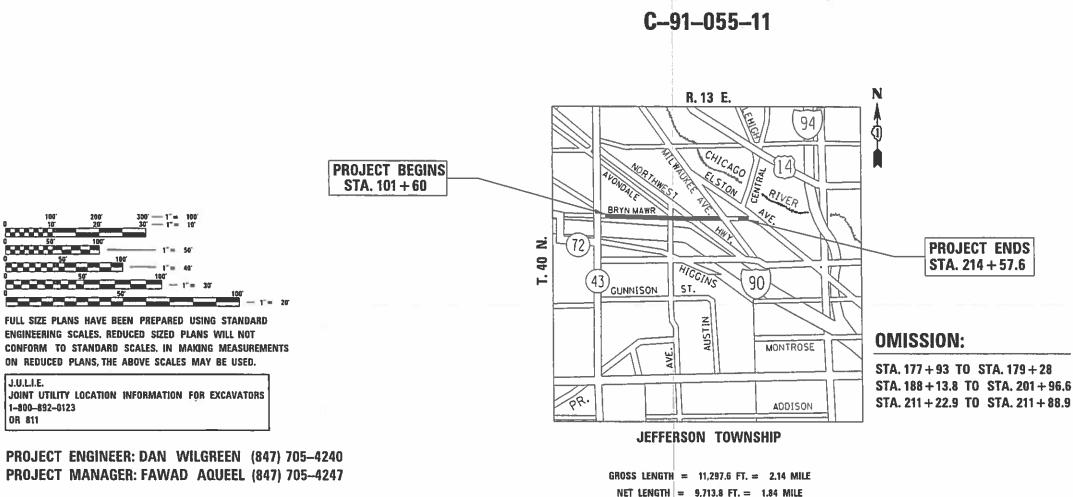
#### 01-17-2020 LETTING ITEM 081

# STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

# PROPOSED **HIGHWAY PLANS**

F.A.U. ROUTE 1350 (BRYN MAWR AVE.) IL 43 (HARLEM AVE.) TO ELSTON AVE. SECTION: 2010-091-RS PROJECT: STP- 2E6T(905) **DESIGNED OVERLAY AND PEDESTRIAN RAMPS COOK COUNTY** 



FOR INDEX OF SHEETS, SEE SHEET NO. 2

#### **PROJECT LOCATED IN:** THE CITY OF CHICAGO

### **TRAFFIC DATA:**

ADT = 3,300 TO 13,300 (2014)SPEED LIMIT = 30 MPH

0

0

0

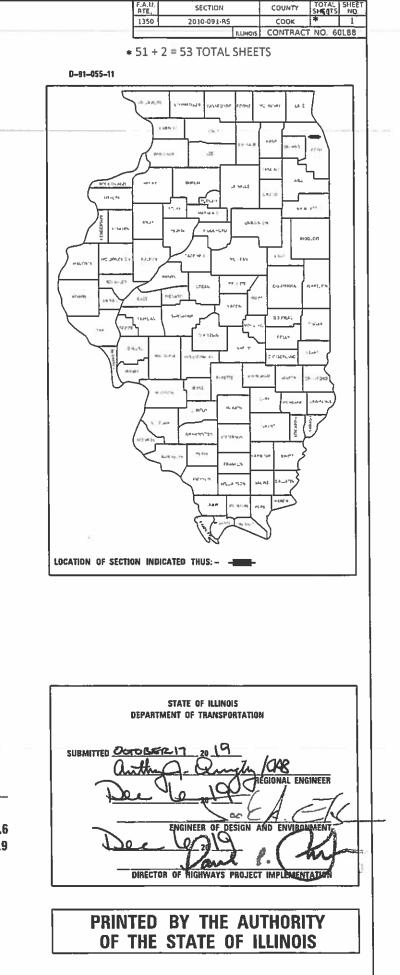
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CONTRACT NO. 60L88

J.U.L.I.E.

1-800-892-0123 OR 811



INDEX O	F SHEETS				
EET NO.	DESCRIPTION		STATE STANDARDS		GEN
1	COVER SHEET	000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS	10.	TEN
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES	424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS		AND FIEI
		424006-04	DIAGONAL CURB RAMPS FOR SIDEWALKS		CON
3-6	SUMMARY OF QUANTITIES	424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS	11.	WHE BET
7-8	EXISTING AND PROPOSED TYPICAL SECTIONS	424021-05	DEPRESSED CORNER FOR SIDEWALKS		THE 45
9-12	ROADWAY AND PAVEMENT MARKING PLANS	442201-03			DIF
13-32	ADA RAMP DETAILS	604001-05			AM
33	DETECTOR LOOP REPLACEMENT PLAN	606001-07 630001-12		12.	THE AT
34	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)	701006-05		_	OF
		701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY	13.	PAV MAR
35	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)	701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE	14.	THE
36	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)	701301-04	LANE CLOSURE, 2L, 2W, SHORT-TIME OPERATIONS		ENG OF
37	BUTT JOINT AND HMA TAPER DETAILS (BD-32)	701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY		
38	CITY OF CHICAGO CATCH BASIN, INLET AND MANHOLE DETAILS (BD-47)	701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS $\leq$ 40 MPH	15.	BUT RES
39	CITY OF CHICAGO DETECTABLE WARNINGS (BD-58)	701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED		AND SPE
40	ENTRANCE AND EXIT RAMP CLOSURE DETAILS (TC-08)	701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE	16.	UNL
		701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE		APP SPE
41	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)	701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN		PRO
42-43	MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS (TC-12)	701701-10 701801-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION LANE CLOSURE, MULTILANE, 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE		
44	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)	701901-08	TRAFFIC CONTROL DEVICES	17.	EXIS CON
45	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17)	780001-05			FRA SPE
46	ARTERIAL ROAD INFORMATION SIGNING (TC-22)	781001-04	TYPICAL APPLICATION RAISED REFLECTIVE PAVEMENT MARKERS	18.	PRO
46A-46B	TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS	886001-01	DETECTOR LOOP INSTALLATIONS		APP
47-49	CITY OF CHICAGO TYPICAL PAVEMENT MARKING (TC-24)			19.	THE CON
50	STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05, SHT 2 OF 7)			20.	THE
51	DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING (TS-07)				OF TWE
5.					CLO FRE
<u>CITY</u>	OF CHICAGO NOTES	<u>G</u>	ENERAL NOTES		CAL WEE
Ŭ NET₩	DRE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "C.U.A.N." (CHICAGO UTILITY ALERT WORK) AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS	((	EFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "C.U.A.N." CHICAGO UTILITY ALERT NETWORK) AT (312) 744-7000 FOR FIELD LOCATIONS	21.	THE
	ITIES. (48 HOUR NOTIFICATION REQUIRED).		F BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. 48 HOUR NOTIFICATION REQUIRED)		LID
	CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND CITY OF CHICAGO.		THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY	22.	THE STA
3 ALL	CATCH BASINS IN THE CITY OF CHICAGO MUST MEET THE DEPARTMENT OF SEWERS' STANDARDS.	-	COMPANIES AND THE CITY OF CHICAGO.	23.	тне
	FORATED LIDS SHALL BE PLACED ON ALL MANHOLES AND CATCH BASINS.		HE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE IN STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.		APP IMP
410	CH MONUMENT LOCATIONS WITHIN THE LIMITS OF THE IMPROVEMENT CAN BE OBTAINED IN SUITE - 333 SOUTH STATE STREET, CHICAGO, IL 60604. THE CONTRACTOR IS RESPONSIBLE FOR THE T OF REPLACEMENT OF ANY BENCH MONUMENT IF DAMAGED OR DESTROYED DURING CONSTRUCTION.	F	EFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR UTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE VAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR		•
	BROKEN, CRACKED, WORN OR OTHERWISE DAMAGED OR BICYCLE UNSAFE FRAMES AND LIDS ON ER STRUCTURES, SHALL BE REPLACED WITH NEW DEPARTMENT OF SEWERS' STANDARD FRAMES		TRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.		
AND	LIDS.		T SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS		

- (7) OPEN LID DRAINAGE STRUCTURES SHALL NOT BE CLOSED, COVERED OR OTHERWISE OBSTRUCTED DURING CONSTRUCTION OF THIS ROADWAY WITHOUT THE WRITTEN PERMISSION FROM THE CITY OF CHICAGO.
- (8) CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY OF CHICAGO AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
- (9) PERMITS FROM THE DEPARTMENT OF SEWERS ARE REQUIRED FOR ALL UNDERGROUND STORM, SANITARY OR COMBINED SEWER SYSTEM CONSTRUCTION, AND FOR RESURFACING WORK INVOLVING ADJUSTMENT OF SEWER STRUCTURES. THE DEPARTMENT OF SEWERS' PERMIT MUST BE OBTAINED BY A LICENSED SEWER DRAIN LAYER PRIOR TO START OF CONSTRUCTION.
- (D) THE CONTRACTOR SHALL TAKE EXTRA CARE AND PRECAUTION WHEN REPARING THE CONCRETE CURB AND GUTTER AT LOCATIONS WHERE EXISTING TREES ARE PRESENT.
- (1) CURB RAMPS AND LANDING (KEYSTONE) TO BE CONSTRUCTED WITH 8" THICK CONCRETE AT ALL TRAFFIC SIGNALIZED INTERSECTIONS AND INDUSTRIAL STREET INTERSECTIONS. AT ALL OTHER LOCATIONS, 5" THICK CONCRETE TO BE USED.

- AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 6. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 7. ALL PAVEMENT PATCHING, CURB AND GUTTER REMOVAL AND REPLACEMENT, DRAINAGE ADJUSTMENT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY 8. AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

efault pw:	USER NAME = Bilgramisa	DESIGNED -	REVISED - SB 11/14/19		INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES	F.A.U. BTE	SECTION	COUNTY TOTAL SHEET
AME -: De		DRAWN -	REVISED -	STATE OF ILLINOIS	BRYN MAWR AVE. (IL 43 TO ELSTON AVE.)	1350	2010-091-RS	COOK 3 1
E N E	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	BRYN WAVVR AVE. (IL 43 TU ELSTUN AVE.)	_		CONTRACT NO. 60L88
ΣĒ	PLOT DATE = 11/14/2019	DATE -	REVISED -		SCALE. SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED. AI	ID PROJECT

#### ENERAL NOTES (CONT.)

TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER ND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE IELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE ONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE HE SPEED LIMIT IS 45 MPH OR LESS. AND 1 INCH WHERE THE SPEED LIMIT IS OVER 5 MPH. WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER, A MAXIMUM GRADE IFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED MINIMUM OF 1:3 (V:H).

HE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT KALPANA, KANNAN-HOSADURGA CILLINOIS. GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT ARKINGS ON ALL FINAL SURFACES.

HE RESIDENT ENGINEER SHALL CONTACT DON CHIARUGI, ARTERIAL TRAFFIC FIELD NGINEER, AT 847-741-9857 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH THE "BUTT JOINT ND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE PECIFIED.

INLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND PPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION ROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.

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

ROPOSED SIDEWALK RAMPS SHALL CONFORM TO CURRENT ADA REQUIREMENTS AND APPLICABLE STATE HIGHWAY STANDARDS OR AS DETERMINED BY THE ENGINEER.

HE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES DURING CONSTRUCTION.

HE CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT F TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT WWW.IDOTLCS.COM WENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP, AND SHOULDER COSURES AND 7 DAYS IN ADVANCE OF ALL PERMANENT AND WEEKEND CLOSURES ON ALL REEWAYS AND/OR EXPRESSWAYS IN DISTRICT ONE. THIS ADVANCE NOTIFICATION IS ALCULATED BASED ON WORKWEEK OF MONDAY THROUGH FRIDAY AND SHALL NOT INCLUDE VEEKENDS OR HOLIDAYS. PLEASE REGISTER AN ACCOUNT AT WWW.IDOTLCS.COM

HE CONTRACTOR SHALL SAW CUT AROUND FRAME AND LID ADJUSTMENTS AS DIRECTED BY THE CITY OF CHICAGO STANDARDS. SAW CUTS SHALL BE INCIDENTAL TO THE FRAME AND IDS TO BE ADJUSTED PAY ITEM.

HE NEW FRAME AND LID CASTINGS SHALL FOLLOW THE CHICAGO WATER AND SEWER TANDARDS AND THE CASTINGS OVER MANHOLES SHALL BE HEAVY DUTY.

HE CONTRACTOR SHALL RELOCATE THE EXISTING CTA BUS STOP SIGNS AT THE PPROXIMATE EXISTING LOCATION AFTER THE COMPLETION OF THE SIDEWALK MPROVEMENT.

	SUMMARY OF QUANTITIES				CO	NSTRUCTI	ON TYPE CODE		SUMMAE	RY OF QUANTITIES				cc	NSTRUCTION	TYPE C	DDE	
	SUMMANT OF QUANTITIES		TOTAL	80% FEDERAL					JUMMAR	I OF QUARTITIES		TOTAL	80% FEDERAL					
CODE NO	ITEM	UNIT	QUANTITIES	80% FEDERAL 20% STATE 0005	100% STATE 0005			CODE NO		ITEM	UNIT	QUANTITIES	80% FEDERAL 20% STATE 0005	100% STATE 0005				
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	26	26				42300200	PORTLAND CEM	ENT CONCRETE DRIVEWAY	SQ YD	42	42					
									PAVEMENT, 6	INCH								
20200100	EARTH EXCAVATION	CU YD	93	93														<u> </u>
								42300400	PORTLAND CEM	ENT CONCRETE DRIVEWAY	SQ YD	166	166					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	1159	1159					PAVEMENT, 8	INCH								
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	6	6				42400200	PORTLAND CEM	ENT CONCRETE SIDEWALK 5 INCH	SQ FT	8013	8013					
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	6	6				42400410	PORTLAND CEM	ENT CONCRETE SIDEWALK 8 INCH	SQ FT	1052	1052					
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	6	6				44000157	HOT-MIX ASPH	ALT SURFACE REMOVAL, 2"	SQ YD	4890	4890					
25200110	SODDING, SALT TOLERANT	SQ YD	1159	1159				44000165	HOT-MIX ASPH	ALT SURFACE REMOVAL, 4"	SQ YD	35556	35556					
25 200 200			21	21							50 XD	208	208					
25200200	SUPPLEMENTAL WATERING		21	21				44000200		EMENT REMOVAL	SO YD	208	208					
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	26202	26202				44000600	SIDEWALK REM	OVAL	SQ FT	9324	9324					
																		J
40600400	MIXTURE FOR CRACKS, JOINTS,	TON	61	61				44201749	CLASS D PATC	HES, TYPE I, 9 INCH	SQ YD	57	57					·
	AND FLANGEWAYS																	
								44201753	CLASS D PATC	HES, TYPE II, 9 INCH	SQ YD	674	674					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT	SQ YD	746	746							60. VD	405	405					
	JOINT							44201757	LLASS D PATC	HES, TYPE III, 9 INCH	SO YD	405	405					
40602985	HOT-MIX ASPHALT BINDER COURSE, IL-9.5,	TON	3983	3983				44201759	CLASS D PATC	HES, TYPE IV, 9 INCH	SO YD	1338	1338					
	N70																	
								44201785	CLASS D PATC	HES, TYPE I, 12 INCH	SQ YD	57	57					
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5,	TON	4530	4530														
	MIX "D", N70							44201789	CLASS D PATC	HES, TYPE II, 12 INCH	SQ YD	674	674					
42001300	PROTECTIVE COAT	SO YD	2507	2507				44201794	CLASS D PATC	HES, TYPE III, 12 INCH	SQ YD	405	405			<b>*</b>	SPECIALTY	ITEMS
FILE NAME =	USER NAME = Bilgramisa DE	ESIGNED -		REVISED	-	 			 [					F.A.U. RTE.	SECTION		COUNTY TO	
	s.gov;PWIDOT\Documents\DOT_0ffices\District NProjects\Di055INCADData\Design\Di055II-strisc@F	Rokwin – HECKED –		REVISED	-		STATE DEPARTMENT O	OF ILLINOIS E TRANSPORTA		SUMMARY BRYN MAWR AVE.			)	RTE. 1350	2010-091-	RS	соок 5	51 3
		ATE -		REVISED						SCALE: SHEET NO. 1 OF 4 SHE			O STA.	FED. RO	AD DIST. NO. 1 ILLI		CONTRACT NO PROJECT	J. 60L88

	SUMMARY OF QUANTITIES					ONSTRUCTION	TIFE CC			SUMMA	RY OF QUANTITIES					NSTRUCTION TYPE		
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FEDERAL 20% STATE 0005	100% STATE 0005				CODE NO		ITEM	UNIT	TOTAL QUANTITIES	80% FEDERAL 20% STATE 0005	100% STATE 0005			
44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SO YD	1 3 3 8	1338				*	66900200	NON-SPECIAL	WASTE DISPOSAL	CU YD	93	93				
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SO YD	78	78				*	66900530	SOIL DISPOSA	AL ANALYSIS	EACH	3	3				
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	30	30				*	66901001	REGULATED SI	JBSTANCES PRE-CONSTRUCTION	L SUM	1	1				
60250400	CATCH BASINS TO BE ADJUSTED WITH NEW	EACH	6	6														
	TYPE 1 FRAME, OPEN LID							*	66901003	REGULATED SI	JBSTANCES FINAL CONSTRUCTION	L SUM	1	1				
										REPORT								
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	3	3				*	66901006		JBSTANCES MONITORING	CAL DA	5	5				
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	2	2				<b>^</b> *	66901006	REGULATED SI	JOSTANCES MUNITURING		5	5				
									67000400	ENGINEER'S I	FIELD OFFICE, TYPE A	CAL MO	6	6				
60262700	INLETS TO BE RECONSTRUCTED	EACH	9	9														
									67100100	MOBILIZATIO	N	L SUM	1	1				_
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	75	75					70102620	TRAFFIC CON	IROL AND PROTECTION,	L SUM	1	1				
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	56	56						STANDARD 70			•					
C0404050									70102020		IROL AND PROTECTION,							
60404950	FRAMES AND GRATES, TYPE 24	EACH	2	2					70102622	STANDARD 70		L SUM	1	1				+
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	11	11														
									70102635	TRAFFIC CON	TROL AND PROTECTION.	L SUM	1	1				
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	23	23						STANDARD 70	1701							
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1					70102640	TRAFFIC CON	IROL AND PROTECTION,	L SUM	1	1				
										STANDARD 70	1801							
	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	6	6					70300100	SHORT TERM	PAVEMENT MARKING	FOOT	6678	6678				+
										SHORT (ENWI)								
63200310	GUARDRAIL REMOVAL	FOOT	250	250					70300150	SHORT TERM I	PAVEMENT MARKING REMOVAL	SQ FT	2224	2224		*	SPECIALT	
TLE NAME = pw:\\pianroom.dot.jiiinois.g	USER NAME = Bl/granilsa gon/PMID0T\Documents\D0T Offices\D1strlat.NProjects\D10551/\CADData\Destgn\D10551/\s PL0T SCALE = 100,0000 ' / In.	DESIGNED - 		REVISED REVISED REVISED	-		DE	STATE OF IL			SUMMARY BRYN MAWR AVE.	OF QUANTI (IL 43 TO E		.)	F.A.U. RTE. 1350	SECTION 2010-091-RS	COUNTY COOK CONTRACT	TOTAL SHEETS 51

REV. 11/26/19

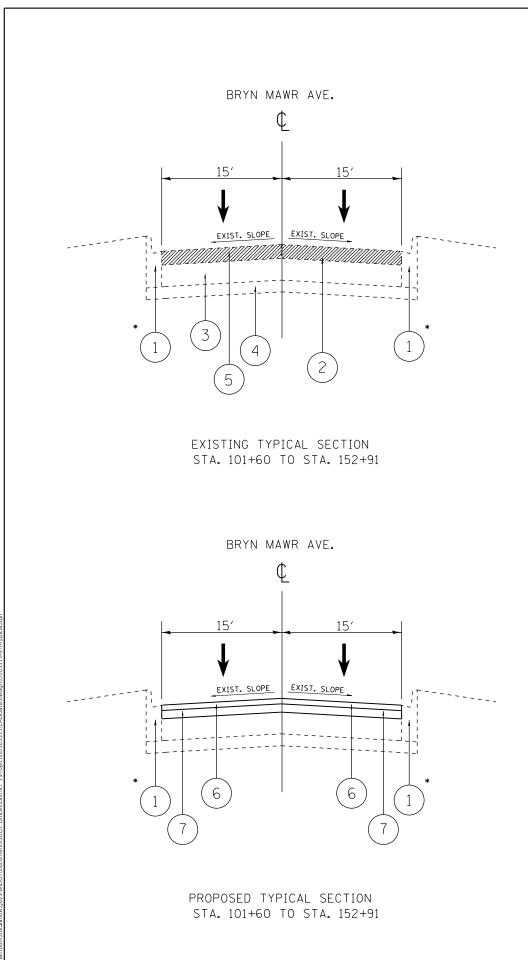
ſ		SUMM	ARY OF QUANTITIES				СС	NSTRUCTI	ON TYPE CODE				SUMMA	ARY OF QUANTITIES	
-	CODE NO		ITEM	UNIT	TOTAL QUANTITIES	80% FEDERAL 20% STATE 0005	100% STATE 0005					CODE NO		ITEM	UNIT
-	70300210	TEMPORARY PA	VEMENT MARKING LETTERS AND	SO FT	261	261					*	78000500	THERMOPLAST	IC PAVEMENT MARKING - LINE	F 001
	70300220	TEMPORARY PA	VEMENT MARKING - LINE 4"	FOOT	3703	3703					*	78000600	THERMOPLAST	IC PAVEMENT MARKING	FOOT
													- LINE 12"		
	70300240	TEMPORARY PA	VEMENT MARKING - LINE 6"	FOOT	133	133									
											*	78000650	THERMOPLAST	IC PAVEMENT MARKING	FOOT
	70300250	TEMPORARY PA	VEMENT MARKING - LINE 8"	FOOT	339	339							- LINE 24"		
-	70300260	TEMPORARY PA	VEMENT MARKING - LINE 12"	FOOT	105	105					*	85000200	MAINTENANCE	OF EXISTING TRAFFIC SIGNAL	EACH
-													INSTALLATIO	N	
ŀ	70300280	TEMPORARY PA	VEMENT MARKING - LINE 24"	FOOT	3265	3265									
											*	88600600	DETECTOR LO	OP REPLACEMENT	FOOT
ł	70300520	PAVEMENT MAR	KING TAPE, TYPE III 4"	FOOT	1616	1616									
											*	89500400	RELOCATE EX	ISTING PEDESTRIAN PUSH-BUTTON	EACH
*	72400200	REMOVE SIGN	PANEL ASSEMBLY - TYPE B	EACH	1	1									
												X0320050	CONSTRUCTIO	N LAYOUT (SPECIAL)	L SU
*	72400310	REMOVE SIGN	PANEL - TYPE 1	SQ FT	6	6									
											*	X4240800	DETECTABLE	WARNINGS (SPECIAL)	SQ F
*	72400600	RELOCATE SIG	N PANEL ASSEMBLY - TYPE B	EACH	1	1									
												x5537800	STORM SEWER	S TO BE CLEANED 12"	FOOT
*	72400710	RELOCATE SIG	N PANEL - TYPE 1	SO FT	6	6					_	x6030310		LIDS TO BE ADJUSTED	EACH
¥	78000100		C PAVEMENT MARKING -	SO FT	261	261							(SPECIAL)		
	18000100	LETTERS AND		3011	201	201									
-												x7011015	TRAFFIC CON	TROL AND PROTECTION	L SU
*	78000200	THERMOPLASTI	C PAVEMENT MARKING	FOOT	3703	3703							(EXPRESSWAY	S)	
		- LINE 4"													
-												x7030005	TEMPORARY P	AVEMENT MARKING REMOVAL	SQ F
*	78000400	THERMOPLASTI	C PAVEMENT MARKING - LINE 6	" F00T	133	1 3 3									
	FILE NAME =		USER NAME = Bilgramisa	DESIGNED -		REVISED	-	<u> </u>						1	
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				DATE -		REVISED			DEPARIN		1 11/			SCALE: SHEET NO. 3 OF 4 SH	

			CO	NSTRUCTIO	N TYPE C	ODE	
IT	TOTAL QUANTITIES	80% FEDERAL 20% STATE 0005	100% STATE 0005				
от	339	339					
OT	105	105					
от	3265	3265					
СН	1	1					
от	201	201					
СН	2	2					
ым	1	1					
FT	714	714					
от	780		780				
Сн	59	59					
SUM	1	1					
FT	8350	8350					
					*	SPECIALTY	ITEMS
JANTI	TIES		F.A.U. RTE.	SECTI	ОN	COUNTY SH	DTAL SHEET EETS NO.
	LSTON AVE.)		1350	2010-09	1-RS		51 5
STA.	T	O STA.	FED. RO	AD DIST. NO. 1 IL	LINOIS FED. AID		

	SUMMARY OF QUANTITIES			80% FEDERAI		DN TYPE CODE			MMARY OF QUANTITIES	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	20% STATE 0005	100% STATE 0005			CODE NO	ITEM	UNIT
Z0004562	COMBINATION CONCRETE CURB AND GUTTER	FOOT	6744	6744						
	REMOVAL AND REPLACEMENT									
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	ЕАСН	146		146					
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4						
Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	14297	14297						
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	LSUM	1	1						
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1						
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1						
Z0076600	TRAINEES	HOUR	500	500						
Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500						
FILE NAME =	USER NAME = Bligramisa DES	SIGNED -		REVISED					CUBAR	
	sis.gov;PWIDOT\Documents\DOT_Offices\District_NProjects\DI055I\CADData\Design\DI055I\-str=5@Rg		·	REVISED REVISED REVISED	-		TATE OF I	LLINOIS RANSPORTATION	SUMN BRYN MAWR	ARY OF QUA

				CO	NSTRUCTIO	N TYPE (	CODE	
NIT	TOTAL QUANTITIES	80% FEDERAL 20% STATE	1C ST	0% ATE				
		0005	00	05				
				FAUT		*	SPECIALTY	
UANTI				F.A.U. RTE. 1350	SECTI 2010-09			51 6
TO E	LSTON AVE.)	D STA.					CONTRACT N	
J STA.	10	U 31A.		+ED. RO	AD DIST. NO. 1 IL	LINUIS FED. AIL	/ PRUJECI	

REV. 12/03/19 REV. 11/26/19



NOTE: STA. 101+60 TO STA. 151+83 TWO-LANE; ONE-WAY TRAFFIC

## LEGEND:

- 2) EXISTING HOT-MIX ASPHALT PAVEMENT, 4"
- (3) EXISTING P.C.C. PAVEMENT, ±9"
- (4) EXISTING STABILIZED SUB-BASE

HOT-MIX ASPHALT MIX
MIXTURE TYPE
DESIGNED OVERLAY
HOT-MIX ASPHALT SURFACE COURSE, MIX "D'
HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N
PARKING LANES
HOT-MIX ASPHALT SURFACE COURSE, MIX "D'
PATCHING
CLASS D PATCHES (HMA BINDER IL-19 mm)
HMA SHOULDER, 8"
HMA SHOULDER. 8" (HMA BINDER IL-19 mm)
QMP DESIGNATION: QUALITY CONTROL/QUALITY AS PAY FOR PERFORMANCE(PFP)

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 SPECIAL PROVISIONS. QUALITY MANAGEMENT PROGRAM (OMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING HMA MIXTURE.

USER NAME = Bilgramisa	DESIGNED -	REVISED -		F	XISTING		OPOSED TYPIC	AL SECTIONS	F., B	A.U.	SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS							350	2010-091-RS	соок	51 7
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	BRYN IV	BRYN MAWR AVE. (IL 43 (HARLEM AVE.) TO ELSTON AVE.)			/E.)			CONTRAC	T NO. 60L88	
PLOT DATE = 10/16/2019	DATE -	REVISED -		SCALE: SHEET OF SHEETS S				TO STA.			ILLINOIS FED	AID PROJECT	

1) EXISTING CONCRETE CURB AND GUTTER, TYPE B-6.12

5) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2" \*\*

(6) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 4"

(7) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"

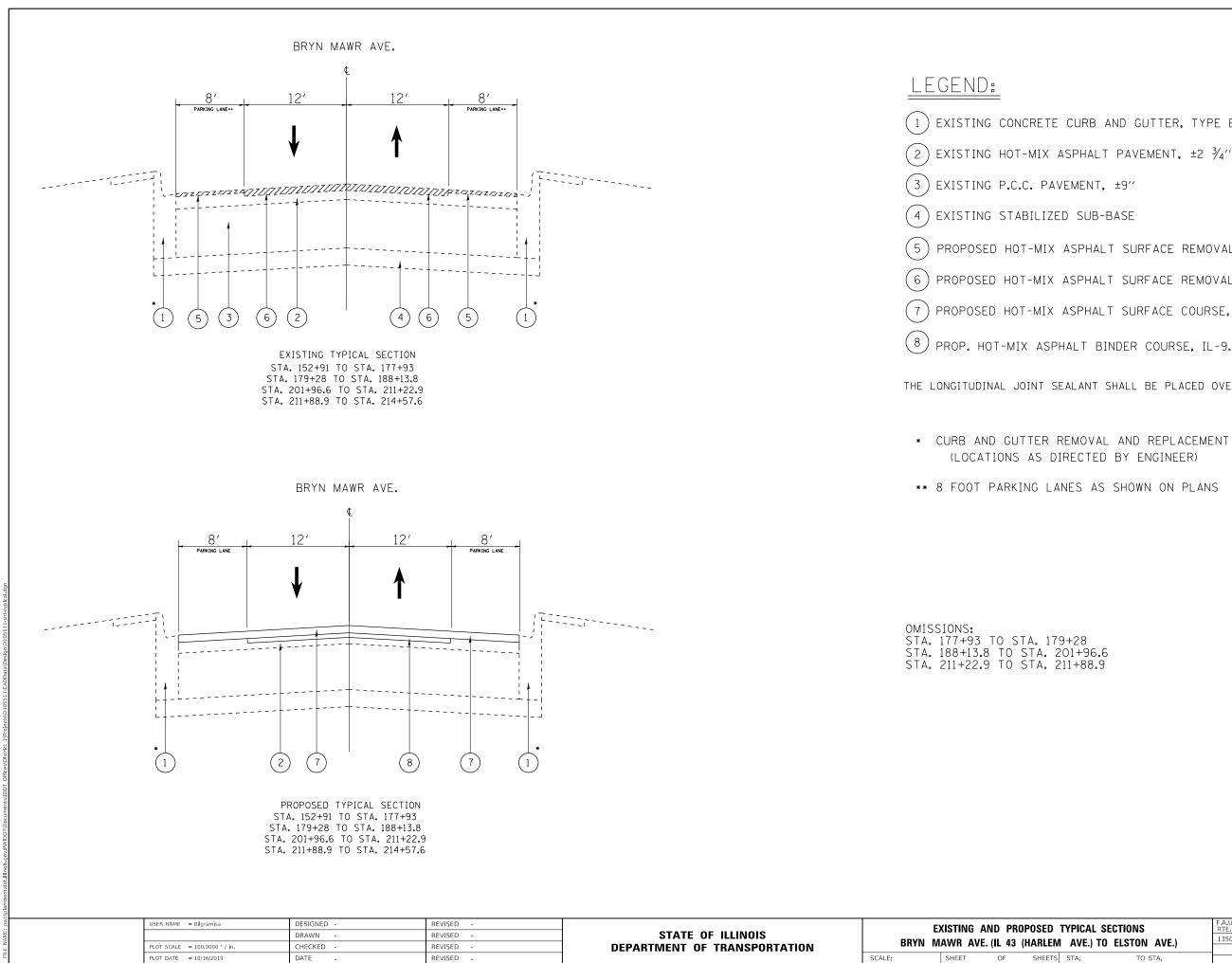
(<sup>8</sup>) prop. hot-mix asphalt binder course, il-9.5, N70, 2"

THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE HMA BINDER IL-9.5, N70

\* CURB AND GUTTER REMOVAL AND REPLACEMENT (LOCATIONS AS DIRECTED BY ENGINEER)

TURE REQUIREMENTS		QUALITY MANAGEMENT
	AIR VOIDS(%) @ N <sub>des.</sub>	PROGRAM (QMP)
", IL-9.5, N70, 2"	4% @ 70 GYR	QCP
170, 2''	4% @ 70 GYR	QCP
", IL-9.5, N70, 2"	4% @ 70 GYR	QCP
	4% @ 70 GYR	QC/QA
	4% @ 70 GYR	QC/QA
SSURANCE(QA/QC); QUALITY CONTROL	FOR PERFORMANC	E(QCP);

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE OUANTITIES IS 112 LBS/SO YD/IN.



1) EXISTING CONCRETE CURB AND GUTTER, TYPE B-6.12

2) EXISTING HOT-MIX ASPHALT PAVEMENT,  $\pm 2 \frac{3}{4}$ " (AFTER MILLING)

PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2" \*\*

(6) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 4"

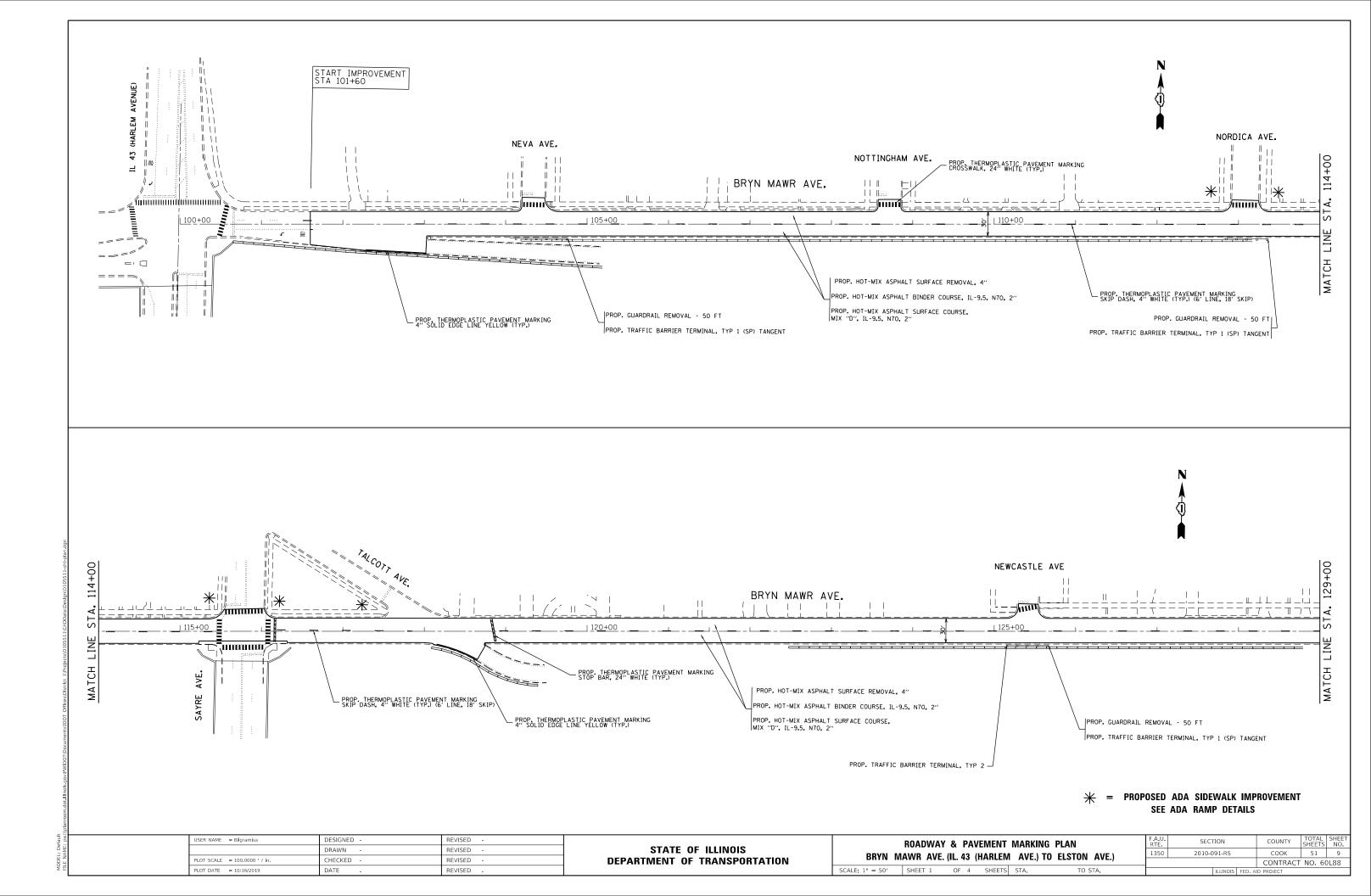
(7) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N7O, 2"

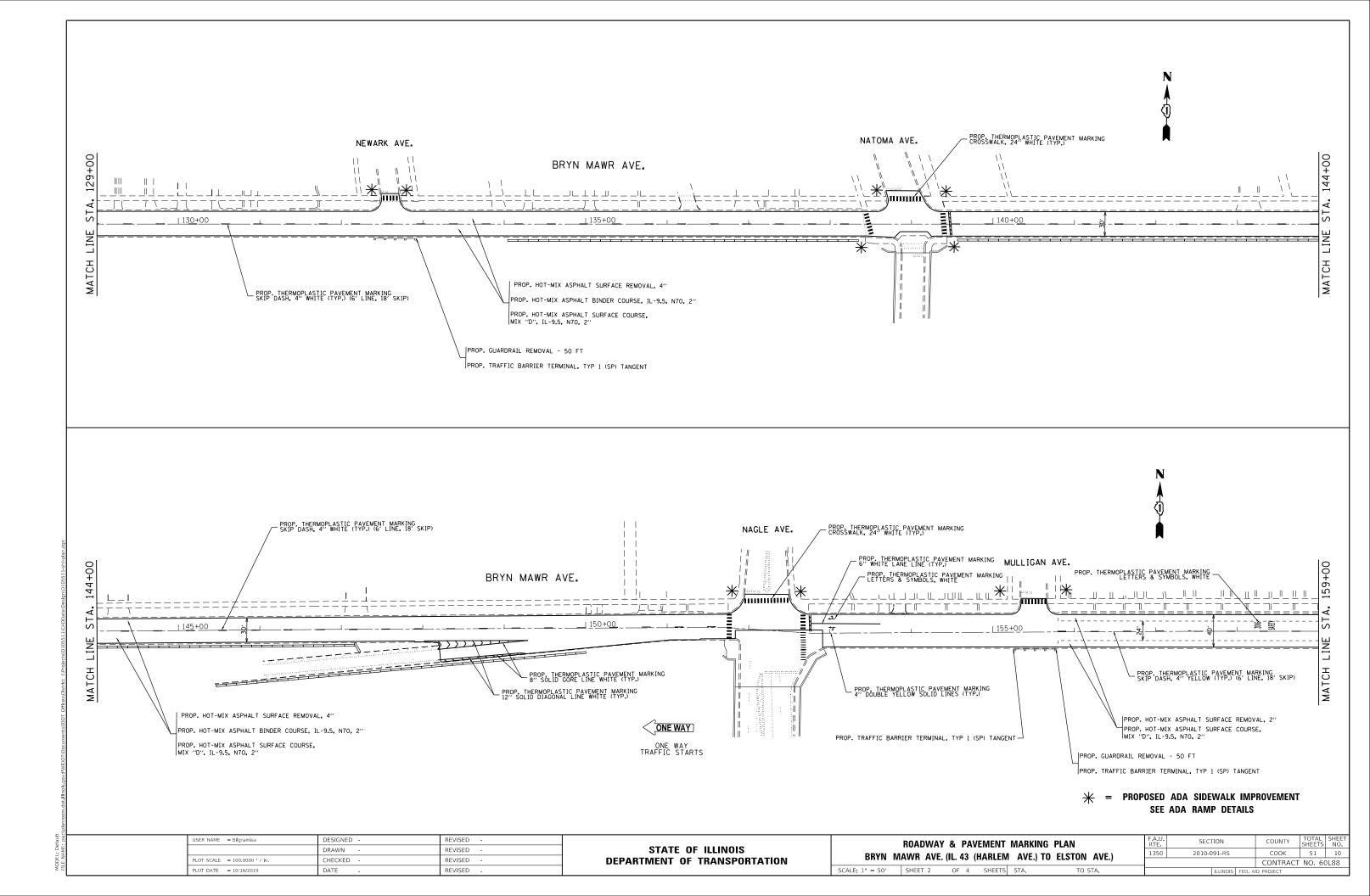
(<sup>8</sup>) prop. hot-mix asphalt binder course, il-9.5, N70, 2"

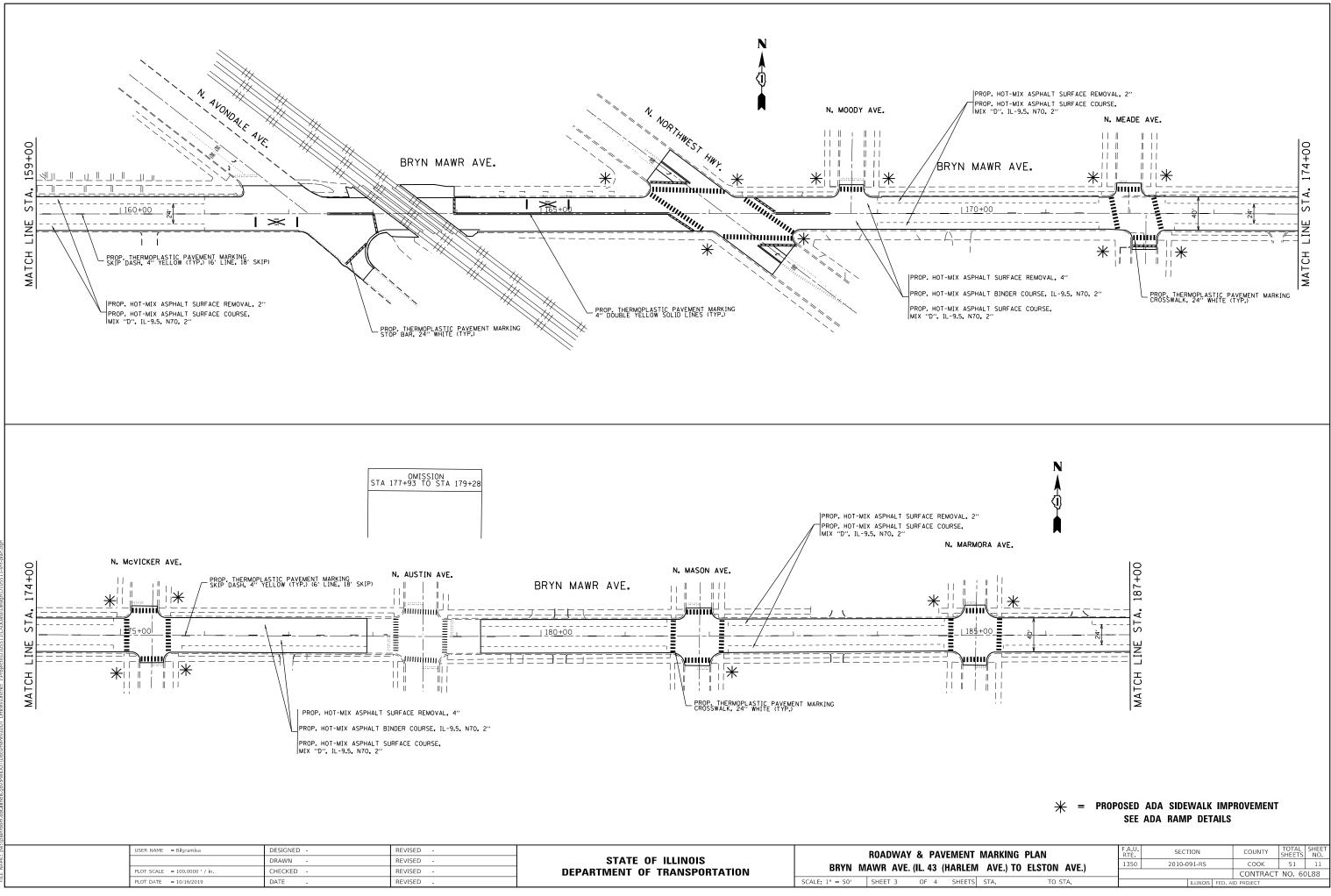
THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE HMA BINDER IL-9.5, N70

(LOCATIONS AS DIRECTED BY ENGINEER)

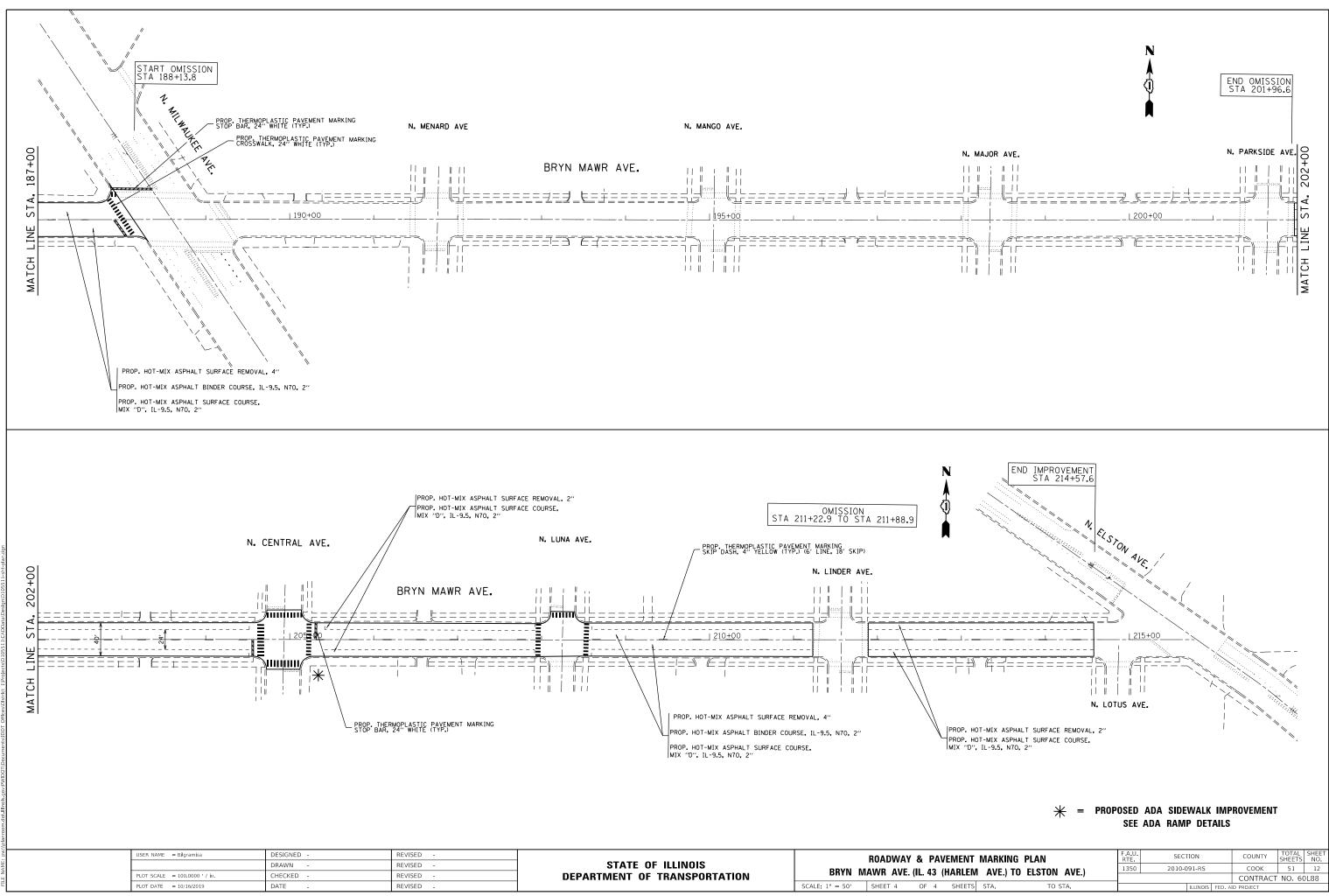
)	TYPICAL	. SECTIONS	F.A.U. RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
EM		TO ELSTON AVE.)	1350	2010-0	91-RS		СООК	51	8
- 1 1		TO LESTON AVE.					CONTRACT	NO. 60	)L88
ΤS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		





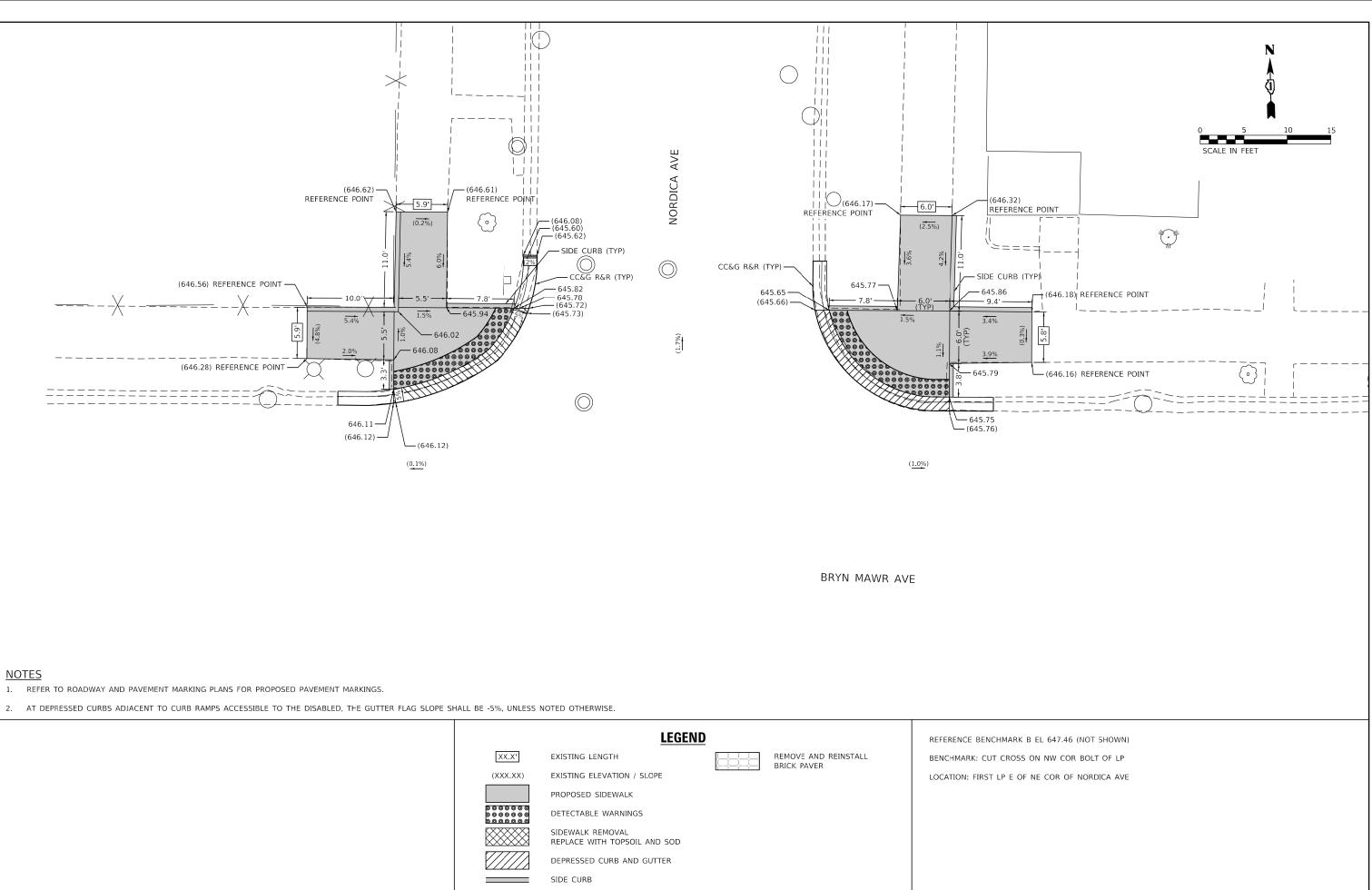


Т	T MARKING PLAN		F.A.U. RTE	SECT	SECTION		COUNTY	SHEETS		
M	M AVE.) TO ELSTON AVE.)			2010-091-RS			СООК	51	11	
							CONTRACT	NO. 60	)L88	L
ГS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT			
										۰.



RKING PLAN	F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.

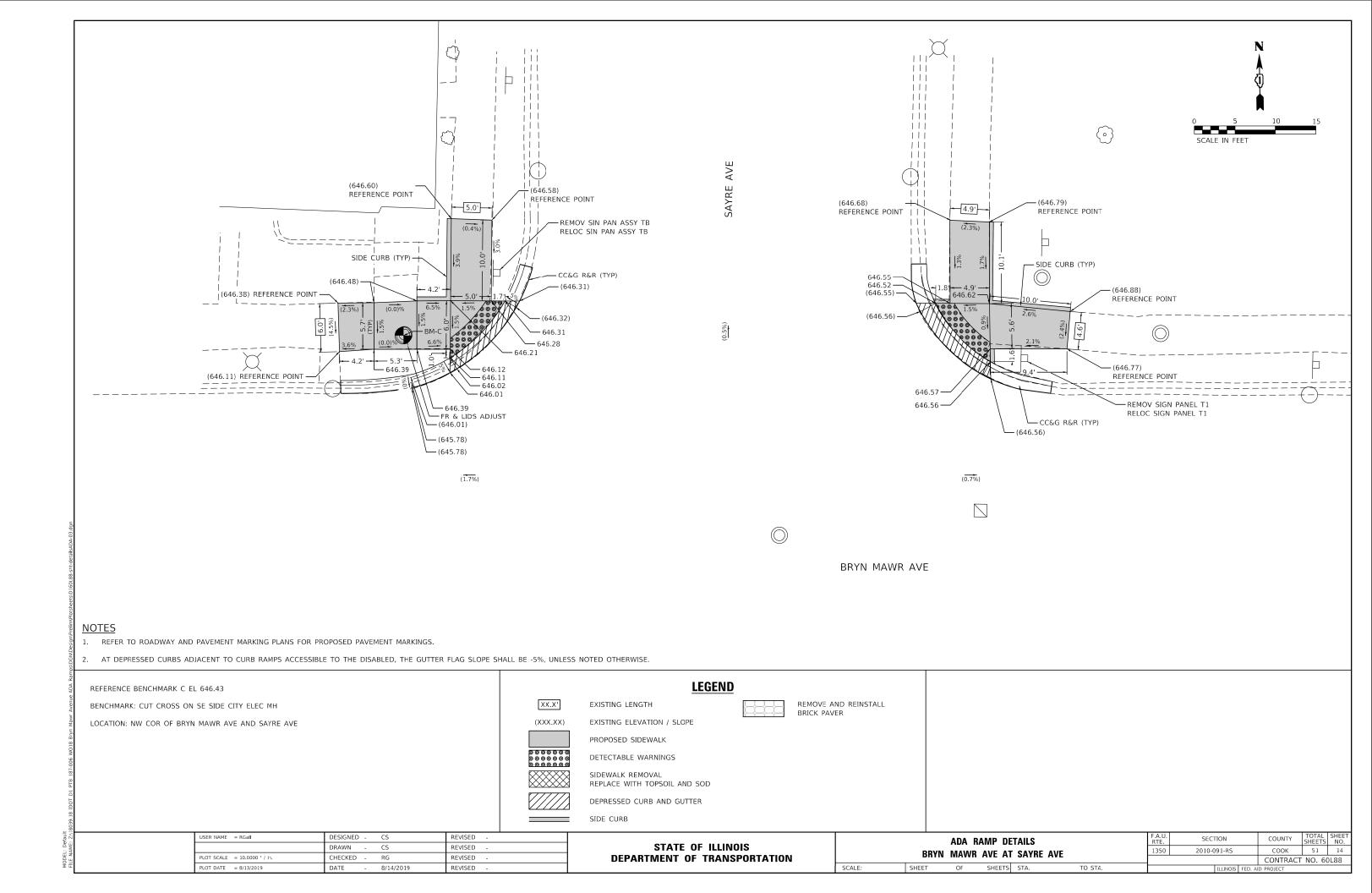
	MARKING PLAN	RTE.	SECTION			COONTI	SHEETS	NO.
EM	AVE.) TO ELSTON AVE.)	1350	2010-0	91-RS		СООК	51	12
	AVE., TO EESTON AVE.,					CONTRACT	NO. 60	L88
TS	STA. TO STA.			ILLINOIS	FED. AI	D PROJECT		

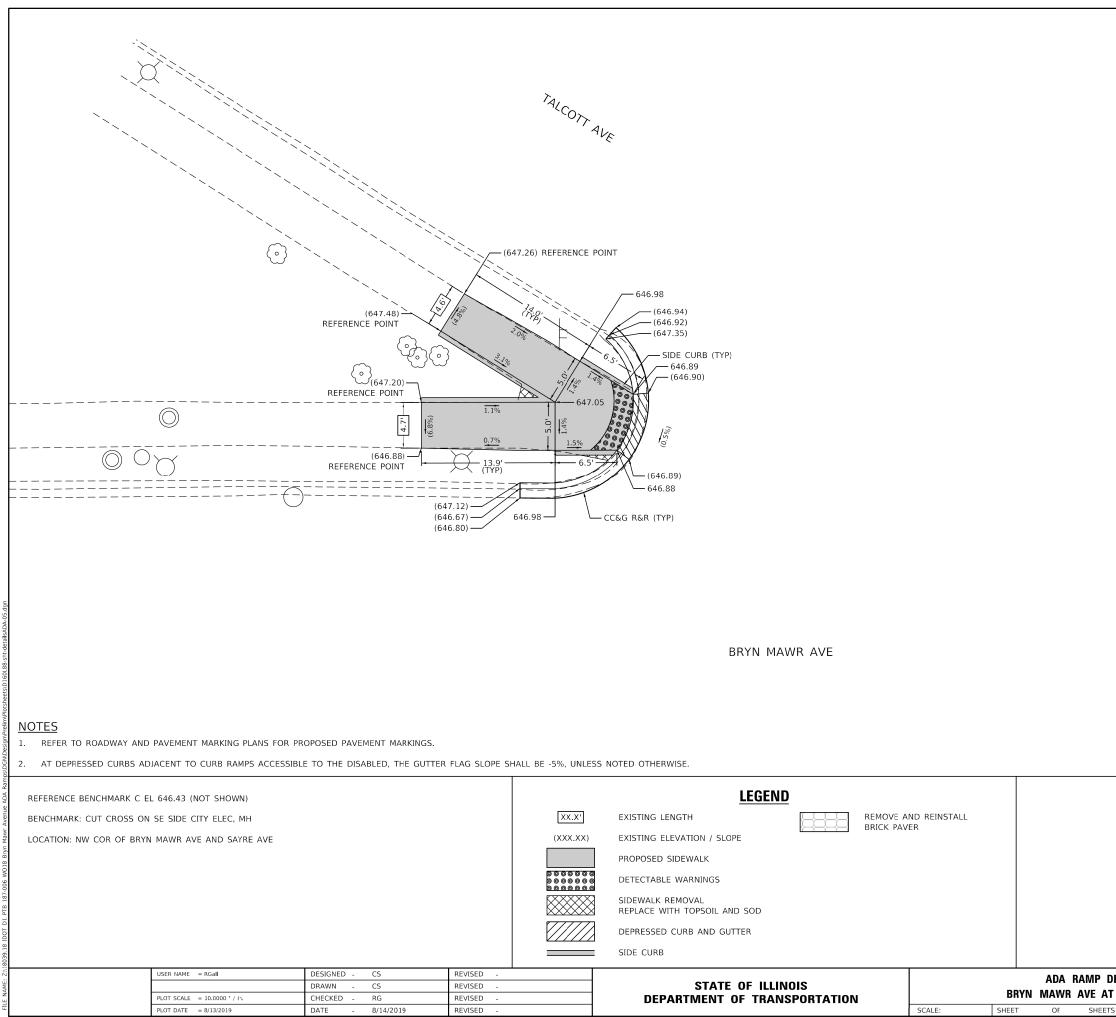




ADA Ram					LEGENI	D		REFERENCE BENCHM
Avenue				XX.X'	EXISTING LENGTH	<b>—</b>	/E AND REINSTALL	BENCHMARK: CUT CI
Mawr				(XXX.XX)	EXISTING ELEVATION / SLOPE	Direct		LOCATION: FIRST LP
018 Bryn					PROPOSED SIDEWALK			
-006 WC				0 0	DETECTABLE WARNINGS			
PTB 187					SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD			
IDOT D1					DEPRESSED CURB AND GUTTER			
8039.18					SIDE CURB			
efault : Z:\1	USER NAME = RGall	DESIGNED - CS	REVISED -					ADA RAMP DE
L: Dé		DRAWN - CS	REVISED -		STATE OF ILLIN	NOIS		
MODEL: C	PLOT SCALE = 10.0000 ' / in.	CHECKED - RG	REVISED -		DEPARTMENT OF TRAN	SPORTATION	BR	YN MAWR AVE AT I
ΣĒ	PLOT DATE = 8/13/2019	DATE - 8/14/2019	REVISED -				SCALE: SHEET	OF SHEETS

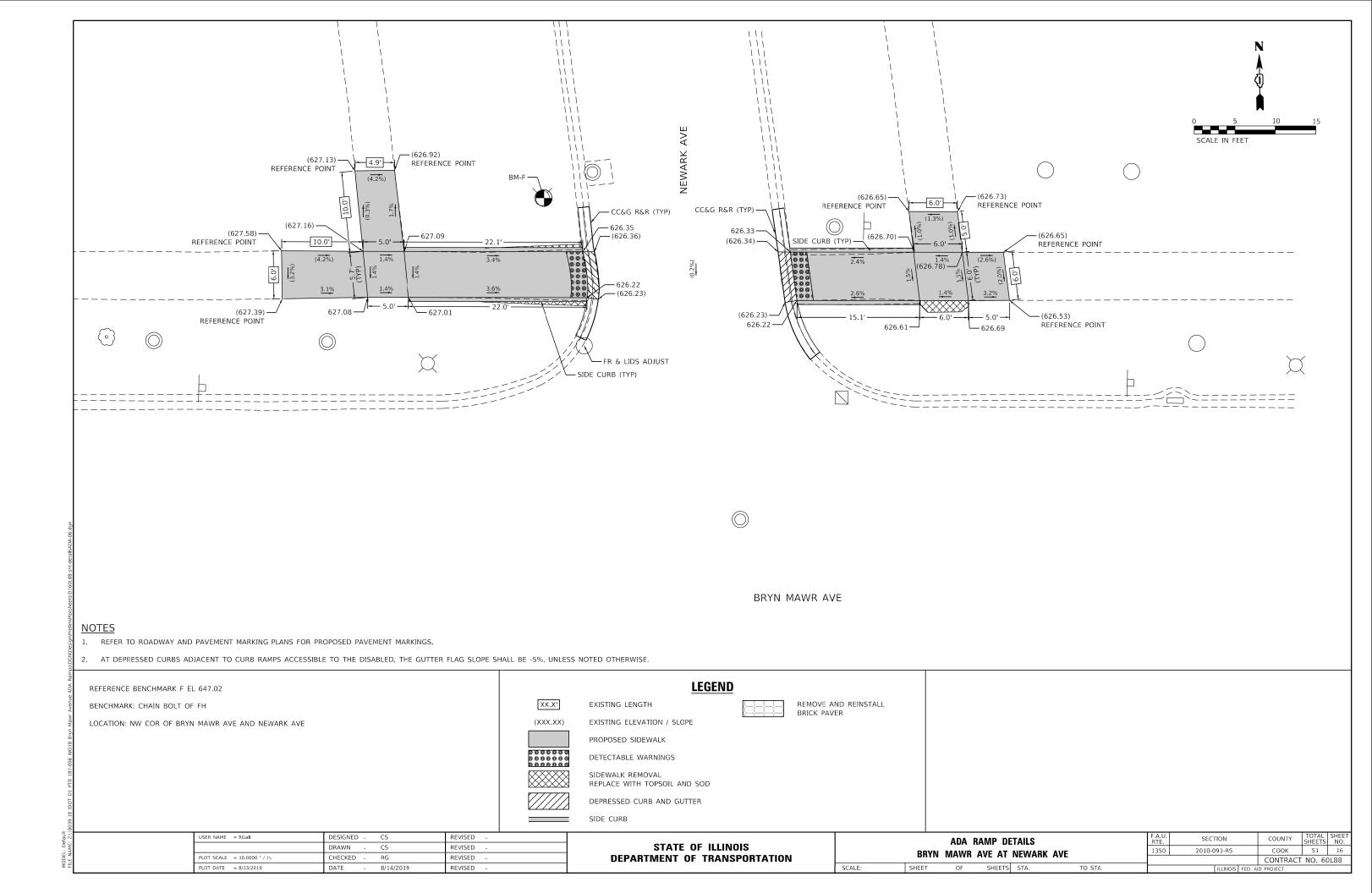
ETAILS				SECT	TION		COUNTY	TOTAL	SHEET NO.
NORDICA AVE			RTE.					SHEETS	NO.
			1350	1350 2010-091-RS			COOK	51	13
_	NOIDIGA AVE						CONTRACT	NO. 60	DL88
5	STA.	TO STA.			ILLINOIS	FED. A	D PROJECT		

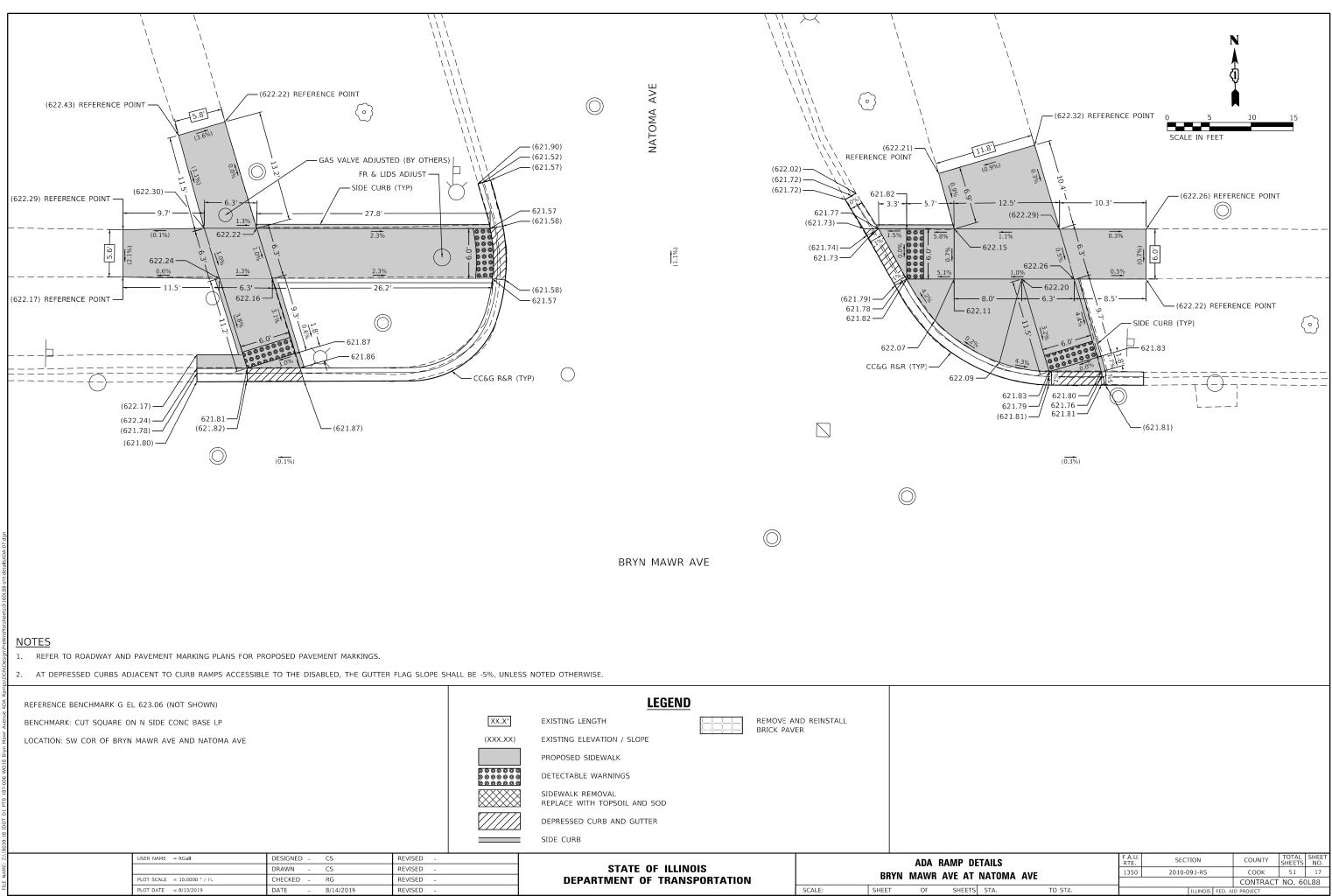




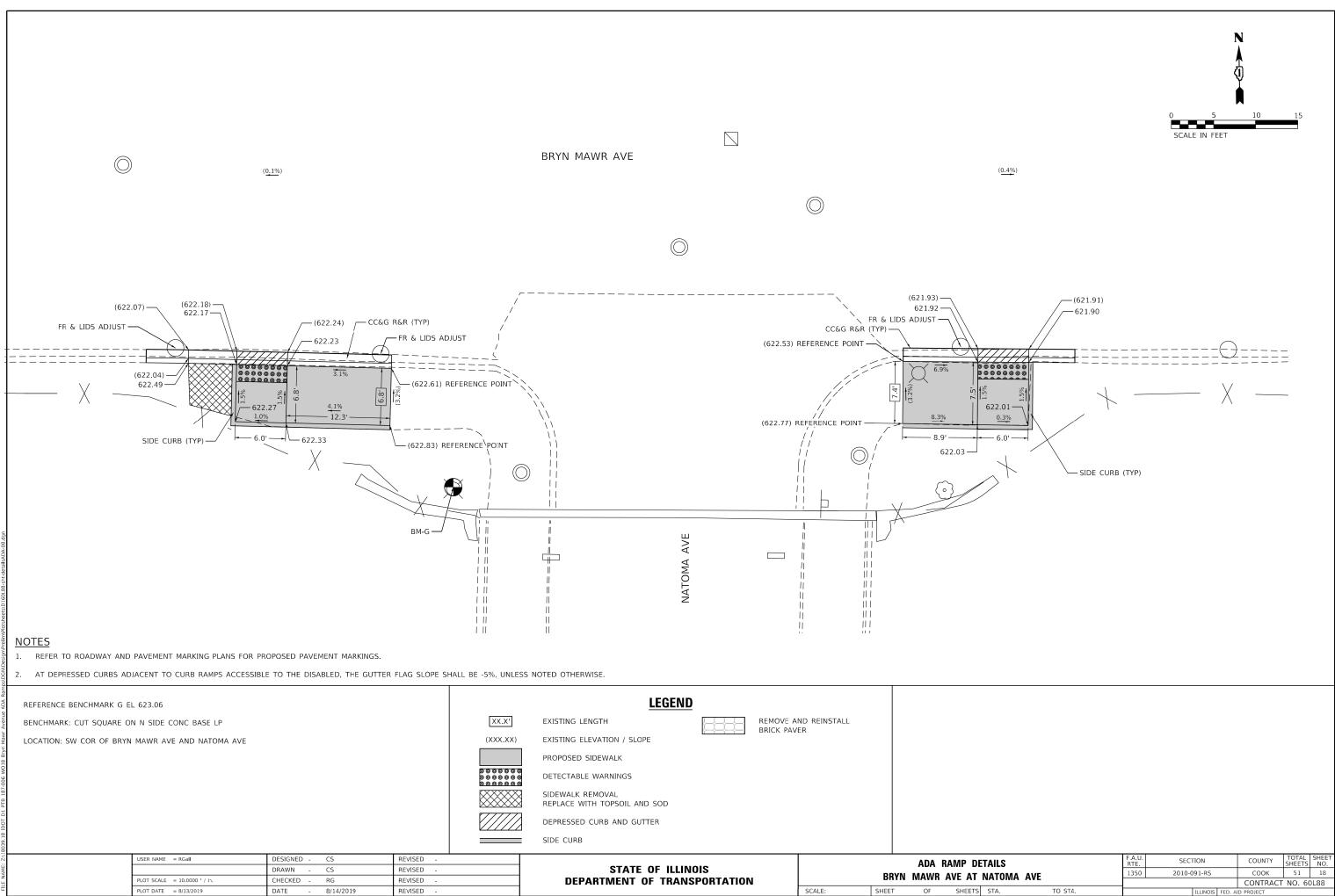
		0	5	10	15	
		SCALE	IN FEET			
$\bigcirc$						
	F.A.U. RTE. 1350	SECTIO 2010-09		COUNTY	TOTAL SHEETS 51	SHEET NO. 15

DETAILS			RTE.	SECTION			COUNTY	SHEETS	NO.
т	TALCOTT AVE			2010-091-RS			СООК	51	15
I TALGUTT AVE							CONTRACT	NO. 60	)L88
٢S	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		

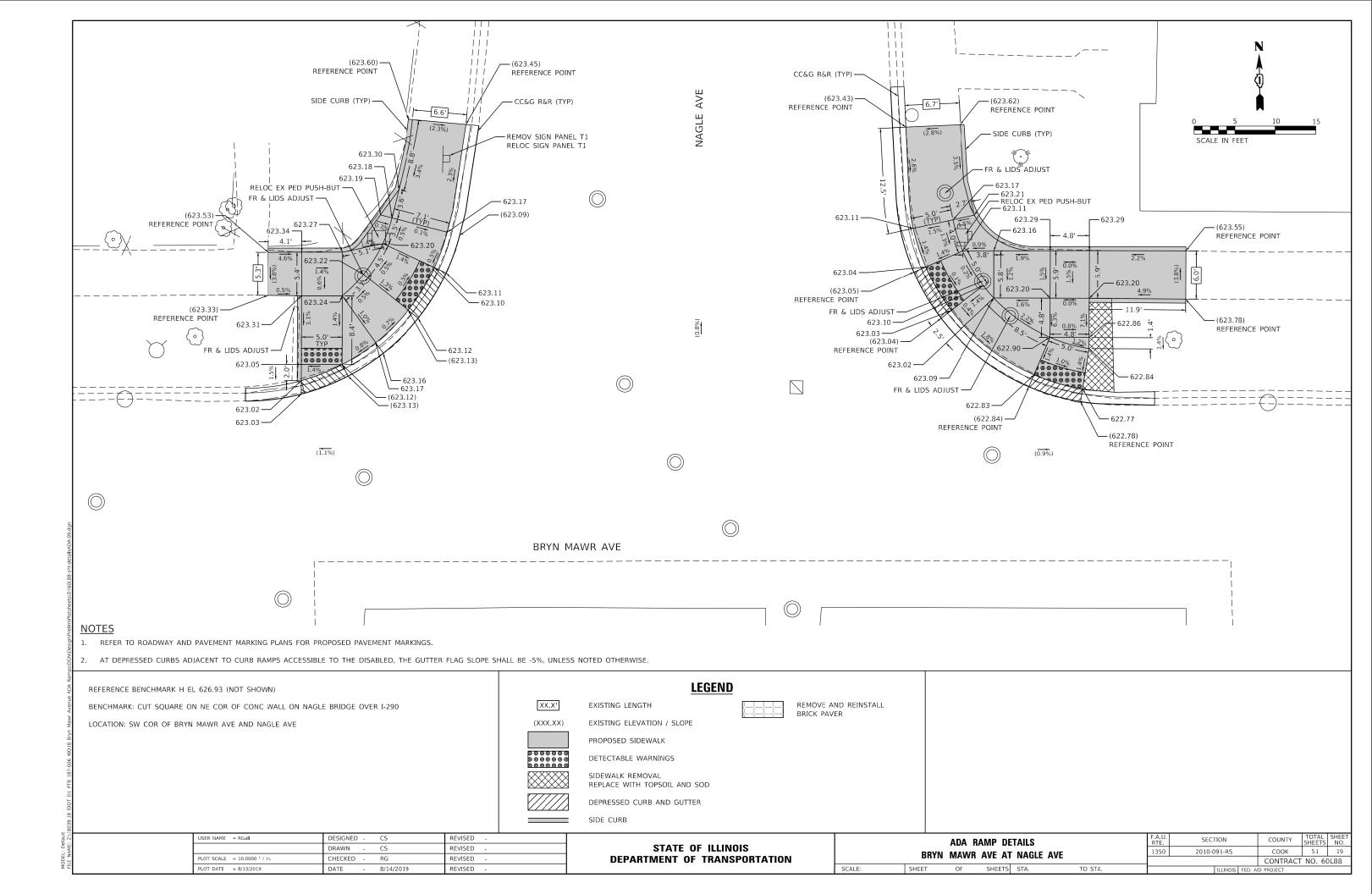


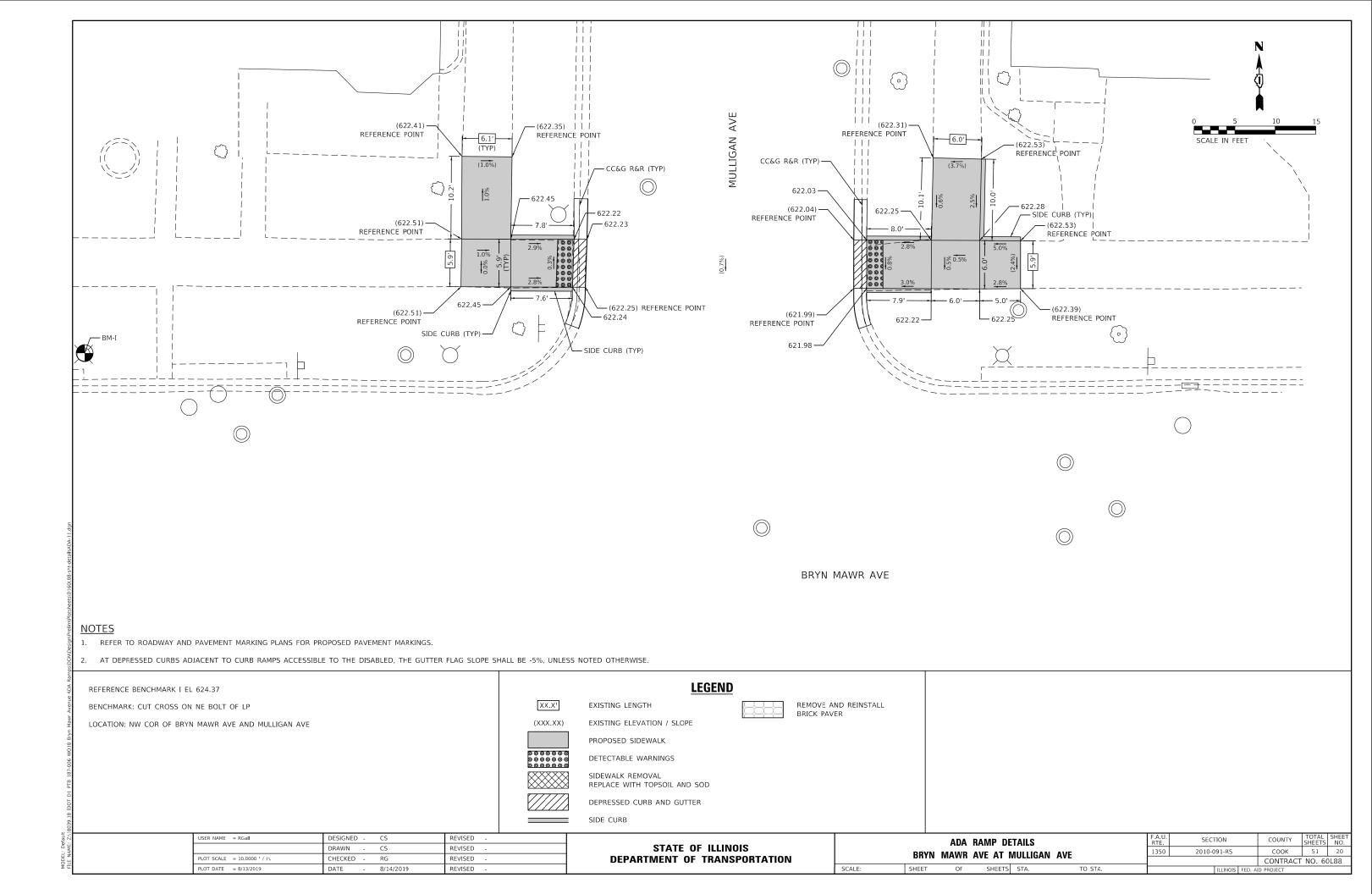


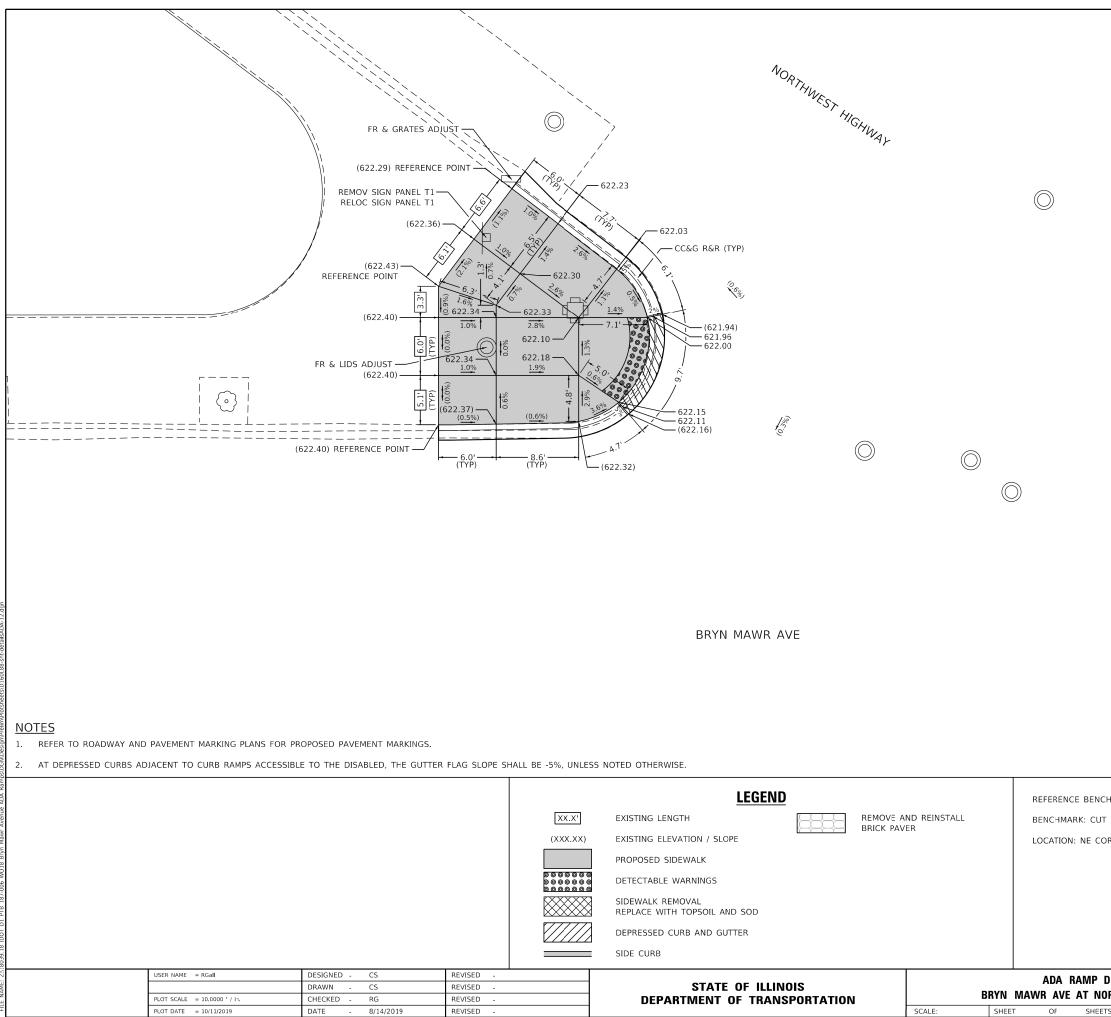
DE	TAILS		F.A.U. RTE.	SEC	SECTION			TOTAL SHEETS	SHEET NO.
т	T NATOMA AVE			2010-0	)91-RS		СООК	51	17
				CONTRACT NO. 60L8					DL88
TS	STA.	TO STA.			ILLINOIS	FED. A	D PROJECT		

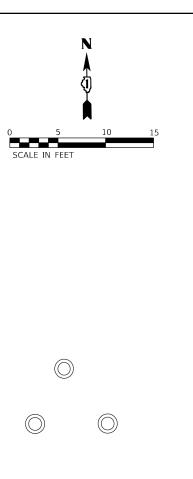


DETAILS	F.A.U. RTE.	SEC	FION		COUNTY	TOTAL SHEETS	SHEET NO.
T NATOMA AVE	1350	2010-091-RS			СООК	51	18
					CONTRACT NO. 60L88		
TS STA. TO STA.			ILLINOIS	FED. A	D PROJECT		







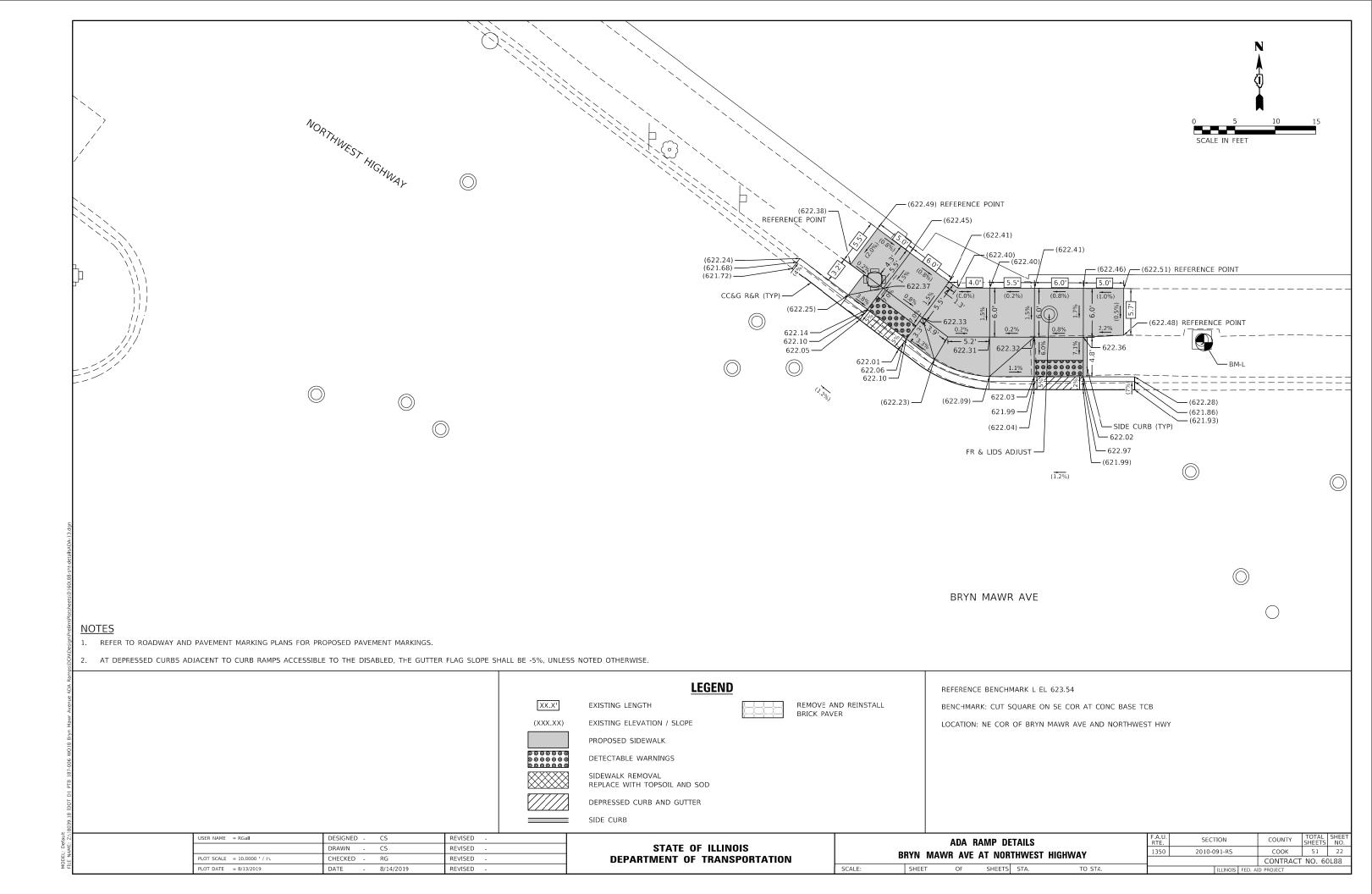


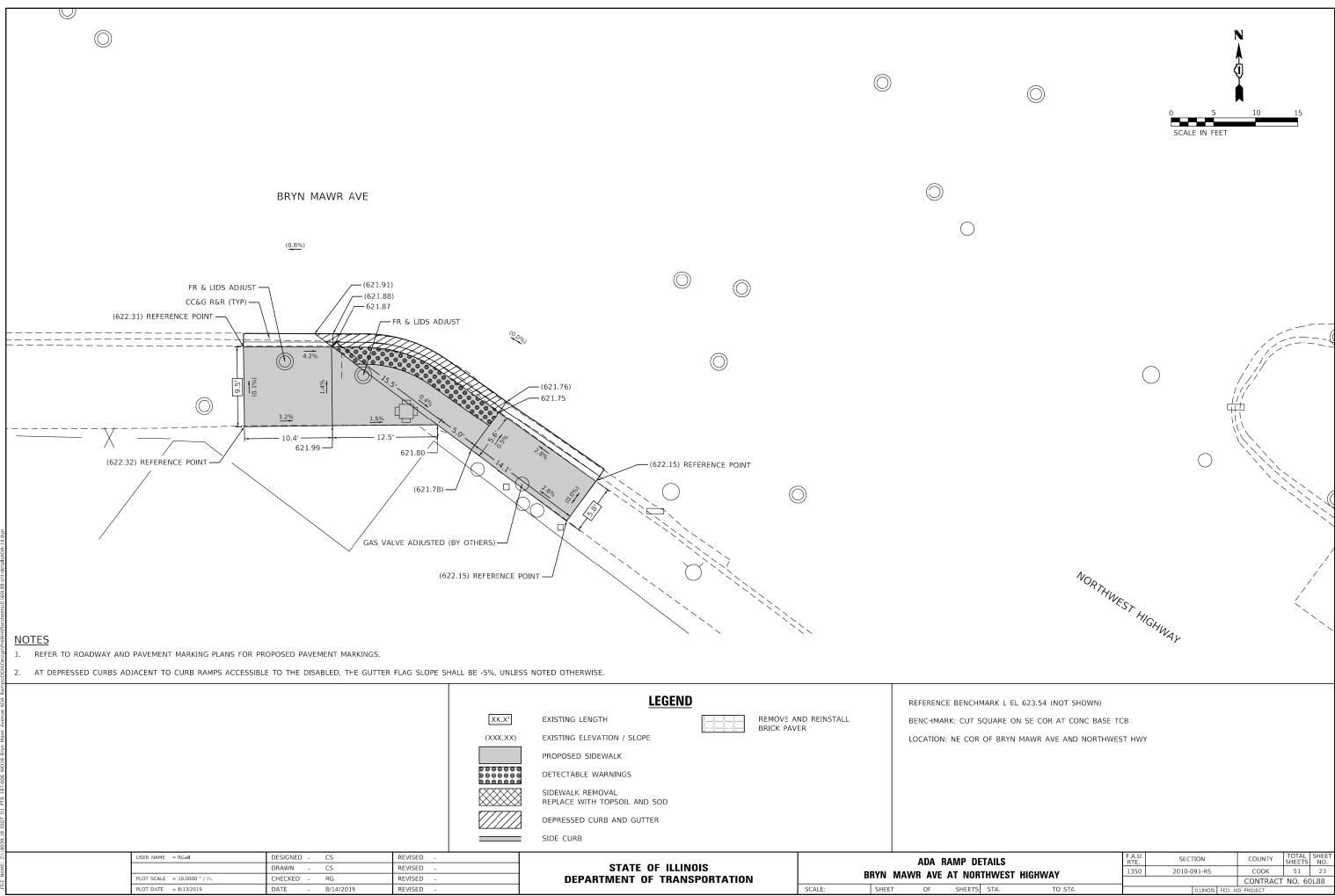
REFERENCE BENCHMARK L EL 623.54 (NOT SHOWN)

BENCHMARK: CUT SQUARE ON SE COR AT CONC BASE TCB

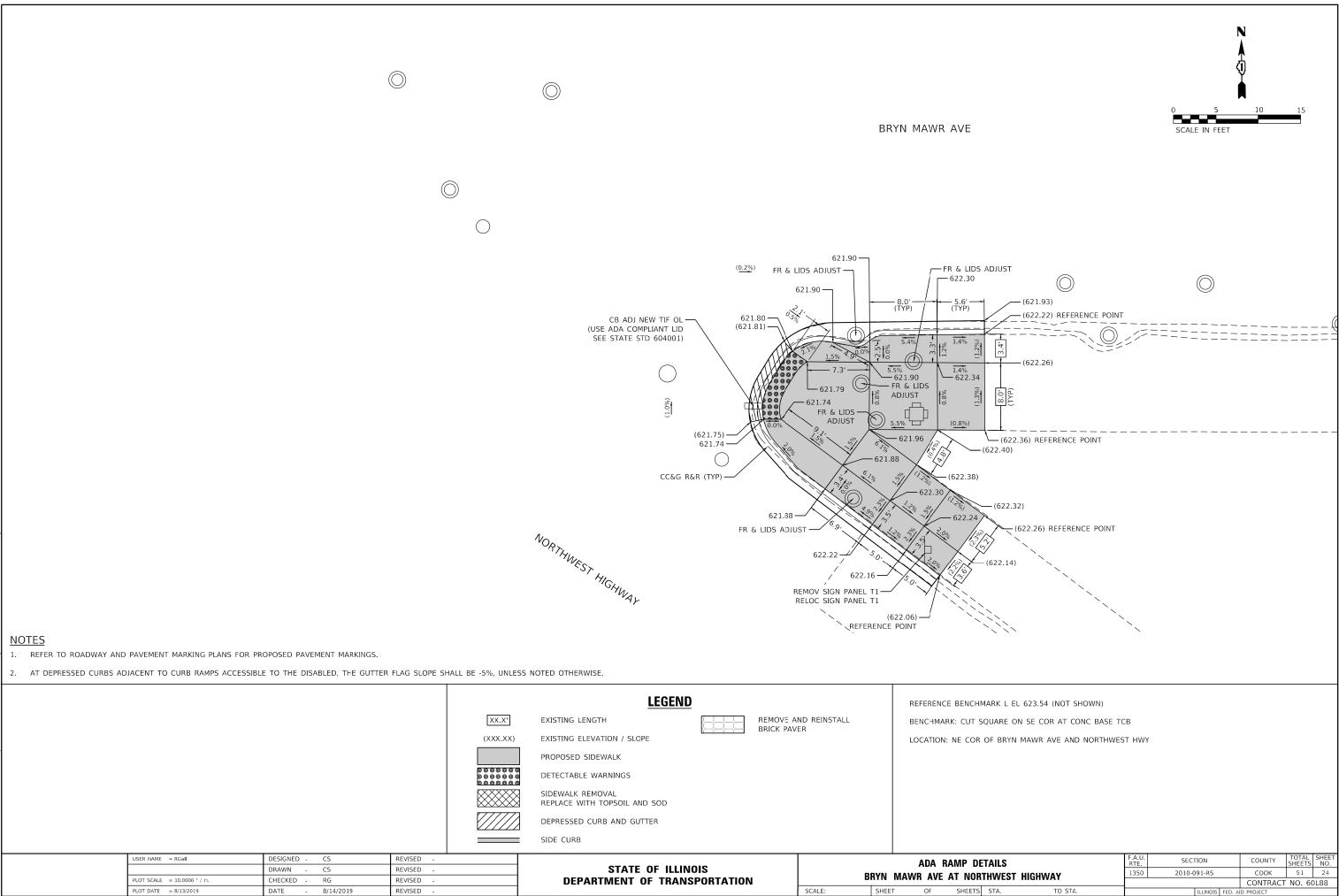
LOCATION: NE COR OF BRYN MAWR AVE AND NORTHWEST HIGHWAY

DETAILS	F.A.U. RTE.	SEC	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
RTHWEST HIGHWAY	1350 2010-091-RS				СООК	51	21
	CONTRACT NO. 60L88					)L88	
TS STA. TO STA.	ILLINOIS FED. AID PROJECT						

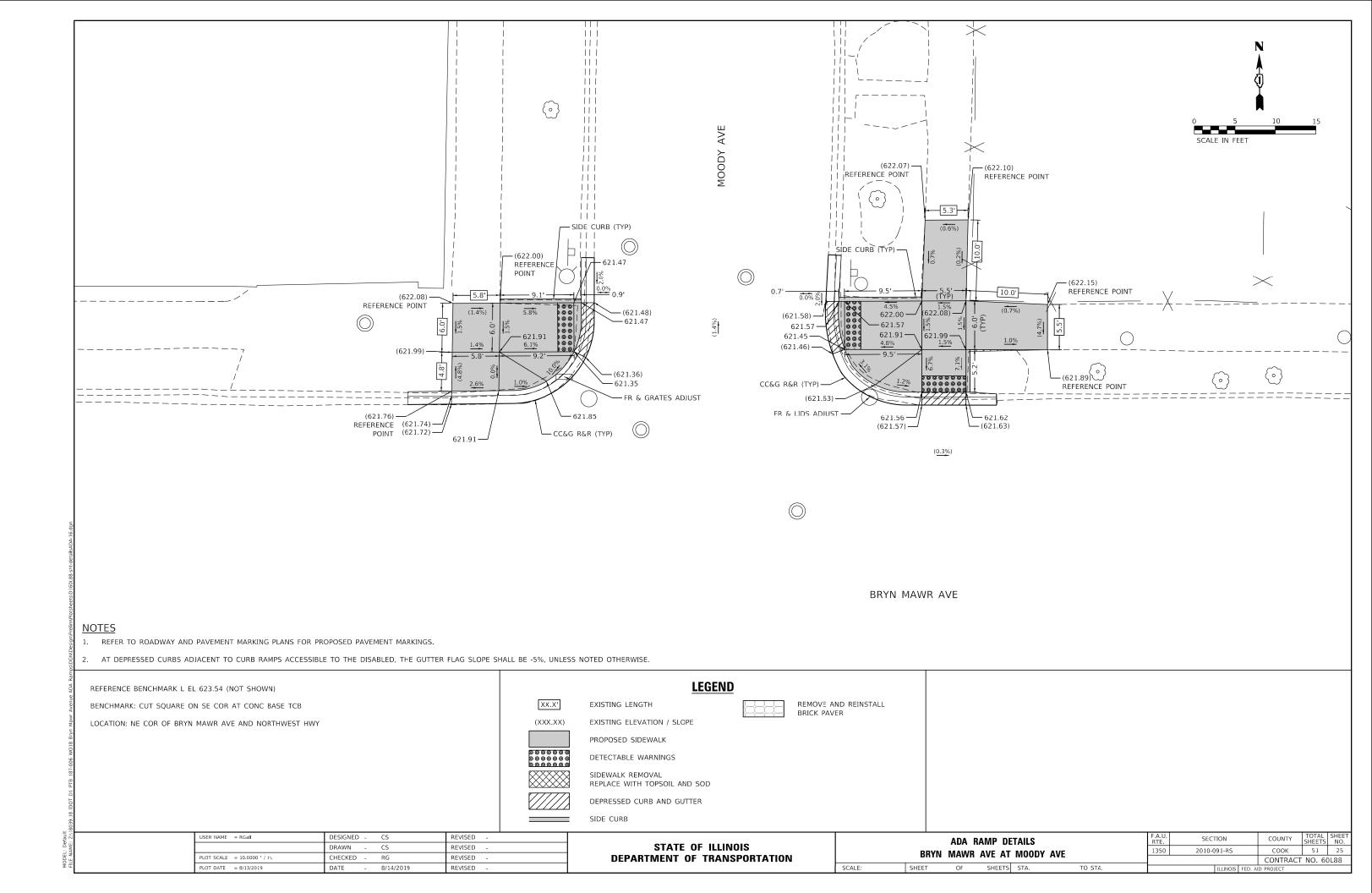


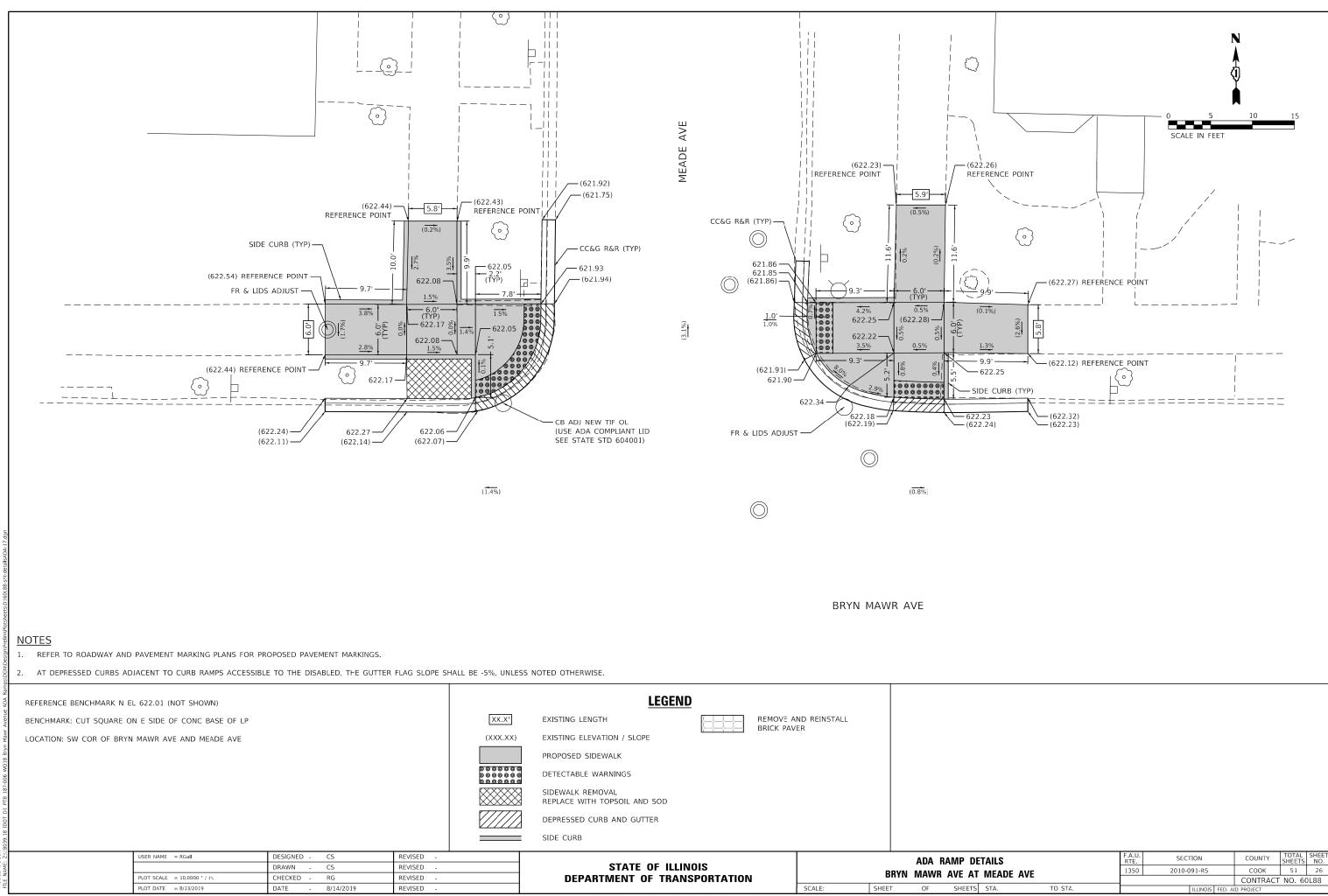


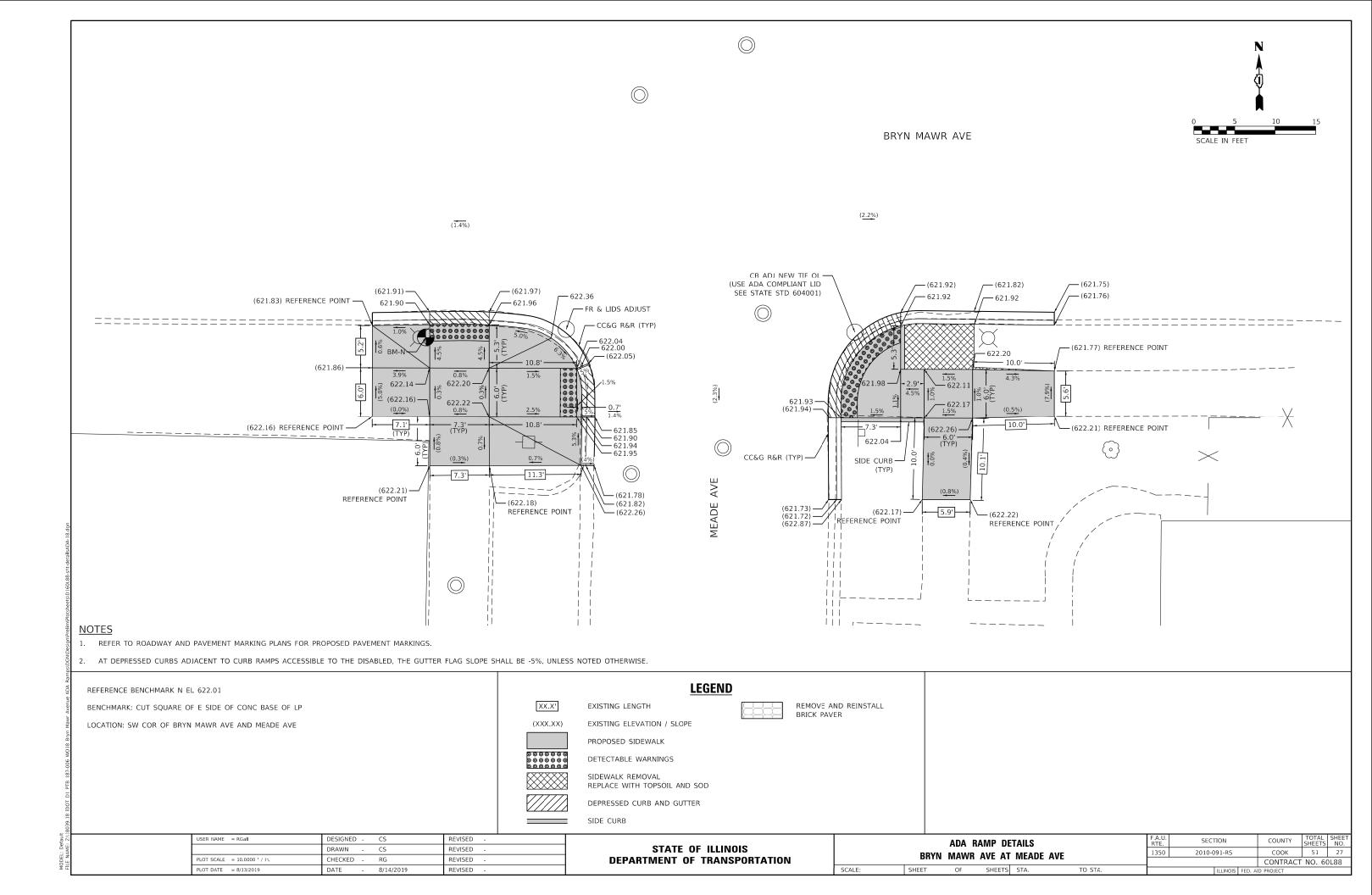
ĸ	THWEST	HIGHWAY				00010				
		IIIGIIWAI					CONTRACT	NO.	60L8	8
S	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT			_

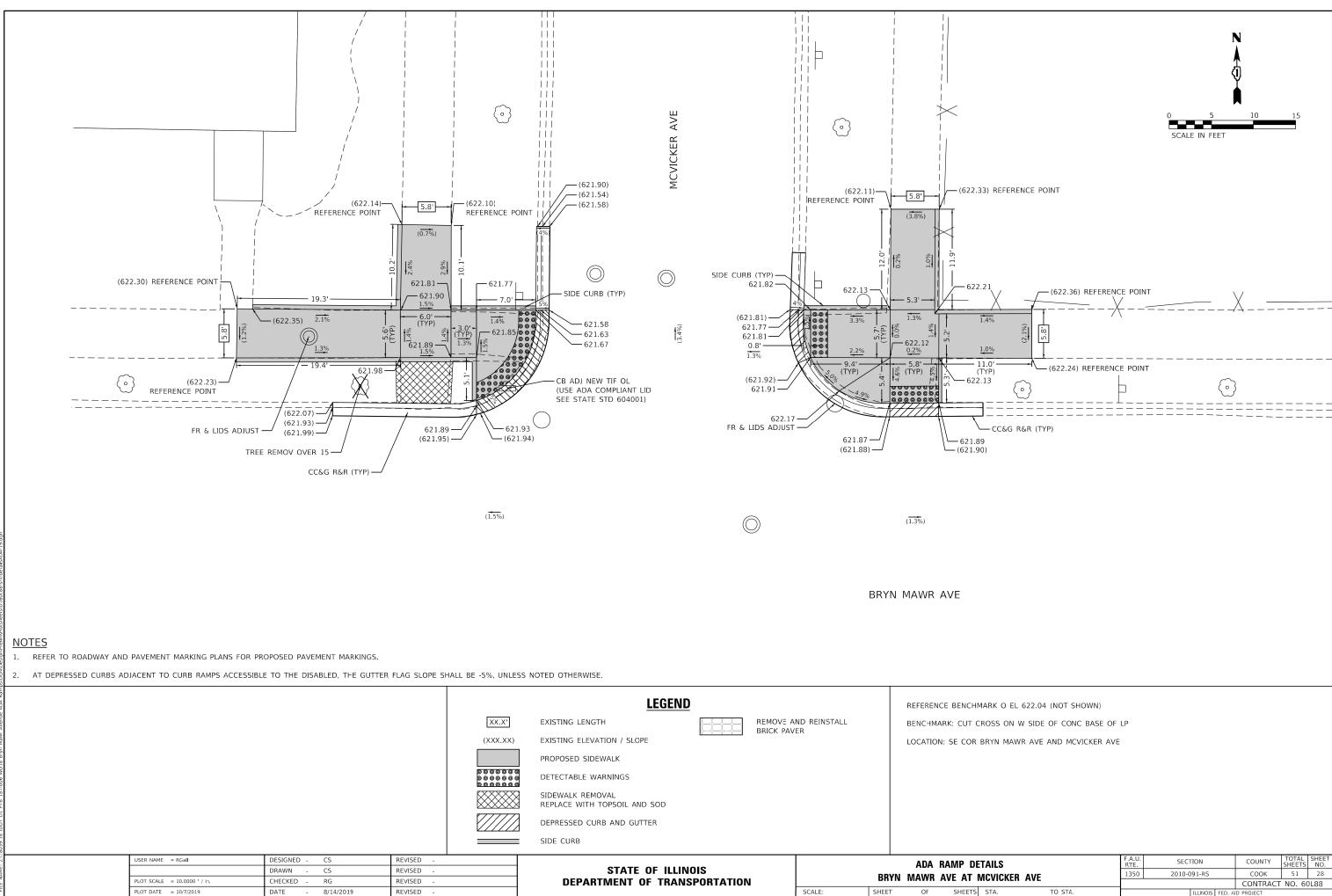


ADA Rai						<b>LEGEND</b>	<u>)</u>		REFERENCE BENCHM
Avenue					XX.X'	EXISTING LENGTH	REMOVE A BRICK PAV	ND REINSTALL	BENCHMARK: CUT SQ
Mawr					(XXX.XX)	EXISTING ELEVATION / SLOPE	Brick Hi		LOCATION: NE COR C
018 Brvn						PROPOSED SIDEWALK			
-006 WC					$\begin{smallmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 &$	DETECTABLE WARNINGS			
PTB 187						SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD			
IDOT D1						DEPRESSED CURB AND GUTTER			
8039.18	91.66					SIDE CURB			
efault : Z:\1		USER NAME = RGall	DESIGNED - CS	REVISED -					ADA RAMP DET
L: De			DRAWN - CS	REVISED -		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		DDVN	MAWR AVE AT NORT
MODEL: D	2	PLOT SCALE = 10.0000 ' / in.	CHECKED - RG	REVISED -				BRTN	WAWN AVE AT NUKT
ΣĒ	E	PLOT DATE = 8/13/2019	DATE - 8/14/2019	REVISED -				SCALE: SHE	T OF SHEETS

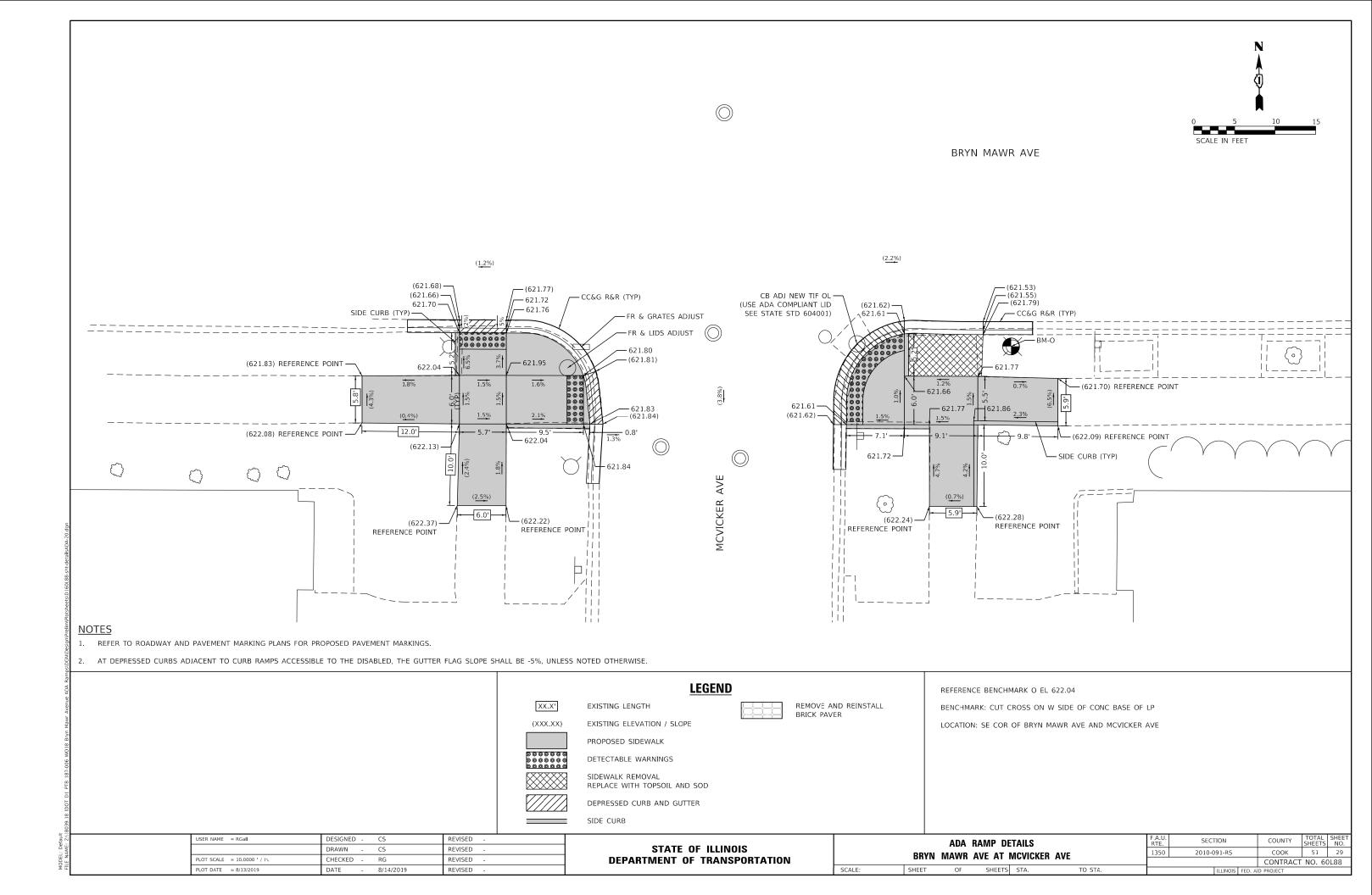


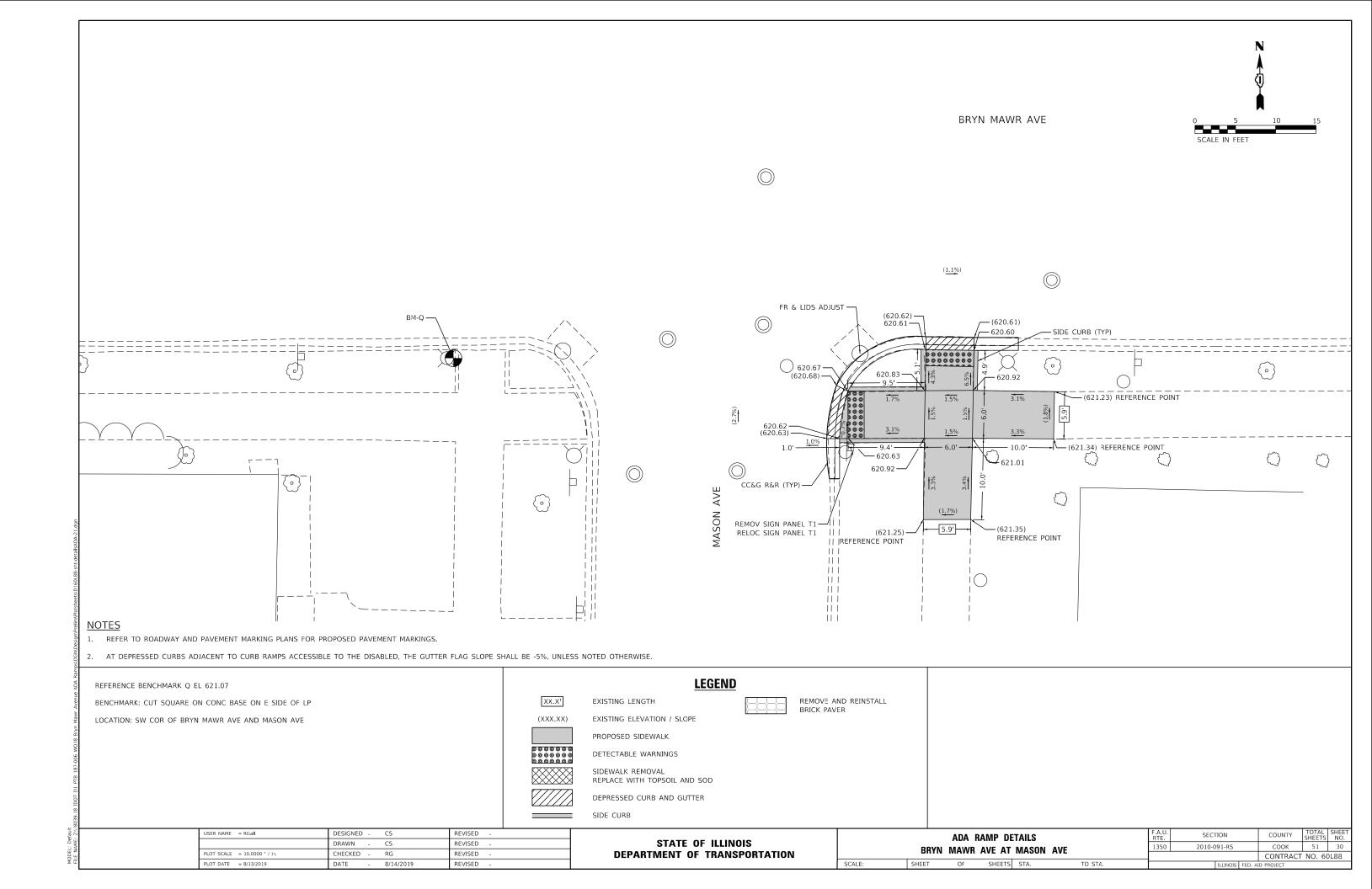


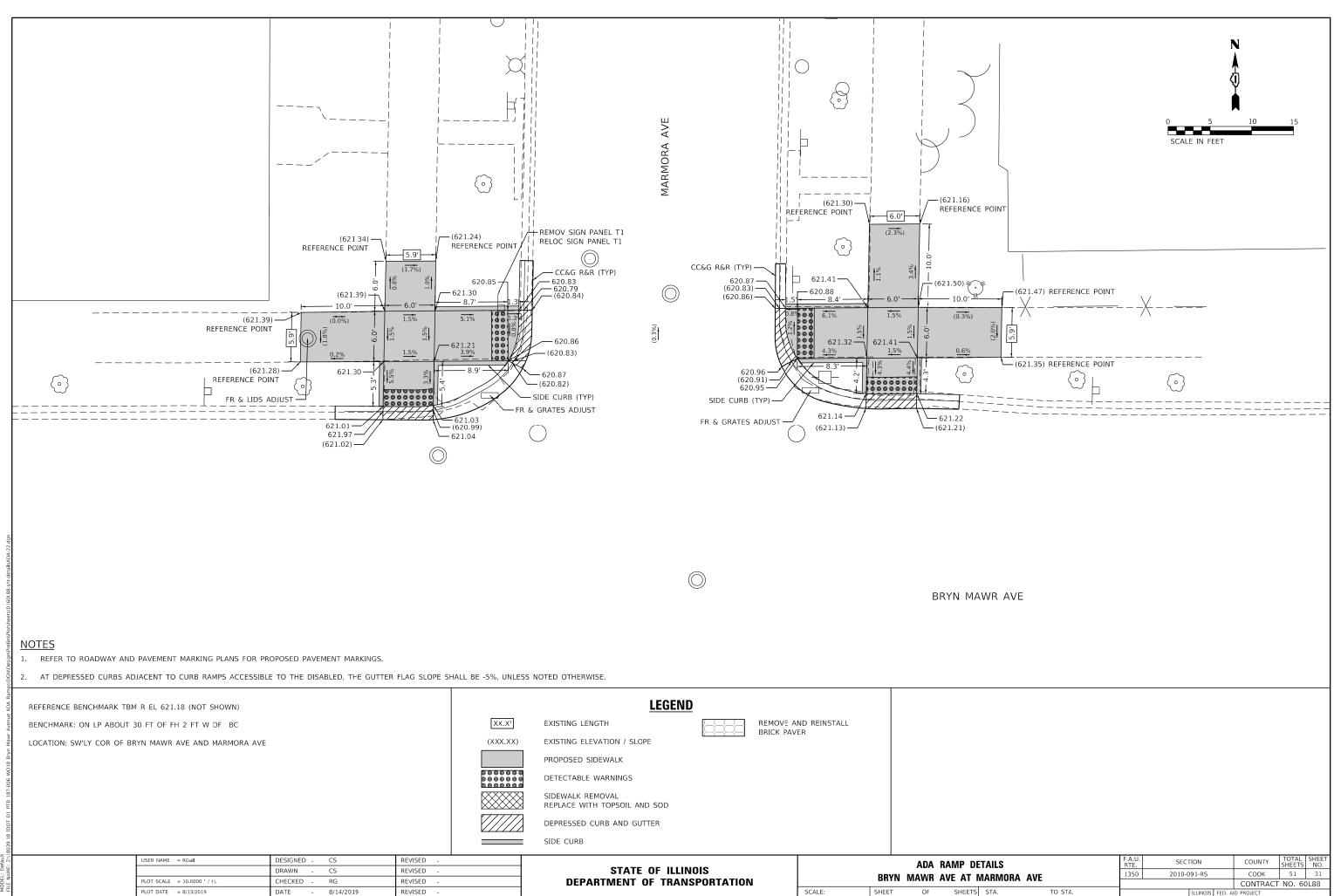




DETAILS	F.A.U. RTE.				COUNTY	TOTAL SHEETS	SHEET NO.
MCVICKER AVE		1350 2010-091-RS			СООК	51	28
MOVICKEN AVE		•			CONTRACT	NO. 60	)L88
TS STA. TO STA.			ILLINOIS	FED. AI	D PROJECT		







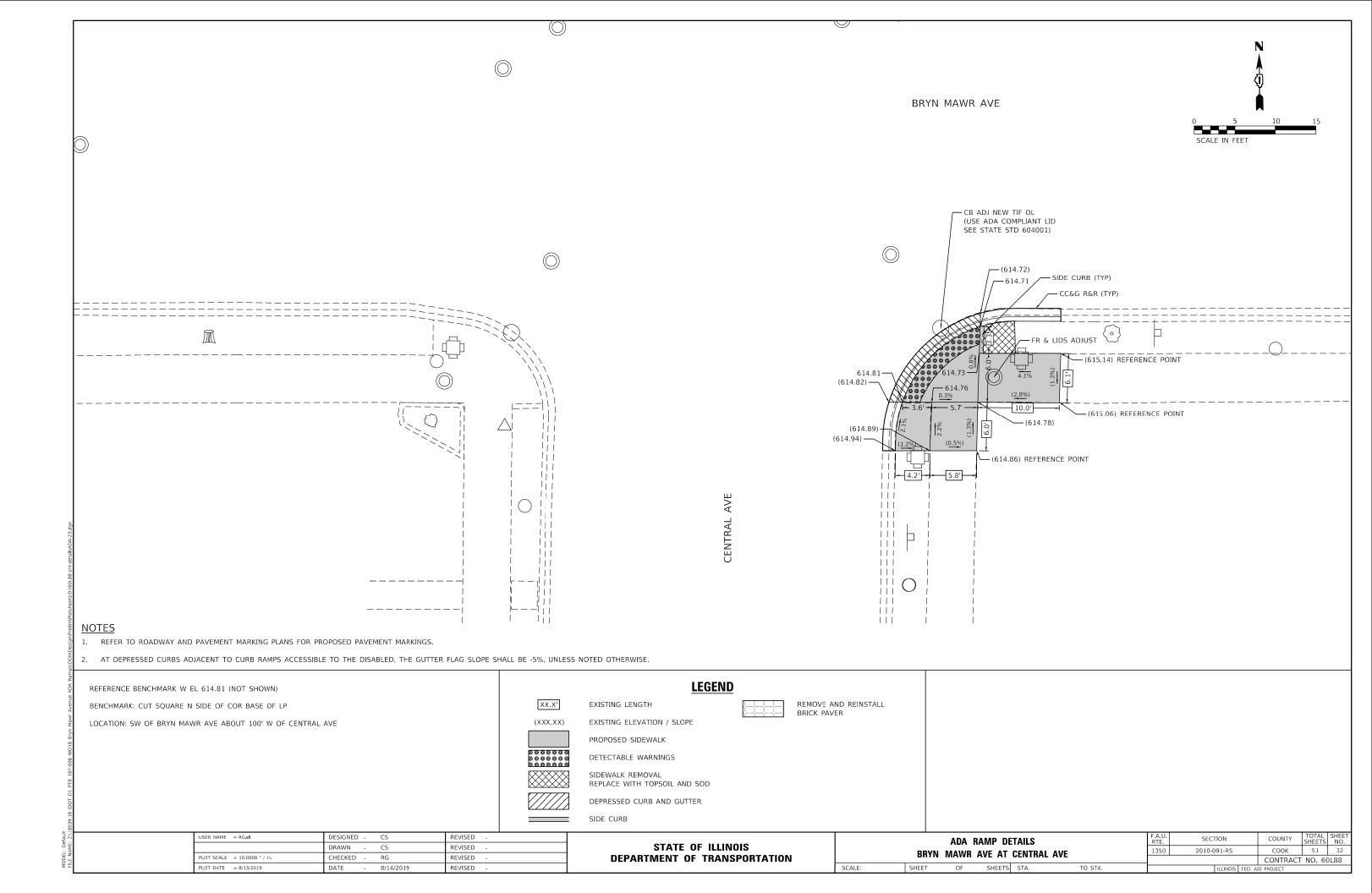
PLOT DATE = 8/13/2019

DATE

8/14/2019

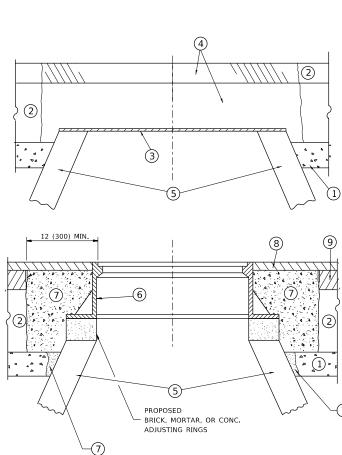
REVISED

HEETS	STA.	TO STA.	ILLINOIS	FED. AID





TEM				Q	UANTII	ry ui	NIT		
DETECTOR LOOP REPLACEN			VIEN <sup>-</sup>	Г	201		от		
LA	CEMENT	PLAN		F.A.P. RTE.	SECT	ION	COUNTY	TOTAL SHEETS	SHEET NO.
AT NAGLE AVENUE		1350	2010-0	2010-091-RS		51	33		
						CONTRACT	NO. 6	OL88	
TS	STA.	TO S	STA.			ILLINOIS FED.	AID PROJECT		



#### **NOTES**

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

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

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

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

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

#### **DETAILS FOR FRAMES AND LIDS ADJUSTMENT** WITH MILLING

	ISHEEISI NO
OSER NAME     Buildramisa     Designed     R. Shah     Revised     R. Webewan 05-14-04       DRAWN     DRAWN     REVISED     R. BORO 01-01-07     STATE OF ILLINOIS     EDAMES AND LUSS AD LU	COOK 51 34
PLOT SCALE = 100.0000 / in. CHECKED REVISED R. BORO 03-09-11 DEPARTMENT OF TRANSPORTATION FRAMES AND LIDS ADJUSTMENT WITH MILLING BD600–03 (BD–8)	CONTRACT NO. 60L88
PLOT DATE = 10/16/2019 DATE - 10-25-94 REVISED - R BORO 12-06-11 SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.	PROJECT

#### CONSTRUCTION PROCEDURES

#### STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

#### STAGE 2 (AFTER PAVEMENT MILLING)

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

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

#### LEGEND

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

#### LOCATION OF STRUCTURES

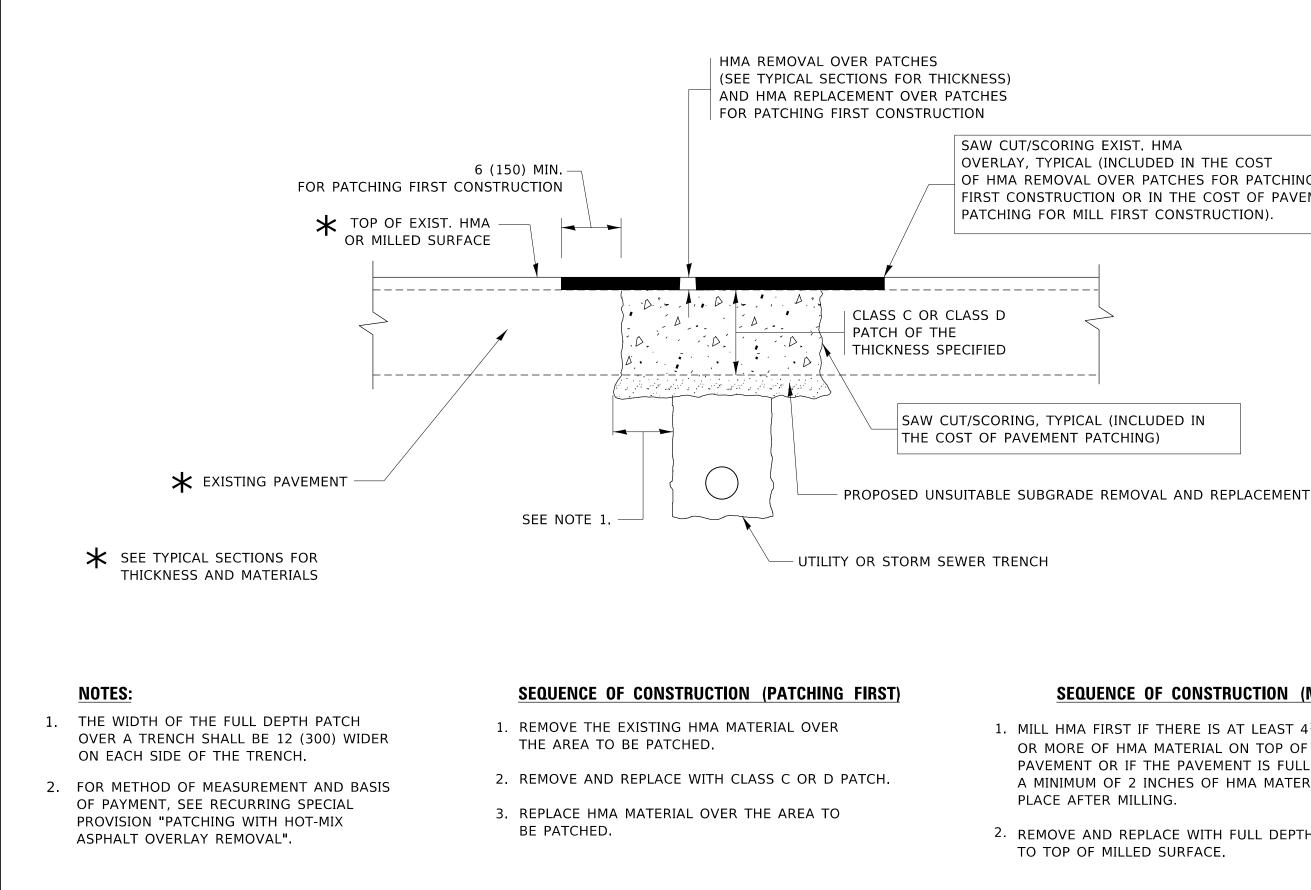
THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

#### **BASIS OF PAYMENT**

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

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION. NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN



USER NAME	E = Bilgramisa	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.U RTE	SECTION	COUNTY TOTAL SHEET SHEETS NO.
		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS	HMA SURFACED PAVEMENT		2010-091-RS	СООК 51 35
PLOT SCALE	E = 100.0000 ' / in.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION			BD400-04 (BD-22)	CONTRACT NO. 60L88
PLOT DATE	= 10/16/2019	DATE - 10-25-94	REVISED K ENG 10-27-08		SCALE NONE SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT

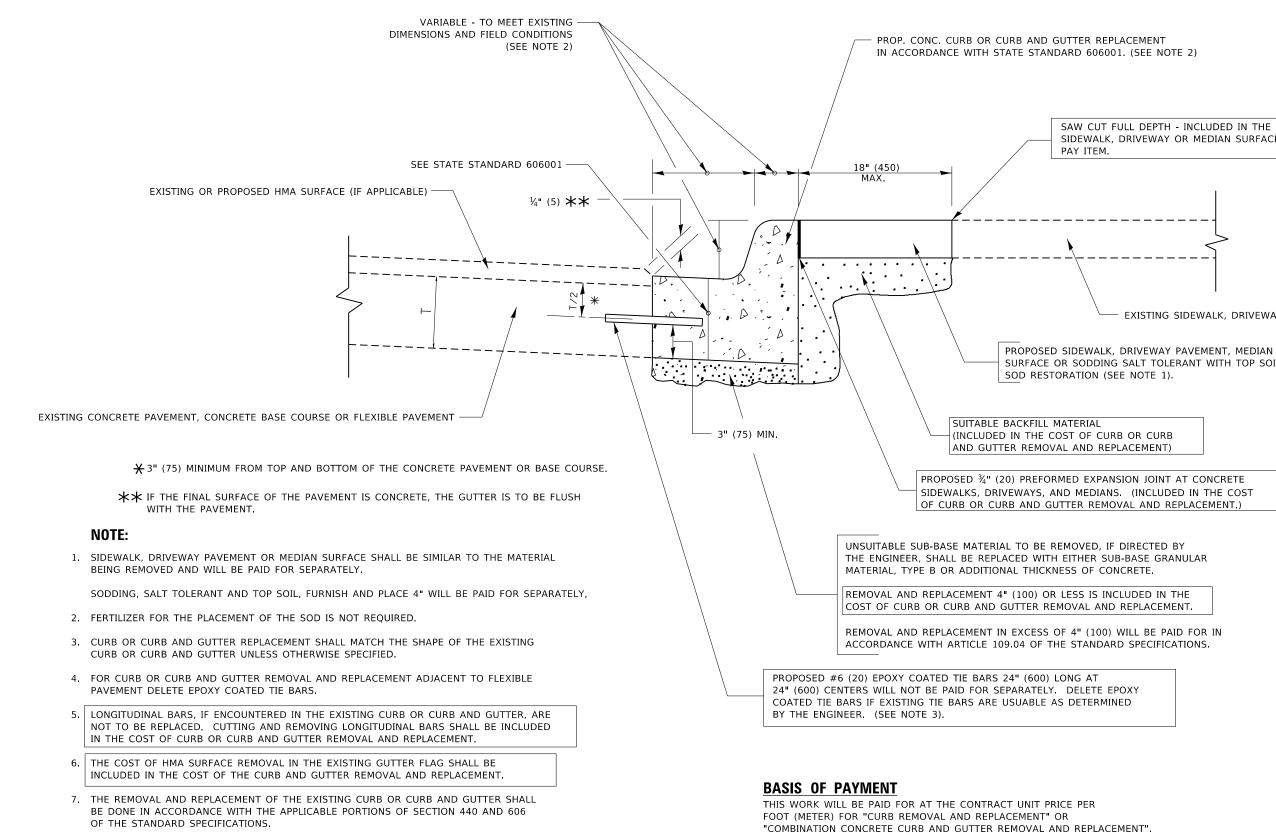
OVERLAY, TYPICAL (INCLUDED IN THE COST OF HMA REMOVAL OVER PATCHES FOR PATCHING FIRST CONSTRUCTION OR IN THE COST OF PAVEMENT PATCHING FOR MILL FIRST CONSTRUCTION).

## **SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

1. MILL HMA FIRST IF THERE IS AT LEAST  $4\frac{1}{2}$  INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN

2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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



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

## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

USER NAME = Bilgramisa	DESIGNED - A HOUSEH	REVISED - R. SHAH 10-03-96			CURB OR (				F.A.U. BTE	SECTIO	N	COUNTY TOT	TAL SHEET
	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS						1350	2010-091	-RS	соок 5	51 36
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT		BD	600-06 (BD-	-24) C	ONTRACT NO	0. 60L88			
PLOT DATE = 10/16/2019	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET 1 OF 1	SHEETS	STA.	TO STA.		ILL	INOIS FED AID P	OJECT	

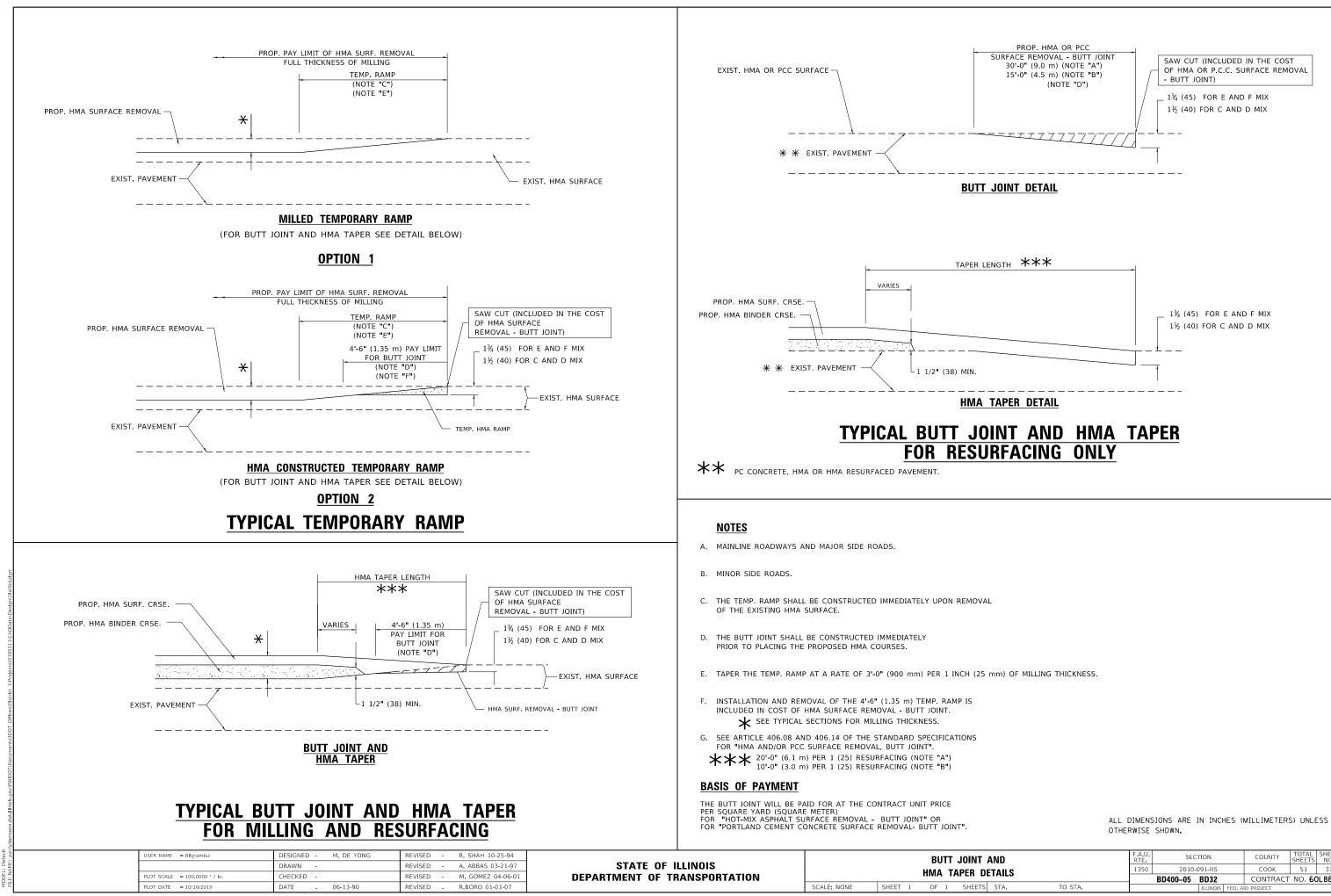
SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL

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

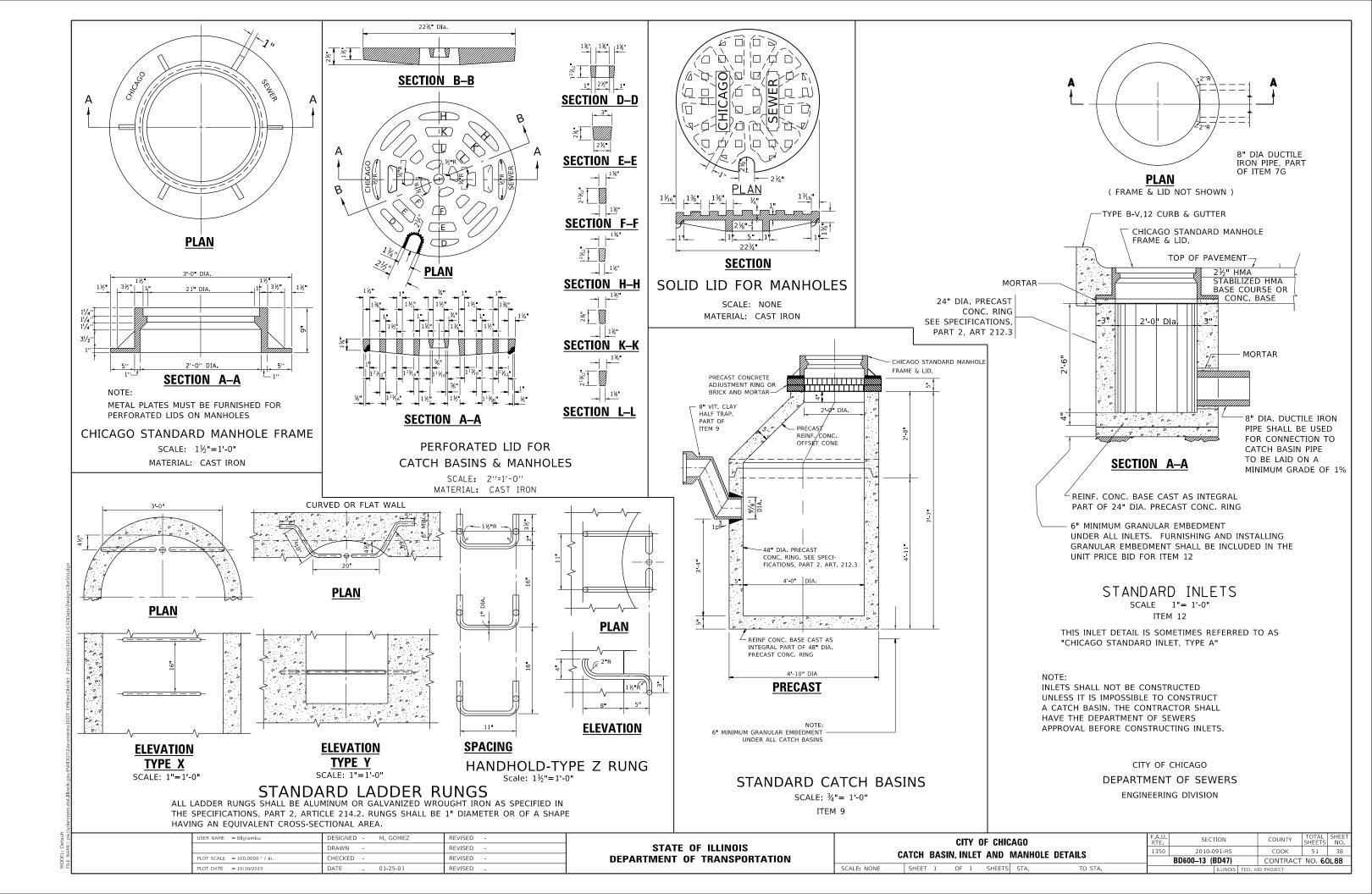
SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100)



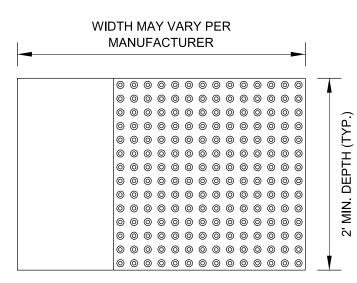
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



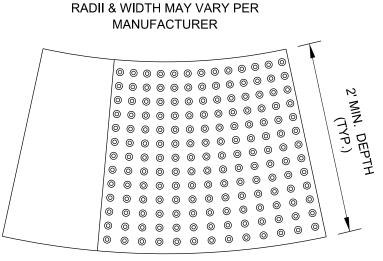
AND		F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DETAILS		1350	2010-091-RS	соок	51	37
			BD400–05 BD32	CONTRACT	NO. 60	DL88
'S STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		



# STRAIGHT DETECTABLE WARNING UNITS



# **RADIAL DETECTABLE WARNING UNITS**



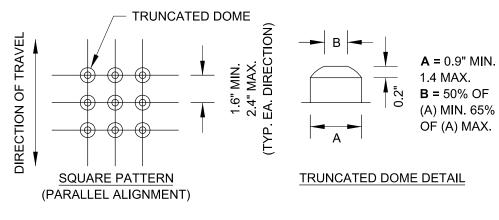
# **DETECTABLE WARNING UNIT SIZES**

- VERIFY ALL DIMENSIONS WITH THE PRODUCT MANUFACTURER.

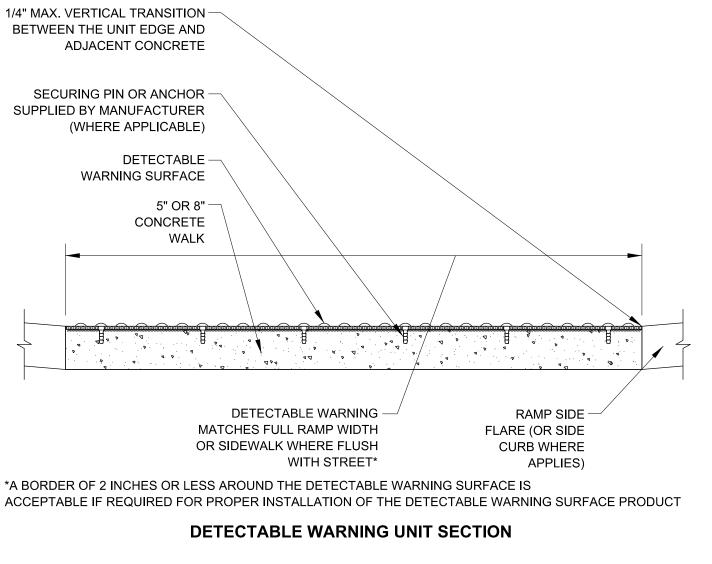
- IF USING RADIAL UNITS, VERIFY THAT THE CURB RADIUS MATCHES AVAILABLE UNIT RADII WITH THE PRODUCT MANUFACTURER.

# GENERAL NOTE:

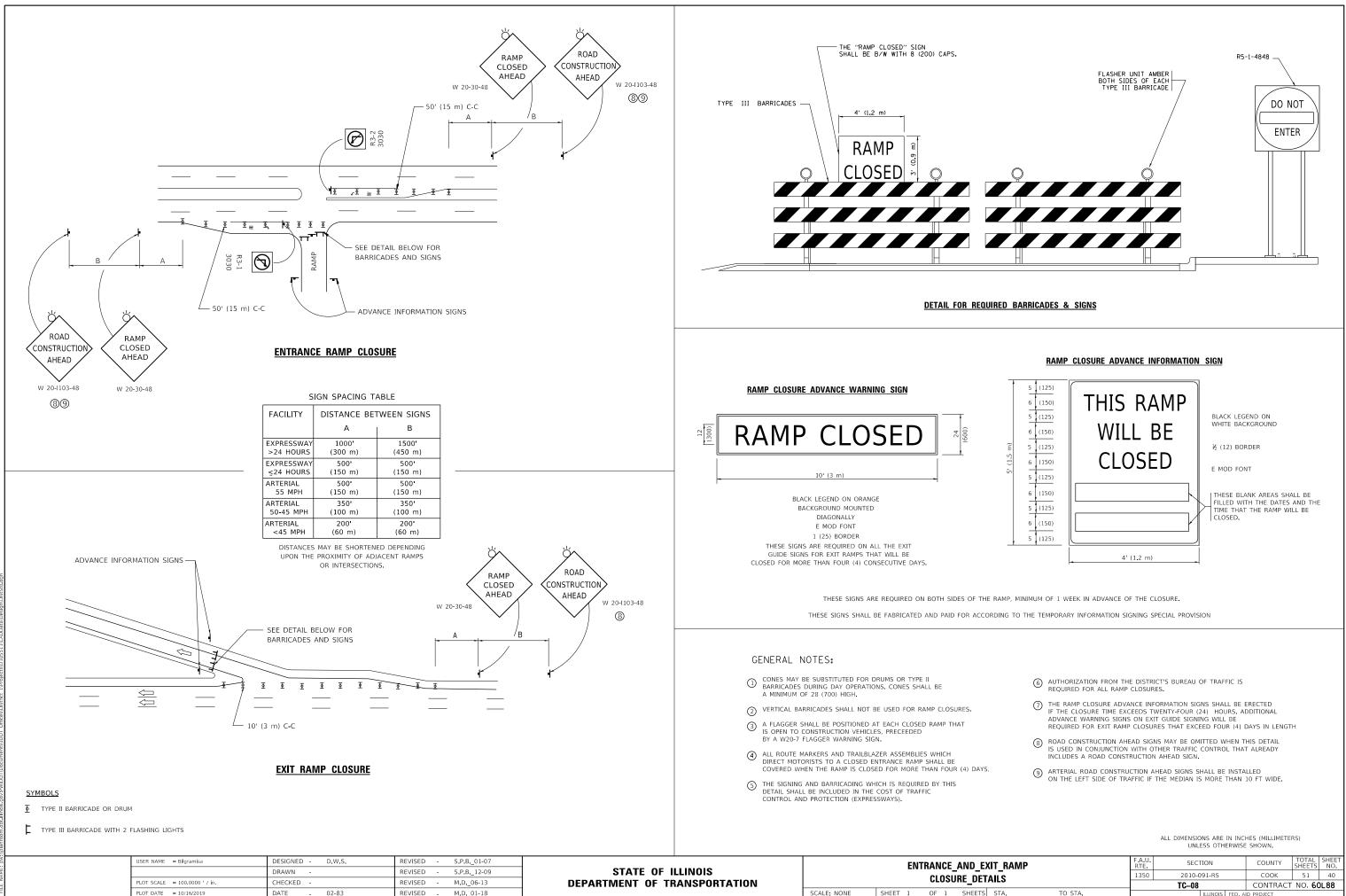
THE ROWS OF DOMES IN THE DETECTABLE WARNING MATERIAL MUST BE ALIGNED WITH THE PATH OF WHEELCHAIR TRAVEL WHICH IS REQUIRED TO BE PERPENDICULAR TO THE GRADE BREAK AT THE BOTTOM OF THE RAMP TO PERMIT TRACKING BETWEEN DOME ROWS. ON BLENDED TRANSITIONS OR FLUSH TRANSITIONS, WHERE RADIAL UNITS ARE SITUATED ABOUT THE CURB RADIUS, DOME ORIENTATION IS NOT SIGNIFICANT.



# **UNIT PATTERN & DOME DETAIL**

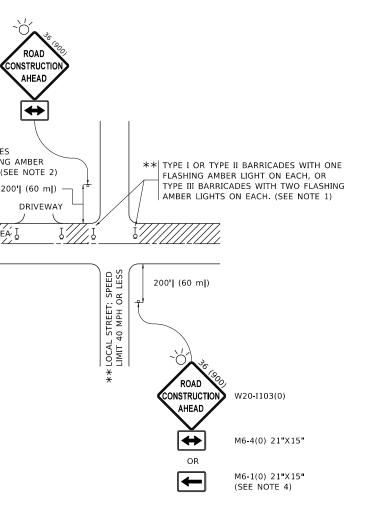


USER NAME = Bilgramisa	DESIGNED -	REVISED -		CITY OF CHICAGO	F.A.U. BTE	SECTION	COUNTY TOT	TAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS	DETECTABLE WARNINGS	1350	2010-091-RS	COOK 5	<u>51</u> 39
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	DETECTABLE WARNINGS		BD 58	CONTRACT NO.	D. 60L88
PLOT DATE = 10/16/2019	DATE - 06-20-2017	REVISED -		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA	۹.	ILLINOIS FED.	AID PROJECT	



	ROAD ROAD (CONSTRUCTION AHEAD 15 (380) 21 (530) (Unit of a construction (Unit of a construction) (Unit of a construction (Unit of a construction) (Unit of a const
	NOTES:
	<ol> <li>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:</li> </ol>
	<ul> <li>a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.</li> </ul>
	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 ENCINEER
	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,
	THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
	<ol> <li>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.</li> </ol>
	WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE 4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
TATE OF II	LINOIS TRAFFIC CONTROL AND PROTECTIO

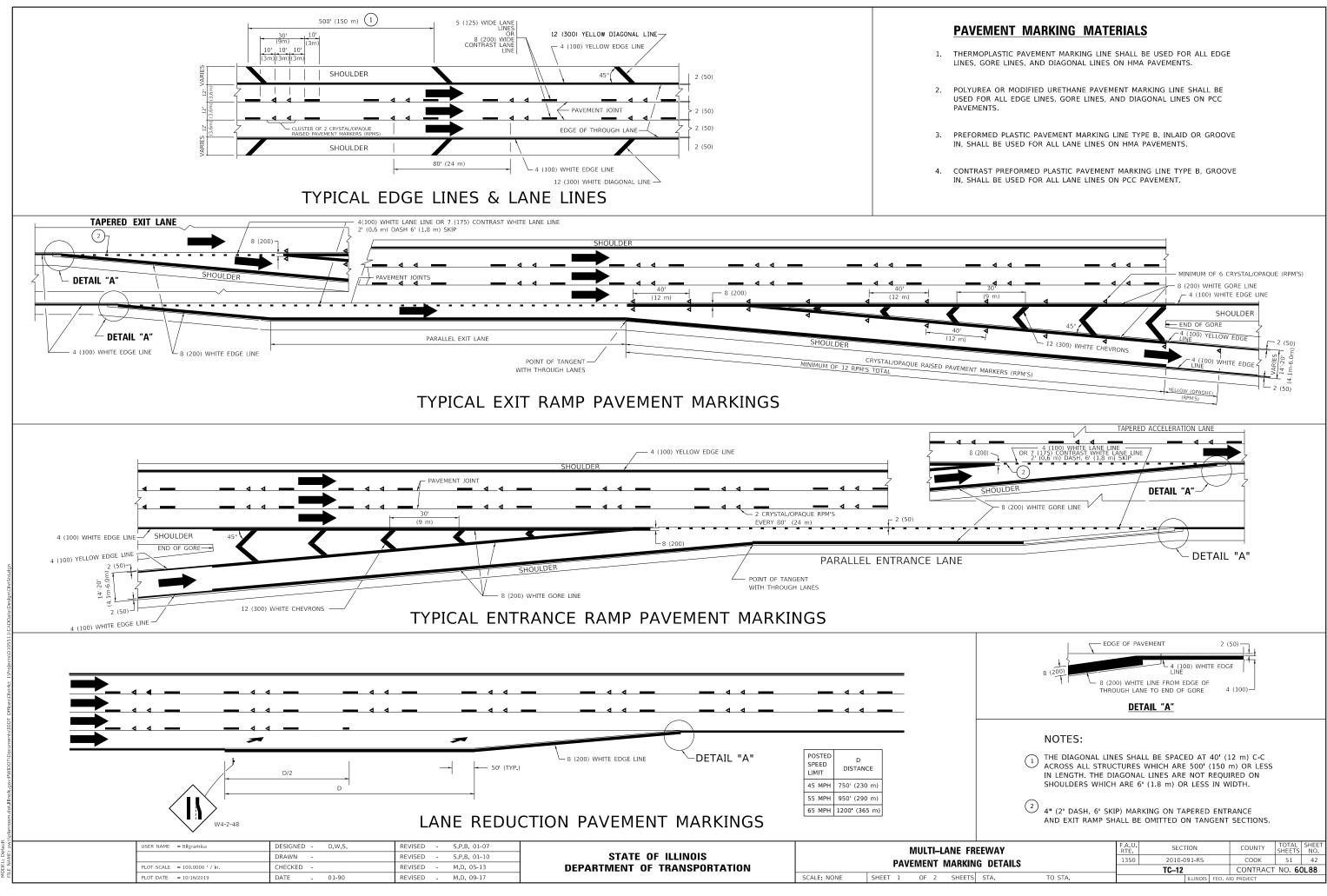
									unics	s otherwise shown		
USER NAME = Bilgramisa	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96	· · · · · ·		-	TRAFFIC CONTROL AND	PROTECTION	FOR	F.A.U. BTE	SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED - T. RAMMACHER 01-06-00	STATE OF ILLINOIS			DE ROADS, INTERSECTIO			1350	2010-091-RS	соок	51 41
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13	DEPARTMENT OF TRANSPORTA	ATION	311	JE RUADS, INTERSECTIO		EWATS	_	TC-10	CONTRACT	NO. 60L88
PLOT DATE = 10/16/2019	DATE - 06-89	REVISED A. SCHUETZE 09-15-16		SCALE	E: NONE	SHEET 1 OF 1 SHEE	TS STA.	TO STA.		ILLINOIS FED	AID PROJECT	

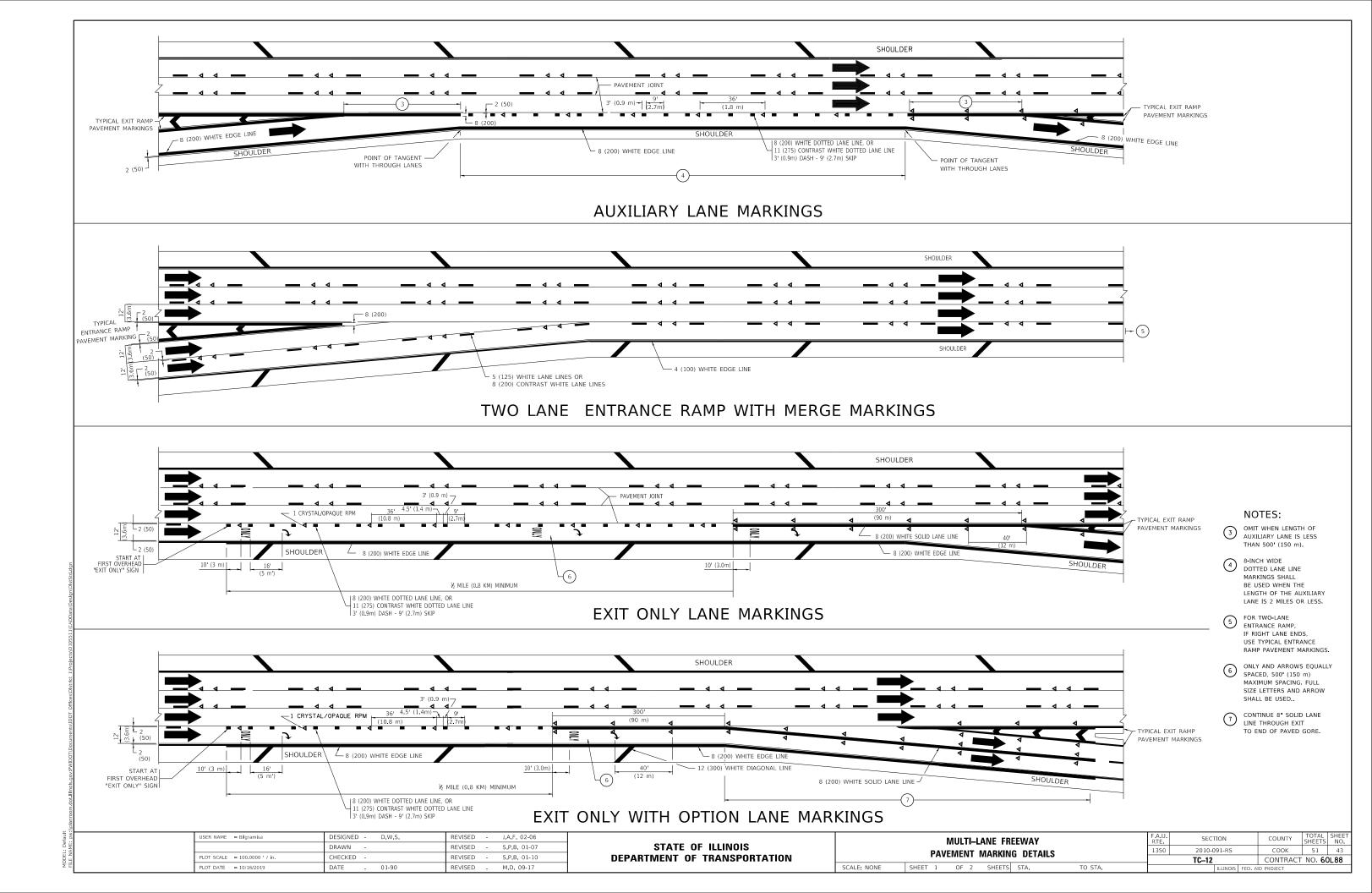


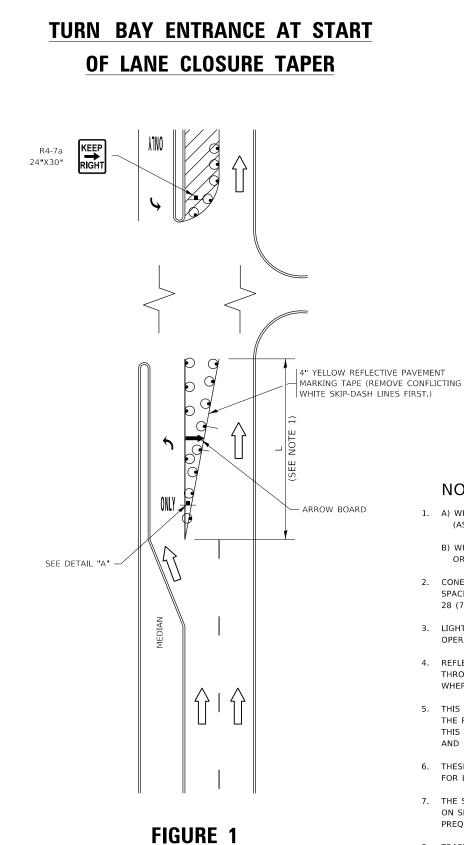
5.	WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY,
	FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL
	ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN
	NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.

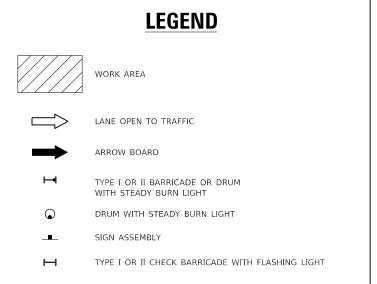
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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



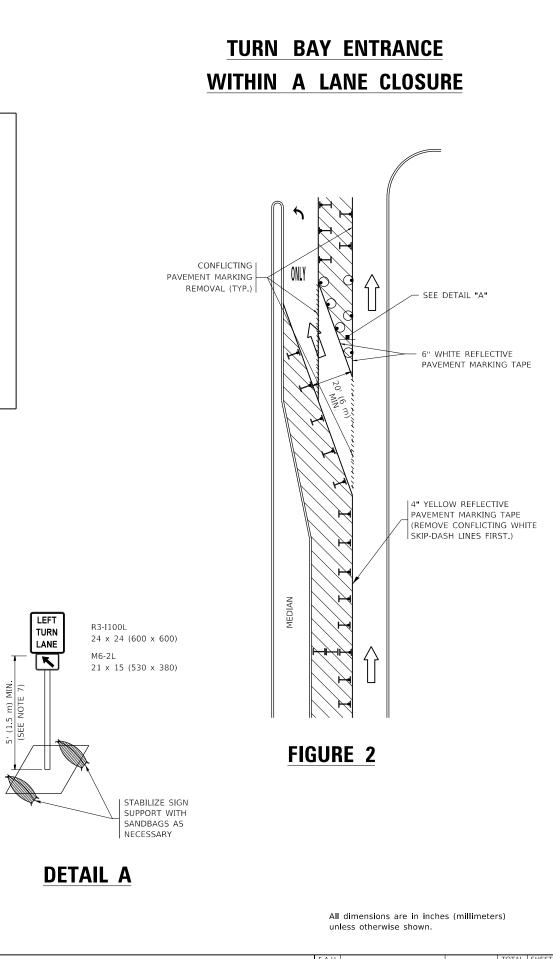






# NOTES:

- 1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
  - B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
- 2. 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.
- 3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
- 4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
- 5. 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" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
- 6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
- 7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREOUIREMENTS.
- 8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



USER NAME = Bilgramisa	DESIGNED -T. RAMMACHER 09-08-94			TRAF	FIC CONTROL AND PROTECTION AT TURI	N BAYS	F.A.U. RTE	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
	DRAWN - A HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13	STATE OF ILLINOIS		(TO REMAIN OPEN TO TRAFFIC)		1350	2010-091-RS	соок	51 44
PLOT SCALE = 100.0000 ' / in.	CHECKED A HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16	DEPARTMENT OF TRANSPORTATION		(TO HEIMAIN OFEN TO HATTIC)			TC-14	CONTRACT	NO. 60L88
PLOT DATE = 10/16/2019	DATE -T. RAMMACHER 01-06-00	REVISED -		SCALE: NONE	SHEET 1 OF 1 SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT	

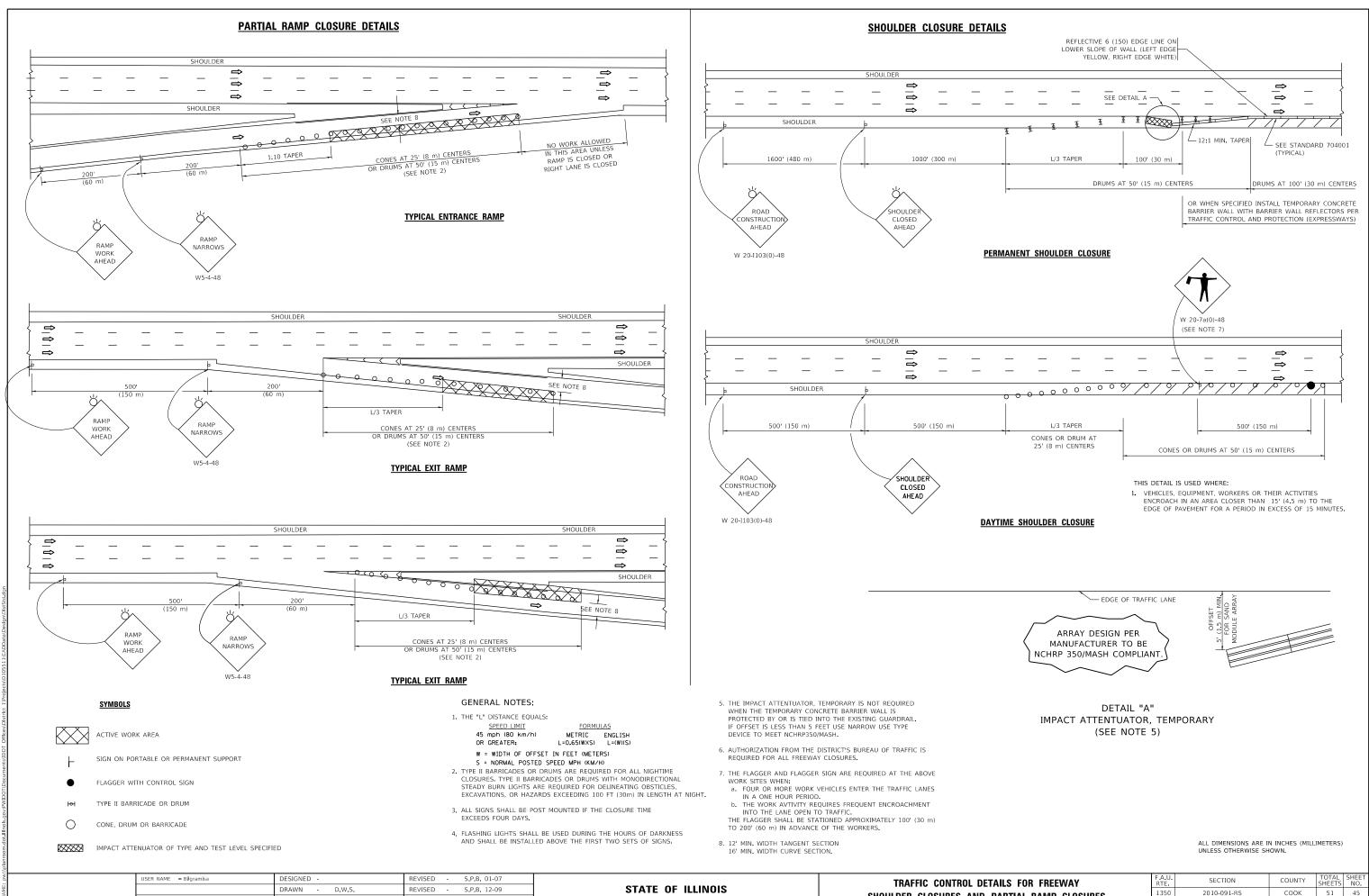
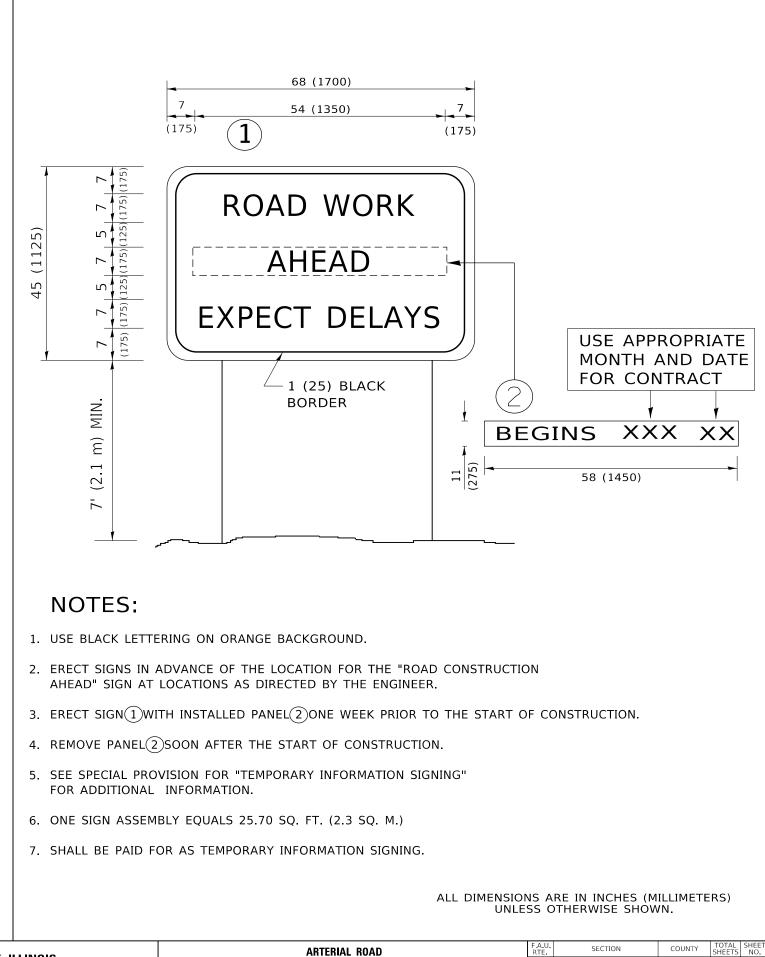


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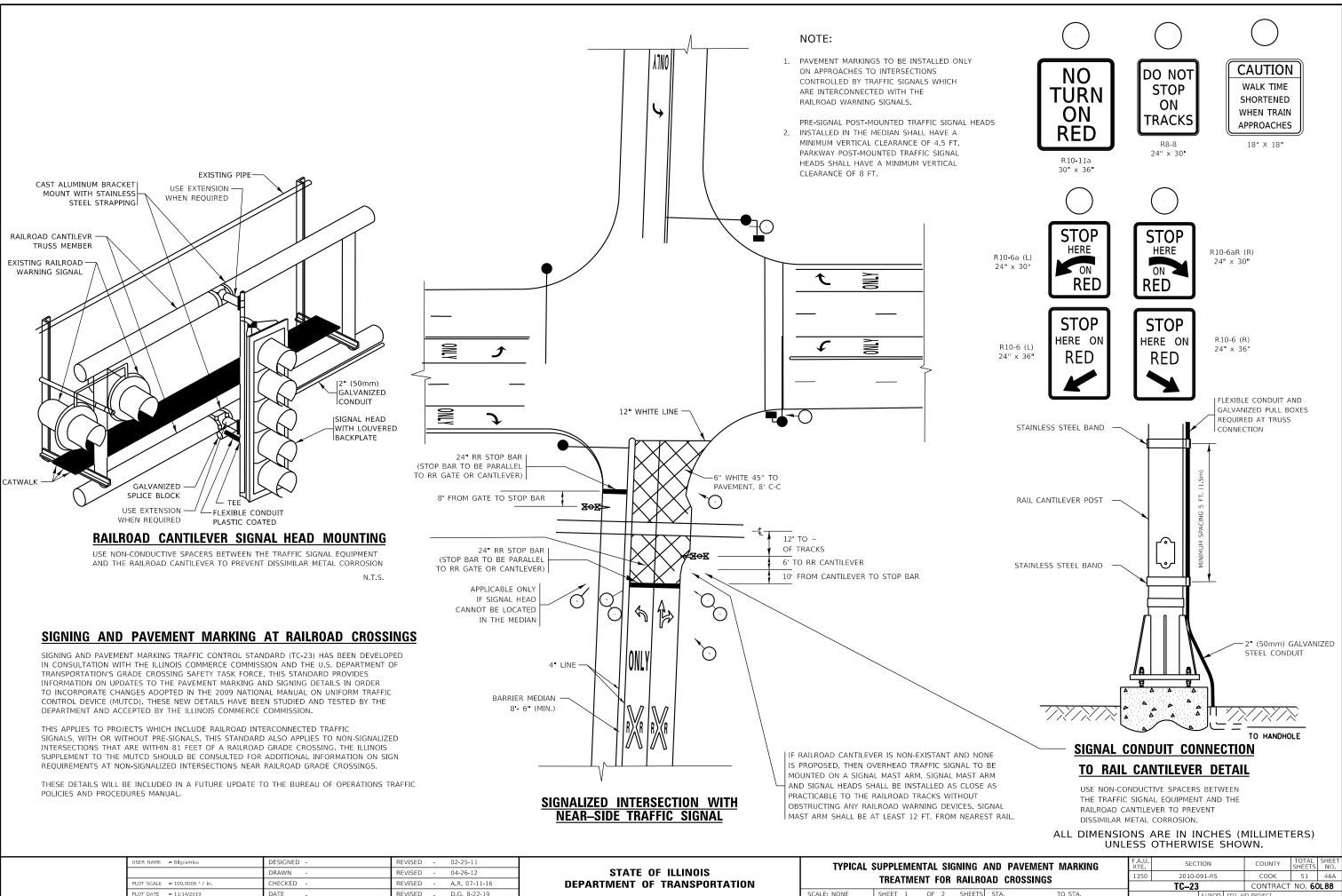
STA. TO STA. ILLINO

2010-091-RS COOK 51 45 TC-17 CONTRACT NO. 60L88



USER NAME = Bilgramisa	DESIGNED -	REVISED - R. MIRS 09-15-97			
	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS		
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		
PLOT DATE = 10/16/2019	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET 1

ARTERIAL ROAD					F.A.U. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
INFORM		SIGN		1350	2010-091-6	RS	СООК	51	46
		31014			TC-22		CONTRACT	NO. 60	L88
OF 1	SHEETS	STA.	TO STA.		ILLI	NOIS FED. AI	D PROJECT		

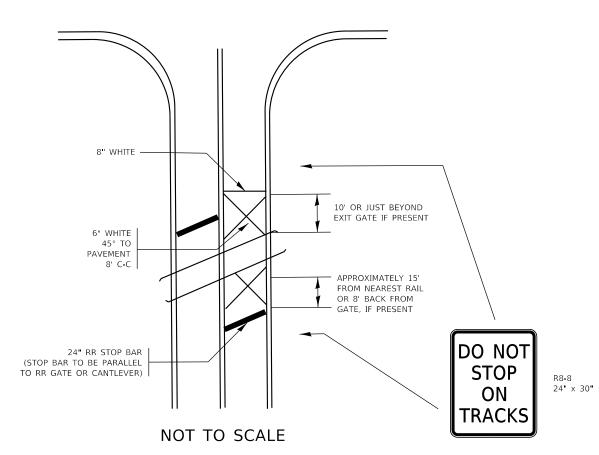


USER NAME = Bilgramisa	DESIGNED -	REVISED - 02-25-11		TYPICAL	SUPPLEMEN	TAL SIG	
	DRAWN -	REVISED - 04-26-12	STATE OF ILLINOIS				
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - A.R. 07-11-16	DEPARTMENT OF TRANSPORTATION	1	TREATMEN	I FUK	RAILROA
PLOT DATE = 11/14/2019	DATE -	REVISED D.G. 8-22-19		SCALE: NONE	SHEET 1	OF 2	SHEETS

# TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS

# WITH SIGNALIZED INTERSECTION

# WITH NON-SIGNALIZED INTERSECTION 81' OR LESS TO CLOSEST RAIL



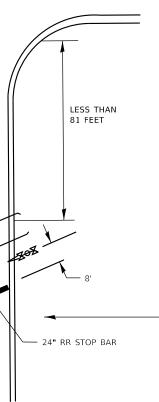
## NOTE:

- 1. DISTANCE TO BE SHOWN ON SIGN MEASURED FROM A POINT 6 FEET FROM THE RAIL CLOSEST TO THE INTERSECTION OR FROM THE CLOSEST POINT ALONG THE EXIT GATE IF PRESENT OVER THE ROADWAY WHEN IN THE LOWERED POSITION TO THE STOP BAR OR CROSSWALK, WHICHEVER IS CLOSEST, ROUNDED DOWN TO THE NEAREST 5 FEET. WHERE THERE IS NO STOP LINE, MEASURE TO POINT WHERE DRIVER HAS A VIEW OF APPROACHING TRAFFIC.
- 2. THE CLEARANCE SIGN IS ALSO TO BE USED AS AN INTERIM MEASURE AT LOCATIONS WITH INTERCONNECTED INTERSECTION TRAFFIC SIGNALS WHERE IT IS PLANNED TO CHANGE THEM TO NEAR-SIDE SIGNALS AT A FUTURE TIME. IN THIS CASE, THE DISTANCE TO BE SHOWN ON THE SIGN IS MEASURED FROM THE EDGE OF THE STRIPED-OUT AREA INSTEAD OF 6 FEET FROM THE RAIL. THE SIGN IS TO BE REMOVED WHEN THE NEAR-SIDE SIGNALS ARE INSTALLED AND THE PAVEMENT MARKING EXTEND TO THE INTERSECTION.

USER NAME = Bilgramisa	DESIGNED -	REVISED -		TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING	F.A.U. SECTION	COUNTY TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS		1350 2010-091-RS	COOK 51 46B
PLOT SCALE = 100.0001 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	TREATMENT FOR RAILROAD CROSSINGS	TC-23	CONTRACT NO. 60L88
PLOT DATE = 11/14/2019	DATE -	REVISED -		SCALE: NONE SHEET 2 OF 2 SHEETS STA. TO STA.	ILLINOIS	FED. AID PROJECT

## NOTE:

- 1. PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
- 2. WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED THE PAVEMENT MARKINGS EXTEND TO THE INTERSECTION. (SEE DETAIL FOR PRE-SIGNALS).



CAUTION XX FEET

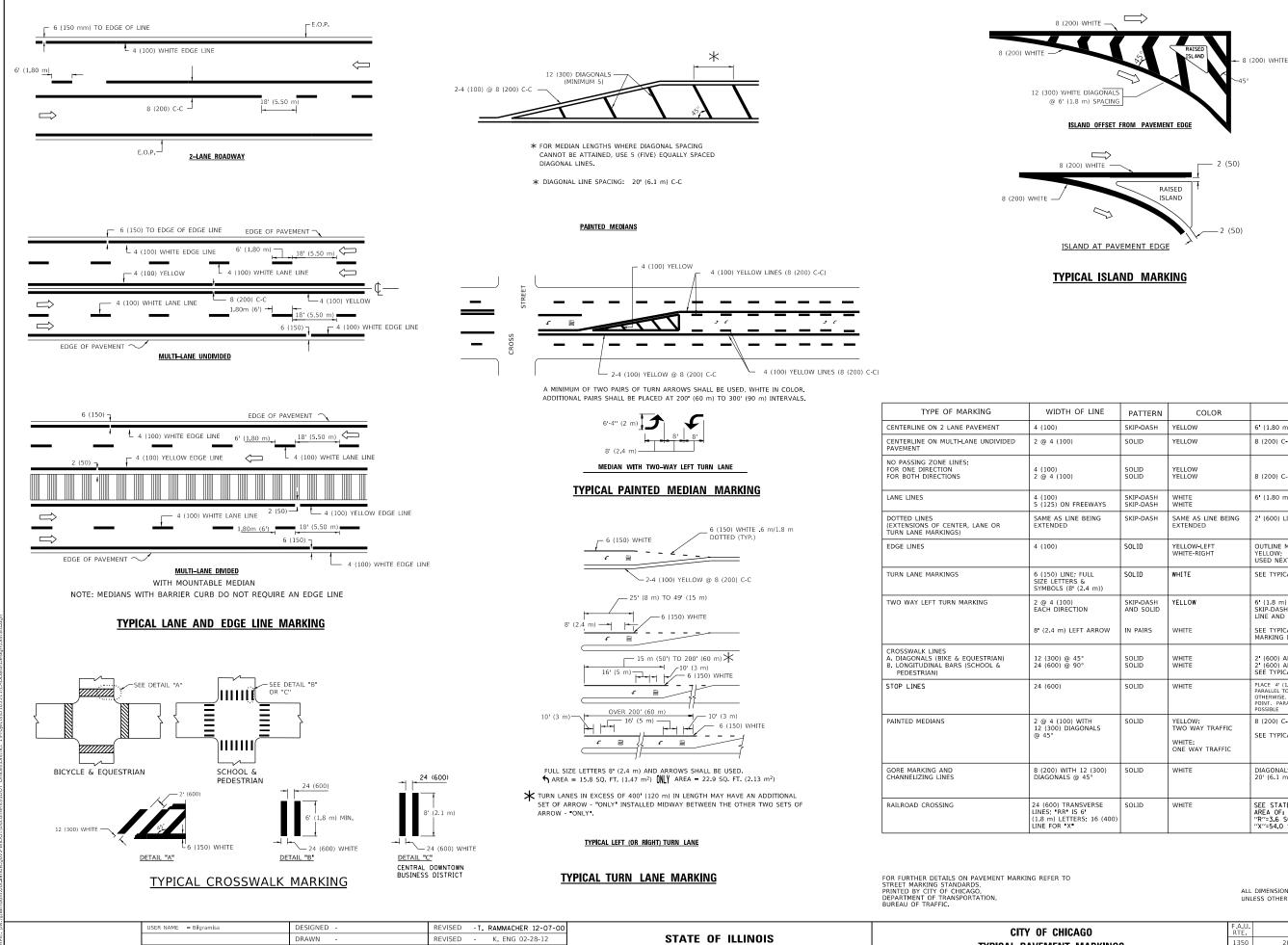
BETWEEN TRACKS AND HIGHWAY

W10-I100 30" x 36"



R8-8 24" x 30"

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

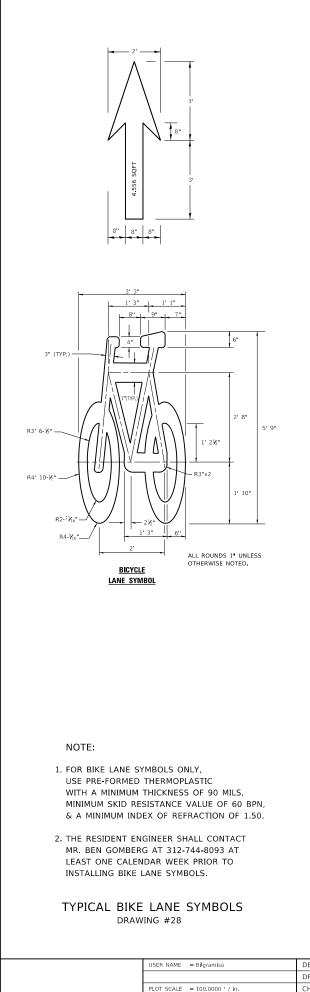


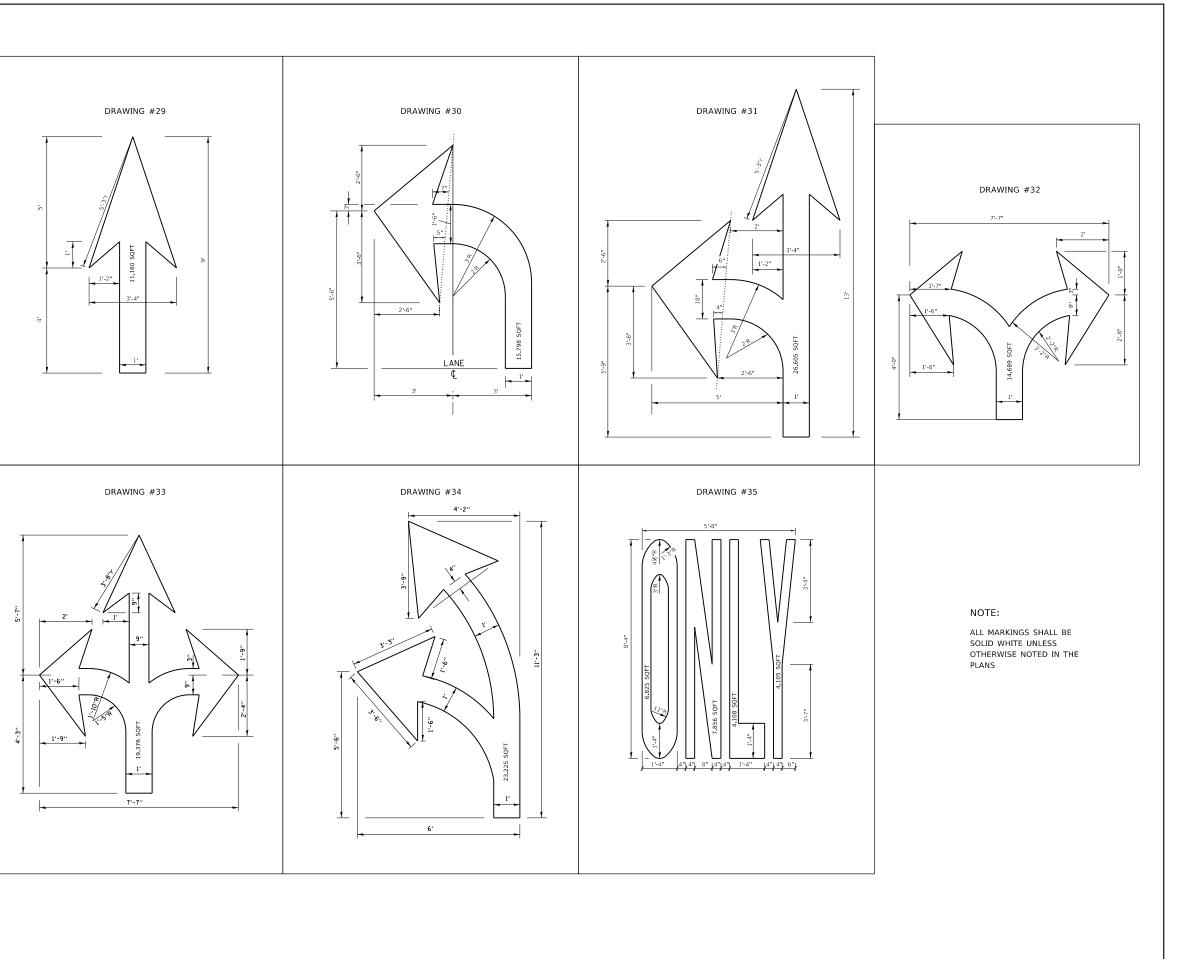
USER NAME = Bilgramisa	DESIGNED - DRAWN -	REVISED - T. RAMMACHER 12-07-00 REVISED - K. ENG 02-28-12	STATE OF ILLINOIS				OF CHI
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		TYPICA	L PAV	ENTENT
PLOT DATE = 10/16/2019	DATE -	REVISED -		SCALE: NONE	SHEET 1 (	OF 3	SHEETS

"H OF LINE	PATTERN	COLOR	SPACING / REMARKS
	SKIP-DASH	YELLOW	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
00)	SOLID	YELLOW	8 (200) C-C
00)	SOLID SOLID	YELLOW YELLOW	8 (200) C-C
IN FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	6'(1.80 m) LINE WITH 18'(5.50 m) SPACE
LINE BEING D	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8) SPACE
	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
INE; FULL TERS & (8' (2.4 m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
DO) ECTION	SKIP-DASH AND SOLID	YELLOW	6' (1.8 m) LINE WITH 18' (5.50 m) SPACE FOR SKIP-DASH; 8 (200) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
@ 45° @ 90°	SOLID SOLID	WHITE WHITE	2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
	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
00) WITH DIAGONALS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	8 (200) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
VITH 12 (300) LS @ 45°	SOLID	WHITE	DIAGONALS: 20' (6.1 m) (LESS THAN 30 MPH (50 km/h))
TRANSVERSE R" IS 6 ETTERS; 16 (400) "X	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )

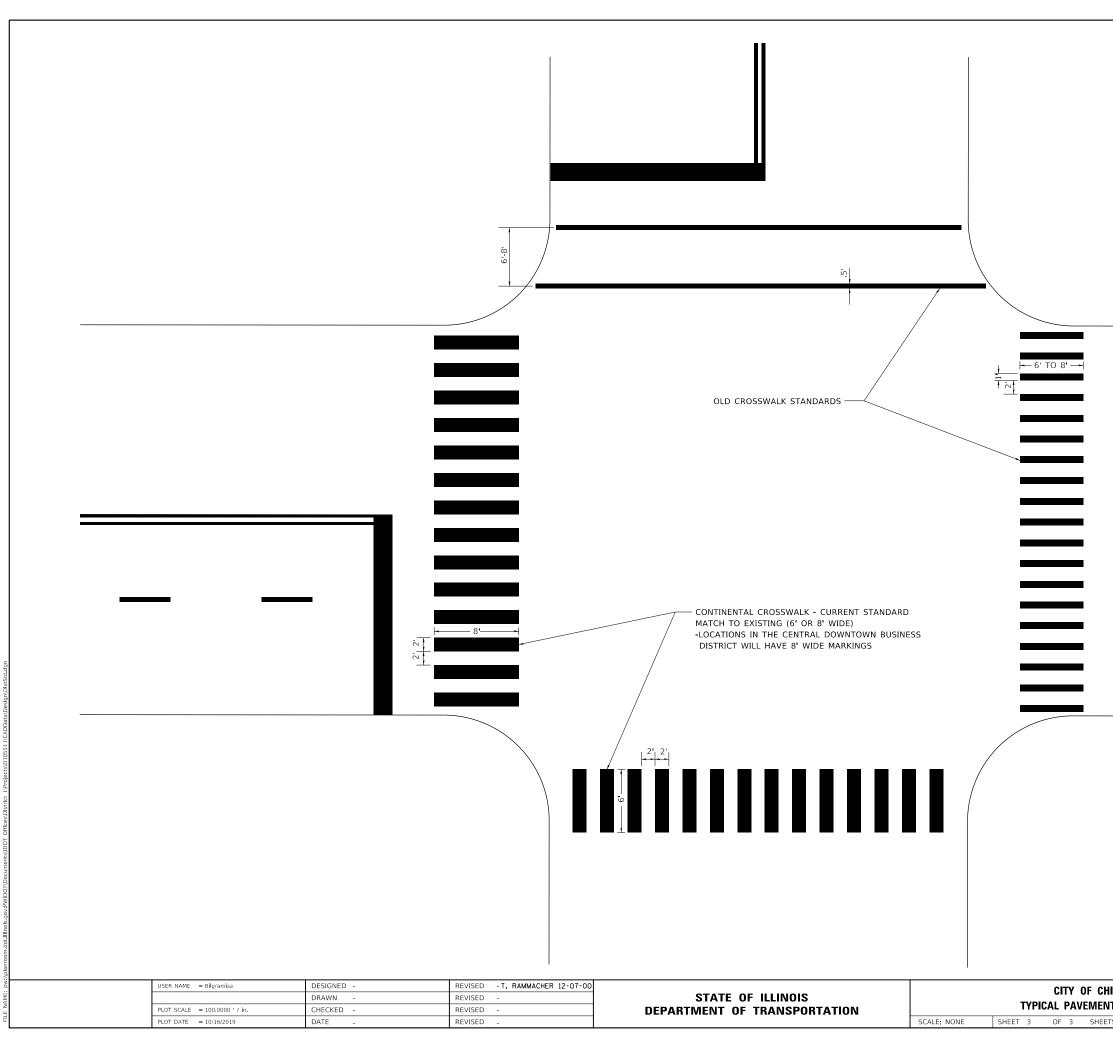
## ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

ICAGO MARKINGS			F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			1350	2010-091-RS	соок	51	47
				TC-24	CONTRACT	NO. 60	DL88
ГS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				





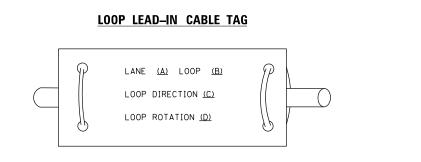
, wd	USER NAME = Bilgramisa	DESIGNED -	REVISED -T. RAMMACHER 12-07-00		CITY OF CHICAGO Typical pavement markings		SECTION	COUNTY TOTAL SHEET
IAME		DRAWN -	REVISED -	STATE OF ILLINOIS			2010-091-RS	COOK 51 48
Z I	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			TC-24	CONTRACT NO 60L88
	PLOT DATE = 10/16/2019	DATE -	REVISED -		SCALE: NONE SHEET 2 OF 3 SHEETS STA. TO STA.		ILLINOIS FED. A	ND PROJECT



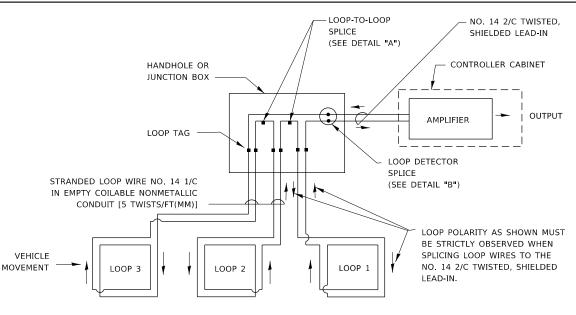
		 =

## 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

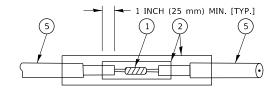


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

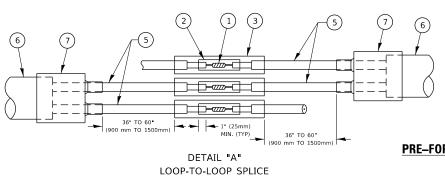


## DETECTOR LOOP WIRING SCHEMATIC

- 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.



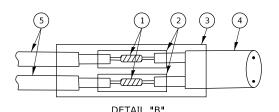
DETAIL "A" LOOP-TO-LOOP SPLICE



## LOOP DETECTOR SPLICE

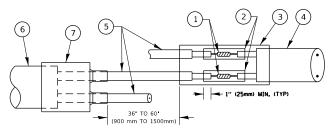
- (1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.

USER NAME = Bilgramisa	DESIGNED -	REVISED -		DISTRICT ONE		F.A.U. BTE	SECTION	COUNTY TOTAL	SHEET	
	DRAWN -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			1350	2010-091-RS	COOK 51	TOTAL SHEET SHEETS NO. 51 50 NO. <b>60L88</b>	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -		3	TANDARD TRAFFIC SIGNA	L DESIGN DETAILS		TS-05		
PLOT DATE = 10/16/2019	DATE -	REVISED -		SCALE: NONE	SHEET 2 OF 7 SHEETS	STA. TO STA.		ILLINOIS FED. /	AID PROJECT	



LOOP-TO-CONTROLLER SPLICE

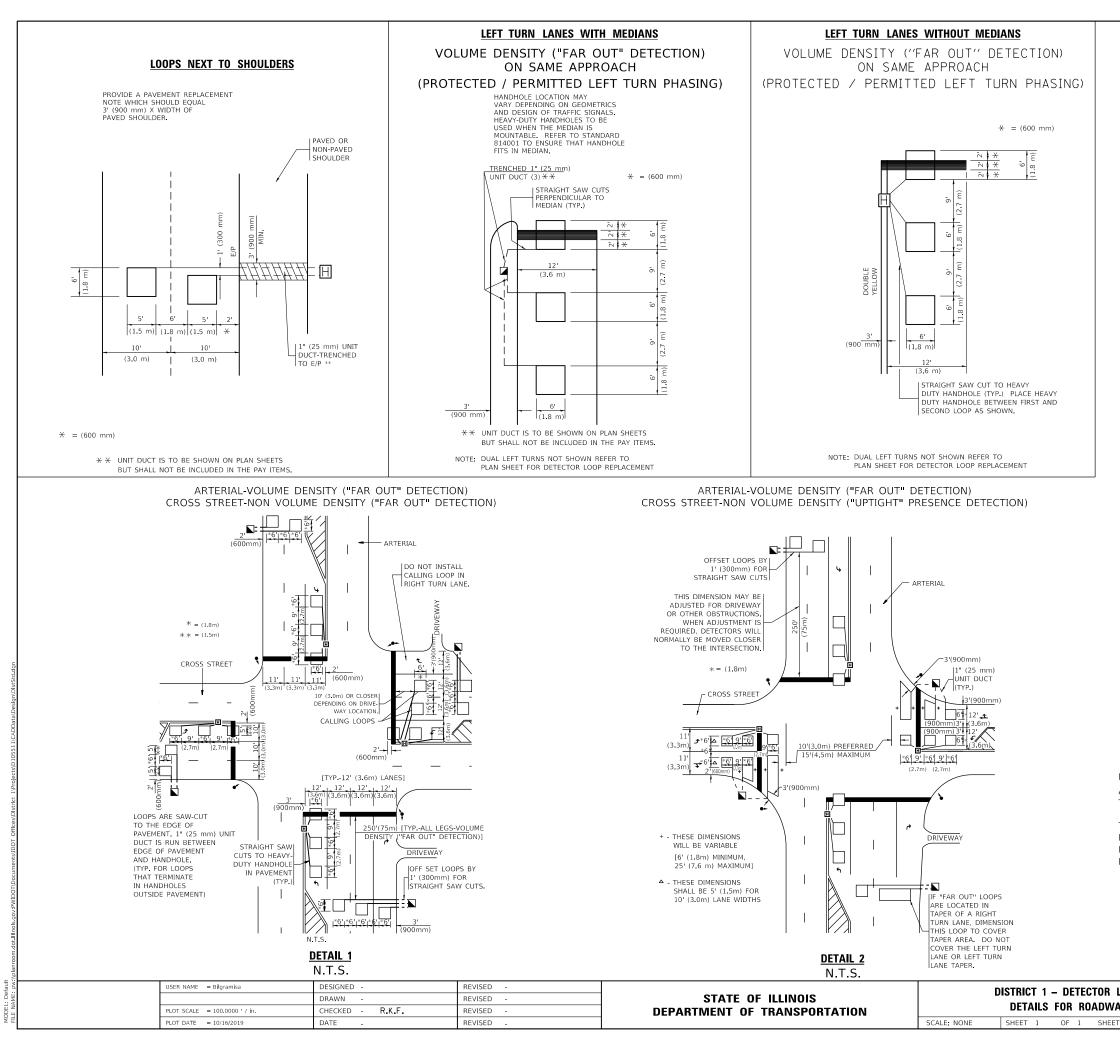
## TYPE I LOOP



## PRE-FORMED LOOP

DETAIL "B" LOOP-TO-CONTROLLER SPLICE

- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PRE-FORMED LOOP
- (6) XL POLYOLEFIN 2 CONDUCTOR
- - (7) BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL



NOTES:

## VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- $\ast\,$  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 SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF <u>ALL</u> 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, <u>MORE</u> 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. <u>EACH</u> ONE OF THESE TYPE OF LOOPS REQUIRES A <u>SEPARATE</u> TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A <u>SEPARATE</u> 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.

## 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 <u>ALL</u> 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.

LOOP INSTALLATION AY RESURFACING		F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		1350	2010-091-RS	соок	51	51	
				TS07	CONTRACT	NO. 60	DL88
ΤS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				