### 07-12-2019 LETTING ITEM 006

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE VILLAGES OF MORTON GROVE AND GLENVIEW

**TRAFFIC DATA:** 

0

0

0

0

**IL RTE 58:** 2017 ADT = 41,700SPEED LIMIT = 40 MPH

# **STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

# PROPOSED **HIGHWAY PLANS**

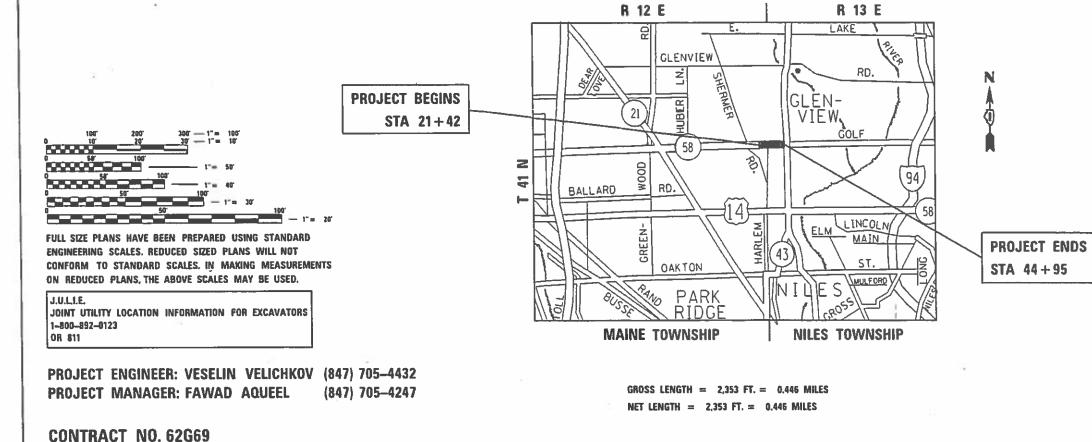
**FAP 339: IL ROUTE 58** LINCOLN ST TO IL ROUTE 43 (WAUKEGAN RD) SECTION 2018-021-RS-SW

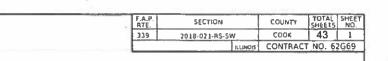
**PROJECT NHPP-IQ94(443)** 

**STANDARD OVERLAY, ADA IMPROVEMENTS** 

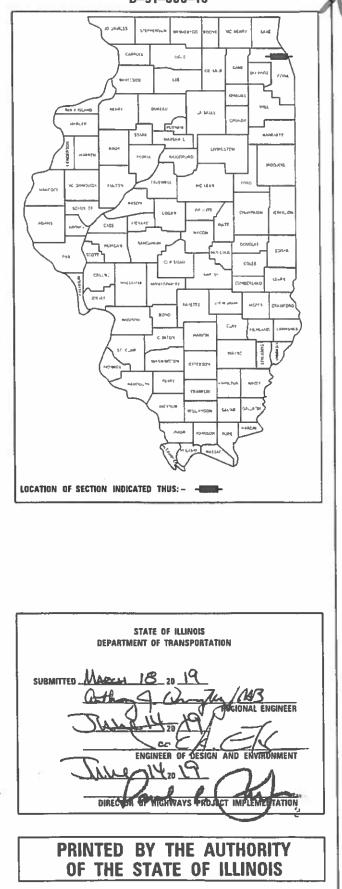
**COOK COUNTY** 

C-91-253-18









#### **INDEX OF SHEETS**

!			UTAIL	<u>OTANDAIDO</u>
<u>Sheet</u>	<u>NO.</u>	DESCRIPTION	000001-07	STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
	1	COVER SHEET	424006-04	DIAGONAL CURB RAMPS FOR SIDEWALKS
2	- 3	INDEX OF SHEETS, STANDARDS AND GENERAL NOTES	424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
4	- 8	SUMMARY OF QUANTITIES	442201-03	CLASS C & D PATCHES
	9	TYPICAL SECTIONS	602401-06	PRECAST MANHOLE TYPE A 4' (1.22 M) DIAMETER
10	- 11	ROADWAY AND PAVEMENT MARKING PLAN	604001-04	FRAME AND LIDS, TYPE 1
12 -	- 17	CURB RAMPS IMPROVEMENT PLAN	606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
18 -	- 19	DETECTOR LOOP REPLACEMENT PLAN	606301-04	PC CONCRETE ISLANDS AND MEDIANS
20 -	- 21	PEDESTRIAN TRAFFIC SIGNAL PLAN - IL ROUTE 58 AT HARLEM AVE.	701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
	22	DRIVEAWAY DETAILS - DISTANCE BETWEEN R.O.W AND FACE OF	701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
		CURB & EDGE OF SHOULDER ≥ 15' (BD-01)	701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
	23	DRIVEAWAY DETAILS - DISTANCE BETWEEN R.O.W AND FACE OF CURB & EDGE OF SHOULDER < 15' (BD-02)	701311-03	LANE CLOSURE 2L, 2W, MOVING OPERATIONS-DAY ONLY
	24	DETAILS FOR FRAMES AND LIDS ADJACENT WITH MILLING (BD-08)	701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS $\leq$ 40 MPH
	25	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)	701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
	26	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)	701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
	27	BUTT-JOINT AND HMA TAPER DETAILS (BD-32)	701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
	28	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROAD, INTERSECTIONS AND DRIVEWAYS (TC-10)	701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
	29	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS	701901-08	TRAFFIC CONTROL DEVICES
		(SNOW-PLOW RESISTANT) (TC-11)	780001-05	TYPICAL PAVEMENT MARKINGS
	30	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)	814001-03	HANDHOLES
	31	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)	873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
	32	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS (TC-16)	878001-10	CONCRETE FOUNDATION DETAILS
	33	ARTERIAL ROAD INFORMATION SIGN (TC-22)	880006-01	TRAFFIC SIGNAL MOUNTAINING DETAILS
	34	DRIVEWAY ENTRANCE SIGNING (TC-26)	886001-01	DETECTOR LOOP INSTALLATIONS
	35	MAST ARM MOUNTED STREET NAME SIGNS (TS-02)		
36 -	42	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05, SHEETS 1 TO 7)		
	43	DISTRICT ONE DETECTOR LOOP INTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)		

**STATE STANDARDS** 

#### **GENERAL NOTES**

1.

- 3. FROM THE DEPARTMENT. 4.
- OF MATERIALS.
- BE REPLACED AND PAID FOR IN KIND.
- CONTRACTOR'S EXPENSE.

- THIS CONTRACT.

- BEGINNING WORK.
- OF PERMANENT PAVEMENT MARKINGS.
- SHOWN IN THE PLANS.
- ON ALL FINAL SURFACES.

FILE NAME =	USER NAME = elkhatibaj	DESIGNED -	REVISED -			F 58 (LINC	OIN ST	TO II BO	UTE 43 (WAUKEGAN RD))	F.A.P RTE	SECTION	COUNTY TOTAL SHEET
pwt\\planroom.dot.illinois.gov#WIDDT\Do	com.dot.ilinois.gov/PVID0T\Documents\100T_Offices\District_1\Projects\DI33818\ <b>DADHY</b> ADUASHID133818-sht-gennot			STATE OF ILLINOIS		•				339	2018-021-RS-SW	COOK 43 2
	PLOT SCALE = 100.0000 ' / 10.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS & GENERAL NOTES						CONTRACT NO. 62G69	
Default	PLOT DATE = 6/1/2019	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA, TO STA,		ILLINOIS FED.	

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC. TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED.

2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGES OF MORTON GROVE AND GLENVIEW.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE (or TOLLWAY) PROPERTY WITHOUT WRITTEN PERMISSION

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 RESIDENT ENGINEER.

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING

6. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL

7. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE

8. ALL PAVEMENT PATCHING, CURB AND GUTTER REMOVAL AND REPLACEMENT, DRAINAGE ADJUSTMENTS, AND CONCRETE BARRIER MEDIAN REPAIR LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER/TECHNICIAN.

9. SIDEWALK REMOVAL AND P.C.C. SIDEWALK 5" LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.

10. FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF

11. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

12. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

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

14. WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED  $1\frac{1}{2}$ INCHES WHERE THE SPEED LIMIT IS 40 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH. WITH WRITTEN APPROVAL OF THE ENGINEER. A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H) OR A NOTCHED LONGITUDINAL WEDGE IS USED.

15. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV, A MINIMUM OF 72 HOURS IN ADVANCE OF

16. THE RESIDENT ENGINEER SHALL CONTACT DON CHIARUGI, AREA TRAFFIC FIELD ENGINEER AT DON.CHIARUGI@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT

17. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)"

18. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS

19. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

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

### **SEE SHEET 3 FOR CONTINUATION**

REV. - MS

### **GENERAL NOTES**

Ī	FILE NAME =	USER NAME = elkhatıbaj	DESIGNED -	REVISED -			F 58 /LINC	OLN ST	тош	ROUTE 43	(WAUKEGAN RD))	F.A.P RTF.	SECTION	COUNTY	TOTAL	SHEET NO.
	pws//planroom.dot.illinois.govsPWIDOT/Docu	lanroom.dot.illinois.gov/PWIDDT\Documents\DDDT Offices\District I\Projects\D133018\ <b>DRAWN</b> a\Design\D133018-sht-gennote.		REVISED -	STATE OF ILLINOIS		•					339	2018-021-RS-SW	соок	43	3
		PLOT SCALE = 100.0000 ' / In.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS & GENERAL NOTES						CONTRAC	T NO. 6	2669		
	Default	PLOT DATE = 6/1/2019	DATE –	REVISED -		SCALE:	SHEET	OF	SHEET	S STA.	TO STA.		ILL INOIS FED. A	ID PROJECT		

21. OVERNIGHT LANE CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURES AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS.

22. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES DURING CONSTRUCTION.

23. CONTACT THE IDOT ROADSIDE DEVELOPMENT UNIT AT 847-705-4171 AT LEAST 2 WEEKS PRIOR TO BEGINNING FORESTRY WORK FOR LAYOUT.

24. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE PRESERVATION OF EXISTING TREES IS OF UTMOST IMPORTANCE TO THE VILLAGE OF MORTON GROVE AND THE VILLAGE OF GLENVIEW. ALL TREE PROTECTION, TREE REMOVAL, PRUNING, AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN ANY AREA. AT NO TIME SHALL THE CONTRACTOR PRUNE OR REMOVE ANY TREES UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.

25. THE CONTRACTOR SHALL TAKE EXTRA CARE IN GRADING AND EXCAVATING NEAR TREES WHICH ARE NOT MARKED FOR REMOVAL SO AS NOT TO CAUSE INJURY TO THE ROOT SYSTEM OR TRUNKS. ANY DAMAGE DONE TO EXISITNG ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.

26. CONTACT MELISSA DEL ROSARIO, ROADSIDE DEVELOPMENT UNIT, AT 847-705-4171 FOR SHRUB LAYOUT 72 HOURS IN ADVANCE PRIOR TO INSTALLATION.

4060029		MATERIALS (TACK COAT)	FOUND	15215	15215			-	44000800	SIDEWALK KEN		30 F
4060029		MATERIALS (TACK COAT)	POUND	15213	15213				44000600	SIDEWALK REN	ΠΛΛ	S0 F1
3510160	D AGGREGATE	BASE COURSE, TYPE B 4"	SQ YD	365	365					1/2"		
									44000159		IALT SURFACE REMOVAL, 2	SO YE
2520020	SUPPLEMENT	AL WATERING	UNIT	3.2	3.2							
							 		42400800	DETECTABLE V	VARNINGS	S0 F1
2520011	SODDING, S	ALT TOLERANT	SQ YD	252	252							
										INCH		
2500321		NG, CLASS 2A	ACRE	0.25	0.25				42400200	PORTLAND CEN	IENT CONCRETE SIDEWALK 5	SQ F1
2500060	D POTASSIUM	FERTILIZER NUTRIENT	POUND	3	3					PAVEMENT, 8	INCH	
									42300400		MENT CONCRETE DRIVEWAY	SO YE
2500050	PHOSPHORUS	FERTILIZER NUTRIENT	POUND	3	3							
										PAVEMENT, 6	inch	
2500040	D NITROGEN F	ERTILIZER NUTRIENT	POUND	3	3				42300200	PORTLAND CEN	ENT CONCRETE DRIVEWAY	SO YE
2110161	5 TOPSOIL FU	RNISH AND PLACE, 4"	SO YD	252	252				42001300	PROTECTIVE C	COAT	SO YE
2110150	5 TOPSOIL EX	CAVATION AND PLACEMENT	CU YD	81	81					"D", N50		
									40603335		ALT SURFACE COURSE, MIX	TON
2020010	D EARTH EXCA	VATION	CU YD	22	22							
										JOINT		
2010130	D TREE PRUNI	NG (1 TO 10 INCH DIAMETER)	EACH	2	2				40600982	HOT-MIX ASPH	IALT SURFACE REMOVAL - BUTT	SO YE
2010100		FENCE	F 001	286	286					METHOD), IL-	4.75, NSU	
2010100	D TEMPORARY	FENCE	FOOT	286	280				40600827	POLYMERIZED	LEVELING BINDER (MACHINE	TON
2010021	D TREE REMOV	AL (OVER 15 UNITS DIAMETER)	UNIT	30	30				-			_
										FLANGEWAYS		
2010011	D TREE REMOV	AL (6 TO 15 UNITS DIAMETER)	UN I T	36	36				40600400	MIXTURE FOR	CRACKS, JOINTS, AND	TON
CODE NO		ITEM	UNIT		80% FED 20% STATE	80% FED 20% STATE			CODE NO		ITEM	UNIT
	SUM	MARY OF QUANTITIES		TOTAL	0005	0021	ON TYPE C			SUMMA	RY OF QUANTITIES	

	URBAN												
			0	CONSTRUCTIO	N TYPE C	ODE							
IIT	TOTAL QUANTITIES	0005 80% FED 20% STATE	0021 80% FED										
		20% STATE	20% 3141										
л	34	34											
л	930	930											
YD	195	195											
ИС	165	165											
YD	2777	2777											
YD	408	408											
YD	625	625											
FT	1819	1819											
FT	137	137											
YD	22537	22537											
FT	1843	1843											
FT	886	886			_ = ►	 PECIALTY I ION-PARTICI IORK (100%)	PATING						
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			URBAN											
	SUMMARY OF QUANTITIES				CC	NSTRUCTI	ON TYPE C	ODE		_		SUMMA	RY OF QUANTITIES	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005 80% FED 20% STATE	0021 80% FED 20% STATE						CODE NO		ITEM	UNI
44003510	MEDIAN REMOVAL PARTIAL DEPTH	SO FT	12683	12683						*	66900200	NON-SPECIAL	WASTE DISPOSAL	CU Y
44201798	CLASS D PATCHES, TYPE I, 13 INCH	SQ YD	4	4						*	66900530	SOIL DISPOSA	AL ANALYSIS	EAC
44201803	CLASS D PATCHES, TYPE II, 13 INCH	SQ YD	1405	1405						*	66901001	REGULATED SL	JBSTANCES PRE-CONSTRUCTION	LSU
												PLAN		
44201807	CLASS D PATCHES, TYPE III, 13 INCH	SO YD	56	56										
										*	66901002	ON-SITE MONI	TORING OF REGULATED	CAL
44201809	CLASS D PATCHES, TYPE IV, 13 INCH	SQ YD	333	333								SUBSTANCES		
44201823	CLASS D PATCHES, TYPE I, 15 INCH	SQ YD	3	3						*	66901003	REGULATED SL	JBSTANCES FINAL CONSTRUCTION	LSUN
												REPORT		
44201827	CLASS D PATCHES, TYPE II, 15 INCH	SQ YD	15	15										
											67000400	ENGINEER'S F	IELD OFFICE, TYPE A	CAL M
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	1										
											67100100	MOBILIZATION	1	L SU
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1										
											70102620	TRAFFIC CONT	ROL AND PROTECTION,	L SU
60266600	VALVE BOXES TO BE ADJUSTED	EACH	3	3								STANDARD 701	501	
60300305	FRAMES AND LIDS TO BE ADJUSTED	ЕАСН	13	13							70102630	TRAFFIC CONT	ROL AND PROTECTION.	L SU
												STANDARD 701	601	
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	3	3										
											70102635	TRAFFIC CONT	ROL AND PROTECTION,	L SU
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	11	11								STANDARD 701	701	
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SO FT	3279	3279							70102640	TRAFFIC CONT	ROL AND PROTECTION.	L SU
60618320	CONCRETE MEDIAN SURFACE, 6 INCH	SO FT	56	56							70700100			
60623800	CONCRETE BARRIER MEDIAN	SO FT	466	466							70300100	SHUKI IEKM F	PAVEMENT MARKING	F00'
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	URBAN								
				C0	NSTRUCTIO	N TYPE	CODE		
	тоты	0005	00	021					
IT	TOTAL QUANTITIES	80% FED		FED					
11	QUANTITIES	20% STATE	20%	STATE					
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					URBAN											
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со	DDE NO		ITEM	UNIT	TOTAL QUANTITIES	0005 80% FED 20% STATE	0021 80% FED 20% STATE						CODE NO		ITEM	UNIT
70	300150	SHORT TERM F	AVEMENT MARKING REMOVAL	S0 FT	2286	2286						*	78000650	THERMOPLAST	C PAVEMENT MARKING - LINE	FOOT
														24"		
70	300210	TEMPORARY PA	VEMENT MARKING LETTERS AND	SQ FT	312	312										
		SYMBOLS										*	78100100	RAISED REFLE	ECTIVE PAVEMENT MARKER	EACH
/0	300220	IEMPORARY PA	VEMENT MARKING - LINE 4"	FOOT	5961	5961							78300200	RAISED REFLE	ECTIVE PAVEMENT MARKER	EACH
	700040											-				
70	300240	TEMPORARY PA	VEMENT MARKING - LINE 6"	FOOT	2211	2211						*	81028200	UNDERGROUND	CONDUIT, GALVANIZED STEEL,	FOOT
70	300250	TEMPORARY PA	VEMENT MARKING - LINE 8"	FOOT	228	228								2" DIA.		
70	300280	TEMPORARY PA	VEMENT MARKING - LINE 24"	FOOT	311	311						*	81028220	UNDERGROUND	CONDUIT, GALVANIZED STEEL,	FOOT
														3" DIA.		
70	300520	PAVEMENT MAR	RKING TAPE, TYPE III 4"	FOOT	1997	1997										
												*	81028240	UNDERGROUND	CONDUIT, GALVANIZED STEEL,	F001
72	400310	REMOVE SIGN	PANEL - TYPE 1	SQ FT	2	2								4" DIA.		
<b>*</b> 72	400710	RELOCATE SIC	IN PANEL - TYPE 1	SQ FT	2	2						*	81400200	HEAVY-DUTY H	IANDHOLE	EACH
* 78	000100	THERMOPLAST	C PAVEMENT MARKING -	SQ FT	312	312						*	85000200	MAINTENANCE	OF EXISTING TRAFFIC SIGNAL	EACH
		LETTERS AND	SYMBOLS											INSTALLATION	8	
* 78	000200	THERMOPLAST	C PAVEMENT MARKING - LINE	FOOT	5961	5961						*	87301215	ELECTRIC CAE	BLE IN CONDUIT, SIGNAL NO.	F001
		4"												14 2C		
* 78	000400	THERMOPLAST	C PAVEMENT MARKING - LINE	FOOT	2211	2211						*	87301225	ELECTRIC CAE	BLE IN CONDUIT, SIGNAL NO.	FOOT
		6"												14 3C		
* 78	000500	THERMOPLAST	C PAVEMENT MARKING - LINE	FOOT	228	228						*	87301900	ELECTRIC CAE	BLE IN CONDUIT, EQUIPMENT	F001
		8"												GROUNDING CC	DNDUCTOR, NO. 6 1C	
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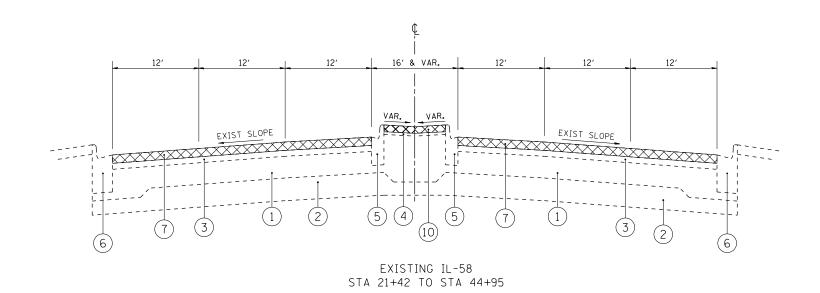
	URBAN							
				CO	NSTRUCTIO	N TYPE (	CODE	
	TOTAL	0005	00	021				
IT	OUANTITIES	80% FED	80%	FED				
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						* = = = = = = = = = = = = = = = = = = =	SPECIALTY INON-PARTIC	
						∠ =	WORK (100%)	STATE)
	43 (WAUKE	GAN RD))		F.A.P. RTE.	SECTIO			OTAL SHEET HEETS NO.
JANTI				339	2018-021-		COOK	43 6 NO. 62G69
STA.	Т	D STA.		FED. ROA	AD DIST. NO. 1 IL	LINOIS FED. AII	PROJECT	

ı					URBAN			NSTRUCTIO								
		SUMM	ARY OF QUANTITIES			0005						-		SUMMA	ARY OF QUANTITIES	
	CODE NO		ITEM	UNIT	TOTAL QUANTITIES	0005 80% FED 20% STATE	0021 80% FED 20% STATE						CODE NO		ITEM	UNI
*	87502440	TRAFFIC SIGN	NAL POST, GALVANIZED STEEL	EACH	4		4					*	C2C11752	SHRUB, VIBU	RNUM DENTATUM CHRISTORS BLUE	EAC
		10 FT.												MUFFIN VIBU	RNUM), 2' HEIGHT, CONTAINER	
*	87800100	CONCRETE FOL	JNDATION, TYPE A	FOOT	16		16						X0320050	CONSTRUCTIO	N LAYOUT (SPECIAL)	LSU
*	87900200	DRILL EXISTI	ING HANDHOLE	EACH	7		7						X0326681	REMOVE AND	RE-ERECT BOULDERS	LSL
*	88102717	PEDESTRIAN S	SIGNAL HEAD, LED, 1-FACE,	EACH	4		4					*	X0327611	REMOVE AND	REINSTALL BRICK PAVER	SQ F
		BRACKET MOUN	NTED WITH COUNTDOWN TIMER													
													X4060004	POLYMERIZED	HOT-MIX ASPHALT SURFACE	TON
*	88600100	DETECTOR LOO	DP, TYPE I	FOOT	556		556							COURSE, STO	NE MATRIX ASPHALT, 9.5, N80	<u> </u>
											_					<u> </u>
*	88600600	DETECTOR LOC	OP REPLACEMENT	FOOT	314	314							X4402020	CONCRETE ME	DIAN SURFACE REMOVAL	SQ F
																<u> </u>
*	88800100	PEDESTRIAN P	PUSH-BUTTON	EACH	4		4						x5537800	STORM SEWER	S TO BE CLEANED 12"	F 00
												_				
*	89500400	RELOCATE EXI	ISTING PEDESTRIAN	EACH	4	4						_	X6030310	FRAMES AND	LIDS TO BE ADJUSTED	EAC
		PUSH-BUTTON										-		(SPECIAL)		
*	89502200	MODIFY EXIST	ING CONTROLLER	EACH	1		1						x7030005	TEMPORARY P	AVEMENT MARKING REMOVAL	SQ F
*	89502210		ING CONTROLLER CABINET	ЕАСН	1		1					-	Z0004562		CONCRETE CURB AND GUTTER	FOO
	89502210	MODIFI EXIST	ING CONTROLLER CABINET									-	20004582		REPLACEMENT	
*	89502350	REMOVE AND R	REINSTALL ELECTRIC CABLE	FOOT	71		71					-				
		FROM CONDUIT											Z0018500	DRAINAGE ST	RUCTURES TO BE CLEANED	EACI
*	89502376	REBUILD EXIS	STING HANDHOLE	EACH	4	4							Z0030850	TEMPORARY I	NFORMATION SIGNING	SQ F
																1
*	89502380	REMOVE EXIST	ING HANDHOLE	EACH	1		1					*	Z0033044	RE-OPTIMIZE	TRAFFIC SIGNAL SYSTEM LEVEL	EAC
														1		
	FILE NAME =	1	USER NAME = elkhatibaj	DESIGNED -		REVISED	-		1	1	1		I		IL ROUTE 58 (LINCOLN ST T	О II Ро
	pw:\\planroom.dot.illino	ols.gov:PWIDOT\Documents\IDOT (	Offices\District \\Projects\DI330I8\CADData\Design\DI330I8- PLOT SCALE = 100,0000 ' / in.	s/vr-SDARAGWIN - CHECKED -		REVISED REVISED	-		-		TATE OF				SUMMARY	
			PLOT SCALE = 100,0000 ' / 1n. PLOT DATE = 6/1/2019	DATE -			-		ט	CFAKIW	CIVI UF	ı KA	ANSPORTA			SHEETS
				5.112		ME TIGED										0.122.10

	URBAN						
			CO	NSTRUCTIO	Ν ΤΥΡΕ	CODE	
IIT	TOTAL QUANTITIES	0005 80% FED 20% STATE	0021 80% FED 20% STATE				
СН	100	100					
SUM	1	1					
SUM	1	1					
FT	401	401					
ИС	2209	2209					
FΤ	56	56					
от	720	720					
	720	720					
СН	13	13					
FT	4173	4173					
	-115						
OT	3622	3622					
СН	31	31					
FT	103	103					
СН	1		1				
					- v		
			F.AP		∆ =	SPECIALTY NON-PARTIC WORK (100%	IPATING STATE)
ROUTE VANTI	43 (WAUKE) TIES	GAN RD))	F.A.P. RTE. 339	SECTI 2018-021-		СООК	OTAL SHEET HEETS NO. 43 7
STA.		O STA.	FED. ROA	AD DIST. NO. 1 IL	LINOIS FED. AI	CONTRACT D PROJECT	NO. 62G69

			URBAN								
	SUMMARY OF QUANTITIES					NSTRUCTI(	ON TYPE CODE		SUM	MARY OF QUANTITIES	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005 80% FED 20% STATE	0021 80% FED 20% STATE				CODE NO	ITEM	UNI
Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	11511	11511							
Z0064800	SELECTIVE CLEARING	UNIT	6	6							
FILE NAME = pw:\\planroom.dotJilinoi	s.gov;PWIDOT\Documents\DOT_Offices\District_NProjects\DI330I8\CADData\Design\DI330I8-stf-\$	SIGNED - AXXIVN - ECKED -	I	REVISED REVISED REVISED	-		ST DEPARTMF	ATE OF I	LLINOIS RANSPORTATION		MARY OF QU
		TE -		REVISED	-					SCALE: SHEET NO. O	F SHEETS

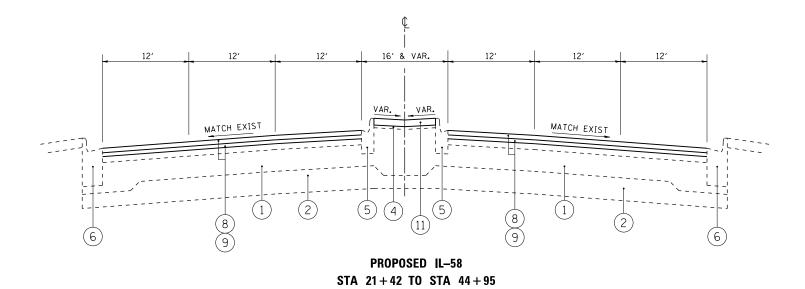
				CO	NSTRUCTIO	Ν ΤΥΡΕ	CODE	
IIT	TOTAL QUANTITIES	0005 80% FED 20% STATE	00 80% 20%	FED				
						∧ =	SPECIALTY I NON-PARTIC WORK (100%	[PAT ING
סחוודר	12 /\N/AUVE	CAN 0011	l	F.A.P. RTE.	SECTI			OTAL SHEET EETS NO.
UANTI	43 (WAUKE	GAN NU))		339	2018-021-			43 8
							CONTRACT N	
STA.	T	D STA.		FED. ROA	AD DIST. NO. 1 IL	LINOIS FED. AI	D PROJECT	



#### LEGEND

EXISTING PCC PAVEMENT (9-7-9)

- 2 EXISTING SUB-BASE GRANULAR MATERIAL
- 3 EXISTING HMA SURFACE, 4.5" TO 8", AVG. 6.5"  $\pm$
- (4) EXISTING STABILIZED MEDIAN SURFACE
- (5) EXISTING COMB CONC C&G M-2.12
- 6 EXISTING COMB CONC C&G B-6.24
- (7) proposed HMA surface removal, 2<sup>1</sup>/<sub>2</sub>"
- (8) PROPOSED POLY. HMA SURF. CSE. SMA, 9.5, N80,  $1\frac{3}{4}$ "
- (9) PROPOSED POLY. LEVELING BINDER (MM), IL-4.75, N50, 3/4"
- (10) PROPOSED MEDIAN REMOVAL PARTIAL DEPTH, 2"
- (11) PROPOSED HMA SURF. CSE., MIX "D", N50, 2"



USER NAME = elkhatibaj	DESIGNED -	REVISED -		IL ROUTE 58 (LINCOLN ST TO IL ROUTE 43 (WAUKEGAN RD))				F.A.P. BTE	SECTION	COUNTY	TOTAL	SHEET	
	DRAWN -	REVISED -	STATE OF ILLINOIS		TYPICAL SECTIONS				339	2018-021-RS-SW	соок	43	9
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION						CONTRACT N		T NO. 62	G69	
PLOT DATE = 6/1/2019	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

HOT-MIX ASPHALT MIXTURE R	QUALITY MANAGEMEN						
MIXTURE TYPE	AIR VOIDS (%) @ NDES	PROGRAM (QMP)					
RESURFACING MAINLINE:							
POLY HMA SURFACE COURSE STONE MATRIX ASPHALT, 9.5, N80, 1¾4"	3.5% @ 80 GYR.	OCP					
POLY, LEVELING BINDER (MM) IL-4.75, N50, 3/4"	3.5% @ 50 GYR.	AO/JO					
MOUNTABLE MEDIANS AND DRIVEWAYS	•						
HMA SURFACE COURSE, MIX "D", N50, (IL-9,5mm), 2"	4% @ 50 GYR.	OC∕OA					
HOT-MIX ASPHALT PATCHING:							
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR.	0C/QA					
OMP DESIGNATION QUALITY CONTROL/QUALITY ASSURANCE (QC/QA) QUALITY CONTROL FOR PERFORMANCE (QCP)							
L							

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 POUND PER SQUARE YARD-INCH

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.

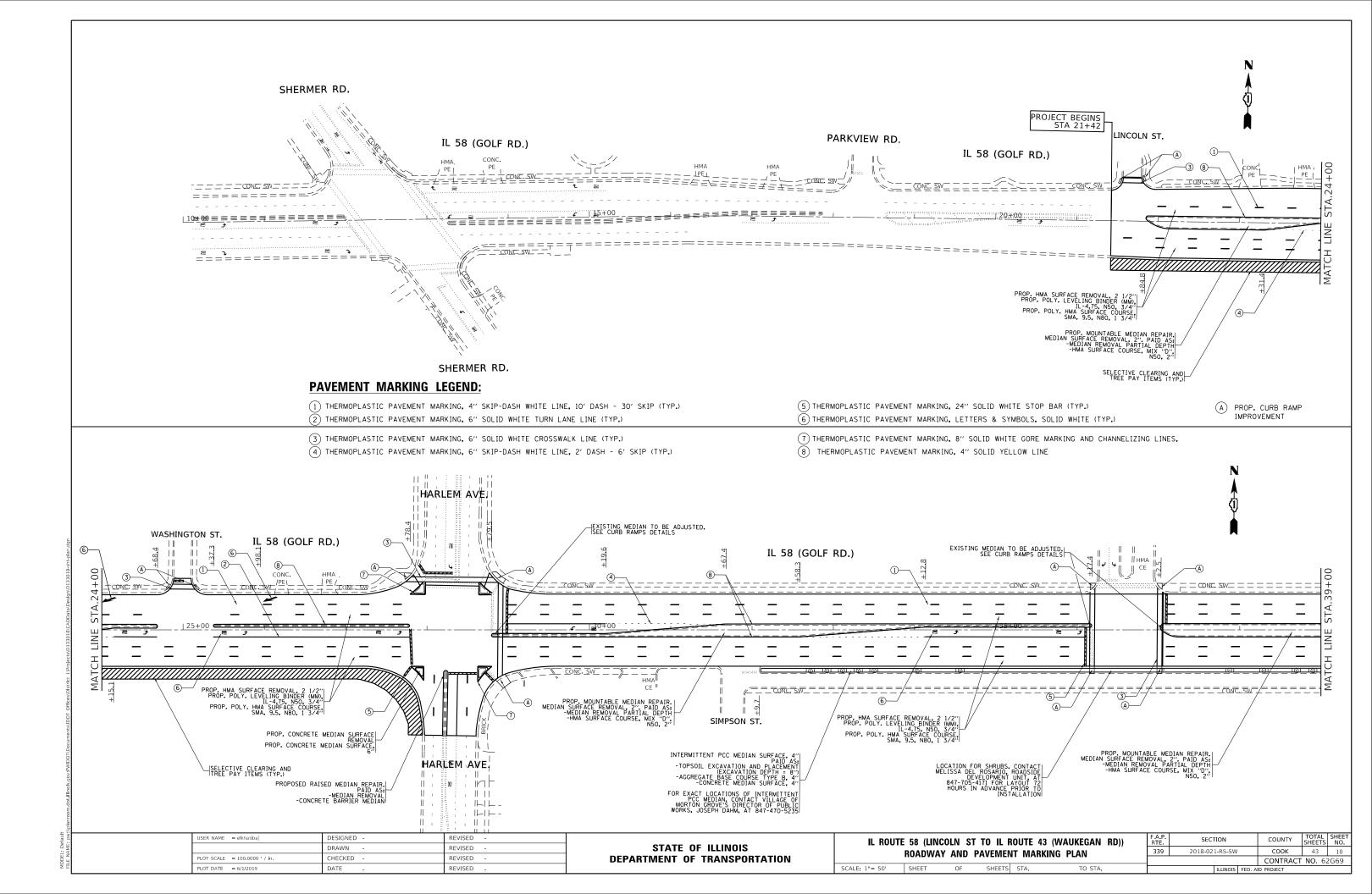
"FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS".

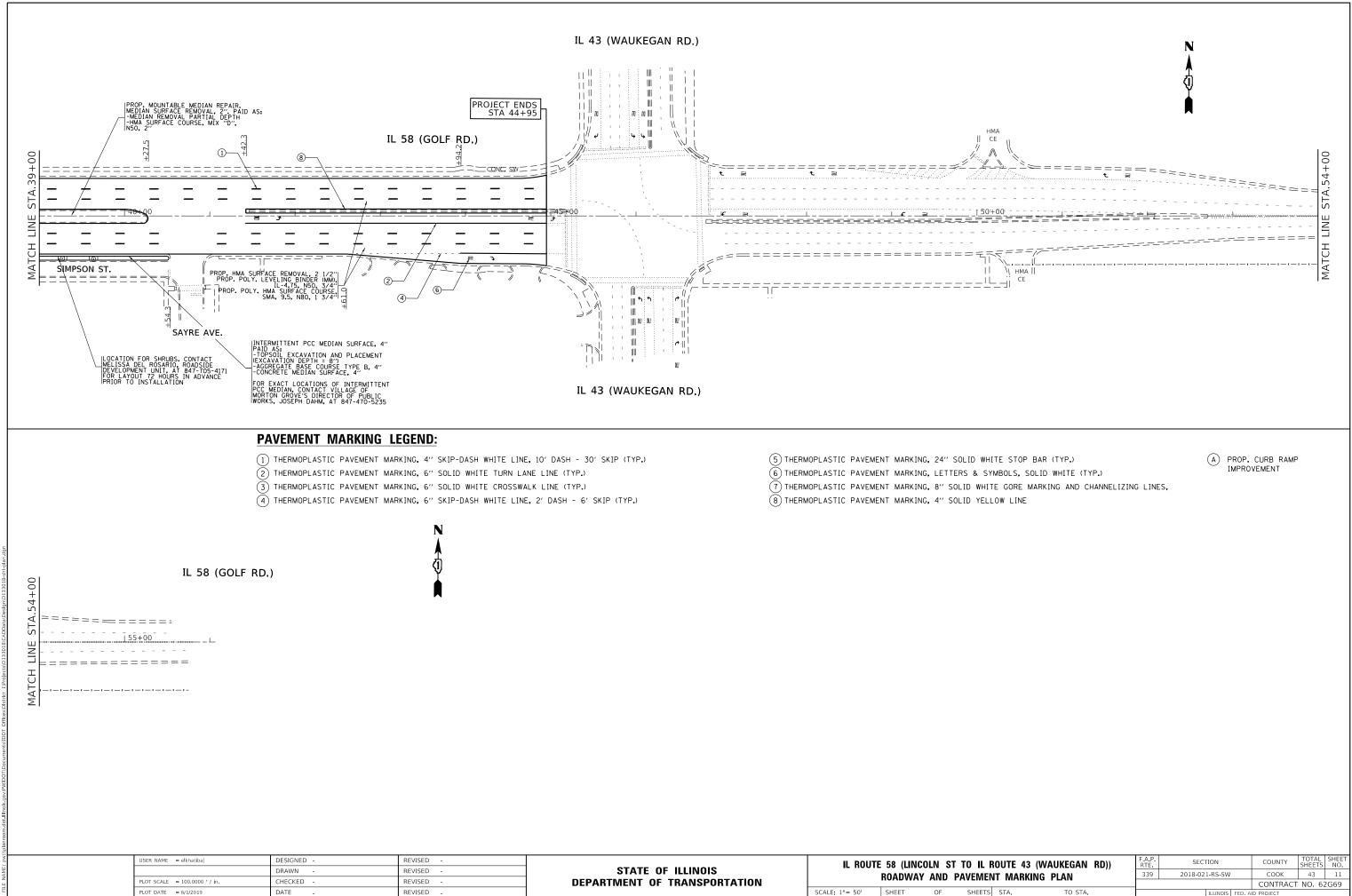
QUALITY MANAGEMENT PROGRAM (OMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

#### NOTES:

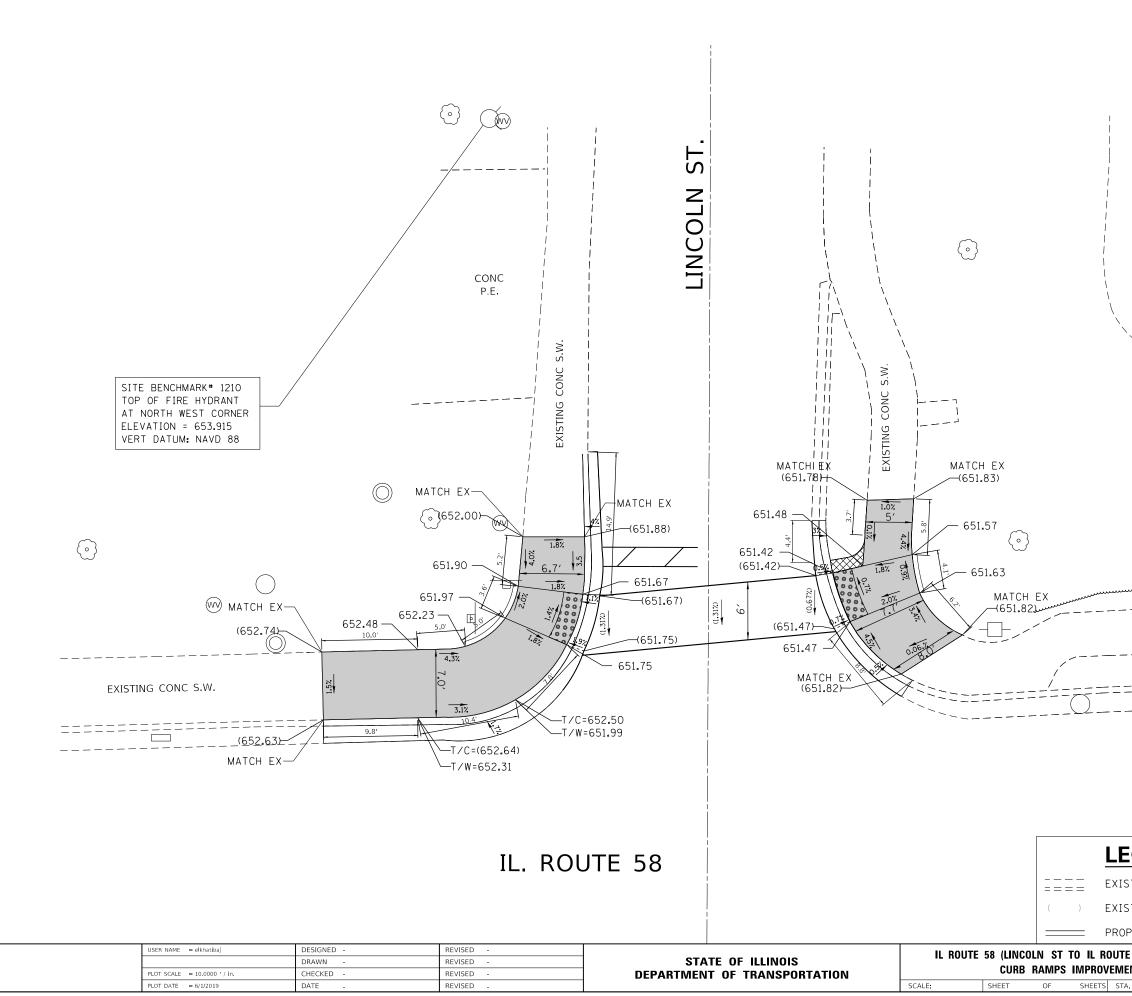
(1) THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING. PATCHING FOR MEDIAN ADJUSTMENT TO BE DONE BEFORE MILLING.

(2) THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE POLYMERIZED LEVELING BINDER WHERE THE SURFACE JOINT WILL BE LOCATED.

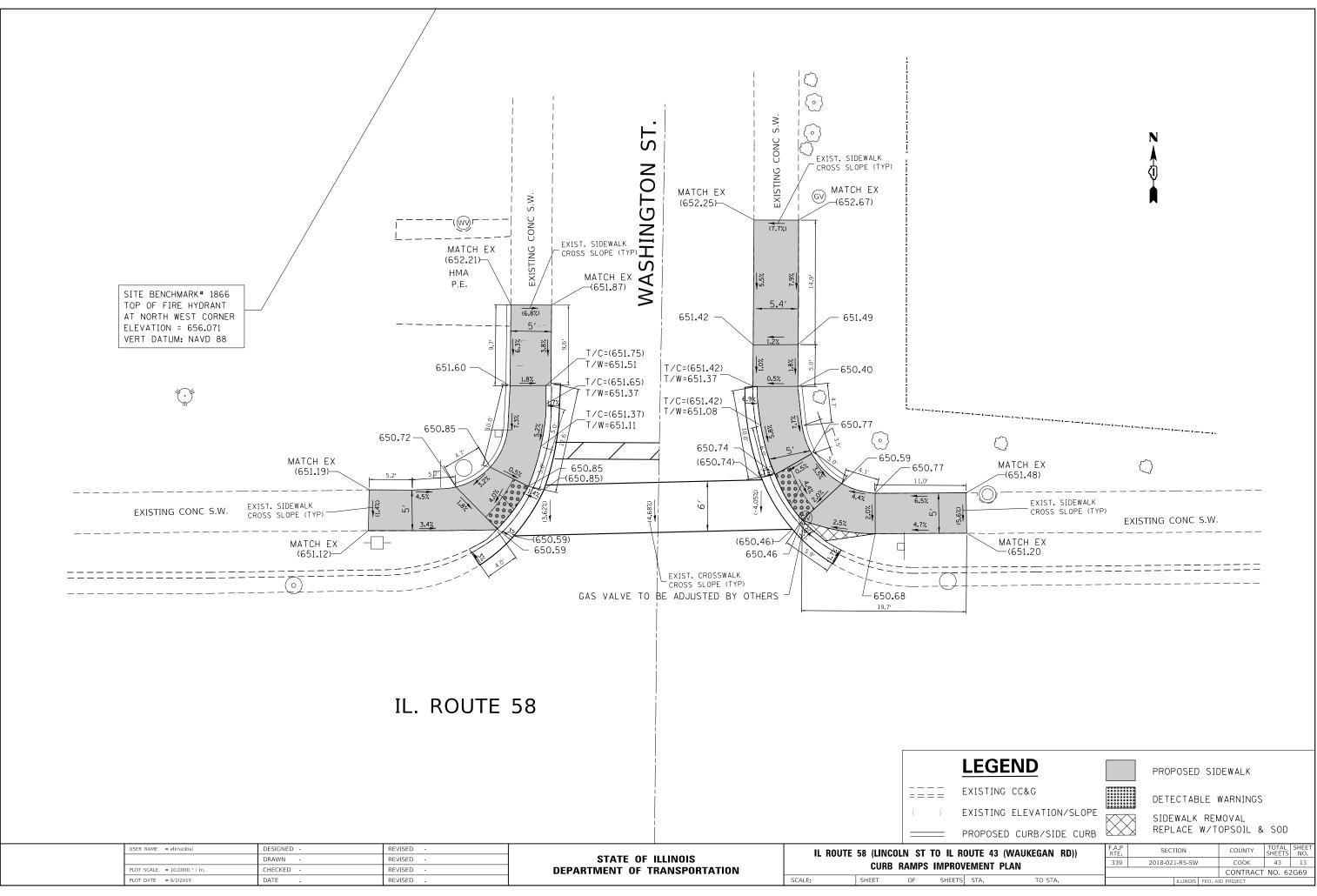




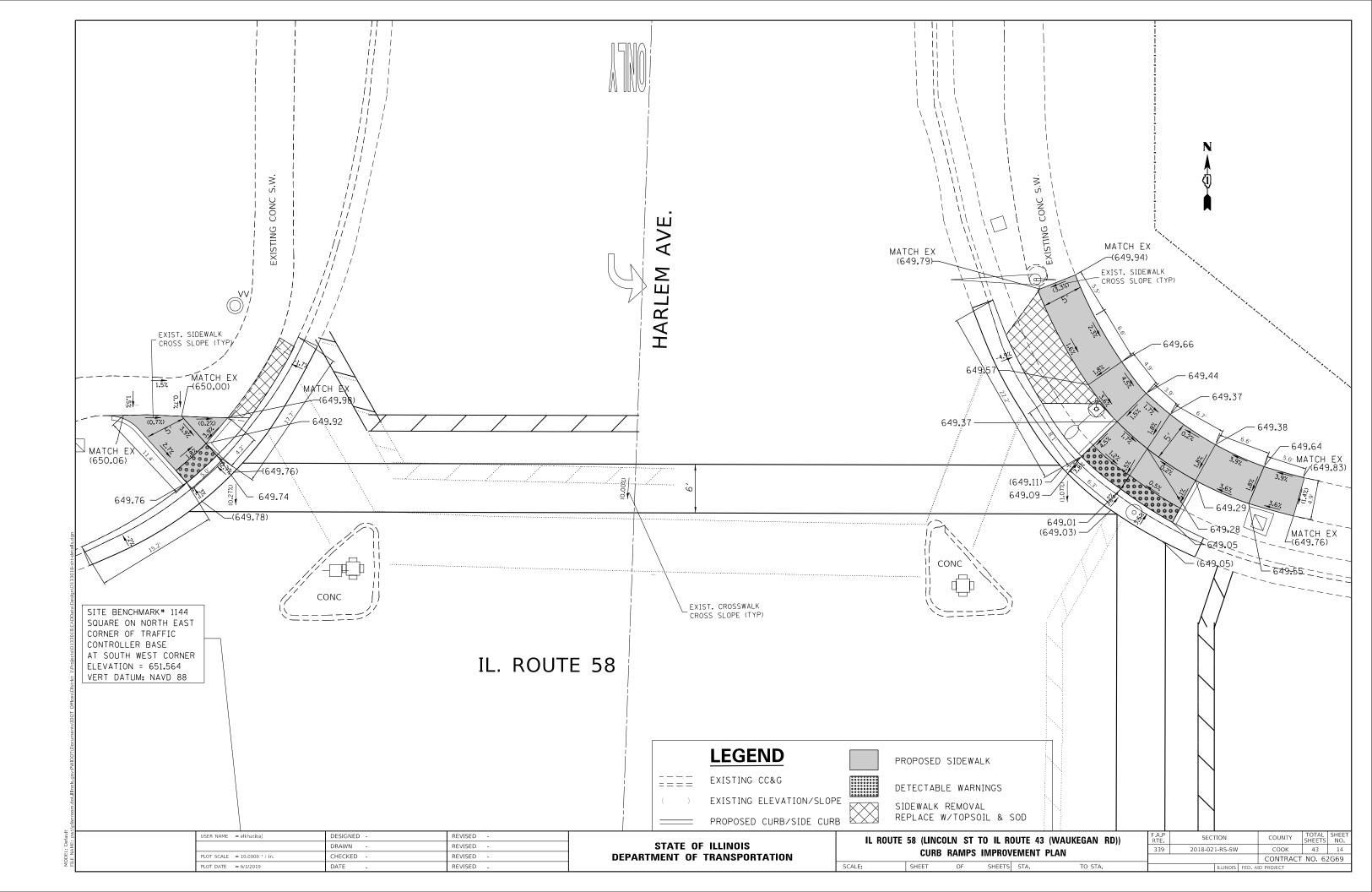
ROUTE 43 (WAUKEGAN RD))		SECT	TION		COUNTY	TOTAL SHEETS	SHEET NO.	
ENT MARKING PLAN	339	2018-021-RS-SW			СООК	43	11	
					CONTRACT NO. 62G69			
S STA. TO STA.			ILLINOIS	FED. A	ID PROJECT			

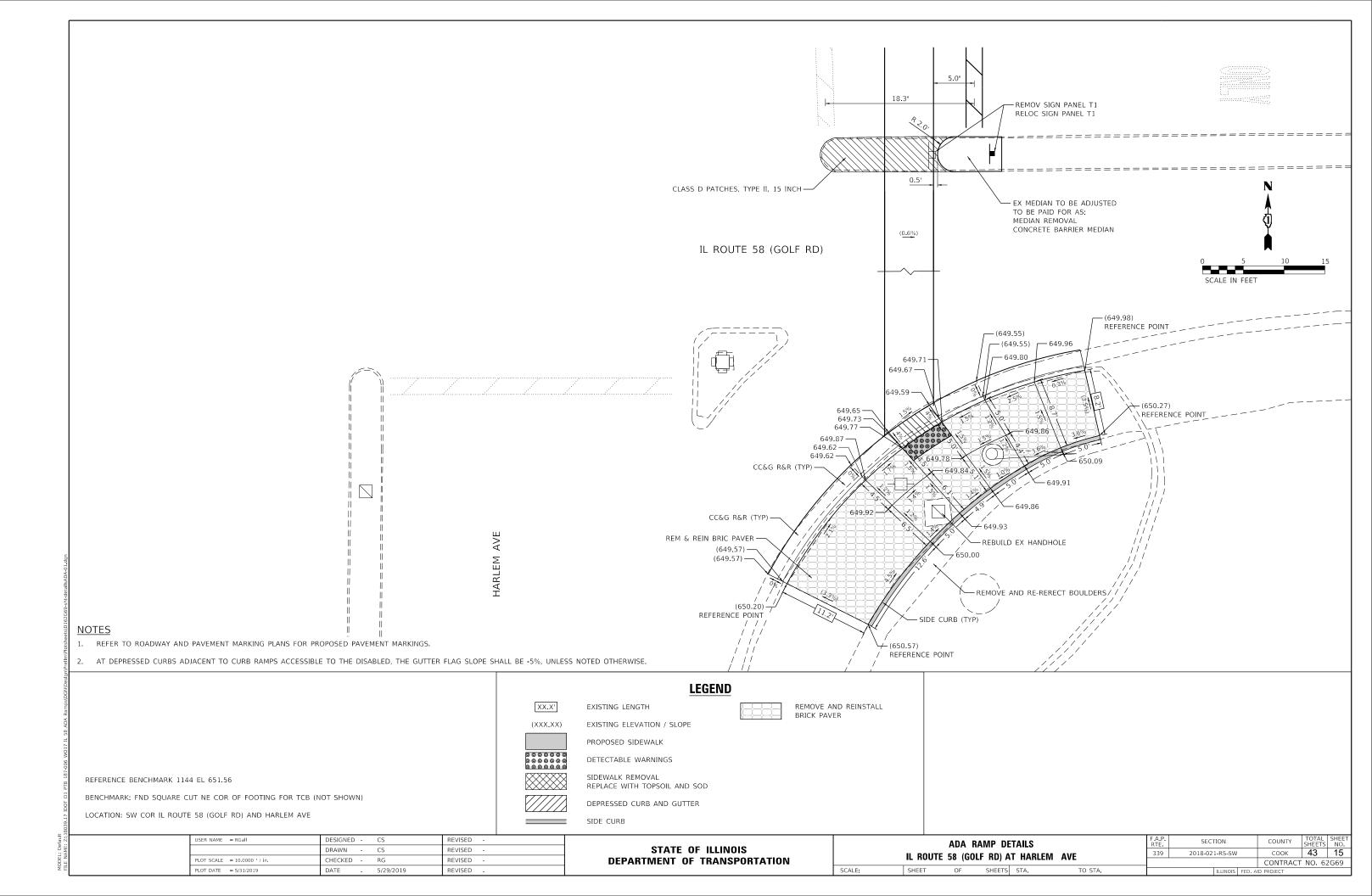


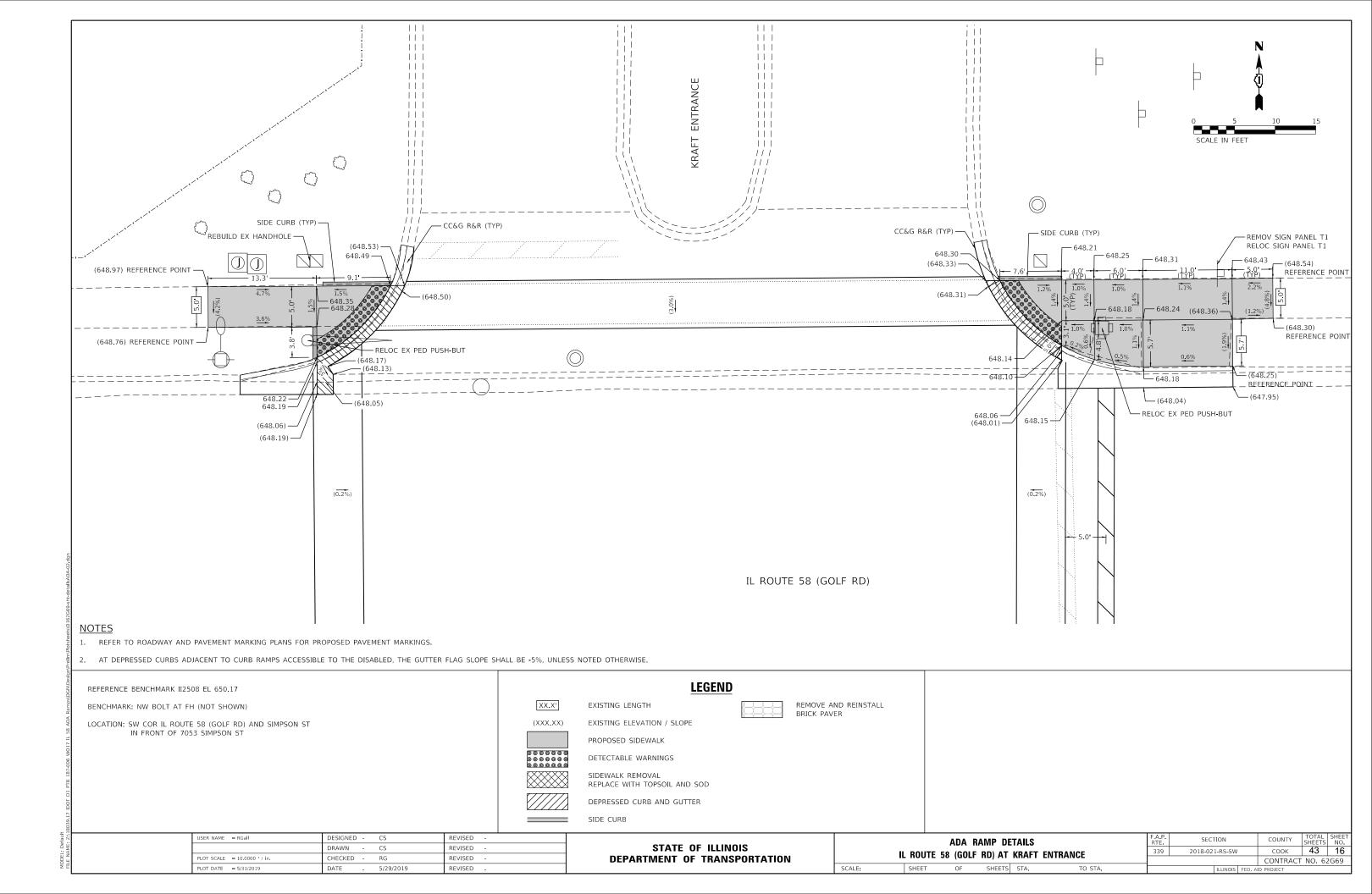
			]
N			
EXISTING CONC S.W			<i>.</i>
<b>LEGEND</b> EXISTING CC&G EXISTING ELEVATION/SLOPE		PROPOSED SIE DETECTABLE SIDEWALK REN REPLACE W/T	WARNINGS
PROPOSED CURB/SIDE CURB ROUTE 43 (WAUKEGAN RD)) OVEMENT PLAN TS  STA. TO STA.	F.A.P RTE. 339	SECTION 2018-021-RS-SW	COUNTY TOTAL SHEETS NO. SHEETS NO. COOK 43 12 CONTRACT NO. 62G69
TS STA. TO STA.	1	ILLINOIS FED. A	ID PROJECT

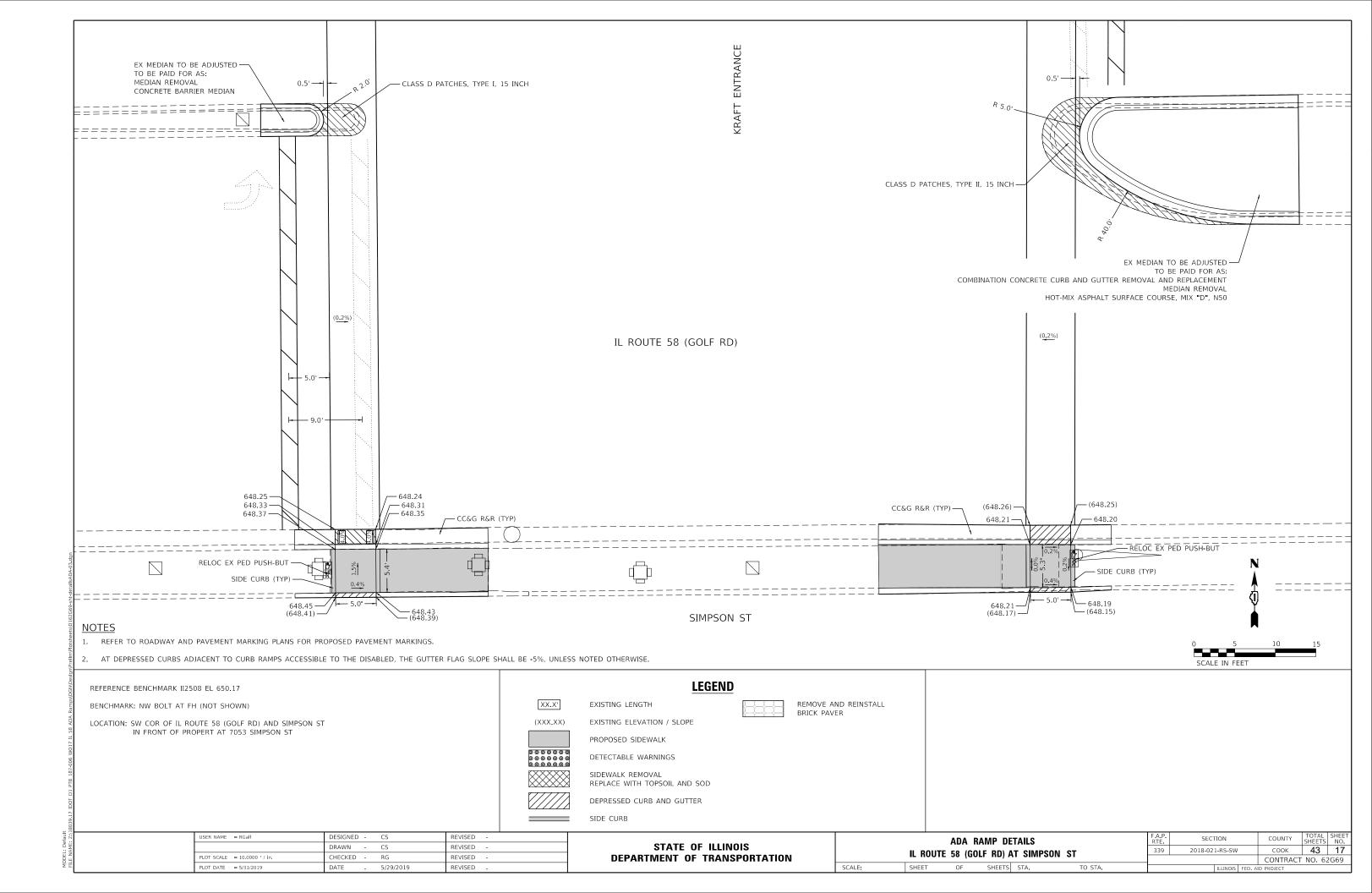


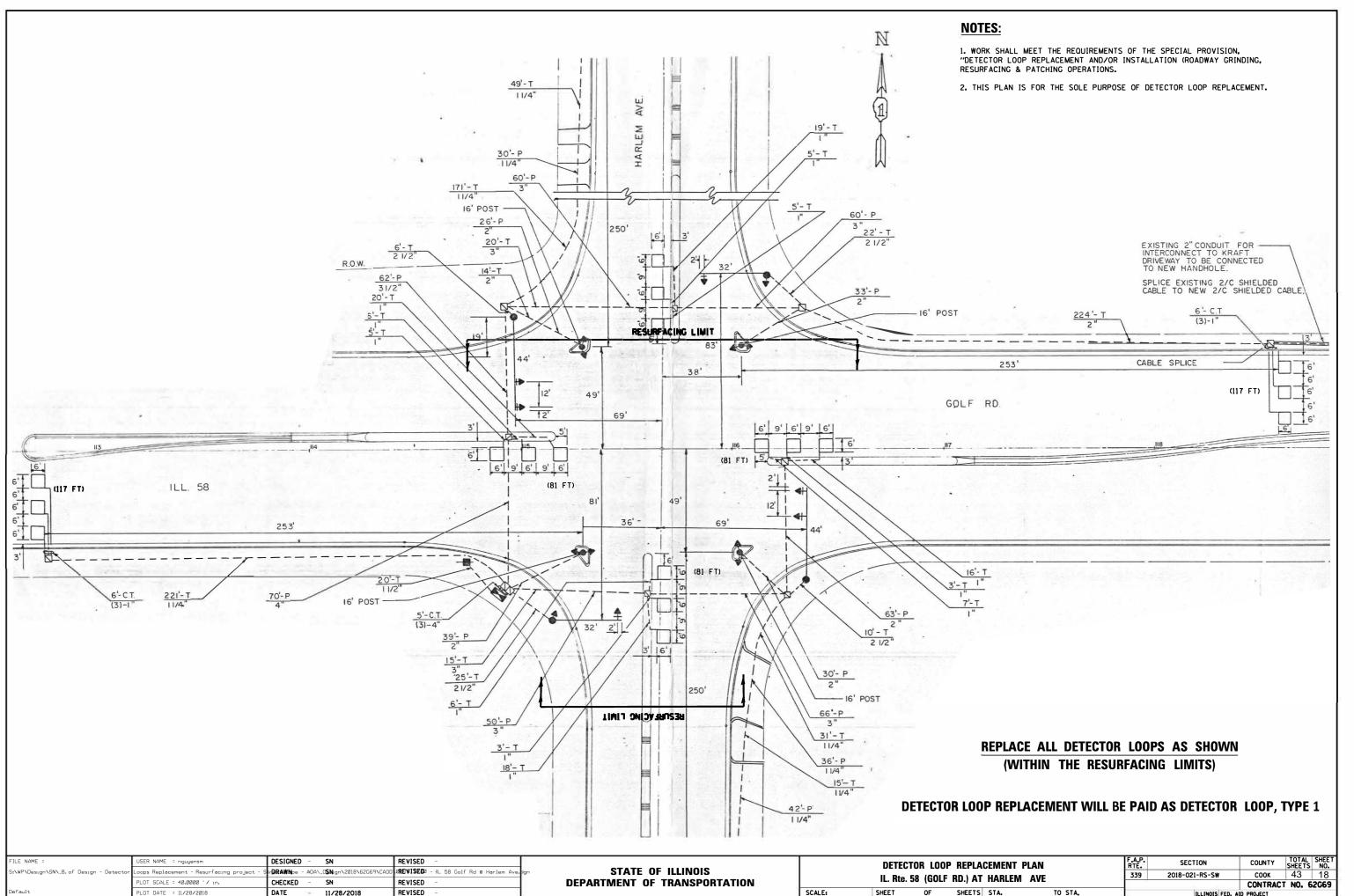
าง	EMENT	PLAN	339 2018-021-RS-SW				COOK	43
							CONTRACT	NO.
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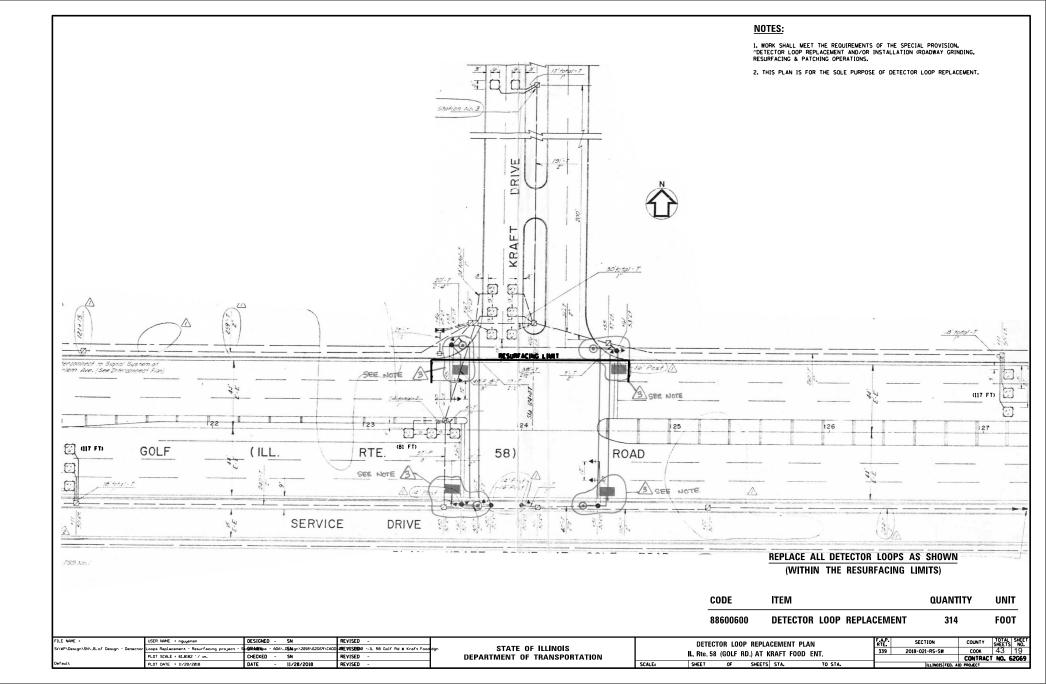
LOT DATE = 11/28/2018

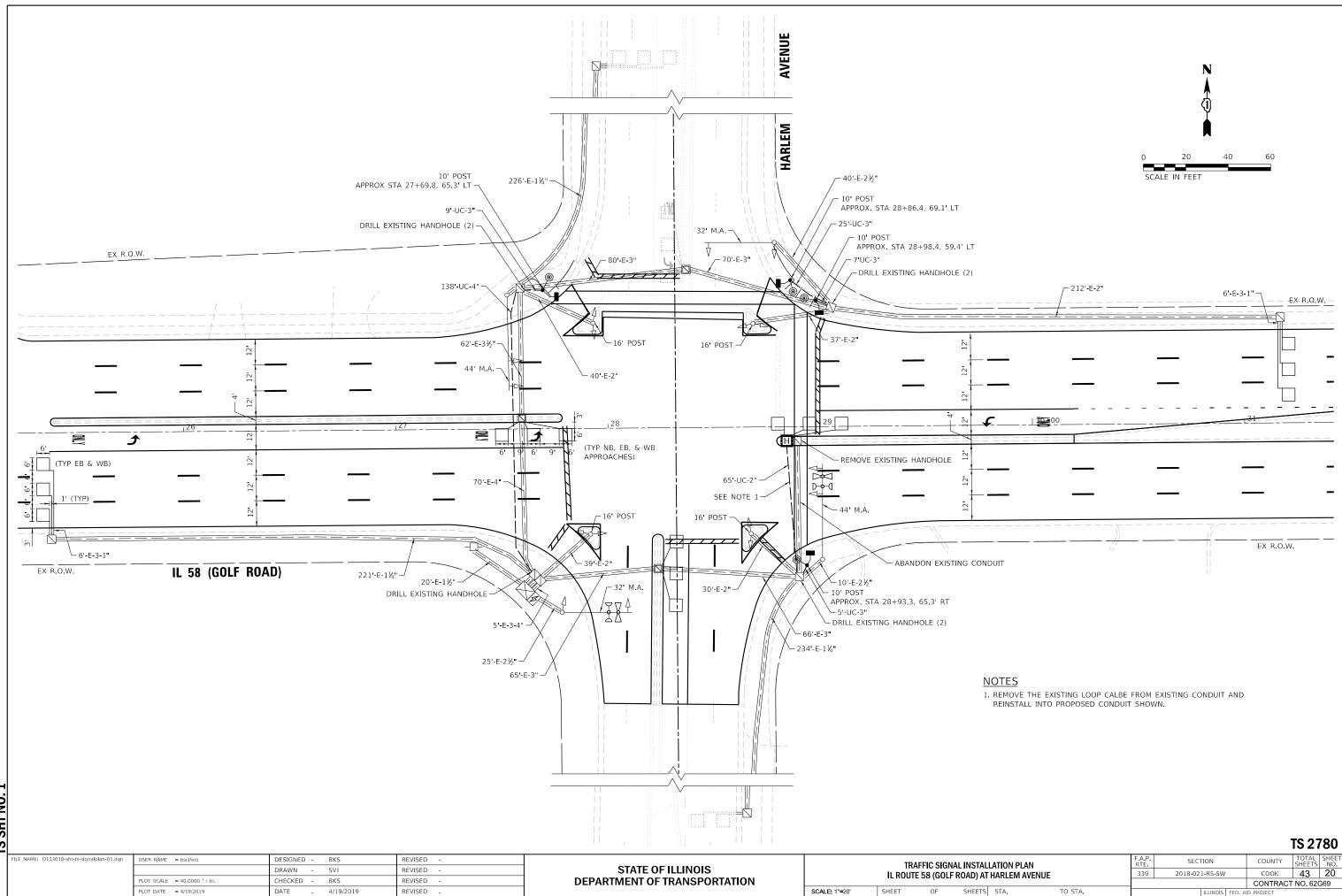
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11/28/2018

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58 /1;	IOLF KD.) AT	HARIEM				0000	10	-
30 10		IIAIIEEMI	AIL		10	CONTRACT	NO.	67
OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		
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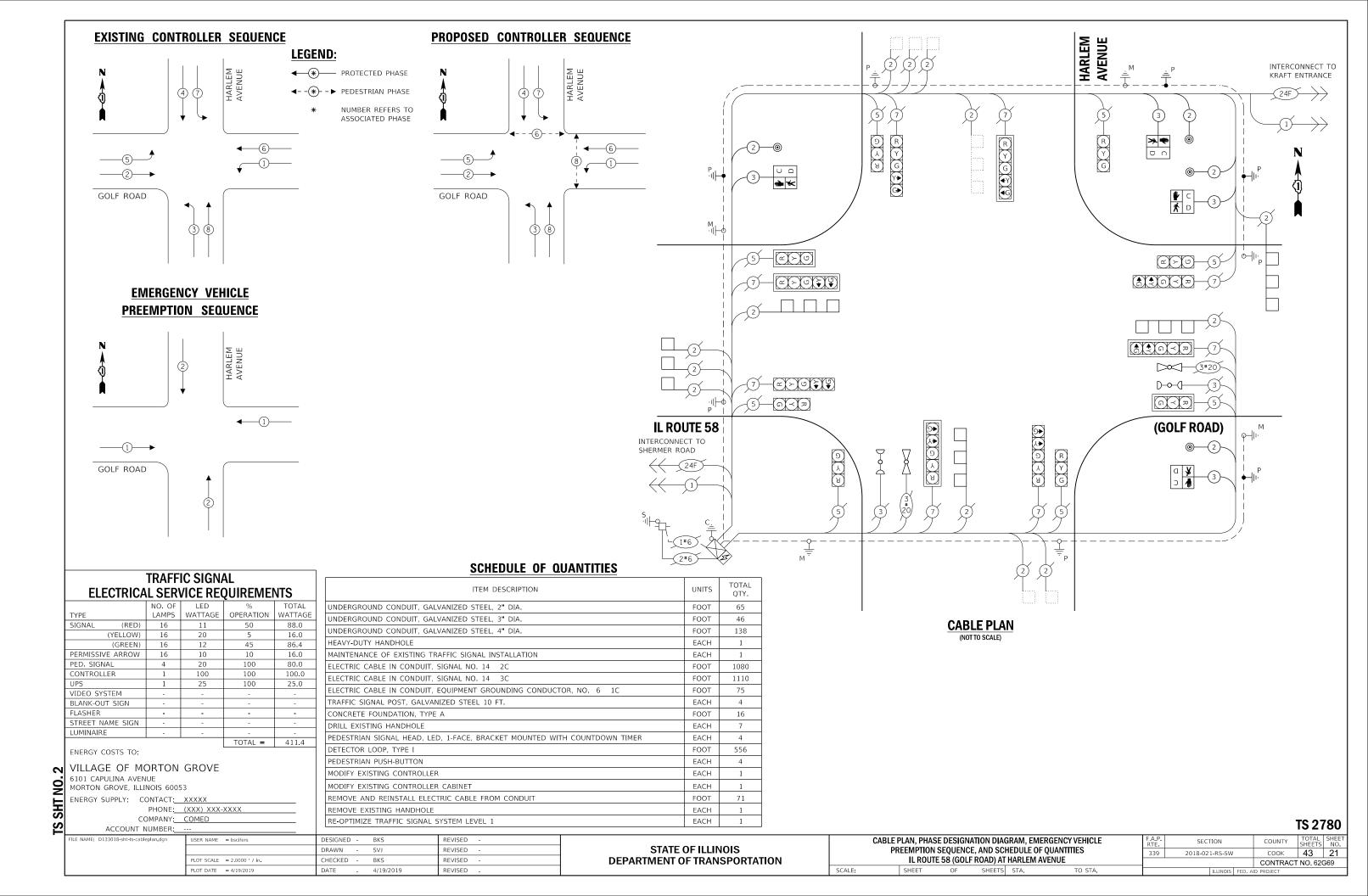


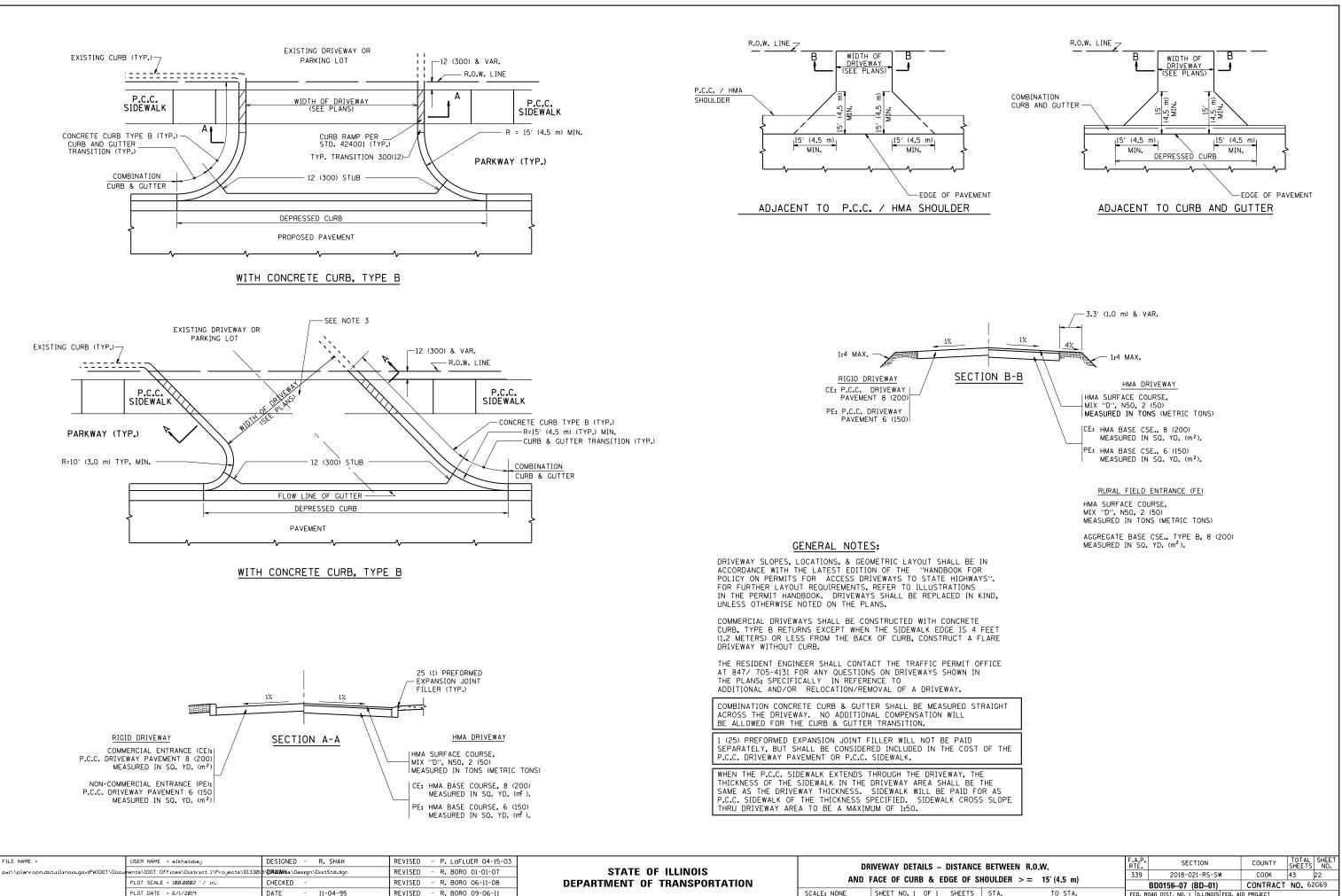


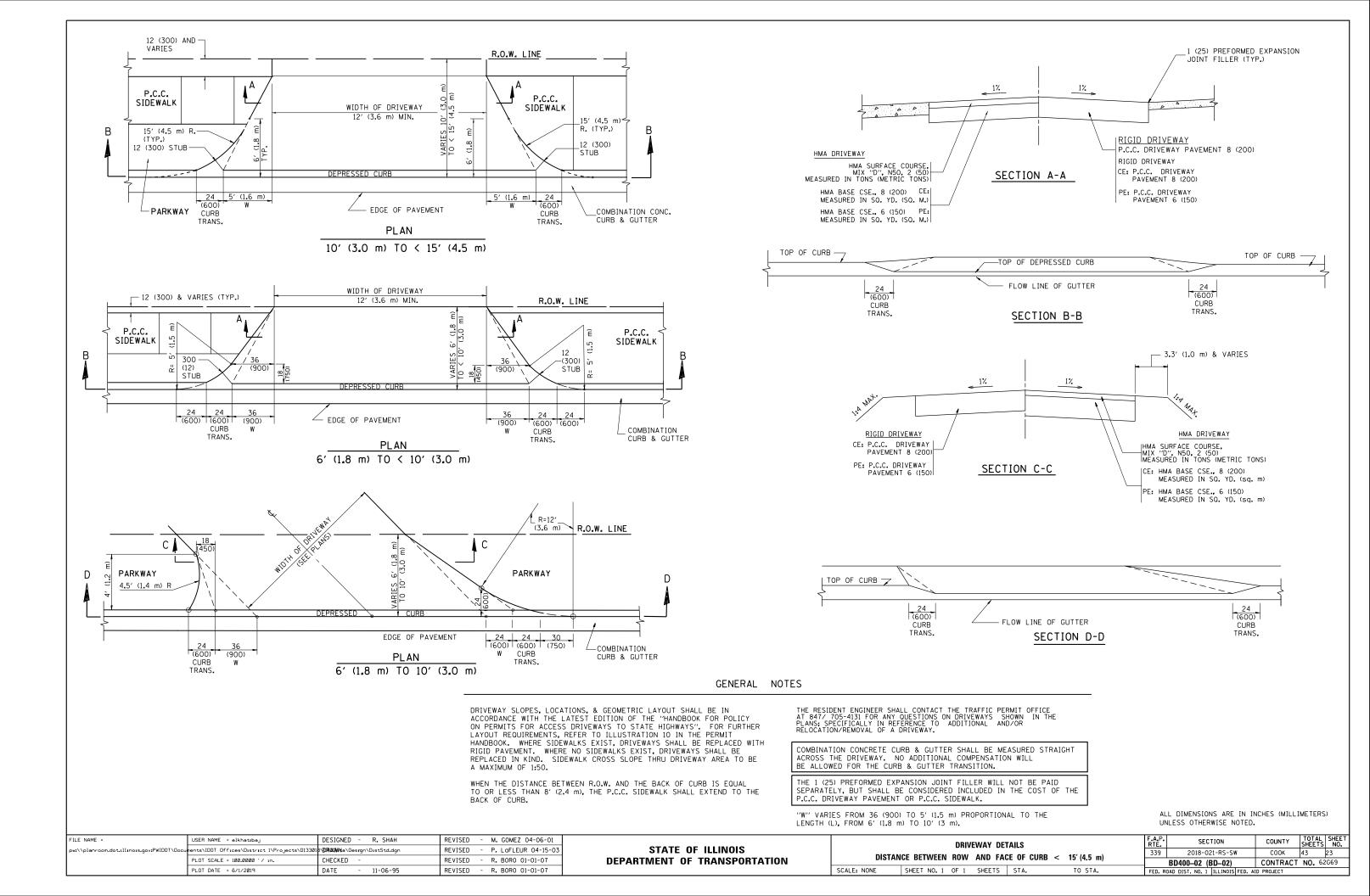
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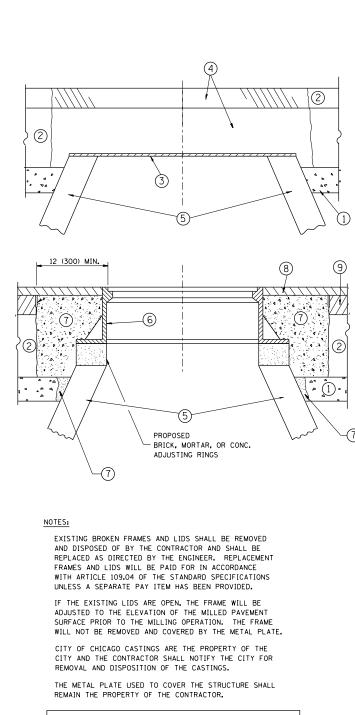
N	IL ROUTE 58 (GOLF

I			2010-021-03-300		COOK	43	<u> </u>
					CONTRACT	NO. 620	369
5	STA. TO STA.		ILLINOIS	FED. A	ID PROJECT		









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

FILE NAME =	USER NAME = elkhatıbaj	DESIGNED - R. SHAH	REVISED -	- R. WIEDEMAN 05-14-04			DETAILS FOR	F.A.P.	SECTION	COUNTY	TOTAL SHEET
pw://planroom.dot.illinois.gov:PWIDOT/Dock	ments\IDOT_Offices\District_I\Projects\D13301	3107AMMNa/Design/DistStd.dgn	REVISED -	- R. BORO 01-01-07	STATE OF ILLINOIS			339	2018-021-RS-SW	СООК	43 24
	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	T NO. 62069	
	PLOT DATE = 6/1/2019	DATE - 10-25-94	REVISED -	- R. BORO 12-06-11		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.		D DIST. NO. 1 ILLINOIS FED. 4		

#### CONSTRUCTION PROCEDURES

#### STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE. B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE. D) BACKFILL WITH CRUSHED STONE AND A MINIMUM  $1^{\prime}_{2}$  (40)
- THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

#### STAGE 2 (AFTER PAVEMENT MILLING)

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

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

#### LEGEND

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

(5) EXISTING STRUCTURE

#### LOCATION OF STRUCTURES:

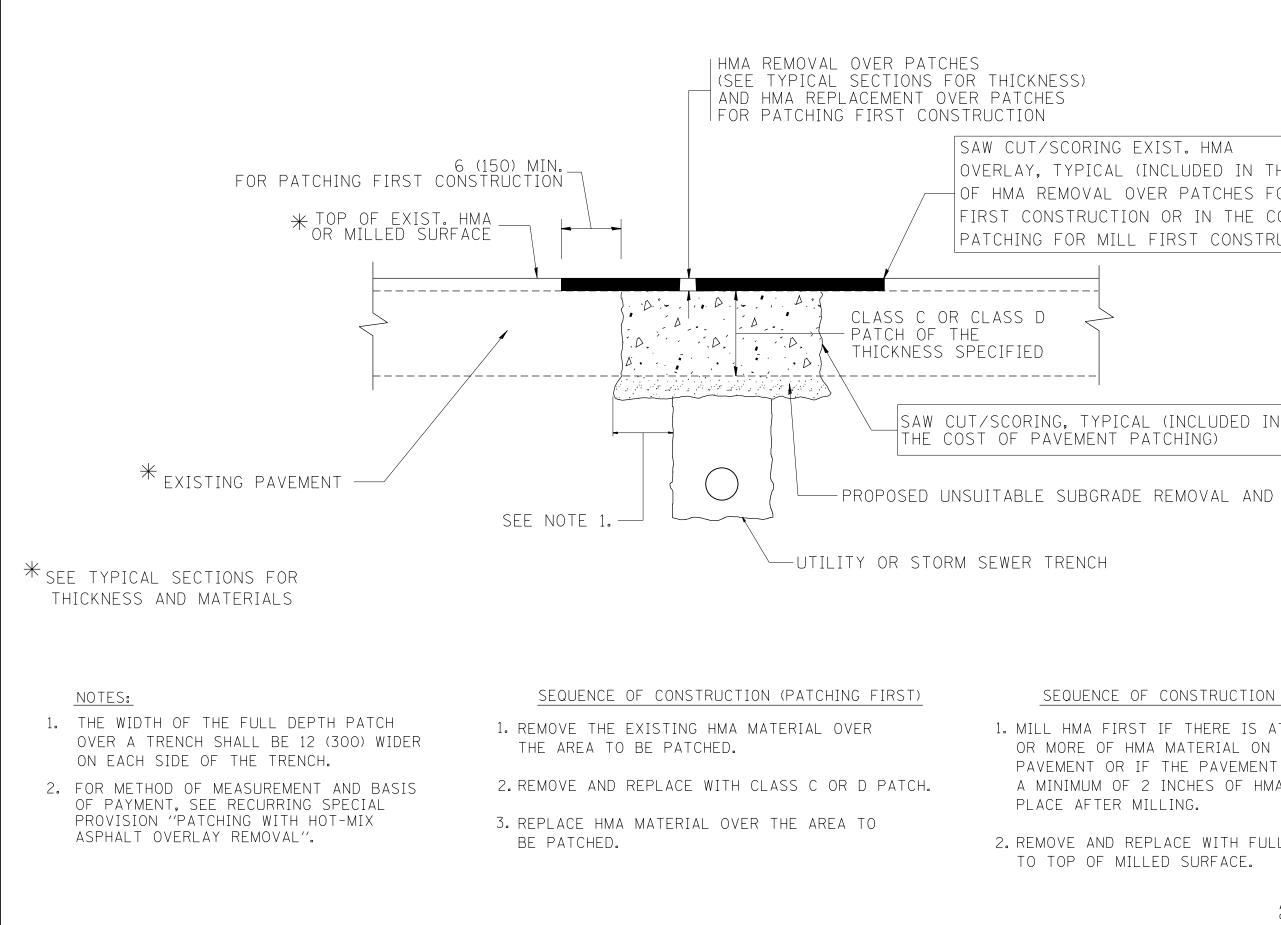
THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

#### 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.



DAVEMENT DATCHIN	NI
HMA SURFACED PAV	٩V
SHEET NO. 1 OF 1 SHEETS	S
Sł	PAVEMENT PATCHI HMA SURFACED PA

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).

PROPOSED UNSUITABLE SUBGRADE REMOVAL AND REPLACEMENT

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

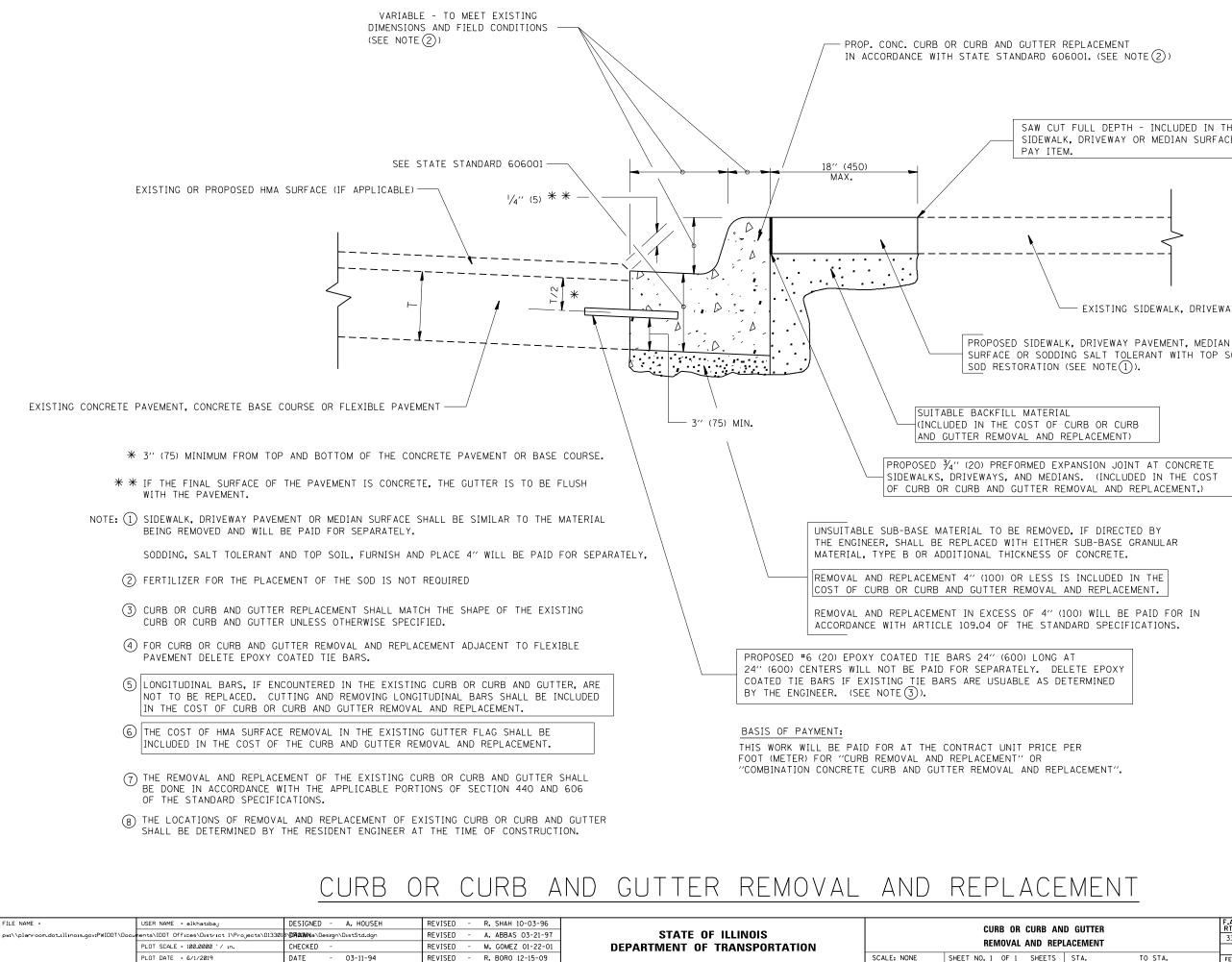
1. MILL HMA FIRST IF THERE IS AT LEAST  $4\frac{1}{2}$  INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN

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

		DIMENSIONS ARE IN INCHES RWISE SHOWN.	(MILLIMETERS	) UNLES	S
ING FOR	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
AVEMENT	339	2018-021-RS-SW	COOK	43	25
		BD400–04 (BD–22)	CONTRACT	NO. 62	C69

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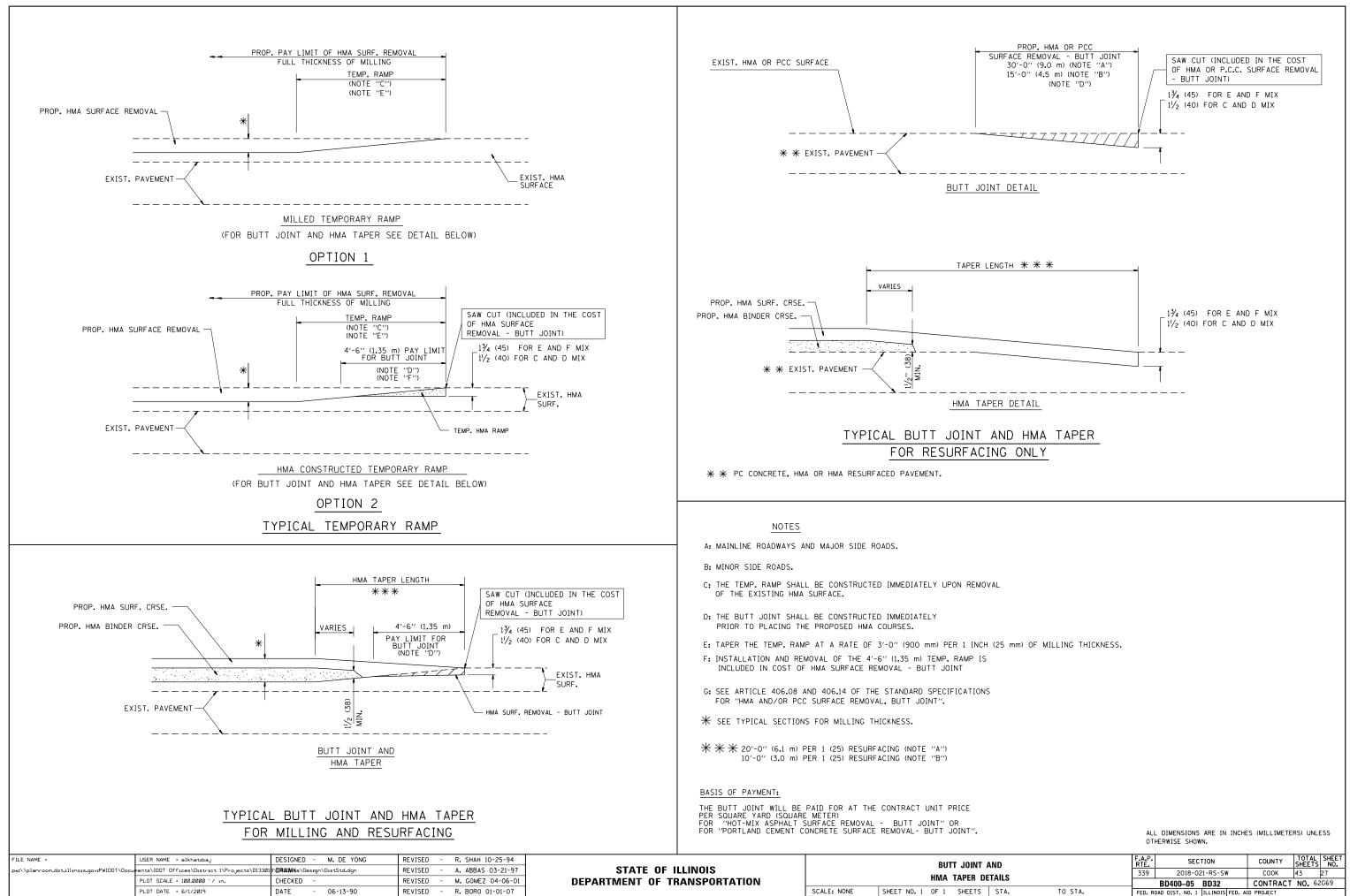
SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL

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

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

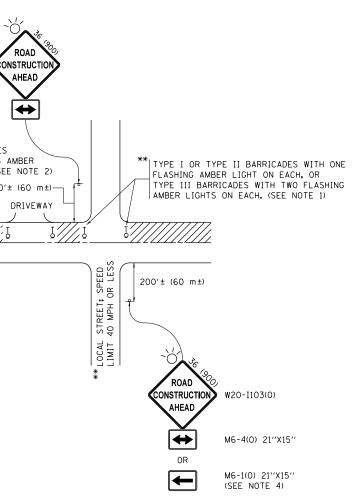
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

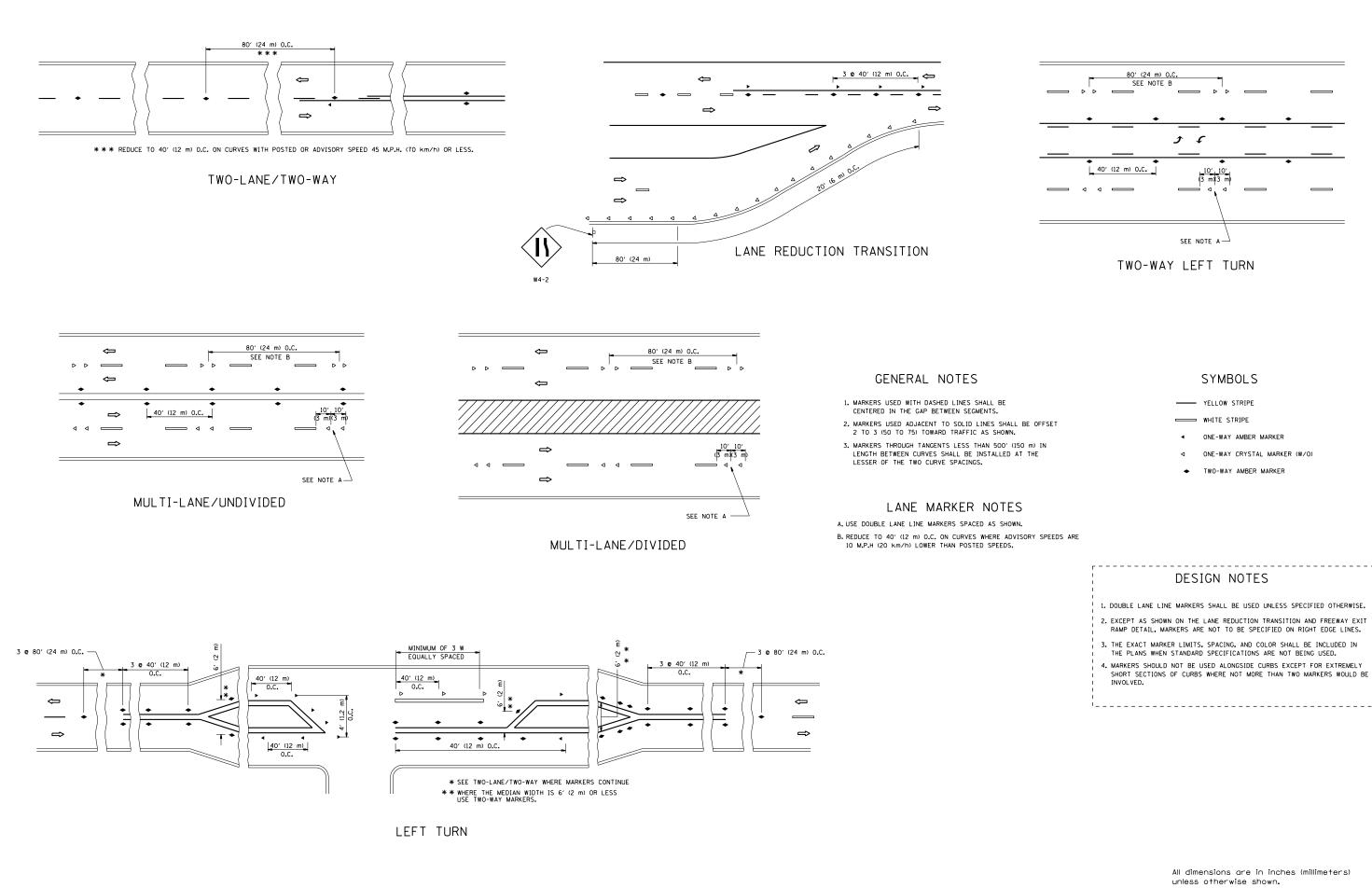
٩NI	ND GUTTER		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EPLACEMENT		339	2018-021-RS-SW	СООК	43	26	
			BD600-06 (BD-24)	CONTRACT	NO. 62	2669	
	STA.	TO STA.	FED. R	DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		



AND DETAILS		SEC	TION	COUNTY	TOTAL SHEETS	SHEET NO.
		2018-02	21-RS-SW	COOK	43	27
		BD400-05	BD32	CONTRACT	NO. 62	C69
STA. TO STA.	FED. RC	DAD DIST. NO. 1	ILLINOIS FED. A	ID PROJECT		

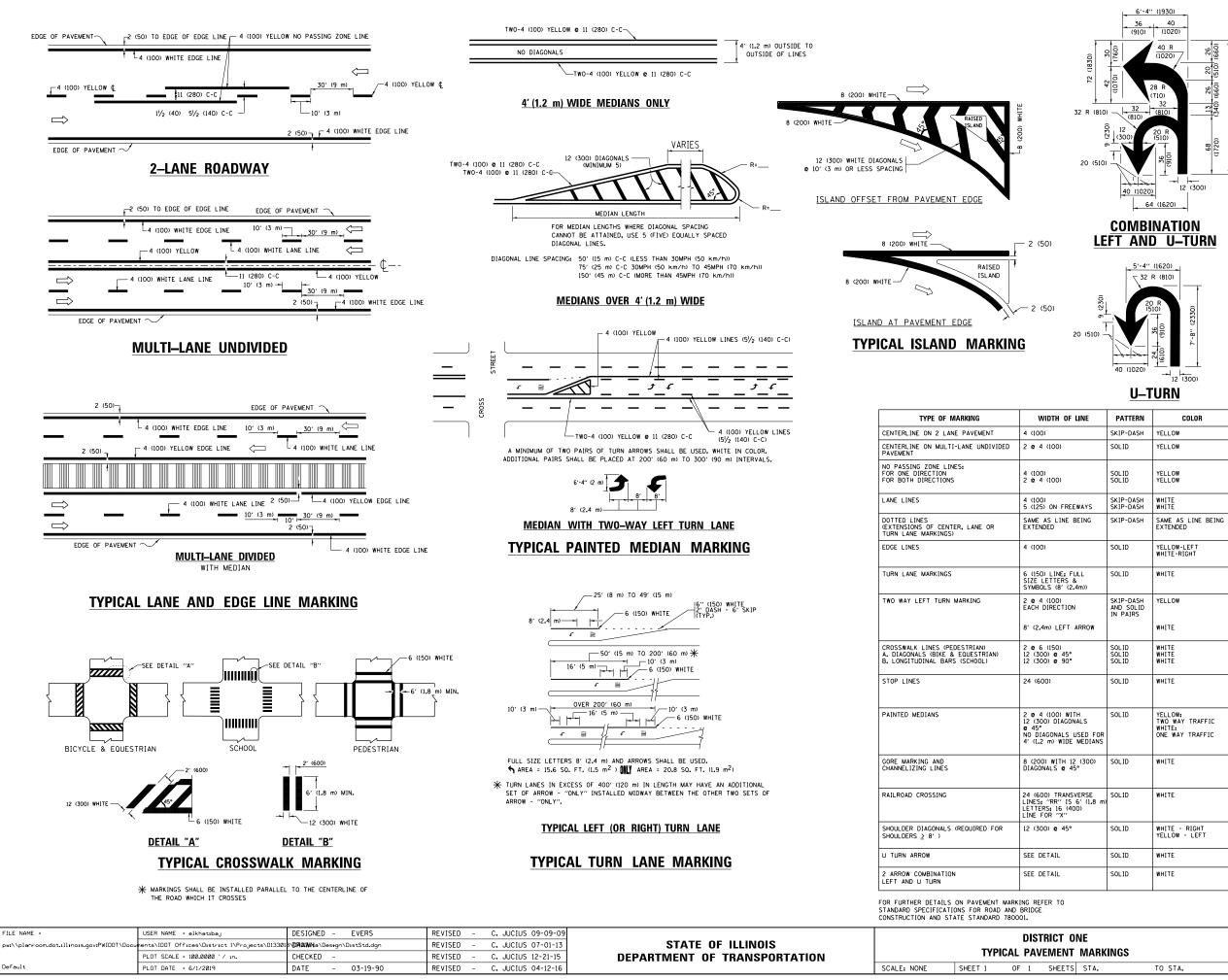
	IS (380) 21 (530)	*TYPE III BARRICADES WITH TWO FLASHING AMBER LIGHTS ON EACH. (SEE NOTE 2) 200'± (60 m±) DRIVEWAY	** TYPE I OR TYPE II BARRICADES WITH ONE FLASHING AMBER LIGHT ON EACH, OR TYPE III BARRICADES WITH TWO FLASHING AMBER LIGHTS ON EACH. (SEE NOTE 1)
			SSET BUT HAN OF LIMIT 200'± (60 m±)
	NOTES:		
	SHOWN ON THE DRAWING AN O) ONE "ROAD CONSTRU- MOUNTED ON IT APPI b) THE CLOSED PORTION BLOCKING WITH TYPE THE CROSS SECTION 2. SIDE ROAD WITH A SPEED AS SHOWN ON THE DRAWING O) ONE "ROAD CONSTRU-	D AS DIRECTED BY THE ENGINEER: TION AHEAD" SIGN 36 × 36 (900×900) WITH A FLASHER OXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE. OF THE MAIN ROUTE SHALL BE PROTECTED BY I, TYPE II OR TYPE III BARRICADES, 1/3 OF OF THE CLOSED PORTION. IMIT GREATER THAN 40 MPH (60 km/h) AND AS DIRECTED BY THE ENGINEER: CTION AHEAD" SIGN 48 × 48 (1.2 m × 1.2 m) WITH A	WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY. OULLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (MG-1 OR MG-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE INGINEER. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, NTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.
	OF THE MAIN ROUTE. b) THE CLOSED PORTION BLOCKING WITH TYPE OF THE CLOSED POR 3. CONES MAY BE SUBSTITUTE SPACING DURING DAY OPER IN HEIGHT. 4. WHEN THE SIDE ROAD LIES SIGNING AND THE WORK ZC	OF THE MAIN ROUTE SHALL BE PROTECTED BY III BARRICADES, 1/2 OF THE CROSS SECTION	
			All dimensions are in inches (millimeters) unless otherwise shown.
FILE NAME =         USER NAME = elkhatibaj         DESIGNED -         L.H.A.         REVISED -         A. HOUSEH 10-15-96           pwt\planroom.dot.illinois.gov/PWIDDT\Doc         ments\DDT Offices\District I\Projects\DI3308         DRAUMNobestgn\DistStd.dgn         REVISED -         T. RAMMACHER 01-06-00           PutT SCALE = 100.0000 '/ in.         CHECKED -         REVISED -         A. SCHUETZE 07-01-13           Default         PutT DATE = 6/1/2019         DATE -         06-89         REVISED -         A. SCHUETZE 09-15-16	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS       SCALE: NONE     SHEET 1     OF 1     SHEETS     STA.     TO	F.A.P. RTE.         SECTION         COUNTY         TOTAL SHEETS         SHEETS NO.           339         2018-021-RS-SW         COOK         43         28           TC-10         CONTRACT         NO.         6269           STA.         ILLINOIS FED. AID PROJECT         6269

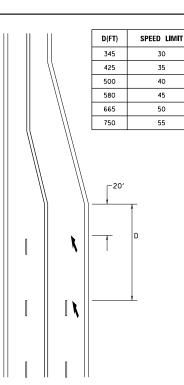




	FILE NAME =	USER NAME = elkhatıbaj	DESIGNED -	REVISED - T. RAMMACHER 09-19-94					SECTION	COUNTY TOTAL SHEET
	pw:\\planroom.dot.illinois.gov:PWIDOT\Docu	nents\IDOT_Offices\District_1\Projects\D13301	3 <b>(DRAMMa</b> \Design \DistStd.dgn	REVISED - T. RAMMACHER 03-12-99	STATE OF ILLINOIS				2018-021-RS-SW	COOK 43 29
		PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			TC-11	CONTRACT NO. 62669
l		PLOT DATE = 6/1/2019	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. A	AID PROJECT

4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.





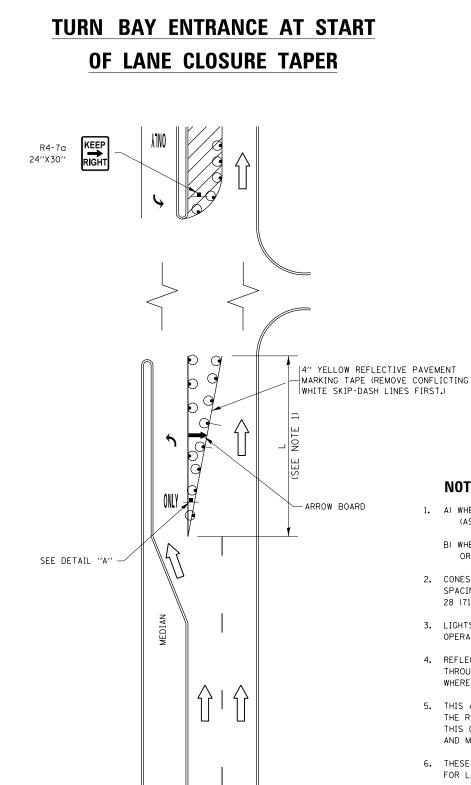
### LANE REDUCTION TRANSITION

# lane reduction arrows required at speeds of 45 MPH or greater or when specified in plans.

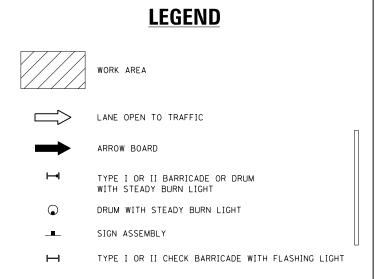
F LINE	PATTERN	COLOR	SPACING /REMARKS
	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
	SOLID	YELLOW	11 (280) C-C
	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
EEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
BEING	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
FULL & 2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
ON ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
•	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 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, OTHEWNISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
ITH DNALS USED FOR E MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
12 (300) 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 (0VER 45MPH (70 km/h))
SVERSE 5 6' (1.8 m) 400)	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SO. FT. (5.0 m <sup>2</sup> )
•	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 (0VER 45MPH (70 km/h))
	SOLID	WHITE	16.3 SF
	SOLID	WHITE	30.4 SF

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

ONE				SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
т	T MARKINGS		339	2018-021-RS-SW	СООК	43	30	
			TC-13	CONTRACT	NO. 62	2669		
TS	STA.	TO STA.	ILLINOIS FED. AID PROJECT					

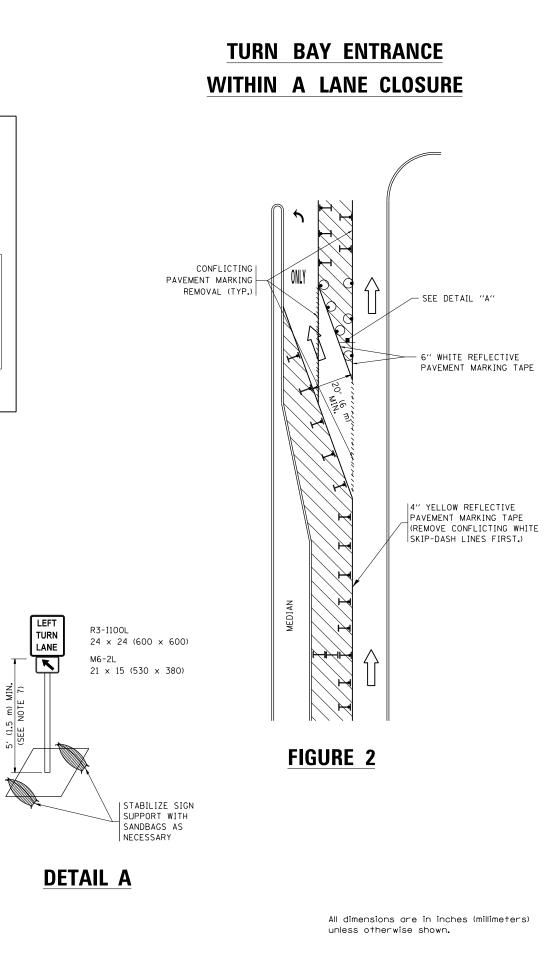


**FIGURE 1** 

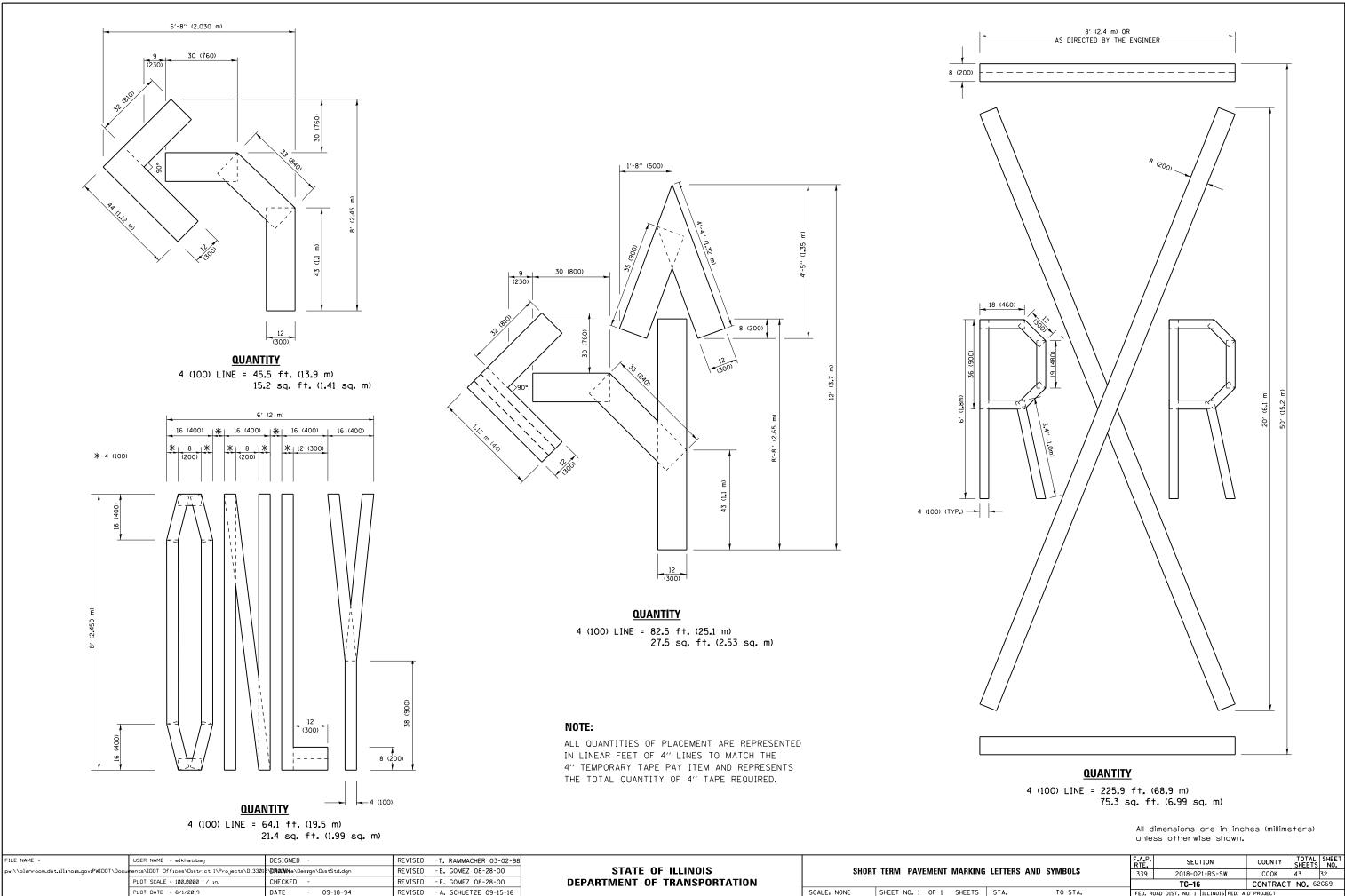


#### NOTES:

- 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 × 15 (530 × 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 PREQUIREMENTS.
- 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.

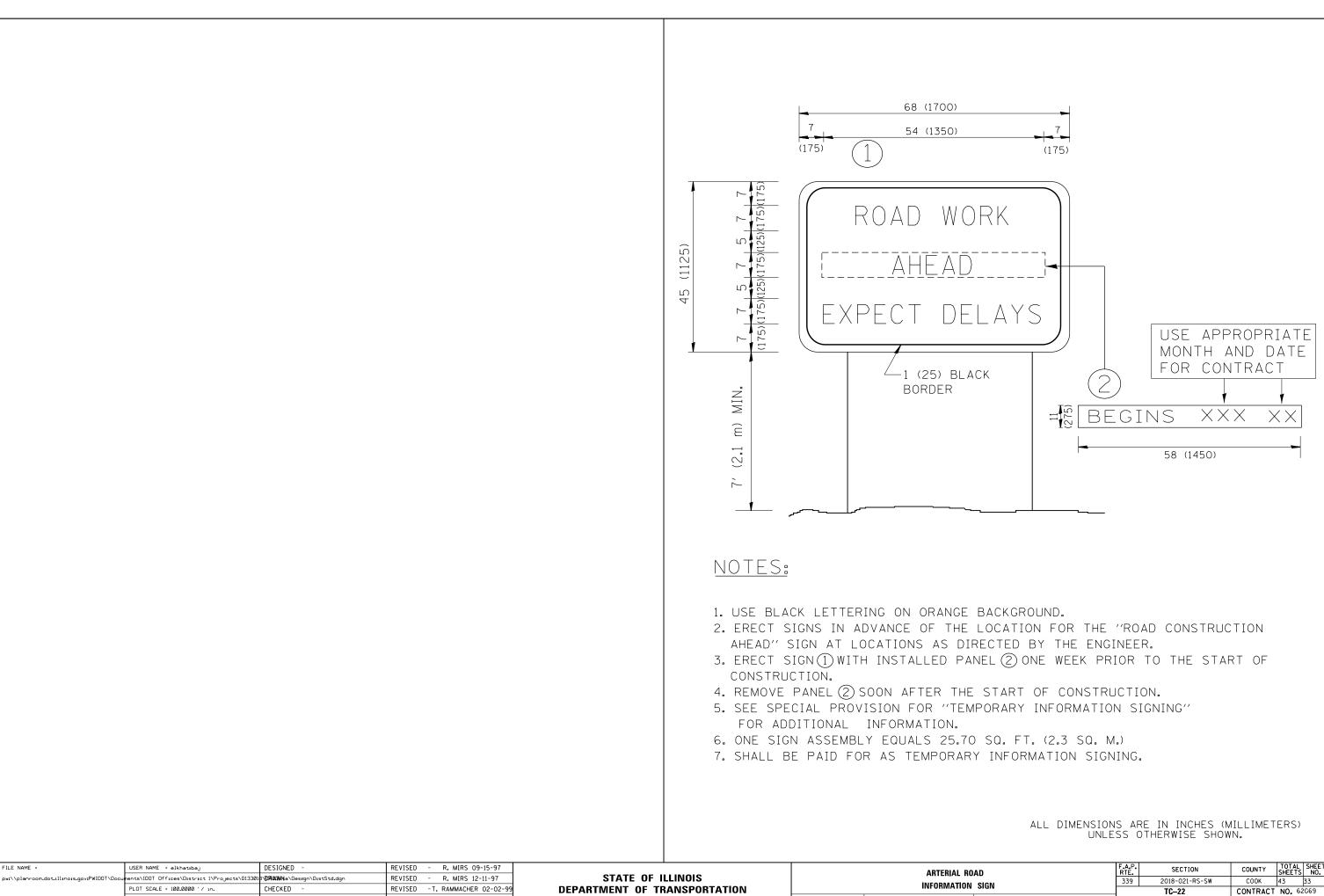


FILE NAME =	USER NAME = elkhatıbaj	REVISED - T. RA	AMMACHER 09-08-94	REVISED	- R. BORO 09-14-09		TRAFFIC CONTROL AND PROTECTION AT TURN BAYS			AYS F.A	A.P.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.		
pw://planroom.dot.illinois.gov:PWIDOT/Docu	nents\IDOT Offices\District l\Projects\D13301	8786003660.Destgn/DiAt	AtSHOUSEH 11-07-95	REVISED	- A. SCHUETZE 07-01-13	STATE OF ILLINOIS	(TO REMAIN OPEN TO TRAFFIC)		33	39	2018-021-RS-SW	СООК	43 31			
	PLOT SCALE = 100.0000 '/ in.	REVISED – A	A. HOUSEH 10-12-96	REVISED	- A. SCHUETZE 09-15-16	DEPARTMENT OF TRANSPORTATION	(TU KEWIAIN UPEN TU TRAFFIC)					TC-14	CONTRAC	CT NO. 62669		
Default	PLOT DATE = 6/1/2019	REVISED - T. RA	AMMACHER 01-06-00	REVISED	-		SCALE: NONE	SHEET 1	OF 1	1 SHEETS ST	Α. ΤΟ	STA.		ILLINOIS FED. A	ID PROJECT	



SCALE: NONE SHEET NO. 1 OF 1 SHEETS

G LETTERS AND SYMBOLS				SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
G	LETTERS	AND SYMBOLS	339	2018-021-RS-SW	COOK	43	32	
				TC-16	CONTRACT	NO. 62	C69	
	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					



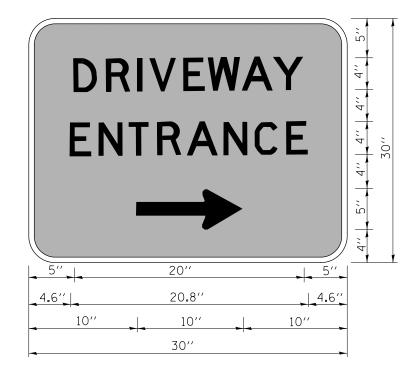
REVISED - C. JUCIUS 01-31-07

PLOT DATE = 6/1/2019

DATE

NSPORTATION				
	SCALE: NONE	SHEET NO. 1	OF 1	SHEETS

RO	AD		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
м	SIGN		339	2018-021-RS-SW	COOK	43	33		
11	N SIGN			TC-22	CONTRACT	NO. 62	C69		
	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" × 5.0"

### NOTES:

- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = elkhatıbaj	DESIGNED -	REVISED - C. JUCIUS 02-15-07		DRIVEWAY ENTRANCE SIGNING				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
pw://planroom.dot.illinois.gov:PWIDOT/Docu	ents\IDOT Offices\District 1\Projects\D13301	3\ <b>DAMMN</b> a\Design\DistStd.dgn	REVISED -	STATE OF ILLINOIS	DIIVEWAT ENTIANCE SIGNING		339	2018-021-RS-SW	соок	43 34		
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			TC-26	CONTRACT	NO. 62669			
	PLOT DATE = 6/1/2019	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.			ID PROJECT	

#### SIGN PANEL – TYPE 1 OR TYPE 2 60 3.75 35.25 11.125 3.875 Sample Rd 60 14.5 4.125 4.125 8.25 17 **Rte 123** 30 Rd Sample 3.75 11.125 3.875 35.25 6 84 35.25 6 9.125 4.875 4.75 12 12 Sample St 6 30 Sample Rd 3.75 3.875 35.25 6 11.125 12 12 AREA SIGN PANEL SHEETING OT

DESIGN	AREA	SIGN PANEL	SHEELING	uir.	
SERIES	SERIES (SQ FT)		TYPE	REQUIRED	
DORC	-	1 OR 2	ZZ	-	

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

### **COMMON STREET NAME ABBREVIATIONS** AND WIDTHS

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

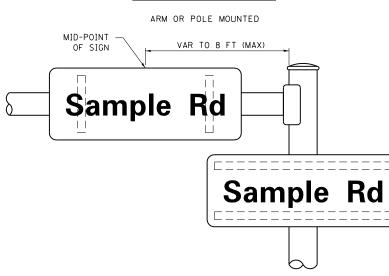
### **GENERAL NOTES**

- 1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" × 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- 2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- 3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-O". ALL BORDERS SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6". IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-O" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-O" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-O" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- 5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- 6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

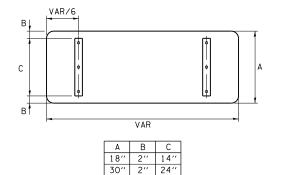
LOCAL SUPPLIERS:	PARTS LISTING:	
- J.O. HERBERT COMPANY, INC MIDLOTHIAN, VA	SIGN CHANNEL SIGN SCREWS	PART #HPN053 (MED. CHANNEL) 1/4" × 14 × 1" H.W.H. #3
- WESTERN REMAC, INC. WOODRIDGE, IL	BRACKETS	SELF TAPPING WITH NEOPRENE WASHER PART #HPNO34 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

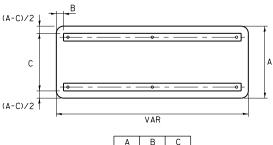
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

### **MOUNTING LOCATION**



### SUPPORTING CHANNELS





18" 30" 2" 22"

2" 12"

						· · · ·										
	USER NAME = elkhatıbaj	DESIGNED - LP/IP	REVISED	- LP 07/01/2015		DISTRICT ONE						F.A.P. BTF.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.	
pw://planroom.dot.illinois.gov:PWIDOT/Docu	nents\IDOT Offices\District 1\Projects\D13301	8\ <b>0RAMHN</b> a\Des+gn\Di <b>b</b> fStd.dgr	REVISED	-	STATE OF ILLINOIS		MACT AD	_			-	CICNIC	339	2018-021-RS-SW	СООК	43 35
	PLOT SCALE = 100.0000 '/ in.	CHECKED - IP	REVISED	-	DEPARTMENT OF TRANSPORTATION					CONTRAC	T NO. 62669					
Default	PLOT DATE = 6/1/2019	DATE - 10/01/2	D14 REVISED	-		SCALE:	SHEET	OF	SH	HEETS STA.		TO STA.		ILLINOIS FED.	AID PROJECT	

### STANDARD ALPHABETS SPACING CHART

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

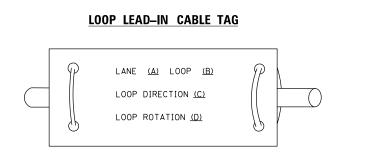
JARACTER         SPACING         (*IL0H)         <		FHWA SEF	RIES "C"		FHWA SERIES "D"					
B         0.880         4.482         0.720         C         0.800         5.446         0.4           C         0.720         4.482         0.720         D         0.960         5.446         0.8           E         0.880         4.082         0.720         D         0.960         5.446         0.8           F         0.880         4.082         0.720         C         0.960         4.962         0.2           C         0.720         4.482         0.880         H         0.960         5.446         0.8           H         0.880         4.082         0.880         H         0.960         5.446         0.8           J         0.240         4.082         0.880         J         0.240         5.122         0.9           M         0.880         4.482         0.880         M         0.960         5.446         0.2           M         0.880         4.482         0.880         M         0.960         5.446         0.2           M         0.880         4.482         0.720         0         0.800         5.684         0.8           P         0.880         4.482         0.880         N <th>HARACTER</th> <th>SPACING</th> <th></th> <th>SPACING</th> <th>CHARACTER</th> <th>SPACING</th> <th></th> <th>RIGHT SPACING (INCH)</th>	HARACTER	SPACING		SPACING	CHARACTER	SPACING		RIGHT SPACING (INCH)		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								0.240		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	-				_			0.400		
E         0.880         4.082         0.440         E         0.960         4.962         0.4           F         0.880         4.082         0.720         G         0.800         5.446         0.80           H         0.880         1.120         0.880         H         0.960         5.446         0.9           J         0.240         4.082         0.880         J         0.240         5.122         0.9           K         0.880         4.482         0.480         K         0.960         5.646         0.9           J         0.240         4.082         0.240         L         0.960         5.446         0.9           M         0.880         4.482         0.880         M         0.960         5.446         0.9           O         0.720         4.722         0.720         0         0.800         5.684         0.80           G         0.880         4.482         0.480         R         0.960         5.446         0.4           G         0.840         4.482         0.480         S         0.400         5.446         0.4           G         0.840         4.482         0.480         S </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.800</td>								0.800		
F         0.880         4.082         0.240         F         0.960         4.962         0.2           G         0.720         4.482         0.720         G         0.800         5.446         0.8           H         0.880         1.120         0.880         H         0.960         1.280         0.9           J         0.240         4.082         0.880         J         0.240         5.122         0.9           J         0.240         4.082         0.880         J         0.240         5.122         0.9           M         0.880         4.082         0.480         K         0.960         5.644         0.8           M         0.880         4.482         0.880         M         0.960         5.446         0.2           O         0.720         4.722         0.720         0         0.800         5.644         0.8           R         0.880         4.482         0.480         R         0.960         5.446         0.2           U         0.240         4.962         0.240         T         0.240         4.962         0.240           U         0.240         4.222         0.240         Y </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.300</td>								0.300		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								0.240		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $								0.800		
J         0.240         4.082         0.880         J         0.240         5.122         0.9           K         0.880         4.482         0.480         K         0.960         5.604         0.4           L         0.880         4.482         0.880         M         0.960         6.244         0.9           N         0.880         4.482         0.880         N         0.960         5.446         0.2           0         0.720         4.722         0.720         0         0.800         5.684         0.8           P         0.880         4.482         0.480         R         0.960         5.446         0.4           C         0.720         4.722         0.720         0         0.800         5.644         0.4           S         0.480         4.482         0.480         S         0.400         5.446         0.4           U         0.880         4.482         0.480         U         0.960         5.446         0.4           U         0.240         4.962         0.240         Y         0.240         6.084         0.2           W         0.240         4.722         0.240         X <td>Н</td> <td>0.880</td> <td>4.482</td> <td>0.880</td> <td>Н</td> <td>0.960</td> <td>5.446</td> <td>0.960</td>	Н	0.880	4.482	0.880	Н	0.960	5.446	0.960		
K         0.880         4.482         0.480         K         0.960         5.604         0.4           L         0.880         4.082         0.240         L         0.960         4.962         0.2           M         0.880         5.284         0.880         M         0.960         5.446         0.9           N         0.880         4.482         0.720         0         0.800         5.684         0.8           P         0.880         4.482         0.720         0         0.800         5.684         0.2           0         0.720         4.722         0.720         0         0.800         5.466         0.4           S         0.480         4.482         0.480         R         0.960         5.446         0.4           V         0.240         4.962         0.240         T         0.240         4.962         0.2           U         0.880         4.482         0.480         U         0.960         5.446         0.4           V         0.240         6.084         0.240         V         0.240         7.124         0.2           V         0.240         6.084         0.220         7.460								0.960		
L         0.880         4.082         0.240         L         0.960         4.962         0.2           M         0.880         5.284         0.880         M         0.960         5.244         0.9           0         0.880         4.482         0.880         N         0.960         5.446         0.9           0         0.880         4.482         0.720         0         0.800         5.684         0.8           P         0.880         4.482         0.720         0         0.800         5.446         0.4           0         0.720         4.722         0.720         0         0.800         5.446         0.4           0         0.480         4.482         0.480         R         0.960         5.446         0.4           1         0.240         4.962         0.240         V         0.240         6.084         0.2           2         0.240         5.122         0.240         W         0.240         6.884         0.2           2         0.480         4.082         0.420         Y         0.240         6.884         0.2           2         0.480         0.220         2.480         0.480								0.960		
M         0.880         5.284         0.880         M         0.960         6.244         0.9           N         0.880         4.482         0.880         N         0.960         5.446         0.9           0         0.720         4.722         0.720         P         0.960         5.446         0.2           0         0.720         4.722         0.720         0         0.800         5.684         0.8           R         0.880         4.482         0.480         R         0.960         5.446         0.4           S         0.480         4.482         0.480         S         0.400         5.446         0.4           U         0.880         4.482         0.240         T         0.240         4.962         0.2           W         0.240         4.962         0.240         W         0.240         6.084         0.2           X         0.240         5.122         0.240         Y         0.240         6.884         0.2           Z         0.480         4.482         0.480         Z         0.400         5.446         0.4           Q         0.240         6.084         0.22         0.770<								0.400		
N         0.880         4.482         0.880         N         0.960         5.446         0.9           0         0.720         4.722         0.720         0         0.800         5.684         0.8           P         0.880         4.482         0.720         0         0.800         5.684         0.8           R         0.880         4.482         0.480         R         0.960         5.446         0.4           S         0.480         4.482         0.480         R         0.960         5.446         0.4           T         0.240         4.082         0.240         T         0.240         4.962         0.2           W         0.240         4.962         0.240         W         0.240         6.084         0.240         W         0.240         6.084         0.240         W         0.240         6.884         0.4           Z         0.480         4.482         0.480         Z         0.400         5.446         0.4           Q         0.240         5.122         0.240         X         0.400         5.446         0.4           Z         0.480         4.082         0.480         Z         0.4								0.240		
P         0.880         4.482         0.720         P         0.960         5.446         0.2           0         0.720         4.722         0.720         0         0.800         5.684         0.8           R         0.880         4.482         0.480         R         0.960         5.446         0.4           T         0.240         4.082         0.240         T         0.240         4.962         0.240           U         0.880         4.482         0.880         U         0.960         5.446         0.9           V         0.240         4.962         0.240         W         0.240         6.084         0.2           W         0.240         6.084         0.240         W         0.240         6.084         0.2           X         0.240         6.122         0.240         X         0.400         5.446         0.4           Q         0.480         4.482         0.480         Z         0.400         5.446         0.4           Q         0.480         4.082         0.480         Z         0.400         5.446         0.4           Q         0.480         4.082         0.720         C </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.960</td>								0.960		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0				0			0.800		
R         0.880         4.482         0.480         R         0.960         5.446         0.4           T         0.240         4.082         0.240         T         0.240         4.962         0.2           U         0.880         4.482         0.880         U         0.960         5.446         0.9           V         0.240         4.962         0.240         V         0.240         6.084         0.2           W         0.240         4.962         0.240         V         0.240         6.084         0.2           W         0.240         4.722         0.240         Y         0.240         6.084         0.2           Z         0.480         4.482         0.240         Y         0.240         6.884         0.2           D         0.720         4.082         0.480         2         0.400         4.562         0.7           D         0.720         4.082         0.720         d         0.480         4.722         0.3           d         0.480         4.082         0.720         g         0.480         4.802         0.8           f         0.320         2.480         0.160         f <td>Р</td> <td>0.880</td> <td>4.482</td> <td>0.720</td> <td>Р</td> <td>0.960</td> <td>5.446</td> <td>0.240</td>	Р	0.880	4.482	0.720	Р	0.960	5.446	0.240		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								0.800		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								0.400		
U         0.880         4.482         0.880         U         0.960         5.446         0.9           V         0.240         4.962         0.240         V         0.240         6.084         0.2           W         0.240         6.084         0.240         W         0.240         7.124         0.2           X         0.240         5.122         0.240         Y         0.240         6.884         0.2           Q         0.480         4.482         0.240         Y         0.240         5.446         0.4           Q         0.240         5.122         0.240         Y         0.240         6.884         0.2           Z         0.480         4.482         0.480         Z         0.400         5.446         0.4           G         0.720         4.082         0.480         b         0.800         4.802         0.7           d         0.480         4.082         0.720         d         0.480         4.802         0.8           f         0.320         2.480         0.160         f         0.320         2.882         0.1           g         0.480         4.082         0.720         g <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.400</td>								0.400		
V         0.240         4.962         0.240         V         0.240         6.084         0.240         W         0.240         7.124         0.2           X         0.240         4.722         0.240         X         0.400         5.446         0.4           Y         0.240         Y         0.240         Y         0.240         5.446         0.4           Q         0.480         4.482         0.480         Z         0.400         5.446         0.4           Q         0.320         3.842         0.640         Q         0.400         4.862         0.7           b         0.720         4.082         0.480         b         0.800         4.802         0.8           c         0.480         4.082         0.720         d         0.480         4.802         0.8           f         0.320         2.480         0.160         f         0.320         2.882         0.18           g         0.480         4.082         0.720         I         0.800         1.722         0.7           g         0.480         4.082         0.640         n         0.800         1.722         0.7           l								0.240		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								0.240		
Y         0.240         5.122         0.240         Y         0.240         6.884         0.2           Z         0.480         4.482         0.480         Z         0.400         5.446         0.4           a         0.320         3.842         0.640         a         0.400         4.862         0.7           b         0.720         4.082         0.480         b         0.800         4.802         0.3           c         0.480         4.082         0.720         d         0.480         4.802         0.3           d         0.480         4.082         0.720         g         0.480         4.802         0.8           f         0.320         2.480         0.160         f         0.320         2.82         0.1           g         0.480         4.082         0.720         g         0.480         4.802         0.8           h         0.720         1.120         0.720         J         0.000         2.642         0.8           j         0.000         2.542         0.160         k         0.800         1.280         0.8           m         0.720         1.120         0.720         I <td>w</td> <td></td> <td></td> <td></td> <td>W</td> <td></td> <td>7.124</td> <td>0.240</td>	w				W		7.124	0.240		
Z       0.480       4.482       0.480       Z       0.400       5.446       0.4         a       0.320       3.842       0.640       a       0.400       4.552       0.7         b       0.720       4.082       0.480       b       0.800       4.802       0.7         d       0.480       4.002       0.240       c       0.480       4.802       0.2         d       0.480       4.082       0.720       d       0.480       4.802       0.3         e       0.480       4.082       0.720       g       0.480       4.802       0.3         g       0.480       4.082       0.720       g       0.480       4.802       0.8         h       0.720       4.082       0.640       h       0.800       4.722       0.7         i       0.720       1.120       0.720       j       0.000       2.642       0.8         k       0.720       4.322       0.160       k       0.800       1.280       0.8         m       0.720       6.724       0.640       m       0.800       4.722       0.7         n       0.720       6.724       0.640 <td>Х</td> <td>0.240</td> <td>4.722</td> <td>0.240</td> <td>Х</td> <td>0.400</td> <td>5.446</td> <td>0.400</td>	Х	0.240	4.722	0.240	Х	0.400	5.446	0.400		
a         0.320         3.842         0.640         a         0.400         4.562         0.7           b         0.720         4.082         0.480         b         0.800         4.802         0.4           c         0.480         4.002         0.240         c         0.480         4.722         0.2           d         0.480         4.082         0.720         d         0.480         4.722         0.3           f         0.320         2.480         0.160         f         0.320         2.882         0.1           g         0.480         4.082         0.720         g         0.480         4.802         0.8           h         0.720         1.120         0.720         j         0.800         1.722         0.7           i         0.720         1.120         0.720         j         0.800         1.280         0.8           k         0.720         1.120         0.720         j         0.800         1.280         0.8           m         0.720         1.120         0.720         j         0.800         1.280         0.8           m         0.720         4.082         0.440         m <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.240</td>								0.240		
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c         0.480         4.002         0.240         c         0.480         4.722         0.2           d         0.480         4.082         0.720         d         0.480         4.802         0.8           e         0.480         4.082         0.320         e         0.480         4.722         0.3           f         0.320         2.480         0.160         f         0.320         2.882         0.1           g         0.480         4.082         0.720         g         0.480         4.802         0.8           h         0.720         1.120         0.720         I         0.800         4.722         0.7           i         0.720         1.120         0.720         I         0.800         4.722         0.8           k         0.720         4.322         0.160         k         0.800         5.122         0.1           l         0.720         4.082         0.440         m         0.800         7.926         0.7           n         0.720         4.082         0.440         m         0.800         4.822         0.4           p         0.720         4.082         0.720         q <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.720</td>								0.720		
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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	f	0.320	2.480	0.160	f	0.320	2.882	0.160		
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1         0.720         1.680         0.880         1         0.800         2.000         0.9           2         0.480         4.482         0.480         2         0.800         5.446         0.8           3         0.480         4.482         0.480         3         1.440         5.446         0.8           4         0.240         4.962         0.720         4         0.160         6.004         0.9           5         0.480         4.482         0.480         5         0.800         5.446         0.8           6         0.720         4.482         0.480         5         0.800         5.446         0.8           7         0.240         4.482         0.720         6         0.800         5.446         0.8           6         0.720         4.482         0.720         7         0.560         5.446         0.5           8         0.480         4.482         0.480         8         0.800         5.446         0.8           9         0.480         4.482         0.480         9         0.800         5.446         0.8           9         0.480         4.482         0.480         9 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.160</td>								0.160		
2         0.480         4.482         0.480         2         0.800         5.446         0.8           3         0.480         4.482         0.480         3         1.440         5.446         0.8           4         0.240         4.962         0.720         4         0.160         6.004         0.9           5         0.480         4.482         0.480         5         0.800         5.446         0.8           6         0.720         4.482         0.480         5         0.800         5.446         0.8           7         0.240         4.482         0.720         6         0.800         5.446         0.8           7         0.240         4.482         0.720         7         0.560         5.446         0.5           8         0.480         4.482         0.480         8         0.800         5.446         0.5           8         0.480         4.482         0.480         8         0.800         5.446         0.8           9         0.480         4.482         0.480         9         0.800         5.446         0.8           9         0.480         4.482         0.480         9 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.960</td>								0.960		
4         0.240         4.962         0.720         4         0.160         6.004         0.9           5         0.480         4.482         0.480         5         0.800         5.446         0.8           6         0.720         4.482         0.720         6         0.800         5.446         0.8           7         0.240         4.482         0.720         7         0.560         5.446         0.8           8         0.480         4.482         0.720         7         0.560         5.446         0.8           9         0.480         4.482         0.480         8         0.800         5.446         0.8           9         0.480         4.482         0.480         9         0.800         5.446         0.8           9         0.480         4.482         0.480         9         0.800         5.446         0.8           0         0.720         4.722         0.720         0         0.800         5.684         0.8								0.800		
5         0.480         4.482         0.480         5         0.800         5.446         0.8           6         0.720         4.482         0.720         6         0.800         5.446         0.8           7         0.240         4.482         0.720         7         0.560         5.446         0.5           8         0.480         4.482         0.720         7         0.560         5.446         0.8           9         0.480         4.482         0.480         8         0.800         5.446         0.8           9         0.480         4.482         0.480         9         0.800         5.446         0.8           0         0.720         4.722         0.720         0         0.800         5.446         0.8								0.800		
6         0.720         4.482         0.720         6         0.800         5.446         0.8           7         0.240         4.482         0.720         7         0.560         5.446         0.5           8         0.480         4.482         0.480         8         0.800         5.446         0.8           9         0.480         4.482         0.480         9         0.800         5.446         0.8           0         0.720         4.722         0.720         0         0.800         5.684         0.8								0.960		
7         0.240         4.482         0.720         7         0.560         5.446         0.5           8         0.480         4.482         0.480         8         0.800         5.446         0.8           9         0.480         4.482         0.480         9         0.800         5.446         0.8           0         0.720         4.722         0.720         0         0.800         5.684         0.8								0.800		
8         0.480         4.482         0.480         8         0.800         5.446         0.8           9         0.480         4.482         0.480         9         0.800         5.446         0.8           0         0.720         4.722         0.720         0         0.800         5.684         0.8								0.800		
9         0.480         4.482         0.480         9         0.800         5.446         0.8           0         0.720         4.722         0.720         0         0.800         5.684         0.8								0.560		
0 0.720 4.722 0.720 0 0.800 5.684 0.8								0.800		
								0.800		
- 0.240 2.802 0.240 - 0.240 2.802 0.2	-	0.240	2.802	0.240	-	0.240	2.802	0.240		

## TRAFFIC SIGNAL LEGEND

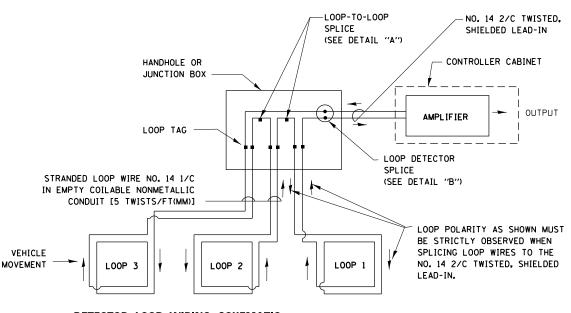
				(NOT TO SCALE)	U			
ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET	$\bowtie$		HANDHOLE -SQUARE			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R R	RR
COMMUNICATION CABINET	ECC	СС	-ROUND			A / TROUGANNINABLE STORAL HEAD		R         R           Y         Y           G         G <b>+</b> Y <b>+</b> Y <b>+</b> G <b>+</b> G
MASTER CONTROLLER	EMC	MC	HEAVY DUTY HANDHOLE -SQUARE -ROUND	H ®	•••			R     R       Y     Y       G     G       4Y     4G       C     C
MASTER MASTER CONTROLLER	ЕММС	ММС	DOUBLE HANDHOLE					
UNINTERRUPTABLE POWER SUPPLY	\$	¥	JUNCTION BOX	$\bigcirc$	0	SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	$\begin{array}{c c} R \\ \hline \\ Y \\ \hline \\ \end{array} \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \\ \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \\ \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \\ \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \\ \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \end{array} \qquad \begin{array}{c c} R \\ \hline \end{array} \qquad \begin{array}{c c} R \\ \hline \\ Y \\ \hline \end{array} \qquad \begin{array}{c c} R \\ \hline \end{array} \end{array} \qquad \begin{array}{c c} R \\ \end{array} \end{array} \end{array} $	
SERVICE INSTALLATION -(P) POLE MOUNTED	- <u>-</u> -P	- <b>-</b> P	RAILROAD CANTILEVER MAST ARM	X <del>OZ X</del> X	Xei X			$ \begin{array}{c c} R \\ Y \\ G \\ \Psi \\ \Psi$
SERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	XoX	X+X		P RB	P RB
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	$\boxtimes^{G} \boxtimes^{GM}$		RAILROAD CROSSING GATE	X0X>	X+X	PEDESTRIAN SIGNAL HEAD	<b>N</b>	¥
TELEPHONE CONNECTION	ET	T	RAILROAD CROSSBUCK	¥ 	¥ _	AT RAILROAD INTERSECTIONS		×
STEEL MAST ARM ASSEMBLY AND POLE	0	•	RAILROAD CONTROLLER CABINET		<b>≥</b> ∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C C C	C X D
ALUMINUM MAST ARM ASSEMBLY AND POLE	$\bigcirc$		UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			ILLUMINATED SIGN		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	o-x	•*	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			"NO LEFT TURN"/"NO RIGHT TURN"		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	• • BM	SYSTEM ITEM INTERSECTION ITEM	S I	SP IP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED	5	
WOOD POLE	$\otimes$	Θ	REMOVE ITEM		R	GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
GUY WIRE	$\succ$	$\succ$	RELOCATE ITEM		RL	ELECTRIC CABLE IN CONDUIT, TRACER		_
SIGNAL HEAD	->	-	ABANDON ITEM		А	NO. 14 1/C	— <u>(1)</u>	-1
SIGNAL HEAD WITH BACKPLATE	+> P P	+ <b>&gt;</b> P P	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF	COAXIAL CABLE	— <u> </u>	— <u>C</u> —
SIGNAL HEAD OPTICALLY PROGRAMMED		- <b>&gt;</b> ' + <b>&gt;</b> '	MAST ARM POLE AND		RMF	VENDOR CABLE		
FLASHER INSTALLATION -(FS) SOLAR POWERED	ord f ord fs	←→ <sup>F</sup> ↔→ <sup>FS</sup>	FOUNDATION TO BE REMOVED SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
PEDESTRIAN SIGNAL HEAD	-0	-1	DETECTOR LOOP, TYPE I	$\square \bigcirc$		FIBER OPTIC CABLE -NO. 62.5/125, MM12F	12F	
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	Ø Ø APS	@ @ APS	PREFORMED DETECTOR LOOP		P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	24F	24F)
RADAR DETECTION SENSOR	R	R	SAMPLING (SYSTEM) DETECTOR		s s		36F )	36F
VIDEO DETECTION CAMERA	V	V	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		IS (IS			
RADAR/VIDEO DETECTION ZONE			QUEUE AND SAMPLING		05 (05)	GROUND ROD -(C) CONTROLLER -(M) MAST ARM	<u> </u>	≟ <sup>C</sup> ≟ <sup>M</sup> ≟ <sup>P</sup> ≟ <sup>S</sup>
PAN, TILT, ZOOM (PTZ) CAMERA	PTZJ	PTZ	(SYSTEM) DETECTOR WIRELESS DETECTOR SENSOR	(W)	©	-(P) POST -(S) SERVICE		
EMERGENCY VEHICLE LIGHT DETECTOR	$\boxtimes$	-	WIRELESS ACCESS POINT		-			
CONFIMATION BEACON	0(]	•••						
WIRELESS INTERCONNECT	<u>∽+I</u>	•++ <del>   </del>						
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR						
LE NAME = USER NAME = elkhatibaj stStd.dgn PLOT SCALE = 100.0000 // ifoult PLOT DATE = 6/1/2019	In. CHECKED -	IP REVISED	- STAT - DEPARTMENT	TE OF ILLINOIS T OF TRANSPORTATION		DISTRICT ONE ANDARD TRAFFIC SIGNAL DESIGN DETAILS SHEET 1 OF 7 SHEETS STA. TO STA.	F.A.P. SECTIO 339 2018-021- TS-05	311LL13 N

#### 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.

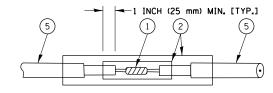


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### 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.



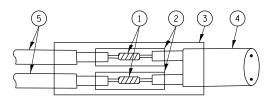
DETAIL "A" LOOP-TO-LOOP SPLICE

(3) (1)6 36" TO 60" 900 mm TO 1500mm) 1" (25mm) MIN, (TYP) 36" TO 60" (900 mm TO 1500mm) DETAIL "A" LOOP-TO-LOOP SPLICE

#### LOOP DETECTOR SPLICE

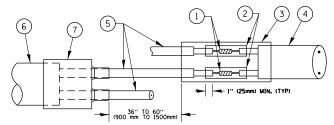
- (1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SUP OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE S
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATEF
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER
- (4) NO.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

FILE NAME =	USER NAME = elkhatıbaj	DESIGNED -	REVISED -		DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			SECTION	COUNTY TOTAL SHEET
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	PLOT SCALE = 100.0000 ' / In.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS			TS05	CONTRACT NO. 62069
Default	PLOT DATE = 6/1/2019	DATE –	REVISED -		SCALE: NONE	SHEET 2 OF 7 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT



### TYPE I LOOP

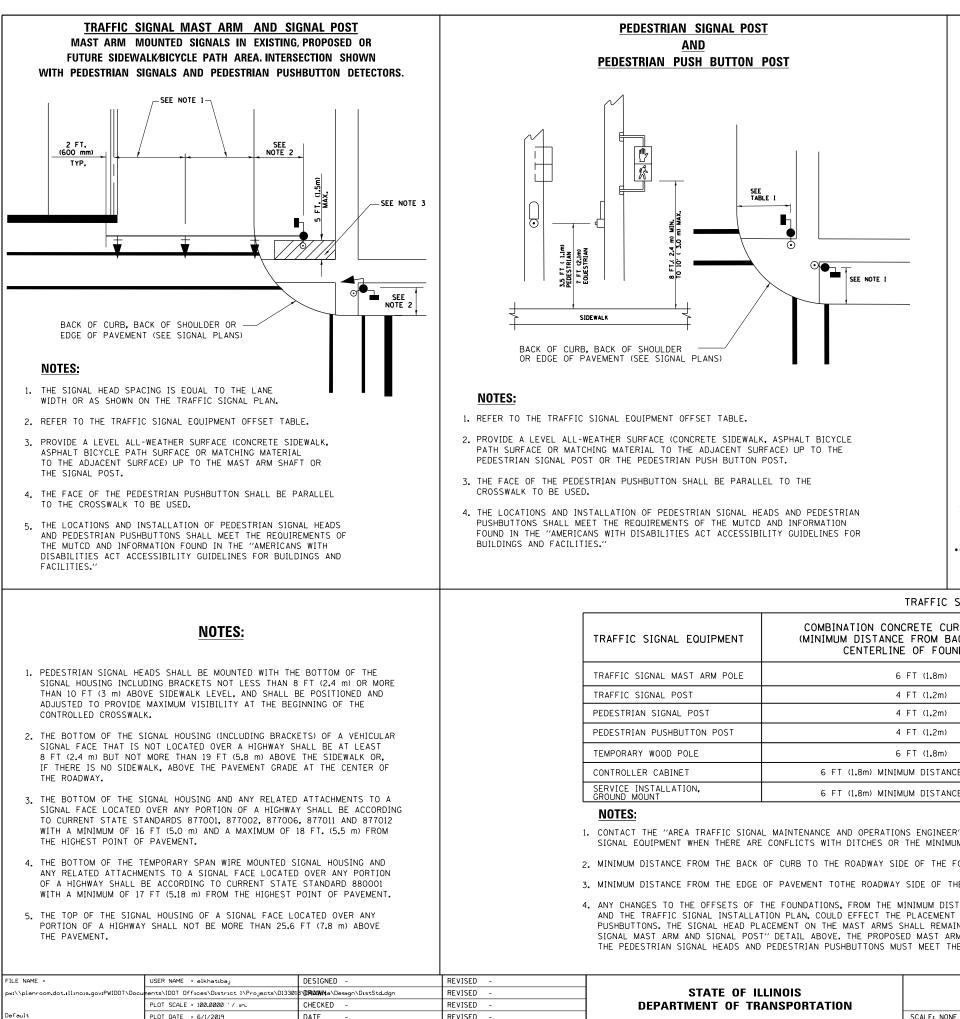
DETAIL "B" LOOP-TO-CONTROLLER SPLICE



#### **PRE-FORMED LOOP**

DETAIL "B" LOOP-TO-CONTROLLER SPLICE

JRFACES	5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
STAGGERED.	6 PRE-FORMED LOOP
R GRADE.	
R GRADE.	The conductor           The conductor           BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL



TRAFFIC SIGNAL EQUIPMENT OFFSET

SHEET 3

OF 7 SHEETS STA

TO STA

5.0 FT. (1.5 m) MAX

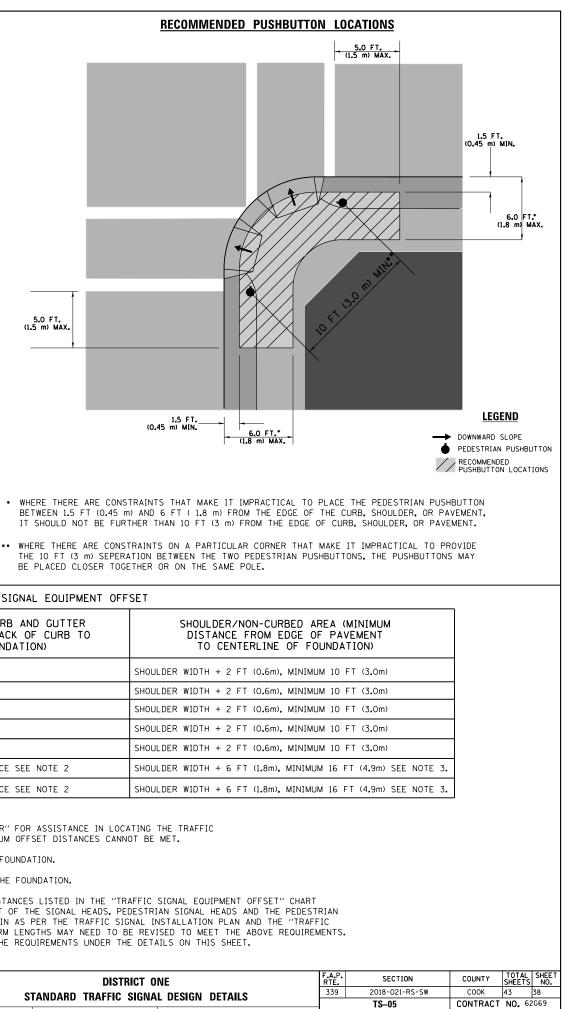
AFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	
AFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOUL
AFFIC SIGNAL POST	4 FT (1.2m)	SHOUL
DESTRIAN SIGNAL POST	4 FT (1.2m)	SHOUL
ESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOUL
PORARY WOOD POLE	6 FT (1.8m)	SHOUL
ITROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOUL
RVICE INSTALLATION, DUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOUL

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.

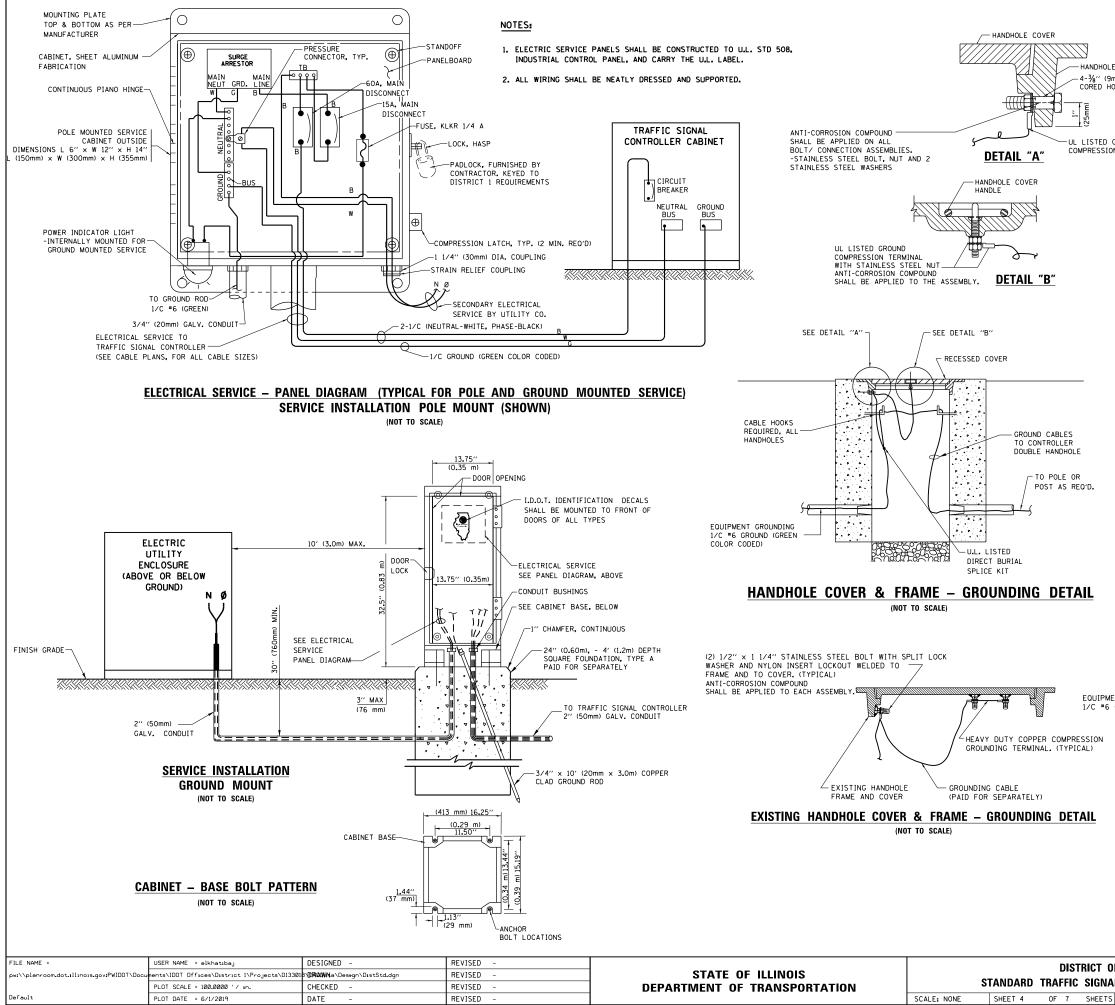
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.

3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE 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.



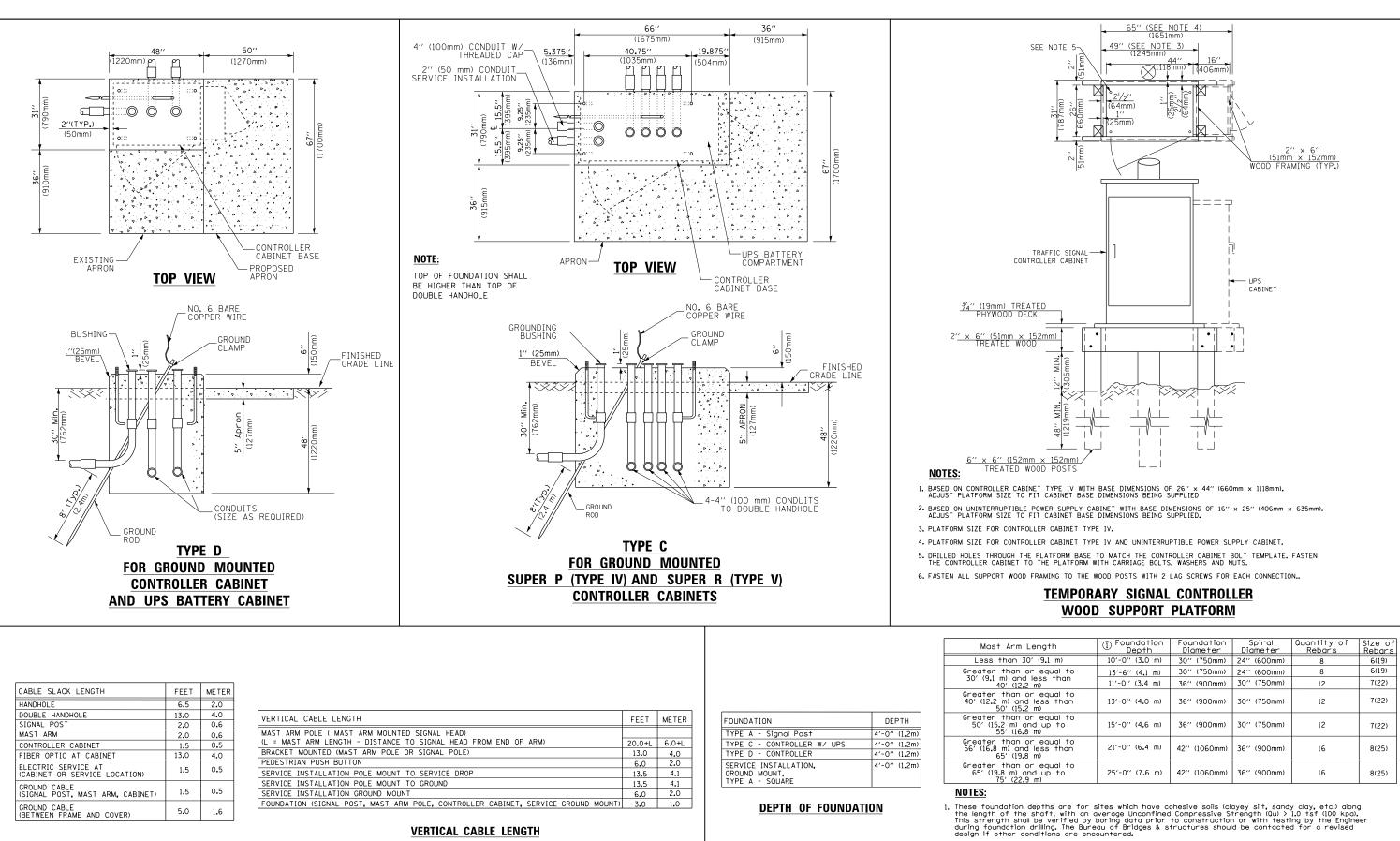
ILLINOIS FED AID PROJECT



#### NOTES: GROUNDING SYSTEM

LE FRAME 9mm) DIA., HOLES GROUND ON TERMINAL	1. 2. 3. 4.	TYPE XLP. TRACEWAYS. IN A CONTI ALL GROUND (HANDHOLE. 3/4" DIA. > 5HALL BE I CONTROLLEF AS INDICAT SUCH AS SU ENGINEER S ILLINOIS DE (847) 705-4 THE NEUTRA CONDUCTORS ALL EQUIPM IN THE CONTRA	DING SYSTEM SHA NO. 6 A.W.G., STI THE GROUNDING ( NUOUS MANNER A DING CONDUCTORS POST, MAST ARM ( 10'-O'' (20mm ) NSTALLED AT ALI CABINET FOUND ED ON THE CABLI JB-SURFACE COND HALL BE NOTIFIE EPARTMENT OF TF 139. AL CONDUCTOR AM IN THE SERVICE FFIC SIGNAL SYS S BE CONNECTED. HENT GROUNDING TROLLER CABINE ACTOR SHALL PRO	RANDED COPPE CABLE SHALL S SHOWN ON T SHALL BE BC , CONTROLLER (3.0m) LONG, L POST FOUND ATION AND EL E PLAN. IF T ITIONS OR IN D OR CONTAC' RANSPORTATION INSTALLATION THE GROUN INSTALLATION TEM SHALL TI CONDUCTORS S T.	R TO BE INS BE INSTALLE THE CABLE P INDED TO ME COPPER CLA COPPER CLA AATIONS, POL ECTRICAL SE HERE ARE AN STALLATION T THE BUREA N DISTRICT O D CONDUCTOF N. AT NO OTHE NEUTRAL SHALL TERMIN	TALLED IN D LAN PROVIDED TAL ENCLOSU IND ROD SHAI D. ONE GROUID RVICE INSTAI Y SPECIAL C PROBLEMS, TI U OF TRAFFI DNE AT R SHALL BE THER POINT AND GROUND NATE AT THE	D. RE LL BE ND ROD NS, LLATION ONDITIONS HE RESIDENT C, GROUND BUS
	• ALL • ALL • GR( 6.5 13'	DTES: CLAMPS SH DUND CABLE (2.0m) SLA (4.0m) OF S	TERMINAL PPROVED EOUAL) HALL BE BRONZE SHALL BE LOOP ICK SHALL BE PI SACK SHALL BE I	(BURNDY OR COPPER. ED OVER HOO ROVIDED IN S PROVIDED IN	TYPE GRC ( UL APPROVE KS IN THE F INGLE HANDF I DOUBLE HA	DR APPROVED	
OR AF	G EN COLO		0LE / POST- (NOT TO SC/	GROUNDI	L/C #6 GROL EAVY DUTY I XOTHERMIC V R U.L. APPRI YPICAL FOR	SROUND ROD VELD, JVED CONNE( ALL GROUN( (20mm × 3.4 ND ROD	CLAMP, CLAMP, CTOR. () RODS)
ONE			F.A.P.	SECT	ION	COUNTY	TOTAL SHEET

ONE	A.P. RTE	SECTION	COUNTY	COUNTY TOTAL SHEETS	
AL DESIGN DETAILS		2018-021-RS-SW	СООК	43	39
AL DESIGN DETAILS		TS05	CONTRACT NO. 62G69		
S STA. TO STA.		ILLINOIS FED. A	ID PROJECT		



### CABLE SLACK

VERTICAL CABLE LENGTH

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	PLOT SCALE = 100.0000 ' / m.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION				TS-05	CONTRACT NO.	62669
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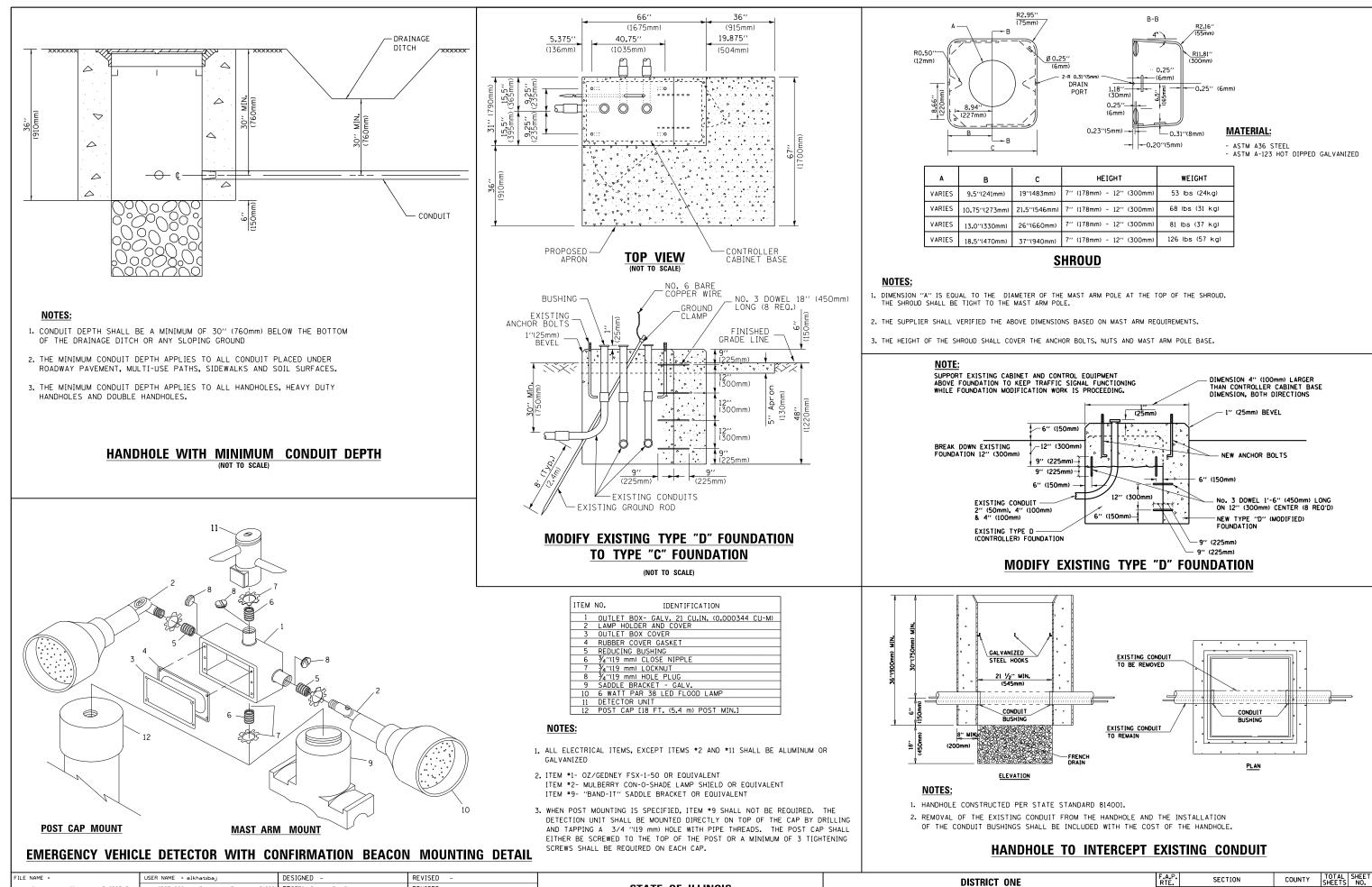
ength	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
)′ (9 <b>.</b> 1 m)	10'-0" (3.0 m)	30'' (750mm)	24'' (600mm)	8	6(19)
r equal to	13'-6'' (4.1 m)	30'' (750mm)	24'' (600mm)	8	6(19)
less than m)	11'-0'' (3.4 m)	36'' (900mm)	30'' (750mm)	12	7(22)
r equal to less than m)	13'-0'' (4.0 m)	36'' (900mm)	30'' (750mm)	12	7(22)
r equal to nd up to m)	15'-0'' (4 <b>.</b> 6 m)	36'' (900mm)	30'' (750mm)	12	7(22)
r equal to less than m)	21'-0'' (6.4 m)	42'' (1060mm)	36" (900mm)	16	8(25)
r equal to nd up to m)	25'-0'' (7.6 m)	42'' (1060mm)	36" (900mm)	16	8(25)

2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.

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 ..

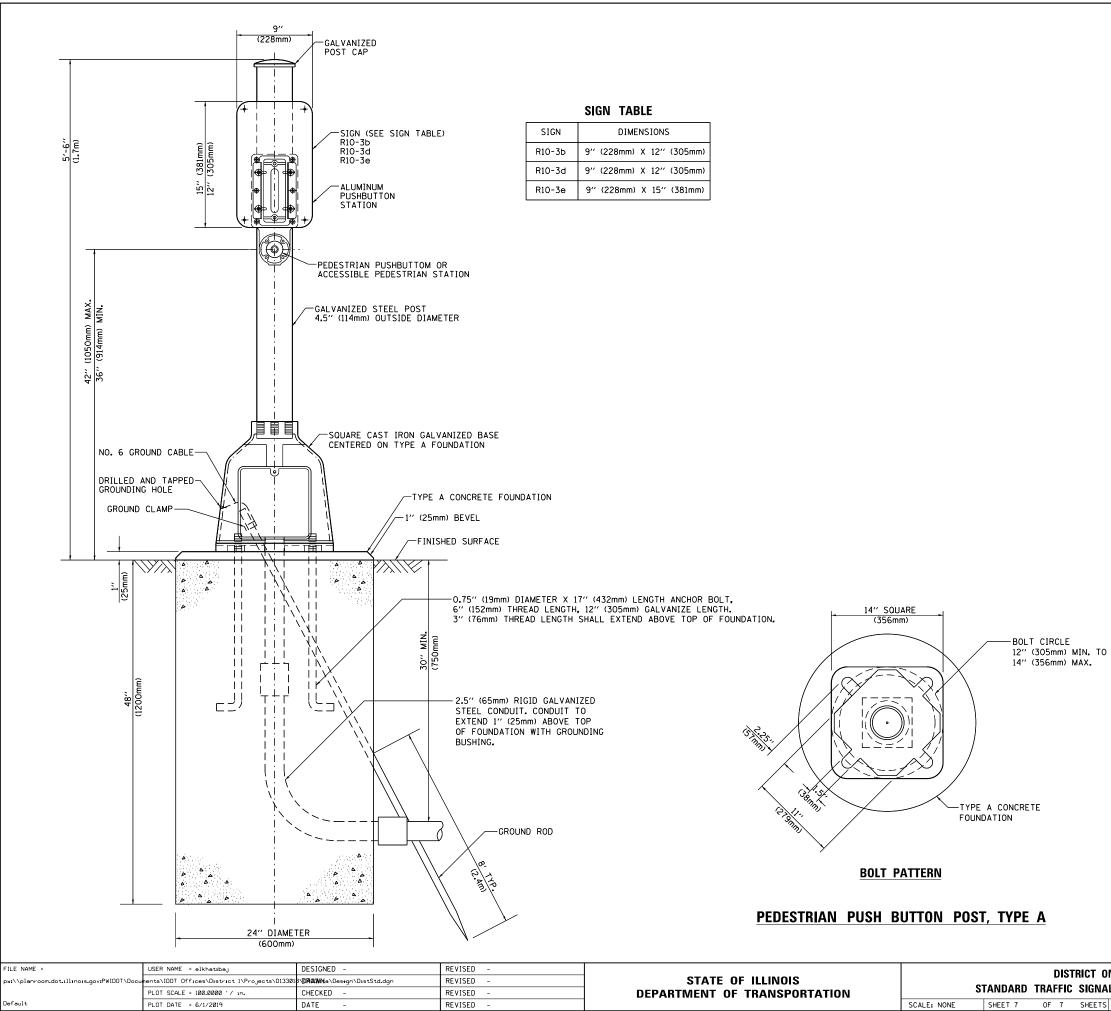
### DEPTH OF MAST ARM FOUNDATIONS, TYPE E



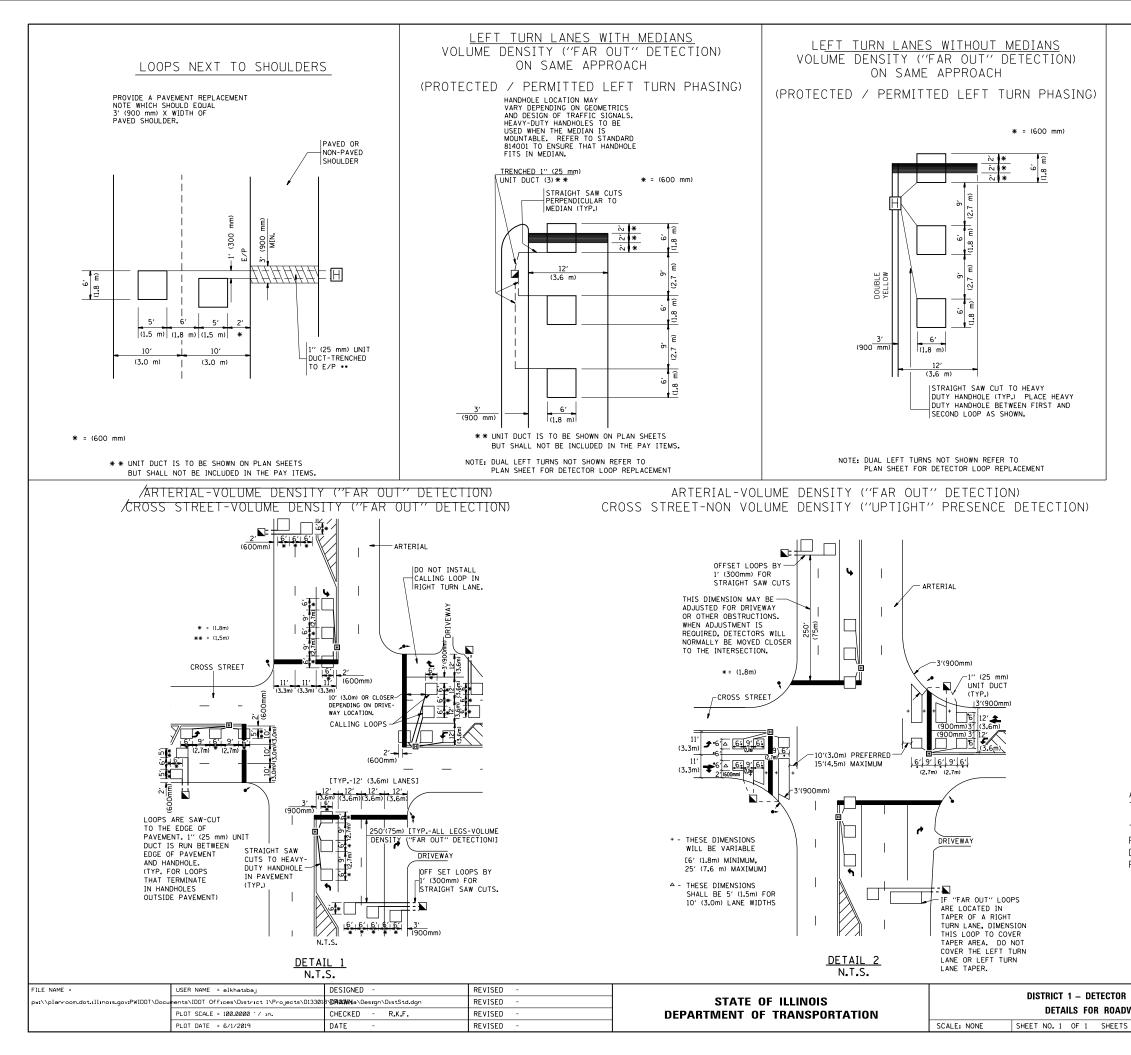
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	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	í .	STANDARD	TRAFFIC	SIGNA	L
Default	PLOT DATE = 6/1/2019	DATE -	REVISED -		SCALE: NONE	SHEET 6	0F 7	SHEETS	ī

	с	HEIGHT	WEIGHT
1)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
m)	21.5''(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
n)	26''(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
n)	37''(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

ONE			F	A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
IAL DESIGN DETAILS			339	2018-021-RS-SW	COOK	43	41		
IAL DESIGN DETAILS					TS05	CONTRACT	NO. 62	G69	
ſS	STA.	TO STA.		ILLINOIS FED. AID PROJECT					



ONE IAL DESIGN DETAILS		F.A.P. RTE.			COUNTY	TOTAL SHEETS	SHEET NO.		
		339			COOK	43	42		
IAL DESIGN DETAILS				TS05		CONTRACT	NO. 62	C69	
ſS	STA.	TO STA.	FED. RO	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					



#### 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 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  $\underline{ALL}$  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.

LOOP INSTALLATION Way resurfacing		F.A.P. RTE.	F.A.P. SECTION		TOTAL SHEETS	SHEET NO.			
		339	2018-021-RS-SW	COOK	43	43			
WAT RESURFACING				TS-07	CONTRACT	NO. 62	2669		
	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						