06-14-2024 LETTING ITEM 181

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

## соок 40 1 ILLINOIS CONTRACT NO. 62U10

D-91-003-23

LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** May 10, 2024

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

# FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN THE VILLAGES OF WHEELING. **VILLAGE OF ARLINGTON HEIGHTS** AND CITY OF PROSPECT HEIGHTS.

#### TRAFFIC DATA:

0

0

0

#### **PALATINE RD:**

PROJECT BEGIN TO PROJECT END: ADT (2022) = 27,500 (MAINLINE)SPEED LIMIT = 30-40 MPH

**FAP ROUTE 305: PALATINE RD S FRONTAGE RD.** E OF US 12 (RAND RD) TO E OF PINECREST DR. SECTION: FAP 305 RS 3 22

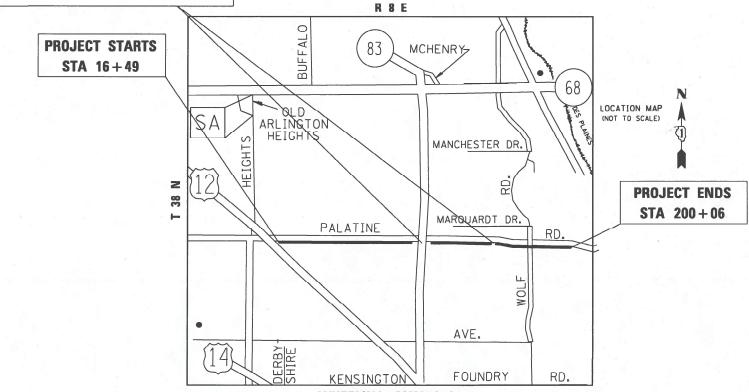
**PROPOSED** 

HIGHWAY PLANS

# **STANDARD OVERLAY & ADA IMPROVEMENTS COOK COUNTY**

C-91-007-23

**OMISSIONS** 



WHEELING TOWNSHIP

GROSS LENGTH = 18,357 FT / 3.48 MILES NET LENGTH = 17,617 FT / 3.34 MILES

STA 107 + 47.4 TO STA 112 + 56.2 STA 167 + 25.2 TO STA 169 + 56.0

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PROJECT ENGINEER: DAN WILGREEN, P.E. (847) 705-4240

PROJECT MANAGER: JEAN A MIDY, P.E.

CONTRACT NO. 62U10

#### **INDEX OF SHEETS**

#### **HIGHWAY STANDARDS**

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE

LANE CLOSURE, MULTILANE, INTERMITTEN OR MOVING OPERATION, FOR SPEEDS <40 MPH

URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH

URBAN LANE CLOSURE, MULTILANE INTERSECTION

SIDEWALK, CORNER OR CROSSWALK CLOSURE

TYPICAL LAYOUT FOR DETECTOR LOOPS

OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY

DESCRIPTION

CLASS C AND D PATCHES

FRAMES AND LIDS TYPE 1

NONTRAVERSABLE MEDIAN

TRAFFIC CONTROL DEVICES

TYPICAL PAVEMENT MARKINGS

DETECTOR LOOP INSTALLATIONS

SHEET NO.	DESCRIPTION	STANDARD NO.
1	COVER SHEET	000001-08
2	INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES	442201-03
3-6	SUMMARY OF QUANTITIES	604001-05
7	TYPICAL SECTION	701101-05
8-14	ROADWAY AND PAVEMENT MARKING PLANS	
15-17	ADA PROJECT DETAILS	701106-02
18-23	DETECTOR LOOP REPLACEMENT PLANS	701427-05
24	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)	701601-09
25	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)	701701-10
26	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)	701801-06
27	BUTT JOINT AND HMA TAPER DETAILS (BD-32)	701901-09
28	ENTRANCE AND EXIT RAMP CLOSURE DETAILS. (TC-08)	780001-05
20		886001-01
29	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)	886006-01
30	TYPICAL APPLICATIONS FOR RAISED REFLECTIVE PAVEMENT MARKERS (TC-11)	
31	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)	
32	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TC-14)	
33	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS (TC-16)	
34	ARTERIAL ROAD INFORMATION SIGN (TC-22)	
35	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05, SHEET 2 OF 7	))
36	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR RAODWAY RESURFACING	(TS-07)
37	PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS (PD-01)	
38	PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS (PD-02)	
39	PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS WITH TURNING SPACE (	PD-04)
40	PROJECT DETAIL FOR PARALLEL CURB RAMPS (PD-06)	

1. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND VILLAGES OF WHEELING, VILLAGE OF ARLINGTON HEIGHTS AND CITY OF PROSPECT

**GENERAL NOTES** 

- 2. THE CONTRACTOR WILL NOT BE ABLE TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY (or TOLLWAY) WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT (or ISTHA).
- 3. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT KAPLANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 4. THE RESIDENT ENGINEER SHALL CONTACT THE AREA TRAFFIC FIELD TECHNICIAN FADI SULTAN AT FADI.SULTAN@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACEMENT
- 5. 6. 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.
- 6. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER.
- 7. LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT [OR COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED ON THE PLANS)], WILL BE DETERMINED IN THE FIELD BYTHE FIELD ENGINEER
- DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE FIELD ENGINEER.
- 9. DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD
- 10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 11. 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 THIS
- 12. PAVEMENT MARKING, TYPE III TAPE SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
- 13. 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.
- 14. ALL MILLED SURFACES SHALL BE AT A UNIFORM CROSS SLOPE PER LANE AND FREE OF RIDGES BETWEEN PASSES. ANY DEVIATIONS SHALL BE CORRECTED AT NO COST TO DEPARTMENT.
- 15. SIDEWALK REMOVAL AND P.C.C. SIDEWALK 5" LOCATIONS SHALL BE DETERMINED IN THE FIELD BY ENGINEER.
- 16. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FORACCORDING TO ARTICLE 109.04 OF THE STANDARDESPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- 17. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL THE TIMES DURING CONSTRUCTION.
- 18. 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.

USER NAME = Rana.Kalo	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 3/28/2024	DATE -	REVISED -

	SUMMARY OF QUANTITIES		CONSTRUC	TION TYPE CODE		SUMMAR	Y OF QUANTITIES				CO	NSTRUCTION	TYPE CODE
		TOTAL	0005						TOTAL	0005			
CODE NO	ITEM UNI	QUANTITIES	5 100% STATE		CODE NO		ITEM	UNIT	QUANTITIES	100% STATE			
20200100	EARTH EXCAVATION CU Y	D 35	35		40604060	HOT-MIX ASPHA	ALT SURFACE COURSE, IL-9.5,	TON	15	15			
						MIX "D", N50							
20700220	POROUS GRANULAR EMBANKMENT CU	D 20	20										
					40604062	HOT-MIX ASPHA	ALT SURFACE COURSE, IL-9.5,	TON	3781	3781			
20800150	TRENCH BACKFILL CU Y	D 9	9			MIX "D", N70							
21101615	TOPSOIL FURNISH AND PLACE, 4" SO Y	D 1149	1149		42001300	PROTECTIVE CO	DAT	SO YD	2425	2425			
25200110	SODDING, SALT TOLERANT SO Y	D 1149	1149		42300400	PORTLAND CEME	ENT CONCRETE DRIVEWAY	SO YD	55	55			
						PAVEMENT, 8	INCH						
25200200	SUPPLEMENTAL WATERING UNIT	12	12										
					42400200	PORTLAND CEME	ENT CONCRETE SIDEWALK 5	SO FT	2591	2591			
35501316	HOT-MIX ASPHALT BASE COURSE, 8" SO Y	D 130	130			INCH							
40600290	BITUMINOUS MATERIALS (TACK COAT) POUR	D 30377	30377		42400800	DETECTABLE WA	ARNINGS	SO FT	234	234			
40600370	LONGITUDINAL JOINT SEALANT FOOT	17616	17616		44000158	HOT-MIX ASPHA	ALT SURFACE REMOVAL, 2	SO YD	45002	45002			
						1/4"							
40600400	MIXTURE FOR CRACKS, JOINTS, AND TON	68	68										
	FLANGEWAYS				44000200	DRIVEWAY PAVE	EMENT REMOVAL	SO YD	185	185			
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT SO Y	D 320	320		44000600	SIDEWALK REMO	OVAL	SO FT	2326	2326			
	JOINT												
					44002215	HOT-MIX ASPHA	ALT REMOVAL OVER PATCHES, 3	SO YD	1800	1800			
40601005	HOT-MIX ASPHALT REPLACEMENT OVER TON	227	227			3/4"							
	PATCHES												
					44201765	CLASS D PATCH	HES, TYPE II, 10 INCHES	SO YD	600	600			
40603200	POLYMERIZED HOT-MIX ASPHALT BINDER TON	1857	1857										
	COURSE, IL-4.75, N50				44201769	CLASS D PATCH	IES, TYPE III, 10 INCHES	SO YD	700	700			
	Lamp 100 - 1 - 1		Lecures		44201771	CLASS D PATCH	ES, TYPE IV, 10 INCHES	SO YD	500	500	IEAD!		* = SPECIALTY ITEMS
FILE NAME =  pw:\Vidot-pw.bentley.com	USER NAME		REVISED - REVISED - REVISED - REVISED -	STATE OF DEPARTMENT OF			PALATINE RD FROM E OF US SUMMARY SCALE: SHEET NO. OF	OF QUANTI	TIES	O STA.		SECTION FAP 305 RS	COUNTY   SHE   S

	SUMMARY OF QUANTITIES				CON	NSTRUCTIO	N TYPE CO	DDE		SUMMARY OF QUANTITIES				CO	NSTRUCTION	TYPE CODE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005 100% STATE					CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005 100% STATE				
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	10	10					* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION	L SUM	1	1				
										PLAN							
55100500	STORM SEWER REMOVAL 12"	FOOT	10	10													
									* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION	L SUM	1	1				
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	1	1						REPORT							
												_					
60108100	PIPE UNDERDRAINS 4" (SPECIAL)	FOOT	20	20					* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	7	7				
60108204	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	100	100					67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12				
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	25	25					67100100	MOBILIZATION	L SUM	1	1				
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	5	5					70102630	TRAFFIC CONTROL AND PROTECTION.	L SUM	1	1				
										STANDARD 701601							
60262700	INLETS TO BE RECONSTRUCTED	EACH	10	10													
									70102635	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1				
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	1	1						STANDARD 701701							
60404000	EDINES AND SPATES TWOSE IS	FACU	75	7-					70100540	TRAFFIC CONTROL AND PROTECTION							
60404900	FRAMES AND GRATES, TYPE 12	EACH	75	75					70102640	TRAFFIC CONTROL AND PROTECTION.  STANDARD 701801	L SUM	1					
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	30	30													
									70300100	SHORT TERM PAVEMENT MARKING	FOOT	21375	21375				
60406100	FRAMES AND LIDS, TYPE 1. CLOSED LID	EACH	10	10													
									70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	1781	1781				
61100500	EXPLORATION TRENCH 52" DEPTH	F00T	25	25													
									70300211	TEMPORARY PAVEMENT MARKING LETTERS AND	SO FT	118	118				
61133100	FIELD TILE JUNCTION VAULTS, 2' DIA.	EACH	1	1						SYMBOLS - PAINT							
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	35	35					70300221	TEMPORARY PAVEMENT MARKING - LINE 4"-	FOOT	6373	6373				
										PAINT							
66900530	SOIL DISPOSAL ANALYSIS	EACH	5	5										IFAD!		* = SPECIAL	
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	SUMMARY OF QUANTITIES				CONSTRUC	TION TYPE CODE			SUMMARY OF QUANTITIES				COI	NSTRUCTIO	N TYPE COI	DE	
			TOTAL	0005							TOTAL	0005					
CODE NO	ITEM	UNIT	QUANTITIES	100% STATE				CODE NO	ITEM	UNIT	QUANTITIES	100% STATE					
70300241	TEMPORARY PAVEMENT MARKING - LINE 6"-	FOOT	238	238			*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	338	338					
	PAINT								24"								
70300251	TEMPORARY PAVEMENT MARKING - LINE 8"-	FOOT	1024	1024			*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	361	361					
	PAINT																
								78300200	RAISED REFLECTIVE PAVEMENT MARKER	EACH	368	368					
70300261	TEMPORARY PAVEMENT MARKING - LINE 12"-	FOOT	2859	2859					REMOVAL								
	PAINT																
								78300202	PAVEMENT MARKING REMOVAL - WATER	SQ FT	6578	6578					
70300281	TEMPORARY PAVEMENT MARKING - LINE 24"-	FOOT	338	338					BLASTING								
	PAINT																
							*	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL,	FOOT	4	4					
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" -	FOOT	5344	5344					2" DIA.								
	TYPE IV TAPE																
							*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL	EACH	3	3					
78000100	THERMOPLASTIC PAVEMENT MARKING -	SQ FT	118	118					INSTALLATION								
	LETTERS AND SYMBOLS																
							*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.	FOOT	88. 5	88. 5					
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	6373	6373					14 2C								
	4"																
							*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.	FOOT	140.5	140.5					
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	238	238					14 3C								
	6"																
+							*	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.	FOOT	557	557					
78000500	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	1024	1024					14 1 PAIR								
	8"																
+							*	87301900	ELECTRIC CABLE IN CONDUIT. EQUIPMENT	FOOT	8	8					
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	2859	2859					GROUNDING CONDUCTOR, NO. 6 1C								
	12"																
							*	87900200	DRILL EXISTING HANDHOLE	EACH	4	4					
															* = S	PECIALTY	ITEMS
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	SUMMARY OF QUANTITIES				CONSTRUCTI	ON TYPE (	CODE			SLIMMA	RY OF QUANTITIES				CONS	TRUCTIO	N TYPE CO	DE	
	22		TOTAL	0005						35			TOTAL	0005					
CODE NO	ITEM	UNIT	QUANTITIES						CODE NO		ITEM	UNIT	QUANTITIES						
* 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE,	EACH	3	3				;	* x8780012	CONCRETE FOL	JNDATION, TYPE A 12-INCH	FOOT	4	4					
	BRACKET MOUNTED WITH COUNTDOWN TIMER									DIAMETER									
* X8860105	DETECTOR LOOP REPLACEMENT	F00T	1565	1565					Z0018400	DRAINAGE STE	RUCTURES TO BE ADJUSTED	EACH	70	70					
<b>*</b> 89502200	MODIFY EXISTING CONTROLLER	EACH	3	3					Z0018500	DRAINAGE STE	RUCTURES TO BE CLEANED	EACH	164	164					
* 89502375	REMOVE EXISTING TRAFFIC SIGNAL	EACH	3	3					Z0030850	TEMPORARY IN	NFORMATION SIGNING	SO FT	154. 2	154. 2					
	EQUIPMENT																		
* 89502376	REBUILD EXISTING HANDHOLE	EACH	2	2															
x0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1															
* X1400367	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	1	1															
X4400501	COMBINATION CURB AND GUTTER REMOVAL AND	FOOT	500	500															
	REPLACEMENT LESS THAN OR EQUAL TO 10																		
	FEET																		
X4400503	COMBINATION CURB AND GUTTER REMOVAL AND	FOOT	6576	6576															
	REPLACEMENT GREATER THAN 10 FEET																		
x5537800	STORM SEWERS TO BE CLEANED 12"	F00T	195	195															
X6030310	FRAMES AND LIDS TO BE ADJUSTED	EACH	23	23															
	(SPECIAL)																		
* X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8	8															
									<u> </u>								* = : 	SPECIALTY	
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		ECKED - TE -		REVISED REVISED	-	D	DEPARTME	NT OF TE	RANSPORTA	ATION	SCALE: SHEET NO. OF			O STA.	FED. ROAD D	DIST. NO. 1  ILL	INOIS] FED. AID P	CONTRACT N	

- 1. EXISTING PCC BASE COURSE, ± 10"
- 2. EXISITING HMA, ± 21/4"
- 3. PROPOSED HMA SURFACE REMOVAL, 21/4"

- 4. EXISTING SIDEWALK, 5"
- 5. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70,  $1\frac{1}{2}$ "
- 6. PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"

PALATINE RD S Frontage

PROPOSED TYPICAL SECTION

STA 16+49 - STA 46+38

STA 77+81 - STA 84+00

STA 88+33 - STA 107+47

STA 112+56 - STA 147+20

STA 150+00 - STA 167+25

PALATINE RD S Frontage

PROPOSED TYPICAL SECTION

STA 46+38 - STA 77+81

STA 84+00 - STA 88+33

STA 147+20 - STA 150+00

STA 169+56 - STA 200+06

MATCH EXIST. SLOPE

11'

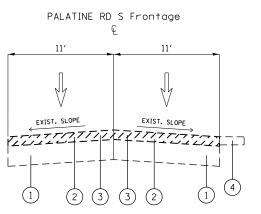
MATCH EXIST. SLOPE

(5)

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MATCH EXIST. SLOPE

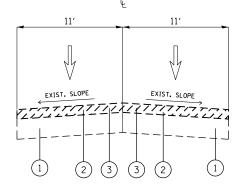
MATCH EXIST. SLOPE



#### EXISTING TYPICAL SECTION

STA 16+49 - STA 46+38 STA 77+81 - STA 84+00 STA 88+33 - STA 107+47 STA 112+56 - STA 147+20 STA 150+00 - STA 167+25

# PALATINE RD S Frontage



# EXISTING TYPICAL SECTION

STA 46+38 - STA 77+81 STA 84+00 - STA 88+33 STA 147+20 - STA 150+00

STA 169+56 - STA 200+06

#### HOT-MIX ASPHALT MIXTURE REQUIREMENTS OUALITY MANAGEMENT PROGRAM (OMP) MIXTURE TYPE AIR VOIDS(%) • Ndes HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 1/2" 4.0% @ 70 GYR. QCP 3.5% @ 50 GYR. QCP POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4" COMMERCIAL DRIVEWAY HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50, 2" 4.0% AT 50 GYR. HOT-MIX ASPHALT BASE COURSE, 8" (HMA BINDER IL-19.0 MM) 4.0% AT 50 GYR. PATCHING HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 MM) 4.0% @ 70 GYR. OC/QA CLASS D PATCHES (HMA BINDER IL-19 MM) OMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFF

#### <u>NOTE</u>

NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTATIES IS 112 LBS/SQ YD/IN.

NOTE 2: THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 -22" AND AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

NOTE 4: THE CONTRACTOR SHALL PATCH BEFORE MILLING

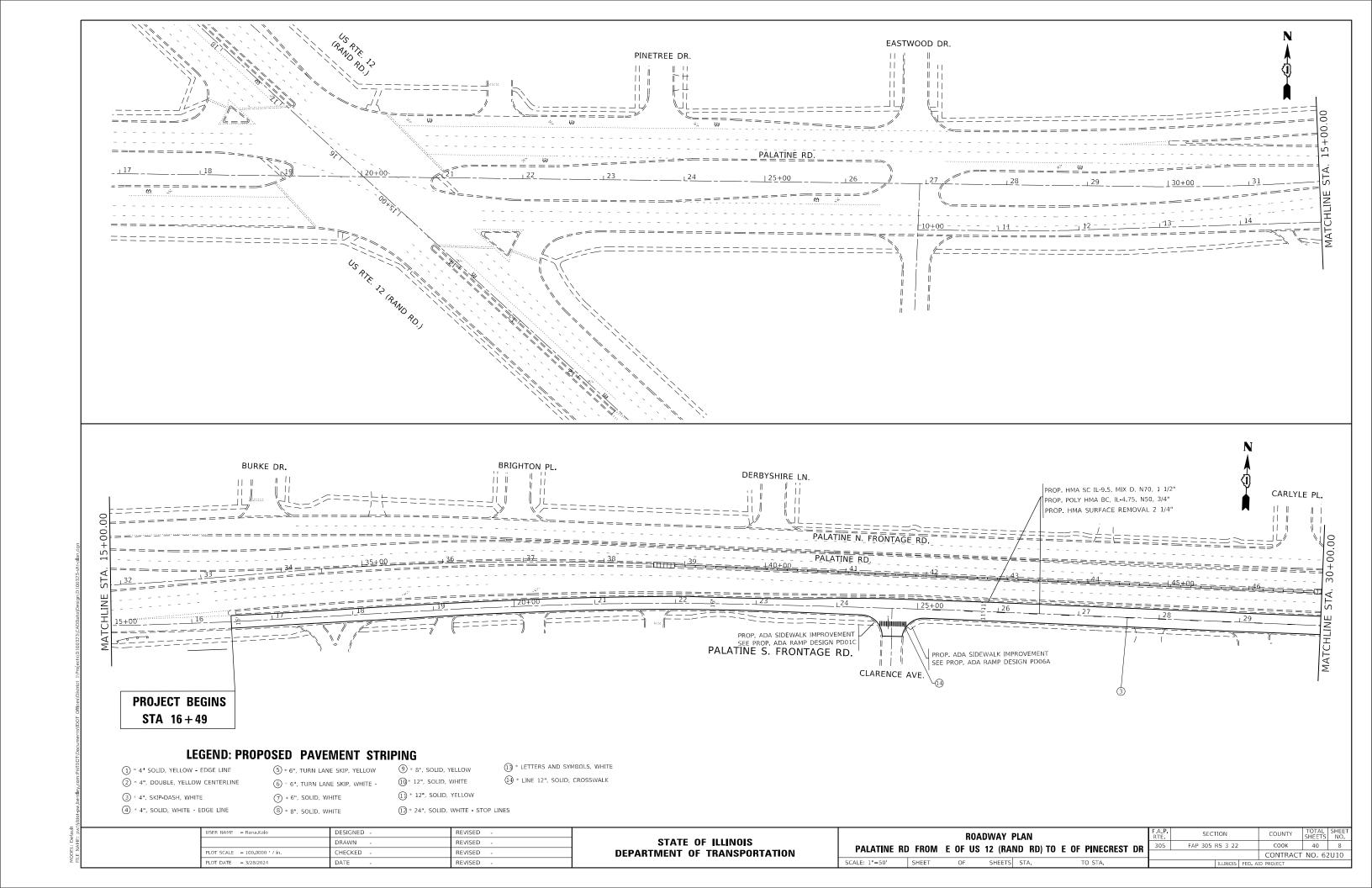
NOTE 5: THE LONGITUDINAL JOINT SEALANT SHALL BE PLACE OVER THE P HMA BC IL-4.75 N50

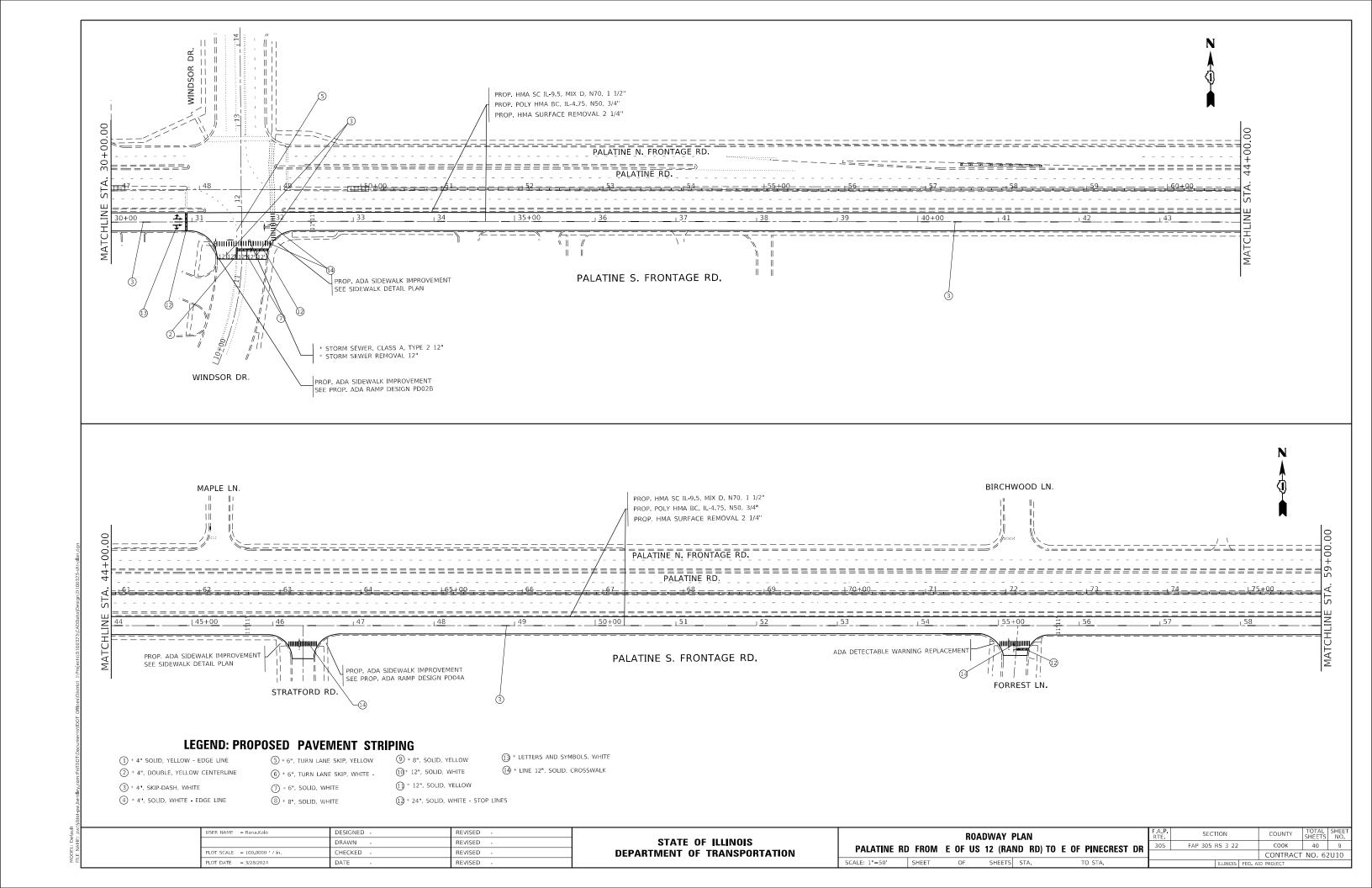
#### JSER NAME = Rana.Kalo DESIGNED REVISED DRAWN REVISED HECKED REVISED DATE

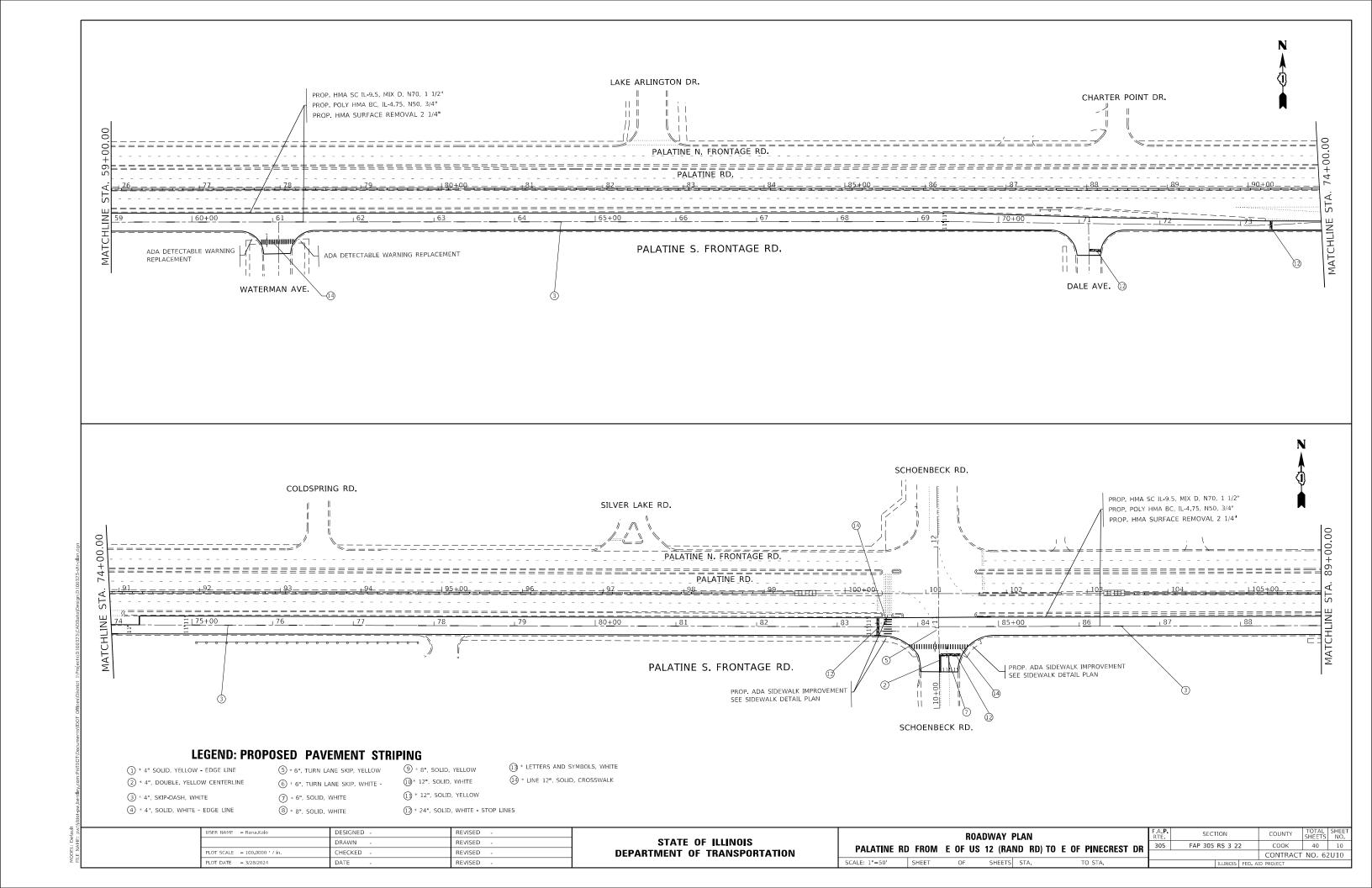
#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

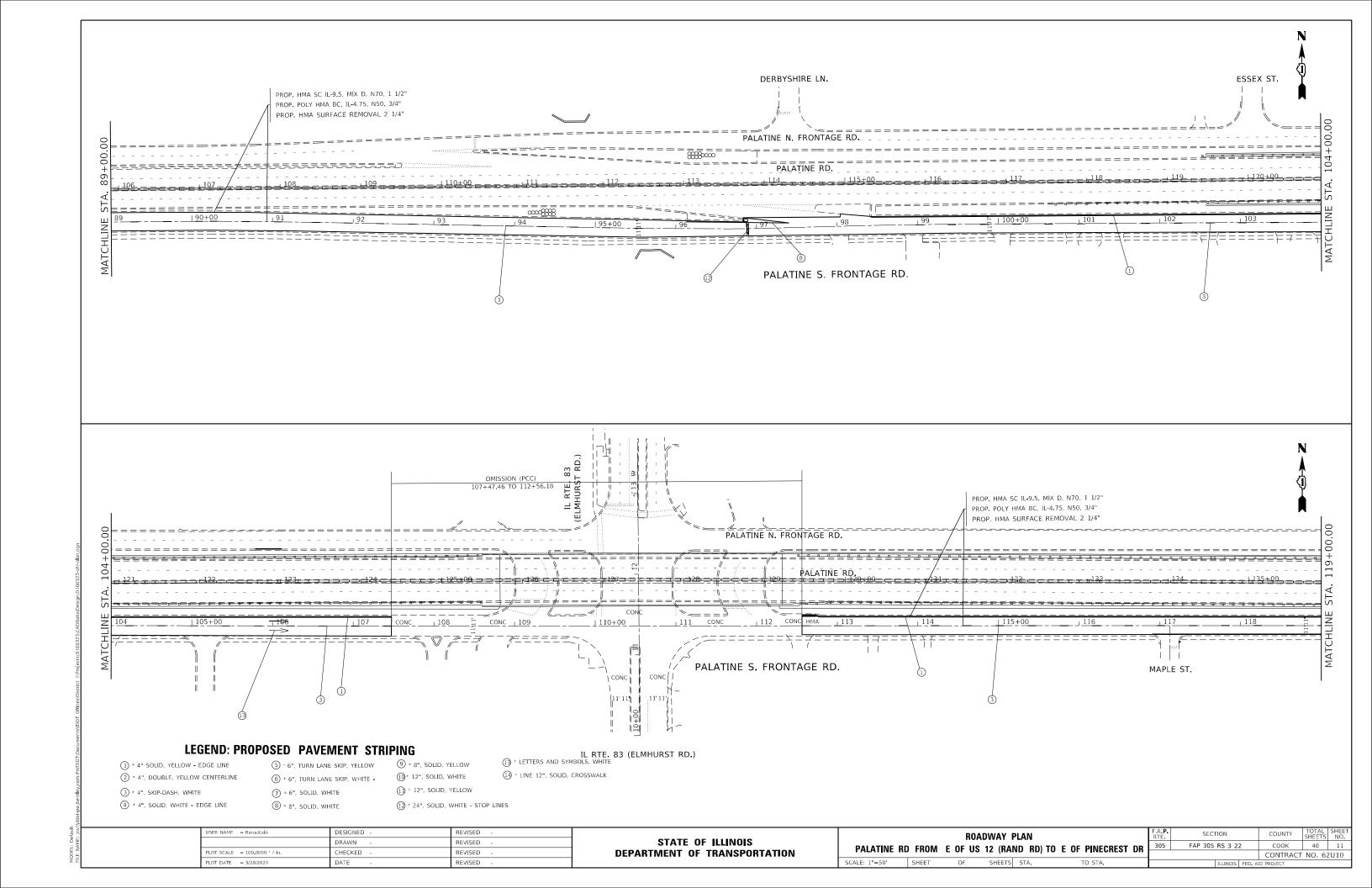
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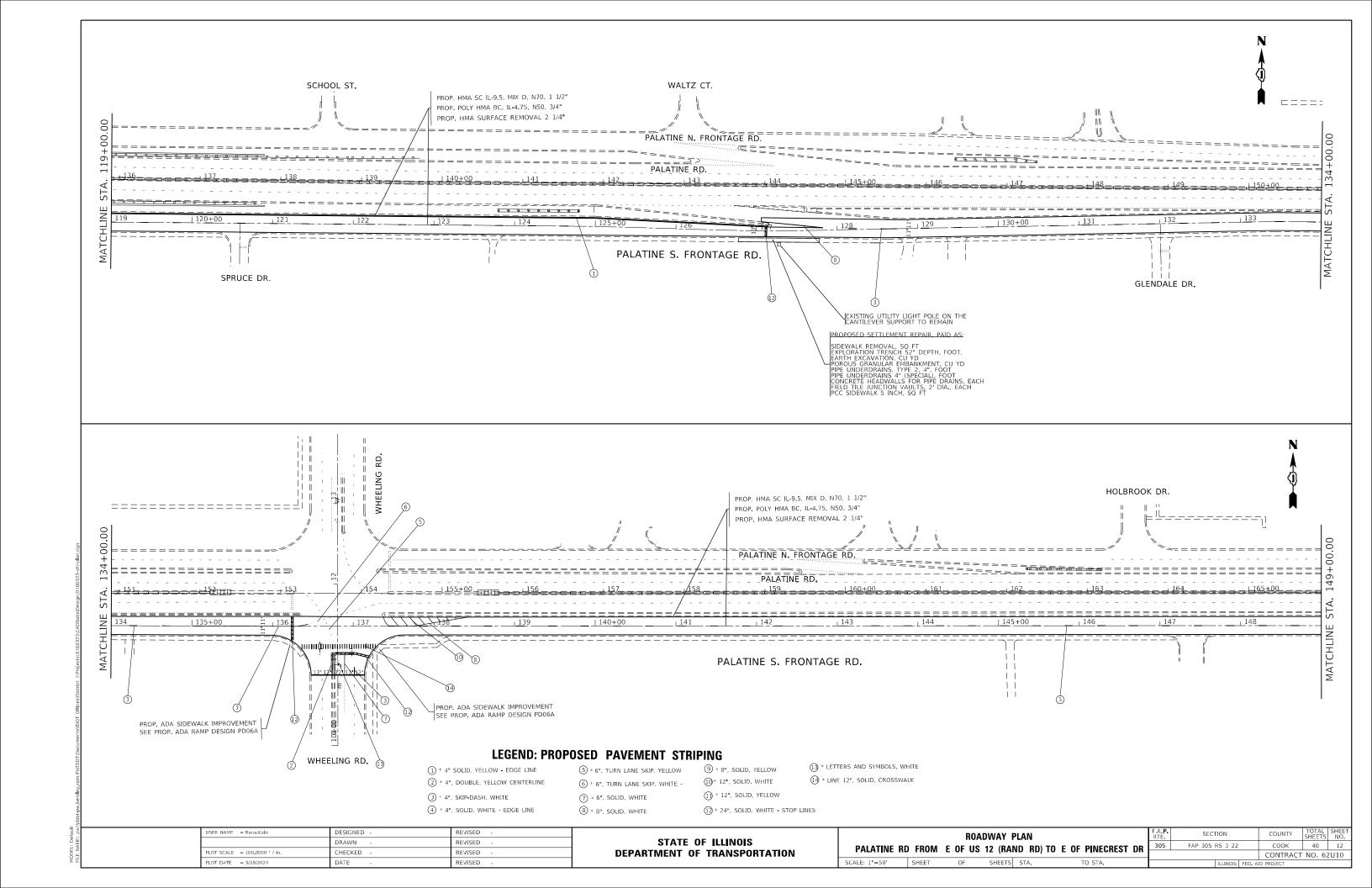
A.P. RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
305	FAP 305	RS 3 2	2	COOK	40	7
				CONTRACT	NO. 62	2U10
		ILLINOIS	FED. AI	D PROJECT		

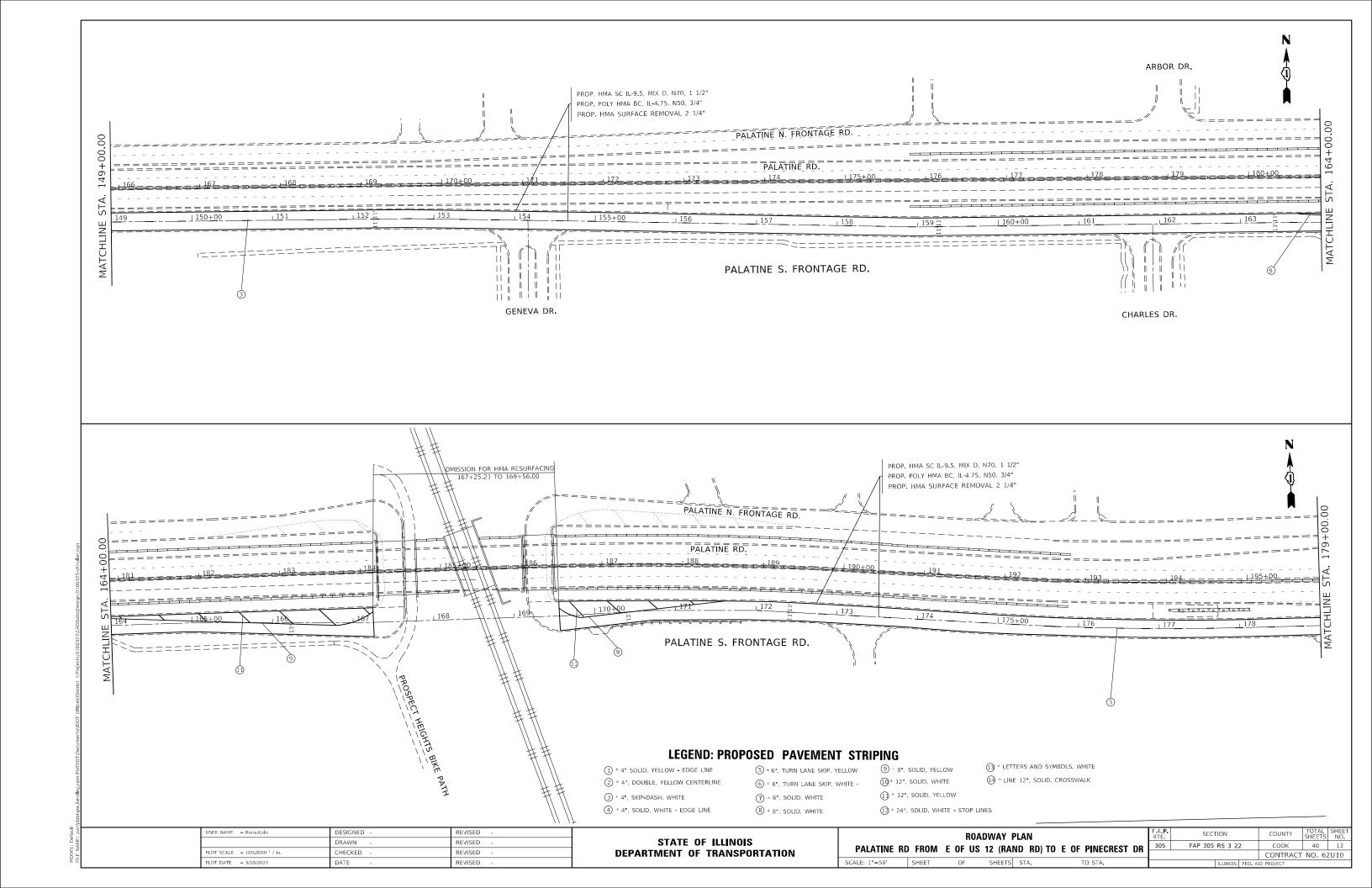


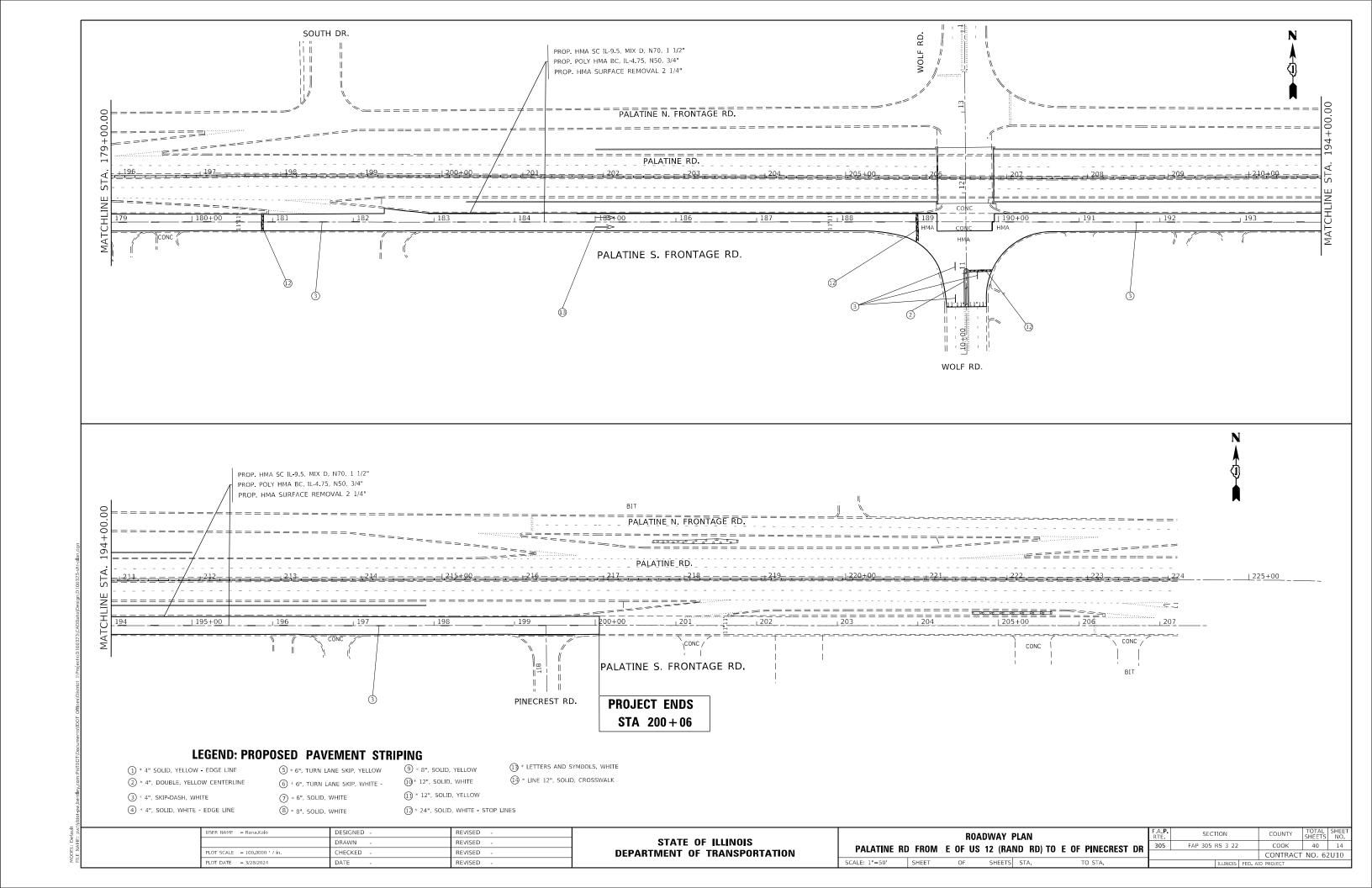


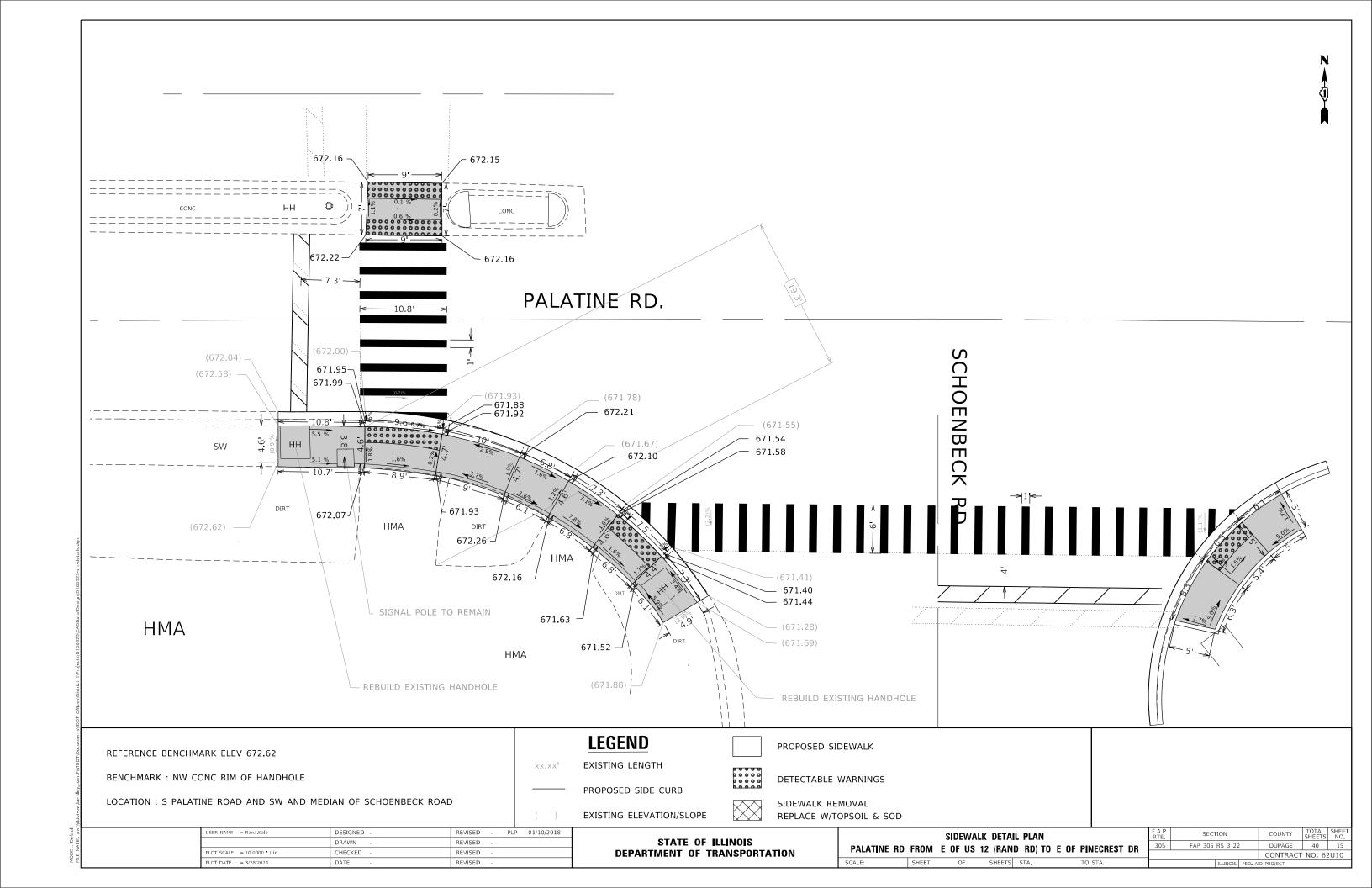




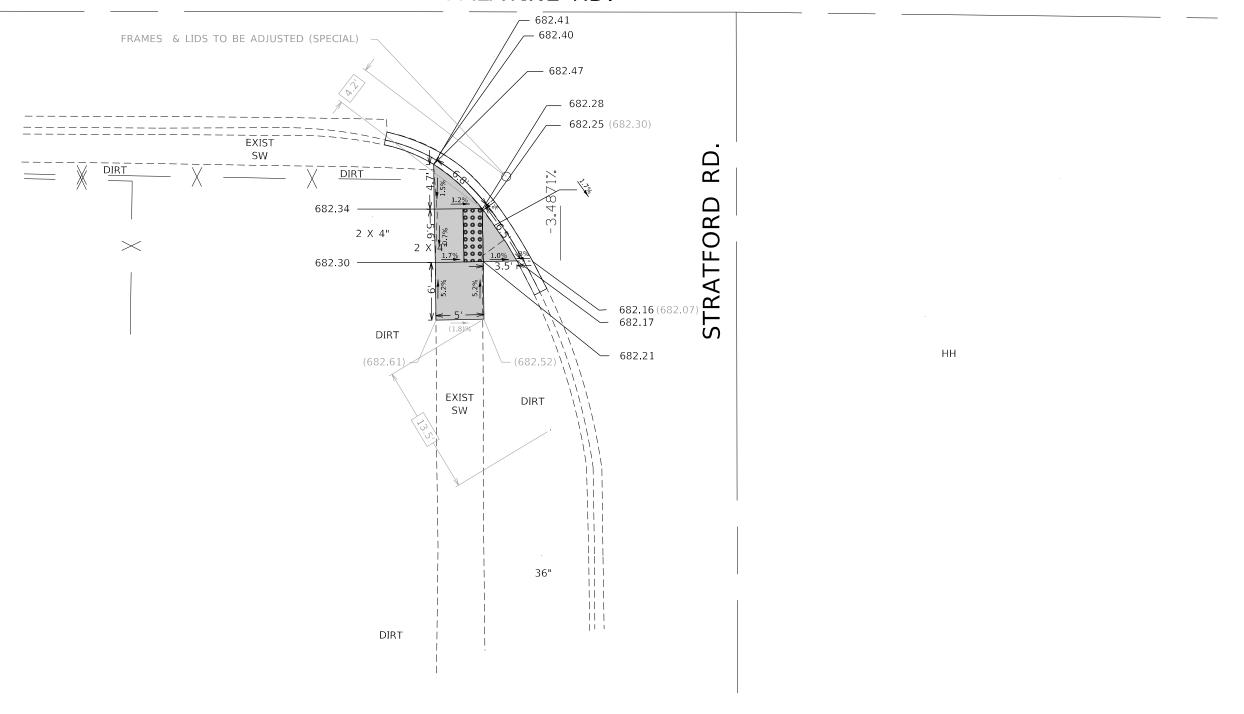








# PALATINE RD.



REFERENCE BENCHMARK ELEV 682.43

BENCHMARK: SE CORNER RIM OF HH

LOCATION: S PALATINE ROAD AND SW OF STRATFORD ROAD

LOCATION: S PALATINE ROAD AND SW OF STRATFORD ROAD

LOCATION: S PALATINE ROAD AND SW OF STRATFORD ROAD

( ) EXISTING ELEVATION/SLOPE

PROPOSED SIDEWALK

DETECTABLE WARNINGS

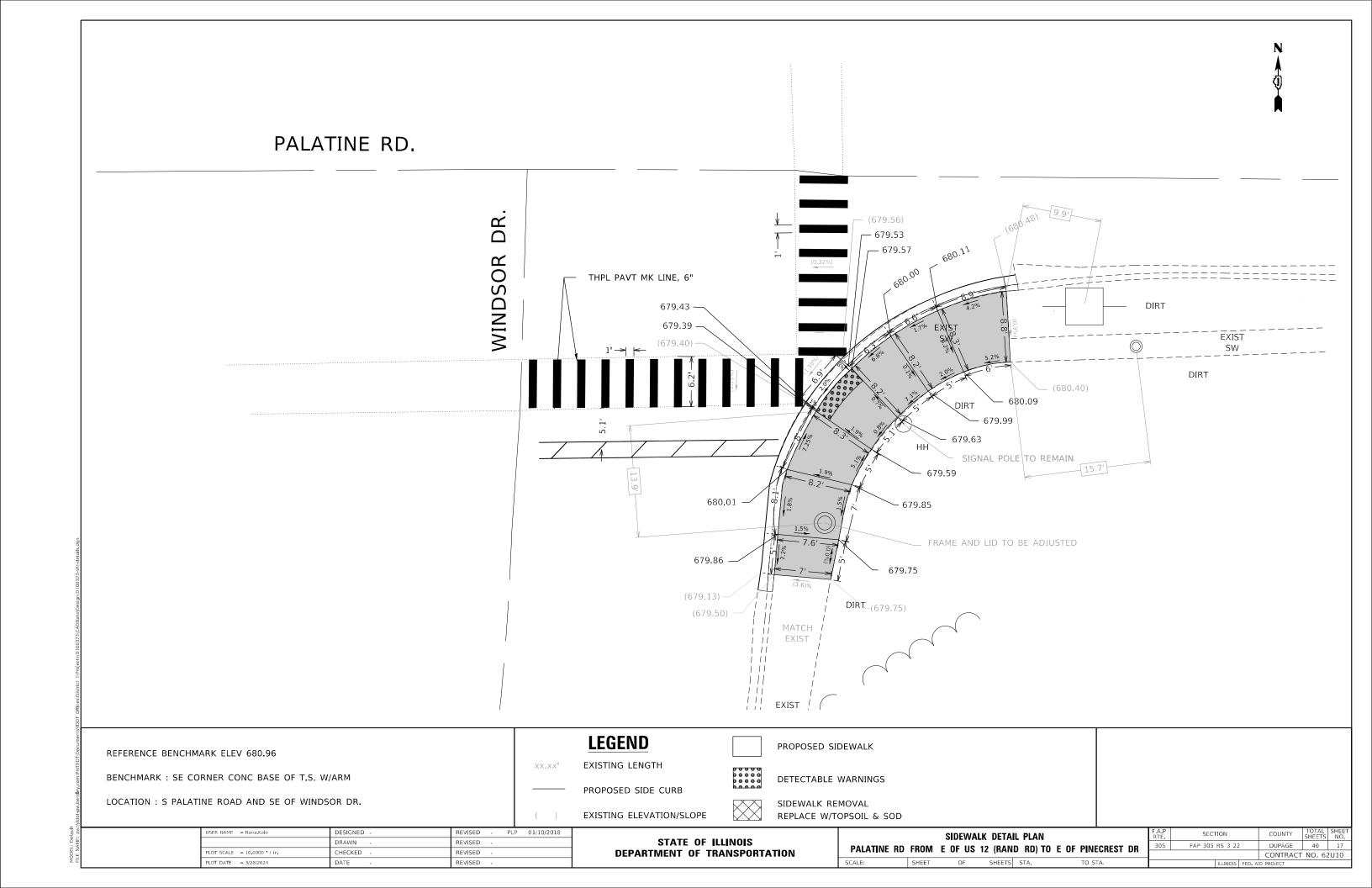
SIDEWALK REMOVAL
REPLACE W/TOPSOIL & SOD

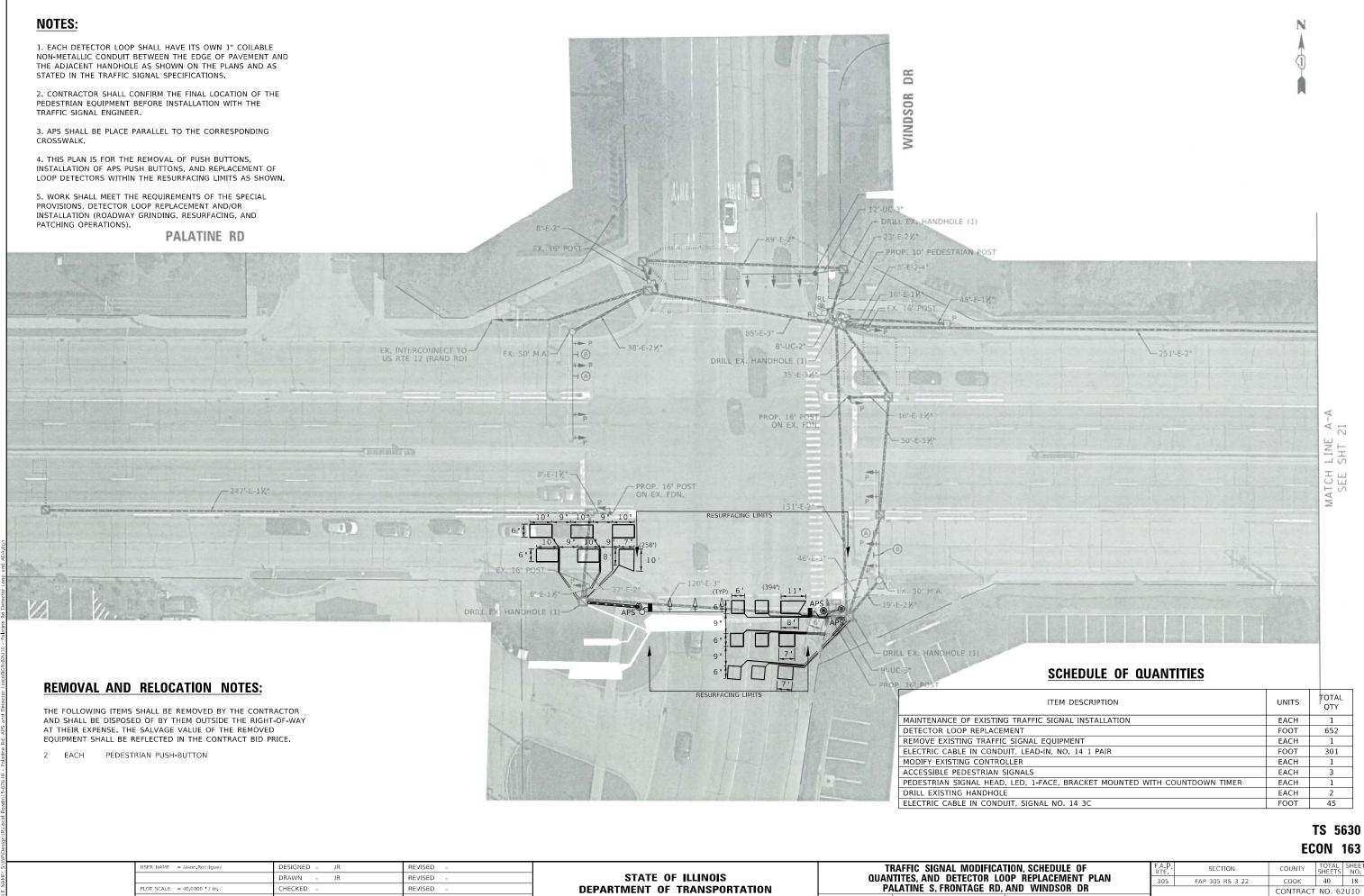
USER NAME = Rana, Kalo	DESIGNED -	REVISED	-	PLP	01/10/2018	Γ
	DRAWN -	REVISED	-			l
PLOT SCALE = 10.0000 / in.	CHECKED -	REVISED	-			l
PLOT DATE = 3/28/2024	DATE -	REVISED	-			1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	SIDEWALK DETAIL PLAN												
PALATINE RD	FROM	E OF US	12 (RAN	D RD) TO	E OF	PINECREST	DR						
SCALE:	SHEET	OF	SHEETS	STA.		TO STA.							

MODEL: Default





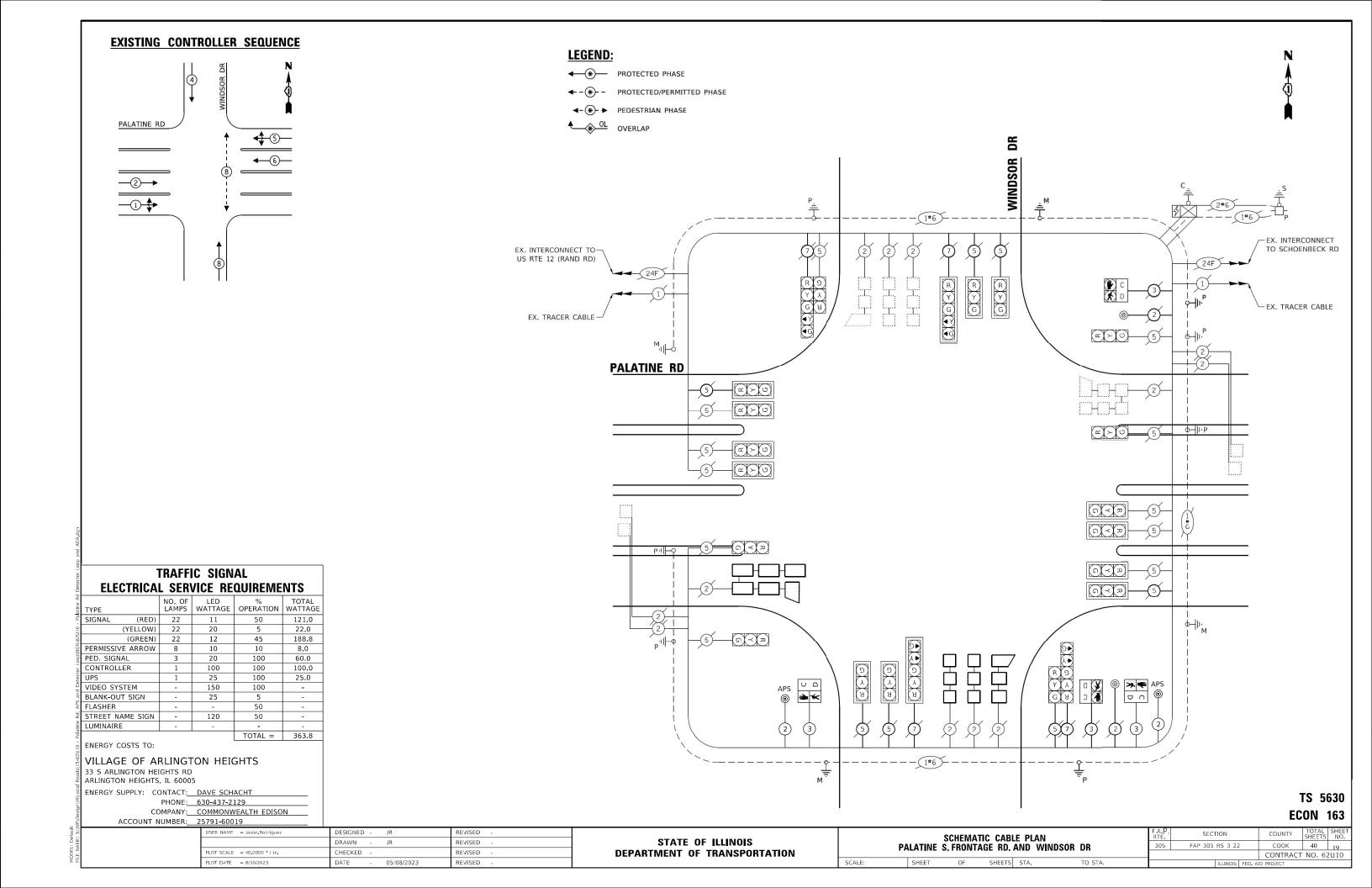
SHEETS STA.

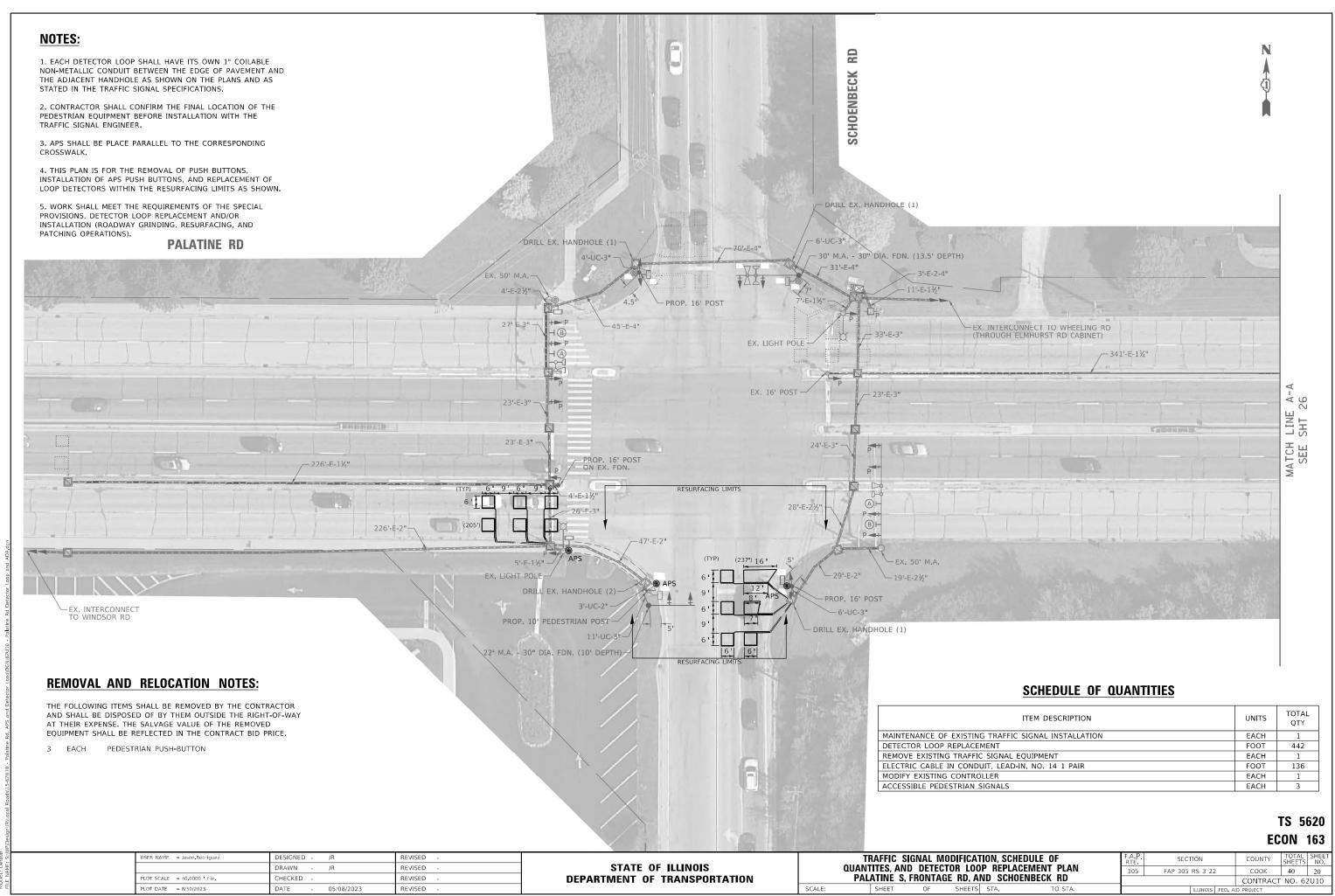
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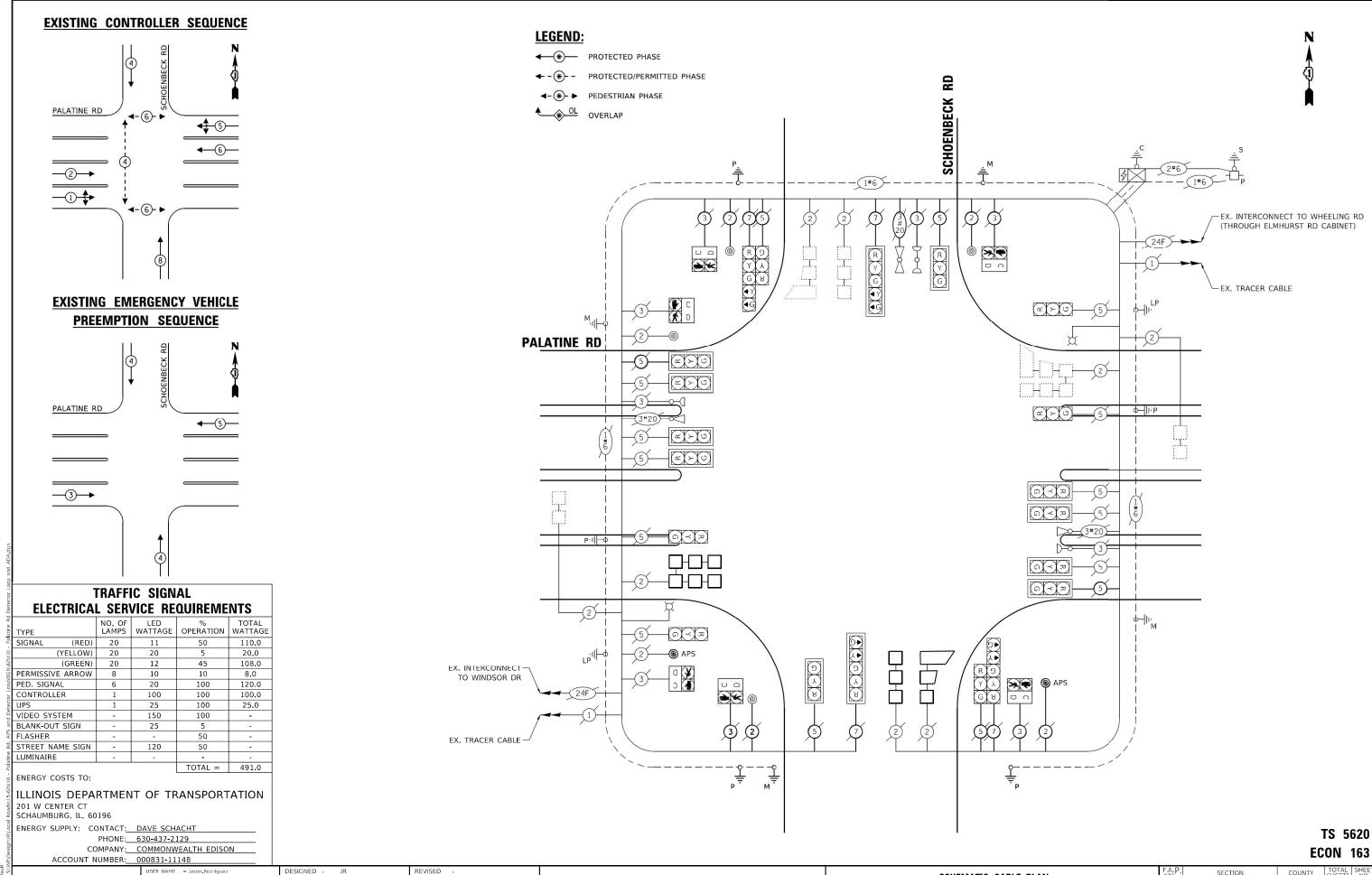
PLOT DATE = 8/30/2023

DATE

REVISED







MODEL: Default

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PLOT DATE = 8/30/2023

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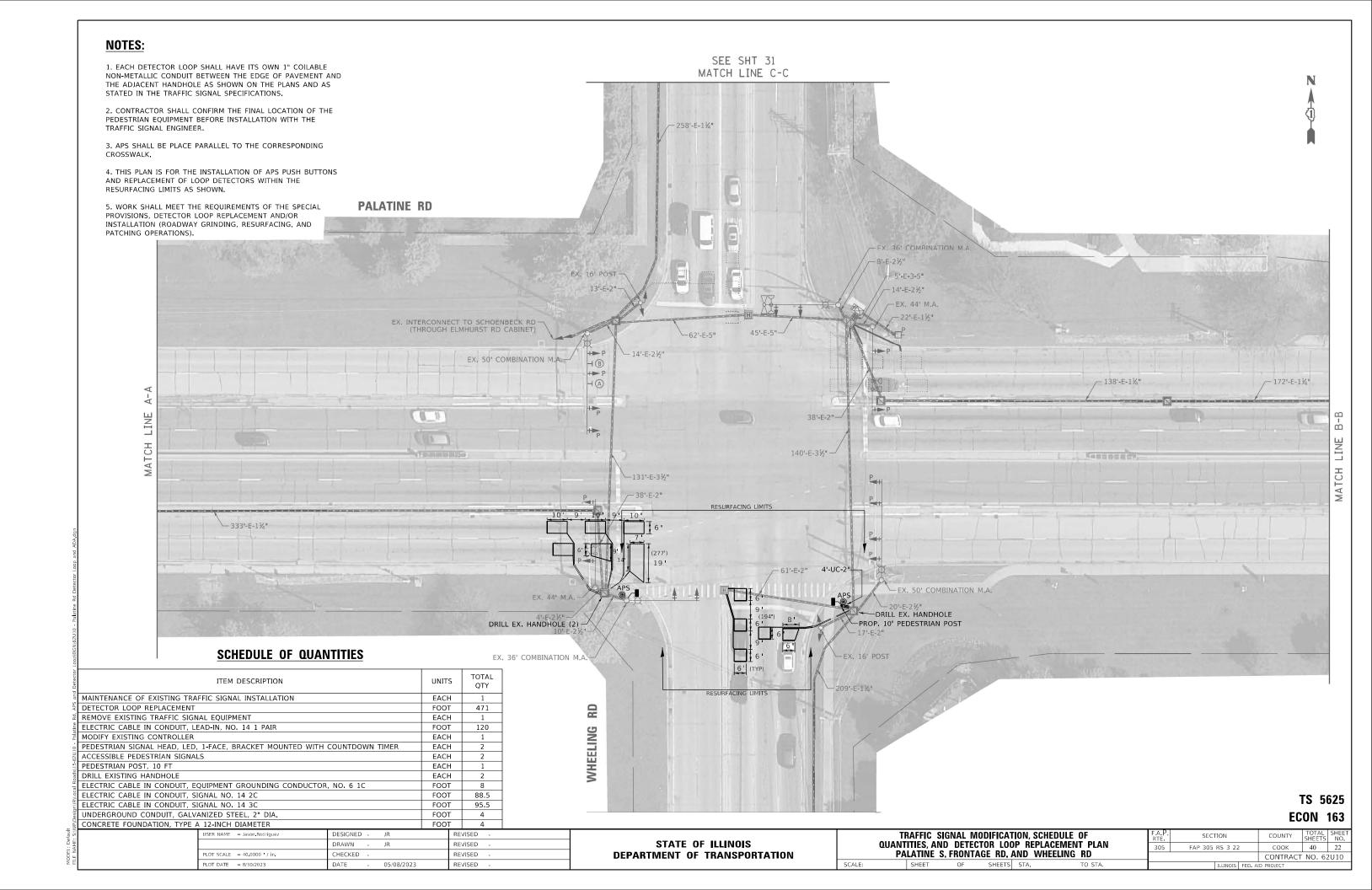
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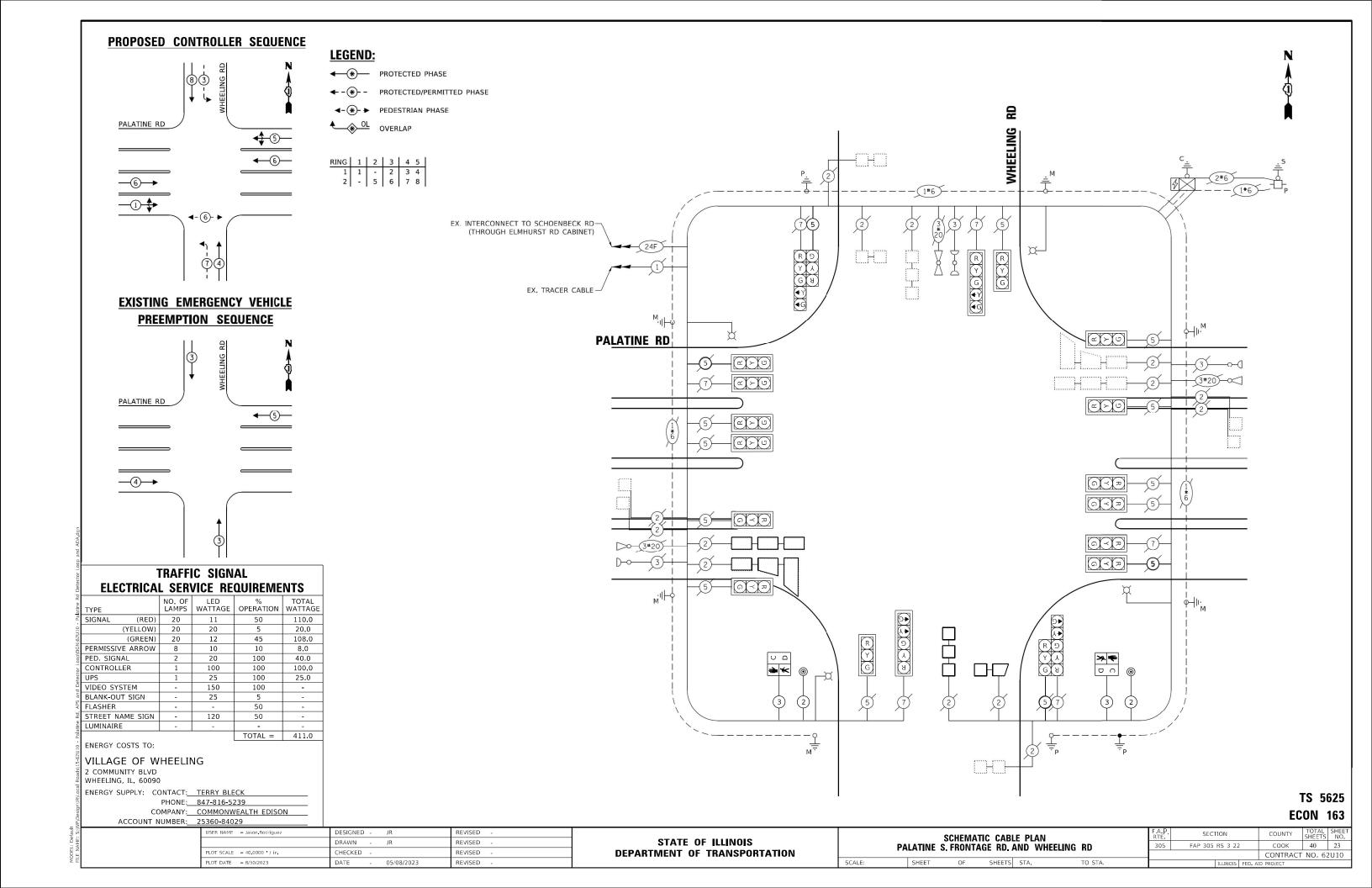
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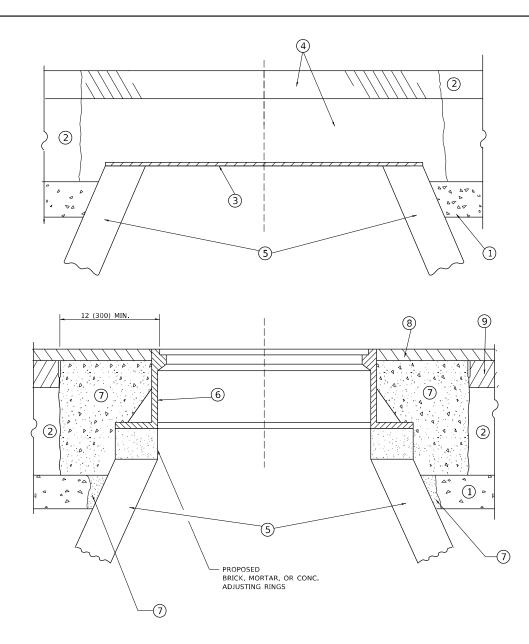
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEMATIC CABLE PLAN
PALATINE S, FRONTAGE RD, AND SCHOENBECK RD

| SHEET OF SHEETS STA. TO STA







# DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

#### **NOTES**

- 1. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.
- 3. CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
- 4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

# 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 HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 3 (80) HMA TO REMAIN AFTER MILLING).

#### 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-2\* 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-2\* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- (8) PROPOSED HMA SURFACE COURSE
- 4 PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- HMA SURFACE MIXEXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE

#### LOCATION OF STRUCTURES

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

#### **BASIS OF PAYMENT**

- 1. 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.
- 3. NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
- 4. 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.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 DETAILS FOR
 F.A.P. RTE.
 SE

 FRAMES AND LIDS ADJUSTMENT WITH MILLING
 305
 305

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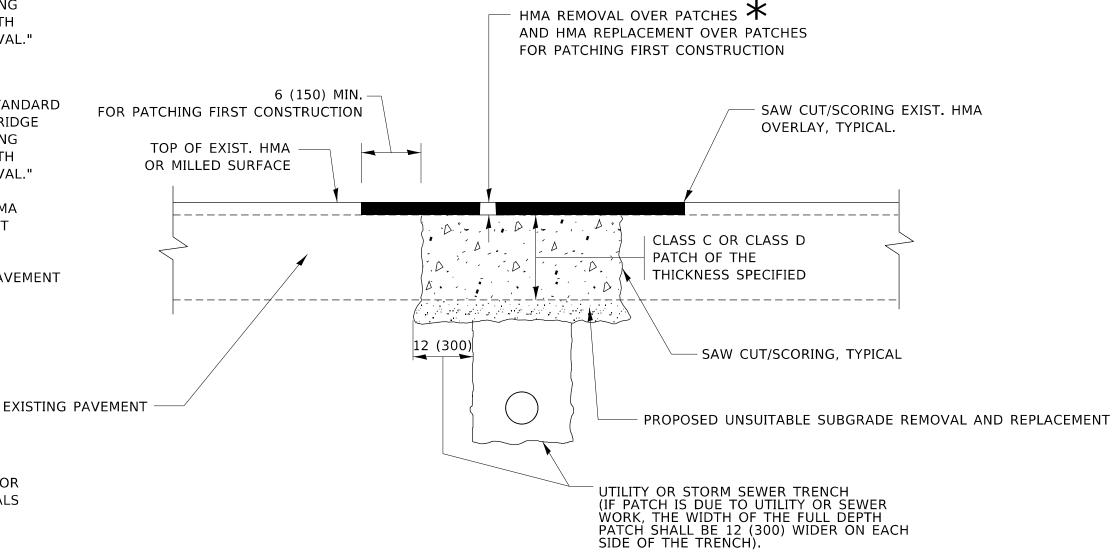
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#### METHOD OF MEASUREMENT

REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."

#### **BASIS OF PAYMENT**

- 1. REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."
- 2. SAW CUT/SCORING OF EXISTING HMA OVERLAY IS INCLUDED IN THE COST OF PAVEMENT PATCHING.
- 3. SAW CUT/SCORING OF EXISTING PAVEMENT IS INCLUDED IN THE COST OF PAVEMENT PATCHING.



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

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEE TYPICAL SECTIONS FOR

THICKNESS AND MATERIALS

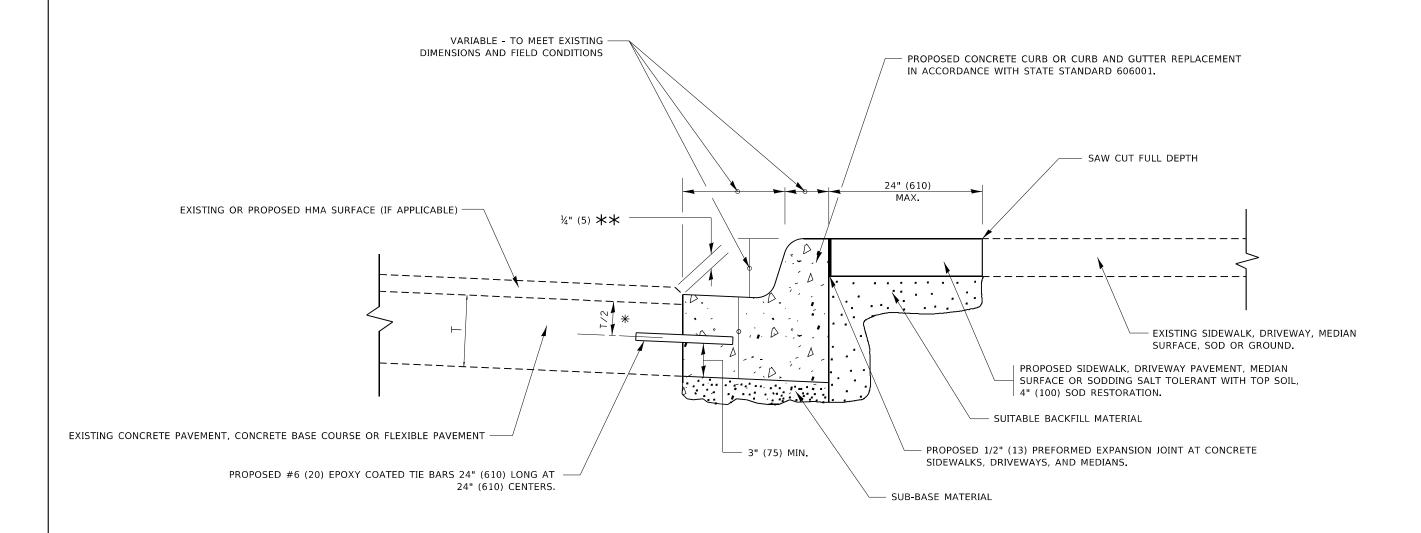
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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

- 1. MILL HMA FIRST IF THERE IS AT LEAST  $4\frac{1}{2}$  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 PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

USER NAME = Rana.Kalo	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07		PAVEMENT PATCHING FOR	F.A.P.	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	REVISED - R. BORO 09-04-07	STATE OF ILLINOIS		305	305 22 RS 2	соок	40	25
PLOT SCALE = 100.0000 / in	CHECKED -	REVISED - K. ENG 10-27-08	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	E	3D400-04 (BD-22)	CONTRACT	FNO. 6	2U10ز
PLOT DATE = 3/28/2024	DATE - 10-25-94	REVISED - K. SMITH 11-18-22		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FEI	). AID PROJECT		-



- 💥 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- \*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

# **CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT**

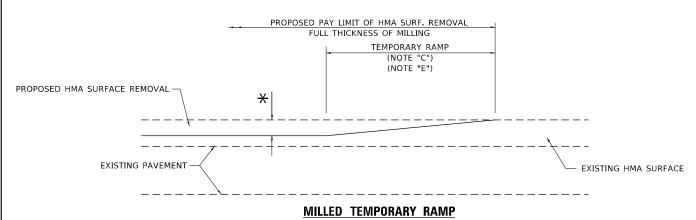
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

USER NAME = Rana, Kalo	DESIGNED	-	A. HOUSEH	REVISED	-	A. ABBAS 03-21-97
	DRAWN	-		REVISED	-	M. GOMEZ 01-22-01
PLOT SCALE = 100.0000 / in.	CHECKED	-		REVISED	-	R. BORO 12-15-09
PLOT DATE = 3/28/2024	DATE	-	03-11-94	REVISED	-	K. SMITH 07-11-19

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

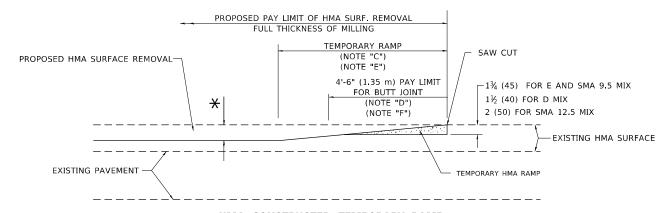
CURB OR CURB AND GUTTER
REMOVAL AND REPLACEMENT

SHEET 1 OF 1 SHEETS STA. TO STA.



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 1

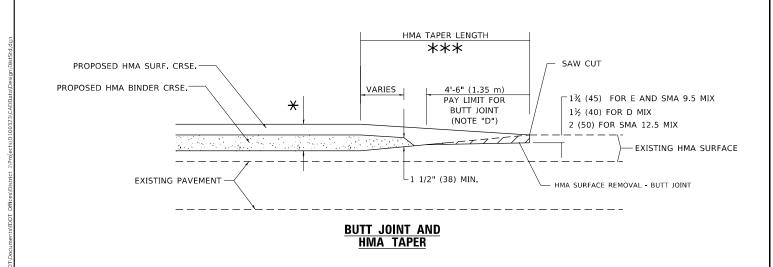


#### HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

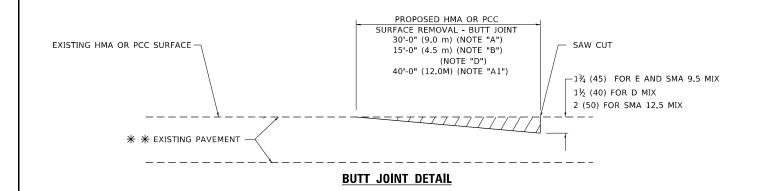
### OPTION 2

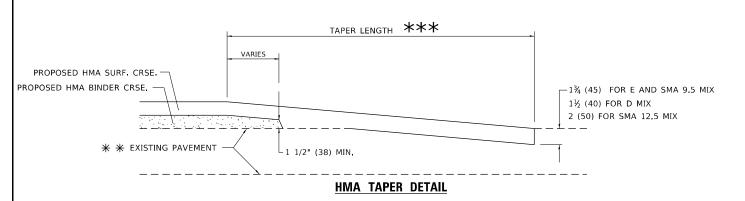
# TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

#### **GENERAL NOTES**

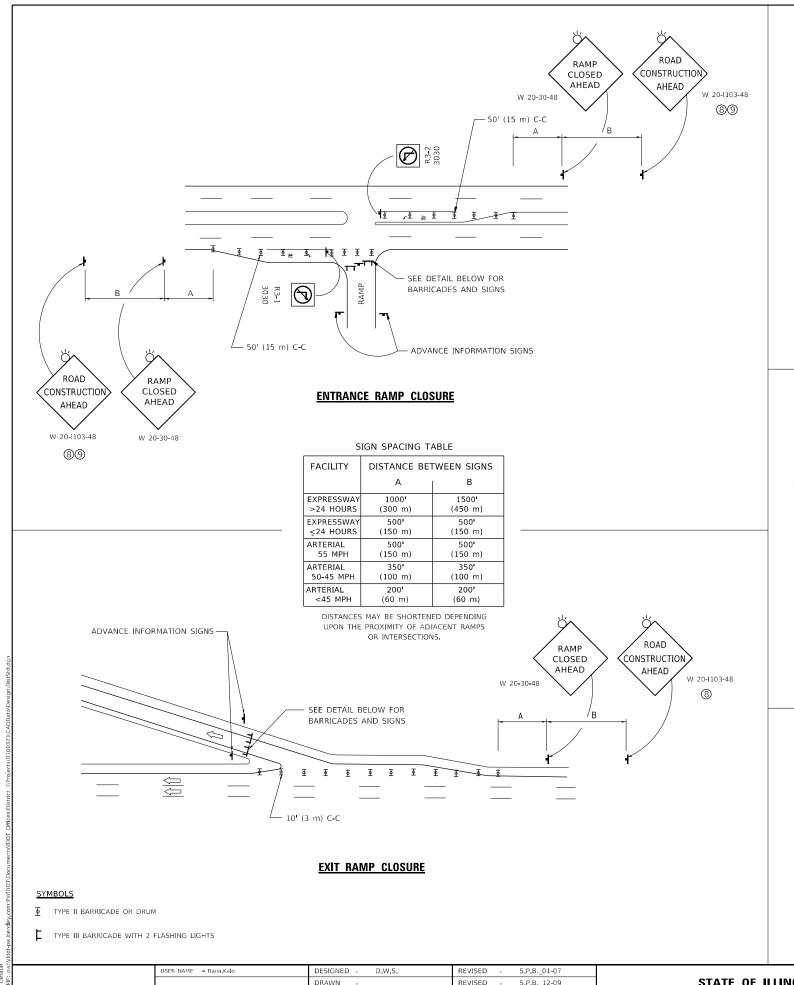
- A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.
- A1. INTERSTATES
- B. MINOR SIDE ROADS.
- C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE,
- D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E. TAPER THE TEMP. RAMP AT A RATE OF 3' 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - igstar SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- F. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

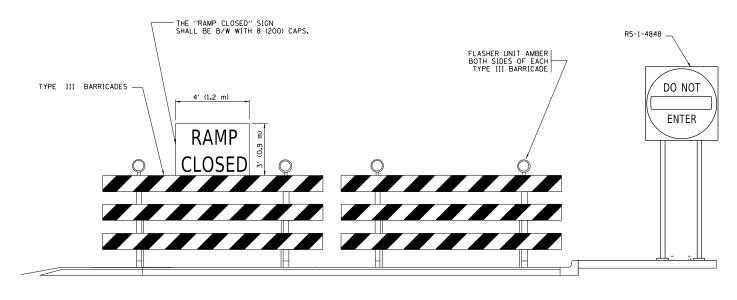
#### **BASIS OF PAYMENT**

- THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT"
- THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.

SCALE: NONE

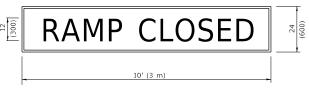
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.





**DETAIL FOR REQUIRED BARRICADES & SIGNS** 

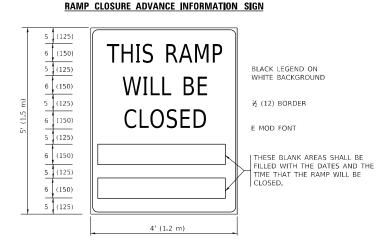
#### RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE

BACKGROUND MOUNTED DIAGONALLY E MOD FONT 1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

#### GENERAL NOTES:

- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- (2) VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- 3 A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
- 4 ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

SCALE: NONE

- 6 AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
- (8) ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

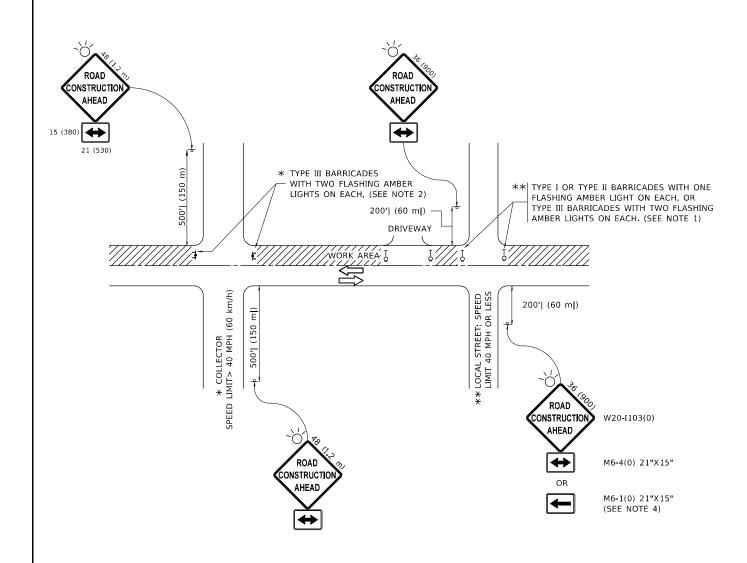
HECKED REVISED M.D.\_06-13 PLOT DATE = 3/28/2024 M.D. 01-18 DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

ENTRANCE\_AND\_EXIT\_RAMP **CLOSURE DETAILS** SHEET 1

SECTION 305 22 RS 2 COOK 40 CONTRACT NO. 62U10

OF 1 SHEETS STA TO STA.



#### NOTES:

- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE,
- THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
  b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION
  OF THE CLOSED PORTION.
- 3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE
  4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL
  BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER
- THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

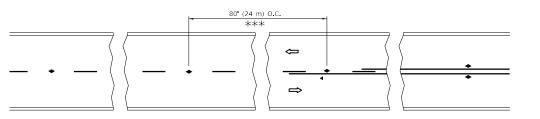
All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = Rana,Kalo	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
PLOT DATE = 3/28/2024	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

SHEET 1 OF 1 SHEETS STA. TO ST

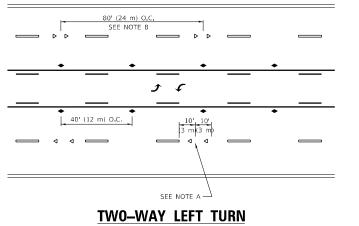


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

# $\Rightarrow$ LANE REDUCTION TRANSITION

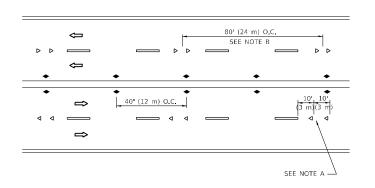
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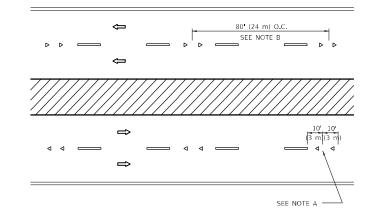
SEE FIGURE 3B-14 MUTCD



#### TW0-LANE/TW0-WAY

40' (12 m)

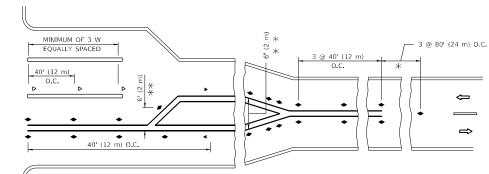




MULTI-LANE/DIVIDED

#### MULTI-LANE/UNDIVIDED

3 @ 40' (12 m)



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

**TURN LANES** 

## **GENERAL NOTES**

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

#### LANE MARKER NOTES

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

#### **DESIGN NOTES**

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

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

JSER NAME = Rana.Kalo DESIGNED REVISED - T. RAMMACHER 03-12-99 STATE OF ILLINOIS DRAWN REVISED - T. RAMMACHER 01-06-00 CHECKED REVISED **DEPARTMENT OF TRANSPORTATION** PLOT DATE = 3/28/2024 C. JUCIUS 07-01-13 DATE REVISED -

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHEET 1 OF 1 SHEETS STA.

SECTION 305 22 RS 2 COOK 40 | 30 TC-11 CONTRACT NO. 62U10

**SYMBOLS** 

ONE-WAY AMBER MARKER

TWO-WAY AMBER MARKER

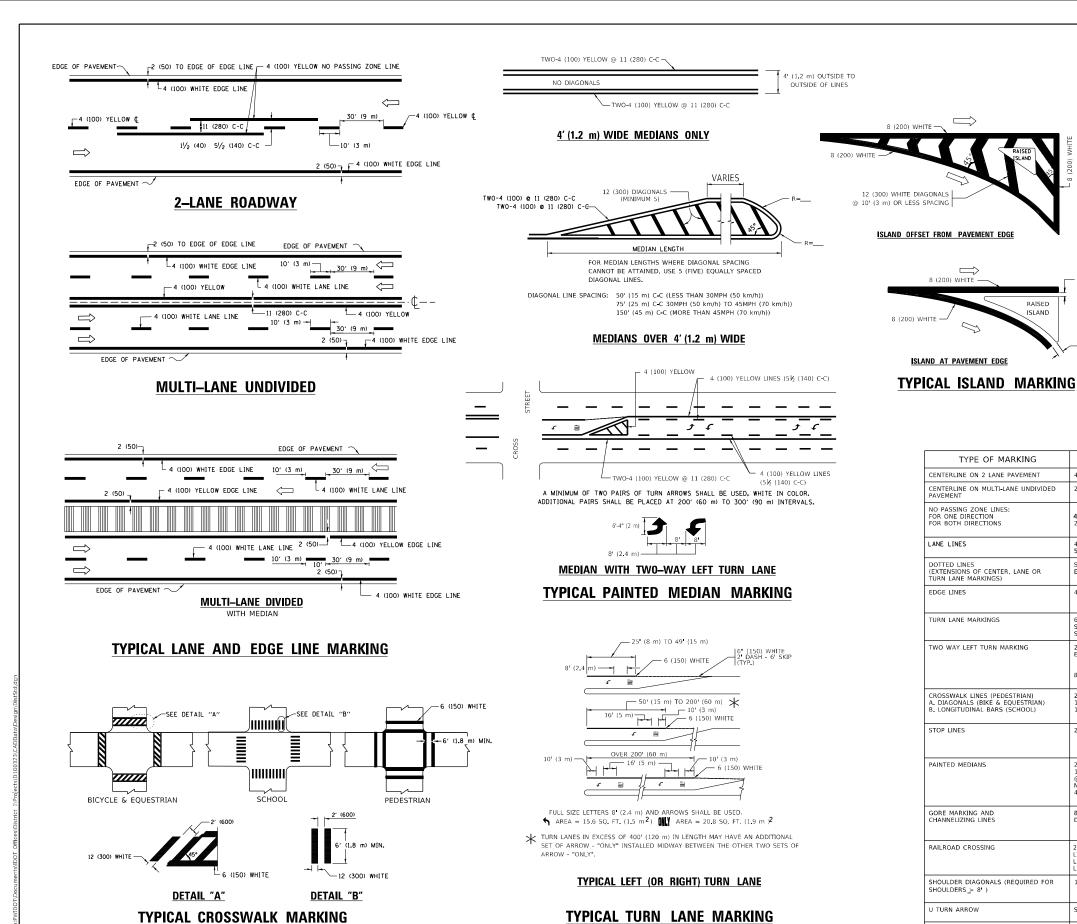
ONE-WAY CRYSTAL MARKER (W/O)

YELLOW STRIPE

■ WHITE STRIPE

3 @ 80 (24 m) O.C. -

 $\Rightarrow$ 



COMBINATION LEFT AND U-TURN 5'-4" (1620) √ 32 R (810) 2 (50) LANE REDUCTION TRANSITION \* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS. **U-TURN** WIDTH OF LINE PATTERN SPACING / REMARKS COLOR SKIP-DASH rELLOW 10' (3 m) LINE WITH 30' (9 m) SPACE SOLID YELLOW 11 (280) C-C **4 (100)** 2 @ 4 (100) YELLOW YELLOW 5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN SKIP-DASH 10' (3 m) LINE WITH 30' (9 m) SPACE 4 (100) 5 (125) ON FREEWAYS SKIP-DASH SAME AS LINE BEING EXTENDED SKIP-DASH SAME AS LINE BEING EXTENDED 2 (600) LINE WITH 6 (1.8 m) SPACE SOLID OUTLINE MEDIANS IN YELLOW YELLOW-LEFT WHITE-RIGHT SEE TYPICAL TURN LANE MARKING DETAIL 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 2 @ 4 (100) EACH DIRECTION 8 (2.4m) LEFT ARROW NOT LESS THAN 6 (1.8 m) APART 2 (600) APART (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS. PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT SOLID WHITE PARALLEL TO CROSSWALK, IF PRESENT.
OTHERWISE, PLACE AT DESIRED STOPPING
POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE
POSSIBLE 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING. 2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° SOLID YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC @ 45° NO DIAGONALS USED FO 4' (1.2 m) WIDE MEDIAN! 8 (200) WITH 12 (300) DIAGONALS @ 45° DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))

SEE STATE STANDARD 780001 AREA OF:

30.4 SF

"R"=3.6 SQ. FT. (0.33 m PEACH "X"=54.0 SQ. FT. (5.0 m )2

50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

D(FT)

580

665

SPEED LIMIT

45

50

55

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

2 ARROW COMBINATION

SCALE: NONE

— 2 (50)

4 (100)

24 (600)

24 (600) TRANSVERSE LINES; "RR" IS 6 (1.8 m) LETTERS; 16 (400) LINE FOR "X"

12 (300) @ 459

SEE DETAIL

SOLID

SOLID

SOLID

SOLID

WHITE

WHITE

WHITE - RIGHT YELLOW - LEFT

RAISED

SECTION DISTRICT ONE 305 22 RS 2 COOK 40 31 TYPICAL PAVEMENT MARKINGS TC-13 CONTRACT NO. 62U10 OF 2 SHEETS STA SHEET 1 TO STA.

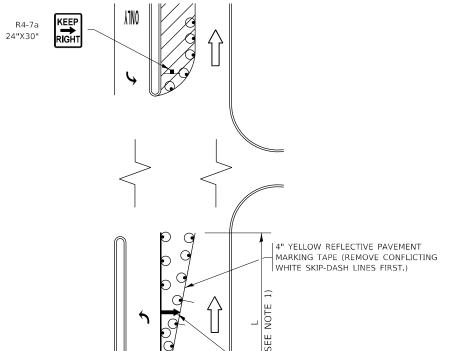
JSER NAME = Rana.Kalo DESIGNED -EVERS C. JUCIUS 09-09-09 DRAWN REVISED C. JUCIUS 07-01-13 HECKED REVISED PLOT DATE = 3/28/2024 DATE REVISED

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

THE ROAD WHICH IT CROSSES

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

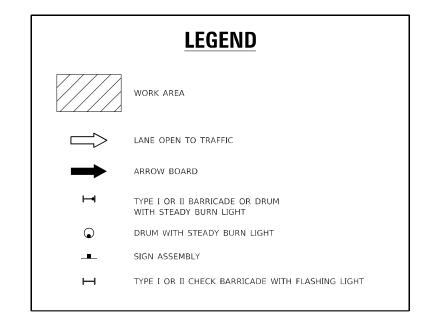


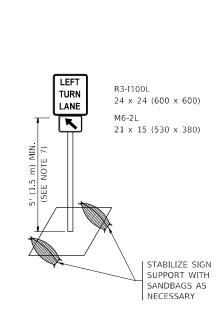
- ARROW BOARD

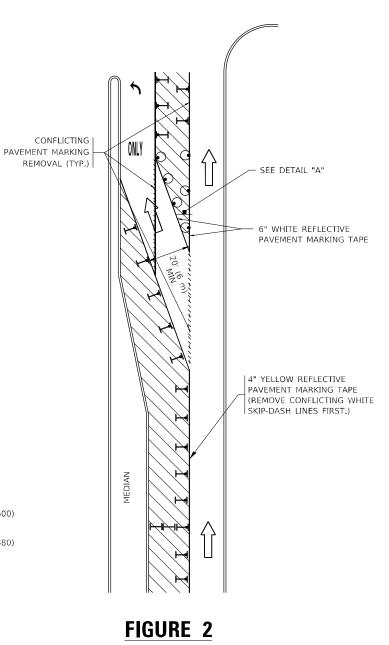


- 1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
- B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
- 2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. 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-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
- 6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
- 7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREOUIREMENTS.
- 8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

# **TURN BAY ENTRANCE** WITHIN A LANE CLOSURE







**DETAIL A** 

SCALE: NONE

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

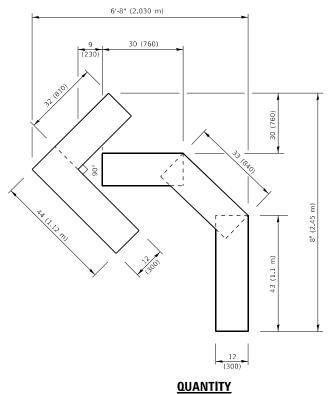
#### SER NAME = Rana Kalo DESIGNED -T. RAMMACHER 09-08-94 R. BORO 09-14-09 A. HOUSEH 11-07-95 REVISED - A. SCHUETZE 07-01-13 A. HOUSEH 10-12-96 REVISED - A. SCHUETZE 09-15-16 PLOT DATE = 3/28/2024 DATE -T. RAMMACHER 01-06-00 REVISED

FIGURE 1

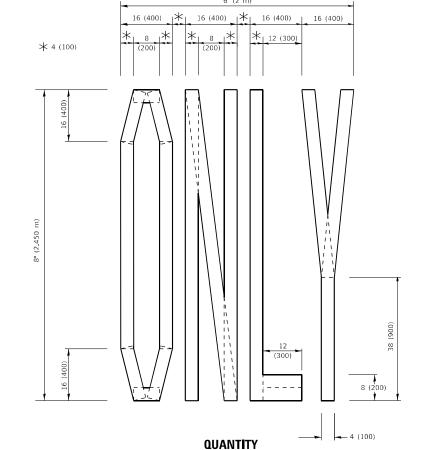
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TRAFF	IC CONTROL AN	D PROTECTION AT	TURN BAYS	F.A.P. RTE	SECT10	N	COUNTY	TOT, SHEE
	/TO REMAI	N OPEN TO TRAFFIC	r)	305	305 22 R	S 2	COOK	40
	(10 IILIVIAII	V OLEN TO THAT IN	<u> </u>		TC-14		CONTRACT	NO.
NIE	CHEET 1 OF	CHEETC CTA	TO CTA			MIGIC FEB AN	DROJECT	

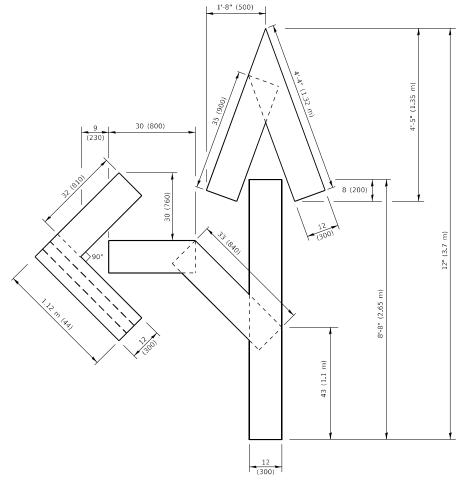
SEE DETAIL "A"



#### 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.41 sq. m)



4 (100) LINE = 64.1 ft. (19.5 m) 21.4 sq. ft. (1.99 sq. m)

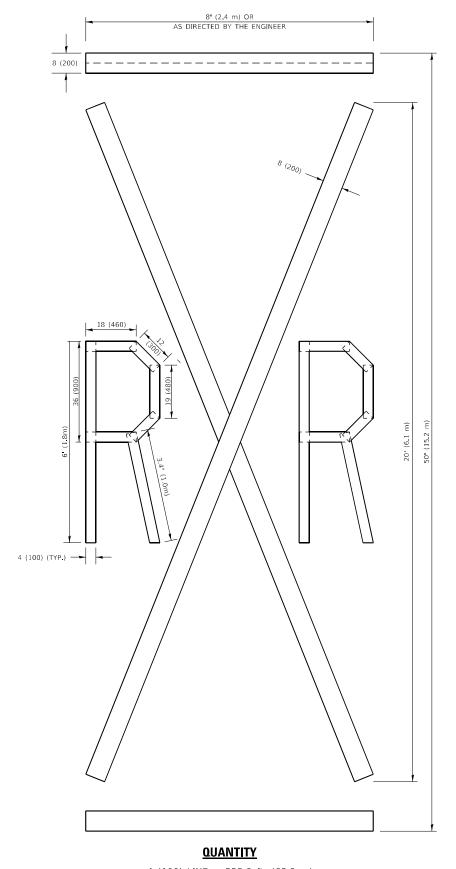


#### QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m) 27.5 sq. ft. (2.53 sq. m)

#### NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

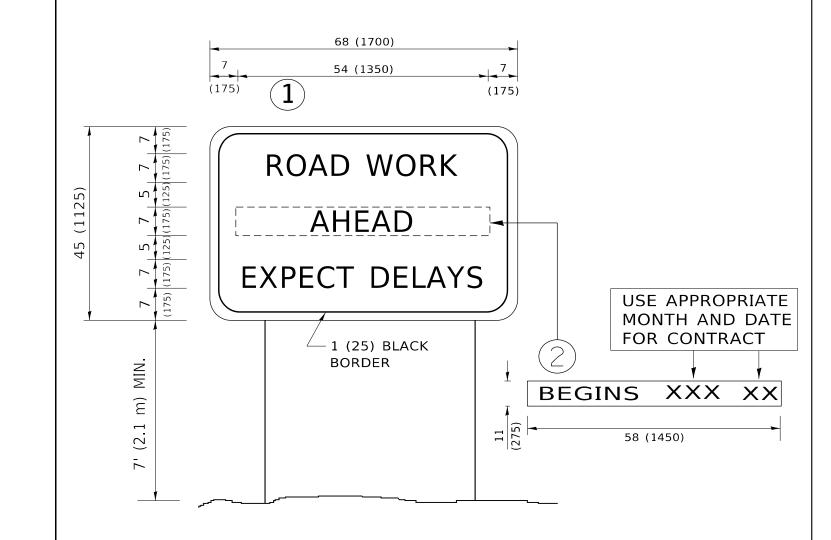
All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = Rana, Kalo	DESIGNED -	REVISED	- T. RAMMACHER 03-02-98
	DRAWN -	REVISED	- E. GOMEZ 08-28-00
PLOT SCALE = 100.0010 / in.	CHECKED -	REVISED	- E. GOMEZ 08-28-00
PLOT DATE = 3/28/2024	DATE - 09-18-94	REVISED	- A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	SHORT	TERM	PAVI	EMENT	M	ARKING	LETTERS	AND	SYMBOLS	
SCAL	E: NONE	SHE	ET 1	OF	1	SHEETS	STA.		TO STA.	

F.A.P. RTE.	SECT	ΠON		COUNTY	TOTAL SHEETS	SHEET NO.
305	305 22 RS 2			СООК	40	33
	TC-16			CONTRACT	NO. 6	52U10
		ILLINO15	FED. A	ID PROJECT		



# NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN(1)WITH INSTALLED PANEL(2)ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL(2)SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.

SHEET

6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)

SCALE: NONE

7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

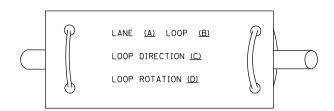
USER NAME = Rana, Kalo	DESIGNED -	REVISED	- R. MIRS 09-15-97
	DRAWN -	REVISED	- R. MIRS 12-11-97
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED	-T. RAMMACHER 02-02-99
PLOT DATE = 3/28/2024	DATE -	REVISED	- C. JUCIUS 01-31-07

	ARTE	RIAL ROAD		F.A.P. RTE	SECTION
	INFOR	MATION SIGN		305	305 22 RS 2
	IIII OIII	VIATION SIGN			TC-22
1	OF 1	SHEETS STA.	TO STA.		ILLINOIS FED

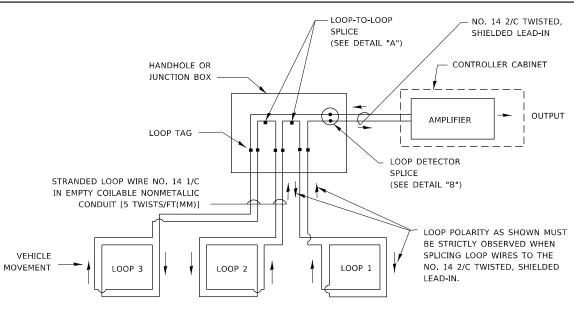
#### **LOOP DETECTOR NOTES**

- 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.

#### LOOP LEAD-IN CABLE TAG

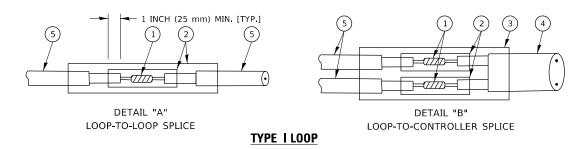


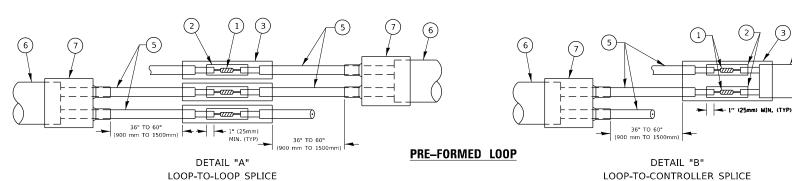
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### **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.





#### LOOP DETECTOR SPLICE

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

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

USER NAME = Rana.Kalo	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 3/28/2024	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

DISTRICT ONE 305 22 RS 2 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

COOK 40 CONTRACT NO. 62U10 SHEET 2 OF 7 SHEETS STA.

# LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. I PAVED OR NON-PAVED SHOULDER

(3.0 m)

\* = (600 mm) \* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS

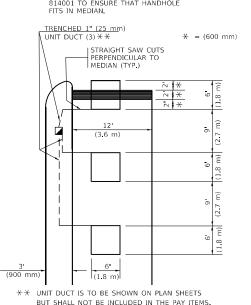
(3.0 m)

# LEFT TURN LANES WITH MEDIANS

#### VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

#### (PROTECTED / PERMITTED LEFT TURN PHASING)

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



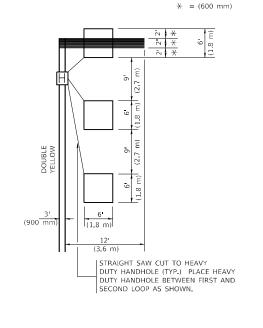
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

#### LEFT TURN LANES WITHOUT MEDIANS

VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

ARTERIAL

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

\* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)

\* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE

\* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

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

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

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

#### NOTE:

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

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

COUNTY

COOK

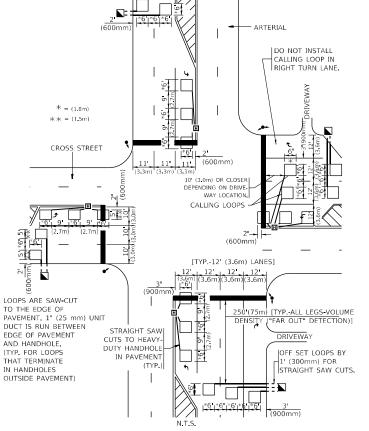
40 36

CONTRACT NO. 62U10

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

11" (25 mm) UNIT

DUCT-TRENCHED



**DETAIL 1** N.T.S.

SER NAME = Rana.Kalo DESIGNED REVISED DRAWN REVISED HECKED R.K.F REVISED PLOT DATE = 3/28/2024 REVISED DATE

#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION DISTRICT 1 - DETECTOR LOOP INSTALLATION 305 22 RS 2 DETAILS FOR ROADWAY RESURFACING TS-07 SHEET 1 OF 1 SHEETS STA. TO STA.

# ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS WHEN ADJUSTMENT IS REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSE TO THE INTERSECTION UNIT DUCT CROSS STREET 10'(3.0m) PREFERRED \*6 9 \*6 9 \*6 + - THESE DIMENSIONS RIVEWAY [6' (1.8m) MINIMUM, 25 (7.6 m) MAXIMUM] △ - THESE DIMENSIONS

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)

CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)

SCALE: NONE

10 (3.0m) LANE WIDTHS

OFFSET LOOPS BY

STRAIGHT SAW CUTS

THIS DIMENSION MAY BE

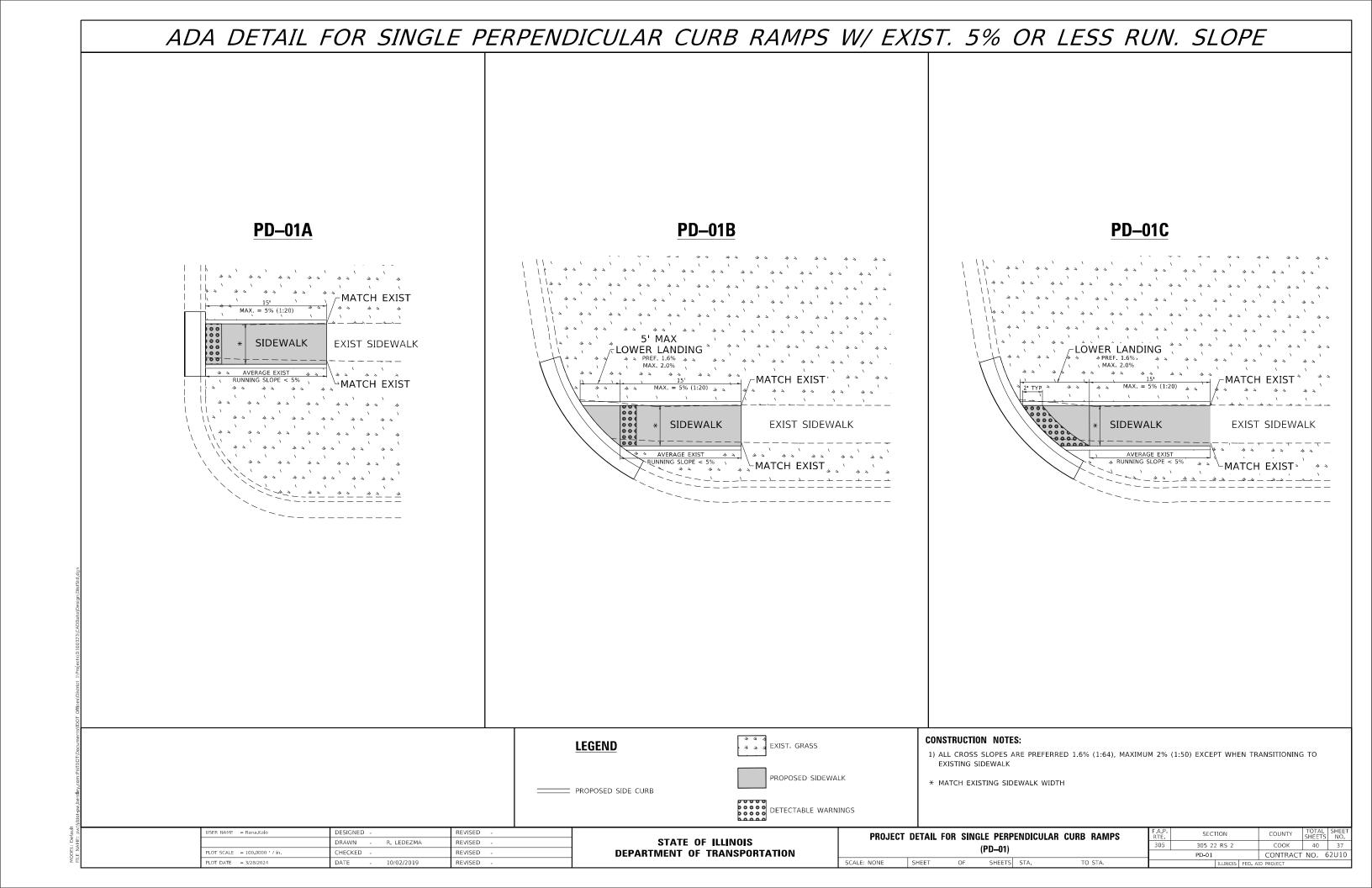
1' (300mm) FOR

FAR OUT" LOOPS ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER TAPER AREA. DO NOT COVER THE LEFT TURN

**DETAIL 2** LANE OR LEFT TURN N.T.S.

## VEHICLES LOOP DETECTORS

- st ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED,
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE
- \* 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.
- INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED. MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).



# ADA DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS W/ EXIST. 5% OR GREATER RUN. SLOPE PD-02A » PREFERRED < 8.3% » » » MAX. ANY SLOPE \* CURB RAMP TRANSITION EXIST SIDEWALK LANDING MATCH EXIST **PD-02C** LOWER LANDING FMATCH EXIST **PD-02B** PREF. 1.6% PREFERRED < 8.3% MAX. 2.0% MAX. ANY SLOPE PREFERRED = 7.1% (1:14) MAX. = 8.3% (1:12) CURB RAMP TRANSITION EXIST SIDEWALK MATCH EXIST , PREFERRED = 7.1% (1:14) MAX. = 8.3% (1:12) PREF. 1.6% MAX. 2.0% \frac{1}{2} \text{PREFERRED < 8.3%} \tag{4} \t EXIST SIDEWALK \* CURB RAMP TRANSITION AVERAGE EXIST RUNNING SLOPE ≥ 5% LANDING MATCH EXIST **CONSTRUCTION NOTES:** a a EXIST. GRASS **LEGEND** 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO PROPOSED SIDEWALK \* MATCH EXISTING SIDEWALK WIDTH = PROPOSED SIDE CURB DETECTABLE WARNINGS JSER NAME = Rana.Kalo DESIGNED REVISED PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS STATE OF ILLINOIS DRAWN -R. LEDEZMA REVISED 305 22 RS 2 COOK 40 HECKED REVISED **DEPARTMENT OF TRANSPORTATION** PD-02 CONTRACT NO. 62U10

# ADA DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS W/ TURNING SPACE PD-04A **PD-04B** LOWER LANDING LOWER LANDING PREF. 1.6% MAX. 2.0% MAX. 2.0% TRANSITION **TRANSITION** EXIST SIDEWALK EXIST SIDEWALK CURB RAMP-CURB RAMP-PREFERRED = 7.1% (1:14)PREFERRED = 7.1% (1:14)MAX. ANY SLOPE 15 <sup>©</sup>MATCH EXIST <sup>®</sup> <sup>©</sup>MATCH EXIST Š 4 4 4 4 4 MATCH EXIST √ ¦ MATCH EXIST ⊢MATCH EXIST EXIST SIDEWALK EXIST SIDEWALK **⊢MATCH EXIST** \* \* \* \* EXIST. GRASS **CONSTRUCTION NOTES: LEGEND** 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK PROPOSED SIDEWALK \* MATCH EXISTING SIDEWALK WIDTH ─ PROPOSED SIDE CURB DETECTABLE WARNINGS SER NAME = Rana Kalo DESIGNED REVISED PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS WITH STATE OF ILLINOIS DRAWN R. LEDEZMA REVISED 305 22 RS 2 COOK 40 TURNING SPACE (PD-04) HECKED REVISED **DEPARTMENT OF TRANSPORTATION** PD-04 CONTRACT NO. 62U10 SCALE: NONE

