09-22-2023 LETTING ITEM 017

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

D-91-219-22

FAP 0305 22 RS2

MCHENRY

CONTRACT NO. 62T64

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED WITHIN THE CITY OF HARVARD AND UNINCORPORATED McHENRY COUNTY.

# **PROPOSED** HIGHWAY PLANS

**FAP 305, FAP 324: US 14 (DIVISION ST)** BRINK STREET TO EAST OF PARK LANE DRIVE **CRACK & JOINT SEALING, SMART OVERLAY SECTION: FAP 0305 22 RS2** PROJECT: NHPP-S7WP(609) **McHENRY COUNTY** 

C-91-272-22



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**US 14 (DIVISION STREET):** IL ROUTE 173 (BRINKS ST) TO ILL ROUTE 23 ADT (2021) = 15,400SPEED LIMIT = 35 MPH

**US 14 (DIVISION STREET):** ILL ROUTE 23 TO EAST OF PARK LANE DRIVE: ADT (2021) = 8,400

SPEED LIMIT = 55 MPH

**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 EXCAVATORS 1-800-892-0123 OR 811

PROJECT ENGINEER: VESELIN VELICHKOV (847) 705-4432

PROJECT MANAGER: FAWAD AQUEEL

R 5 E R 6 E PROJECT BEGIN STA. 15 + 91HEBRON LOCATION MAP BRINK ST TO ILL ROUTE 23 CRACK & JOINT SEALING STA. 15+91 TO STA. 71+39 CHEMUNG BRIDGE OMISSION STA. 71 + 39 TO STA. 72 + 47 HEN HARTLAND ILL ROUTE 23 TO E. OF PARK LANE DR. SMART OVERLAY STA. 72+47 TO STA. 437+38 PROJECT END STA. 437 + 38BRIDGE OMISSION STA. 295 + 00 TO STA. 297 + 34 WOODSTOCK

DUNHAM TOWNSHIP, HARTLAND TOWNSHIP

GROSS AND NET LENGTH = 42,147 FT. = 7.98 MILES NET LENGTH = 41,805 FT. = 7.92 MILES

LOCATION OF SECTION INDICATED THUS: - -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SUBMITTED JUNE 27 2023

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 62T64

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6	TYPICAL SECTIONS
7-21	ROADWAY AND PAVEMENT MARKING PLANS
22	DETECTOR LOOP REPLACEMENT PLAN
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24	BD-08: DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
25	BD-22: PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
26	BD-32: BUTT JOINT AND HMA TAPER DETAILS
27	BD-55: RUMBLE STRIPS FOR CENTERLINE, NON-FREEWAY
28	TC-10: TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
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32	TC-22: ARTERIAL ROAD INFORMATION SIGN
33	TS-07: DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

PD-11: CRACK AND JOINT SEALING DETAIL

#### **STATE STANDARDS**

STANDARD NO.	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
642006-01	SHOULDER RUMBLE STRIPS, 8 IN.
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-05	LANE CLOSURE, 2L, 2W, DAYS ONLY, FOR SPEEDS $\geq$ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS $\geq$ 45 MPH
701311-03	LANE CLOSURE, 2L, 2W MOVING OPERATIONS - DAY ONLY
701336-07	LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS $\geq$ 45 MPH
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEEDS $\leq$ 40 MPH
701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUT FOR DETECTOR LOOPS

#### **GENERAL NOTES**

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, CITIES OF HARVARD AND UNINCORPORATED MCHENRY COUNTY.
- 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 CONTRACT.
- THE CONTRACTOR SHALL CONTACT KALPANA KANNAN-HOSADURGA, THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR, AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.
- UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE RESIDENT ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
- 7. 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 ASSHOWN ON THE PLANS OR DIRECTED BY THE RESIDENT ENGINEER.

- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1½ INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS OVER 45 MPH. WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1V:3H.
- 9. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF CURB OR DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCIDENTAL.
- 10. 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 ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS, UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- 11. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED INCLUDING PREVIOUSLY SEEDED AREAS. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER.
- 12. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS LINLESS OTHERWISE SPECIFIED
- 13. THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER, VIA E-MAIL AT WALTER.CZARNY@ILLINOIS.GOV, A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 14. CONTRACTOR SHALL PROVIDE 7 DAY NOTICE OF WORK SO THAT THE DEPARTMENT OF TRANSPORTATION DATA MANAGEMENT CAN SCHEDULE INSPECTION. THE RESIDENT ENGINEER SHALL CONTACT MR. ADAM FOWLER AT ADAM.FOWLER@ILLINOIS.GOV (217) 524-0634 OR PATRICK MURPHY AT PATRICK MURPHY@ILLINOIS GOV (217) 557-5570 WITH CENTRAL OFFICE THREE DAYS PRIOR TO MILLING THE AUTOMATIC TRAFFIC RECORDER.
- MATERIALS RESULTING FROM THE ROUTING OF CRACKS IN THE EXISTING PAVEMENT MAY BE PLACED, SHAPED AND COMPACTED TO THE SATISFACTION OF THE ENGINEER ALONG EXISTING AGGREGATE SHOULDERS ADJACENT TO THE PAVEMENT. ALL MATERIALS RESULTING FROM THE ROUTING OF CRACKS IN PAVEMENTS WITHOUT AGGREGATE SHOULDERS AND SURPLUS MATERIALS RESULTING FROM THE ROUTING OF CRACKS IN PAVEMENTS WITH AGGREGATE SHOULDERS, WHERE ALL MATERIALS ARE NOT PLACED ALONG EXISTING AGGREGATE SHOULDERS, SHALL BE DISPOSED OF AS SPECIFIED IN ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.
- 16. ALL SIGNS MUST BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SOECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2022, THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE IDOT BUREAU OF DESIGN AND ENVIRONMENT HIGHWAY STANDARDS AND LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- 17. THE "ROAD CONSTRUCTION AHEAD" SIGNS SHALL REMAIN INSTALLED UNTIL THE COMPLETION OF THE PROJECT OR WHEN NO ROADWAY HAZARDS REMAIN WITHIN THE WORK ZONE.
- 18. ALL CRACK ROUTING & CRACK SEALING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. CRACK ROUTING SHALL BE OMITTED WHERE VEHICLE DETECTOR LOOPS & RAISED REFLECTIVE PAVEMENT MARKERS ARE PRESENT IN THE PAVEMENT.
- 19. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS
- 20. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. AREAS OF SEVERE RUTTING SHALL BE DETERMINED BY ENGINEER BEFORE
- 21. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON PLANS SHALL BE PLACED AT NO ADDITIONAL COST TO THE
- 22. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS
- 23. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 24. ALL MILLED SURFACES SHALL BE A UNIFORM CROSS SLOPE PER LANE AND FREE OF RIDGES BETWEEN PASSES. ANY DEVIATIONS SHALL BE CORRECTED AT NO COST TO THE DEPARTMENT.
- 25. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS

USER NAME = Nedal.Qarut	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 6/30/2023	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  US 14 - DIVISION STREET: BRINK STREET TO EAST OF PARK LANE DRIVE INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES SHEET 1 OF 1 SHEETS STA.

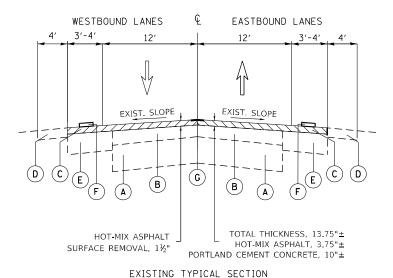
SECTION COUNTY FAP 0305 22 RS2 MCHENRY 34 CONTRACT NO. 62T64

	SUMMARY OF QUANTITIES					TRUCTION TYPE	CODE			SHAMA	RY OF QUANTITIES					RUCTION T	YPE CODE	
	SOMMAN OF GUARTITIES		TOTAL	1	JTOMATIC CR					JUMMAI	J. GONNIIILJ		TOTAL	SMART	AUTOMATIC CRK TRAFFIC	& JNT SL		
CODE NO	ITEM U	) TINL	QUANTITIES URBAN	20% STATE 20	0% STATE 20	O% FED O% STATE OOO5			CODE NO		ITEM	UNIT		80% EED	80% FED 20% STATE 20%	% FED STATE 005		
40600290	BITUMINOUS MATERIALS (TACK COAT) PO	OUND	60910	60910					45100200	CRACK FILLIN	G	POUND	5975			5975		
40600370	LONGITUDINAL JOINT SEALANT F	FOOT	56575	56575					48102100	AGGREGATE WE	DGE SHOULDER, TYPE B	TON	2130	2130				
40600400	MIXTURE FOR CRACKS, JOINTS, AND	TON	205	205					64200108	SHOULDER RUM	BLE STRIPS, 8 INCH	F00T	72,520	72,520				
	FLANGEWAYS																	
									67100100	MOBILIZATION	i	L SUM	1	0.9		0. 1		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT SO	O YD	250	250														
	JOINT								70100450	TRAFFIC CONT	ROL AND PROTECTION.	L SUM	1	1				
										STANDARD 701	201							
40601005	HOT-MIX ASPHALT REPLACEMENT OVER	TON	2700	2700														
	PATCHES								70100600	TRAFFIC CONT	ROL AND PROTECTION.	L SUM	1	1				
										STANDARD 701	336							
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5,	TON	11370	11370														
	MIX "D", N70								70102622	TRAFFIC CONT	ROL AND PROTECTION.	L SUM	1	0.1		0. 9		
										STANDARD 701	502							
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 SO	O YD	135346	135346														
	1/2"								70102635	TRAFFIC CONT	ROL AND PROTECTION.	L SUM	1	0.1		0. 9		
										STANDARD 701	701							
44002215	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3	O YD	12850	12850														
	3/4"								70102640	TRAFFIC CONT	ROL AND PROTECTION.	L SUM	1			1		
										STANDARD 701	801							
44201798	CLASS D PATCHES, TYPE I, 13 INCH	O YD	500	500														
									70300100	SHORT TERM P	AVEMENT MARKING	FOOT	15760	15760				
44201803	CLASS D PATCHES, TYPE II, 13 INCH	O YD	5500	5500														
									70300150	SHORT TERM P	AVEMENT MARKING REMOVAL	SO FT	5225	5225				
44201807	CLASS D PATCHES, TYPE III, 13 INCH	O YD	2850	2850														
									70300211		VEMENT MARKING LETTERS AND	SO FT	345	345				$\perp$
44201809	CLASS D PATCHES, TYPE IV, 13 INCH SO	O YD	4000	4000						SYMBOLS - PA	INT							
45100100	CRACK ROUTING (PAVEMENT) F	F00T	20900			20900											* = SPECIA △ = NON-PA	RTICIPATII
FILE NAME =	USER NAME = NedalDaruf DESIGNED	D		REVISED -							US 14 – DIVISION STREET: BRINK	STREET TO	FAST OF PA	BK IVNE DD	IVE F.A.P.	SECTION	WORK (	TOTAL SH SHEETS N
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		-		REVISED -			DEL AU I ME	UP IR	ANSFURIA		SCALE: SHEET NO. 1 OF 3			O STA.	FED. ROAD DIS	T. NO. 1 (ILLINOIS		CT NO. 62T

Column   11		SUMMARY OF QUANTITIES				CONSTRUCTIO	N TYPE CODE			SUMMARY OF QUANTITIES				DNSTRUCTION TYPE	CODE	
Control   Time		SUMMERCE OF GUARTITIES		TOTAL		TRAFFIC				SUMMANT OF GUNNITIES		TOTAL	TRAFFIC	CRK & JNT SL		
Part	CODE NO	ITEM	UNIT	QUANTITIES 2	0% STATE	80% FED 20% STATE			CODE NO	ITEM	UNIT	QUANTITIES	20% STATE 80% FED 20% STATE	20% STATE		
Page	70300221	TEMPORARY PAVEMENT MARKING - LINE 4"-	FOOT	42960	42960			:	* 78000600	THERMOPLASTIC PAVEMENT MARKING - LIN	NE FOOT	450	450			
Part		PAINT								12"						
Part	70300241	TEMPORARY PAVEMENT MARKING - LINE 6"-	FOOT	1000	1000				* 78000650	THERMOPLASTIC PAVEMENT MARKING - LIN	NE FOOT	245	245			
Part		PAINT														
Part																
TRESSEE PARTIEST MARTING - LINE 22"   FOOT   456   450	70300251		FOOT	530	530			:	* 78009000		- SO FT	1410		1410		
PAINT		FAINI								LETTERS AND SIMBOLS						
100002021   100000000   100000000   100000000   100000000	70300261	TEMPORARY PAVEMENT MARKING - LINE 12"-	FOOT	450	450			:	* 78009004	MODIFIED URETHANE PAVEMENT MARKING -	- F00T	27120	470	26650		
PAINT		PAINT								LINE 4"						
PAINT	70300281	TEMPORARY PAVEMENT MARKING - LINE 24"-	FOOT	245	245				* 78009006	MODIFIED URETHANE PAVEMENT MARKING	- F00T	5760		5760		
THE CLIT TAPE  LINE 8"  LINE 8"  ** 78000100  THERMOPLASTIC PAVEMENT MARKING - 50 FT 345 345  LINE 12"  ** 78000200  THERMOPLASTIC PAVEMENT MARKING - LINE  FOOT 42960  4"  ** 78000200  THERMOPLASTIC PAVEMENT MARKING - LINE  FOOT 1000  THERMOPLASTIC PAVEMENT MARKING - LINE  FOOT 1000  THERMOPLASTIC PAVEMENT MARKING - LINE  FOOT 530  THERMOPLASTIC PAVEMENT MARKING - LINE  FOOT 53																
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TREMBURASTIC PAVEMENT MARKING - SO FT 345 345   # 7800012   MODIFIED URETHANE PAVEMENT MARKING - FOOT 540 540 540	70306120		FOOT	39540	39540			:	* 78009008		- F00T	265		265		
LETTERS AND SYMBOLS		TYPE III TAPE								LINE 8"						
TREMORDIA STIC PAVEMENT MARKING - LINE	78000100	THERMOPLASTIC PAVEMENT MARKING -	SQ FT	345	345			:	* 78009012	MODIFIED URETHANE PAVEMENT MARKING	- F00T	540		540		
A"   LINE 24"   LINE		LETTERS AND SYMBOLS								LINE 12"						
T8000400   THERMOPLASTIC PAVEMENT MARKING - LINE   FOOT   1000   1000	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	42960	42960			:	* 78009024	MODIFIED URETHANE PAVEMENT MARKING	- F00T	570		570		
6"  78300200 RAISED REFLECTIVE PAVEMENT MARKER EACH 915 915  REMOVAL  8"  78300202 PAVEMENT MARKING REMOVAL - WATER SO FT 415 415  ★ 78300202 PAVEMENT MARKING REMOVAL - WATER SO FT 415 415  ★ 78300202 PAVEMENT MARKING REMOVAL - WATER SO FT 415 415  ★ 2 SPECIALTY SON-PARTICE WORK-PARTICE WO		4"								LINE 24"						
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# 78300202 PAVEMENT MARKING - LINE FOOT 530 530 REMOVAL # 78300202 PAVEMENT MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION COUNTY TO SHAPE - MARKING REMOVAL - WATER SO FT 415 # SECTION CO	18000400		1001	1000	1000				√ \(\(\alpha\) \(\alpha\) \(\alp	RAISED REFLECTIVE PAVEMENT MARKER	LACH	915	312			
8"  * 78300202 PAVEMENT MARKING REMOVAL - WATER SO FT 415 415  * SPECIALTY  BLASTING  * SUSER NAME : Medilibrial DESIGNED - REVISED - WORK (100%)  FILE NAME : USER NAME : Medilibrial DESIGNED - REVISED - WORK (100%)  * STATE OF HUNDIS  ** USER NAME : Medilibrial DESIGNED - REVISED - COUNTY TO SHAPE TO BE STATE OF HUNDIS  ** SPECIALTY  *									78300200	RAISED REFLECTIVE PAVEMENT MARKER	EACH	915	915			
* 78300202 PAVEMENT MARKING REMOVAL - WATER SO FT 415 415  ** SPECIALTY  ** SPECIALTY  ** SPECIALTY  ** NON-PARTIC  ** WORK (100%)  ** STATE OF HUNOIS  ** STATE OF HUNOIS  ** TREET: BRINK STREET TO EAST OF PARK LANE DRIVE  ** RIE. SECTION  ** SECTION  ** COUNTY SH	78000500		FOOT	530	530					REMOVAL						
BLASTING    STATE OF HILINOIS   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   F.A.P.   SECTION   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   STREET: BRINK STREET TO EAST OF PARK LANE DRIVE   STREET   STREET   STREET   STREET   STREET   STREET		8"							* 78300202	PAVEMENT MARKING REMOVAL - WATER	SQ FT	415	415			
FILE NAME : USER NAME : Mediclorul DESIGNED - REVISED -  STATE OF HILINOIS  US 14 - DIVISION STREET: BRINK STREET TO EAST OF PARK LANE DRIVE RIE. SECTION COUNTY SHE														*	= NON-PARTI	CIPATIN
pw:\/ldat-pu.beniley.com=rmituri vb.curenisvituri vtro jeds\vartheritor.com=rmituri vtro					<del>-</del>			CTATE OF	LLINIOLO	US 14 – DIVISION STREET:	BRINK STREET TO	EAST OF PA	ARK LANE DRIVE F.A.P.	SECTION		TOTAL SHE
PLOT SCALE = 100,0000 1/ In. CHECKED - CONTRACT N  SUMMARY OF QUANTITIES  SUMMARY OF QUANTITIES  SUMMARY OF QUANTITIES  305 FAP 0305 22 RS2 MCHENRY   1	w:\\ildot-pw.bentley.com				<del>-</del>	· 	DEPAR			CLINA	MARY OF QUAN	TITIES	305	FAP 0305 22 RS2	MCHENRY	34 4

	SUMMARY OF QUANTITIES					NSTRUCTIO	CODE			CLIMANA	ARY OF QUANTITIES				CO	NSTRUCTIO	N TYPE CO	DE	
	SUMMINITY OF QUANTITIES		<sub>TOTA</sub> .	SMART	AUTOMATIC TRAFFIC RECORDER					SUMMA	MILL OF GOWNITHES	1	TATA:	SMART	AUTOMATIC TRAFFIC	CRK & JNT SL			
CODE NO	ITEM	UNIT	TOTAL QUANTITIES URBAN	80% FED 20% STATE 0005	RECORDER 80% FED 20% STATE OO21	80% FED 20% STATE 0005			CODE NO		ITEM	UNIT	TOTAL QUANTITIES URBAN	80% FED 20% STATE 0005	RECORDER 80% FED 20% STATE 0021	80% FED 20% STATE 0005			
* 88600100	DETECTOR LOOP, TYPE I	FOOT	300		300														
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	555	555															
x0326898	CENTER LINE - RUMBLE STRIP - 16"	FOOT	36260	36260															
x2020110	GRADING AND SHAPING SHOULDERS	UNIT	730	730															
x6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	12	11		1													
* x7800815	HOT SPRAY THERMOPLASTIC PAVEMENT	FOOT	88850	88850															
	MARKING LINE - 4 INCH																		
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	155	103		52													
* X0301242	PIEZO AXLE SENSOR, CLASS II	EACH	2		2														
Ø z0076600	TRAINEES	HOURS	500	500															
Ø 20076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOURS	500	500															
																	* = S	Ø PECIALTY ON-PARTIC	0042
FILE NAME = pw:\Vidot-pw.bentiey.com	n-PWIDOT-Documents-VDOT Offices-District N-Projects-Di21922-CADData-Design-Di21922-sht-Sq. PLOT SCALE = 100,0000 '/ In.	DESIGNED -  DEMANN -  CHECKED -  DATE -		REVISED REVISED REVISED REVISED	- - -			ATE OF IL	LINOIS Ansporta		US 14 - DIVISION STREET: BRI SUMMA  SCALE: SHEET NO. 3 OF	RY OF QUANT	TITIES	RK LANE I	305 [		ON 22 RS2	COUNTY TO SHOULD	STATE) OTAL SHEET HEETS NO. 34 5

#### US 14 (DIVISION STREET)



\* = SHOULDER RUMBLE STRIPS CUT ON EDGE LINE EASTBOUND & WESTBOUND

\* STA 85+00 - STA 295+00 STA 297+34 - STA 437+38

US 14 (DIVISION STREET)

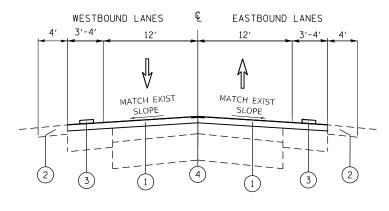
MEDIAN/TURN LANE

7'-12'

EXIST. SLOPE

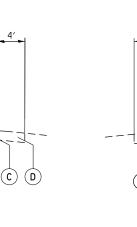
HOT-MIX ASPHALT SURFACE REMOVAL, 1½"

#### US 14 (DIVISION STREET)



PROPOSED TYPICAL SECTION \* STA 85+00 - STA 295+00 STA 297+34 - STA 437+38

\* = SHOULDER RUMBLE STRIPS CUT ON EDGE LINE EASTBOUND & WESTBOUND

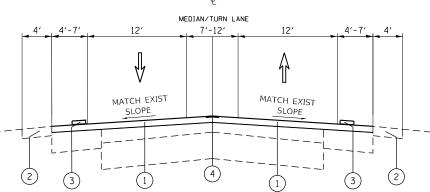


EXISTING TYPICAL SECTION

(G)

- STA 15+91 STA 71+39 \* STA 72+47 STA 85+00
- \* = SHOULDER RUMBLE STRIPS CUT ON EDGE LINE EASTBOUND & WESTBOUND

US 14 (DIVISION STREET)



PROPOSED TYPICAL SECTION

- STA 15+91 STA 71+39 \* STA 72+47 STA 85+00
- \* = SHOULDER RUMBLE STRIPS CUT ON EDGE LINE EASTBOUND & WESTBOUND

#### **LEGEND - EXISTING:**

- A PORTLAND CEMENT CONCRETE PAVEMENT 10"±
- B HOT-MIX ASPHALT PAVEMENT 3.75"±
- © HOT-MIX ASPHALT SHOULDER 8"±
- D AGGREGATE SHOULDER 6"±
- E HMA BASE WIDENING & SHOULDER
- F SHOULDER RUMBLE STRIPS, 8"
- G CENTERLINE RUMBLE STRIPS, 16"

#### **LEGEND - PROPOSED**

- $\bigcirc$  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70, 1 $^{1}\!\!/_{2}$ "
- 2) GRADING AND SHAPING SHOULDERS + AGGREGATE WEDGE SHOULDER, TYPE B
- 3 SHOULDER RUMBLE STRIPS, 8" 4 CENTERLINE RUMBLE STRIPS, 16"

HOT-MIX ASPHALT MIXTURE REQUIREMENTS QUALITY MANAGEMENT PROGRAM (QMP) MIXTURE TYPE AIR VOIDS(%) @ Ndes PAVEMENT HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70 4.0% @ 70 GYR. PATCHING 4% @ 70 GYR. QC/QA CLASS D PATCHES (HMA BINDER IL-19 MM) 4% @ 70 GYR. HOT-MIX ASPHALT REPLACEMENT OVER PATCHES (HMA BINDER IL-19 MM)

#### OMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)

#### <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 3: THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING. NOTE 4: LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE.

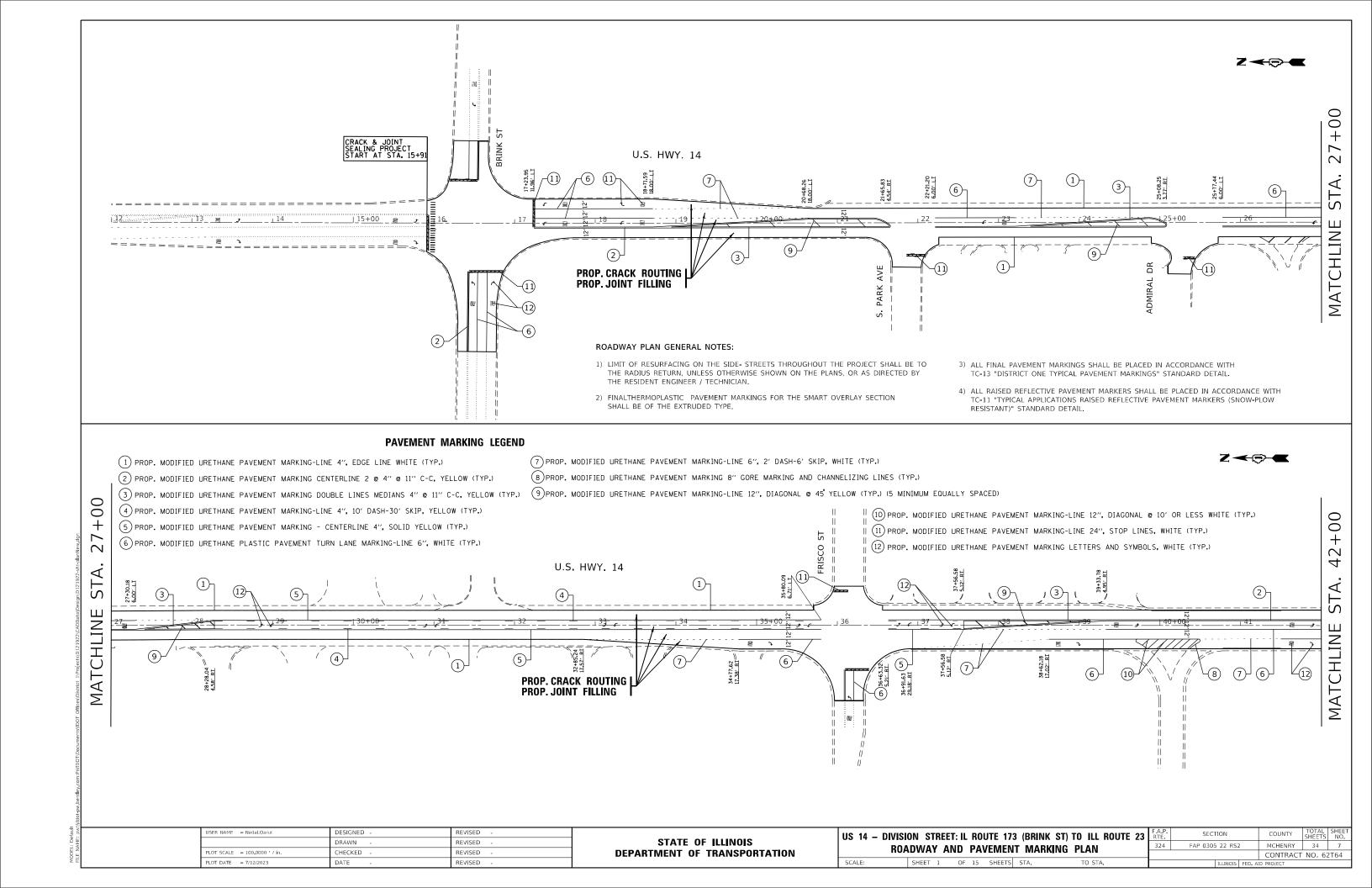
USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	
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PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	
PLOT DATE = 7/15/2023	DATE -	REVISED -	

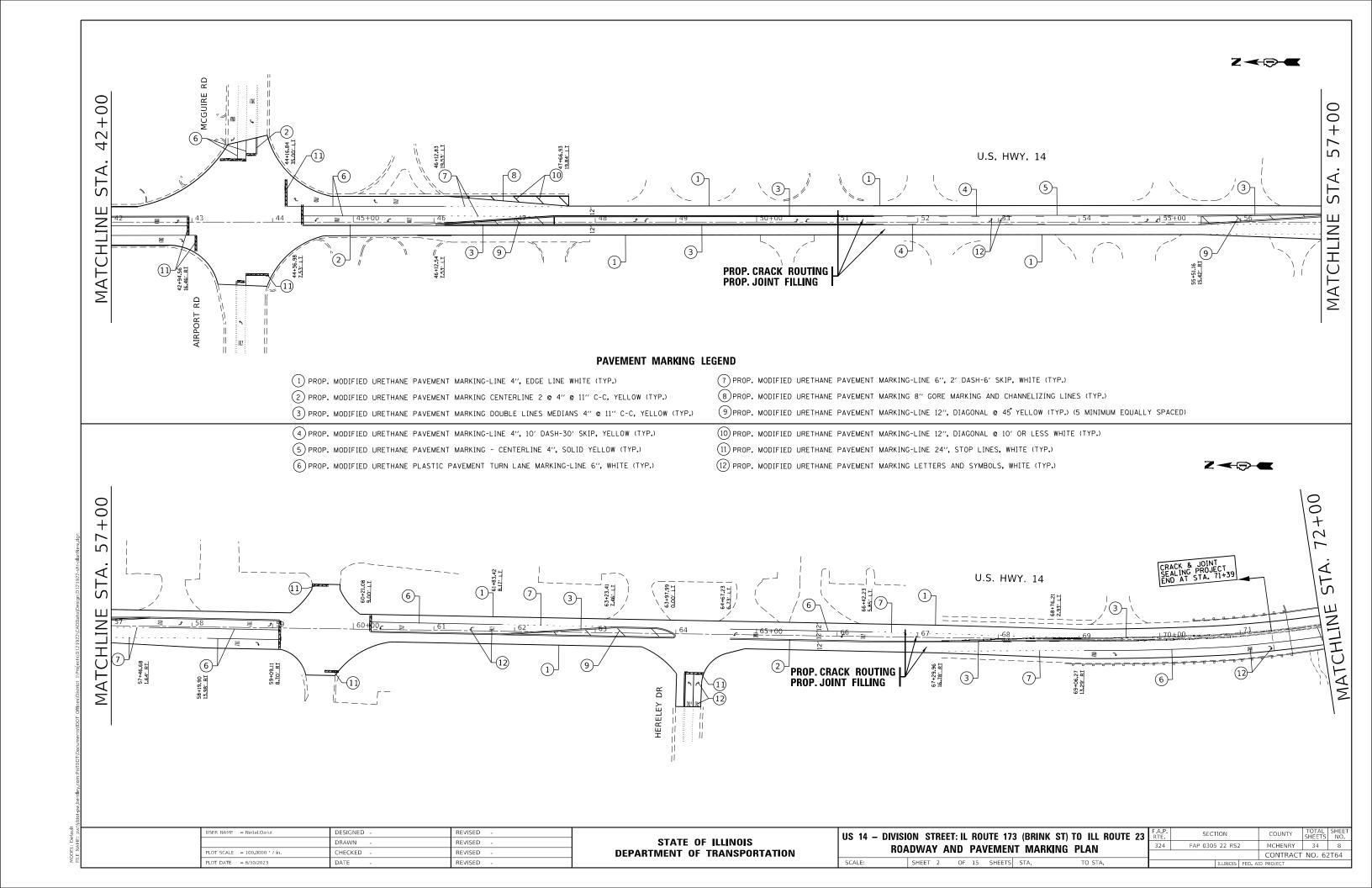
EXIST. SLOPE

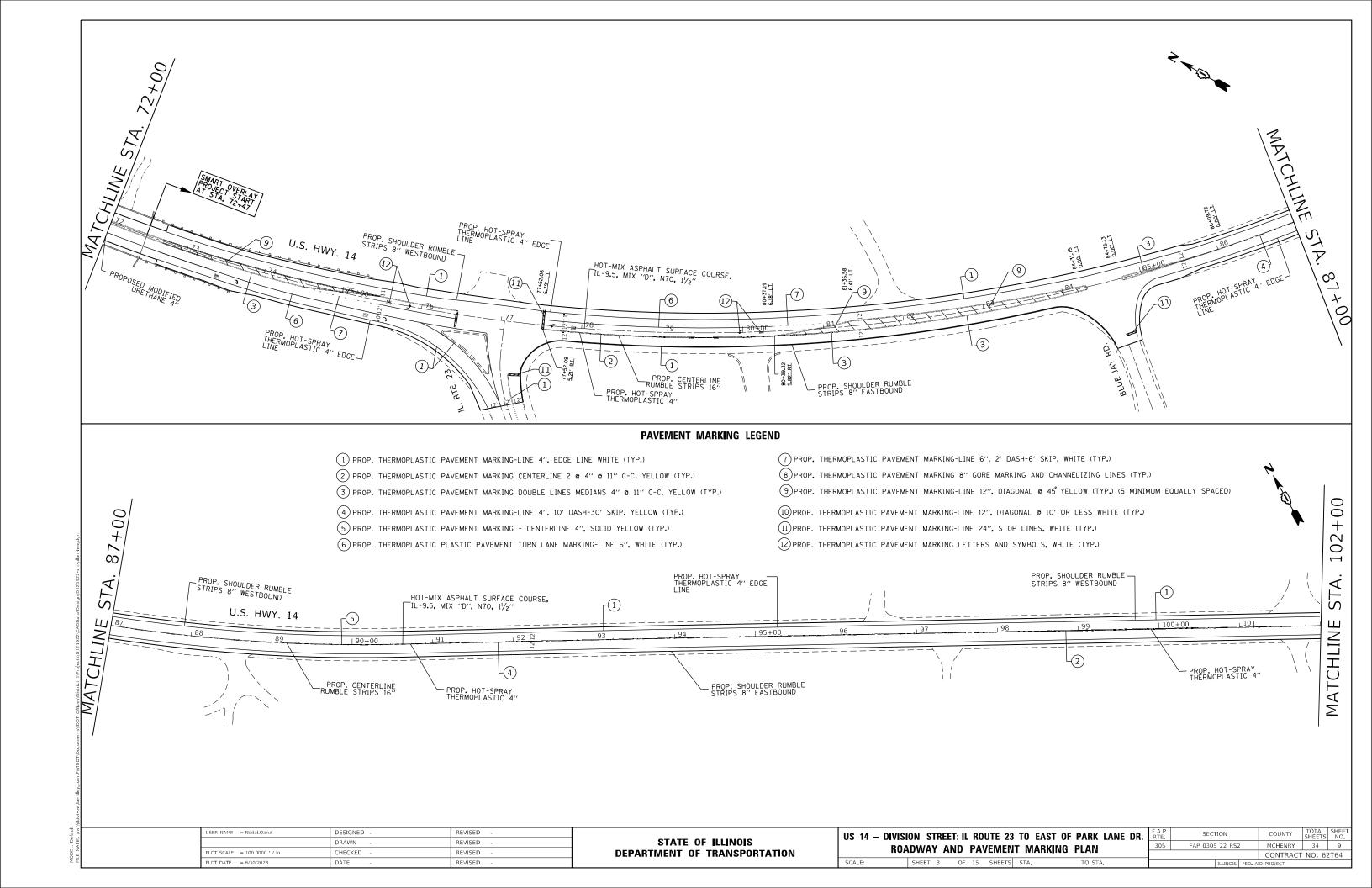
(E)

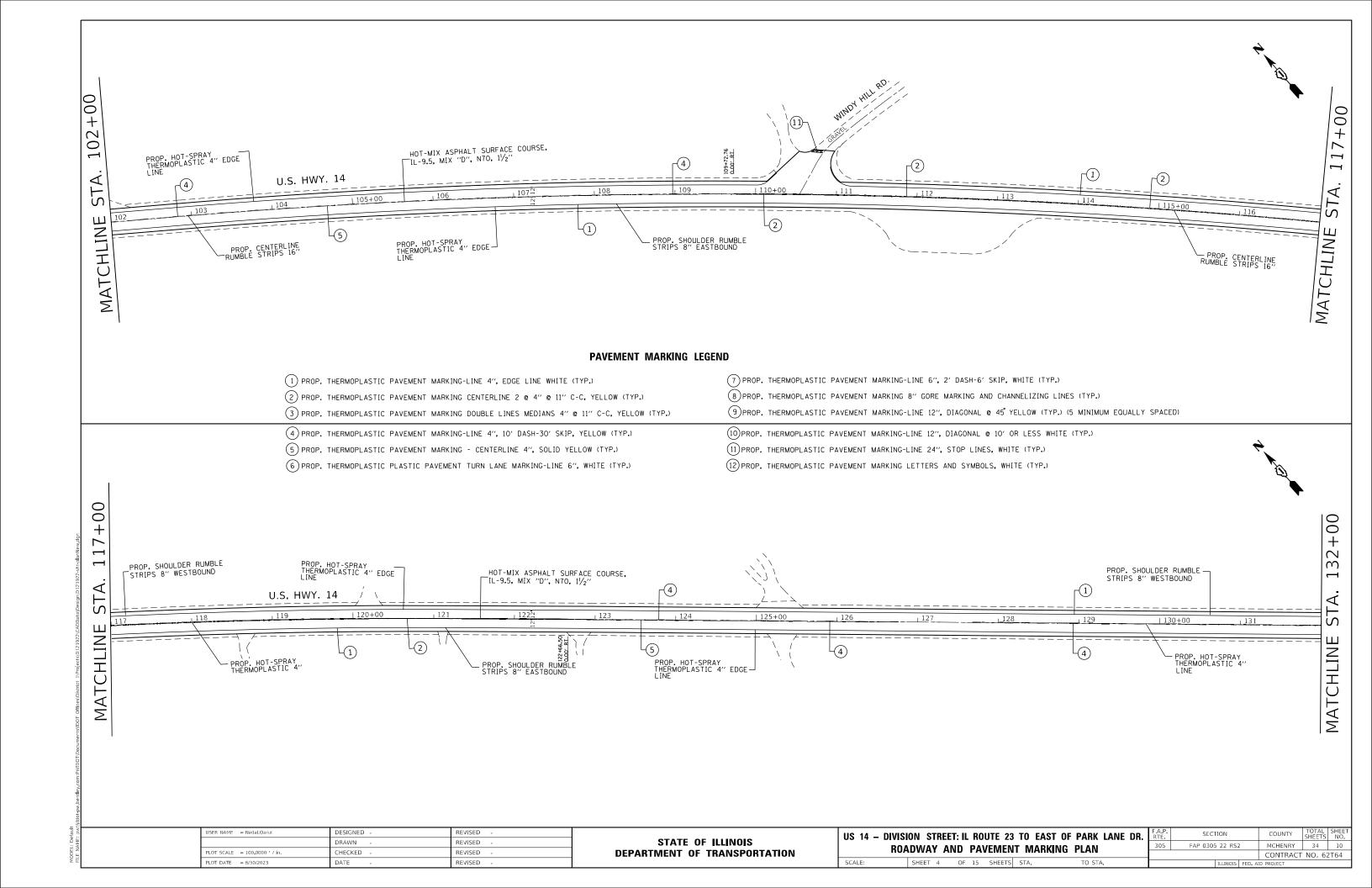
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  US

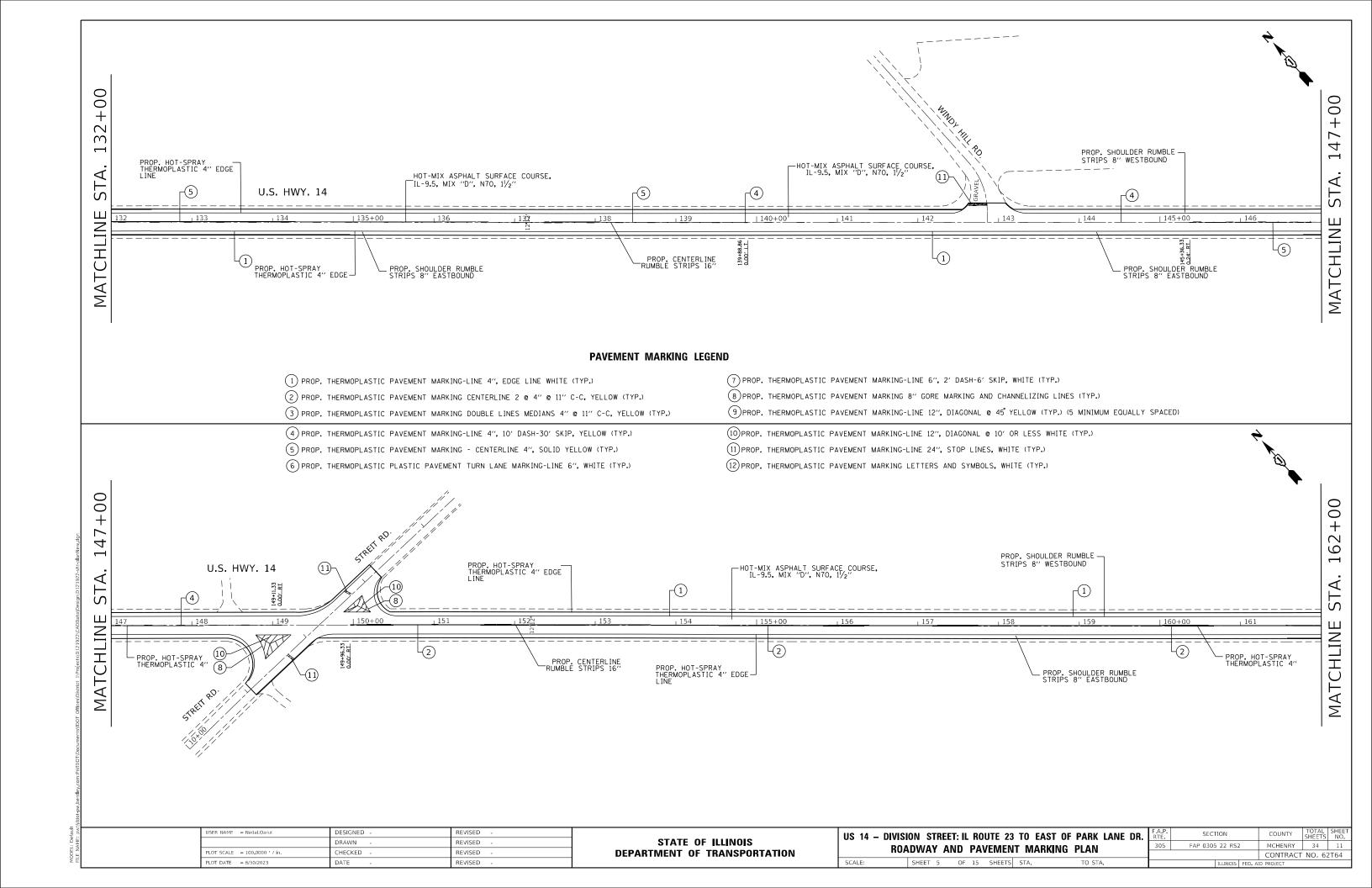
US 14 – DIVISIO	N STREET	BRI	NK	STREET	TO EA	ST OF PARK LANE DRIVE	F.A.P. RTE	SECT	ПОИ	COUNTY	TOTAL SHEETS	SHEET NO.
	TYPICAL SECTION									MCHENRY	34	6
	THICAL SECTION									CONTRACT	NO. 62	2T64
SCALE:	SHEET 1	OF	1	SHEETS	STA.	TO STA.			ILLINOIS FED	AID PROJECT		

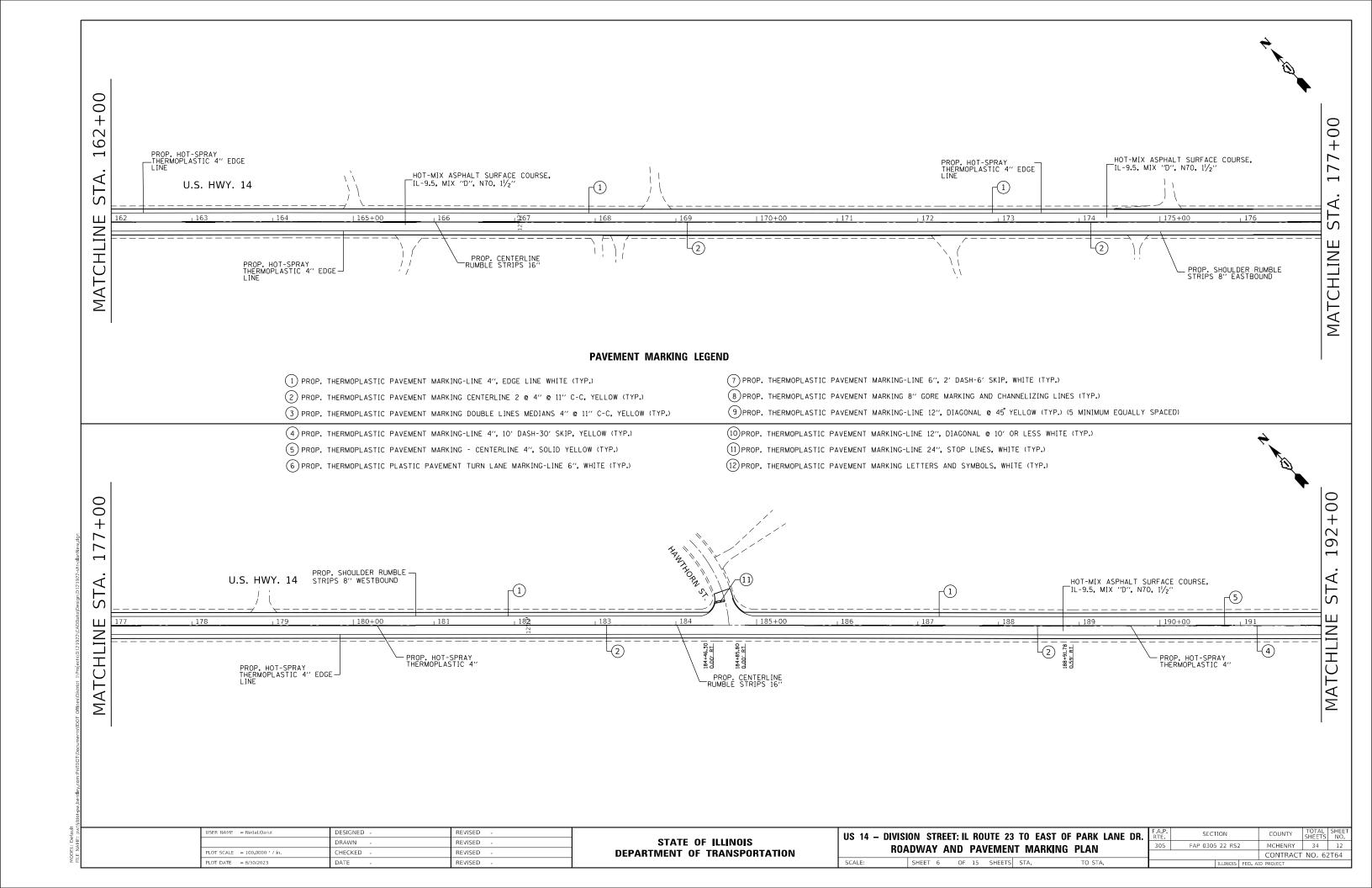


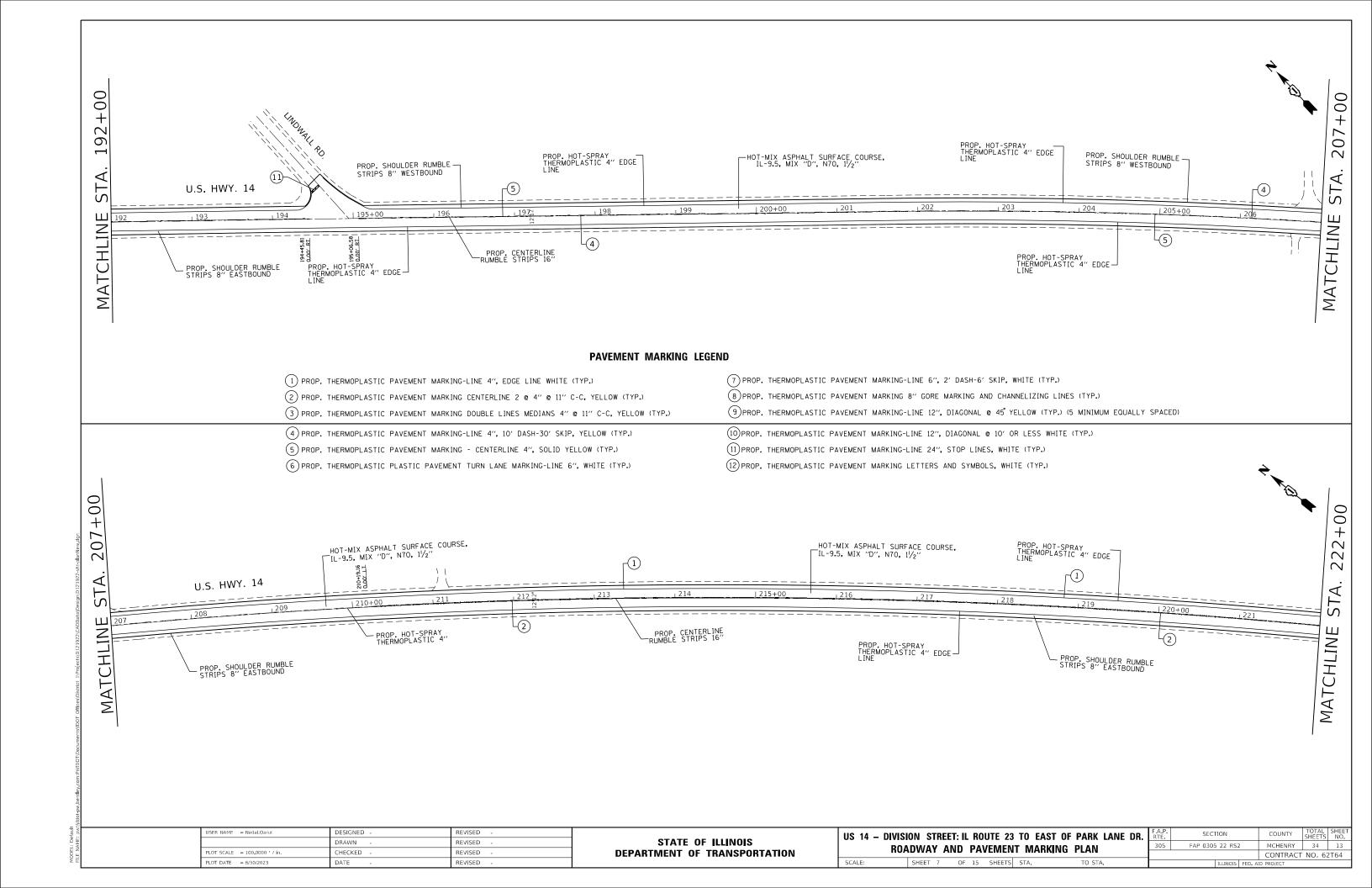


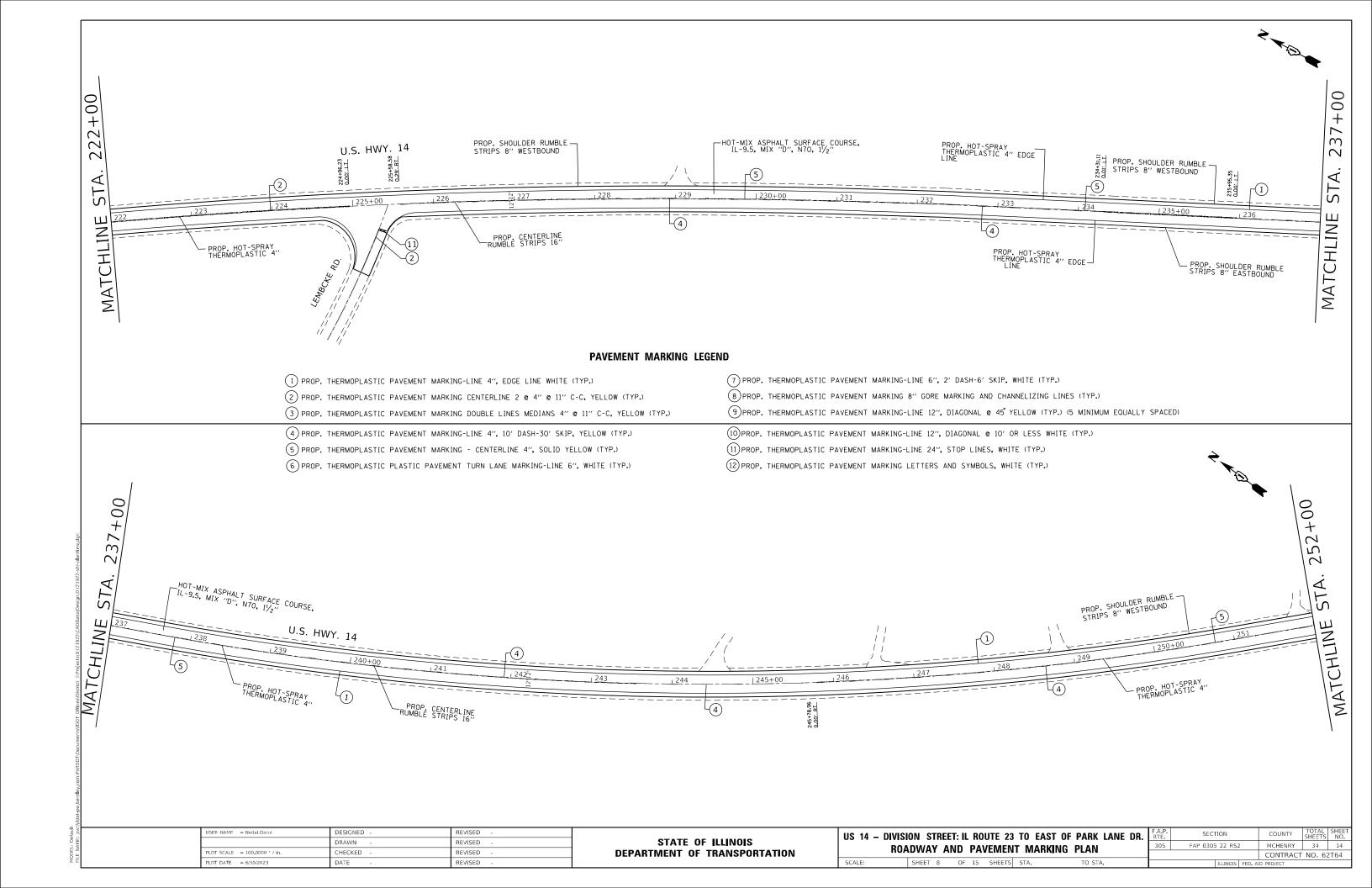


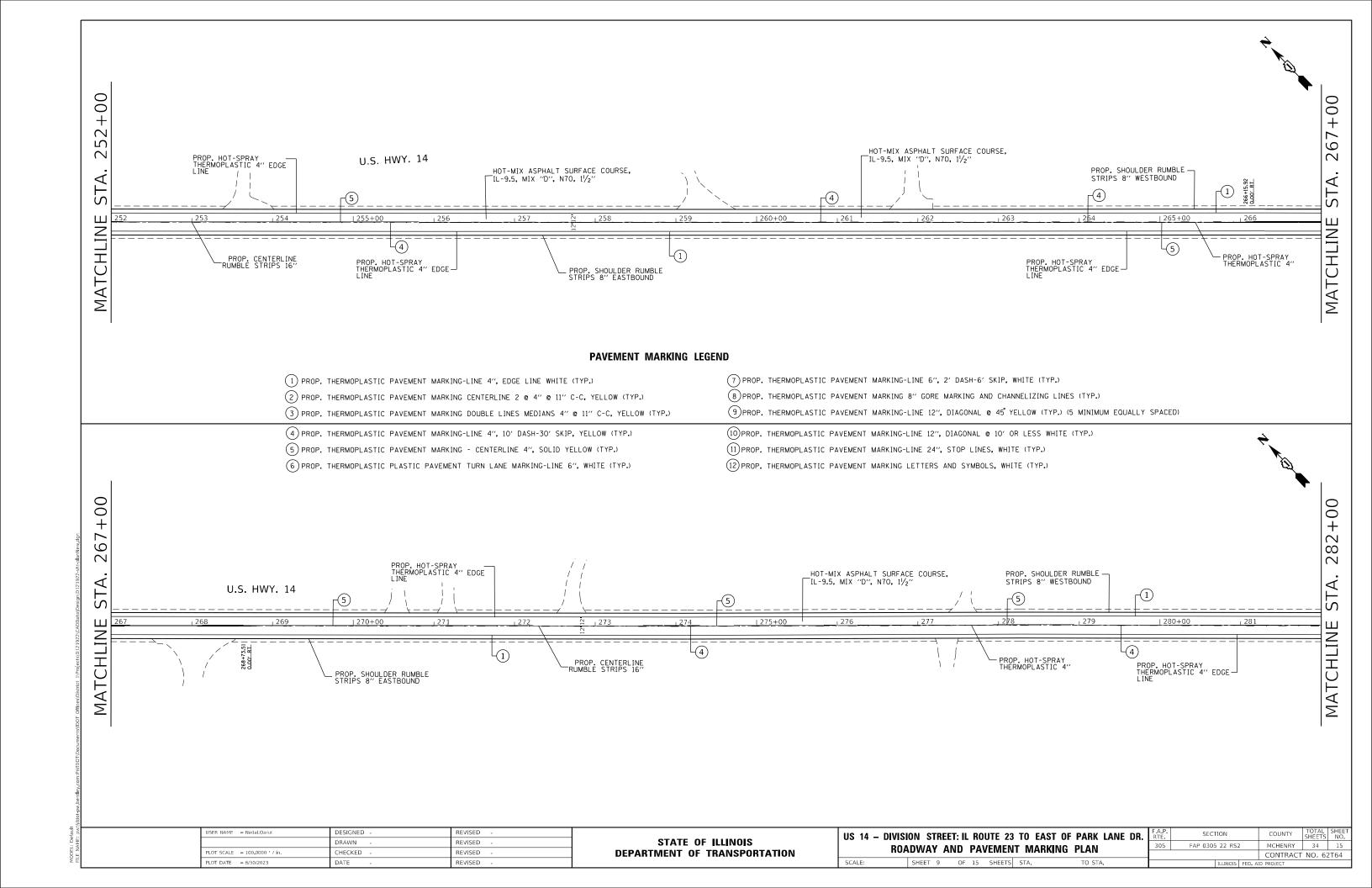


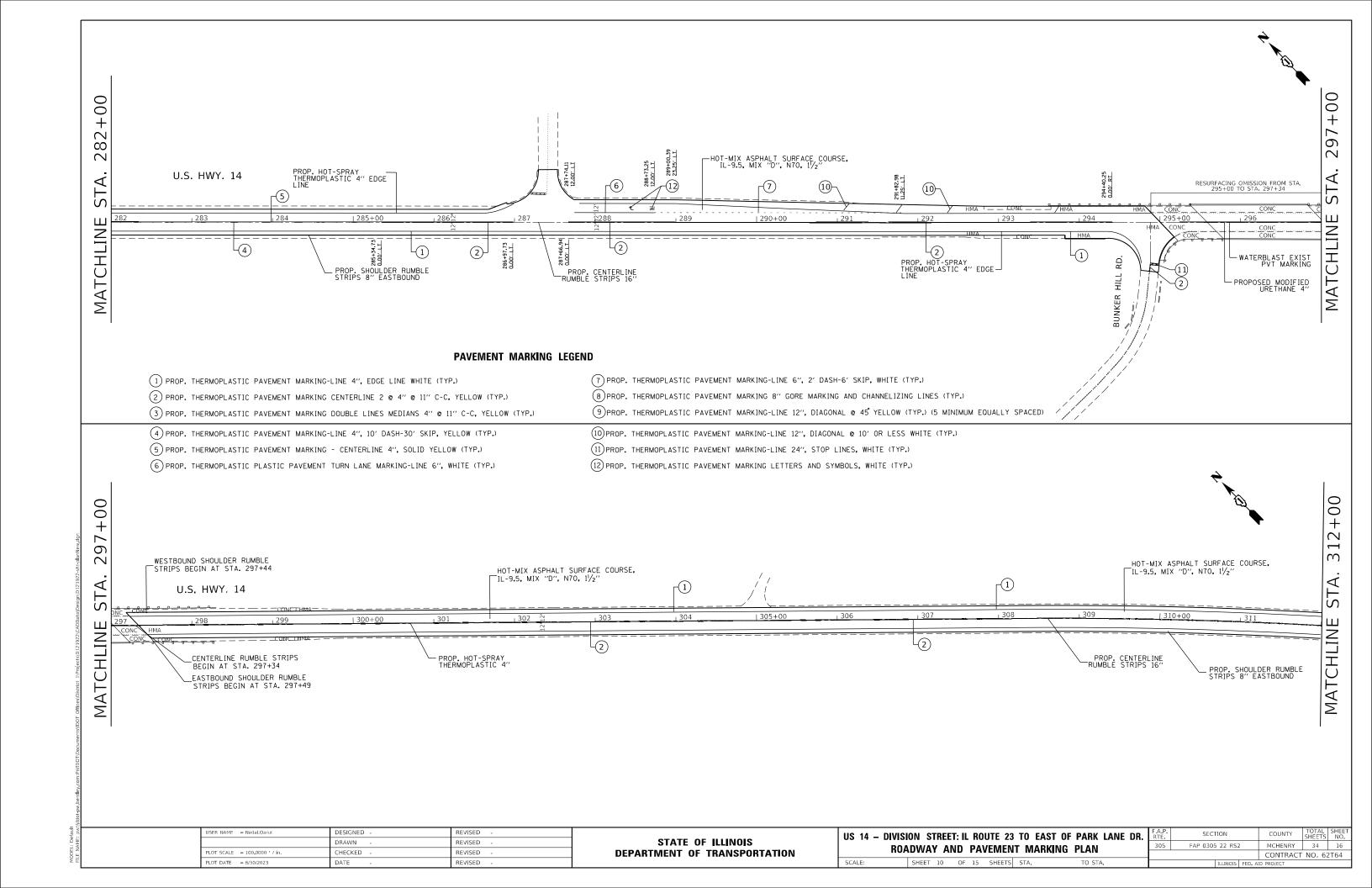


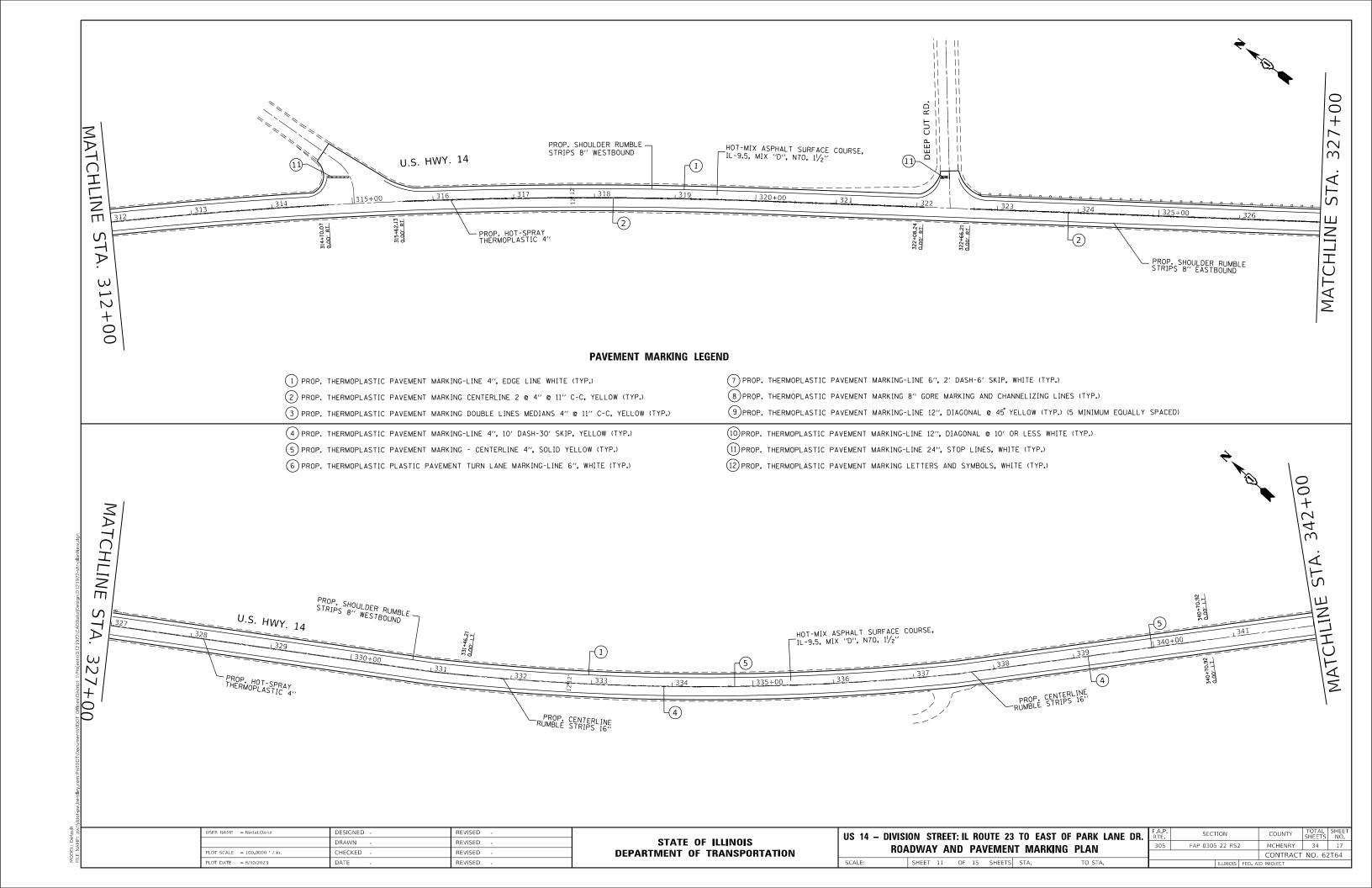


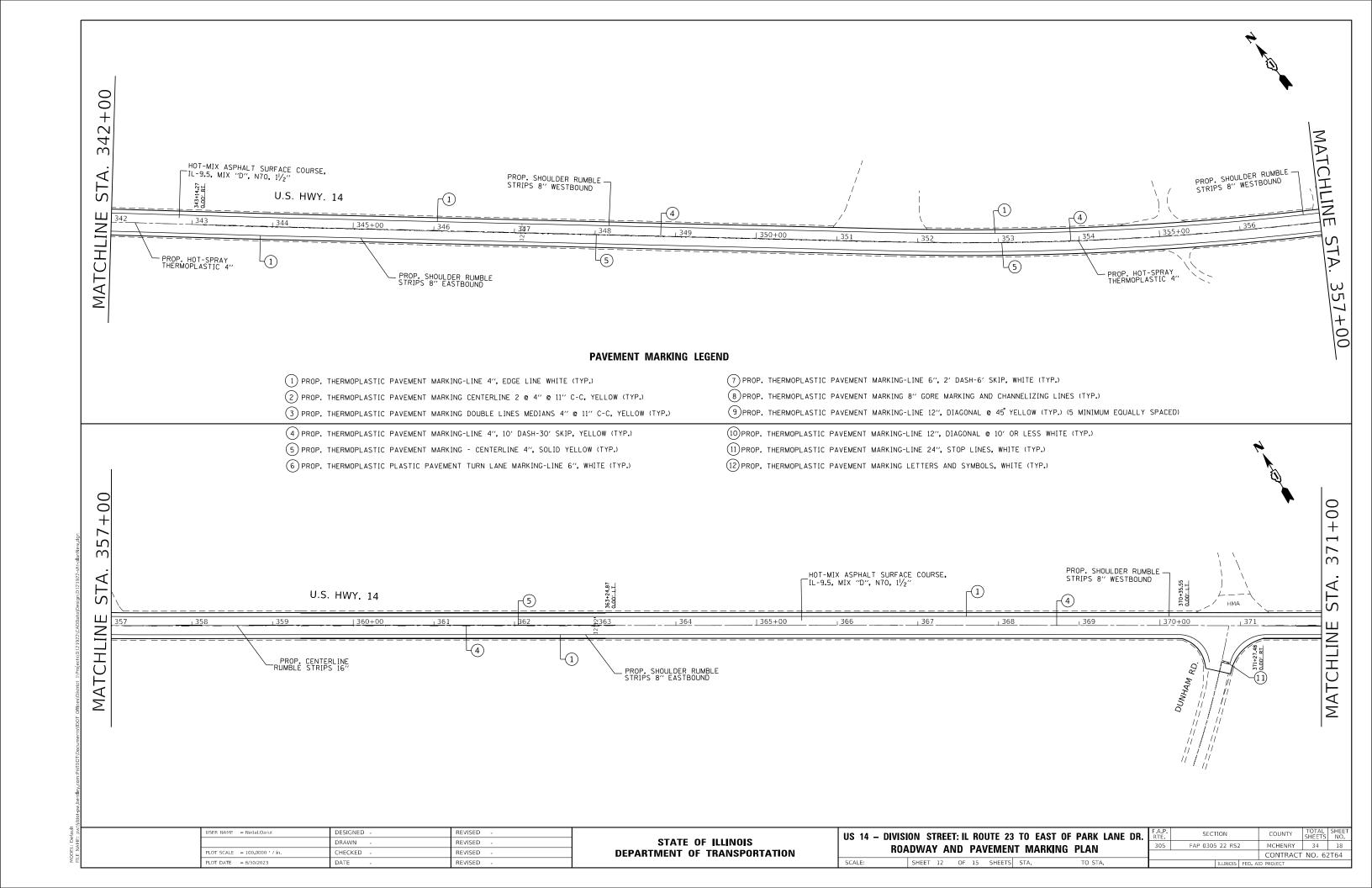


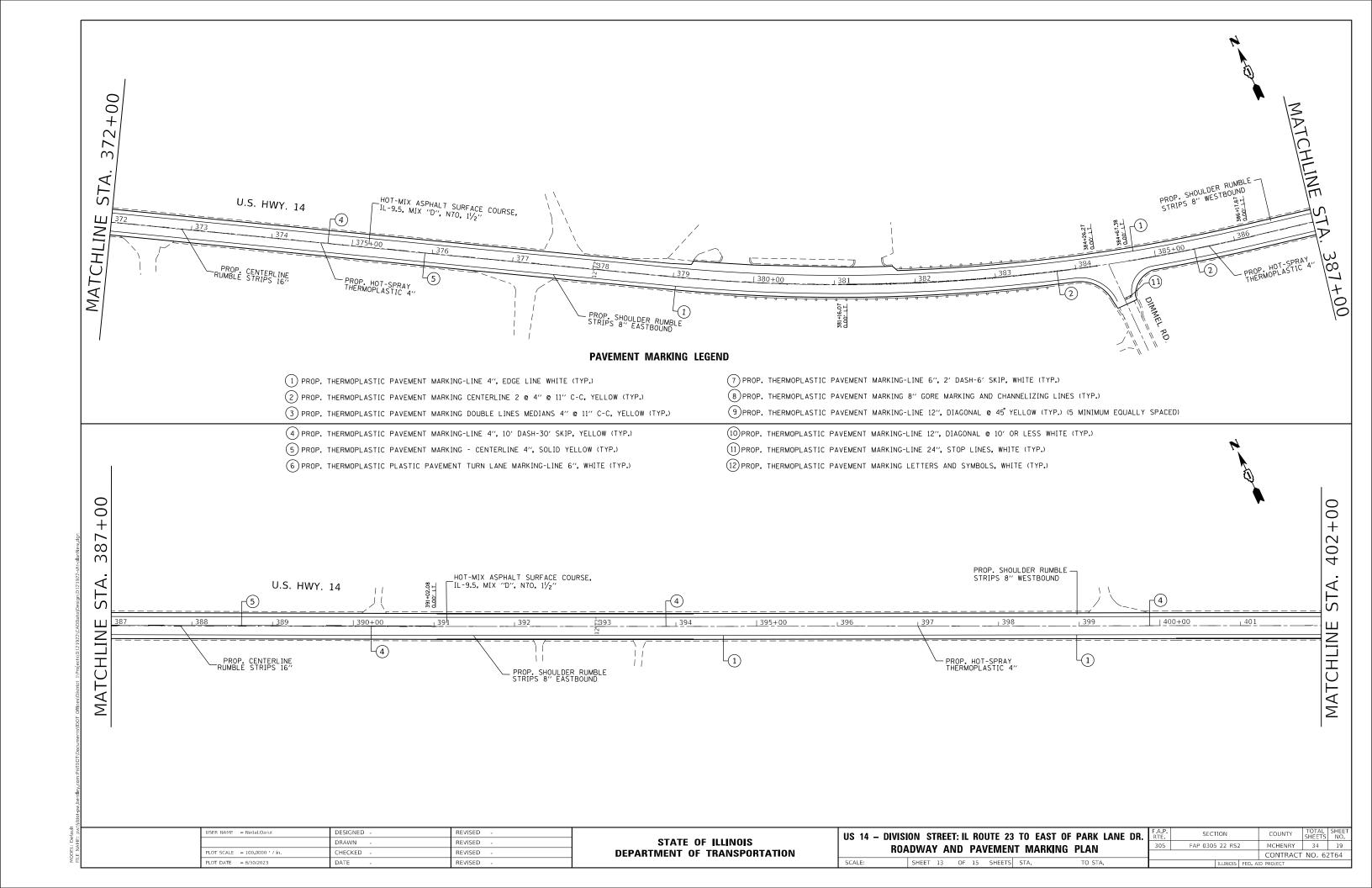


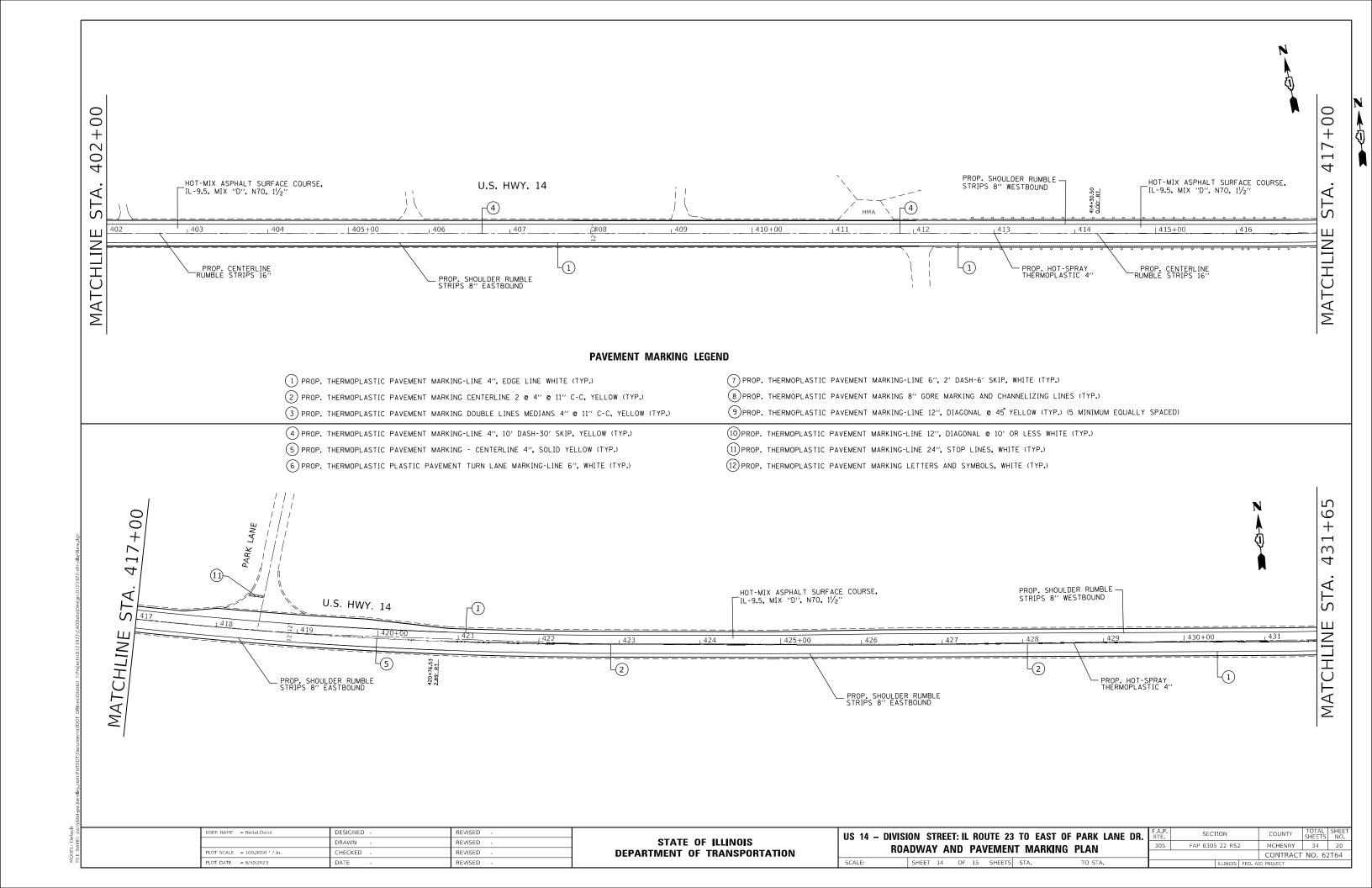


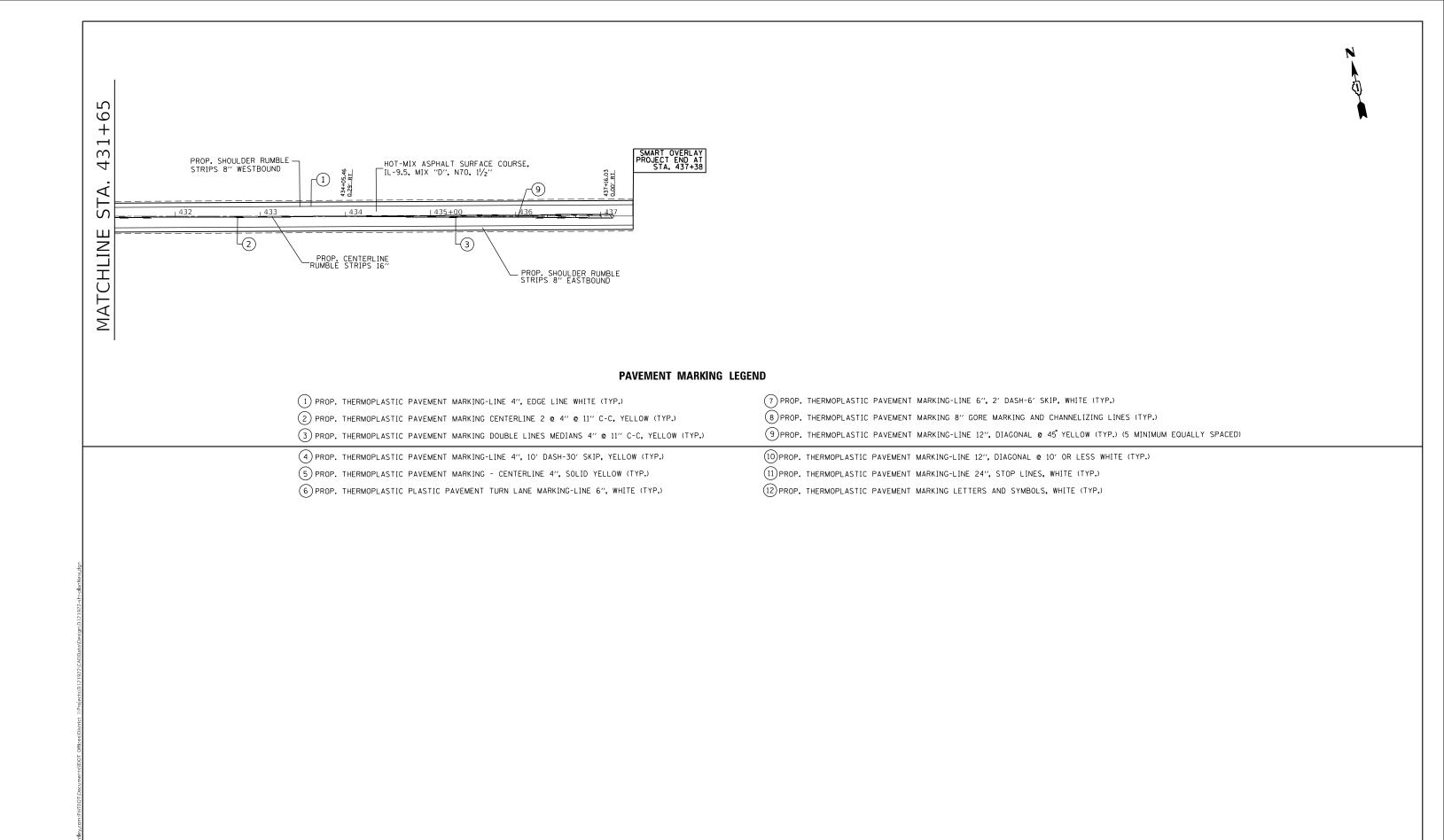












 USER NAME
 = Nedal,Qarut
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 PLOT SCALE
 = 100,0000 ' / in.
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 PLOT DATE
 = 6/30/2023
 DATE
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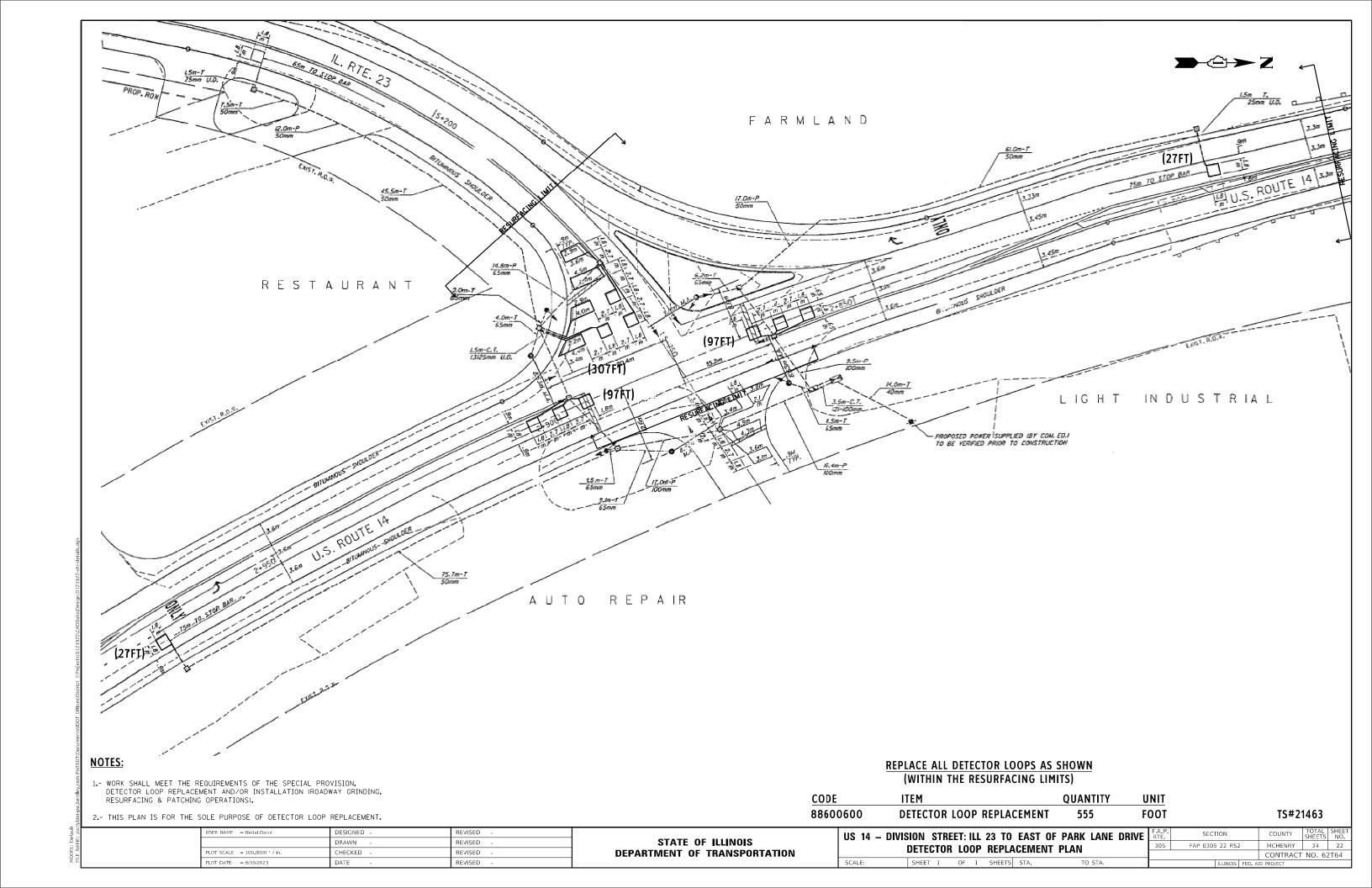
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 14 - DIVISION STREET: IL ROUTE 23 TO EAST OF PARK LANE DR.

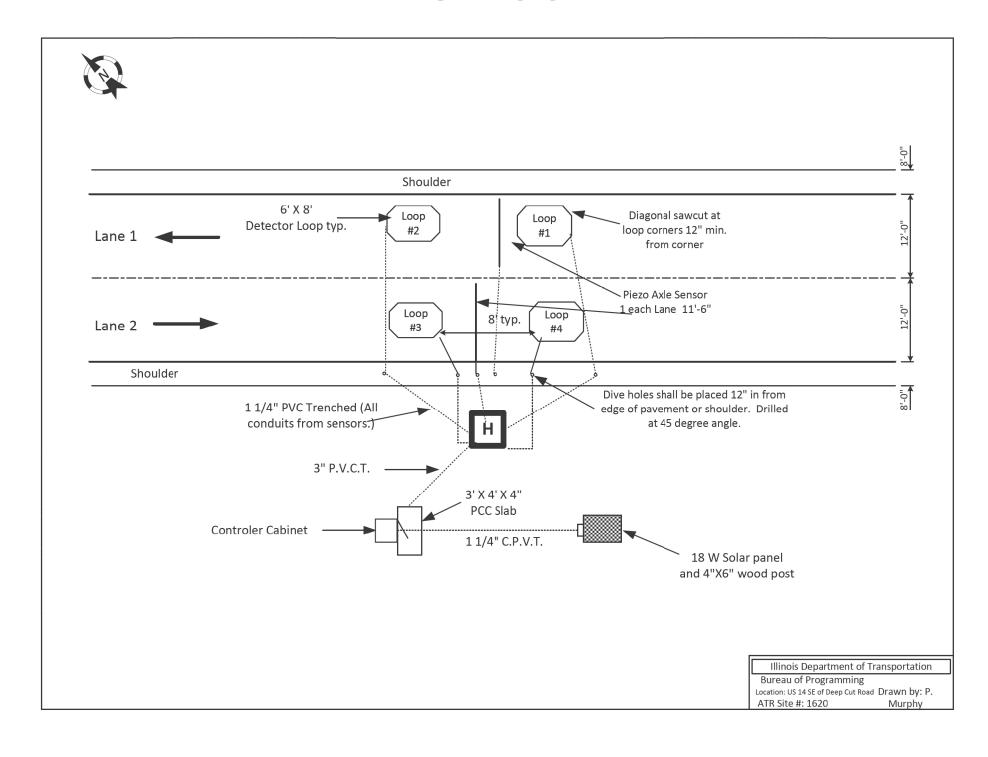
ROADWAY AND PAVEMENT MARKING PLAN

SCALE: SHEET 15 OF 15 SHEETS STA. TO STA.

F.A.P. SECTION COUNTY TOTAL SHEETS NO. 305 FAP 0305 22 RS2 MCHENRY 34 21 CONTRACT NO. 62T64



# Layout for ATR SITE 1620



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 PLOT SCALE
 = 100,0000 ' / in.
 CHECKED
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 PLOT DATE
 = 6/30/2023
 DATE
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 14 - DIVISION STREET: ILL 23 TO EAST OF PARK LANE DRIVE AUTOMATIC TRAFFIC RECORDER LAYOUT SITE 1620

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

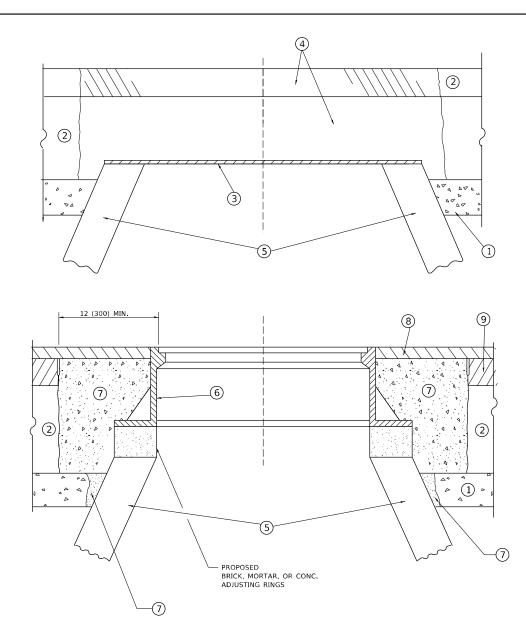
 F.A.P. RTE.
 SECTION
 COUNTY SHEETS NO.
 TOTAL SHEETS NO.

 305
 FAP 0305 22 RS2
 MCHENRY
 34
 23

 CONTRACT NO. 62T64

 ILLINOIS FED. AID PROJECT

MODEL: Default



### 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.

#### **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. 1 1/2 (40) 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-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

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

- 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

MCHENRY

CONTRACT NO. 62T64

34 24

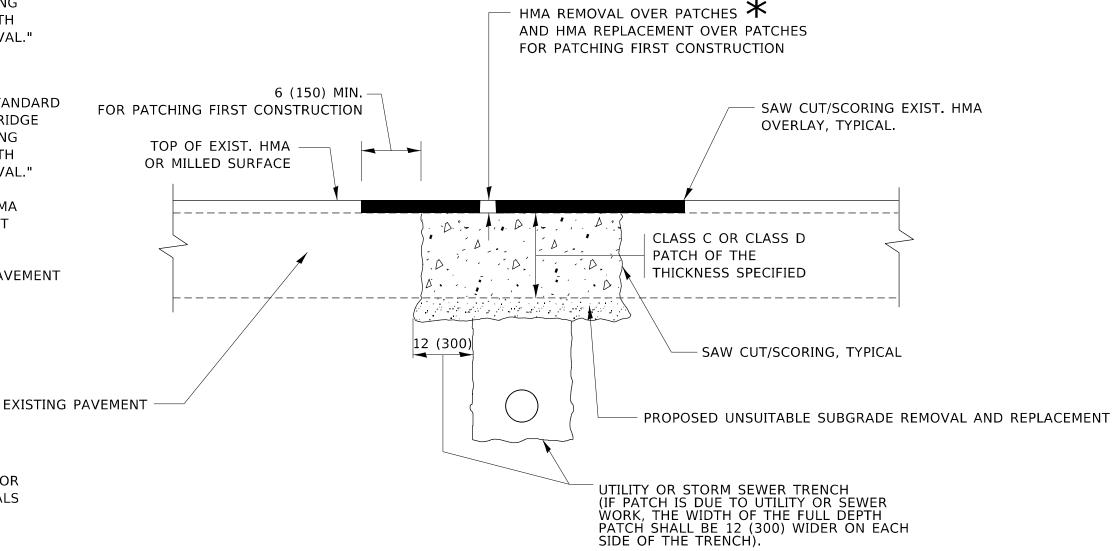
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

#### 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

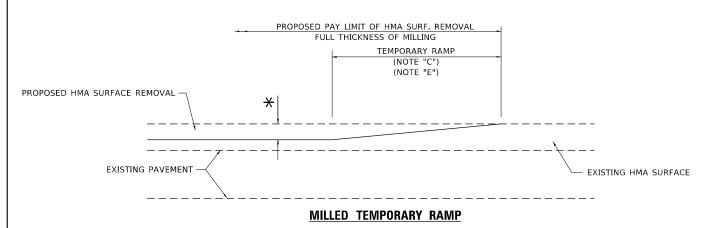
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

#### **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.

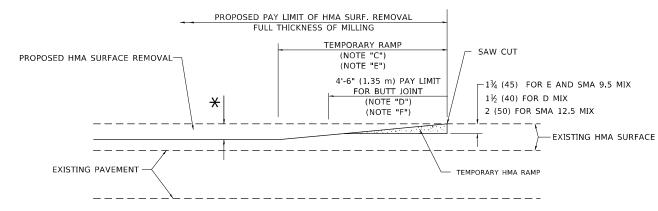
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

USER NAME = Nedal.Qarut	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07			PAVEMENT PATCHING FOR		F.A.P.	SECTION	COUNTY TOT	FTS NO
	DRAWN -	REVISED - R. BORO 09-04-07	STATE OF ILLINOIS				305	FAP 0305 22 RS2	MCHENRY 34	4 25
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED - K. ENG 10-27-08	DEPARTMENT OF TRANSPORTATION		HMA SURFACED PAVEMENT		В	D400-04 (BD-22)	CONTRACT NO	. 62T64
PLOT DATE = 6/30/2023	DATE - 10-25-94	REVISED - K. SMITH 11-18-22		SCALE: NONE	SHEET 1 OF 1 SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT	



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 1

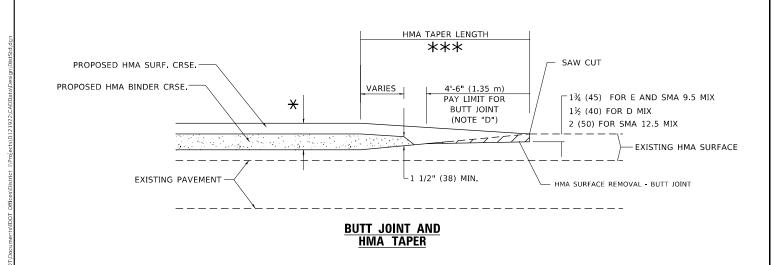


#### HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 2

#### TYPICAL TEMPORARY RAMP



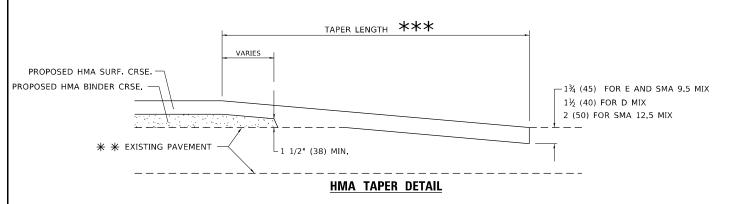
## TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

# \* EXISTING PAVEMENT

| 30'-0" (9.0 m) (NOTE "A") | 15'-0" (4.5 m) (NOTE "B") | (NOTE "B") | (NOTE "A1") | 1½ (45) FOR E AND SMA 9.5 MIX | 1½ (40) FOR D MIX | 2 (50) FOR SMA 12.5 MIX | 1½ (40) FOR SMA 12.5 MIX | 1½ (40) FOR D MIX | 1½ (40) FOR SMA 12.5 MIX | 1½ (

PROPOSED HMA OR PCC

SURFACE REMOVAL - BUTT JOINT



## 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.

SHEET 1

- 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**

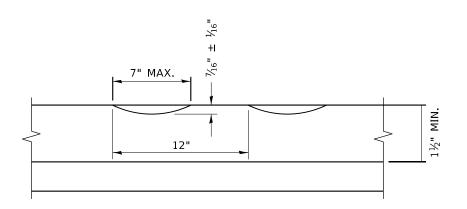
- THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT"
- THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT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

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

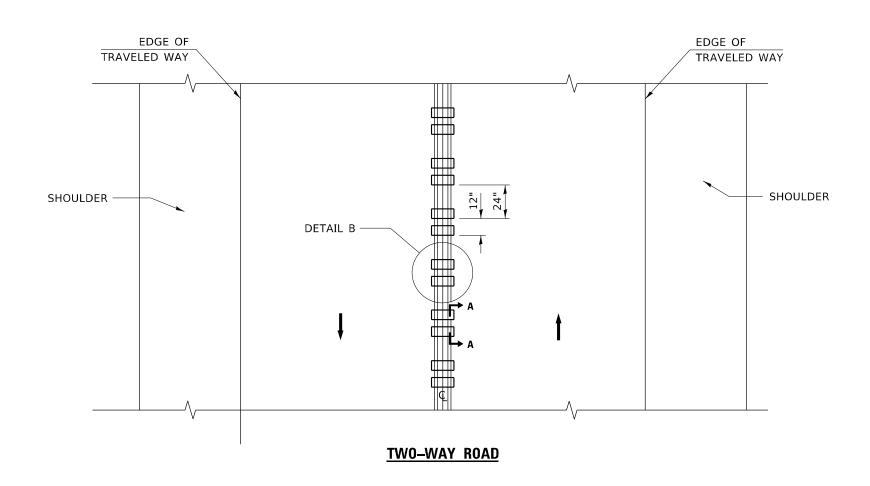
USER NAME = Nedal.Qarut	DESIGNED	-	M. DE YONG	REVISED	-	A. ABBAS 03-21-97
	DRAWN	-		REVISED	-	M. GOMEZ 04-06-01
PLOT SCALE = 100.0000 / in.	CHECKED	-		REVISED	-	R. BORO 01-01-07
PLOT DATE = 6/30/2023	DATE		06-13-90	REVISED		K SMITH 11-18-22

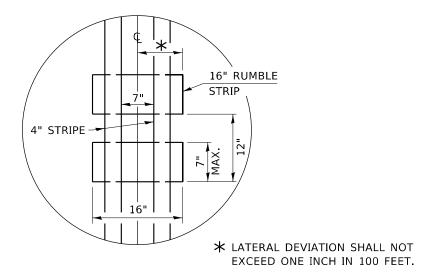
STATE	OF	ILLINOIS
DEPARTMENT	OF 1	<b>TRANSPORTATION</b>

BU	TT JOINT	AND		F.A.P. RTE	SEC	TION		COUNTY	TOTAL SHEETS	SHEE NO.
HMA TAPER DETAILS				305	FAP 030	5 22 RS2	2	MCHENRY	34	26
IIIVIA	IALLII	LIAILO			BD400-05	BD-32		CONTRACT	NO. 62	2T64
OF	1 SHEET	SI STA	TO STA.			TELIMOIS	EED AL	D PROJECT		



#### SECTION A-A





#### **DETAIL B**

#### **GENERAL NOTES**

- 1. CENTERLINE RUMBLE STRIPS SHALL BE CONSTRUCTED ACCORDING TO SECTION 642 ALONG THE CENTERLINE OF PAVEMENT.
- 2. SEE STANDARD 780001 FOR OTHER STRIPING LAYOUTS.
- 3. RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.
- 4. ALL RUMBLE STRIPS SHALL BE MILLED.
- 5. CENTERLINE RUMBLE STRIPS SHALL BE CONTINUOUS THROUGH CONNECTIONS OF SIDEROADS WITH NO LEFT TURN LANES.
- 6. DISCONTINUE CENTERLINE RUMBLE STRIPS THROUGH THE LIMITS OF ALL LEFT TURN LANES, INCLUDING ANY LANE TAPER SECTIONS.
- 7. AFTER RUMBLE STRIPS ARE INSTALLED, THE PAVEMENT SURFACE SHALL BE SWEPT CLEAN PRIOR TO THE PLACEMENT OF THE NEW PAVEMENT MARKINGS.
- 8. WHERE USED, ADJUST SPACING OF RAISED REFLECTIVE PAVEMENT MARKERS TO FALL IN WIDER GAP BETWEEN RUMBLE STRIPS.

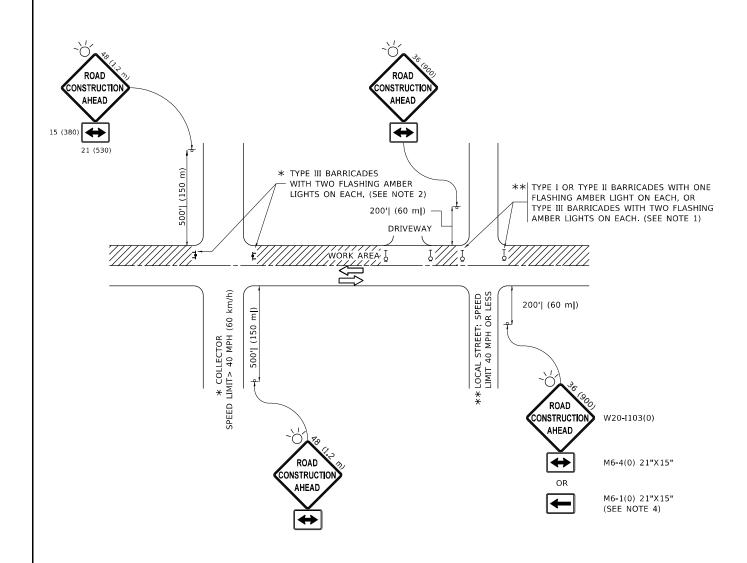
#### **BASIS OF PAYMENT**

- 1. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR CENTERLINE-RUMBLE STRIP OF THE WIDTH SPECIFIED.
- 2. HOT-SPRAY THERMOPLASTIC PAVEMENT MARKING WILL BE USED OVER THE RUMBLE STRIPS, AND WILL BE PAID FOR SEPARATELY.

USER NAME = Nedal.Qarut	DESIGNED	-	R. BORO	REVISED	-	K. SMITH 11-18-22
	DRAWN	-		REVISED	-	
PLOT SCALE = 100.0000 / in.	CHECKED	-		REVISED	-	
PLOT DATE = 6/30/2023	DATE	-	08-06-2012	REVISED	-	

SCALE: NONE

	F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RUMBLE STRIPS FOR CENTERLINE, NON-FREEWAY	305	FAP 0305 22 RS2	MCHENRY	34	27
		BD-55	CONTRACT	NO. 62	2T64
SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED. A	ID PROJECT		



#### 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).

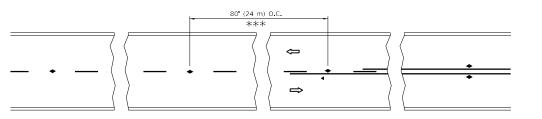
- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER
- 7. 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 = Nedal.Qarut	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 = 6/30/2023	DATE - 06-89	REVISED _ A. SCHUETZE 09-15-16

					TION FOR DRIVEWAYS
SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.

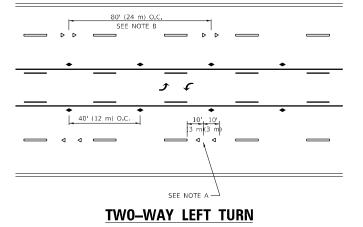
F.A.P. RTE	SEC <sup>-</sup>	COUNTY	TOTAL SHEETS	SHEE NO.			
305	FAP 0305	22 RS	2	MCHENRY	34	28	
	TC-10		CONTRACT NO. 62T64				
		TI L TI LOTE	555 A	ID DDOJECT			



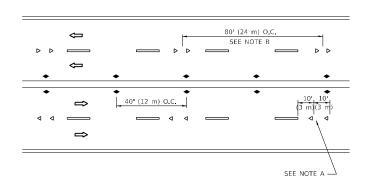
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

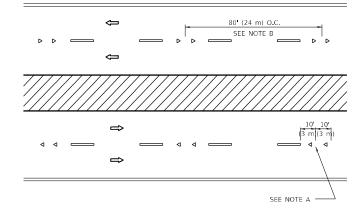
# $\Rightarrow$ LANE REDUCTION TRANSITION

SEE FIGURE 3B-14 MUTCD



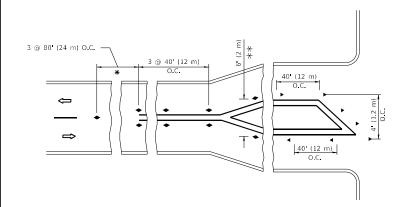
#### TW0-LANE/TW0-WAY

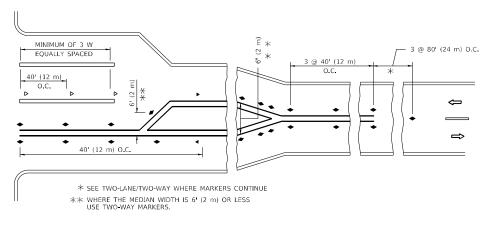




#### MULTI-LANE/UNDIVIDED







#### **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.

- 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 INVOLVED.

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

DESIGNED REVISED - T. RAMMACHER 03-12-99 DRAWN REVISED - T. RAMMACHER 01-06-00 CHECKED REVISED PLOT DATE = 6/30/2023 C. JUCIUS 07-01-13 DATE REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

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

SECTION MCHENRY FAP 0305 22 RS2 34 29 TC-11 CONTRACT NO. 62T64

**SYMBOLS** 

ONE-WAY AMBER MARKER

TWO-WAY AMBER MARKER

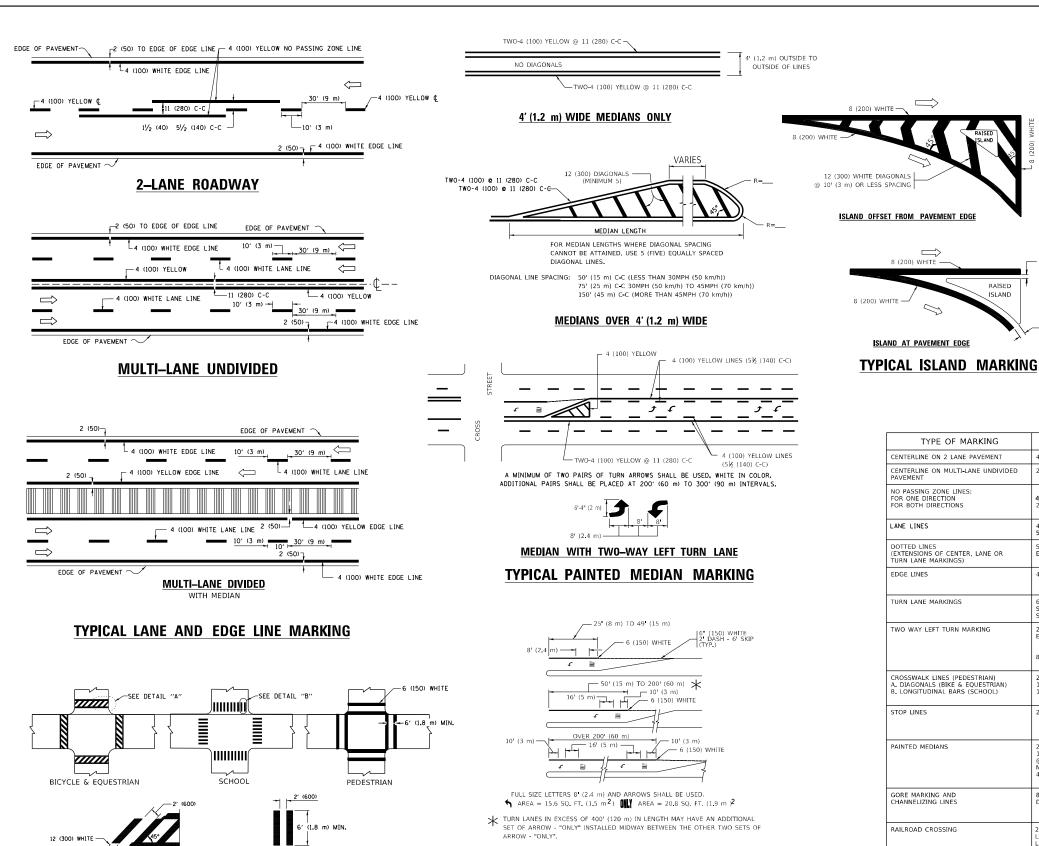
ONE-WAY CRYSTAL MARKER (W/O)

YELLOW STRIPE

■ WHITE STRIPE

**DESIGN NOTES** 

SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE



TYPICAL TURN LANE MARKING

TYPICAL LEFT (OR RIGHT) TURN LANE

**COMBINATION** LEFT AND U-TURN 5'-4" (1620) √ 32 R (810) 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 COLOR SPACING / REMARKS SKIP-DASH YELLOW 10' (3 m) LINE WITH 30' (9 m) SPACE 2 @ 4 (100) SOLID YELLOW 11 (280) C-C

D(FT)

665

SPEED LIMIT

50

NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	<b>4 (100)</b> 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	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
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (500) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15 (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20 (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30 (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ZEACH "X"=54.0 SQ. FT. (5.0 m Z
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS > 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

8 (200) WHITE -

RAISED

TYPE OF MARKING

CENTERLINE ON 2 LANE PAVEMENT

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

USER NAME = Nedal.Qarut	DESIGNED	-	EVERS	REVISED	-	C. JUCIUS 09-09-09
	DRAWN	-		REVISED	-	C. JUCIUS 07-01-13
PLOT SCALE = 100.0000 / in.	CHECKED	-		REVISED	-	C. JUCIUS 12-21-15
PLOT DATE = 6/30/2023	DATE	-	03-19-90	REVISED	-	C. JUCIUS 04-12-16

─12 (300) WHITE

DETAIL "B"

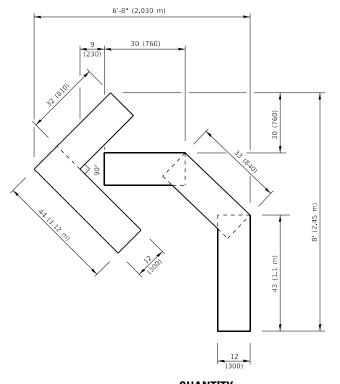
- 6 (150) WHITE

TYPICAL CROSSWALK MARKING

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

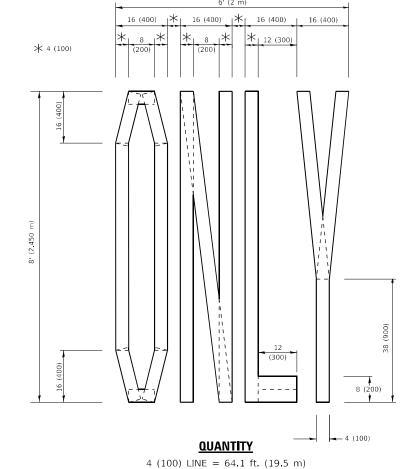
DETAIL "A"

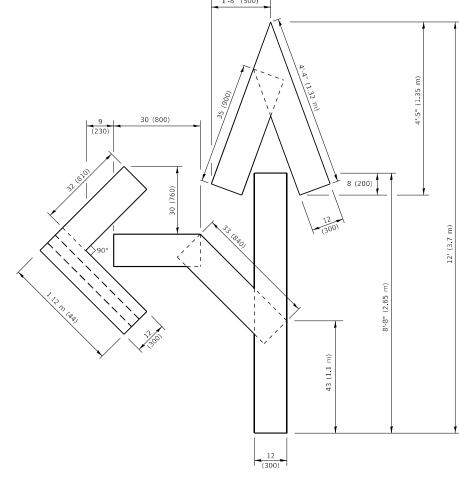
	DISTRICT ONE				F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS				2	305	FAP 0305 22 RS2	MCHENRY	34	30
TTFICAL FAVEIVIENT IVIANNINUS					TC-13		CONTRACT NO. 62T64		
SHEET 1	OF 2	SHEETS	STA	TO STA		TILINOIS FED A	D. DDOJECT		



#### **QUANTITY**

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



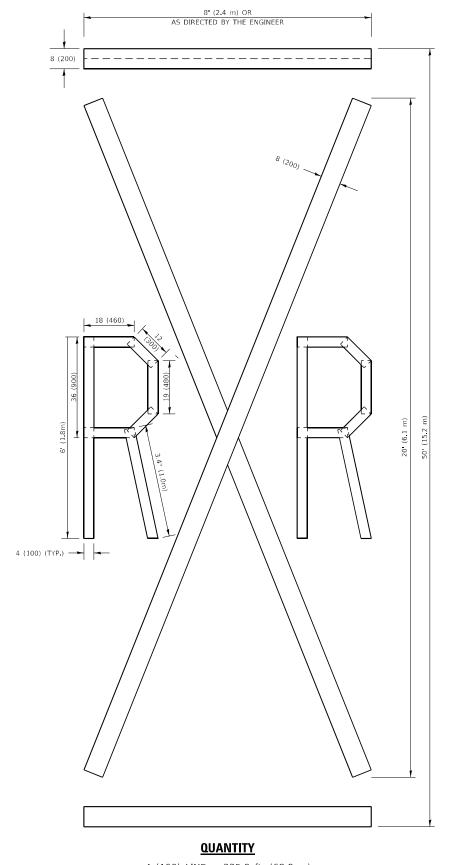


#### QUANTITY

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)

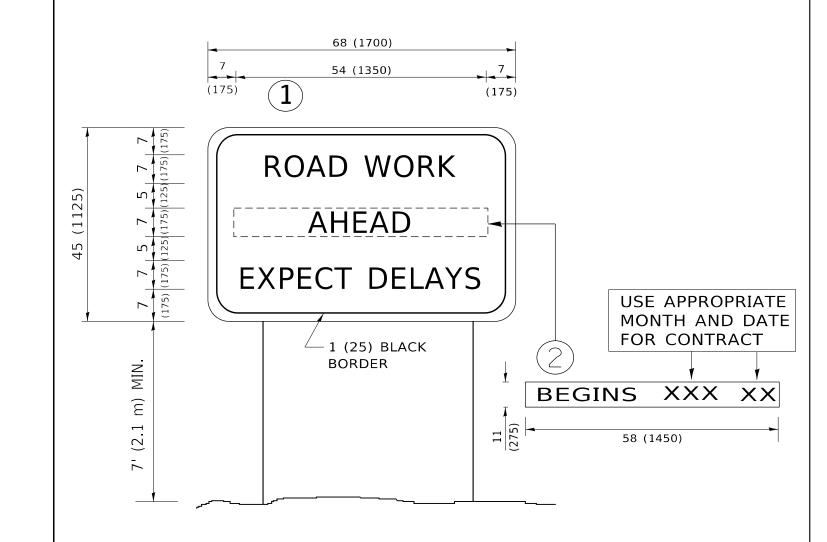
All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = Nedal.Qarut	DESIGNED	-		REVISED	- T. RAMMACHER 03-02-98
	DRAWN	-		REVISED	- E. GOMEZ 08-28-00
PLOT SCALE = 100.0000 / in.	CHECKED	-		REVISED	- E. GOMEZ 08-28-00
PLOT DATE = 6/30/2023	DATE	-	09-18-94	REVISED	- A. SCHUETZE 09-15-16

21.4 sq. ft. (1.99 sq. m)

	SHORT	TERM	PAV	EMENT	MARKING	LETTERS	AND	SYMBOLS	
CALE	NONE	CHEE	T 1	OF 1	CHEETC	CTA		TO CTA	

F.A.P. SECTION			COUNTY	TOTAL SHEETS	SHEET NO.		
305	FAP 0305 22 RS2			MCHENRY	34	31	
	TC-16		CONTRACT NO. 62T64				
		ILLINOIS	FED. A	D PROJECT			



#### NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN(1)WITH INSTALLED PANEL(2)ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL(2)SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)

SCALE: NONE

7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

MCHENRY 34 32

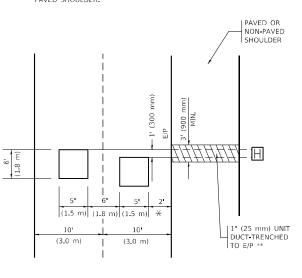
CONTRACT NO. 62T64

USER NAME = Nedal.Qarut	DESIGNED -	REVISED	-	R. MIRS 09-15-97
	DRAWN -	REVISED	-	R. MIRS 12-11-97
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED	- T.	RAMMACHER 02-02-9
PLOT DATE = 6/30/2023	DATE -	REVISED	-	C. JUCIUS 01-31-07

ARTERIAL ROAD								F.A.P. RTE	SECTION
		INFORMATION SIGN 305 FAP 0305 22 RS2							
			HAI C	ını	MIJUN			TC-22	
	SHEET 1		OF	1	SHEETS	STA.	TO STA.		ILLINOIS FED

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

\* = (600 mm)



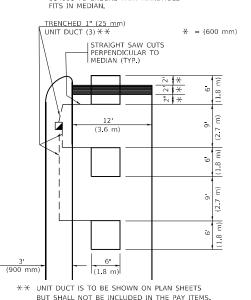
### LEFT TURN LANES WITH MEDIANS

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

HANDHOLF LOCATION MAY VARY DEPENDING ON GEOMETRICS

(PROTECTED / PERMITTED LEFT TURN PHASING)

AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLL



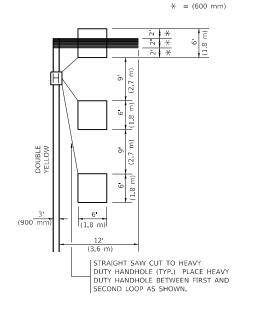
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

#### LEFT TURN LANES WITHOUT MEDIANS

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

(PROTECTED / PERMITTED LEFT TURN PHASING)



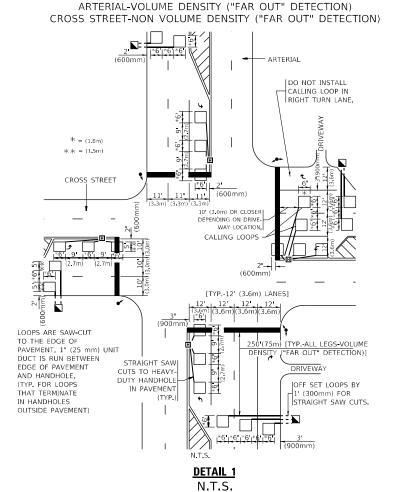
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

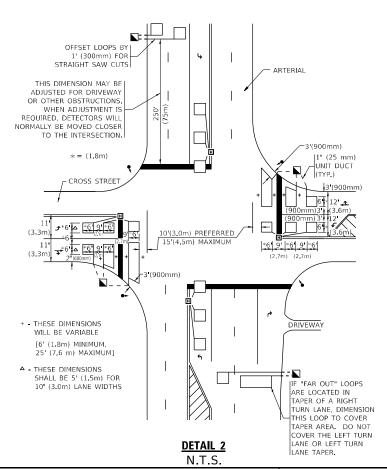
SCALE: NONE

BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS

\* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

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





#### 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.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED. MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

TO STA.

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.

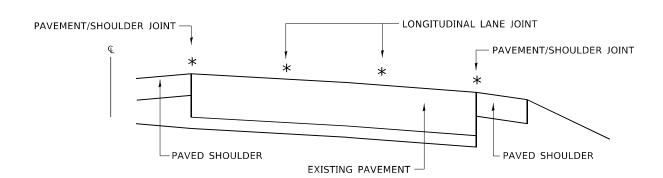
"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0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

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

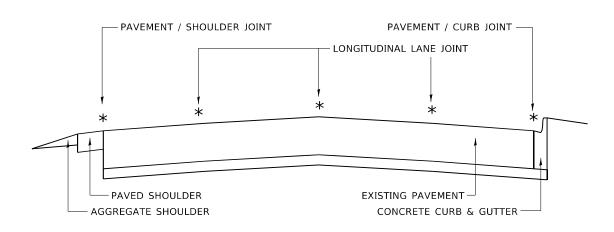
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

RTE	SECT	LION			NO.					
305	FAP 0305	22 RS2	2	MCHENRY	34	33				
	TS-07			CONTRACT NO. 62T64						
		ILLINOIS	FED. AI	ID PROJECT						

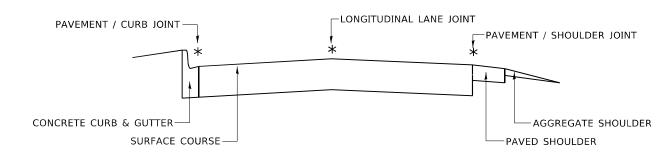
DESIGNED SER NAME = Nedal,Qaru REVISED DRAWN REVISED HECKED R.K.F REVISED PLOT DATE = 6/30/2023 REVISED DATE



#### MULTI-LANE DIVIDED PAVEMENT



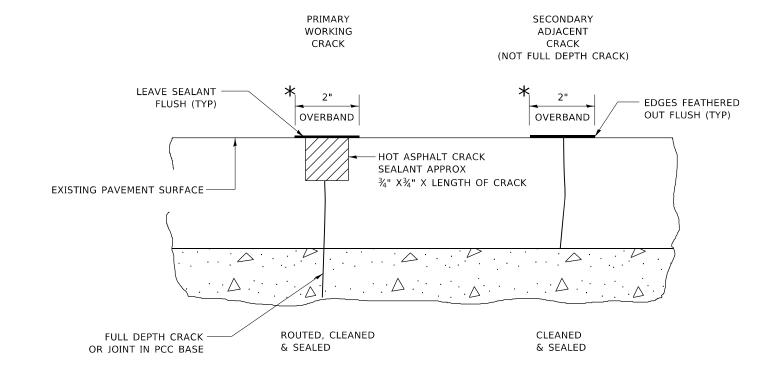
#### MULTI-LANE UNDIVIDED PAVEMENT



#### TWO-LANE PAVEMENT

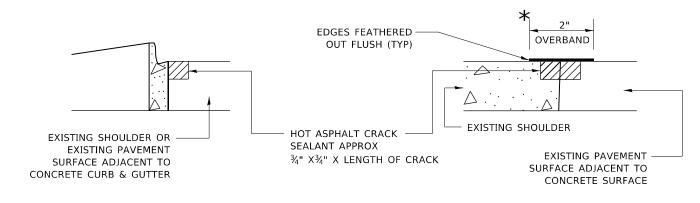
\* PROPOSED LONGITUDINAL CRACK ROUTING (PAVEMENT) & CRACK FILLING LOCATIONS

# GENERAL EXISTING TYPICAL SECTIONS (APPLIES TO HMA AND PCC PAVEMENTS)



\* IN ALL LOCATIONS WHERE THE LONGITUDINAL CRACK CONFLICTS WITH EXISTING PAVEMENT MARKINGS (EITHER EDGE LINE OR LANE LINE) THE CRACK SHALL BE ROUTED & THE RESULTING RESERVOIR FILLED WITH SEALANT. ALL DAMAGES TO EXISTING RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR. ALL EXISTING PAVEMENT MARKINGS WITHIN THE PROJECT LIMITS SHALL BE RESTORED WITH MODIFIED URETHANE PAVEMENT MARKINGS.

#### LONGITUDINAL JOINT



#### CRACK & JOINT SEALING DETAIL

USER NAME = Nedal.Qarut	DESIGNED	-	F. Aqueel / A. Midy	REVISED	-
	DRAWN	-		REVISED	-
PLOT SCALE = 100.0000 / in.	CHECKED	-		REVISED	-
PLOT DATE = 6/30/2023	DATE	-	10/08/2020	REVISED	-

CRACK & JOINT SEALING DETAIL (PD-11)					F.A.P. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.		
					•	305	FAP 0305 22 RS2		MCHENRY	34	34
									CONTRACT	NO. 62	2T64
	SHEET	OF	SHEETS	STA	TO STA		TILLINOIC E	ED AI	D DDOLECT		