# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

D-91-104-23

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE VILLAGE OF LIBERTYVILLE

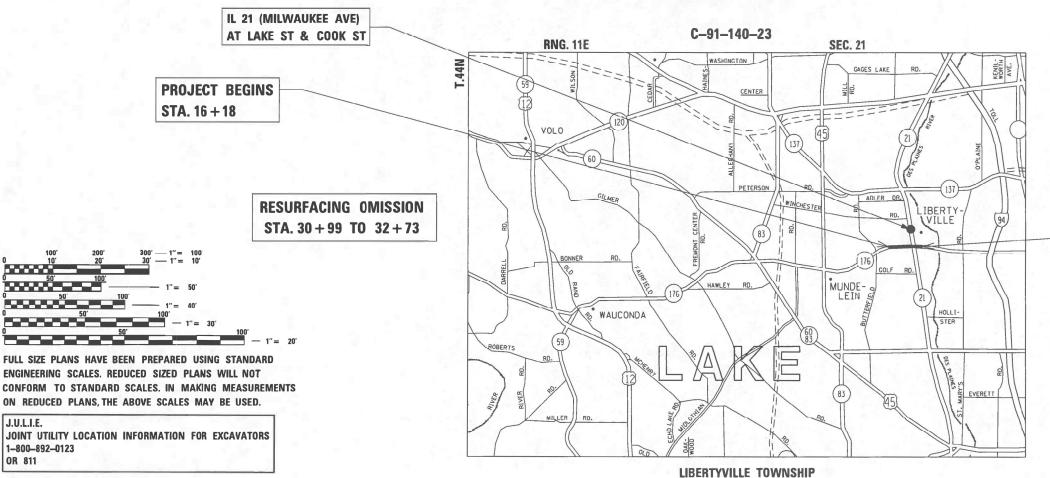
IL 176 TRAFFIC DATA

SPEED LIMIT = 30 MPH

2023 ADT = 13,089

# PROPOSED HIGHWAY PLANS

FAU ROUTE 1238: IL 176 (PARK AVE)
GARFIELD RD TO PARK PL
SECTION: FAU 1238 23 OVERLAY
PROJECT: STP-N03T(716)
DESIGNED OVERLAY & ADA IMPROVEMENTS
LAKE COUNTY



PROJECT ENGINEER: LUKASZ POCIECHA, (847) 705–4225
PROJECT MANAGER: FAWAD AQUEEL

GROSS LENGTH = 1,858 FT. = 0.35 MILE NET LENGTH = 1,684 FT. = 0.32 MILE WO-TI-SIDE

LEE

OF PATE ALL

VIOLOGE

NO. C. SELAND

NAME AND STARK MASSIALL

NAME ON ONE SECTION INDICATED THUS:

OF SECTION INDICATED THUS:

PROJECT ENDS STA. 34 + 76

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED DESCRIPTION

SUBMITTED DESCRIPTION

REGIONAL ENGINEER

May 10, 2024

ENGINEER OF DESIGN AND ENVIRONMENT

May 10, 2024

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 62U77

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#### STATE STANDARDS

000001-08 424001-11 424006-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS PERPENDICULAR CURB RAMPS FOR SIDEWALKS DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424016-05	MID-BLOCK CURB RAMPS FOR SIDEWALKS
424021-06	DEPRESSED CORNER FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
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
701901-09	TRAFFIC CONTROL DEVICES
886001-01	DETECTOR LOOP INSTALLATIONS

#### **PROJECT SPECIFIC NOTES:**

THE NORTHWEST CORNERS OF ILLINOIS ROUTE 21 (MILWAUKE AVE) AT LAKE STREET AND COOK STREET SHALL BE INCLUDED IN THIS CONTRACT. SEE PAGES 16-19 FOR CORNER DEATAILS

#### **GENERAL NOTES**

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELELPHONE AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF LIBERTYVILLE.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 11/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (85 KM/HR) OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (85 KM/HR), WITH WRITTEN APPROVAL FROM THE ENGINEER. A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPPED A MINIMUM 1:3 (V:H).
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT). IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 6) THE CONTRACTOR SHALL CONTACT KALPANA HOSADURGA, THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR, AT KALPANA.KANNAN-HOSADURAG@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE ENGINEER SHALL CONTACT THE LAKE COUNTY TRAFFIC FIELD AREA ENGINEER FADI SULTAN AT FADI.SULTAN@ILLINOIS.GOV A MINIMUM OF TWO WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS
- FRAMES AND GRATES ADJUSTMENTS OF PRIVATE UTILITIS WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 10) ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED BY THE ENIGNEER AT THE TIME OF
- 11) IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
- 12) THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIME DURING CONSTRUCTION.
- 13) ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID IN KIND.
- 14) ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFRENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER TJAY THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 16) 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 THE DEPARTMENT.

SCALE:

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.

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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

IL 1	76 (PARK /	AVE.) –	GARFIEL	.D RI	D. TO PARK PL	F.A.U. RTE.	SECTION
IND	EX HIGHWA	V STAN	DARDS	& G	ENERAL NOTES	1238	FAU 1238 23 OVERLA
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CONTRACT NO. 62U77

COUNTY

LAKE Í

#### VILLAGE NOTES

- 1) THE VILLAGE OF LIBERTYVILLE ENGINEERING DIVISION (847-918-2105) SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF WORK, AND SHALL BE KEPT APPRISED OF THE PROJECT SCHEDULE THROUGHOUT THE DURATION OF CONSTRUCTION.
- 2) THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL NECESSARY PRECAUTIONS TO ENSURE PROTECTION OF EXISTING BRICK PAVERS. ANY BRICK PAVERS THAT ARE REMOVED AND ARE NOT INTENDED TO BE REPLACED UPON COMPLETION OF THE IMPROVEMENTS SHALL BE RETURNED TO THE VILLAGE OF LIBERTYVILLE.
- ALL EXISTING BRICK PAVER CROSSWALKS ARE TO REMAIN AND SHALL BE PROTECTED AS NECESSARY TO AVOID DAMAGE DURING CONSTRUCTION.
- 4) VILLAGE-OWNED IRRIGATION LINES ARE COMMONLY LOCATED IN CLOSE PROXIMITY OR BENEATH CURB LINES AND ROADWAYS ALONG MILWAUKEE AVE. BETWEEN CHURCH ST. AND JOHNSON AVE. ANY IRRIGATION LINES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR USING PVC GLUE FITTINGS AND WATERPROOF UNDERGROUND WIRE CONNECTIONS AFTER THE PIPE INTERIOR AND EXTERIOR AND WIRING ARE CLEANED AND PREPPED PER MANUFACTURER'S RECOMMENDATIONS.
- THERE ARE DECORATIVE FENCING AND PLANTING AREAS LOCATED WITHIN THE BRICK PAVERS THROUGHOUT THE DOWNTOWN AREA THAT WILL NEED TO BE MAINTAINED AND PROTECTED DURING CONSTRUCTION.

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IL 1	76 (PARK A	AVE.) –	GARFIEI	.D RD.	TO PARK PL	F.A.U. RTE	SECTION
חואו	EX HIGHWA	V CTAR	unarne	& CEN	IERAL NOTES	1238	FAU 1238 23 OVERLAY
טאון	LA, IIIGIIVVA	ואוט וא	IDAIIDO	Q ULIV	ILIAL NOTES		
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				80% FEDERAL 20% STATE	100% STATE	80% FEDERAL 20% STATE
				ROADWAY	ROADWAY	TRAFFIC SIGNALS
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	0005	0021
NO.			QOANTITI	URBAN	URBAN	URBAN
20200100	EARTH EXCAVATION	CU YD	30	30		
		1				+
21101605	TOPSOIL FURNISH AND PLACE, 2"	SQ YD	6	6		
25200110	SODDING SALT TOLERANT	SQ YD	6	6		
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	4.0	4.0		
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	4938	4938		
						1
			2500	2.50		
40600370	LONGITUDINAL JOINT SEALANT	FOOT	3500	3500		
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	22	22		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	100	100		
40000302	TIOT PHIA ASTRIACT SONTACE REMOVAL BOTT SOTIO	30 10	100	100		
40602985	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	TON	819	819		
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	0.5	0.5		
						1
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	728	728		
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	16.0	16.0		
42400200	DODILAND CEMENT CONCRETE SIDEWALK 5 INCL	50.57	241	241		
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	241	241		
42400800	DETECTABLE WARNINGS	SQ FT	40	40		

CONSTRUCTION CODE

\* SPECIALTY ITEM

				80% FEDERAL 20% STATE	100% STATE	80% FEDERAL 20% STATE
				ROADWAY	ROADWAY	TRAFFIC SIGNALS
CODE	ITEM	UNIT	TOTAL	0005	0005	0021
NO.			QUANTITY	URBAN	URBAN	URBAN
44000164	HOT-MIX ASPHALT SURFACE REMOVAL, 3 3/4"	SQ YD	7314	7314		
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	25.5	25.5		
44000300	CURB REMOVAL	FOOT	25	25		
44000600	SIDEWALK REMOVAL	SQ FT	100	100		
44201297	DOWEL BAR 1"	EACH	6	6		
44201785	CLASS D PATCHES, TYPE I, 12 INCH	SQ YD	50	50		
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	500	500		
44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	500	500		
44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SQ YD	400	400		
50800105	REINFORCEMENT BARS	POUND	30.5	30.5		
50900805	PEDESTRIAN RAILING	FOOT	10	10		
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	1		
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	1	1		
60266600	VALVE BOX TO BE ADJUSTED	EACH	2	2		
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	12	12		
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	1	1		
60403800	LIDS, TYPE 1 CLOSED LID	EACH	3	3		
60406001	FRAMES AND LIDS, TYPE 1 ADA COMPLIANT, OPEN LID	EACH	1	1		

**DEPARTMENT OF TRANSPORTATION** 

CONSTRUCTION CODE

\* SPECIALTY ITEM

USER NAME = Jammal,Alramahi

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F.A.U. RTE. SECTION 1238 FAU 1238 23 OVERLAY

IL 176 (PARK AVE.) – GARFIELD RD. TO PARK PL

SUMMARY OF QUANTITIES

TO STA.

SHEET OF SHEETS STA.

				l.			
					80% FEDERAL 20% STATE	100% STATE	80% FEDERAL 20% STATE
ſ					ROADWAY	ROADWAY	TRAFFIC SIGNALS
	CODE	ITEM	UNIT	TOTAL QUANTITY	0005	0005	0021
	NO.			QUANTITY	URBAN	URBAN	URBAN
Ī							
ŀ		NON CRECIAL WASTE DISPOSAL	GIL VD	20	20		
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	30	30		
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2		
l							
F			<u> </u>	_			
*	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1		
*	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1		
ŀ							
-							
*	66901006	REGULATED SUBSTANCES MONITORING	CAL DA	3	3		
F	67100100	MOBILIZATION	L SUM	1	1		
-							
	70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1		
l	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1		
-	, 0102033	THE TOTAL PROPERTY OF THE PROP	2 30	-			
L							
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1		
F	70300100	SHORT TERM PAVEMENT MARKING	FOOT	3,305	3,305		
-	70300100	STORT FERD LAVERENT PIARKING	1001	3,303			
ļ							
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	276	276		
f							
<b> </b>	70200211	TEMPODADY DAVEMENT MARKING LETTERS AND SYMPOLS - DALVIT	50.57	207	207		<del> </del>
	70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	297	297		
ſ	70300221	TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT	FOOT	4,292	4,292		
╁							
}							
	70300241	TEMPORARY PAVEMENT MARKING - LINE 6" - PAINT	FOOT	1,078	1,078		
_					<u>-</u>		

**DEPARTMENT OF TRANSPORTATION** 

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COUNTY TOTAL SHEET NO.

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CONTRACT NO. 62U77

F.A.U. SECTION RTE. SECTION 1238 FAU 1238 23 OVERLAY

IL 176 (PARK AVE.) – GARFIELD RD. TO PARK PL

SUMMARY OF QUANTITIES

TO STA.

SHEET OF SHEETS STA.

					CONSTRUCTION CODE		]
					80% FEDERAL 20% STATE	100% STATE	80% FEDERAL 20% STATE
ſ					ROADWAY	ROADWAY	TRAFFIC SIGNAL
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	0005	0021
				Q0/111111	URBAN	URBAN	URBAN
	70300261	TEMPORARY PAVEMENT MARKING - LINE 12" - PAINT	FOOT	520	520		
	70300281	TEMPORARY PAVEMENT MARKING - LINE 24" - PAINT	FOOT	34	34		
L							
	70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	826	826		
ŀ							
ŀ							
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	297	297		
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	4,292	4,292		
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,078	1,078		
-							
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	856	856		
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	34	34		
ŀ							
f	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	103	103		
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	100	100		
	0500000	MAINTENANCE OF EVICTING TRAFFIC CICNAL INSTALLATION	FACIL	2			2
*    -	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2			2
*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	34.5			34.5
-							
*	X8860105	DETECTOR LOOP REPLACEMENT	FOOT	120			120

**DEPARTMENT OF TRANSPORTATION** 

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IL 176 (PARK AVE.) – GARFIELD RD. TO PARK PL

SUMMARY OF QUANTITIES

TO STA.

OF SHEETS STA.

				CONSTRUC	TION CODE	]
				80% FEDERAL 20% STATE	100% STATE	80% FEDERAL 20% STATE
				ROADWAY	ROADWAY	TRAFFIC SIGNALS
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	0005	0021
			,	URBAN	URBAN	URBAN
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	13			13
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1		
X0327611	REMOVE AND REINSTALL BRICK PAVER	SQ FT	990	990		
X4060995	TEMPORARY RAMP (SPECIAL)	SQ YD	128	128		
X4400501	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT LESS THAN OR EQUAL TO 10 FEET	FOOT	130	130		
X4400503	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT GREATER THAN 10 FEET	FOOT	300	300		
X5091300	DECORATIVE STEEL RAILING	FOOT	21	21		
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	13	13		
X6061005	CONCRETE CURB, TYPE B (SPECIAL)	FOOT	40	40		
X6061055	CONCRETE ISLAND (SPECIAL)	SQ FT	75.0	75.0		
X6700407	ENGINEERS FIELD OFFICE, TYPE A (D1)	CAL MO	3	3		
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	14			14
Z0012450	CONCRETE STEPS	CU YD	1	1		
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	25		25	

*	SPECIALTY	ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 176 (PARK AVE.) – GARFIELD RD. TO PARK PL

SUMMARY OF QUANTITIES

SHEET OF SHEETS STA. TO STA.

SCALE:

F.A.U. SECTION COUNTY TOTAL SHEETS NO.

1238 FAU 1238 23 OVERLAY LAKE 36 8

CONTRACT NO. 62U77

REV-SEP

					CONSTRUCTION CODE	
				80% FEDERAL 20% STATE	100% STATE	80% FEDERA 20% STATE
CODE			TOTAL	ROADWAY	ROADWAY	TRAFFIC SIGN
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	0005	0021
				URBAN	URBAN	URBAN
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	183	183		
_				1		
		<u> </u>				<u> </u>

**DEPARTMENT OF TRANSPORTATION** 

USER NAME = Jammal Alramahi

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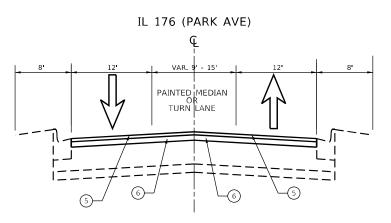
F.A.U. RTE. SECTION 1238 FAU 1238 23 OVERLAY

IL 176 (PARK AVE.) – GARFIELD RD. TO PARK PL

SUMMARY OF QUANTITIES

TO STA.

SHEET OF SHEETS STA.



PROPOSED TYPICAL SECTION
STA. 16+18 TO STA. 34+76

#### **LEGEND**

- ① EXISTING PCC PAVEMENT, VAR 3 1/4" TO 8"
- ② EXISTING HMA PAVEMENT ±8"
- 3 EXISTING COMBINATION CURB & GUTTER
- 4 PROPOSED HMA SURFACE REMOVAL, 3.75"
- © PROPOSED HMA SURFACE COURSE, MIX "D", IL-9.5, N70, 1.75"
- 6 PROPOSED HMA BINDER COURSE, IL-9.5, N70, 2"

HOT-MIX ASPHALT MIXTURE REQUIREMENTS							
MIXTURE TYPE	AIR VOIDS @ NDES	QUALITY MANAGEMENT PROGRAM (QMP)					
DESIGNED OVERLAY	-1						
TEMPORARY RAMP (SPECIAL) (HMA BINDER COURSE, IL-9.5, N70)	4% @ 70 GYR.	QC/QA					
HMA SURFACE COURSE, MIX "D", IL-9.5, N70, 1.75"	4% @ 70 GYR.	QC/QA					
HMA BINDER COURSE, IL-9.5, N70, 2"	4% @ 70 GYR.	QC/QA					
PATCHING							
CLASS D PATCHES (HMA BINDER IL-19mm)	4% @ 70 GYR.	QC/QA					
DRIVEWAY							
HMA BASE COURSE (HMA BINDER IL-19mm); PE-6"	4% @ 50 GYR.	QC/QA					
HMA SURFACE COURSE, MIX "D", IL-9.5, N50, 2"	4% @ 50 GYR.	QC/QA					
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERDFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)							

#### **MIXTURE TABLE NOTES**

- 1. THE UNIT WEIGHT USED TO CALCUALTE ALL HOT-MIX ASPHALT SURFACE
- MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
- 2. THE AC TYPE FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE AC TYPE SHALL BE "PG 64-22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

NOTE:

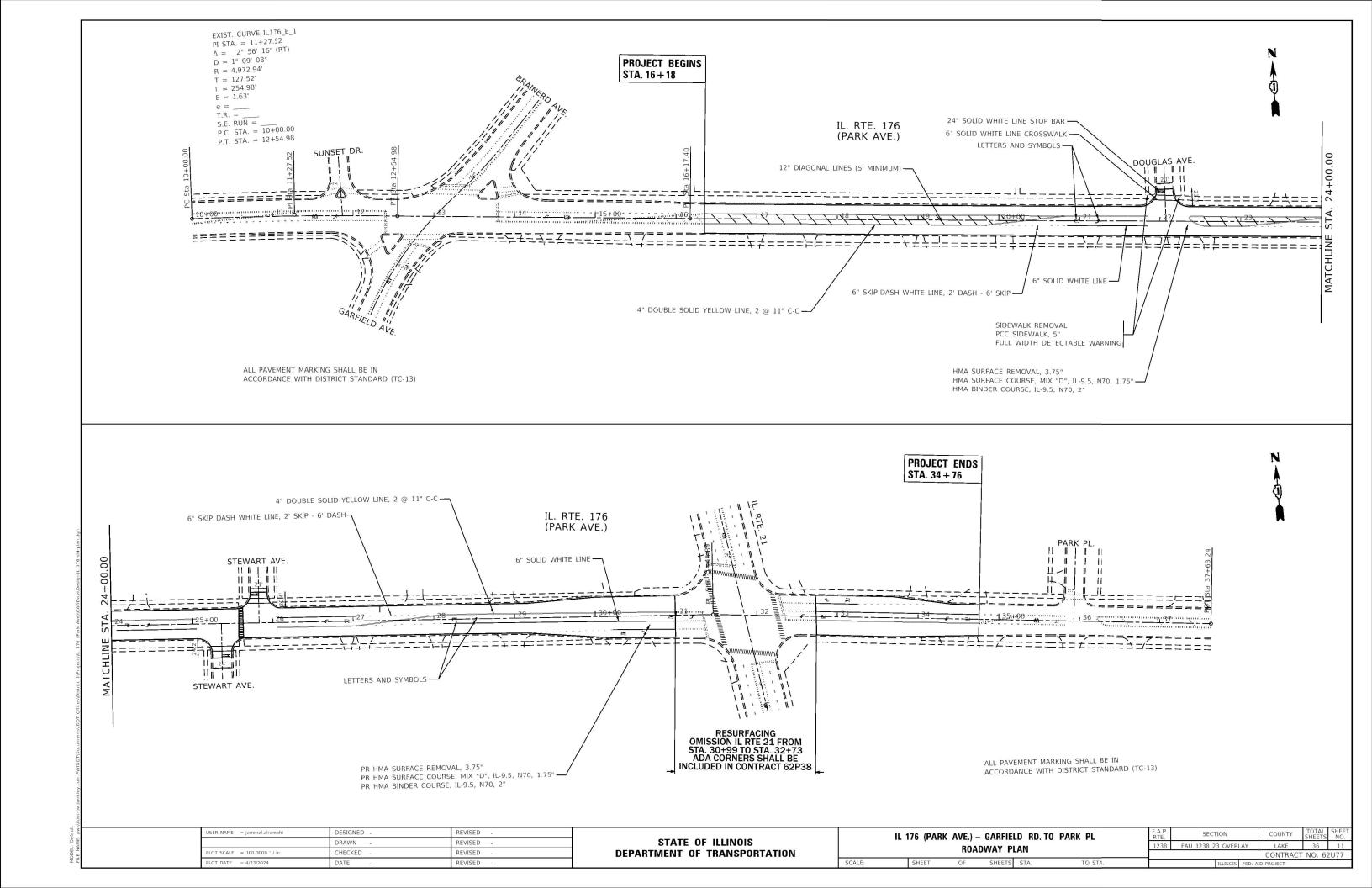
THE CONTRACTOR SHALL MILL BEFORE PATCHING.

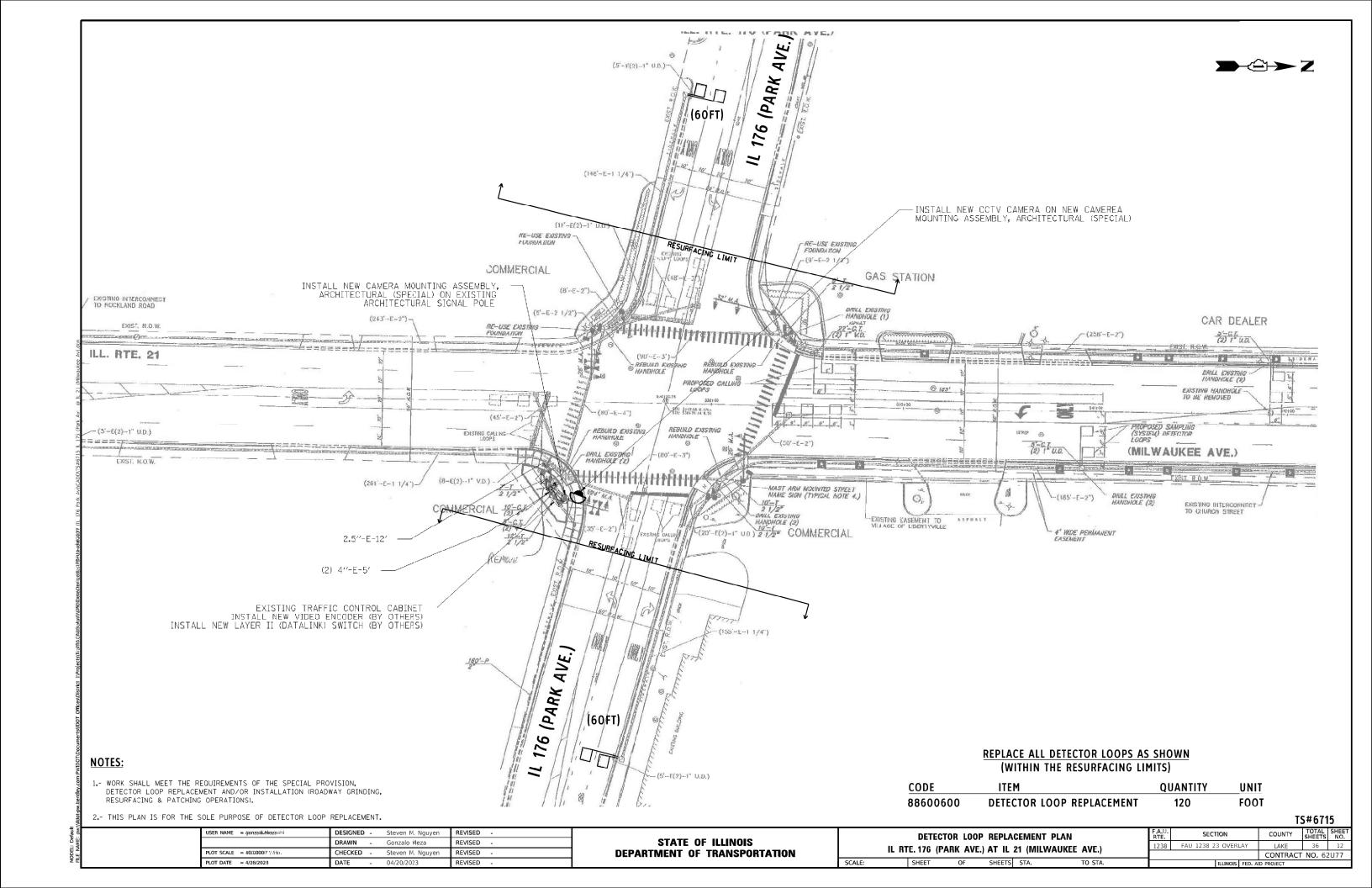
THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE HOT-MIX ASPHALT BINDER COARSE, IL-9.5, N70.

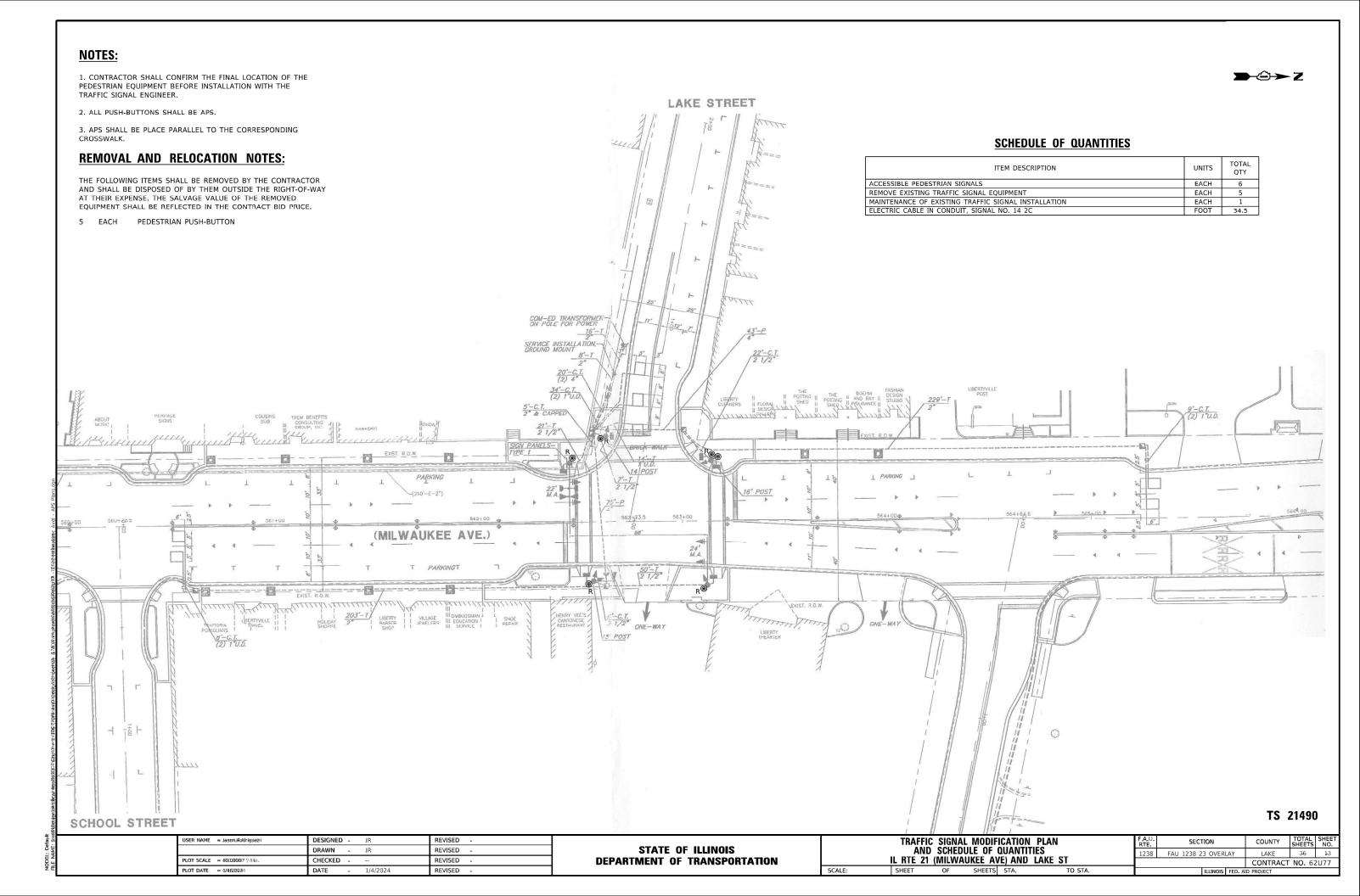
OSER MANE - Johnnan Aironnam	DESIGNED -	NEVISED -	
	DRAWN -	REVISED -	STATE
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	DEPARTMENT
PLOT DATE = 3/21/2024	DATE -	REVISED -	

			6 (PARK . CAL SECT	•
LE:	SHEET	OF	SHEETS	STA.

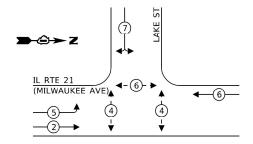
TO STA.







#### **EXISTING CONTROLLER SEQUENCE**

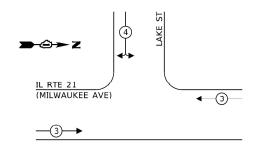


#### LEGEND:

**←**(\*) PROTECTED PHASE

← - (\*)- - PROTECTED/PERMITTED PHASE

#### **EXISTING EMERGENCY VEHICLE** PREEMPTION SEQUENCE



T	RAFFIC	SI	GNAL
<b>ELECTRICAL</b>	<b>SERVIC</b>	Έ	REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	11	50	49.5
(YELLOW)	9	20	5	9.0
(GREEN)	9	12	45	48.6
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	5	20	100	100.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	336.1

ENERGY COSTS TO:

## VILLAGE OF LIBERTYVILLE 1500 FRANKLIN BLVD

LIBERTYVILLE, IL. 60048

ENERGY SUPPLY: CONTACT: DANIEL MENDEZ

PHONE: (773) 799-6111

COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER:

DESIGNED - JR REVISED -DRAWN - JR REVISED -PLOT SCALE = 40000000 //in CHECKED -REVISED PLOT DATE = 4/4/200244

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  CABLE PLAN
IL RTE 21 (MILWAUKEE AVE) AND LAKE ST OF SHEETS STA.

COUNTY TOTAL SHEET NO.

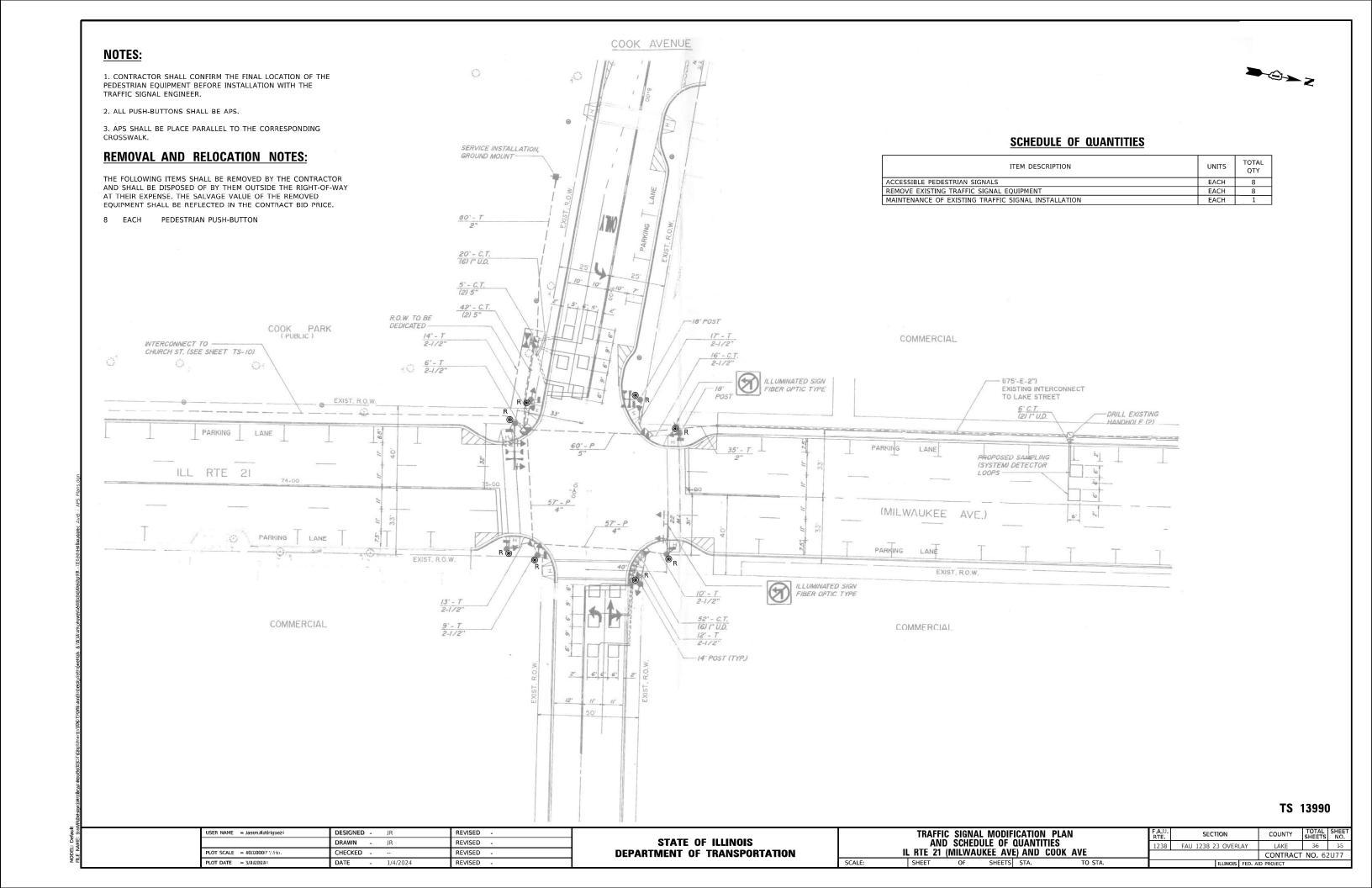
LAKE 36 14 SECTION 1238 FAU 1238 23 OVERLAY CONTRACT NO. 62U77

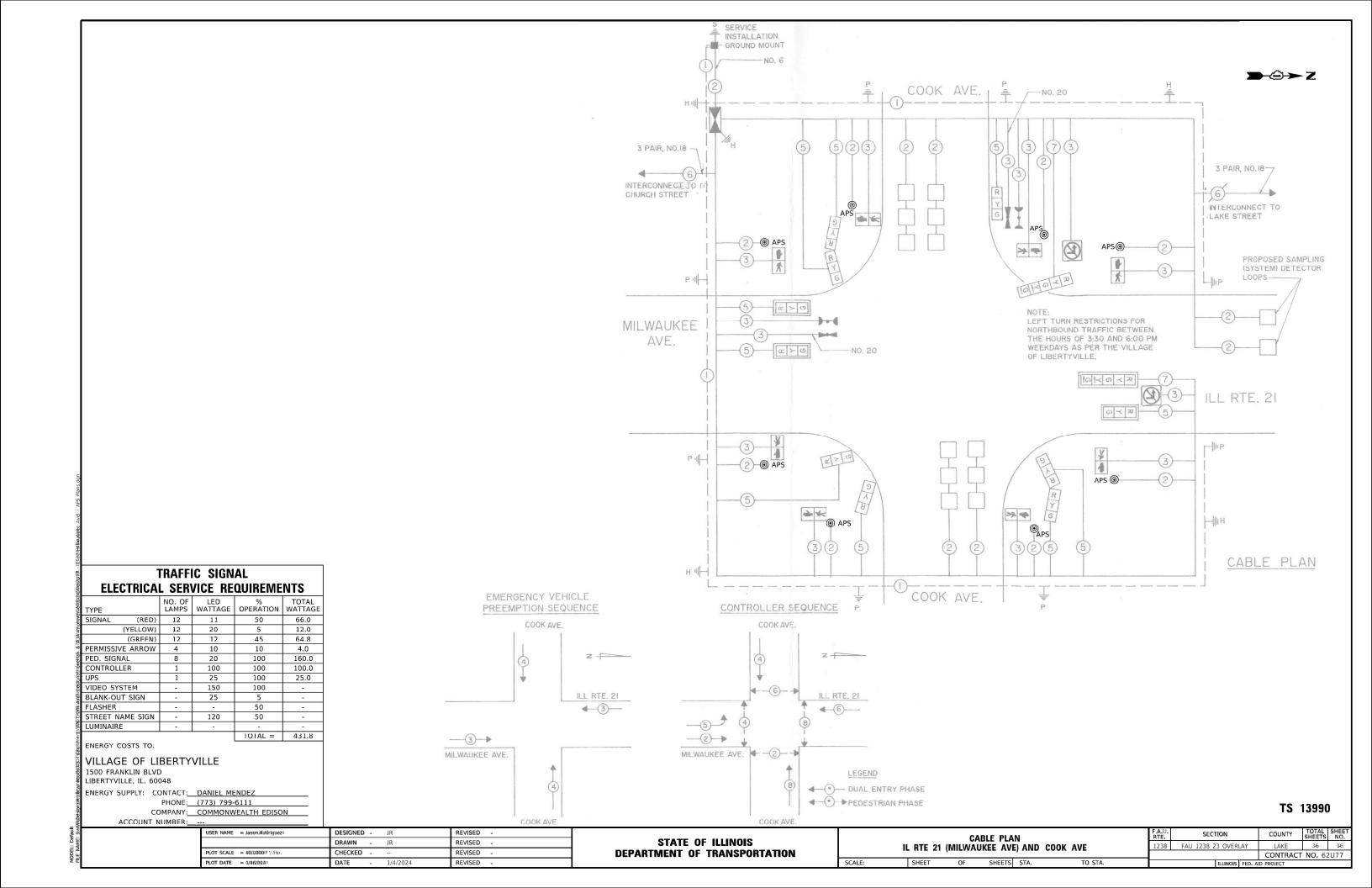
-(1#6)EX. INTERCONNECT TO — LAKE ST EX. TRACER CABLE -IL ROUTE 21 MILWAUKEE AVE --(1#6<del>)</del>-

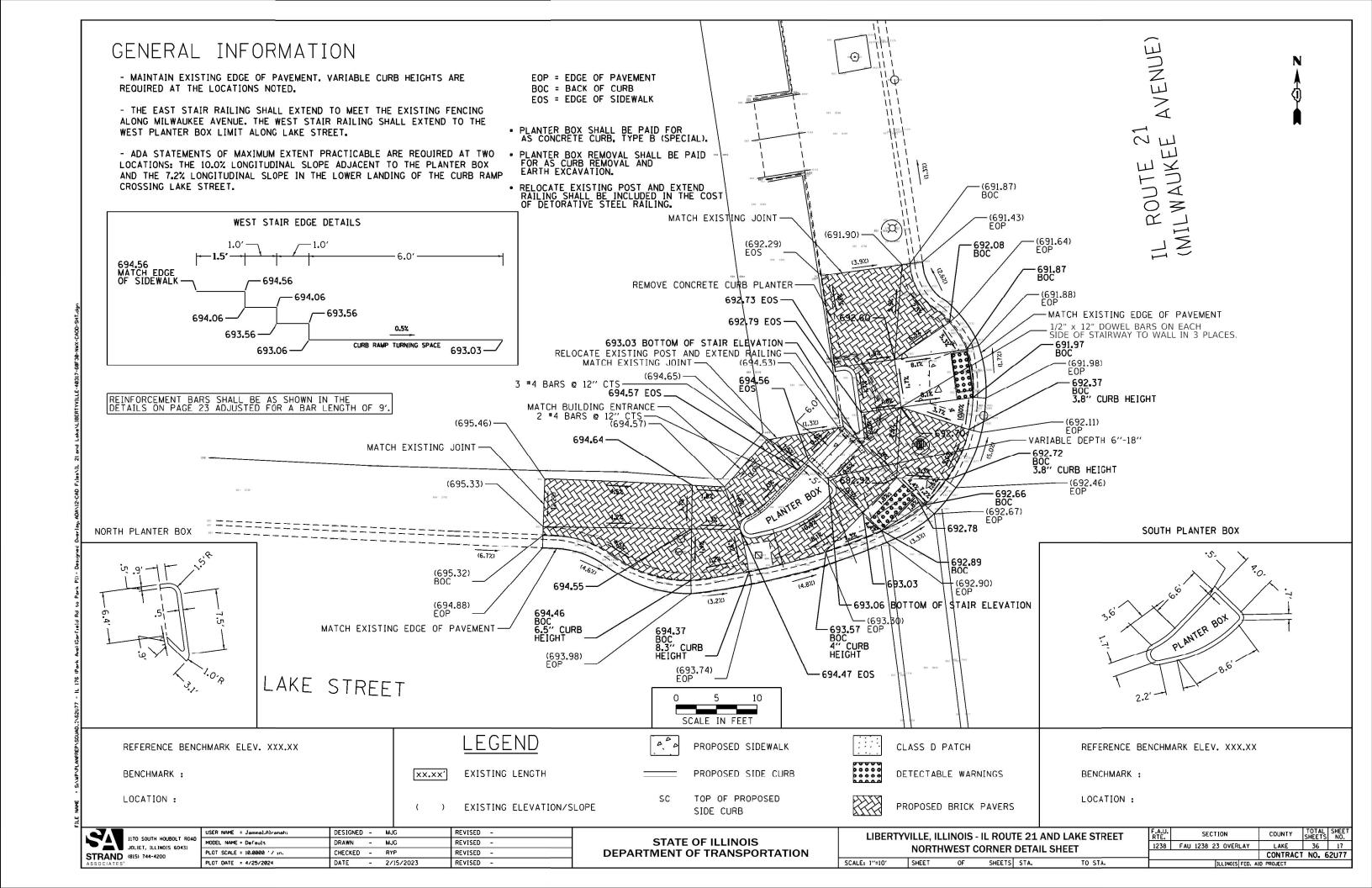
#### **CABLE PLAN**

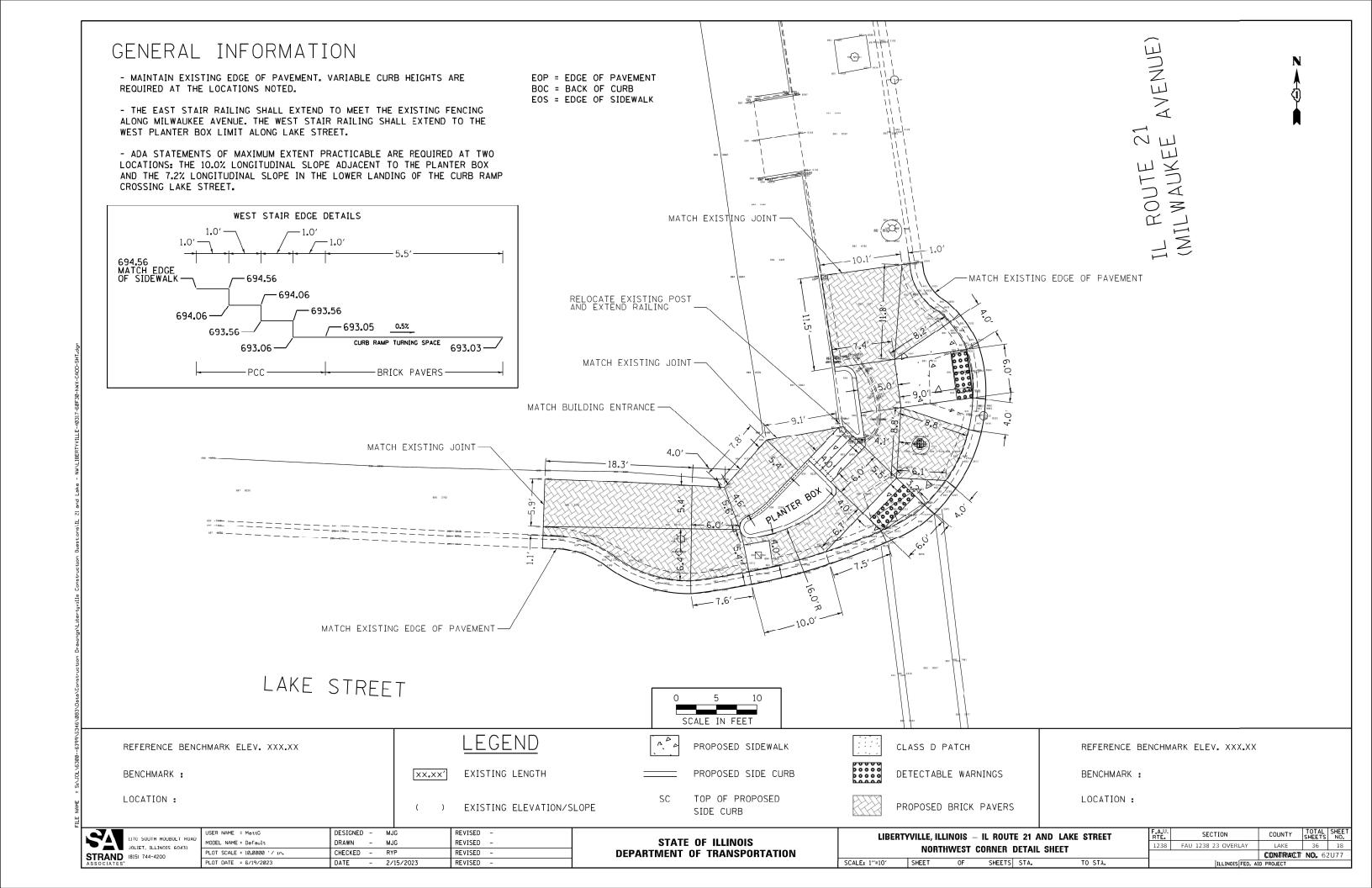
TS 21490

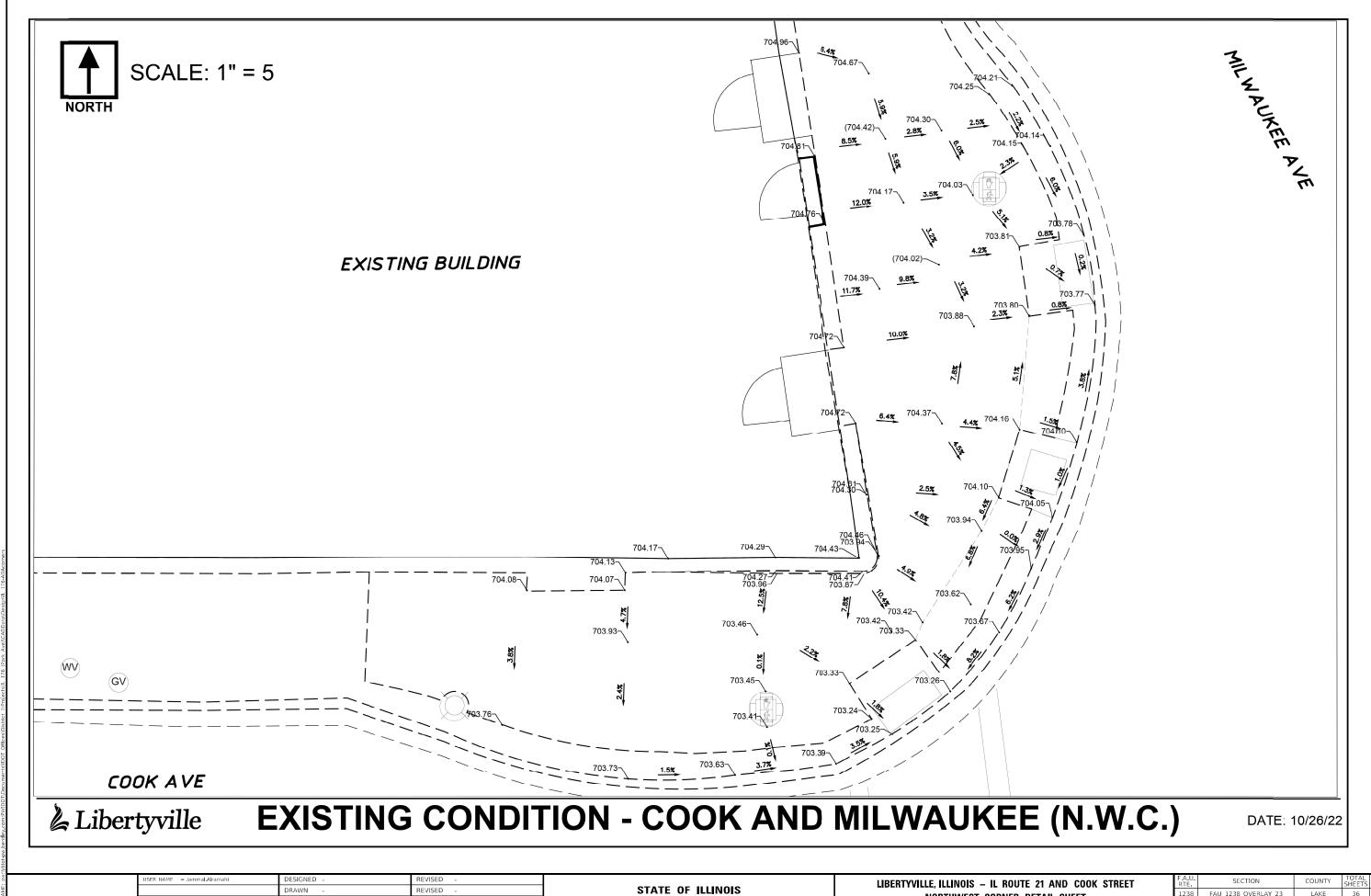
**→**②→ Z











**DEPARTMENT OF TRANSPORTATION** 

DRAWN

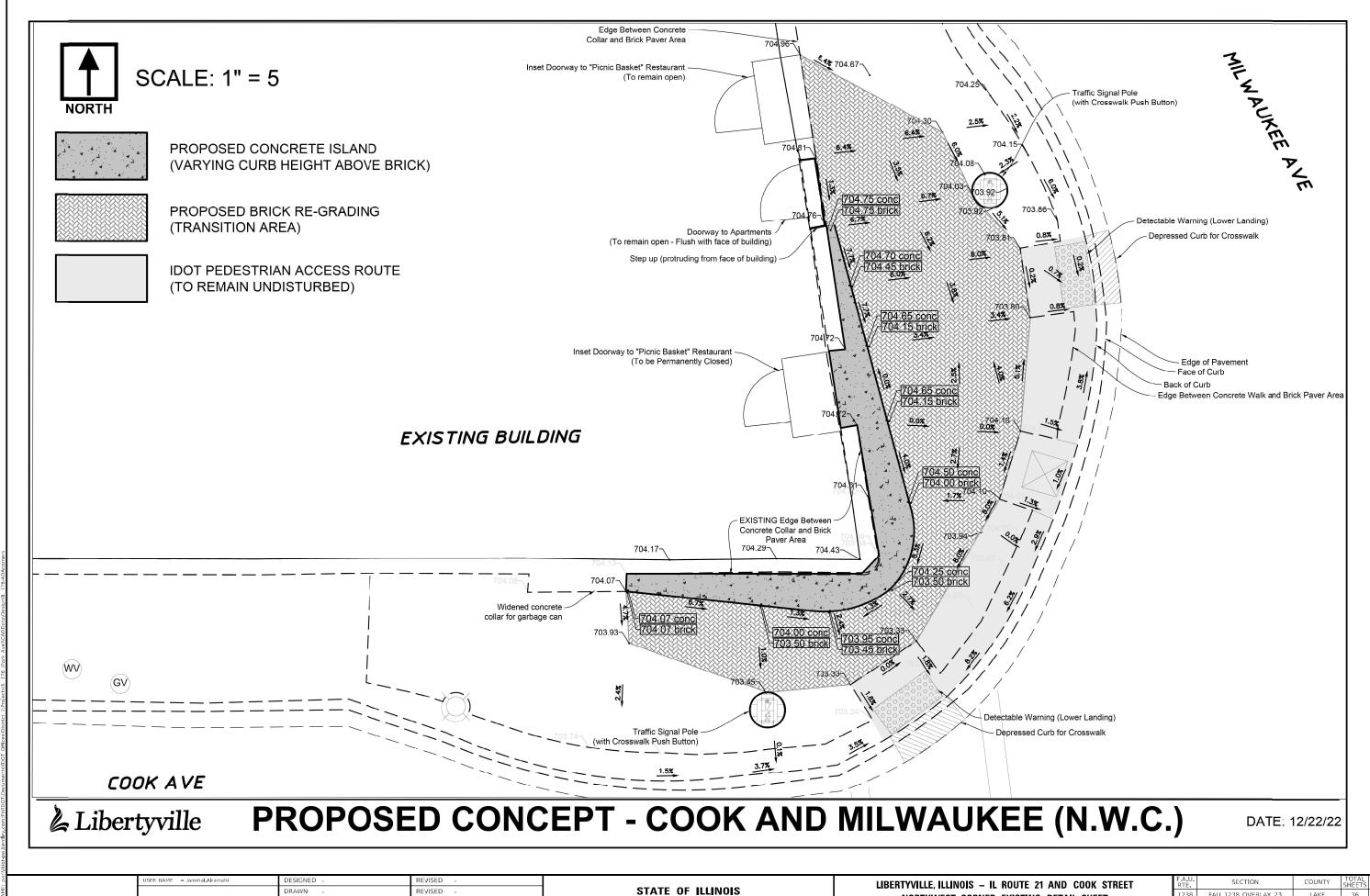
CHECKED

REVISED

REVISED

LIBERTYVILLE, ILLINOIS - IL ROUTE 21 AND COOK STREET NORTHWEST CORNER DETAIL SHEET

CONTRACT NO. 62U77



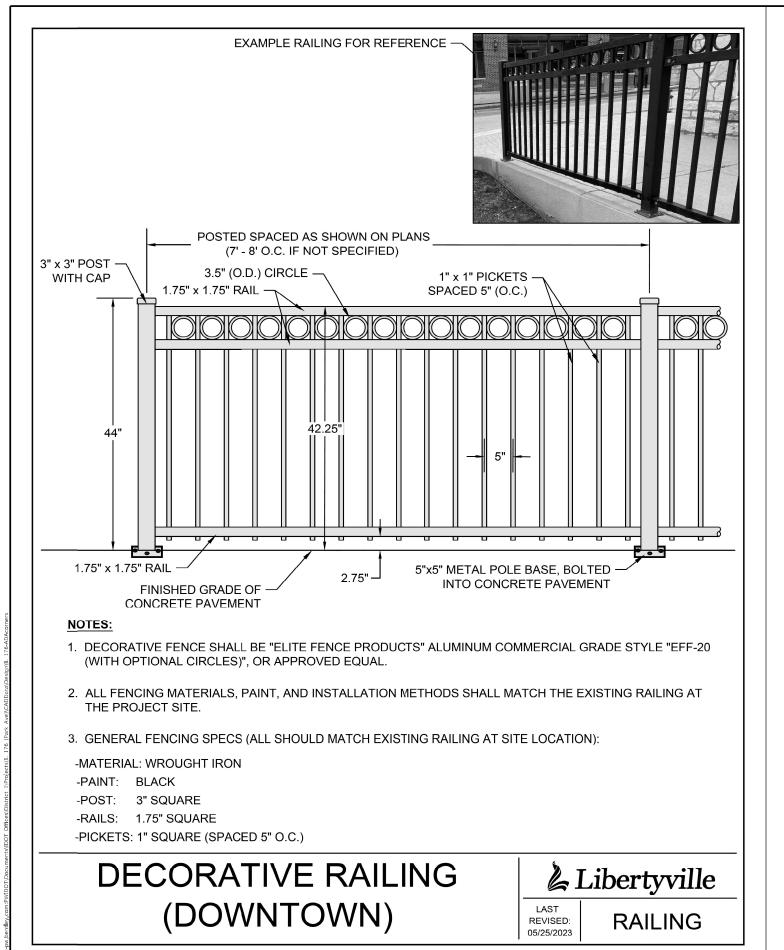
CHECKED

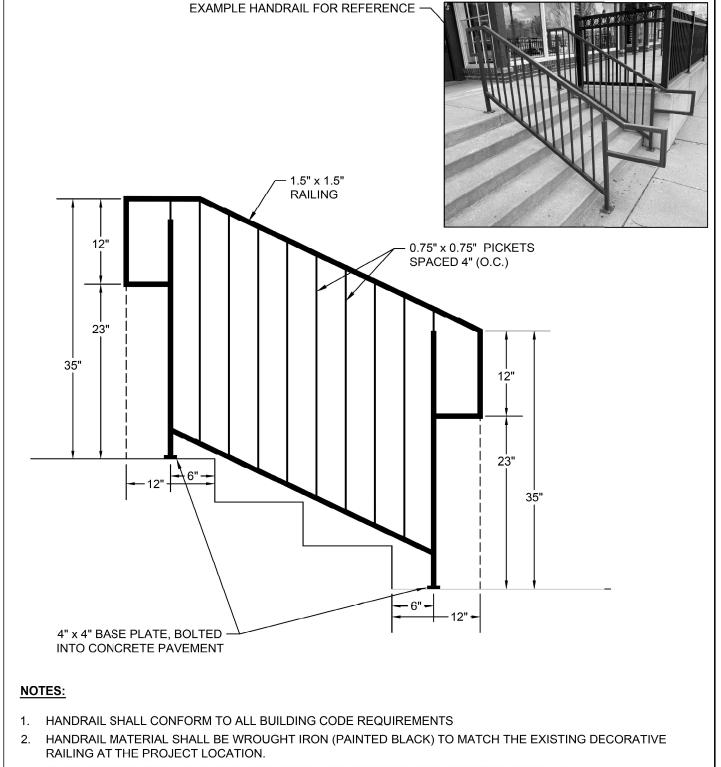
REVISED

**DEPARTMENT OF TRANSPORTATION** 

NORTHWEST CORNER EXISTING DETAIL SHEET

1238 FAU 1238 OVERLAY 23 CONTRACT NO. 62U77





- 3. SHOP DRAWING SHOULD BE PROVIDED BY THE CONTRACTOR FOR APPROVAL PRIOR TO FABRICATION/INSTALLATION
- 4. ALL RAILINGS AND PICKETS ARE "SQUARE" SHAPE

HANDRAIL FOR STEPS



LAST REVISED: 05/25/2023

HANDRAIL

USER NAME = Jammal,Alramahi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 3/21/2024	DATE -	REVISED -

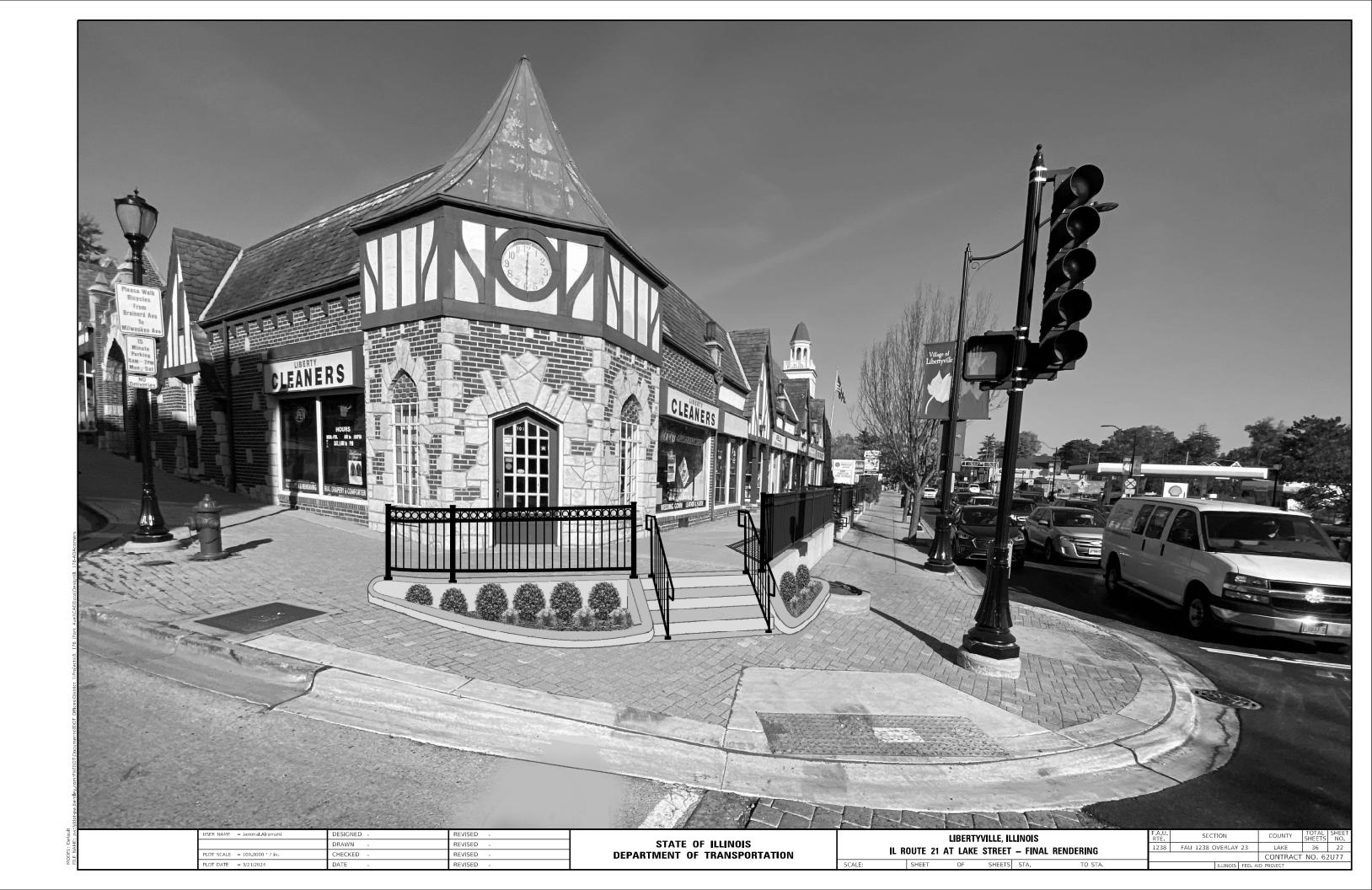
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

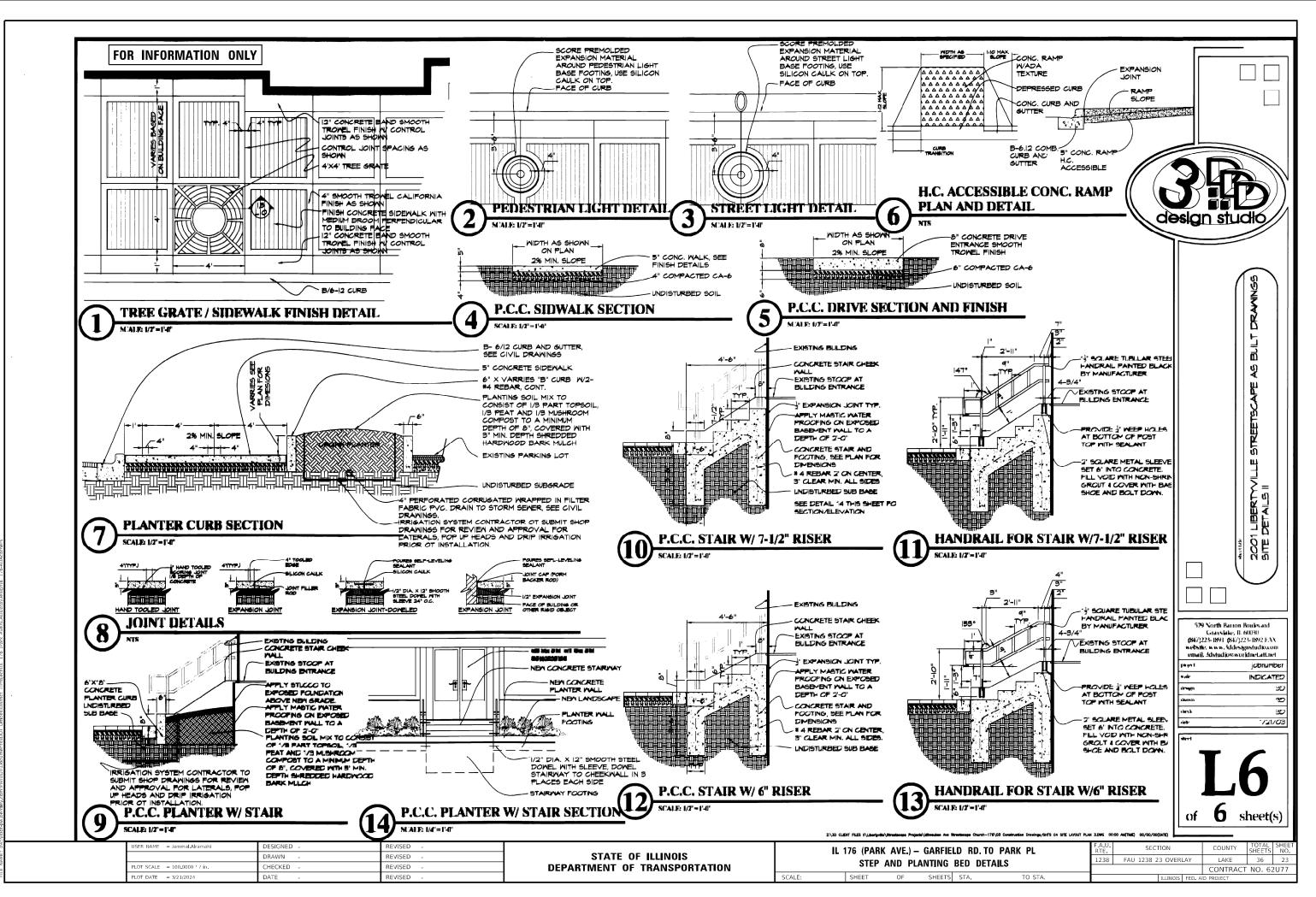
LIBERTYVILLE, ILLINOIS
DECORATIVE RAILING AND HANDRAIL DETAILS

SECTION COUNTY TOTAL SHEET NO.

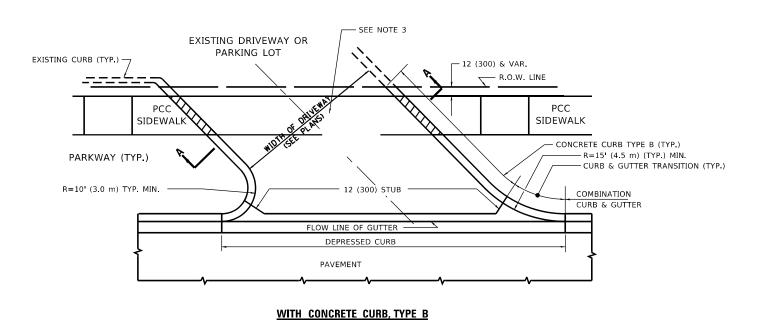
FAU 1238 OVERLAY 23 LAKE 36 21

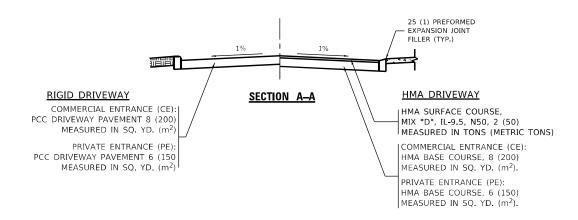
CONTRACT NO. 62U77

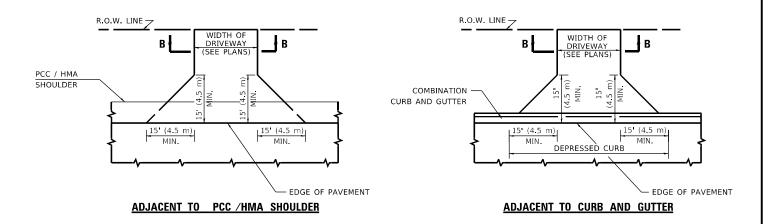


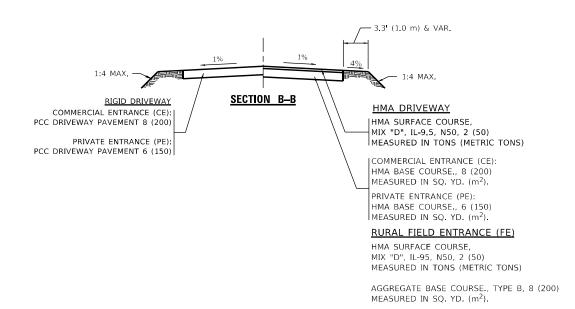


MODEL: Default









#### **GENERAL NOTES**

- 1. DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.
- COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

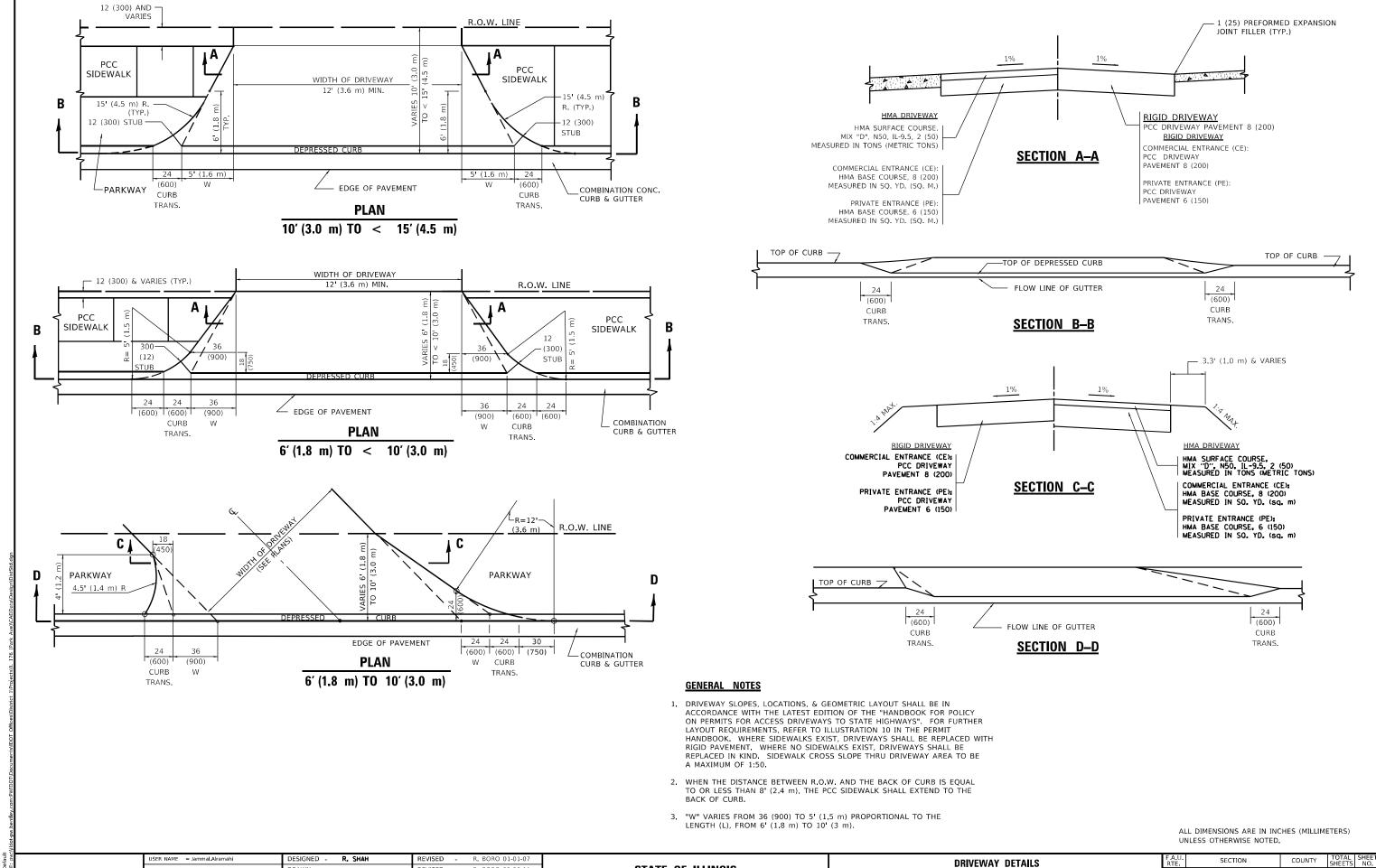
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

USER NAME = Jammal.Alramahi	DESIGNED - R. SHAH	REVISED - R. BORO 06-11-08
	DRAWN -	REVISED - R. BORO 09-06-11
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED - K. SMITH 08-28-19
PLOT DATE = 3/21/2024	DATE - 11-04-95	REVISED - K SMITH 11-18-22

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS — DISTANCE BETWEEN R.O.W.						
AND F	ACE OF	CURB	&	EDGE OF	SHOULDER	≥ 15′(4.5m)
SCALE: NONE	SHEET	1 OF	1	SHEETS	STA.	TO STA.

	F.A.U. RTE	SECT	LION		COUNTY	TOTAL SHEETS	SHEET NO.	
	1238	FAU 1238 23 OVERLAY			LAKE	36	24	
	BD400-01 (BD-01)				CONTRACT	2U77		
			ILLINOIS	FED. A	ID PROJECT			



**DEPARTMENT OF TRANSPORTATION** 

LAKE

BD400-02 (BD-02)

CONTRACT NO. 62U77

DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5m)

OF 1 SHEETS STA.

36 25

REVISED -

R. BORO 09-06-11

K. SMITH 08-27-19

K. SMITH 11-18-22

DRAWN

DATE

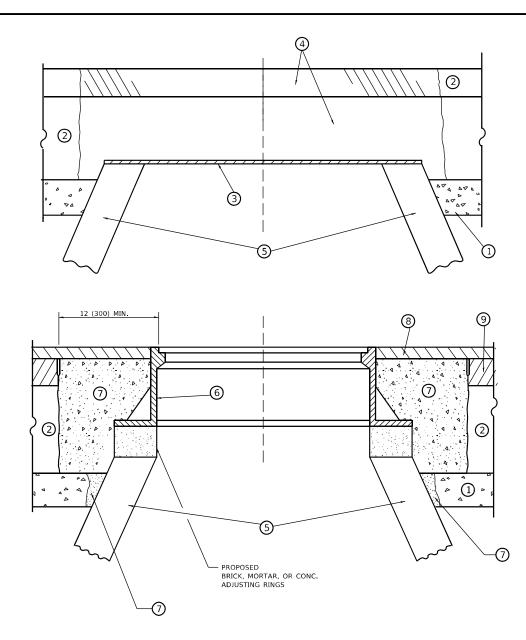
CHECKED

11-06-95

LOT SCALE = 100.0000 ' / in.

LOT DATE = 3/21/2024

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.
- 2. 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.
- 5. THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

#### STAGE 1 (BEFORE PAVEMENT MILLING)

**CONSTRUCTION PROCEDURES** 

- 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**

(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

(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)."
- 2. 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

LAKE

36

CONTRACT NO. 62U77

JSER NAME = Jammal.Alramahi DESIGNED - R. SHAH REVISED - R. BORO 03-09-11 DRAWN REVISED - R. BORO 12-06-11 CHECKED REVISED - K. SMITH 11-18-22 LOT DATE = 3/21/2024 10-25-94 REVISED - K. SMITH 09-15-23 DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

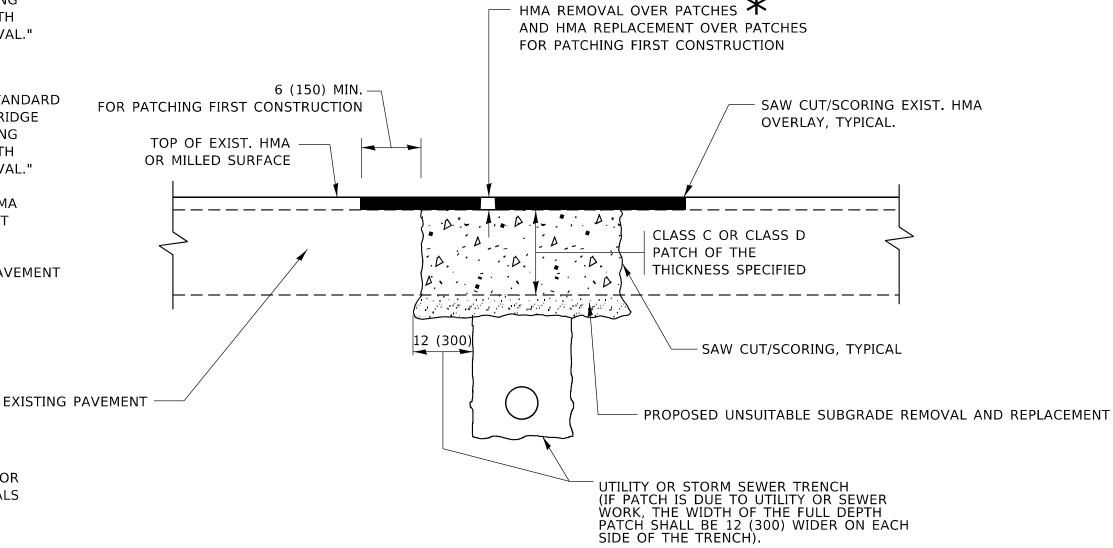
DETAILS FOR 1238 FAU 1238 23 OVERLAY FRAMES AND LIDS ADJUSTMENT WITH MILLING BD600-03 (BD-08) SHEET 1 OF 1 SHEETS STA.

#### **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

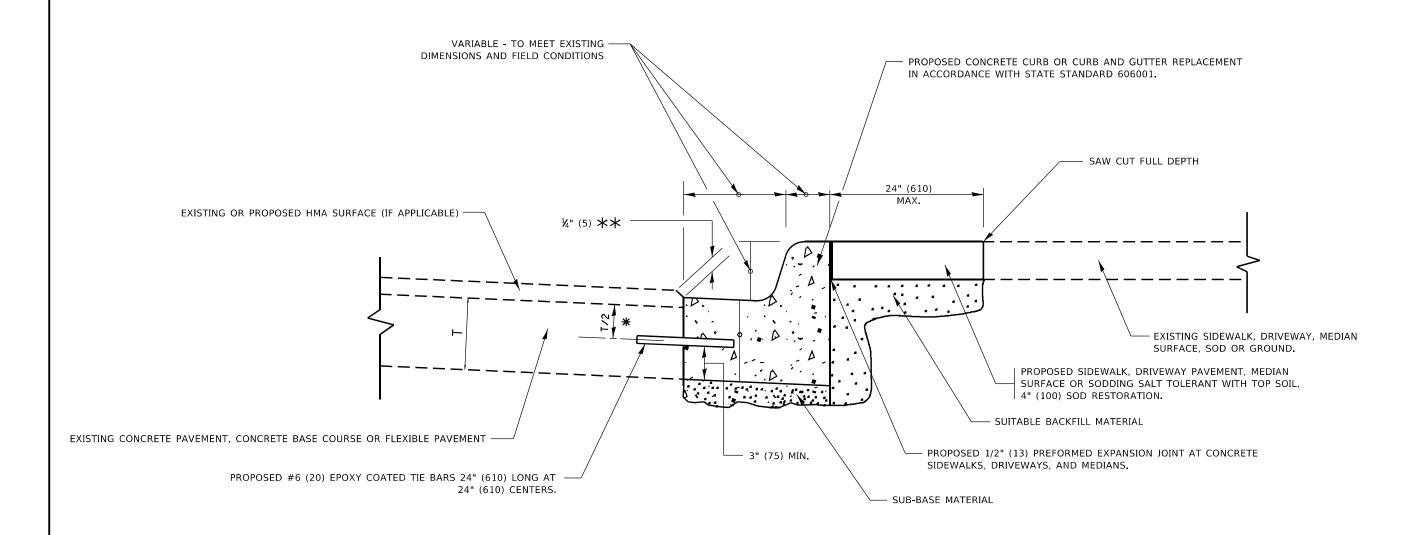
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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

- 1. MILL HMA FIRST IF THERE IS AT LEAST 4½ 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 = Jammal.Alramahi	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07		PAVEMENT PATCHING FOR	F.A.U. RTF	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	REVISED - R. BORO 09-04-07	STATE OF ILLINOIS		1238	FAU 1238 23 OVERLAY	LAKE	36	27
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - K. ENG 10-27-08	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT		BD400-04 (BD-22)	CONTRACT	F NO. 62	U77
PLOT DATE = 3/21/2024	DATE - 10-25-94	REVISED - K. SMITH 11-18-22		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.		LILINOIS FED A	ID PROJECT		



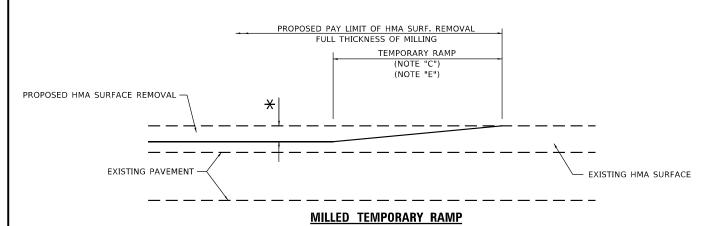
- imes 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- $\star\star$  IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

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

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

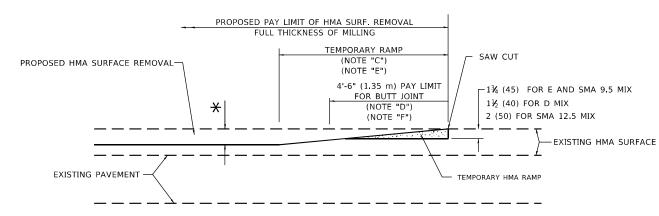
USER NAME = Jammal,Alramahi	DESIGNED - A. HOUSEH	REVISED	-	A. ABBAS 03-21-97
	DRAWN -	REVISED	-	M. GOMEZ 01-22-01
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED	-	R. BORO 12-15-09
PLOT DATE = 3/21/2024	DATE - 03-11-94	REVISED	-	K. SMITH 07-11-19

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 1

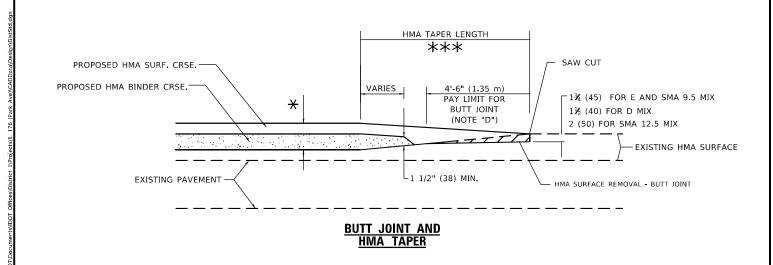


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

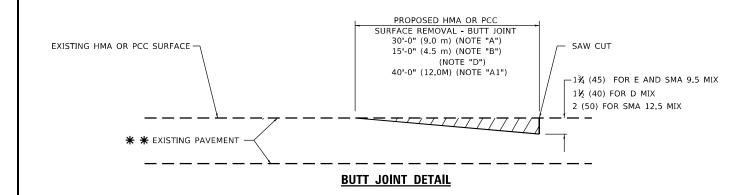
#### OPTION 2

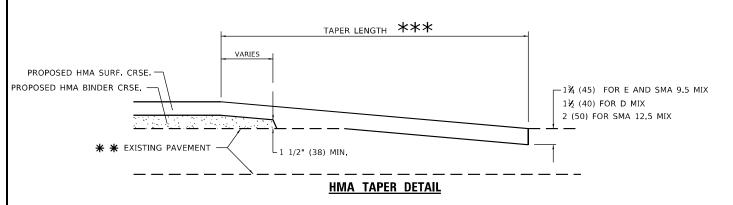
### TYPICAL TEMPORARY RAMP



# 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.

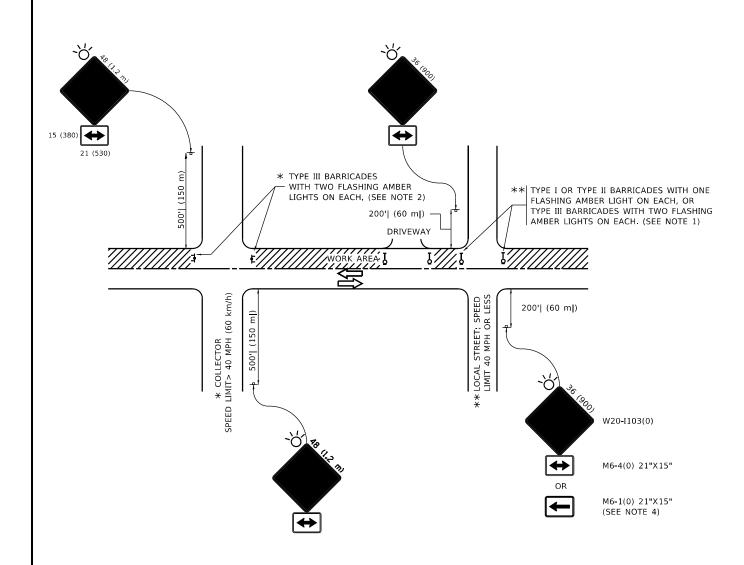
#### **GENERAL NOTES**

- 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.

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



#### 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.
- 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.

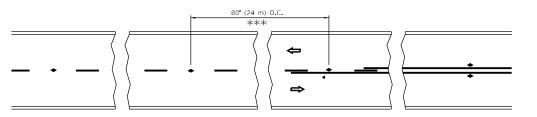
All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = Jammal,Airamahi	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 = 3/21/2024	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

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

SI	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS							
	SHEET	1	OF	1	SHEETS	STA.	TO STA.	

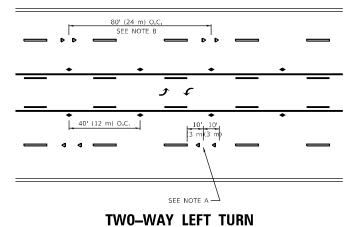
F.A.U. RTE	SEC	TION		COUNTY	TOTAL SHEETS	SHE
1238	FAU 1238 2	LAKE	36	3		
	TC-10	CONTRACT	NO. 62	2U7		
		TILINIOIC	EED A	D DOOLEGE		



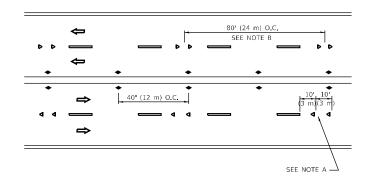
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

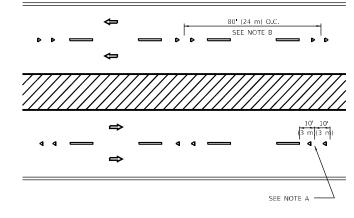
# LANE REDUCTION TRANSITION

SEE FIGURE 3B-14 MUTCD



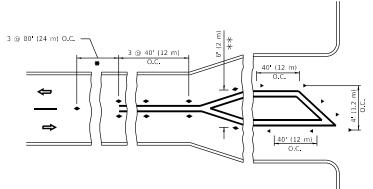
#### TW0-LANE/TW0-WAY

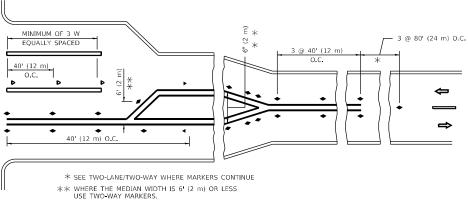




#### MULTI-LANE/UNDIVIDED







#### **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.

REVISED - T. RAMMACHER 03-12-99 JSER NAME = Jammal.Alramahi DESIGNED -REVISED - T. RAMMACHER 01-06-00 DRAWN LOT SCALE = 100.0000 ' / in. CHECKED REVISED - C. JUCIUS 09-09-09 PLOT DATE = 3/21/2024 REVISED -C. JUCIUS 07-01-13 DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

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

SECTION 1238 FAU 1238 23 OVERLAY LAKE 36 TC-11 CONTRACT NO. 62U77

**SYMBOLS** 

ONE-WAY AMBER MARKER

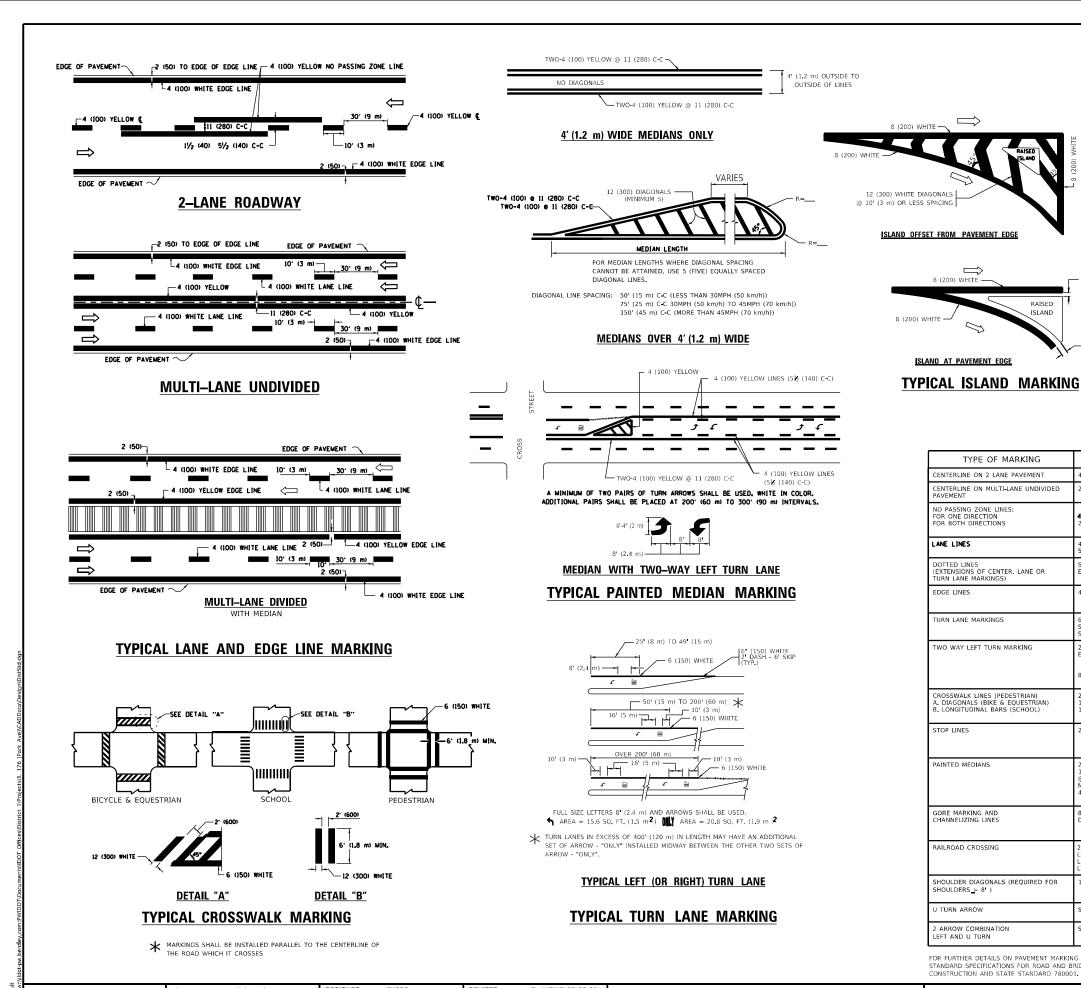
TWO-WAY AMBER MARKER

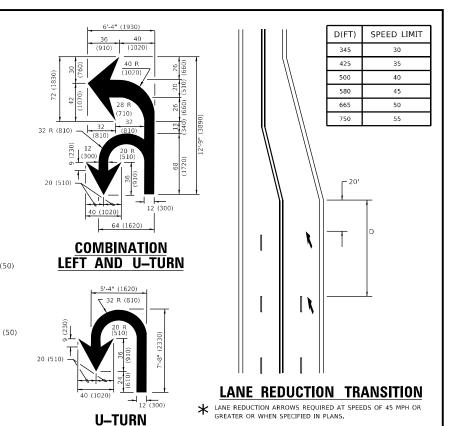
ONE-WAY CRYSTAL MARKER (W/O)

YELLOW STRIPE

WHITE STRIPE

**TURN LANES** 





TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	<b>4 (100)</b> 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	S¼ (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 EN 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' (600) APART 5EE 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 <b>2</b> EACH "X"=54.0 SQ. FT. (5.0 m <b>2</b>
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

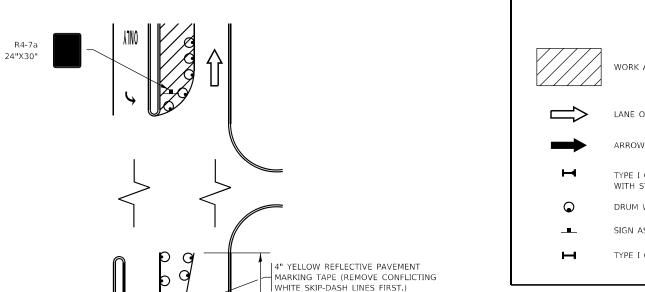
All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = Jammal.Alramahi	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 = 3/21/2024	DATE	-	03-19-90	REVISED	-	C. JUCIUS 04-12-16

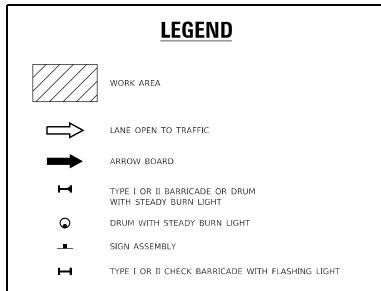
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	DISTRICT ONE				F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	TYPICAL PAVEMENT MARKINGS					1238	FAU 1238 23 OVERLAY	LAKE	36	32
							TC-13	CONTRACT	NO. 62	2U77
	SHEET 1	OF 2	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		

## TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

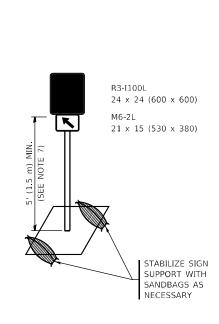


- ARROW BOARD

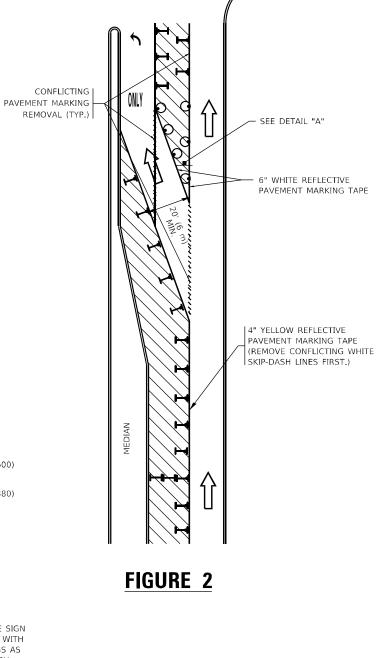


#### NOTES:

- 1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
  - B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
- 2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- 3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
- 4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
- 5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN, UNDER THIS CONDITION, "RIGHT TURN LANE" R3-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** 

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

LAKE

36

CONTRACT NO. 62U77

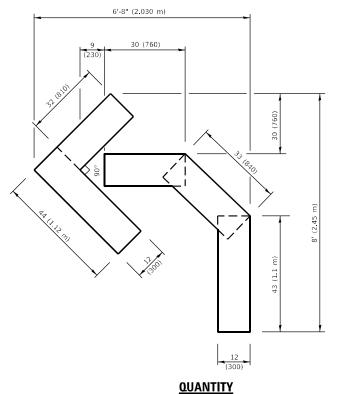
#### DESIGNED -T. RAMMACHER 09-08-94 REVISED - R. BORO 09-14-09 SER NAME = Jammal.Alramahi DRAWN - A. HOUSEH 11-07-95 REVISED - A. SCHUETZE 07-01-13 PLOT SCALE = 100.0000 ' / in. A. HOUSEH 10-12-96 REVISED - A. SCHUETZE 09-15-16 LOT DATE = 3/21/2024 DATE -T. RAMMACHER 01-06-00 REVISED

FIGURE 1

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

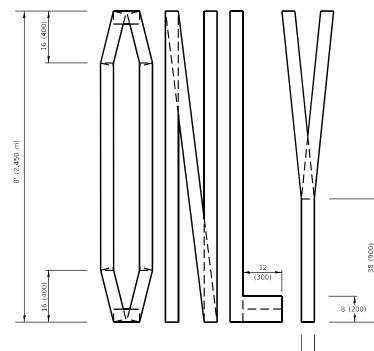
SECTION TRAFFIC CONTROL AND PROTECTION AT TURN BAYS 1238 FAU 1238 23 OVERLAY (TO REMAIN OPEN TO TRAFFIC) TC-14 SHEET 1 OF 1 SHEETS STA.

SEE DETAIL "A"



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

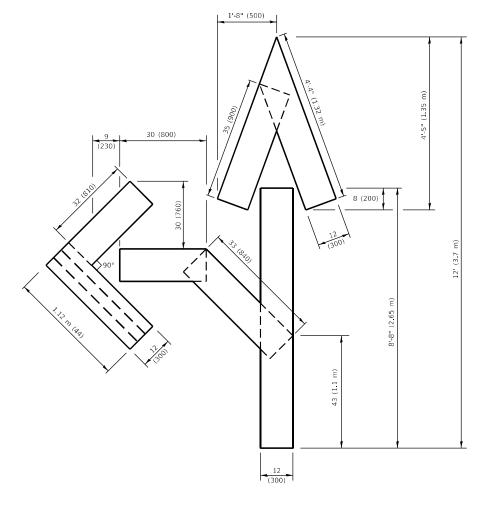
16 (400) | | 16 (400) | 16 (400) | 16 (400) \* 4 (100)



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

DATE

QUANTITY

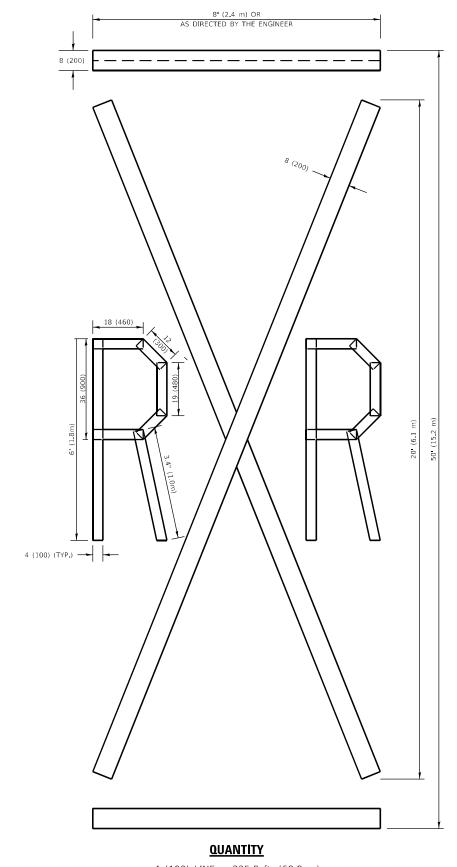


#### QUANTITY

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)

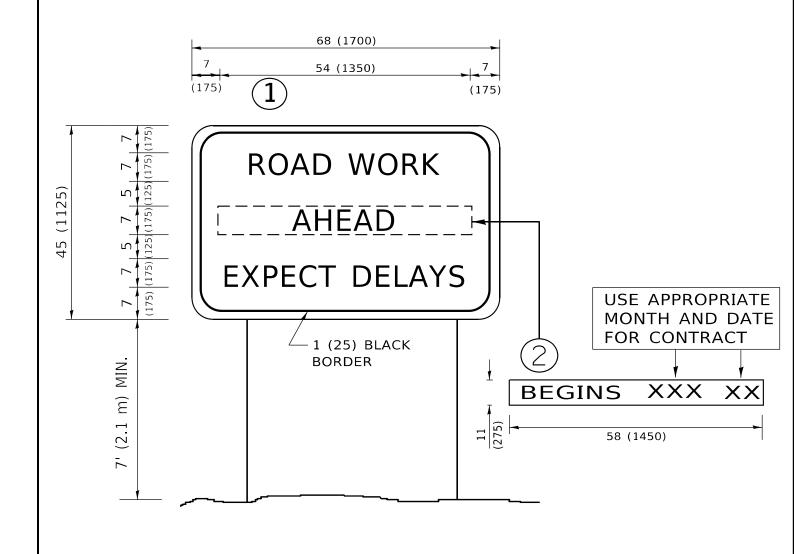
> All dimensions are in inches (millimeters) unless otherwise shown.

DESIGNED -JSER NAME = Jammal,Airamahi 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 = 3/21/2024 REVISED - A. SCHUETZE 09-15-16

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS SCALE: NONE SHEET 1 OF 1 SHEETS STA.

SECTION 1238 FAU 1238 23 OVERLAY CONTRACT NO. 62U77 TC-16



#### 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

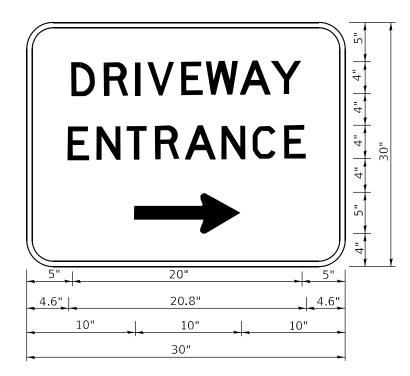
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

USER NAME = Jammal.Alramahi	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 = 3/21/2024	DATE -	REVISED - C. JUCIUS 01-31-07

STATE	: OI	: ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

	ARTERIAL ROAD							SEC <sup>-</sup>	LION	
	INFORMATION SIGN						1238	FAU 1238 2	3 OVER	LAY
		liai .	UIII	MAIJON	SIGIN			TC-22		
•	1	OF	1	SHEETS	STA.	TO STA.			ILLINOIS	FED. A



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

#### NOTES:

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

USER NAME = Jammal.Alramahi	DESIGNED -	REVISED	-	C. JUCIUS 02-15-07
	DRAWN -	REVISED	-	
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED	-	
PLOT DATE = 3/21/2024	DATE -	REVISED	-	

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

						F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS		
DRIVEWAY ENTRANCE SIGNING					1238	FAU 1238 23 OVERLAY	LAKE	36	36		
Ļ								TC-26 CONT		RACT NO. 62U77	
L	SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT			