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STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

FOR INDEX OF SHEETS AND HIGHWAY STANDARDS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN THE VILLAGES OF SCHAUMBURG & ELK GROVE

PROPOSED HIGHWAY PLANS

FAP ROUTE 0341: IL 72 (HIGGINS ROAD) I-290 (EISENHOWER EXPWY) TO NW OF LANDMEIER ROAD SECTION: FAP 0341 23 SMART

PROJECT: NHPP-8SP4(014)

SMART OVERLAY, ADA IMPROVÉMENTS

COOK COUNTY C-91-071-24

TRAFFIC DATA

2023 ADT = 21,500 - 29,000 VPDPOSTED SPEED LIMIT = 35 - 45 MPH FUNCTIONAL CLASS = OTHER PRINCIPLE ARTERIAL

E HIGGINS RD STA 222 + 55 I-290 EXPWY RAMP OAKTON ST STA 10+00 STA 312+98 R11E **PROJECT BEGINS** STA 27 + 21 1-290 EXPWY RAMP CONCRETE JOINT **OAKTON ST** STA 330 + 58 HIGGINS RD T41N E HIGGINS RD STA 400+00 OMISSION AT OAKTON ST SALT CREEK STA 81 + 74 TO STA 82+69 Elk Grove ALEXANDER ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ane ON REDUCED PLANS. THE ABOVE SCALES MAY BE USED. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 01/22/2025 OMISSION AT PROJECT ENDS **ELK GROVE TOWNSHIP** 1-800-892-0123 HIGGINS CREEK STA 451 + 22 GROSS LENGTH = 25,714 FT. = 4.87 MILE STA 423+91 TO

STA 425 + 58

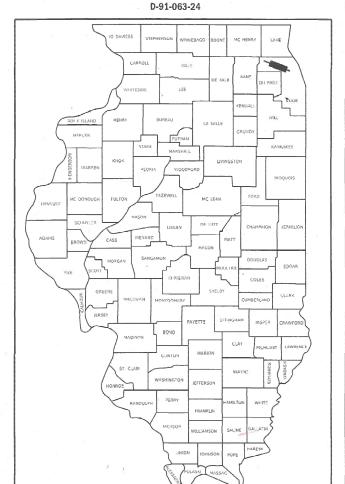
NET LENGTH = 25.450 FT. = 4.82 MILE

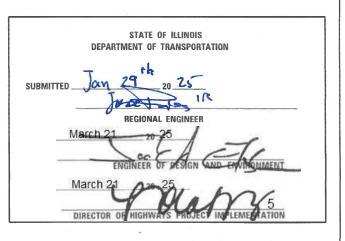
PROJECT ENGINEER: VESELIN VELICHKOV (847) 705-4432 PROJECT MANAGER: FAWAD AQUEEL

> 1 South Wacker | Suite 2650 | Chicago, IL 60606 P 312,425,9560 | F 312,425,9564 | www.infrastructure-eng.com

CONTACT: ALEXANDER LANE (312) 477-0620

FAP 0341 23 SMART 0341 COOK ILLINOIS CONTRACT NO. 62V85





LOCATION OF SECTION INDICATED THUS: -

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV-SEP

CONTRACT NO. 62V85

INFRASTRUCTURE ENGINEERING | THEORPHEATED

INDEX OF SHEETS

55		
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l	55	TC-13: TYPICAL PAVEMENT MARKINGS
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l	57	TC-16: SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS
l	57A	TC-17: TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER AND PARTIAL RAMP CLOSURES
l	58	TC-22: ARTERIAL ROAD INFORMATION SIGN
	59	TC-26: DRIVEWAY ENTRANCE SIGNING
	60	TS-07: DETECT OR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

STATE STANDARDS

STANDARD NO.	DRAWING NAME
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-12	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
701006-05	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701101-05	●FF-RD ●PERATIONS, MULTILANE 15" (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701400-12	APPROACHTO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
701421-08	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701426-0 9	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH
701427- <mark>0</mark> 5	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≤ 40 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701446-11	TWO LANE CLOSURE, FREEWAY/EXPRESSWAY
701501-06	URBAN LANE CL●SURE, 2L, 2W, UNDIVIDED
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CL●SURE, MULTILANE INTERSECTI●N
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-10	TRAFFIC CONTROL DEVICES
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

GENERAL NOTES

- 1. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO BEGINNING CONSTRUCTION AND ORDERING MATERIALS.
- 3. 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,
- 4. THE RESIDENT ENGINEER SHALL CONTACT FADI SULTAN, AREA TRAFFIC FIELD ENGINEER, AT FADI.SULTAN@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 5. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNITESS OTHERWISE SHOWN
- 6. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 7. LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT [OR COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED ON THE PLANS)], WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- B. DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 9. 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.
- 10. THE CONTRACTOR SHALL 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 SHALL DELIVER THE RECORD TO THE ENGINEER.
- 11. THE CONTRACTOR SHALL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF PLATED STRUCTURES BY STATION AND OFFSET LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT.
- 12. 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.
- 13. PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.

SCALE: NTS

- 14. 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 SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.
- 15. OVERNIGHT LANE CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURES AS DETERMINED AND APPROVED IN WRITING BY THE RESIDENT ENGINEER OR AS PROVIDED IN THE CONTRACT SPECIFICATIONS.
- 16. 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.
- 17. DROP-OFFS ADJACENT TO THE TRAVEL LANE SHALL BE KEPT TO A MINIMUM. PROTECTION OF THE DROP-OFF SHALL BE ACCORDING TO THE IDOT BUREAU OF SAFETY PROGRAMS AND ENGINEERING, SAFETY ENGINEERING POLICY MEMORANDUM 4-21. DROP-OFFS GREATER THAN OR EQUAL TO 12" AT LOCATIONS WHERE THE DROP-OFF IS LOCATED WITHIN 8 FT OF THE EDGE OF THE TRAVEL LANE SHALL BE BACKFILLED IN ACCORDANCE WITH TABLE 2, CONDITION II OF THE SAFETY 4-21 POLICY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE DROP-OFF AREAS MEET THE OFFSET, HEIGHT, AND DURATION REQUIREMENTS TO USE BARRICADES AT THE END OF EACH WORKDAY. THIS MAY REQUIRE THE CONTRACTOR TO REPLACE OR PLACE SUFFICIENT MATERIAL IN THE EXCAVATION TO REDUCE THE DROP-OFF TO BE COMPLIANT WITH THE REQUIREMENTS FOR USE OF BARRICADES. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED TO COMPLY WITH THIS REQUIREMENT.

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3.22/22-4675-00 IDOT Various Phase 2 (PTB 205-002)/WO 24 62/85IDGN/CADD_Sheets/82/85-SHT-80

				CONSTRUCTION COD		ICTION CODE	Ę
			URBAN	0005 ROADWA	Y	0021 TRAFFIC SIGNAL	
PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	100% STATE	80% FEDERAL 20% STATE	
20404400	AUTDOOFN FEDTUATED AUTDIENT	BOUND.	222.0	000.0			
20101400	NITROGEN FERTILIZER NUTRIENT	POUND	233,9	233,9			
20101500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	233.9	233.9			
20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	233.9	233.9			
20101000	TO THE SAME	T G G I I	200,0	200.0			
20200100	EARTH EXCAVATION	CU YD	3,220	3,220			
21101615	TOPSOIL FURNISH AND PLACE, 4"	Se YD	150	150			
21101645	TOPSOIL FURNISH AND PLACE, 12"	Se YD	12,380	12,380			
25000210	SEEDING, CLASS 2A	ACRE	2.59	2.59			
25000210	SEEBING, SD GO 27	ACITE	2.00	2.00			
25200110	SODDING, SALT TOLERANT	SQ YD	150	150			
25200200	SUPPLEMENTAL WATERING	UNIT	626.5	626.5			
25200200	SUPPLEINENTAL WAI ERING	ONIT	020.5	020.9			
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	42	42			
28000510	INLET FILTERS	EACH	12	12			
2000510	INLEI FILIERS	CACH	12	1/2			
35101500	AGGREGATE BASE COURSE, TYPE B	CU YD	328	328			
				AN			
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	88,885	88,885			
40600370	LONGITUDINAL JOINT SEALANT	FOOT	92,592	92,592			
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	297	297			
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	S@ YD	1,185	1,185			
40605026	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT 9.5 MIX "F" NR0	TON	20,064	20,064			
42001300	PROTECTIVE COAT	Se YD	9,952	9,352			
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	S@ FT	4,260	4,260			
42400\$00	DETECTABLE WARNINGS	S@ FT	273	273			
44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	Se YD	197,522	197,522			
44000464	HOT MIY ASBUALT SUDEACE DEMOVAL 2"	CA VD	1 542	1 512			
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	Se YD	1,543	1,543			
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	20,493	20,493			
						<u> </u>	

				C	CONSTRUCTION CODE	
			URBAN	0005 ROADWA	0021 TRAFFIC SIGNAL	
PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	100% STATE	80% FEDERAL 20% STATE
44000600	SIDEWALK REMOVAL	SQ FT	3,075	3,075		
			1,000			
44003100	MEDIAN REMOVAL	SQ FT	117,816	117,816		
44201773	CLASS D PATCHES, TYPE I, 11 INCH	SQ YD	168	168		
11001777	CLACC D BATCHEC TYPE II 44 INCH	00 1/0	4.500	4.500		
44201///	CLASS D PATCHES, TYPE II, 11 INCH	SQ YD	<mark>4,520</mark>	4,520		
44201781	CLASS D PATCHES, TYPE III, 11 INCH	S@ YD	1,180	1,180		
44201783	CLASS D PATCHES, TYPE IV, 11 INCH	S● YD	2,918	2,918		
			-,			
56109210	WATER VALVES TO BE ADJUSTED	EACH	5	5		
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	116	116		
C0404850	EDAMEC AND COATEC TYME 04	FACIL	7	7		
60404950	FRAMES AND GRATES, TYPE 24	EACH	7	7		
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	27	27		
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	14	14		
60609200	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12	FOOT	20,112	20,112		
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	6,404	6,404		
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	3,220	3,220		
4 0300200	Harrist Estre Whole Startes	33.12	0,220	0,220		
66900530	SOIL DISPOSAL ANALYSIS	EACH	6	6		
66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1		
66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1		
00301003	INCOUNT EU SOLISTANGLO FINAL CONSTRUCTION REFORT	L 20IVI		1		
66901006	REGULATED SUBSTANCES MONITORING	CAL DA	6	6		
67100100	MOBILIZATION	L SUM	1	1		
				2		
70100320	TRAFFIC CONTROL AND ₱ROTECTION, STANDARD 701422	L SUM	1	1		
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1		
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1		
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1		
				3		

l	USER NAME = ALane	DESIGNED - JCS	REVISED _
INFRASTRUCTURE		DRAWN _ JCS	REVISED _
ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606		CHECKED - ACL	REVISED -
P 312.425.9560 F 312.425.9564 www.infrastructure-eng.com		DATE - 02/04/2025	***

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				CONSTRUC		CTION CODE	
			URBAN	0005 ROADWA	Υ	0021 TRAFFIC SIGNAL	
PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	100% STATE	80% FEDERAL 20% STATE	
70102 6 35	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1			
70102033	TRAFFIC CONTROL SURVEILLANCE		50	50			
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1			
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1	1			
70300100	SHORT TERM PAVEMENT MARKING	FOOT	20,124	20,124			
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	31,649	31,649			
70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	3,474	3,474			
70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	75,499	75,499			
10300221	TEM CIVALLY AND THE WASHING - BINE 4 - 1 AND	1001	75,433	75,450			
70300241	TEMPORARY PAVEMENT MARKING - LINE 6"- PAINT	FOOT	13,260	13,260			
70300261	TEMPORARY PAVEMENT MARKING - LINE 12"- PAINT	FOOT	4,918	4,918			
70300281	TEMPORARY PAVEMENT MARKING - LINE 24"- PAINT	FOOT	1,413	1,413			
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	75,499	75,499	İ		
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	3,474	3,474			
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	75, <mark>4</mark> 99	75, <mark>49</mark> 9			
78000300	THERMOPLASTIC PAVEMENT MARKING - LINE 5"	FOOT	490	490			
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	13,260	13,260			
78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	2,160	2,160			
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	4,918	4,918			
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	1,413	1,413			
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	1,135	1,135			
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	1,135	1,135			
7 83 00202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	6,708	6,708			
\$102\$200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	94			94	
\$ 5000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2			2	
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	4,107			4,107	
8 7301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	716			716	
8 7301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCT OR, NO. 6	FOOT	60			60	
41301300	10	1001	••			-	

				CONSTRUCTION		ICTION CODE	CODE	
			URBAN	0005 ROADWA	Υ	0021 TRAFFIC SIGNAL		
PAY ITEN NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	100% STATE	80% FEDERAL 20% STATE		
\$79 00200	DRILL EXISTING HANDHOLE	EACH	6			6		
		j						
\$ 9500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	3			3		
8 9502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2			2		
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1				
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	1,241			1,241		
X1400367	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	3			3		
X 1400378	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	3			3		
V0544600	EDOCION CONTROL IN ANI/ET / OFFICIALLY	00.1/0	10 575	49.676				
X2511630	EROSION CONTROL BLANKET (SPECIAL)	SQ YD	12,575	12,575				
X4400501	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT LESS THAN OR FOLIAL TO 10 FEFT	FOOT	4,048	4,048				
X4400503	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT GREATER THAN 10 FFFT	FOOT	2,0 8 9	2,0 8 9				
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	7, <mark>18</mark> 5		7,185			
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	40	40				
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1				
X6700407	ENGINEER'S FIELD OFFICE. TYPE A (D1)	CAL MO	18	18				
X7011015		L SUM	1	1				
X8760200	ACCESSI DLE PEDESTRIAN SIGNALS	EACH	18			18		
X 2 7 2 1 1 1 2	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	24			24		
X-7-0012	GONGRETE I GONDATION, THE EXTENDED DIAMETER	1001	24			24		
X8860105	DETECTOR LOOP REPLACEMENT	FOOT	6,546			6,546		
Z0001110	GAS VALVETO BE ADJUSTED	EACH	2	2				
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	215		215			
X7200061	TEMP®RARY INFORMATION SIGNING	SQ FT	27	278				
Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	2			2		
Z0076600	TRAINEES	нопр	1000	1000				
Z0076604		HOUR	1000	1000				

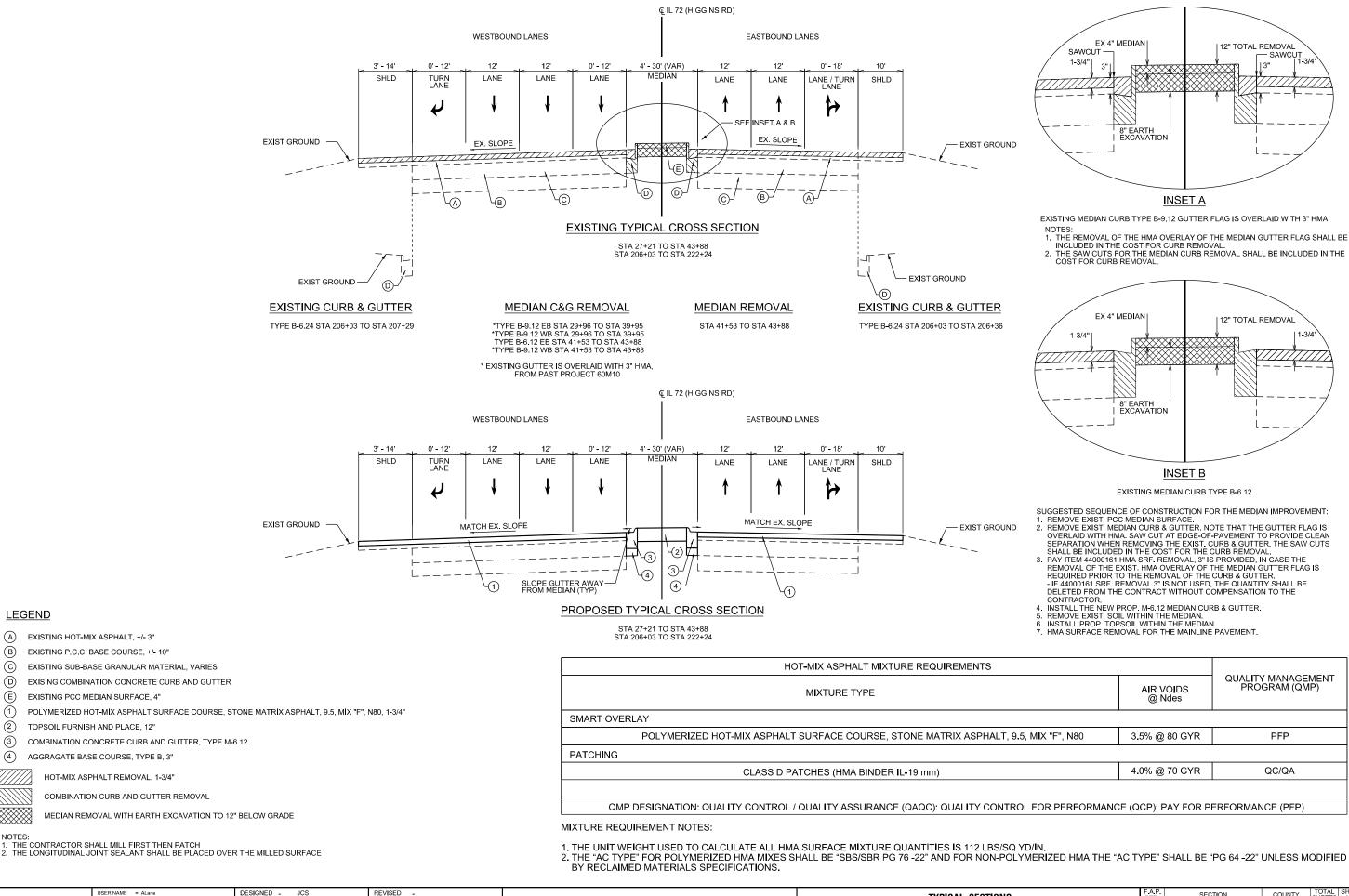
* = SPECIALTY ITEM

Hi		USER NAME = ALane	DESIGNED _	JCS	REVISED _
	INFRASTRUCTURE		DRAWN _	JCS	REVISED _
	ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606		CHECKED -	ACL	REVISED -
	P 312.425.9560 F 312.425.9564 www.infrastructure-eng.com		DATE -	02/04/2025	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES						
IL 72 (HIGGINS ROAD)						
	STA.	TO STA.				

SCALE: NTS



SCALE: 1"=5"

LEGEND

(B)

(C)

D

(E)

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(3)

4

EXISTING HOT-MIX ASPHALT, +/- 3"

EXISTING P.C.C. BASE COURSE. +/- 10"

EXISTING PCC MEDIAN SURFACE, 4'

TOPSOIL FURNISH AND PLACE, 12"

AGGRAGATE BASE COURSE, TYPE B, 3"

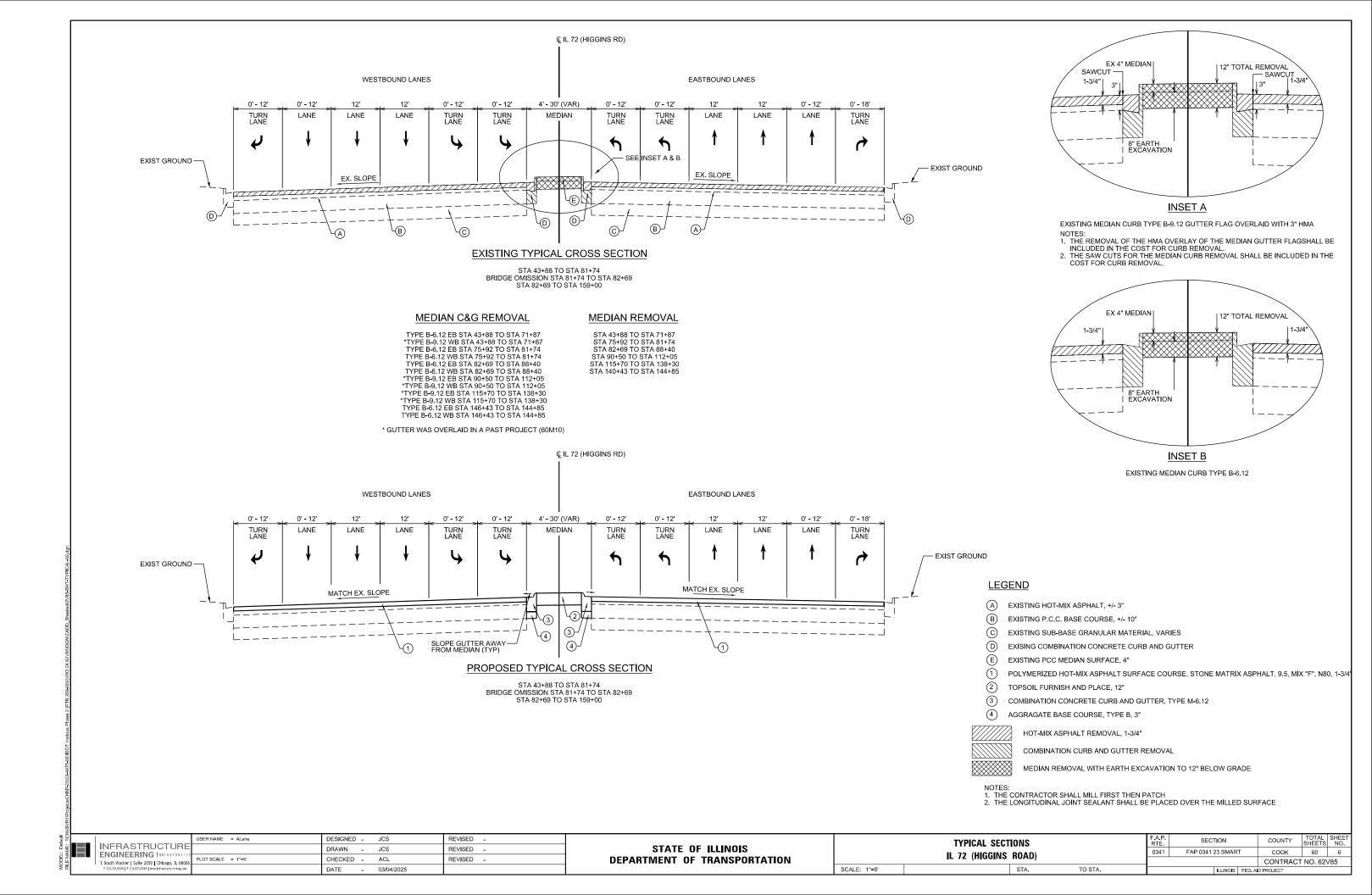
HOT-MIX ASPHALT REMOVAL, 1-3/4"

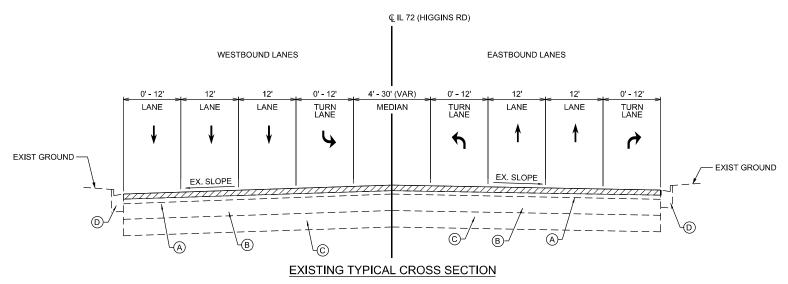
USER NAME = ALane

INFRASTRUCTURE DRAWN JCS REVISED ENGINEERING LINCO CHECKED -ACL 1 South Wacker | Suite 2650 | Chicago, IL 6060 DATE 03/04/2025

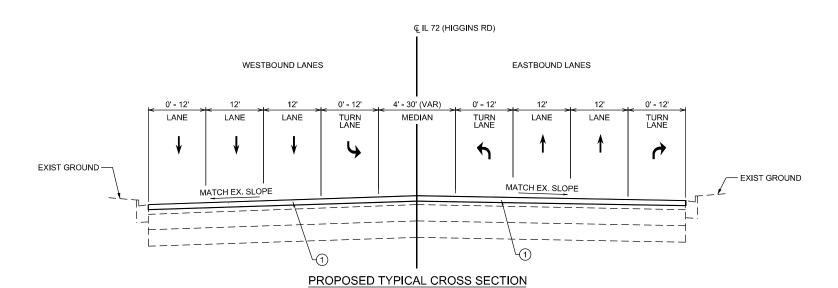
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION COUNTY TYPICAL SECTIONS 0341 FAP 0341 23 SMART COOK 60 IL 72 (HIGGINS ROAD) CONTRACT NO. 62V85 TO STA.





STA 159+00 TO STA 206+03 STA 400+55 TO STA 451+22 BRIDGE OMISSION FROM STA 423+91 TO STA 425+58



STA 159+00 TO STA 206+03

STA 400+55 TO STA 451+22 BRIDGE OMISSION FROM STA 423+91 TO STA 425+58

LEGEND

- (A) EXISTING HOT-MIX ASPHALT, +/- 3"
- B EXISTING P.C.C. BASE COURSE, +/- 10"
- © EXISTING SUB-BASE GRANULAR MATERIAL, VARIES
- D EXISING COMBINATION CONCRETE CURB AND GUTTER
- E EXISTING PCC MEDIAN SURFACE, 4"
- (1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 1-3/4"
- 2 TOPSOIL FURNISH AND PLACE, 12"
- (3) COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12
- 4 AGGRAGATE BASE COURSE, TYPE B, 3"



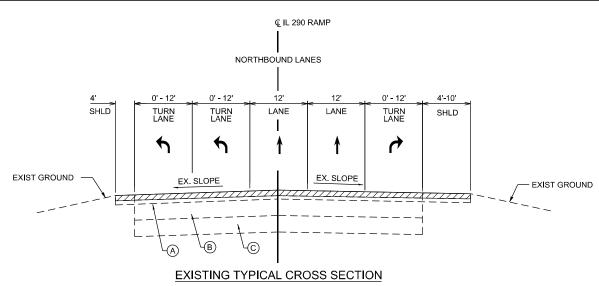
HOT-MIX ASPHALT REMOVAL, 1-3/4"

COMBINATION CURB AND GUTTER REMOVAL

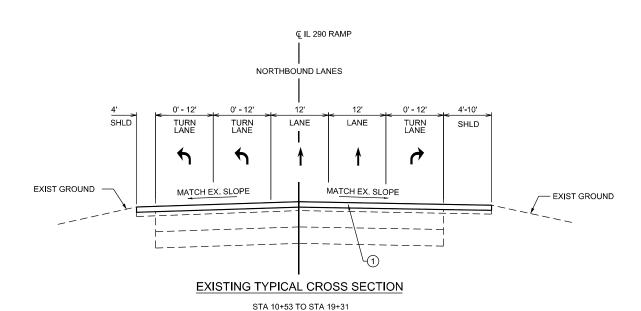
MEDIAN REMOVAL WITH EARTH EXCAVATION TO 12" BELOW GRADE

- 1. THE CONTRACTOR SHALL MILL FIRST THEN PATCH
 2. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE

	USER NAME = ALane	DESIGNED - JCS	REVISED -			TYPICAL SECTIONS		F.A.P.	SECTION	COUNTY	TOTAL	SHEET
INFRASTRUCTURE		DRAWN - JCS	REVISED -	STATE OF ILLINOIS				0341	FAP 0341 23 SMART	соок	60	7
1 South Wacker I Suite 2650 I Chicago II 60606	PLOT SCALE = 1"=5"	CHECKED - ACL	REVISED -	DEPARTMENT OF TRANSPORTATION		IL 72 (HIGGINS ROAD)				CONTRACT	T NO. 62V	85
P 312.425.9560 F 312.425.9564 www.infrastructure.eng.com		DATE - 03/04/2025			SCALE: 1"=5'	STA.	TO STA.		ILLINOIS FED. A	D PROJECT		



STA 10+53 TO STA 19+31



LEGEND

- (A) EXISTING HOT-MIX ASPHALT, +/- 3"
- B EXISTING P.C.C. BASE COURSE, +/- 10"
- © EXISTING SUB-BASE GRANULAR MATERIAL, VARIES
- D EXISING COMBINATION CONCRETE CURB AND GUTTER
- E EXISTING PCC MEDIAN SURFACE, 4"
- (1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 1-3/4"
- 2 TOPSOIL FURNISH AND PLACE, 12"
- (3) COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12
- 4 AGGRAGATE BASE COURSE, TYPE B, 3"



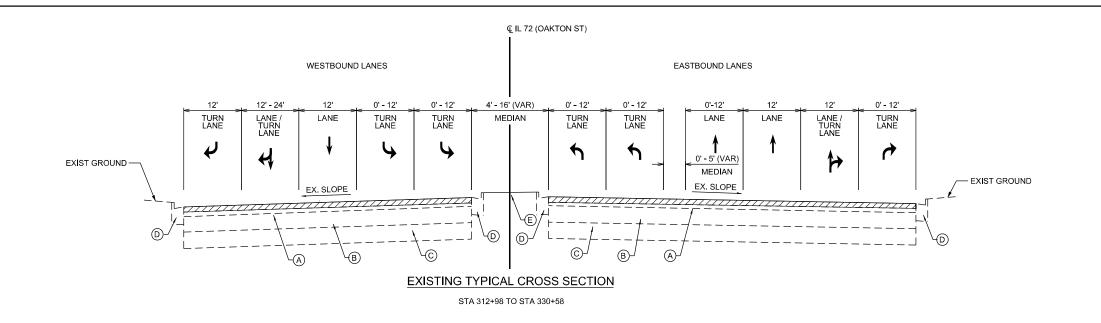
HOT-MIX ASPHALT REMOVAL, 1-3/4"

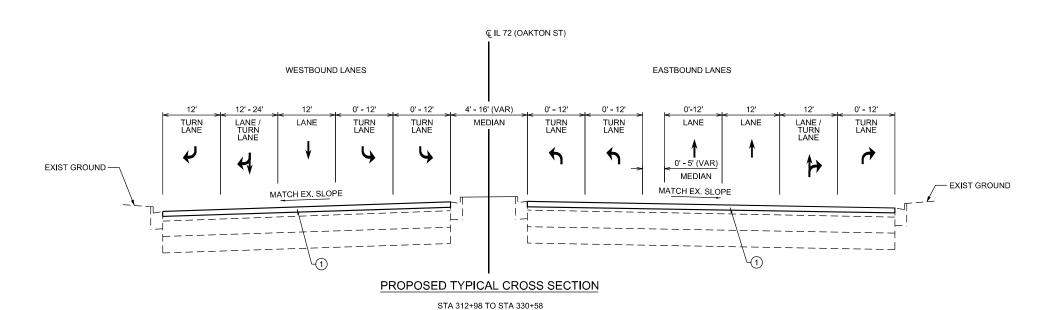
COMBINATION CURB AND GUTTER REMOVAL

MEDIAN REMOVAL WITH EARTH EXCAVATION TO 12" BELOW GRADE

- 1. THE CONTRACTOR SHALL MILL FIRST THEN PATCH
 2. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE

DESIGNED - JCS REVISED -TYPICAL SECTIONS SECTION COUNTY INFRASTRUCTURE STATE OF ILLINOIS DRAWN - JCS REVISED -FAP 0341 23 SMART 0341 соок 60 8 ENGINEERING LINCORPOR 1 290 EXIT RAMP CHECKED - ACL REVISED -**DEPARTMENT OF TRANSPORTATION** 1 South Wacker | Suite 2650 | Chicago, IL 60606 CONTRACT NO. 62V85 SCALE: 1"=5" TO STA. DATE - 03/04/2025





LEGEND

(A) EXISTING HOT-MIX ASPHALT, +/- 3"

(B) EXISTING P.C.C. BASE COURSE, +/- 10"

© EXISTING SUB-BASE GRANULAR MATERIAL, VARIES

D EXISING COMBINATION CONCRETE CURB AND GUTTER

E EXISTING PCC MEDIAN SURFACE, 4"

(1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 1-3/4"

2 TOPSOIL FURNISH AND PLACE, 12"

(3) COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12

4 AGGRAGATE BASE COURSE, TYPE B, 3"

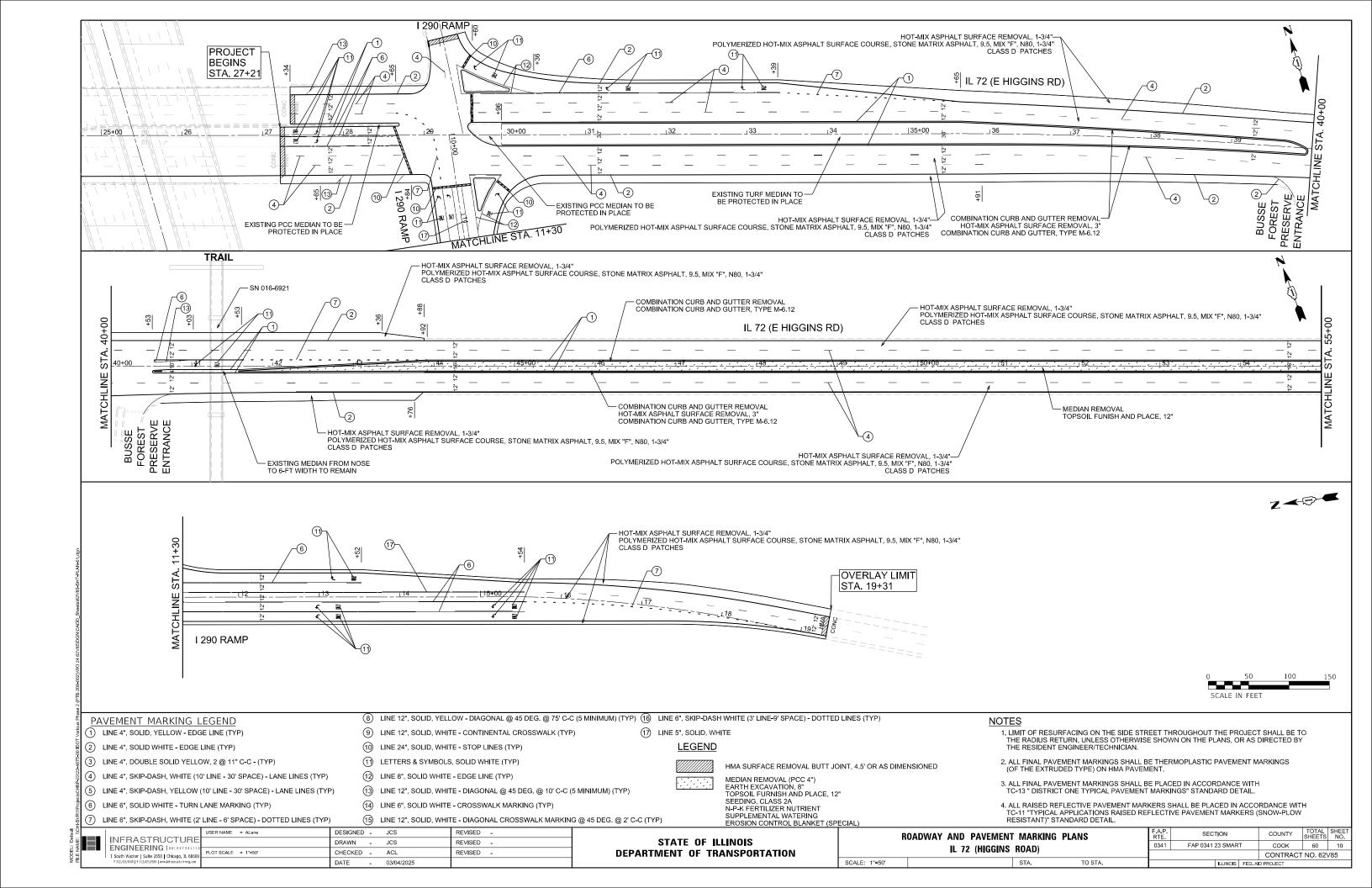
HOT-MIX ASPHALT REMOVAL, 1-3/4"

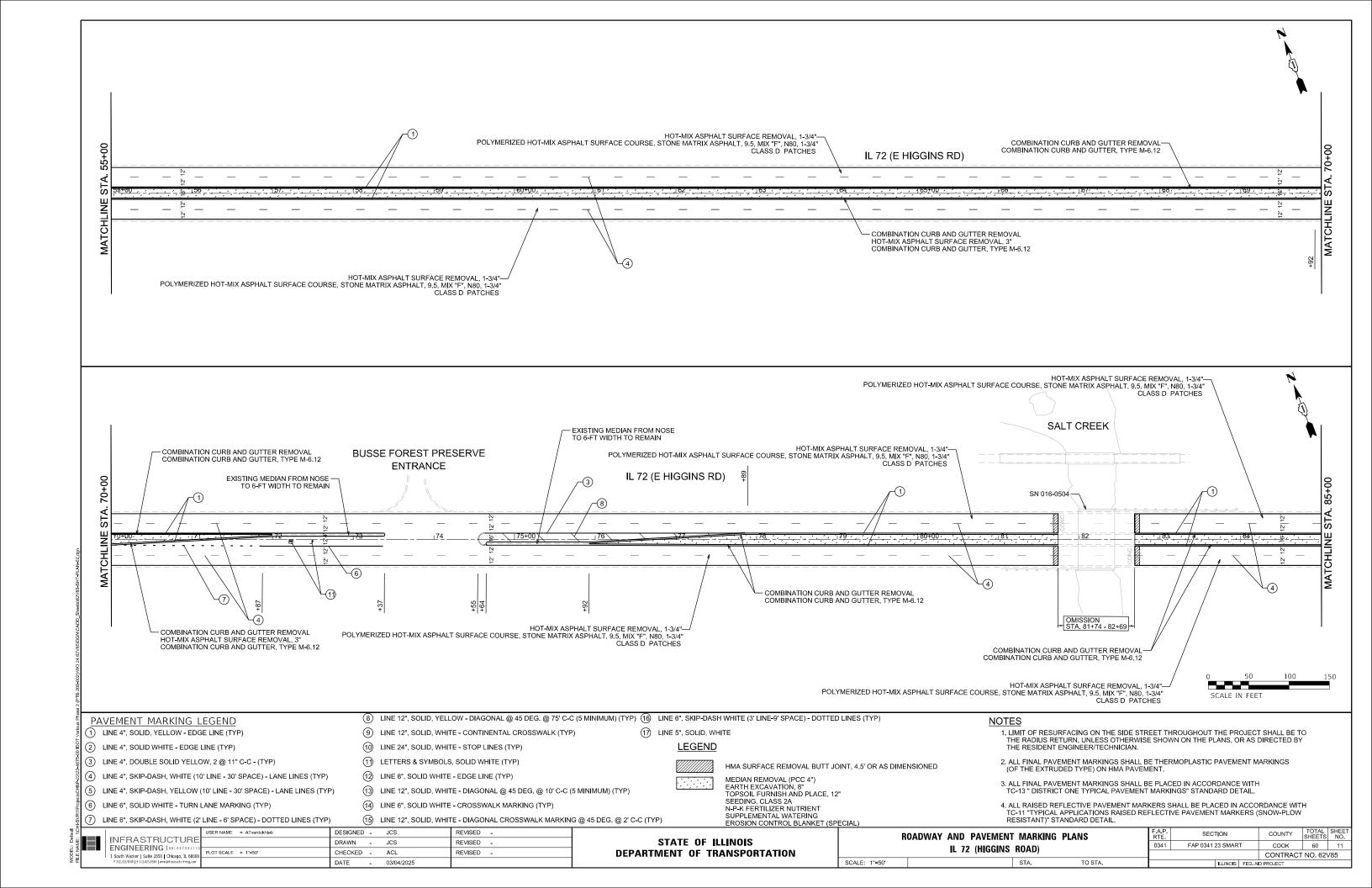
COMBINATION CURB AND GUTTER REMOVAL

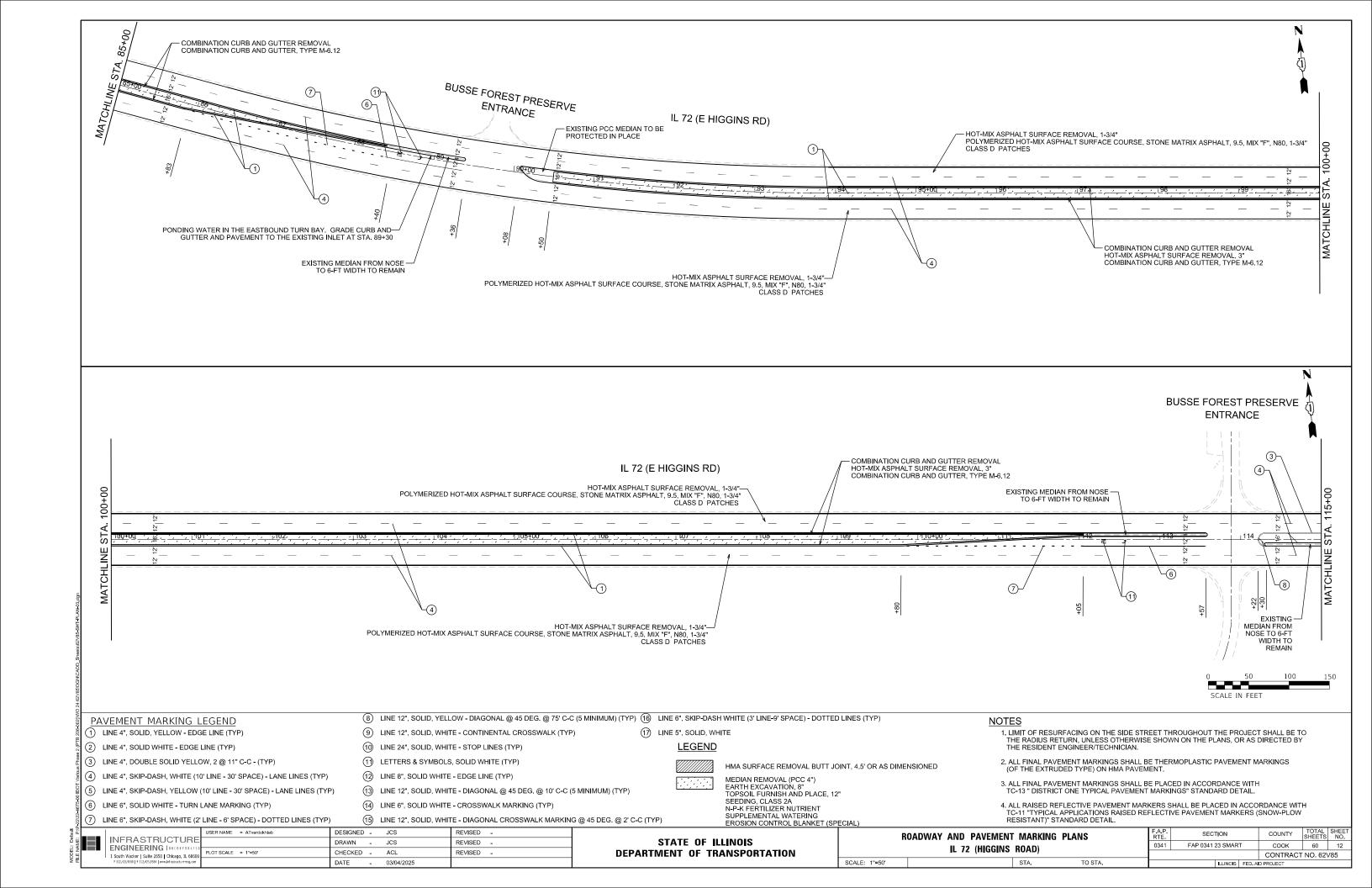
MEDIAN REMOVAL WITH EARTH EXCAVATION TO 12" BELOW GRADE

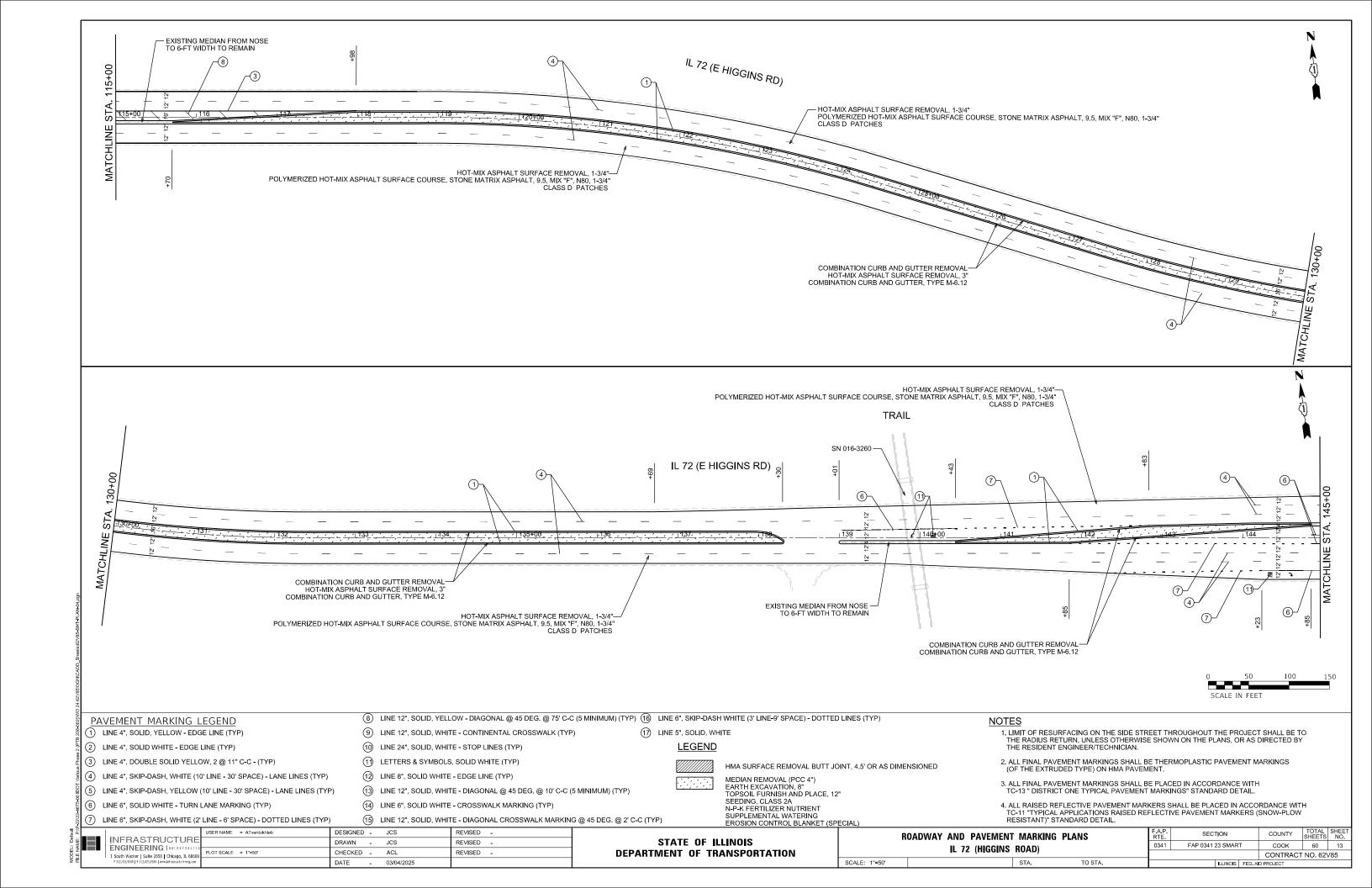
1. THE CONTRACTOR SHALL MILL FIRST THEN PATCH
2. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE

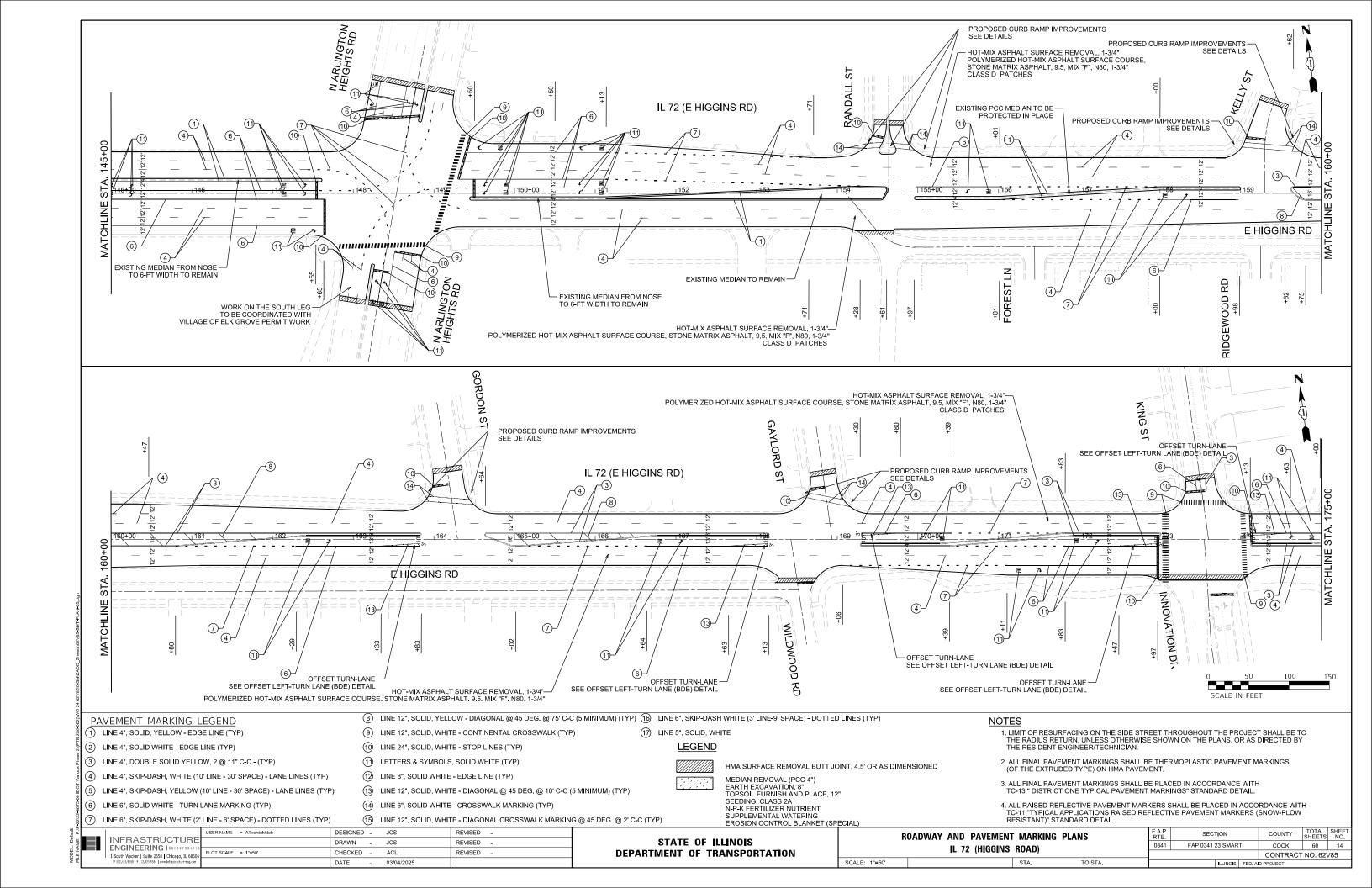
	IN IED A OTRI IOTI IDE	USER NAME = ALane	DESIGNED -	JCS	REVISED -		TYPICAL SEC	TONS		RTE	SECTION	COUNTY	SHEETS	NO.
	INFRASTRUCTURE		DRAWN -	JCS	REVISED -	STATE OF ILLINOIS				0341	FAP 0341 23 SMART	соок	60	9
	1 South Wacker Suite 2650 Chicago, IL 60606	PLOT SCALE = 1"=5"	CHECKED -	ACL	REVISED -	DEPARTMENT OF TRANSPORTATION	IL 72 (OAKTO	v 51)				CONTRACT	T NO. 62V8	.5
· ·	P 312.425.9560 F 312.425.9564 www.infrastructure.eng.com		DATE -	03/04/2025			SCALE: 1"=5'	STA.	TO STA.		ILLINOIS FED. AI	ID PROJECT		

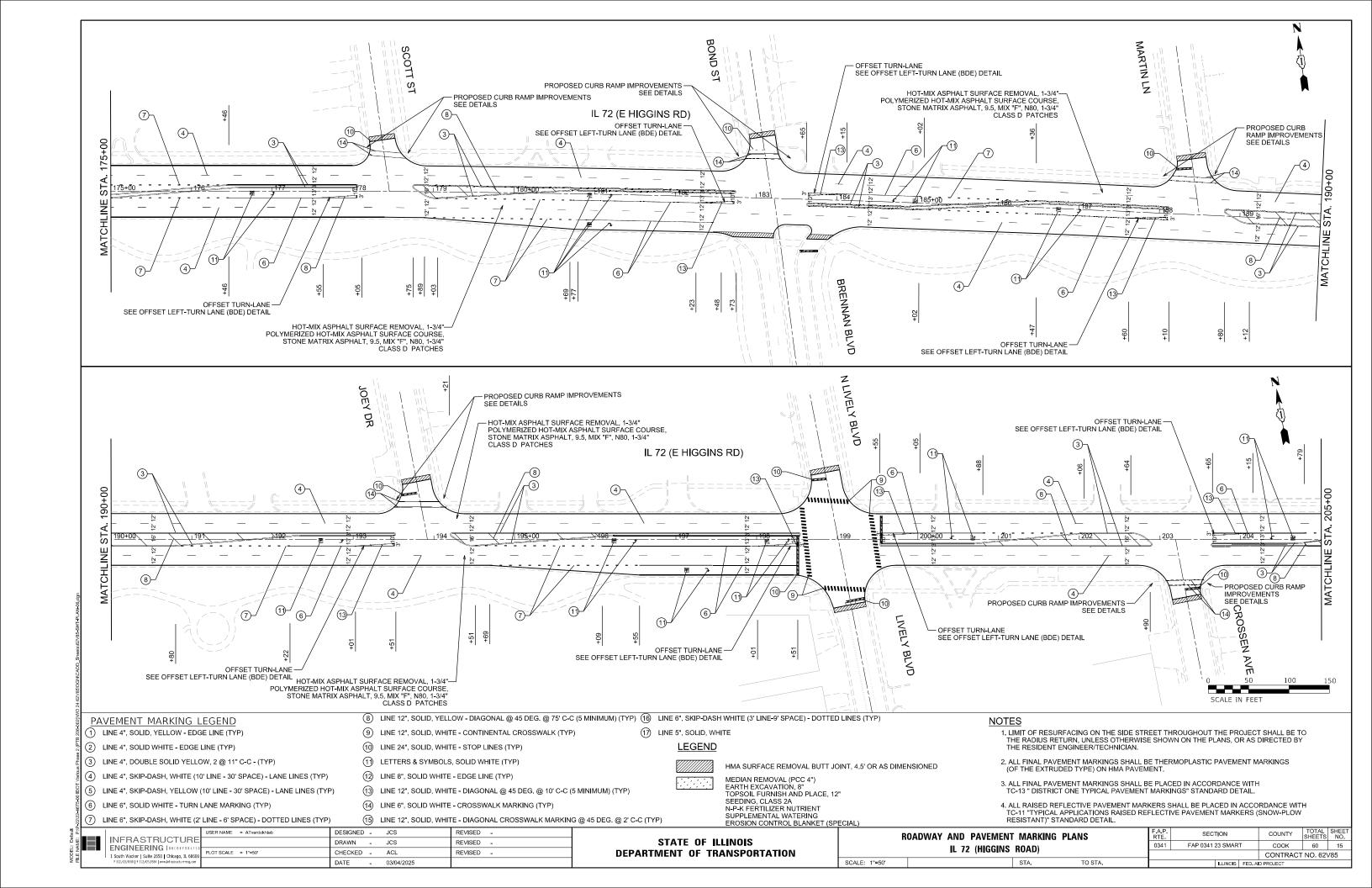




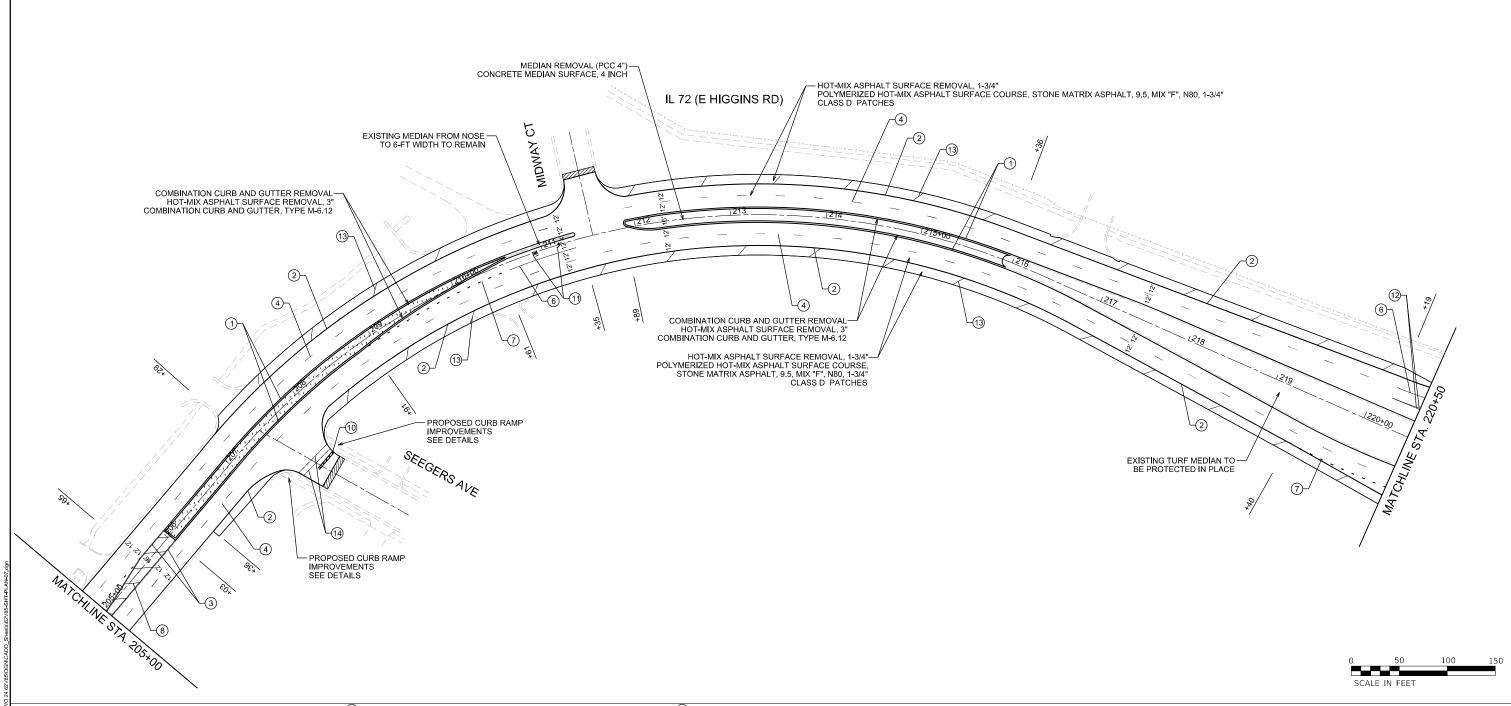












PAVEMENT MARKING LEGEND

- 1 LINE 4", SOLID, YELLOW EDGE LINE (TYP)
- 2 LINE 4", SOLID WHITE EDGE LINE (TYP)
- 3 LINE 4", DOUBLE SOLID YELLOW, 2 @ 11" C-C (TYP)
- 4 LINE 4", SKIP-DASH, WHITE (10' LINE 30' SPACE) LANE LINES (TYP)
- (5) LINE 4", SKIP-DASH, YELLOW (10' LINE 30' SPACE) LANE LINES (TYP)
- 6) LINE 6", SOLID WHITE TURN LANE MARKING (TYP)
- (7) LINE 6", SKIP-DASH, WHITE (2' LINE 6' SPACE) DOTTED LINES (TYP)

- (9) LINE 12", SOLID, WHITE CONTINENTAL CROSSWALK (TYP)
- (10) LINE 24", SOLID, WHITE STOP LINES (TYP)
- 11) LETTERS & SYMBOLS, SOLID WHITE (TYP)
- 12 LINE 8", SOLID WHITE EDGE LINE (TYP)
- (13) LINE 12", SOLID, WHITE DIAGONAL @ 45 DEG. @ 10' C-C (5 MINIMUM) (TYP)
- 14 LINE 6", SOLID WHITE CROSSWALK MARKING (TYP)
- (15) LINE 12", SOLID, WHITE DIAGONAL CROSSWALK MARKING @ 45 DEG. @ 2' C-C (TYP)

(8) LINE 12", SOLID, YELLOW - DIAGONAL @ 45 DEG. @ 75' C-C (5 MINIMUM) (TYP) (16) LINE 6", SKIP-DASH WHITE (3' LINE-9' SPACE) - DOTTED LINES (TYP)

17) LINE 5", SOLID, WHITE



HMA SURFACE REMOVAL BUTT JOINT, 4.5' OR AS DIMENSIONED

SCALE: 1"=50'

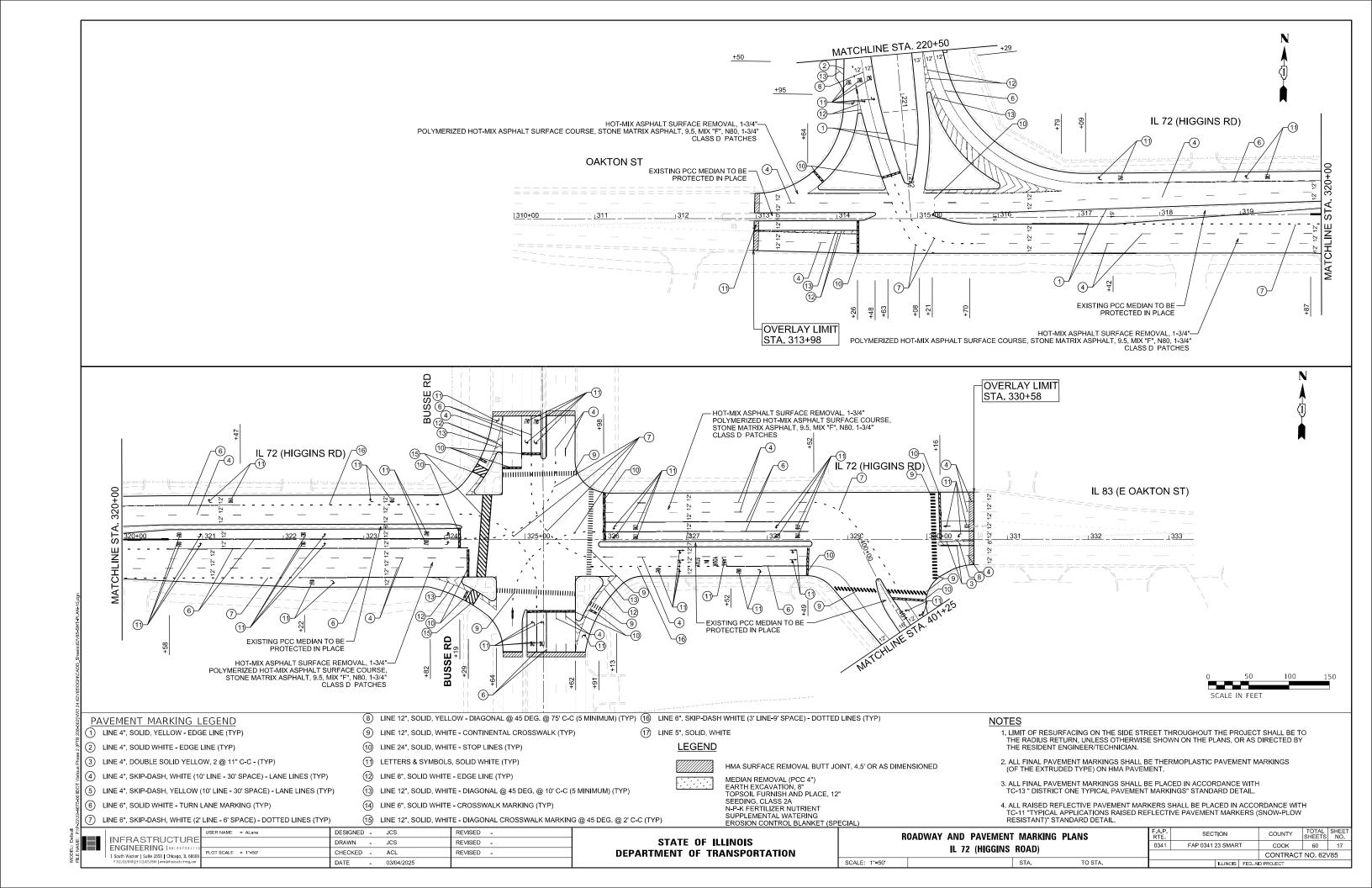
MEDIAN REMOVAL (PCC 4") EARTH EXCAVATION, 8" TOPSOIL FURNISH AND PLACE, 12" SEEDING, CLASS 2A N-P-K FERTILIZER NUTRIENT SUPPLEMENTAL WATERING EROSION CONTROL BLANKET (SPECIAL)

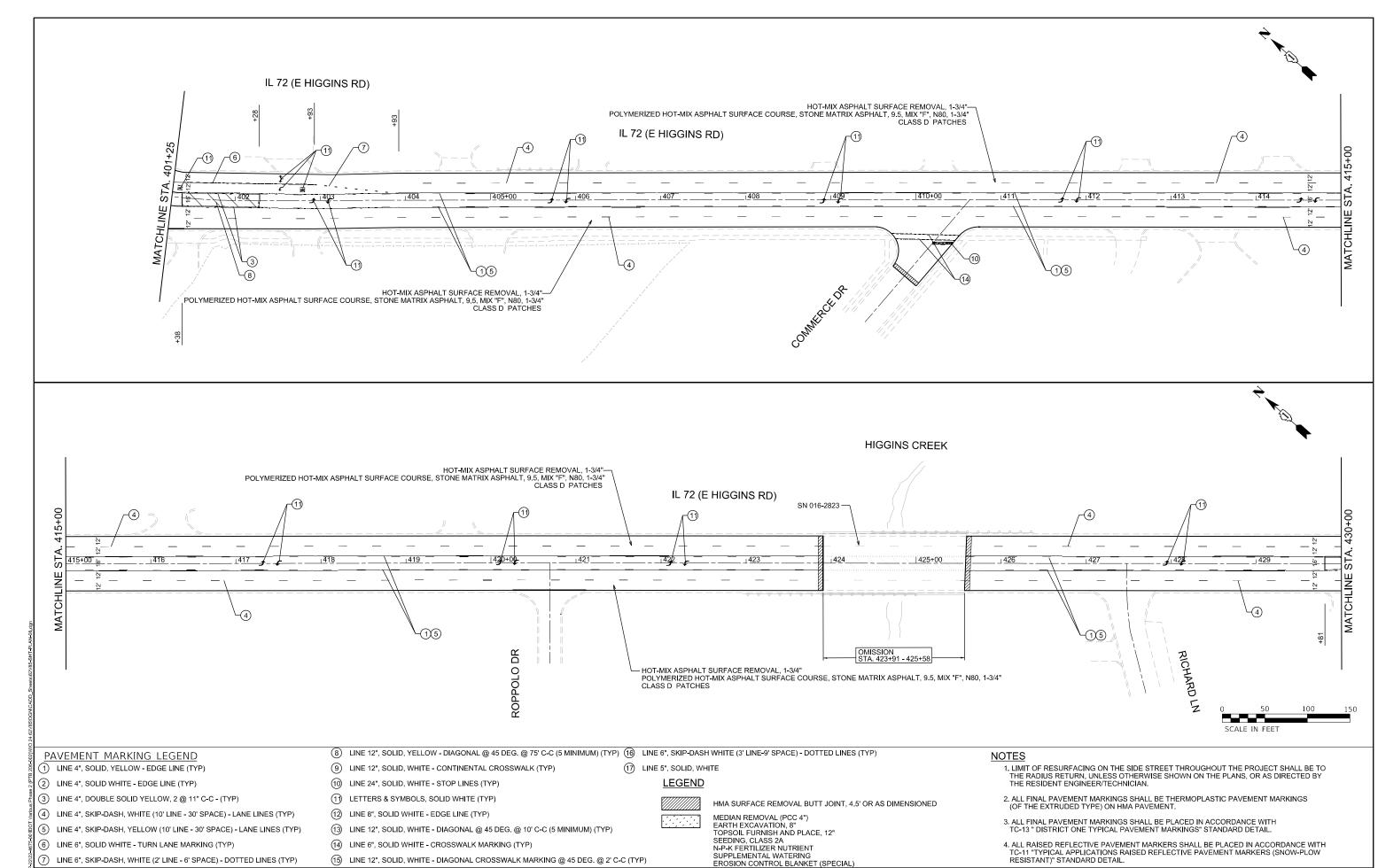
- 1. LIMIT OF RESURFACING ON THE SIDE STREET THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, UNLESS OTHERWISE SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER/TECHNICIAN.
- 2. ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKINGS (OF THE EXTRUDED TYPE) ON HMA PAVEMENT.
- 3. ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH TC-13 " DISTRICT ONE TYPICAL PAVEMENT MARKINGS" STANDARD DETAIL.
- 4. ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH TC-11 "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" STANDARD DETAIL.

	USER NAME = ALane	DESIGNED	-	JCS	REVISED	-
INFRASTRUCTURE ENGINEERING INCORPORATION		DRAWN	-	JCS	REVISED	-
1 South Wacker Suite 2650 Chicago, IL 60606		CHECKED	-	ACL	REVISED	-
P 312 425 9560 F 312 425 9564 www.infrastructure.eng.com		DATE	_	03/04/2025		

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

ROADWAY AND PAVEMENT MARKING	PLANS	F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 72 (HIGGINS ROAD)		0341	FAP 0341 23 SMART	соок	60	16
IL 72 (IIIddin's NOAD)				CONTRACT	NO. 62\	/ 85
STA.	TO STA.		ILLINOIS FE	D. AID PROJECT		





STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

SECTION

FAP 0341 23 SMART

ROADWAY AND PAVEMENT MARKING PLANS

IL 72 (HIGGINS ROAD)

SCALE: 1"=50"

COUNTY

соок

60

CONTRACT NO. 62V85

INFRASTRUCTURE ENGINEERING | INCORPOLATED 1 South Wacker | Suite 2650 | Chicago, IL 60606 P 312-265-596 | F 31

DESIGNED -

CHECKED -

JCS

ACL

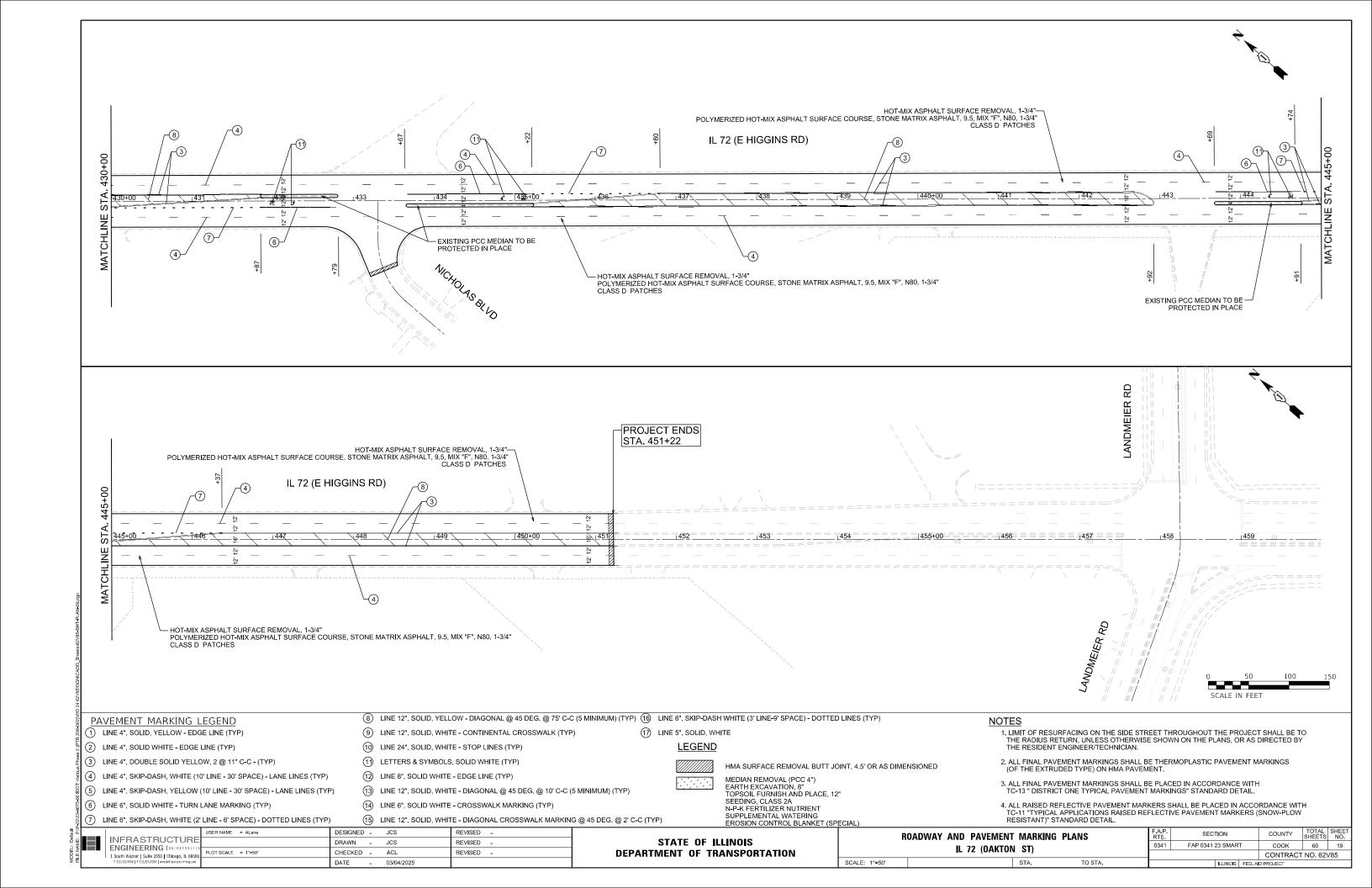
03/04/2025

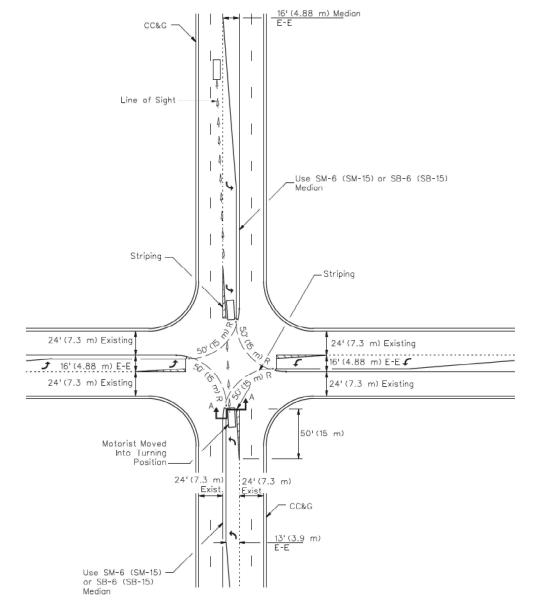
DRAWN

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REVISED

REVISED

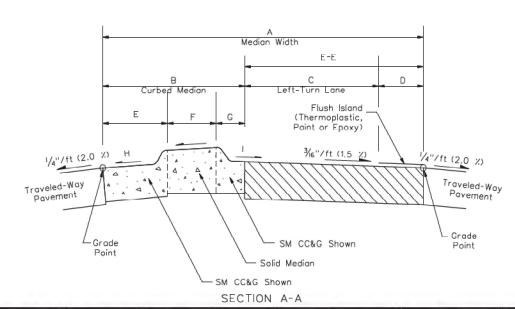




SEE FIGURE 36-3.S FOR TYPICAL SECTION A-A

TYPICAL DESIGN FOR PARALLEL OFFSET LEFT-TURN LANES

(EXISTING 16 FT (4.88 M) WIDE TRAVERSABLE MEDIAN) FIGURE 36-3.P (BDE MANUAL)



"A" Median Width E-E	"B" Curbed Median	"C" Left-Lane Turn	"D" Offset	"E"	"F"	"G" Left- Turn Curb	"H" Flow Direction	" " Flow Direction
				US Cus	tomary			
16 ft	3 ft	10 ft	3 ft	20 in	2 in	14 in	1/4"/ft/traveled way	3/16"/ft/traveled way
18 ft	4.5 ft	11 ft	2.5 ft	20 in	20 in	14 in	3/4"/ft/traveled way	3/16"/ft/traveled way
22 ft	6 ft	12 ft	4 ft	32 in	26 in	14 in	3/4"/ft/traveled way	3/16"/ft/traveled way
				Met	ric			The second second
4.88 m	980 mm	3.0 m	900 mm	500 mm	130 mm	350 mm	2.0%/traveled way	1.5%/traveled way
5.5 m	1.35 m	3.3 m	850 mm	500 mm	500 mm	350 mm	6.0%/median	1.5%/traveled way
7.0 m	1.75 m	3.6 m	1.65 m	800 mm	600 mm	350 mm	6.0%/median	1.5%/traveled way

TYPICAL DESIGN FOR PARALLEL OFFSET LEFT-TURN LANES

FIGURE 36-3.S (BDE MANUAL)

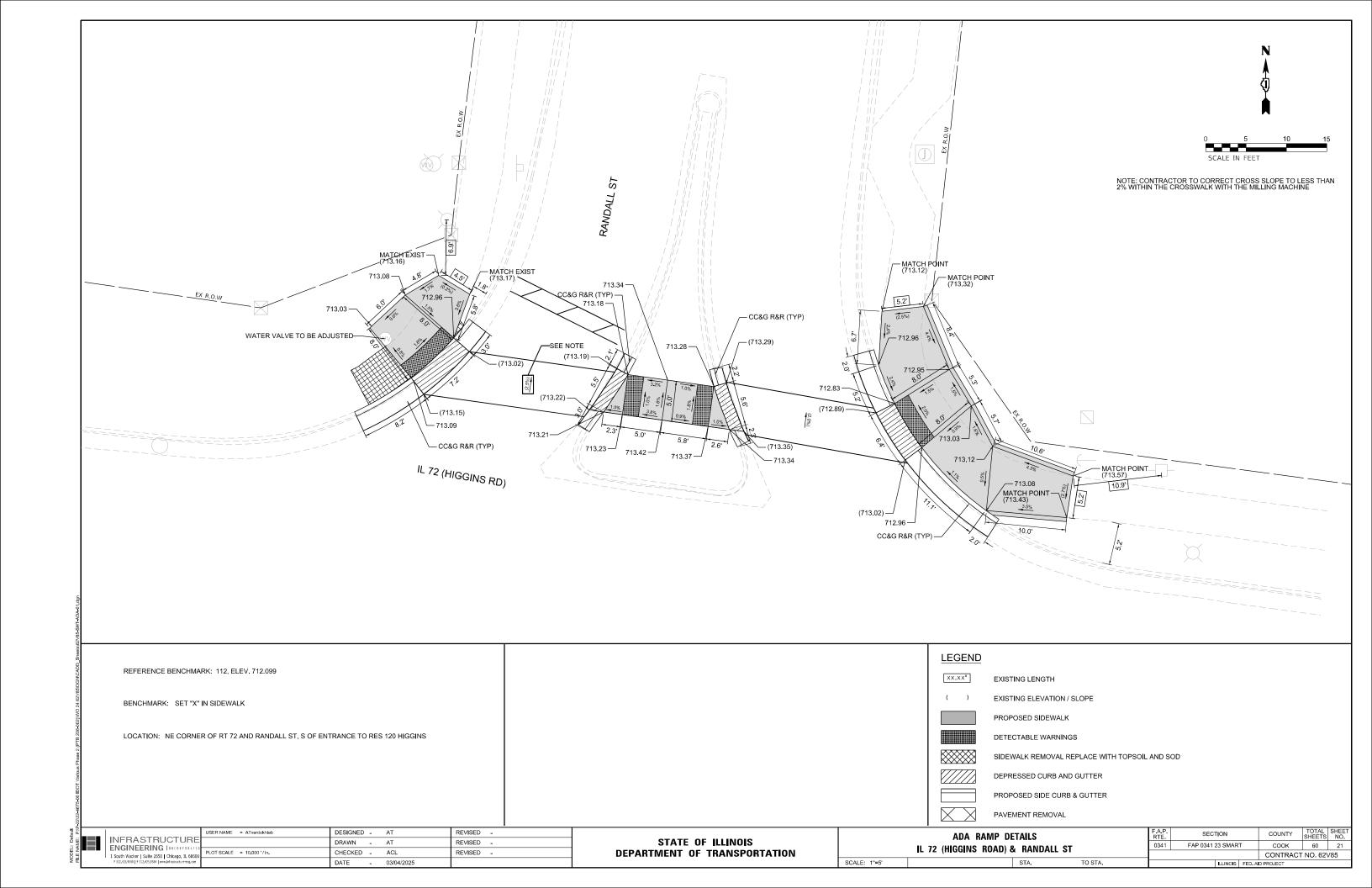
INFRA ENGINE
1 South Wacket
9 312.425.9560 | F

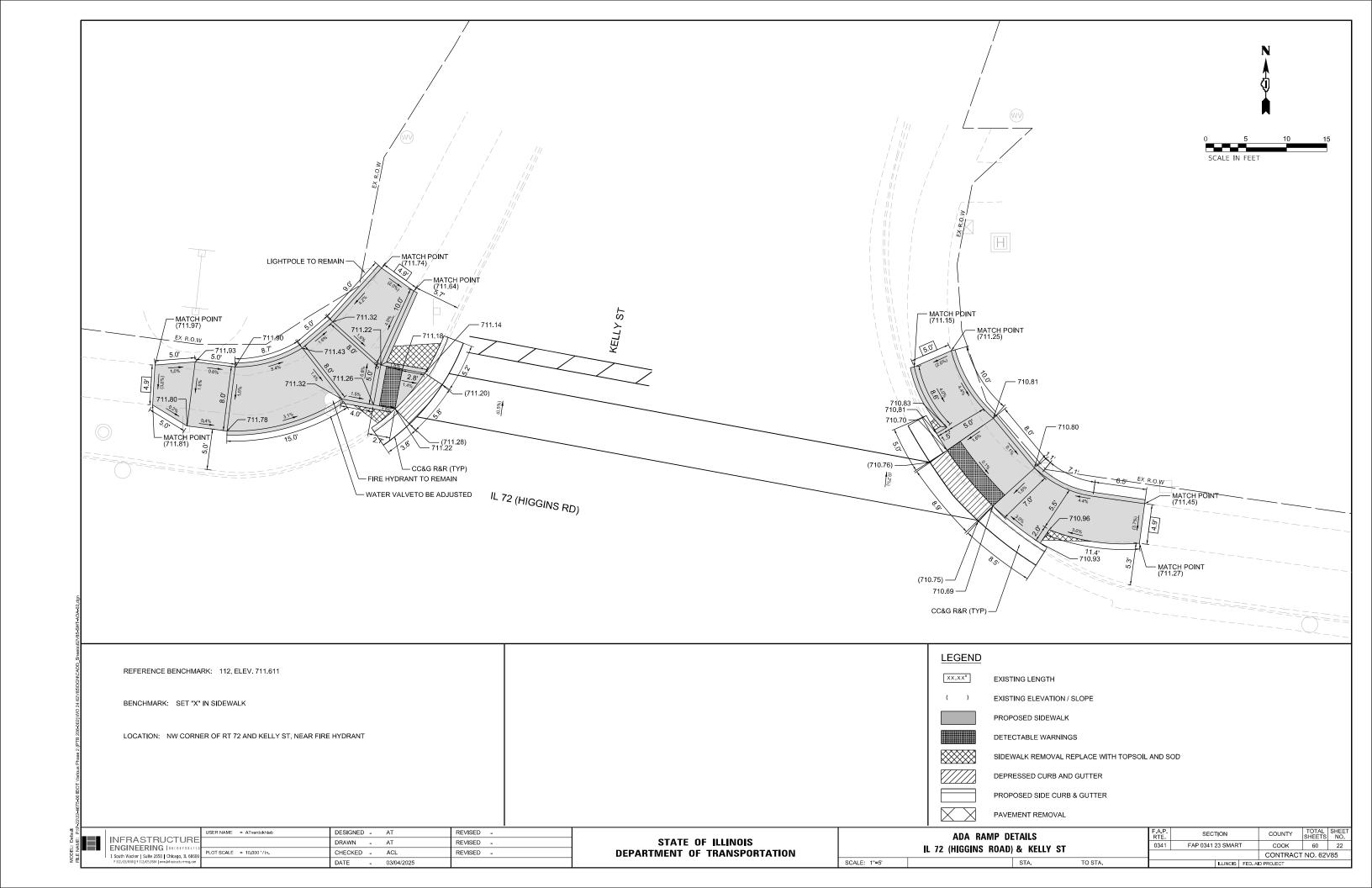
	USER NAME = ATverdokhleb	DESIGNED -	JCS	REVISED -
RASTRUCTURE		DRAWN -	JCS	REVISED -
acker Suite 2650 Chicago, IL 60606		CHECKED -	ACL	REVISED -
560 F 312.425.9564 www.infrastructure-eng.com		DATE -	03/04/2025	

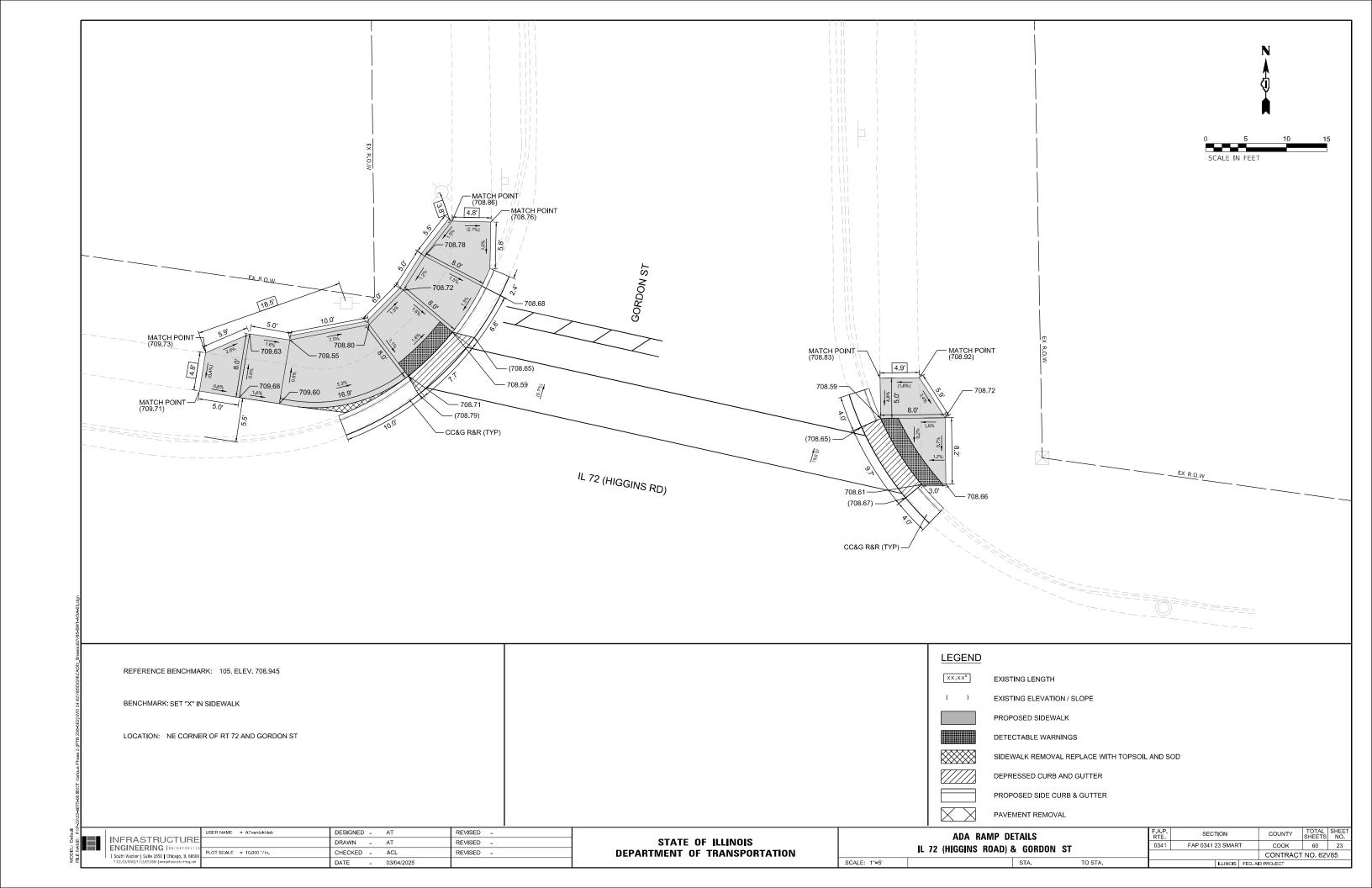
STATE OF	ILLINOIS
DEPARTMENT OF T	RANSPORTATION

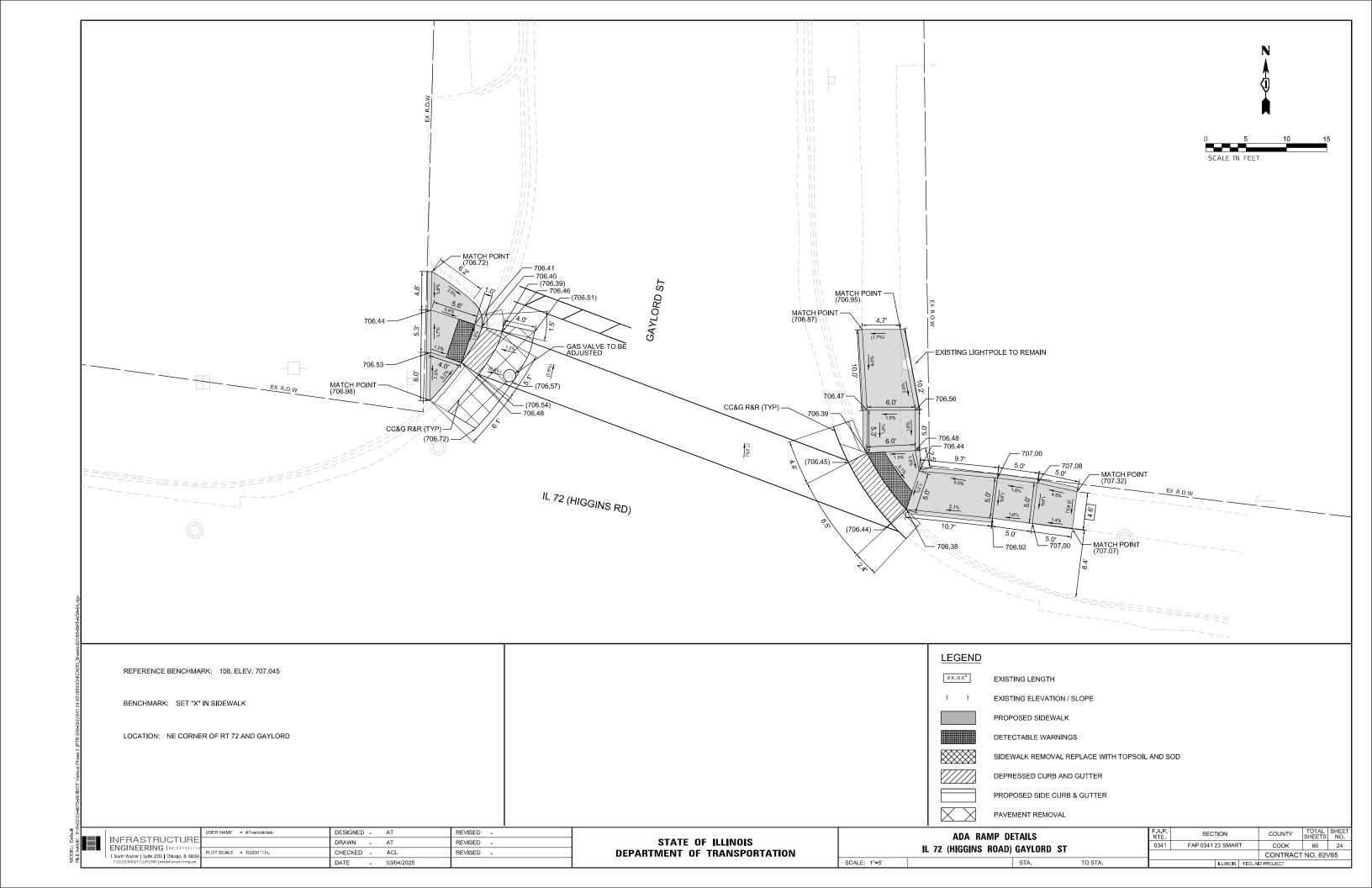
SCALE: 1"=50'

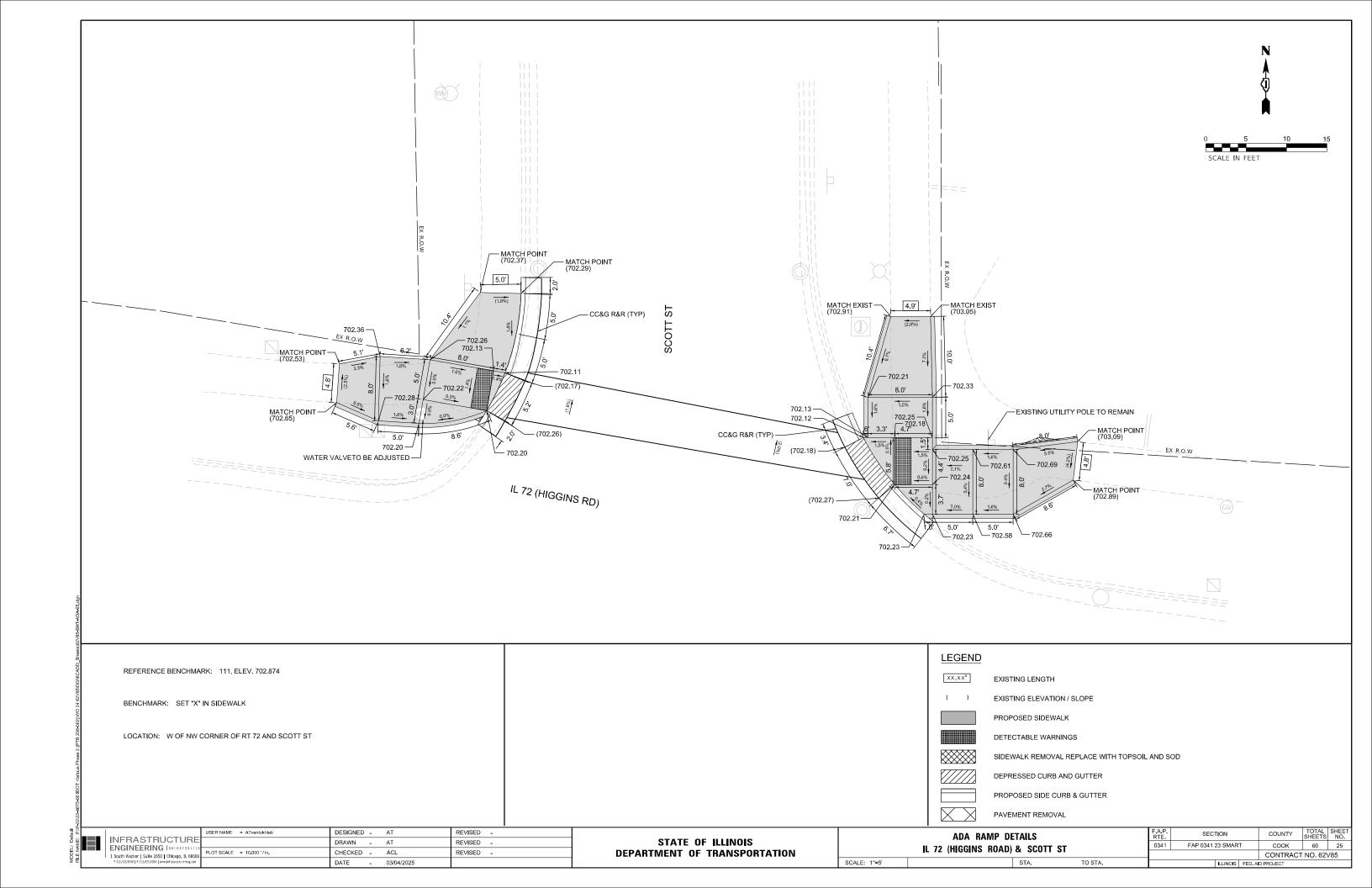
OFFSET LEFT_TURN LANE (BDE) DETAIL	F.A.P. RTE.	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
IL 72 (HIGGINS ROAD)	0341	FAP 0341 23 SMART		COOK	60	20	
IL 72 (IIIddiN3 IIOAD)					CONTRAC	F NO. 621	/85
STA. TO STA.			ILLINOIS	FED. AI	D PROJECT		

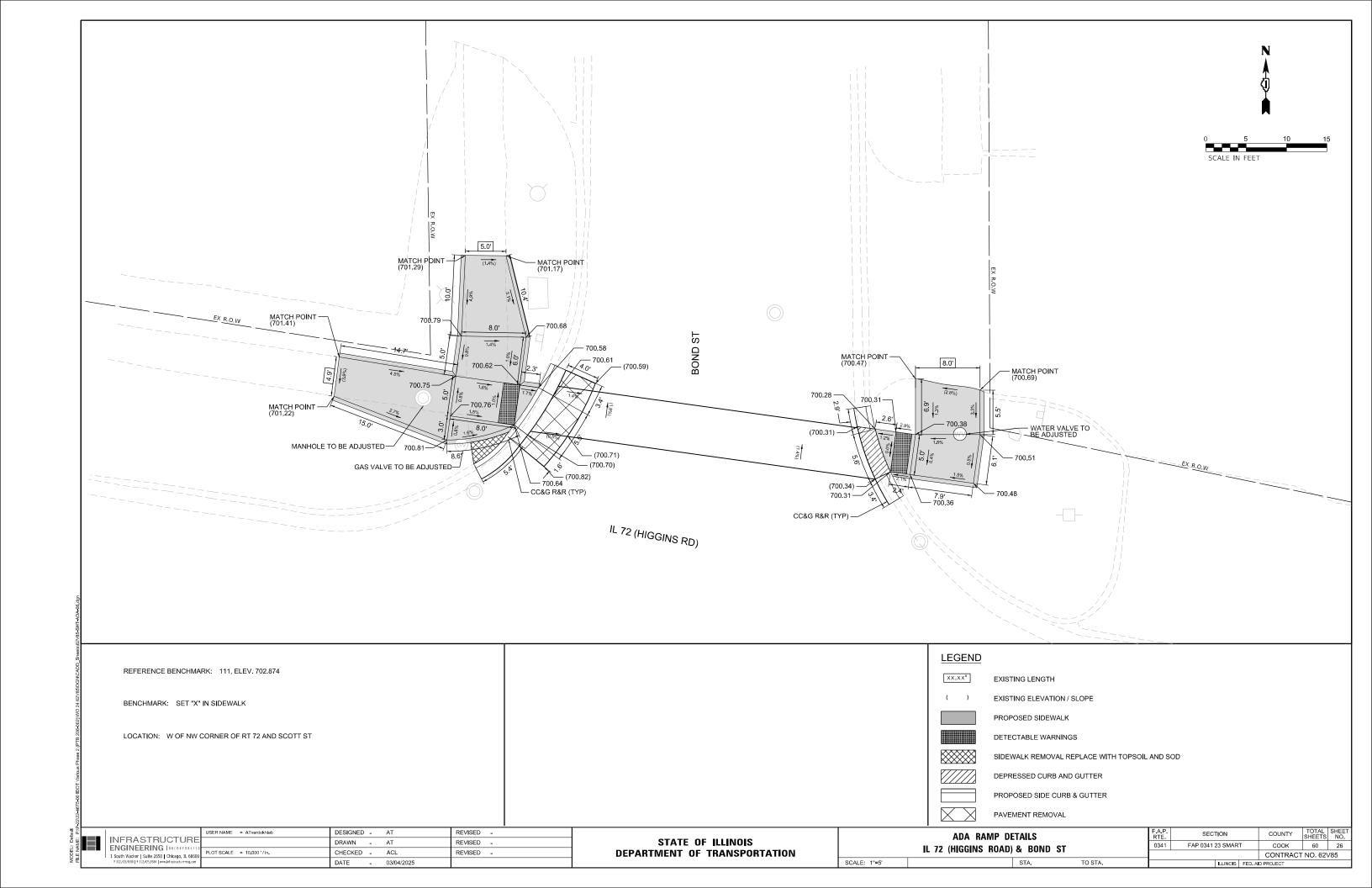


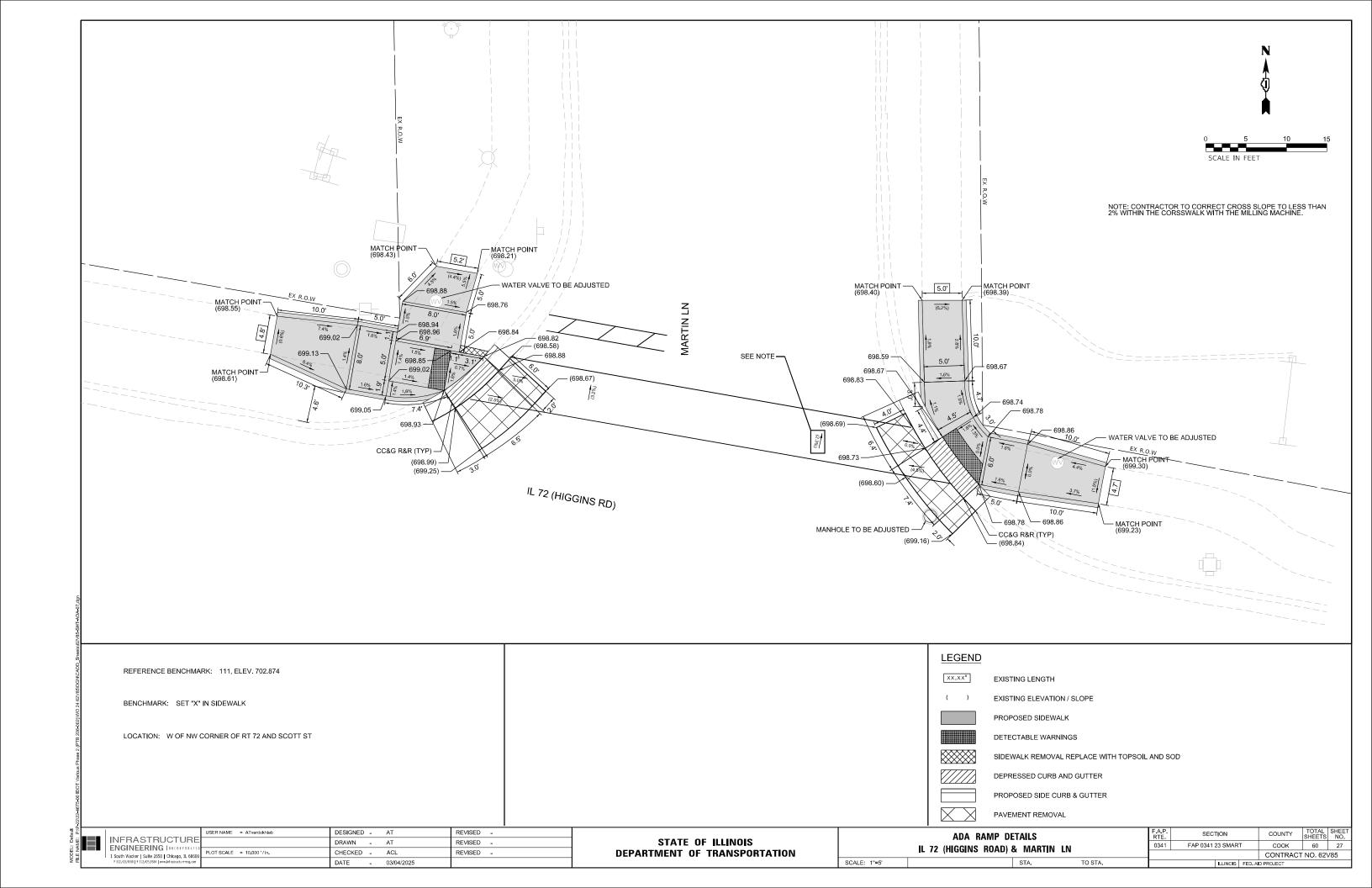


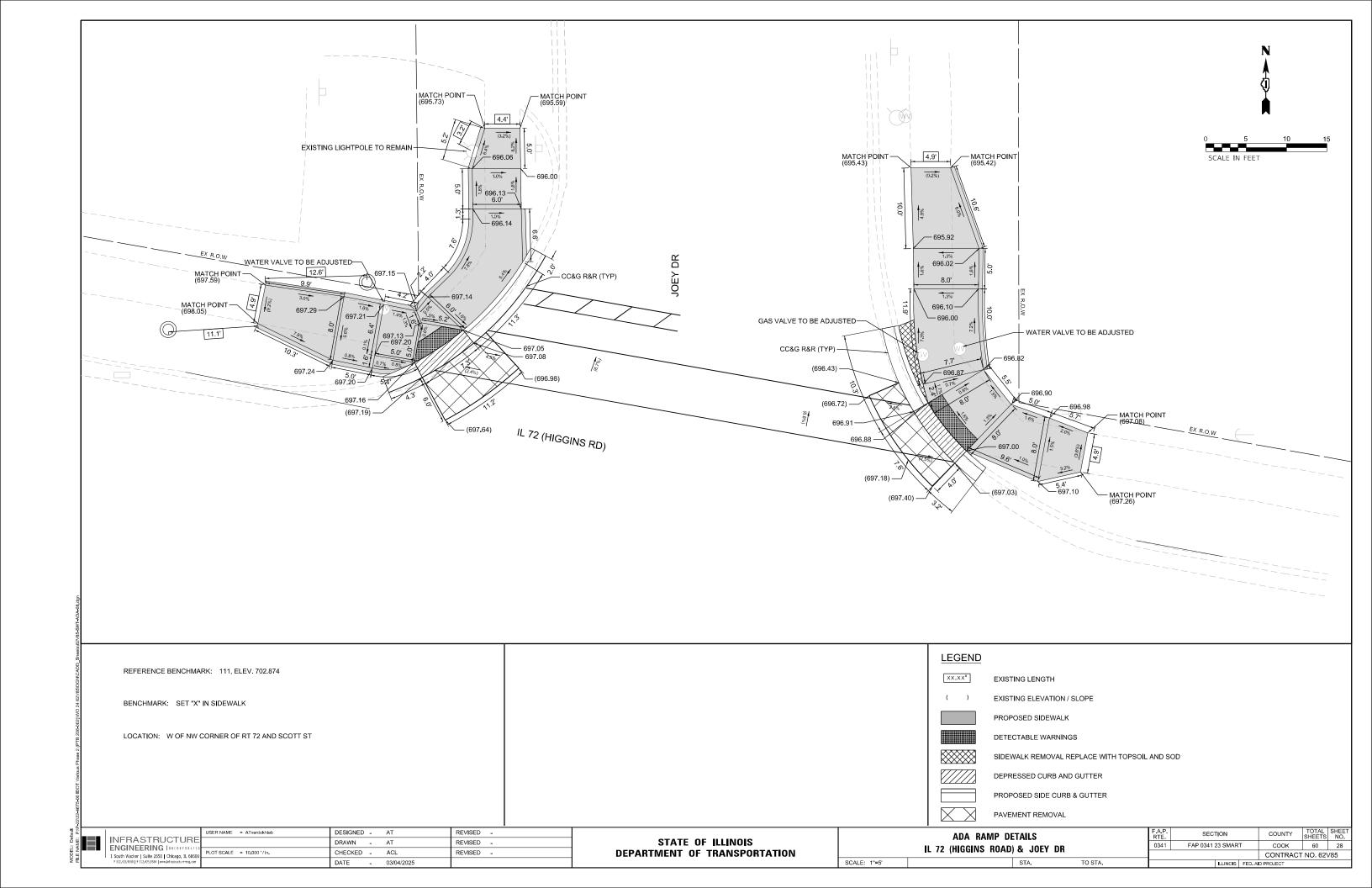


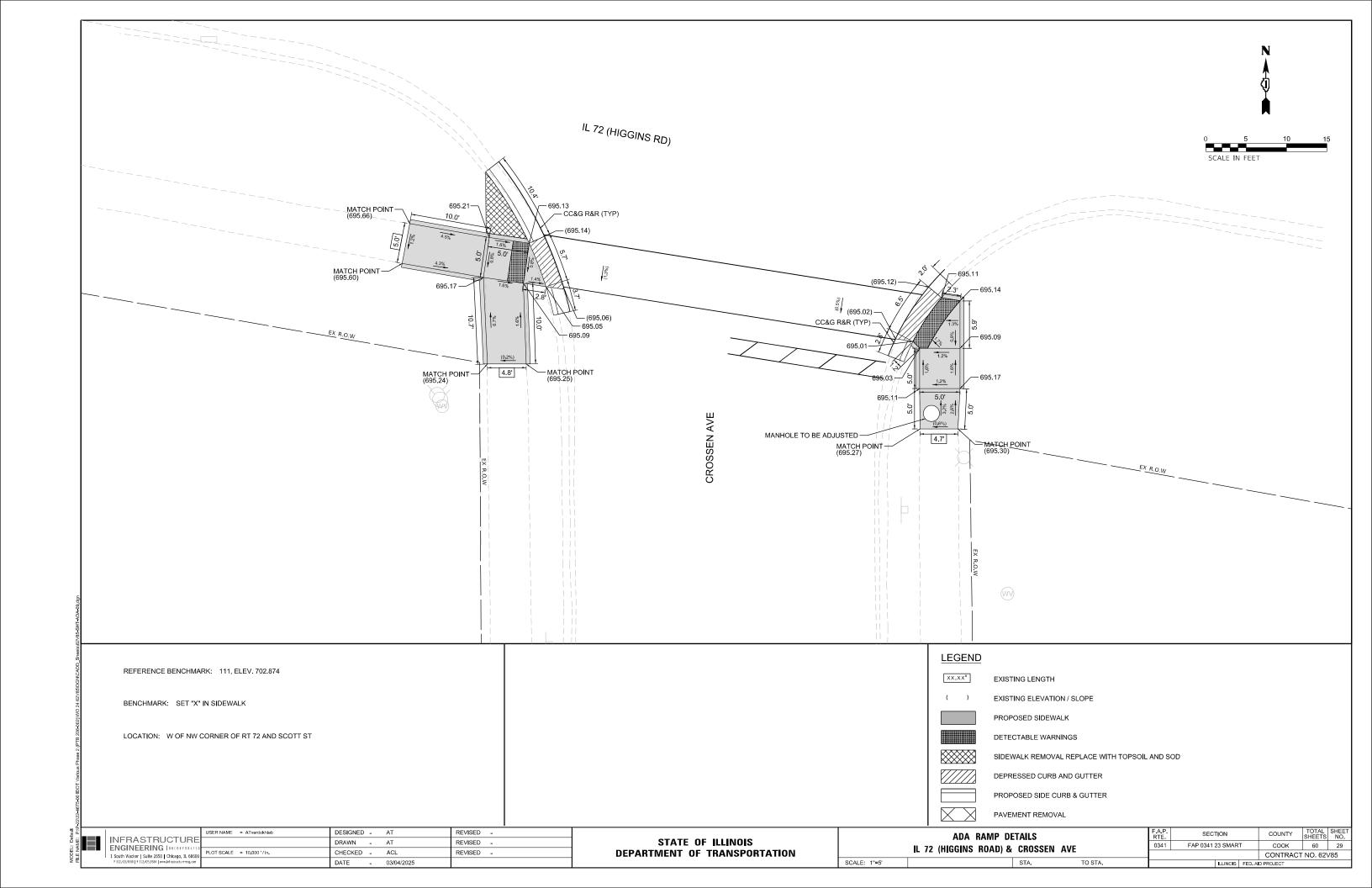


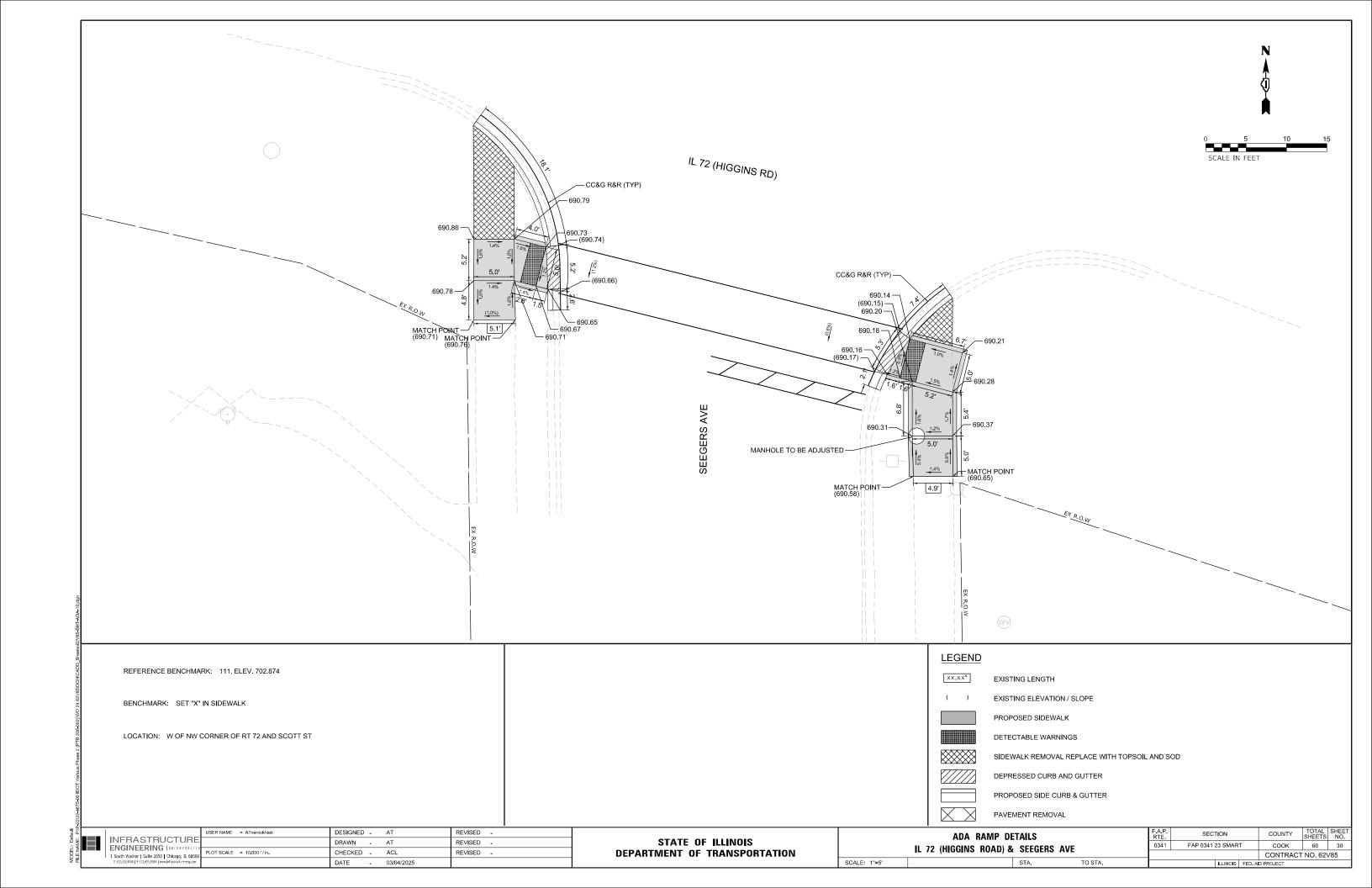












TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

<u>ITEM</u>	EXISTING	PROPOSED	ITEM	<u>EXISTING</u>	PROPOSED	ITEM	EXISTING	PROPOSED
ONTROLLER CABINET		\blacksquare	HANDHOLE -SQUARE			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R R Y Y	R R Y
OMMUNICATION CABINET	ECC	cc	-ROUND					C C C ←Y
ASTER CONTROLLER	EMC	MC	HEAVY DUTY HANDHOLE -SQUARE -ROUND	H H	⊞ ⊕			4
ASTER MASTER CONTROLLER	EMMC	ммс	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE		
NINTERRUPTABLE POWER SUPPLY	4	4	JUNCTION BOX		•	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
ERVICE INSTALLATION P) POLE MOUNTED	- <u></u> -	- ■ -P	RAILROAD CANTILEVER MAST ARM	XOX X				G G G G G G G G G G G G G G G G G G G
ERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	∑⊙ ∑	X•X		P RB	P RB
G) GROUND MOUNTED GM) GROUND MOUNTED METERED	\boxtimes \subseteq	$\mathbf{X}^{G} \mathbf{X}^{GM}$	RAILROAD CROSSING GATE	₹0 ₹~	X +X-	PEDESTRIAN SIGNAL HEAD	(P)	
ELEPHONE CONNECTION	ET	T	RAILROAD CROSSBUCK	苍	*	AT RAILROAD INTERSECTIONS	S	Ŕ
TEEL MAST ARM ASSEMBLY AND POLE	O	•——	RAILROAD CONTROLLER CABINET		▶-∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	(C) C	₩ C ★ D
LUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL					
TEEL COMBINATION MAST ARM SSEMBLY AND POLE WITH LUMINAIRE	0-X-	•*	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
IGNAL POST	٥	●	system item	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.		(5)
BM) BARREL MOUNTED - TEMPORARY			INTERSECTION ITEM	I	IP	ALL DETECTOR LOOP CABLE TO BE SHIELDED		
OOD POLE	\otimes	•	REMOVE ITEM		R	GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	
UY WIRE	>	>	RELOCATE ITEM		RL	ELECTRIC CABLE IN CONDUIT, TRACER		
GNAL HEAD WITH BACKBLATE		-	ABANDON ITEM		Α	NO. 14 1/C		
GNAL HEAD OFFICALLY PROCEDUMED	+t> -t> P P	→ P + → P	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF	COAXIAL CABLE	— <u>c</u> —	<u> </u>
GNAL HEAD OPTICALLY PROGRAMMED LASHER INSTALLATION			MAST ARM POLE AND		RMF	VENDOR CABLE		<u> </u>
FS) SOLAR POWERED	orper orper	•► FS FS FS	FOUNDATION TO BE REMOVED SIGNAL POST AND		RPF	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	<u></u>	(6#18)
EDESTRIAN SIGNAL HEAD	-0	-1	FOUNDATION TO BE REMOVED DETECTOR LOOP, TYPE I	ПО	ПО	FIBER OPTIC CABLE -NO. 62.5/125, MM12F	—	—(12F)—
EDESTRIAN PUSH BUTTON APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	⊚ ⊗ APS	⊚ ⊗ APS	PREFORMED DETECTOR LOOP	P P	P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	<u> 24F</u>	
ADAR DETECTION SENSOR	R	R	SAMPLING (SYSTEM) DETECTOR	<u> </u>	[S] (S)			—(36F)—
IDEO DETECTION CAMERA		ŢŶ Ĭ	INTERSECTION AND SAMPLING	IS (S)			500)	001)
ADAR/VIDEO DETECTION ZONE		=	(SYSTEM) DETECTOR QUEUE AND SAMPLING		IS (S)	GROUND ROD -(C) CONTROLLER	.C .M .P .S	.C .M .P .S
			(SYSTEM) DETECTOR	QS QS	QS QS	-(M) MAST ARM -(P) POST	8 8 8	
AN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ.	WIRELESS DETECTOR SENSOR	®	0	-(S) SERVICE		
MERGENCY VEHICLE LIGHT DETECTOR	∞]	4	WIRELESS ACCESS POINT	$\qquad \qquad \Longrightarrow \qquad \qquad \\$				
CONFIMATION BEACON	o-Q	•-						
VIRELESS INTERCONNECT	0+1 -	•++						
/IRELESS INTERCONNECT RADIO REPEATER	ERR	RR						

MODEL: Default

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAWN - IP

CHECKED - LP

DATE - 9/29/2016

PLOT SCALE = 50.0000 ' / in.

PLOT DATE = 3/4/2019

REVISED -

REVISED -

REVISED -

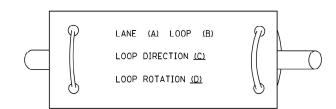
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET 1 OF 7 SHEETS STA. TO:

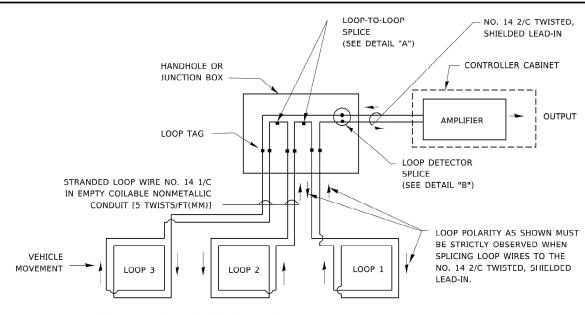
LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

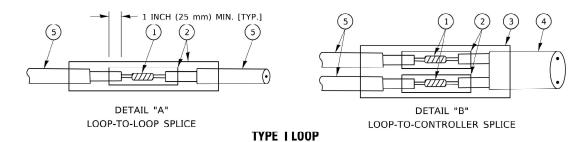


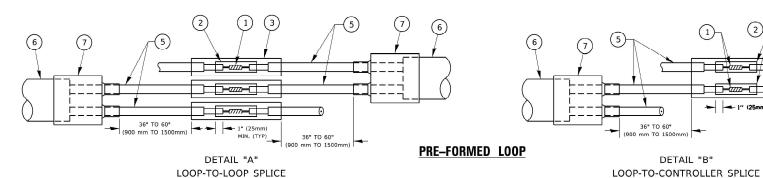
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
- THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE





LOOP DETECTOR SPLICE

- (1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

SCALE: NONE

(4) NO. 14 2/C TWISTED, SHIELDED CABLE



1" (25mm) MIN. (TYP)

(6) XL POLYOLEFIN 2 CONDUCTOR

(7) BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

USER NAME = footemj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

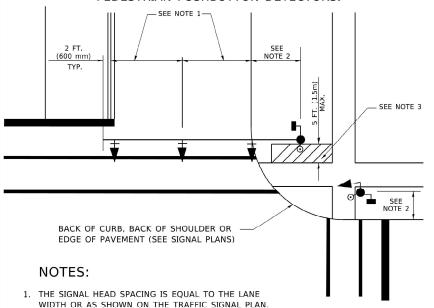
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

		DIST	RICT OI	NE		F.A.P. RTE.	SEC	TION	COUNTY	TOTAL SHEETS	SHEET NO.
91	TANDARD	TRAFFIC	SIGNA	DESIGN	DETAILS	0341	FAP 0341	23 SMART	COOK	60	32
	IANDAND	IIIAIIIU	JIUIVA	. DESIGN	DETAILS		TS-05		CONTRACT	NO. 6	2V85
	SHEET 2	OF 7	SHEETS	STA	TO STA			ILLINOIS FED A	ID DDOIECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

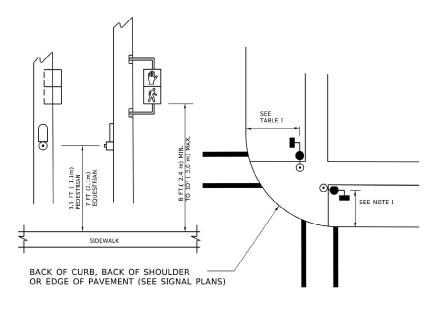
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND

PEDESTRIAN PUSHBUTTON DETECTORS.



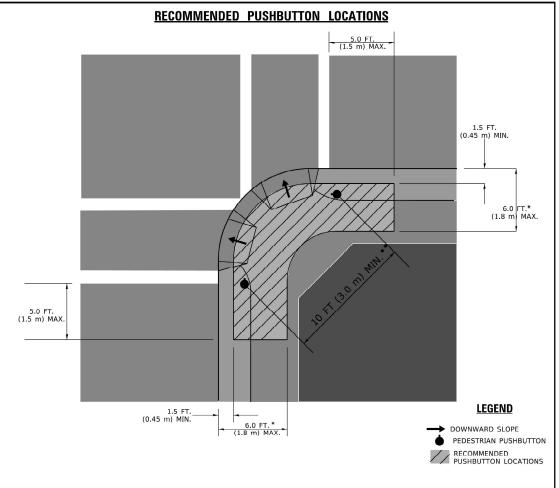
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."



- * WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- ** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAYEMENT

TRAFFIC SIGNAL EQUIPMENT OFFSET

	The sterning Legen 12.11 error	
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

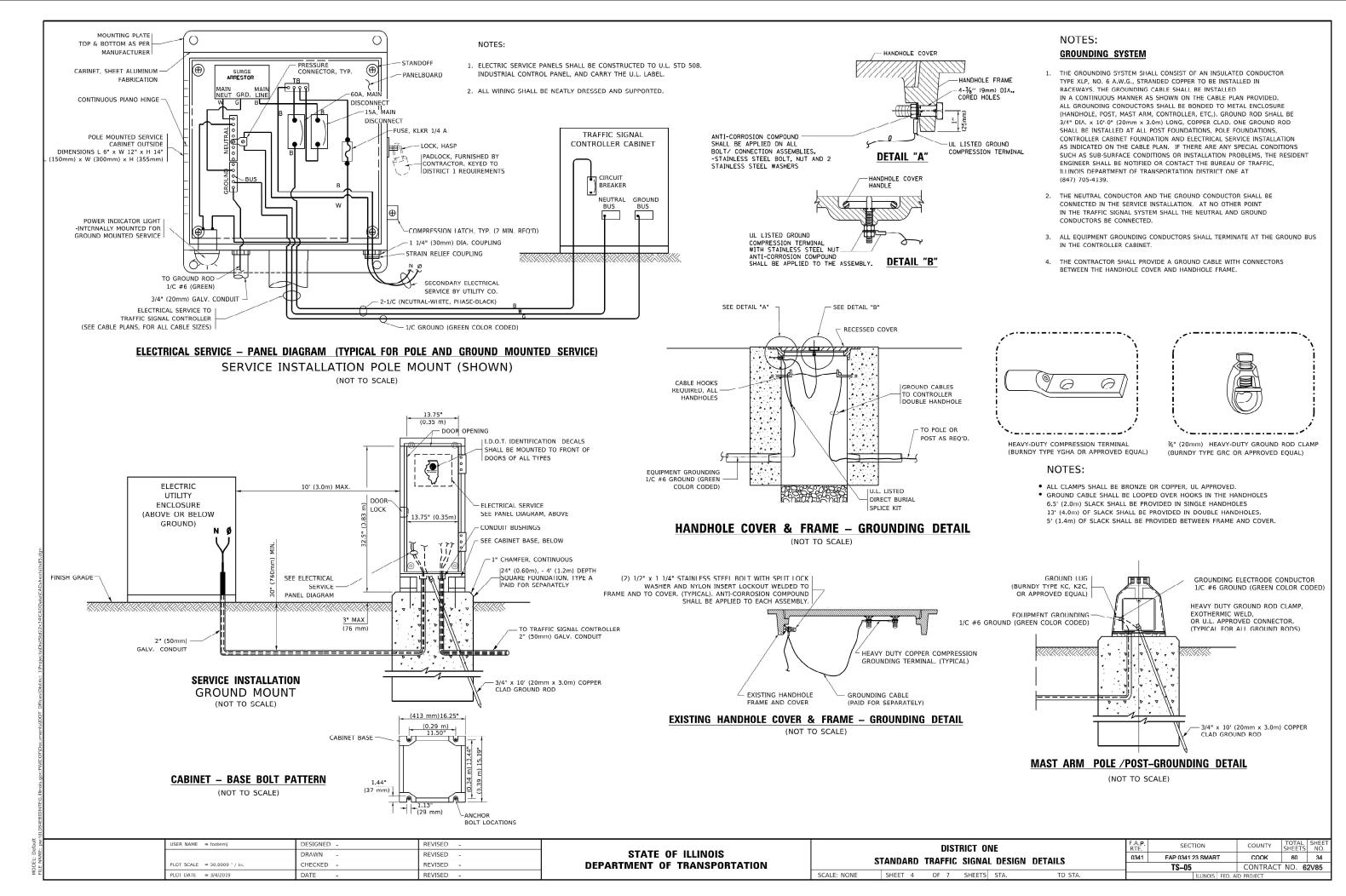
SCALE: NONE

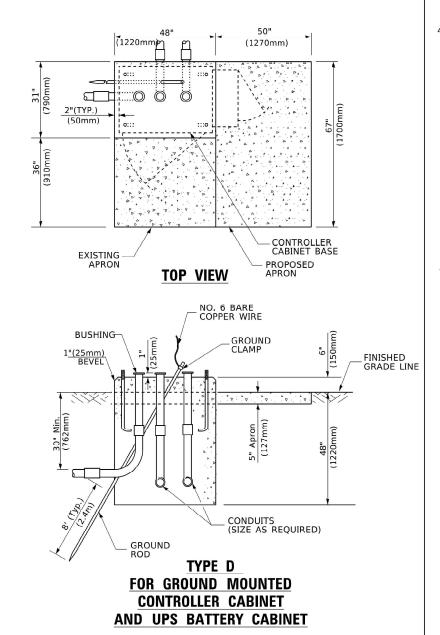
USER NAME = footemj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

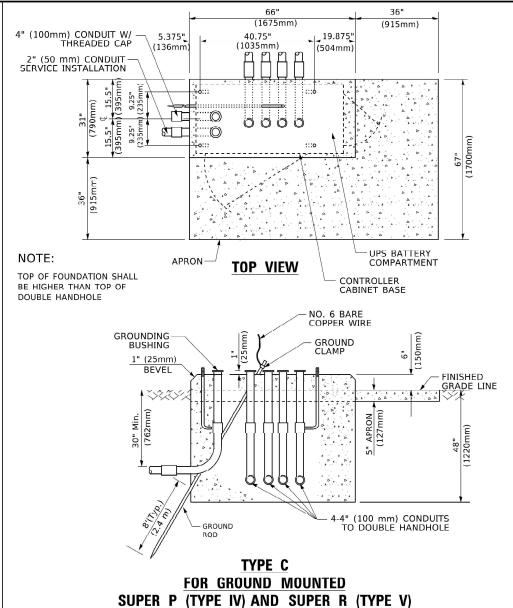
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	0341	FAP 0341 23 SMART	COOK	60	33
STANDARD TRAFFIC SIGNAL DESIGN DETAILS		TS-05	CONTRACT	NO. 6	2V85
SHEET 3 OF 7 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT		

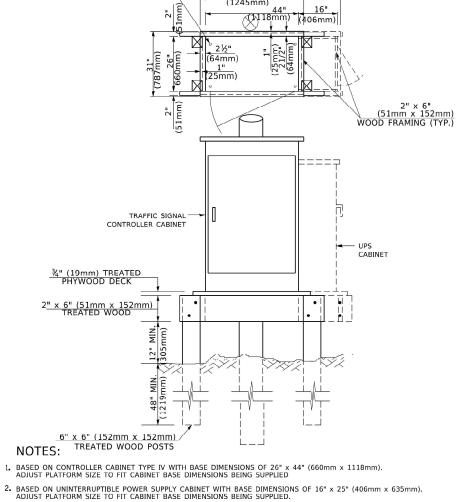
MODEL: Default







CONTROLLER CABINETS



65" (SEE NOTE 4) (1651mm)

49" (SEE NOTE 3) (1245mm)

SEE NOTE 5-

- $\mathbf{3}_{\bullet}$ PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET
- 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD)		
(L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

CABLE SLACK

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS TYPE D - CONTROLLER	4'-0" (1.2m) 4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

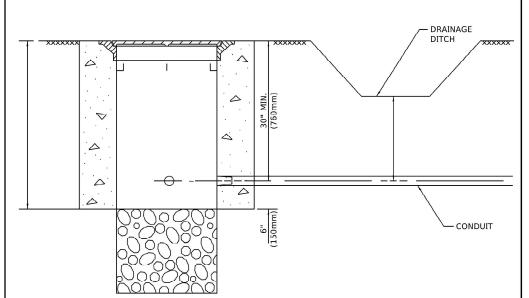
Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and loss than 65' (19.8 m)	21'-0'' (6 ₋ 4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along
 the length of the shaft, with an average Unconfined Compressive Strength (Ou) > 1.0 tsf (100 kpa).
 This strength shall be verified by boring data prior to construction or with testing by the Engineer
 during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised
 design if other conditions are encountered.
- 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36° (900 mm) diameter foundations.
- 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
- 4. For most arm assemblies with dual arms refer to state standard 878001...

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

USER NAME = footemj	DESIGNED -	REVISED -		DISTRICT ONE	F.A.P. SECTION	COUNTY	TOTAL S	SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS	5.5 S. M. S.	0341 FAP 0341 23 SM/	ART COOK	60	35
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	TS-05	CONTRAC	T NO. 62	V85
PLOT DATE = 3/4/2019	DATE -	REVISED -		SCALE: NONE SHEET 5 OF 7 SHEETS STA. TO STA.	ILLING	IS FED. AID PROJECT		



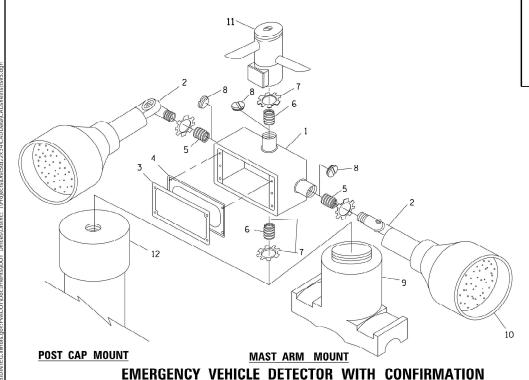
NOTES:

- CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- 3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

JSER NAME = footem

LOT SCALE = 50.0000 ' / in

HANDHOLE WITH MINIMUM CONDUIT DEPTH (NOT TO SCALE)



BEACON MOUNTING DETAIL

DESIGNED -

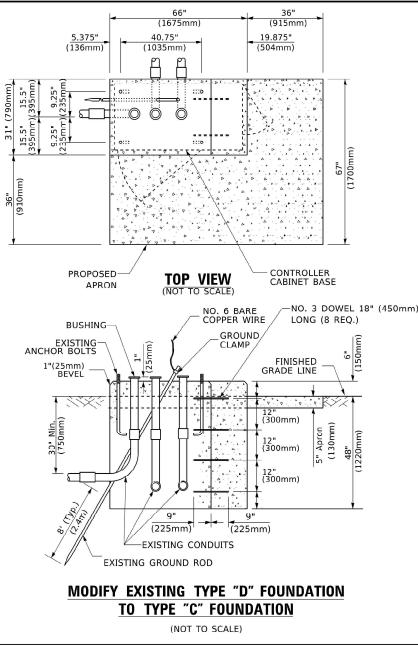
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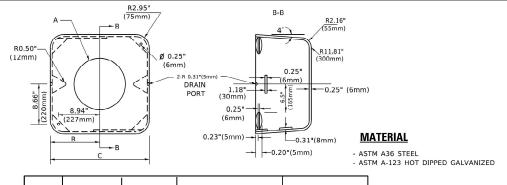
REVISED



ITEM	NO. IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL FITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

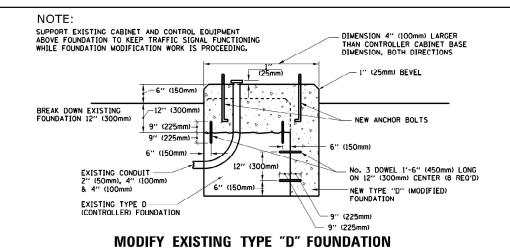


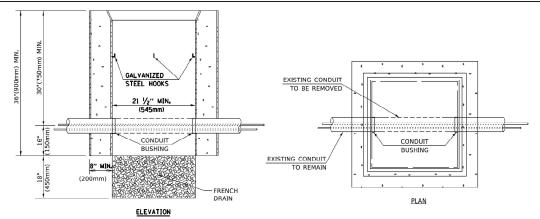
А	В	С	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

SHROUD

NOTES:

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD.
 THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- 3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.





NOTES:

- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

COUNTY

COOK

CONTRACT NO. 62V85

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE SHEET 6 OF 7 SHEETS STA. TO STA.

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

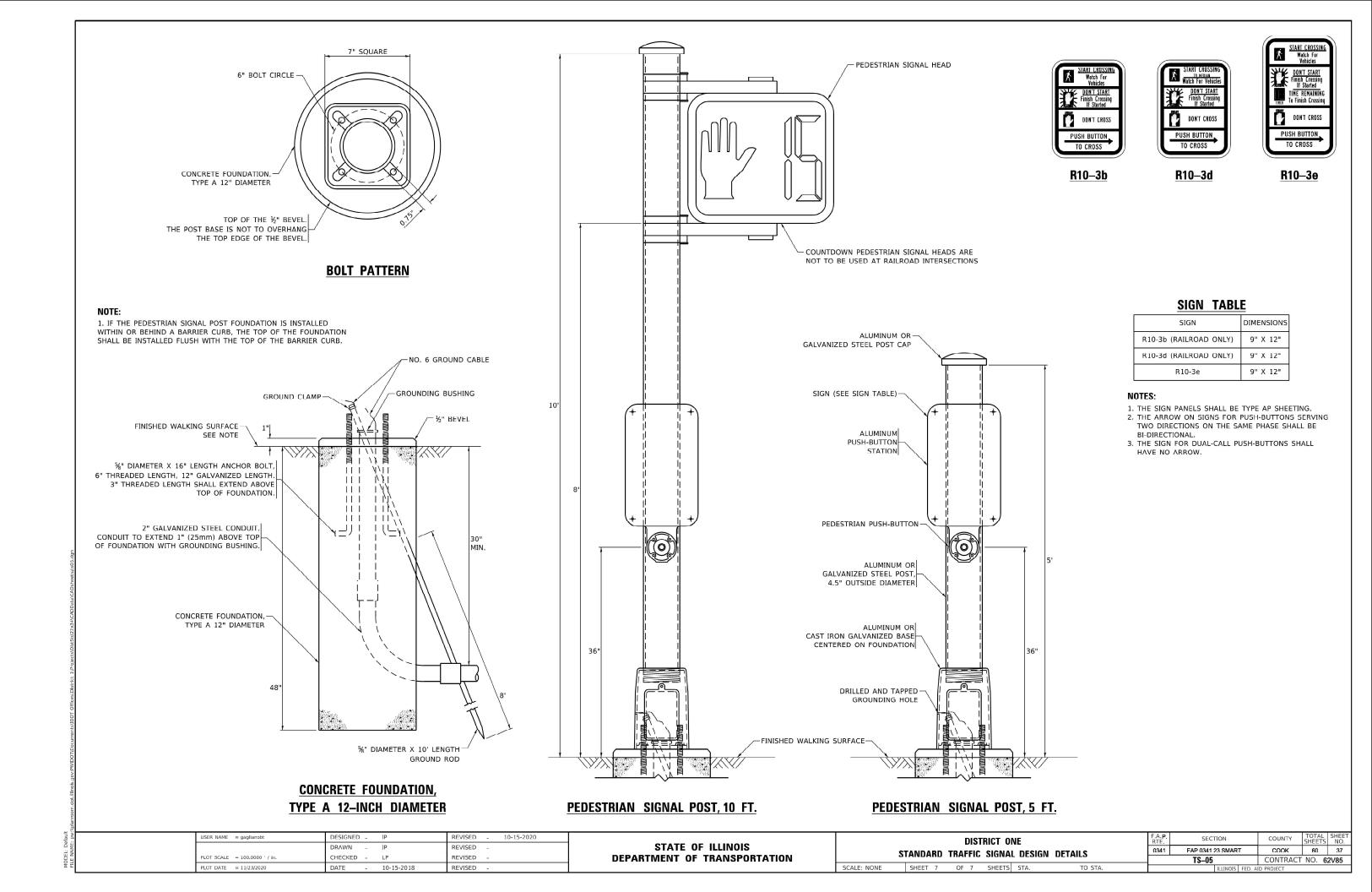
SCALE: NONE SHEET 6 OF 7 SHEETS STA. TO STA.

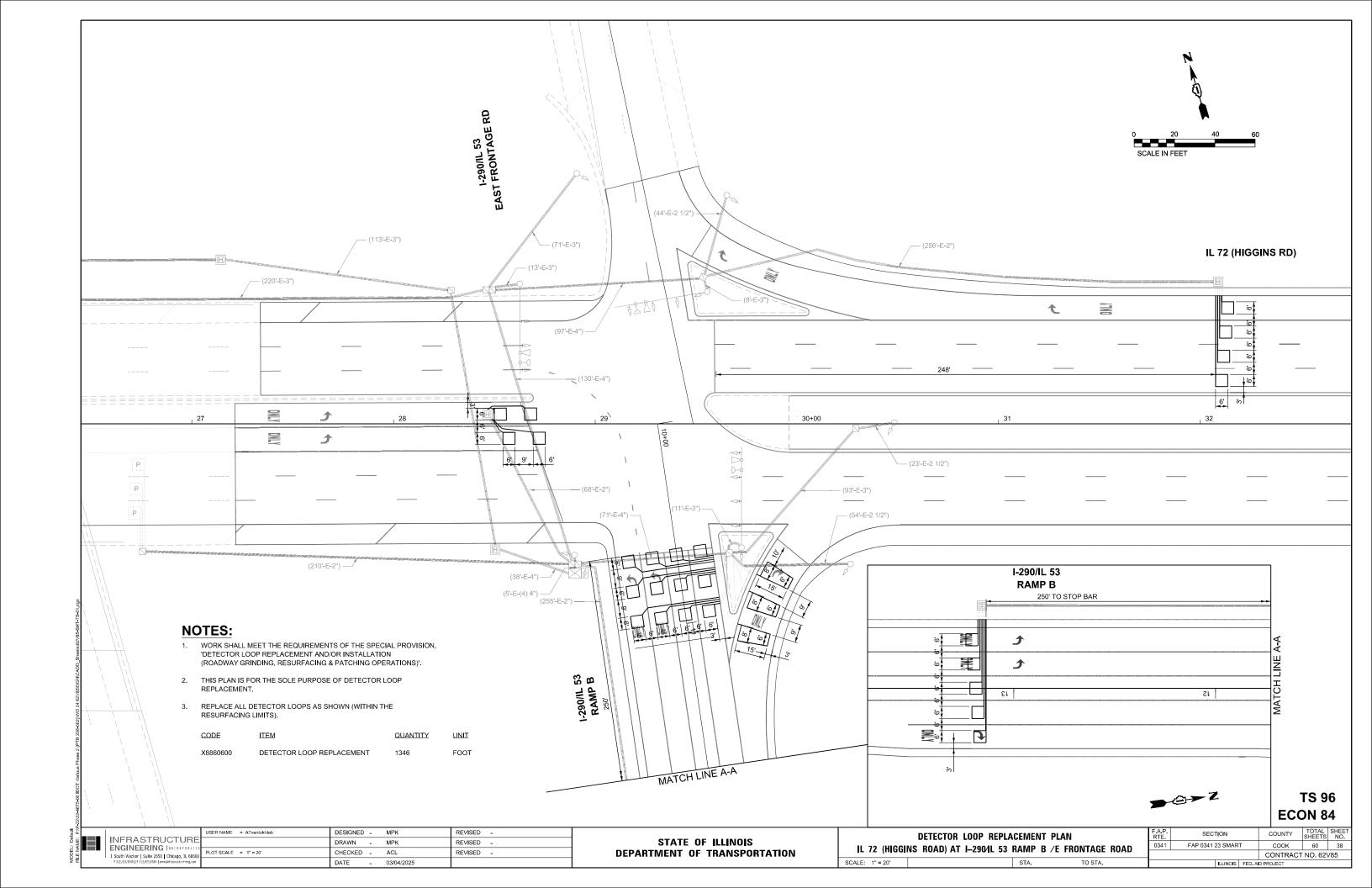
TS-05

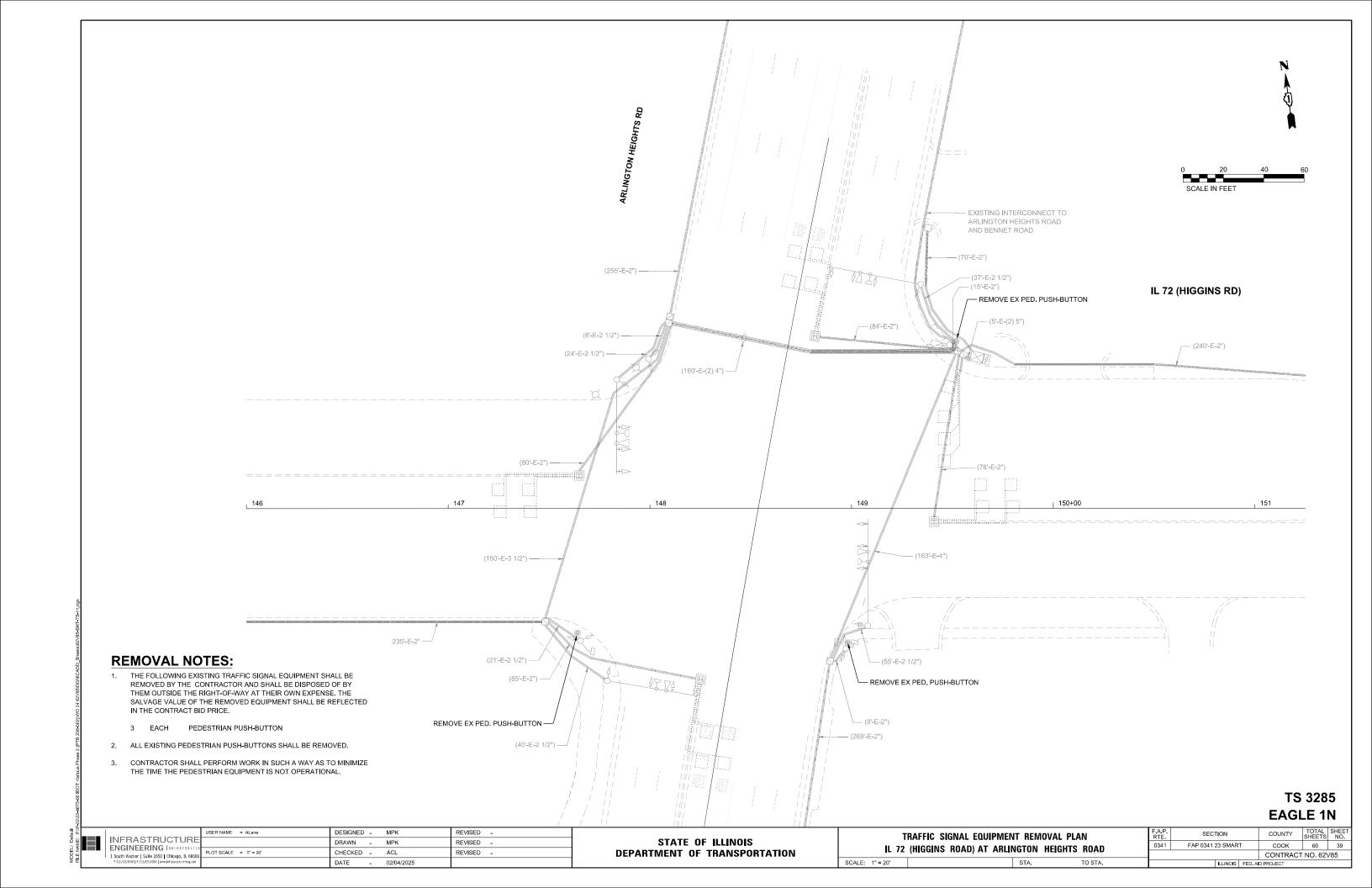
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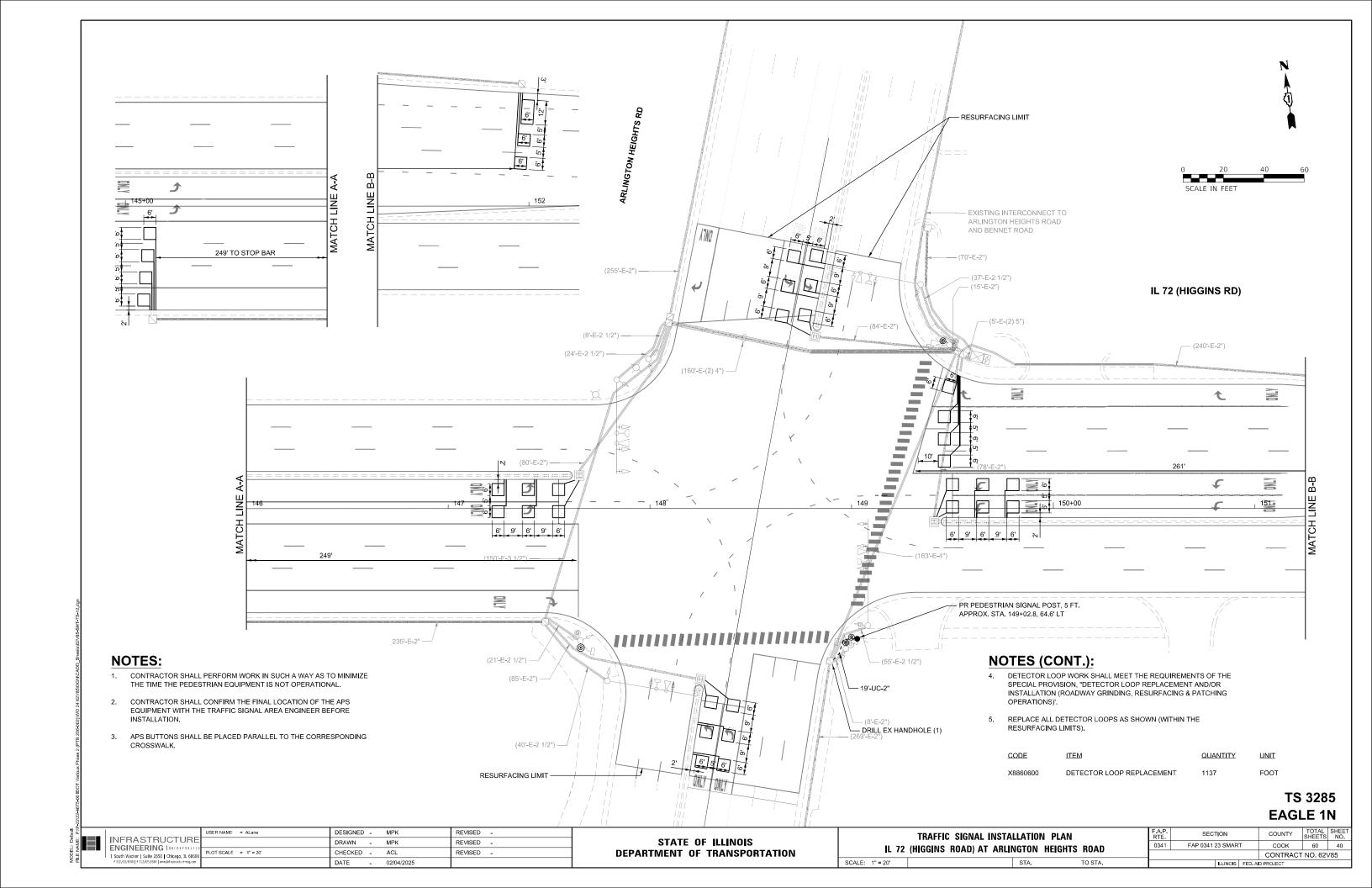
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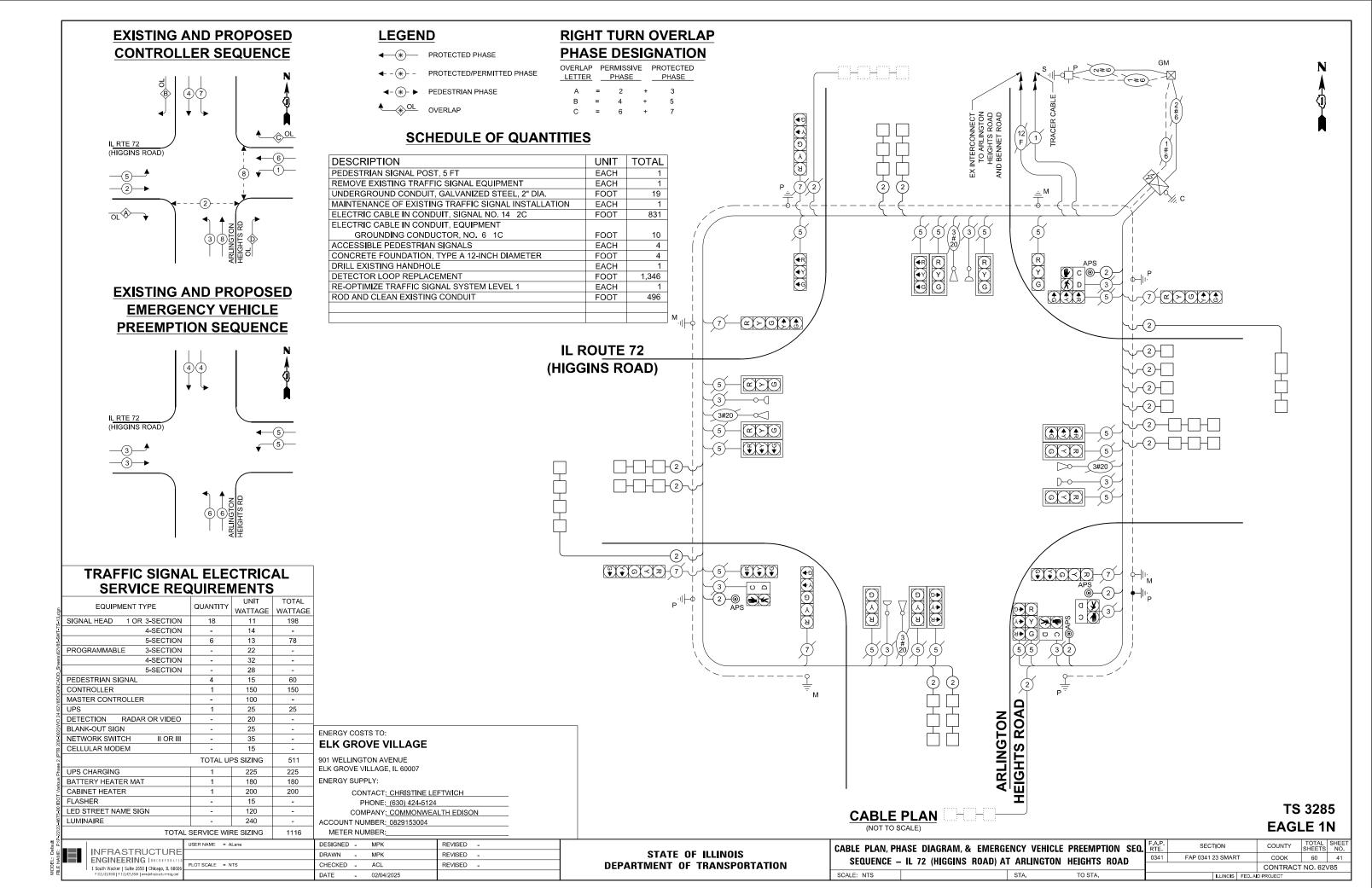
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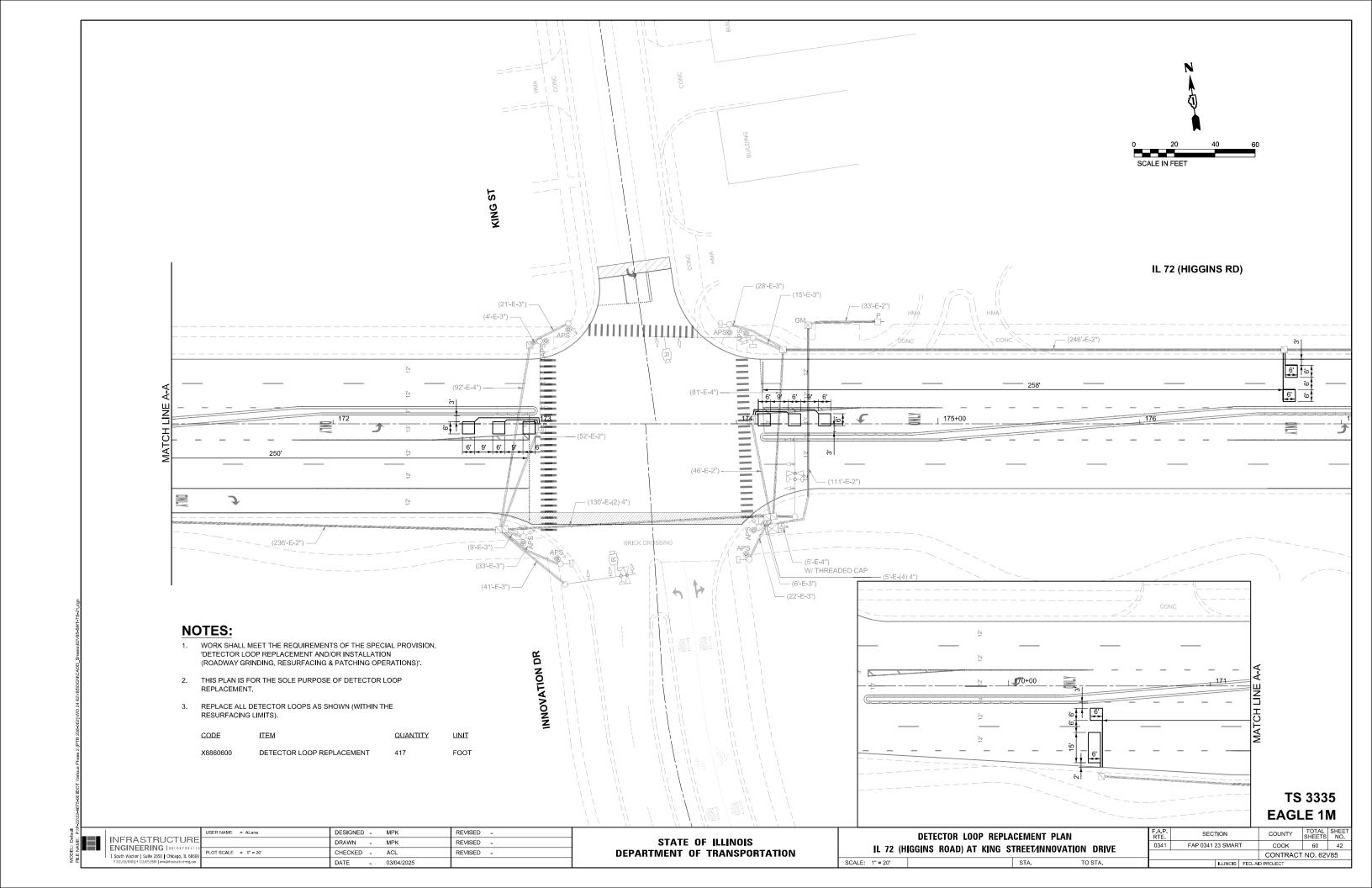


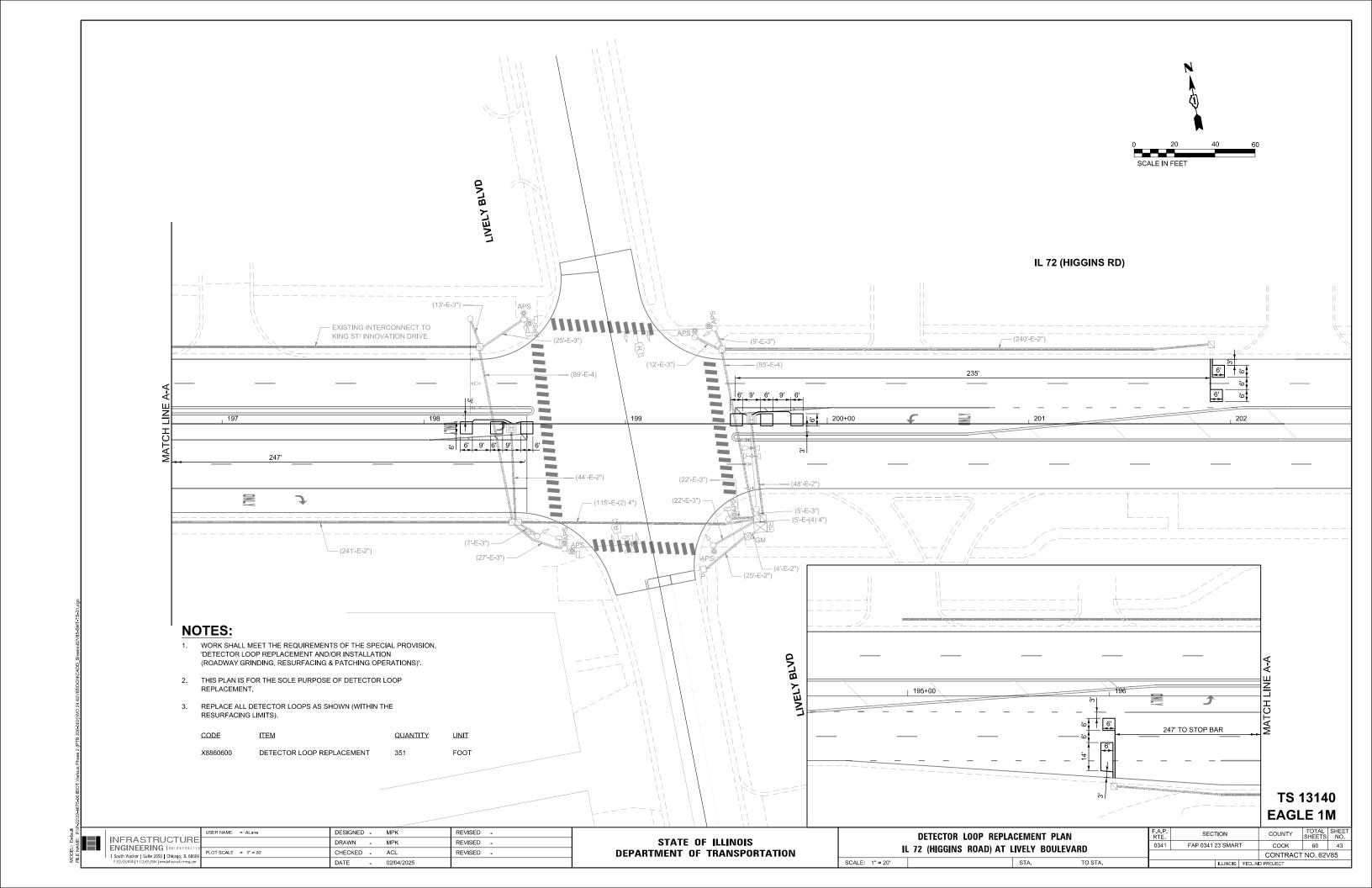


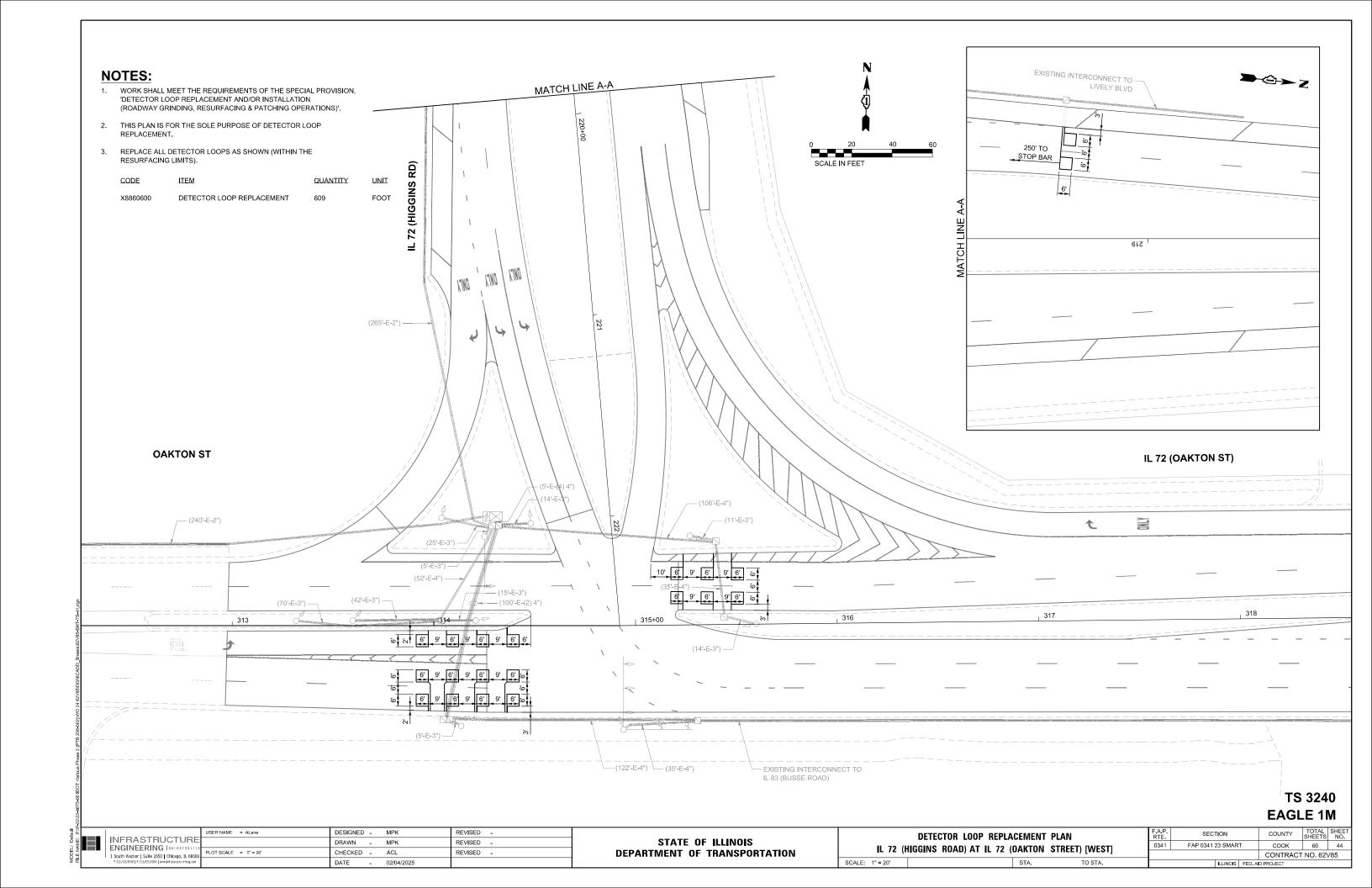


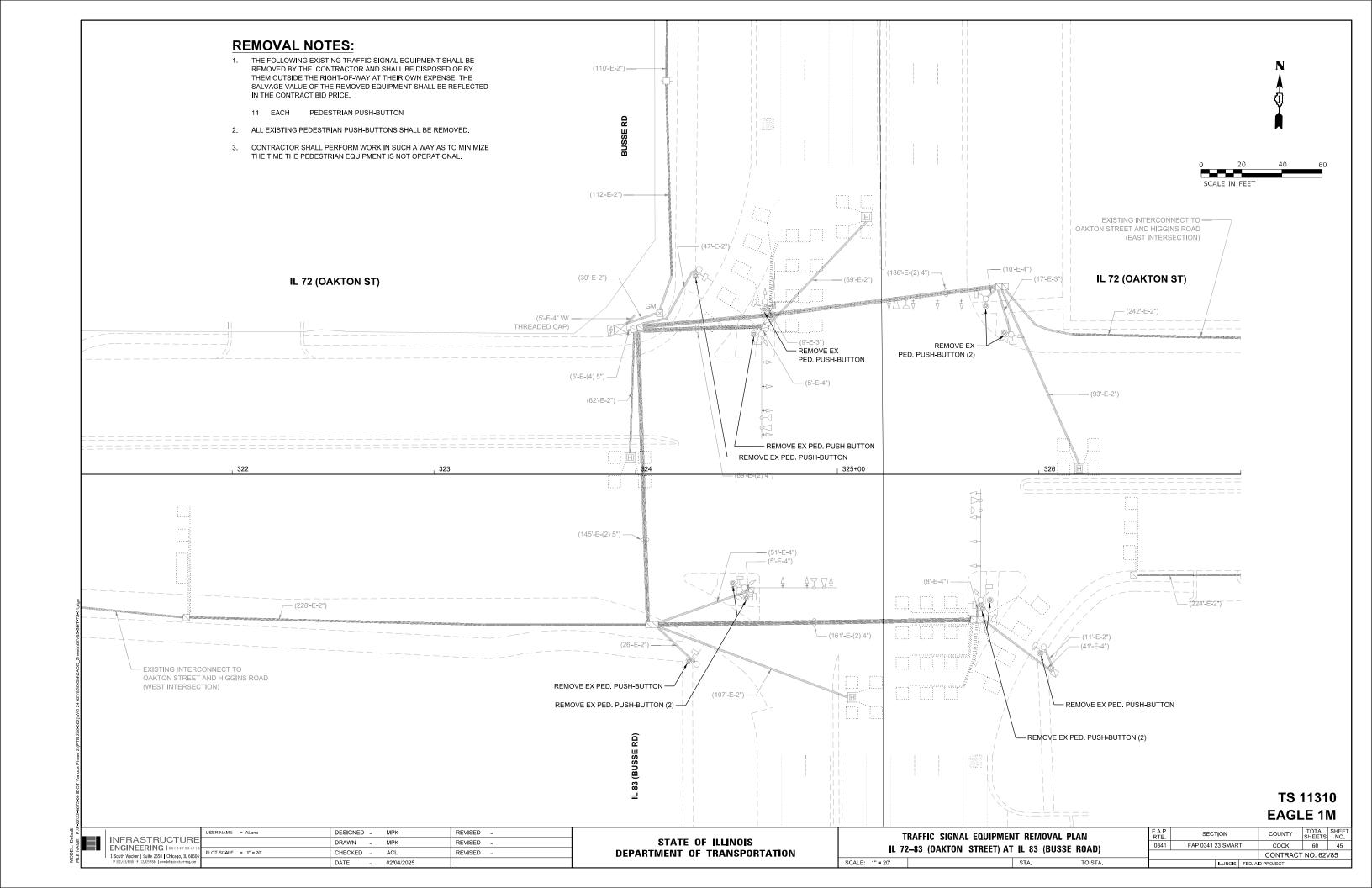


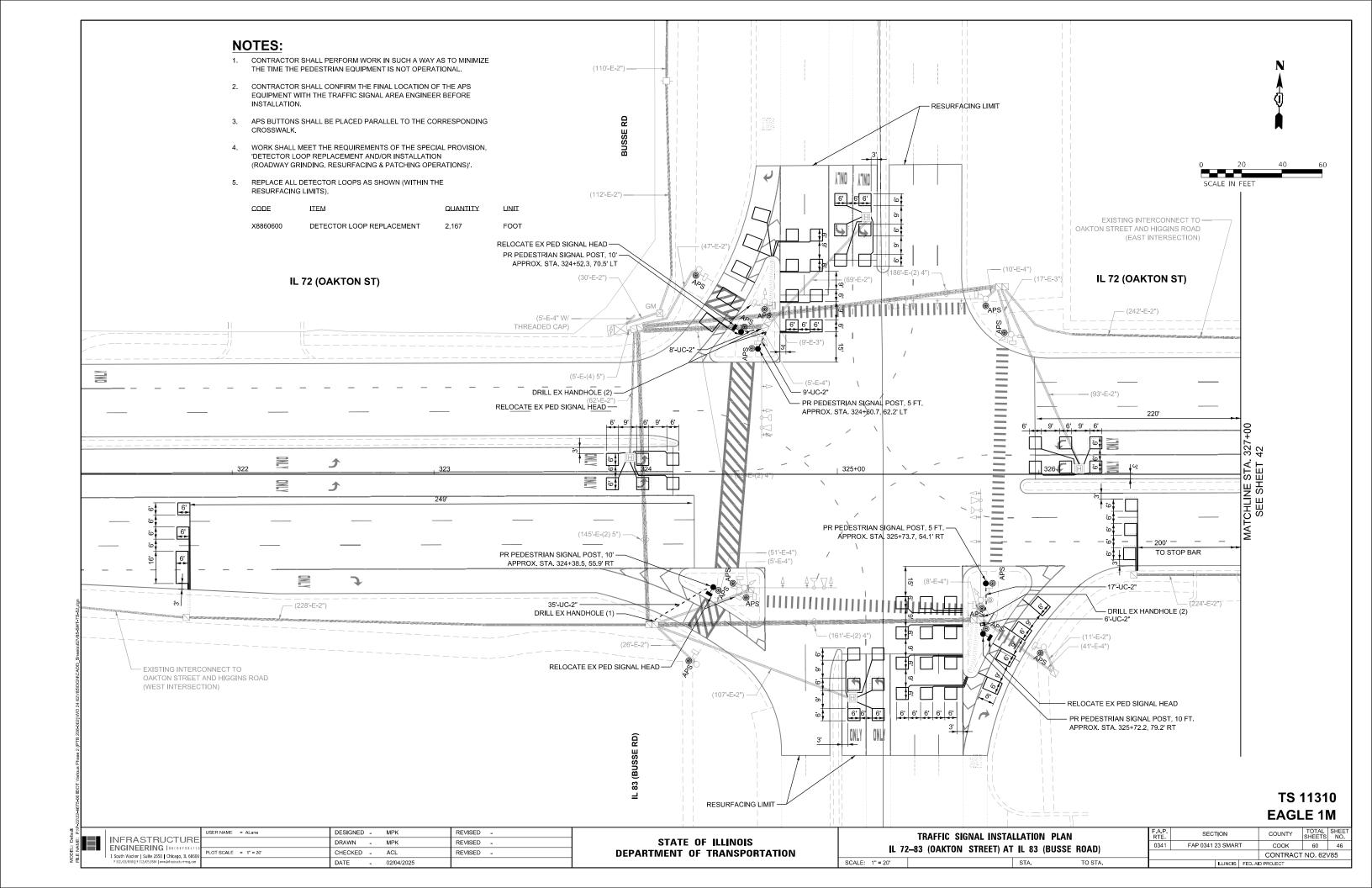


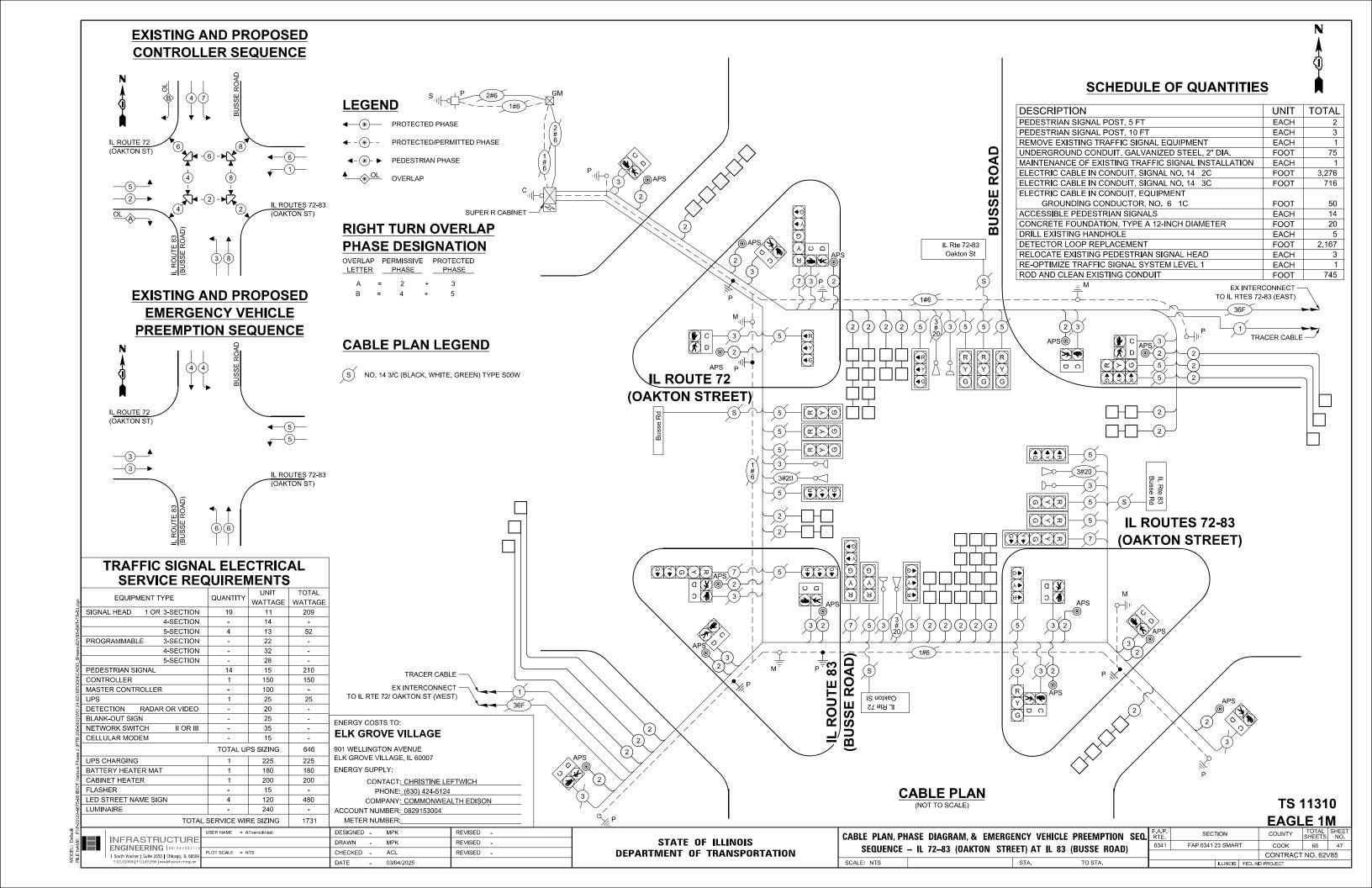


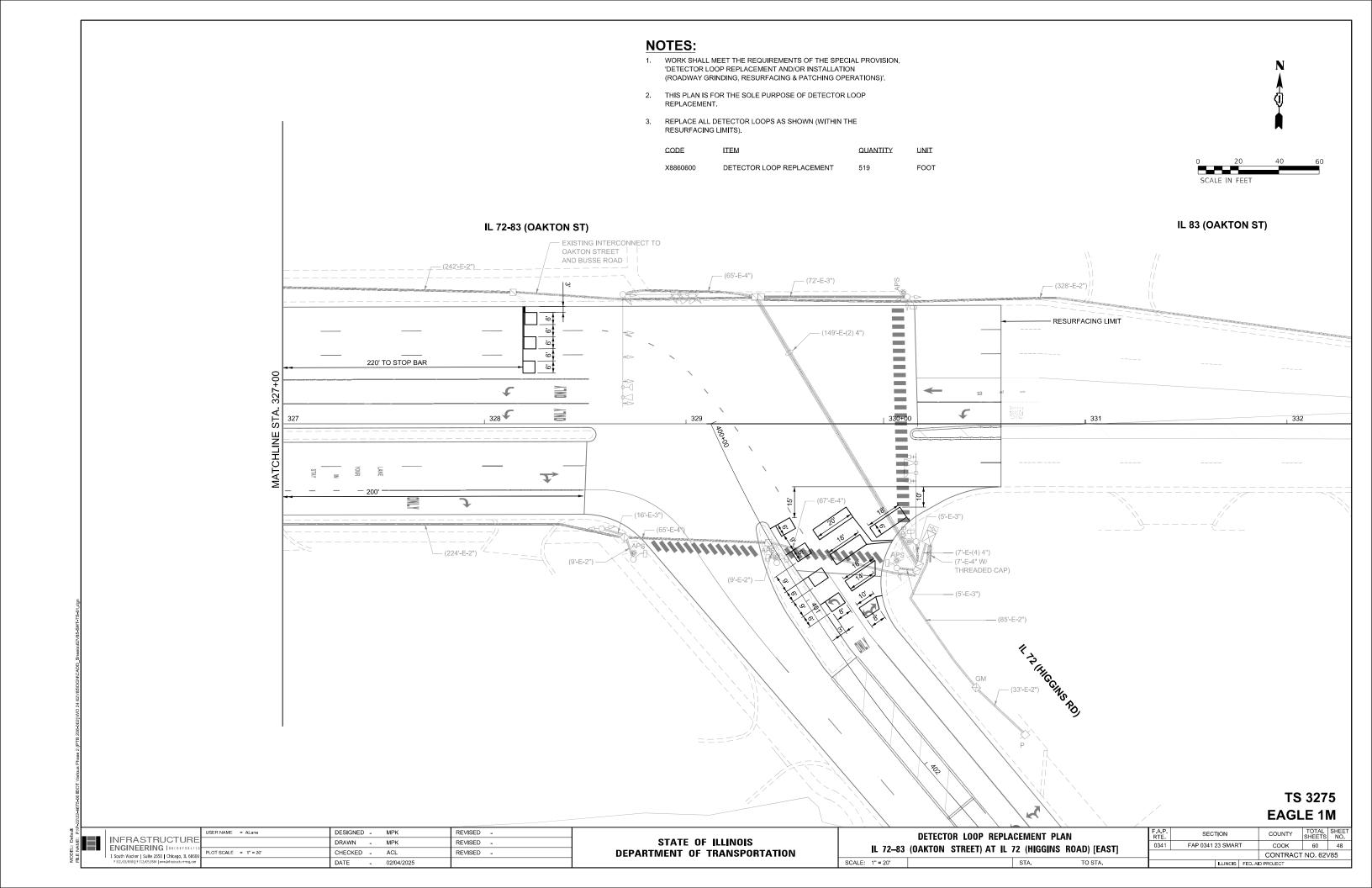


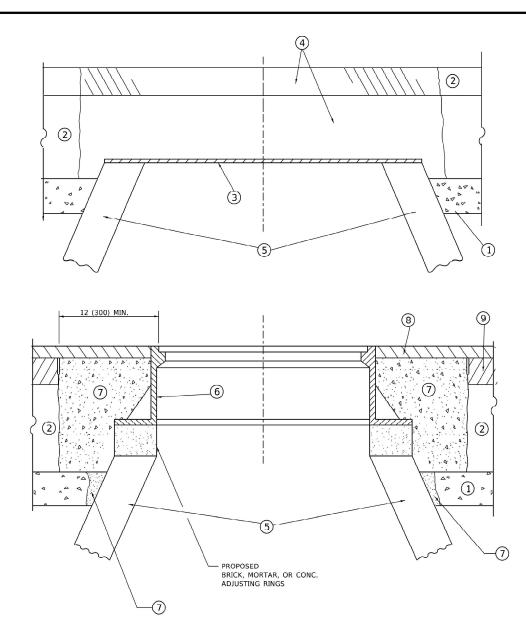












DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

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.
- CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
- 4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 3 (80) HMA TO REMAIN AFTER MILLING).

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-2* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.
- *UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

LEGEND

(1) SUB-BASE GRANULAR MATERIAL

- (6) FRAME AND LID (SEE NOTES)
- (2) EXISTING PAVEMENT
- (7) CLASS PP-2* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- (8) PROPOSED HMA SURFACE COURSE
- 4 PROPOSED CRUSHED STONE AND HMA SURFACE MIX
 - 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.
- NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
- 4. WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

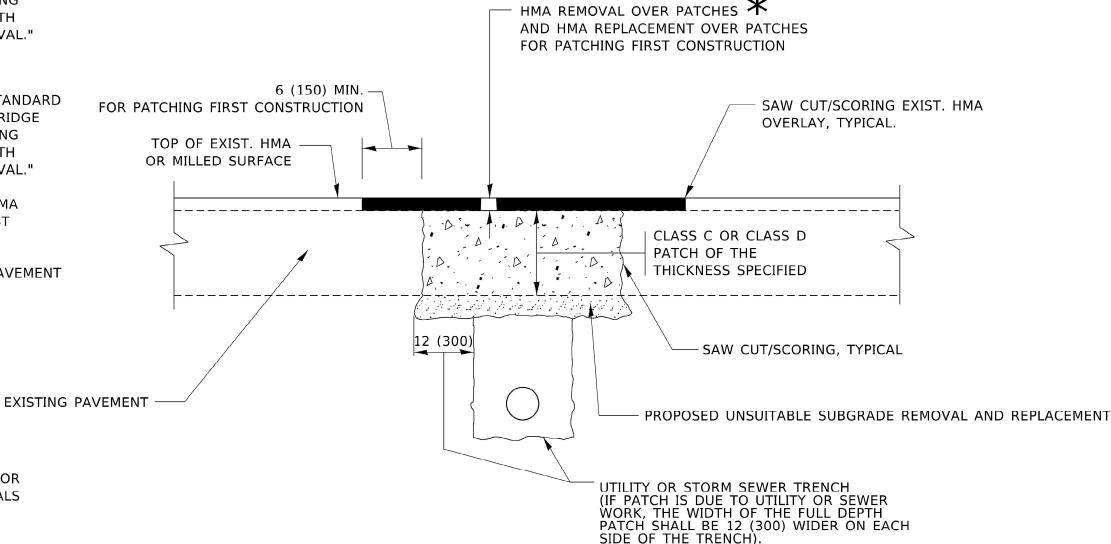
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METHOD OF MEASUREMENT

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

BASIS OF PAYMENT

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



SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEE TYPICAL SECTIONS FOR

THICKNESS AND MATERIALS

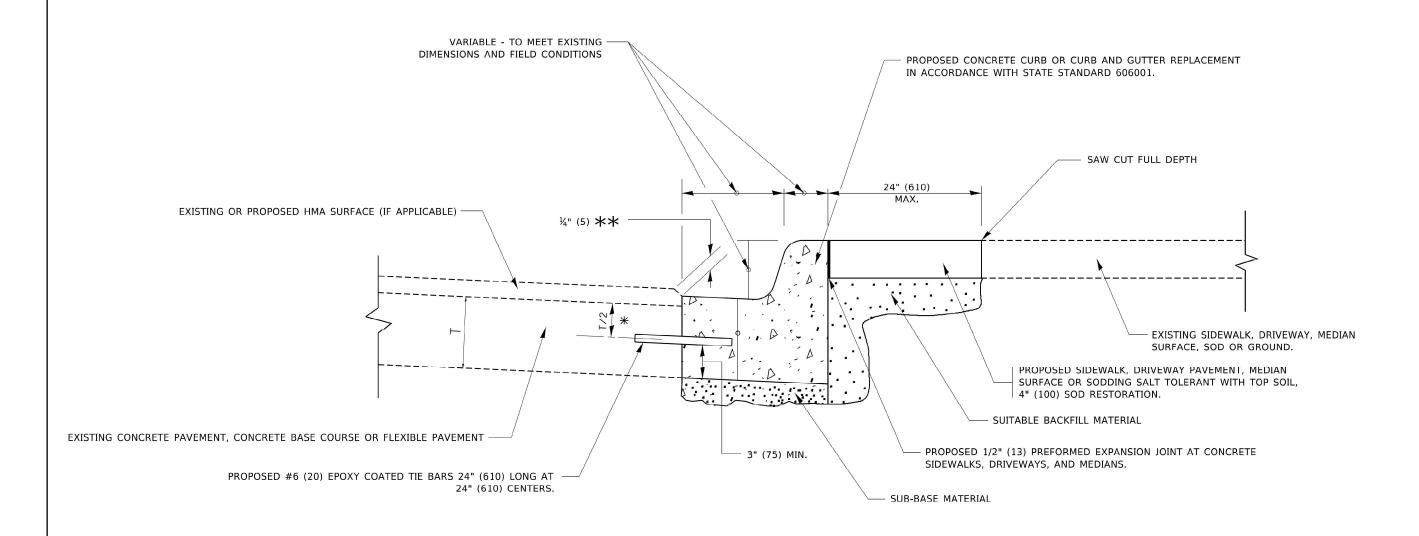
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 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 = Lawrence.DeManche	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07			PAVEMENT PATCHING FOR	F.A. P. RTF.	SECTION	COUNTY TOTAL SHEET SHEETS NO.	
	DRAWN -	REVISED R. BORO 09-04-07	STATE OF ILLINOIS		HMA SURFACED PAVEMENT	0341	FAP 0341 23 SMART	COOK 60 50	
PLOT SCALE - 100,0000 ' / in.	CHECKED -	REVISED - K. ENG 10-27-08	DEPARTMENT OF TRANSPORTATION		TIVIA JUNTAGED PAVEIVIEIVI		D400-04 (BD-22)	CONTRACT NO. 62V85	
PLOT DATE = 11/18/2022	DATE - 10-25-94	REVISED - K SMITH 11-18-22		SCALE: NONE SHEET 1 OF 1 SHEETS STA TO STA		SCALE: NONE SHEET 1 OF 1 SHEETS STA TO STA		TILLINOIS LEED A	ID BROIECT



- \divideontimes 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.

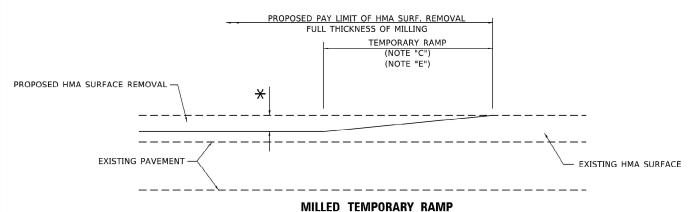
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

L	USER NAME = footemj	DESIGNED	-	A. HOUSEH	REVISED	-	A. ABBAS 03-21-97
		DRAWN	-		REVISED	-	M. GOMEZ 01-22-01
F	PLOT SCALE = 50.0000 ' / in.	CHECKED	-		REVISED	-	R. BORO 12-15-09
F	PLOT DATE = 7/11/2019	DATE	-	03-11-94	REVISED	-	K. SMITH 07-11-19

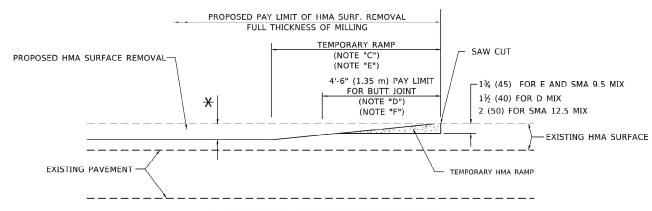
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

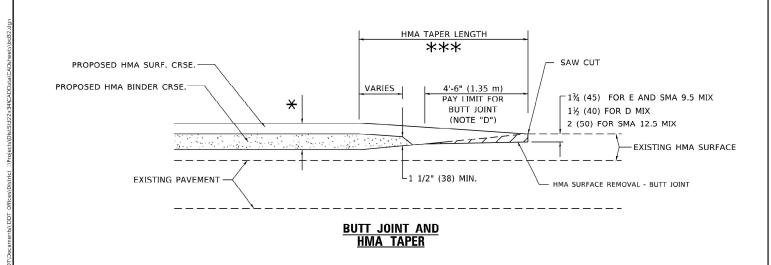


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP



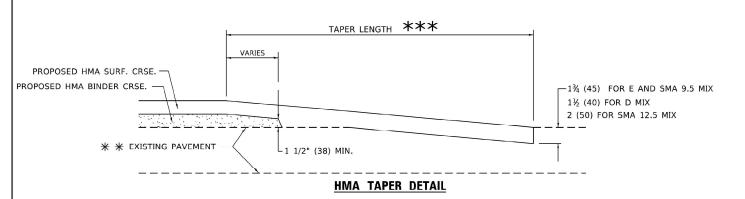
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

JSER NAME = Lawrence.DeMai DESIGNED -M. DE YONG DRAWN REVISED M. GOMEZ 04-06-01 CHECKED REVISED R. BORO 01 01 07 LOT DATE = 11/18/2022 DATE REVISED K. SMITH 11-18-22

DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND FAP 0341 23 SMART **HMA TAPER DETAILS** BD400-05 BD-32 SHEET 1 OF 1 SHEETS STA

PROPOSED HMA OR PCC SURFACE REMOVAL - BUTT JOINT 30' 0" (9.0 m) (NOTE "A") EXISTING HMA OR PCC SURFACE -SAW CUT 15'-0" (4.5 m) (NOTE "B") (NOTE "D") 40'-0" (12.0M) (NOTE "A1") -1¾ (45) FOR E AND SMA 9.5 MIX 1½ (40) FOR D MIX 2 (50) FOR SMA 12.5 MIX * EXISTING PAVEMENT **BUTT JOINT DETAIL**



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
- 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")

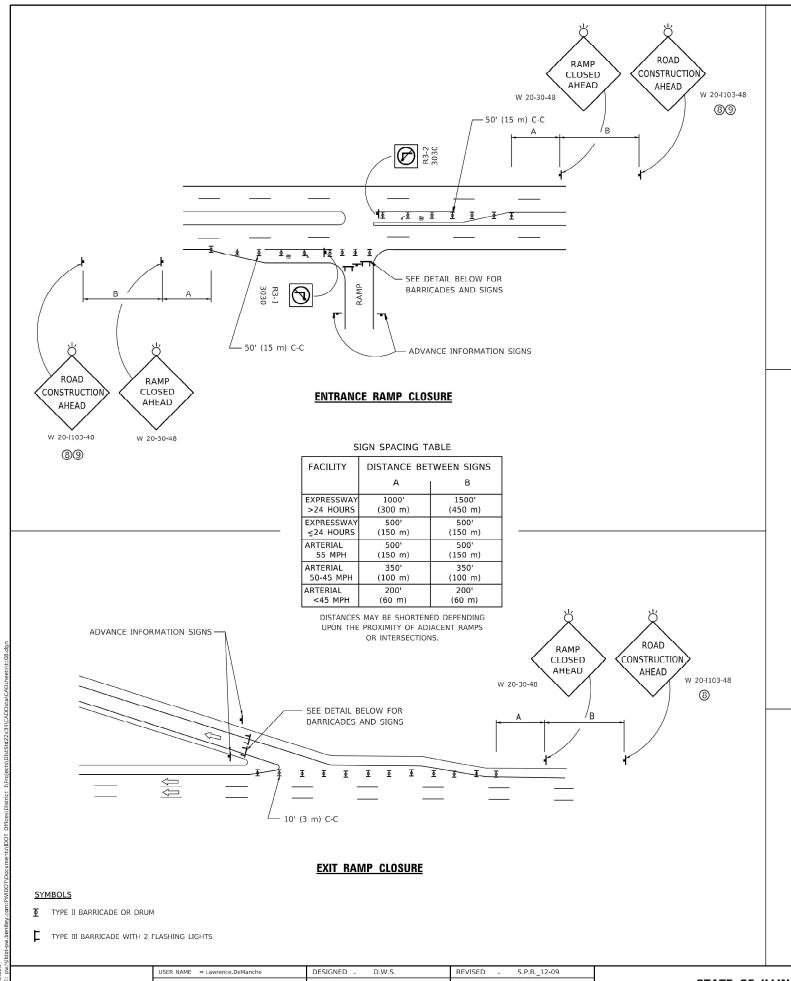
BASIS OF PAYMENT

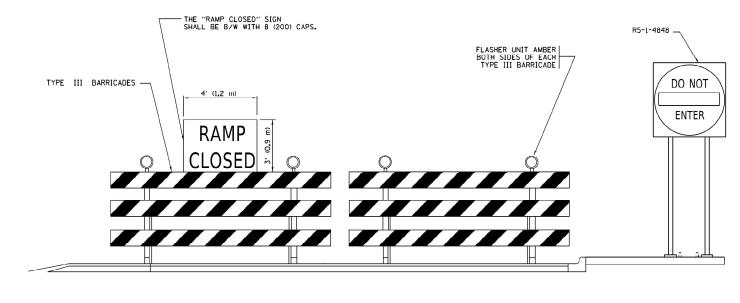
- THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT".
- THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT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

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

STATE OF ILLINOIS

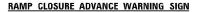
COUNTY COOK 60 52 CONTRACT NO. 62V85

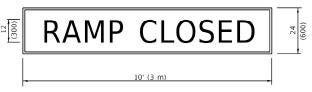




DETAIL FOR REQUIRED BARRICADES & SIGNS

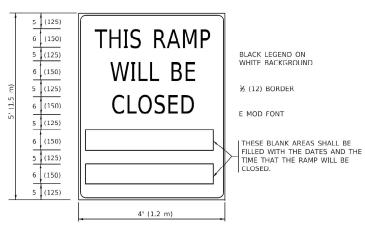
RAMP CLOSURE ADVANCE INFORMATION SIGN





BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY E MOD FONT 1 (25) BORDER

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



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

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

GENERAL NOTES:

- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II 1 BARRICADES DURING DAY OPERATIONS, CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- (2) VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- (3) A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
- ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

SCALE: NONE

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

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

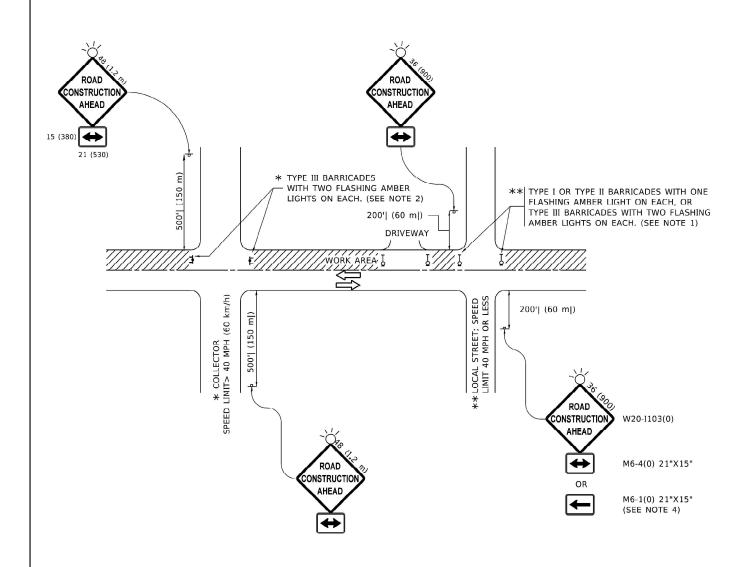
USER NAME = Lawrence.DeManche	DESIGNED -	D.W.S.	REVISED	-	S.P.B12-09
	DRAWN -		REVISED	-	M.D06-13
PLOT SCALE - 100.0000 ' / in.	CHECKED -		REVISED	-	M.D01-18
DLOT DATE - F/2/2024	DATE	02.83	DEMICED		D.C. 0E 24

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

ENTRANCE_AND_EXIT_RAMP Closure_details												
	SHEET	1	OF	1	SHEETS	STA.						

SECTION FAP 0341 23 SMART COOK 60 52A

0341 TC-08 CONTRACT NO. 62V85 OF 1 SHEETS STA. TO STA.



NOTES:

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

SCALE: NONE

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

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

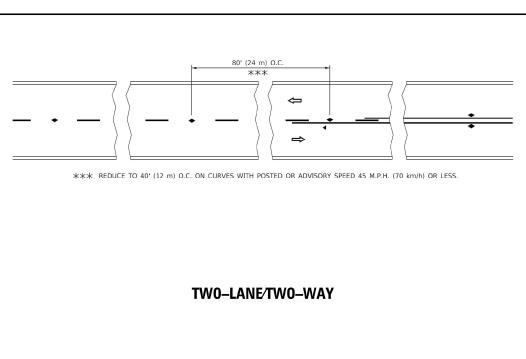
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

| SHEET | 1 OF | 1 SHEETS | STA. TO S

P. SECTION COUNTY TOTAL SHEETS NO.

11 FAP 0341 23 SMART COOK 60 53

TC-10 CONTRACT NO. 62V85



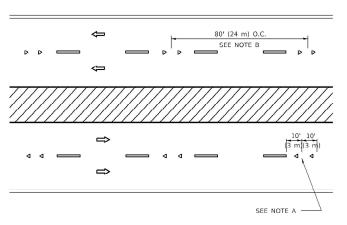
80' (24 m) O.C.

MULTI-LANE/UNDIVIDED

SEE NOTE A

 \Rightarrow

 \Rightarrow

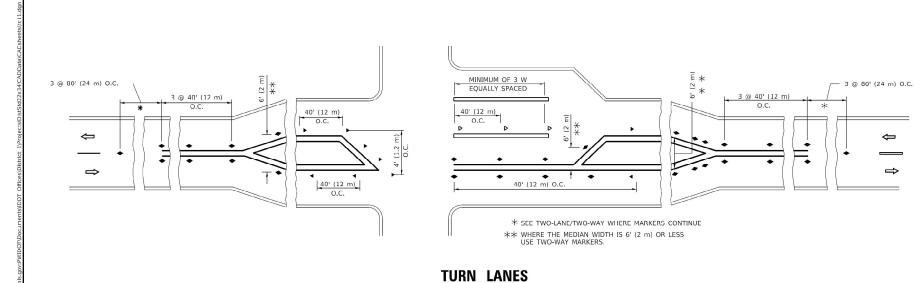


MULTI-LANE/DIVIDED

SEE FIGURE 3B-14 MUTCD

LANE REDUCTION TRANSITION

3 @ 40' (12 m) O.C.



SEE NOTE B 5 C 40' (12 m) O.C. SEE NOTE A -TWO-WAY LEFT TURN

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
- 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.
- 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.

USER NAME = TOOTEM)	DESIGNED -	REVISED	- 12	RAMMACHER 03-12-
	DRAWN -	REVISED	- T.	RAMMACHER 01-06-
PLOT SCALE - 50.0000 ' / in.	CHECKED -	REVISED	-	C. JUCIUS 09-09-09
PLOT DATE = 3/4/2019	DATE -	REVISED	-	C. JUCIUS 07-01-13

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TYPICAL APPLICATIONS										
RAISED REFLE	CTIVE	PA	VEME	NT	MARKER	S	(SNOW-PLOW	RESISTANT)	F	
SCALE: NONE	CHEET	1	OF	1	CHEETC	ст	Λ ΤΟ	CTA	1-	

SECTION 0341 FAP 0341 23 SMART COOK 60 54 CONTRACT NO. 62V85 TC-11

SYMBOLS

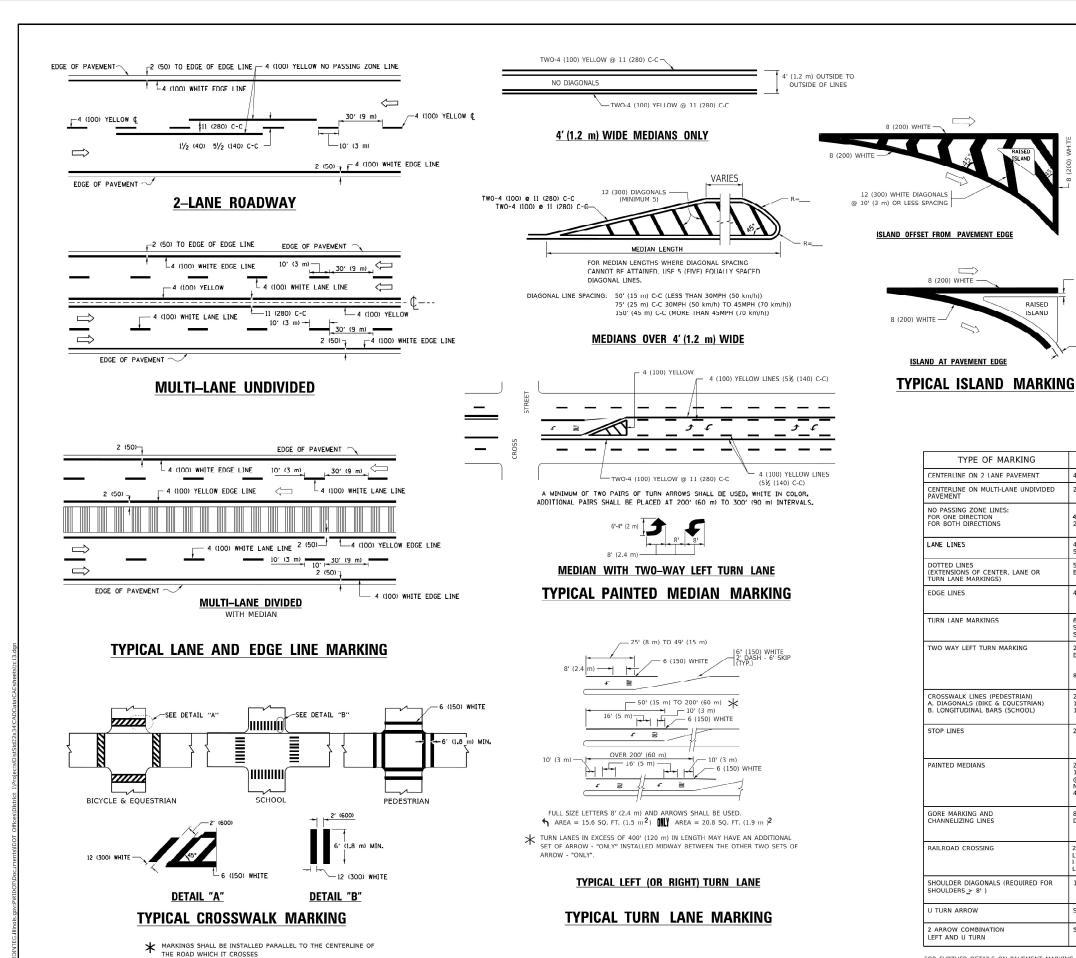
ONE-WAY AMBER MARKER

TWO-WAY AMBER MARKER

■ ONE-WAY CRYSTAL MARKER (W/O)

YELLOW STRIPE

WHITE STRIPE



COMBINATION LEFT AND U-TURN 5'-4" (1620) 32 R (810) 2 (50) LANE REDUCTION TRANSITION * LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS. U-TURN WIDTH OF LINE PATTERN COLOR SPACING / REMARKS SKIP-DASH 10' (3 m) LINE WITH 30' (9 m) SPACE 5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C 4 (100) 2 @ 4 (100) OMIT SKIP-DASH CENTERLINE BETWEEN SKIP-DASH SKIP-DASH 10' (3 m) LINE WITH 30' (9 m) SPACE 4 (100) 5 (125) ON FREEWAYS SAME AS LINE BEING EXTENDED SKIP-DASH SAME AS LINE BEING 2' (600) LINE WITH 6' (1.8 m) SPACE EXTENDED SOLID YELLOW-LEFT WHITE-RIGHT OUTLINE MEDIANS IN YELLOW 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m)) SOLID SEE TYPICAL TURN LANE MARKING DETAIL SKIP-DASH AND SOLID IN PAIRS 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 8' (2.4m) LEFT ARROW NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS. PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING PUINI. PARALLEL 10 CROSSROAD CENTERLINE, WHERE SOLID WHITE SOLID 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING 2 @ 4 (100) WITH 12 (300) DIAGONALS YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS 8 (200) WITH 12 (300) DIAGONALS @ 45° DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))

D(FT)

665

750

SPEED LIMIT

55

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

SCALE: NONE

2 (50)

4 (100)

24 (600)

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

12 (300) @ 45°

SEE DETAIL

SOLID

SOLID

SOL ID

WHITE

WHITE

RAISED

TYPE OF MARKING

SECTION DISTRICT ONE FAP 0341 23 SMART COOK TYPICAL PAVEMENT MARKINGS CONTRACT NO. 62V85 TC-13 OF 2 SHEETS STA

30.4 SF

SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m 2FACH "X"=54.0 SQ. FT. (5.0 m 2

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

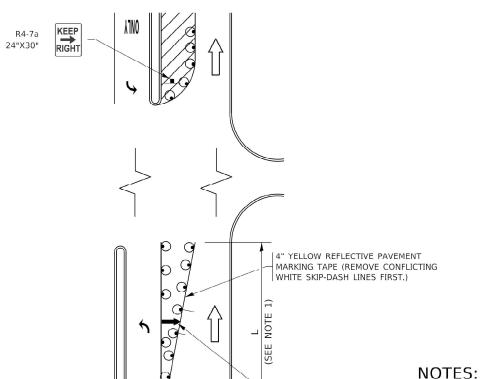
All dimensions are in inches (millimeters

unless otherwise shown.

C. JUCIUS 09-09-09 USER NAME = footem DESIGNED -EVERS REVISED -DRAWN C. JUCIUS 07-01-13 CHECKED REVISED -C. JUCIUS 12-21-15 LOT SCALE - 50.0000 ' / in DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

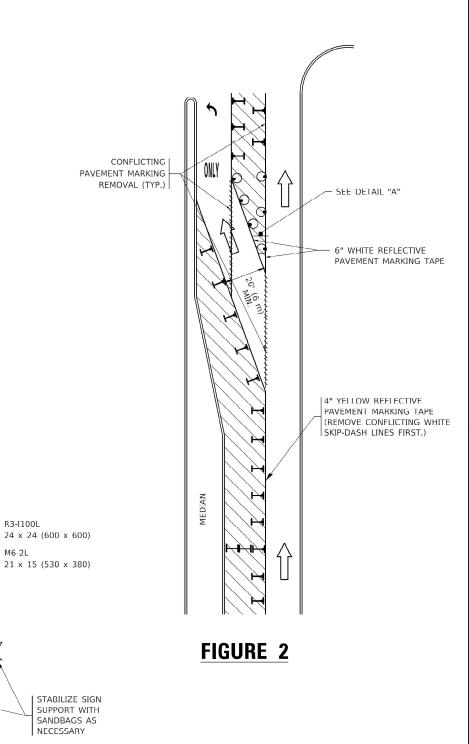


- ARROW BOARD

LEGEND WORK AREA LANE OPEN TO TRAFFIC ARROW BOARD TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT DRUM WITH STEADY BURN LIGHT SIGN ASSEMBLY TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

- 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 PREQUIREMENTS.
- 8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE



DETAIL A

TURN

LANE

All dimensions are in inches (millimeters) unless otherwise shown

COOK

CONTRACT NO. 62V85

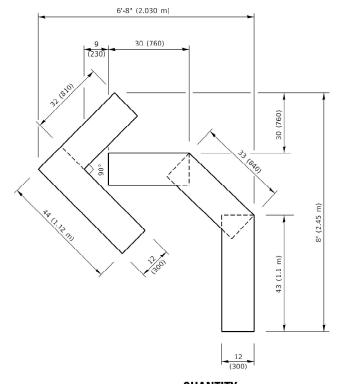
DESIGNED - T. RAMMACHER 09-08-94 REVISED - R. BORO 09-14-09 JSER NAME = footem Λ. HOUSEH 11-07-95 REVISED - A. SCHUETZE 07-01-13 CHECKED - A. HOUSEH 10-12-96 REVISED - A. SCHUETZE 09-15-16 LOT SCALE = 50.0000 ' / in. DATE -T. RAMMACHER 01-06-00 REVISED -

FIGURE 1

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

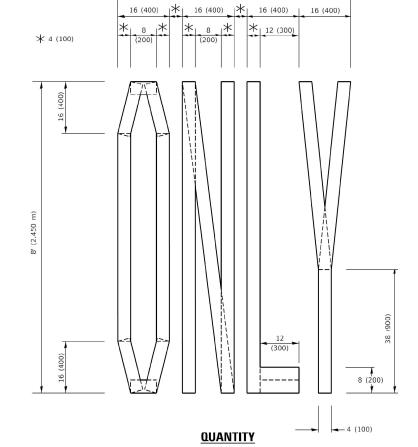
SECTION TRAFFIC CONTROL AND PROTECTION AT TURN BAYS FAP 0341 23 SMART (TO REMAIN OPEN TO TRAFFIC) TC-14 SHEET 1 OF 1 SHEETS STA.

SEE DETAIL "A" -

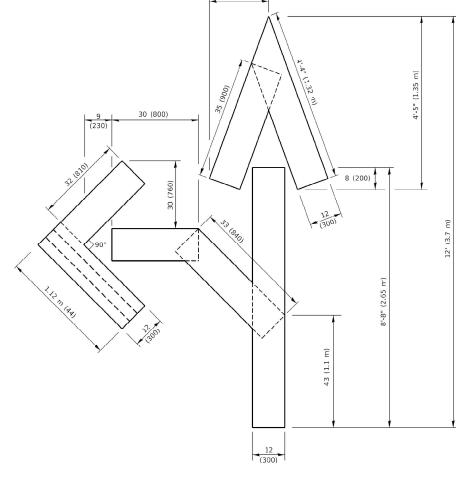


QUANTITY

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



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



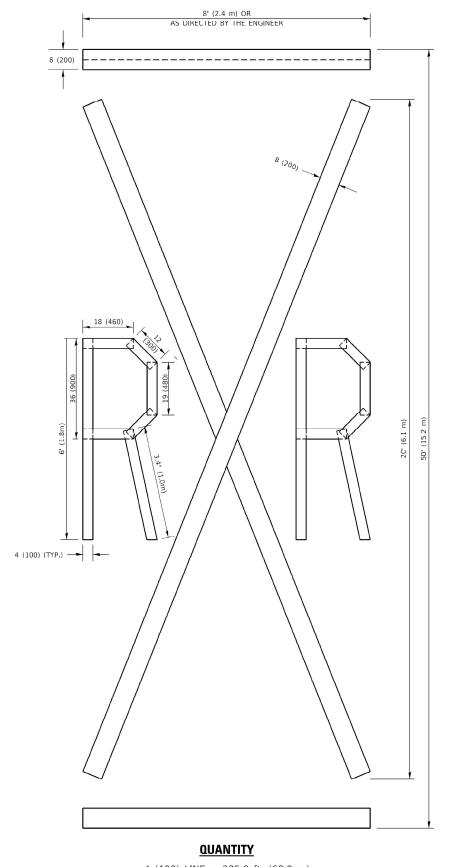
1'-8" (500)

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.

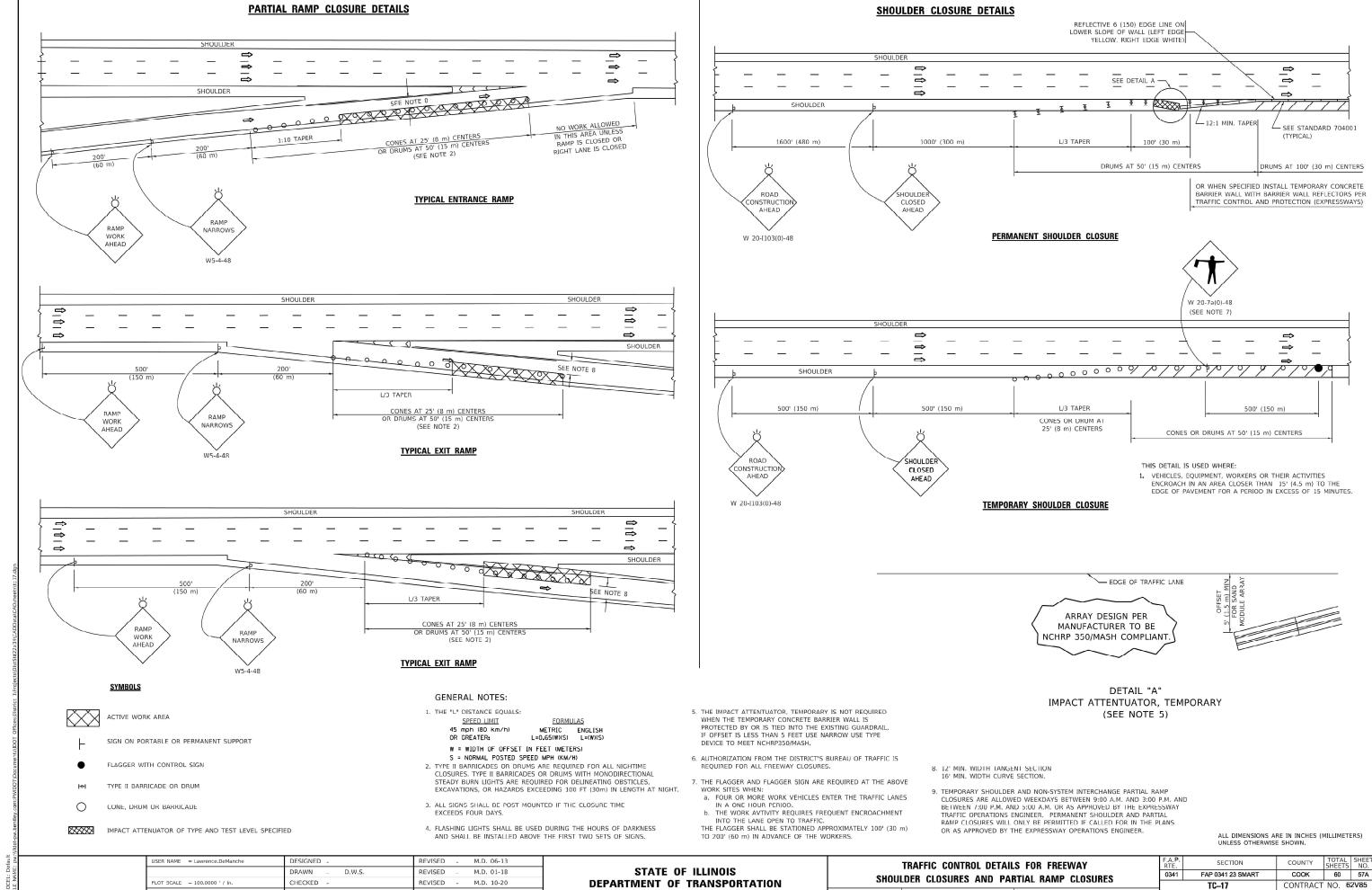


4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

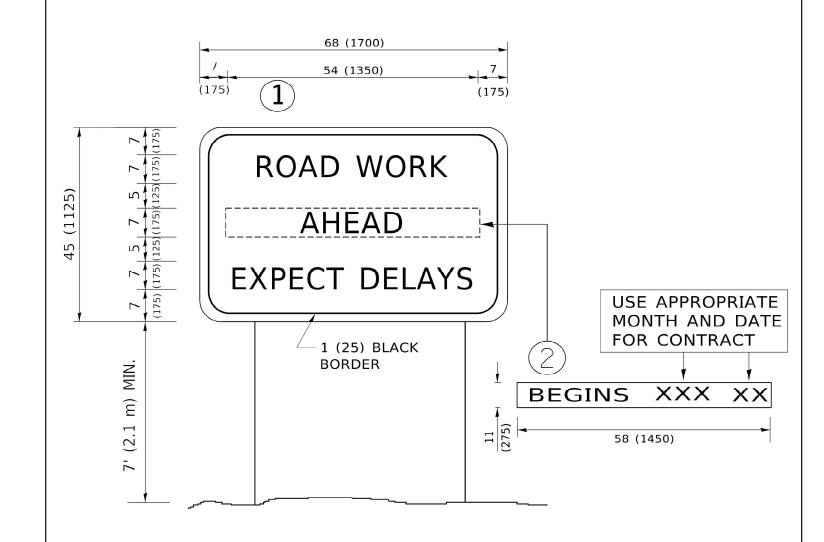


SHEET 1 OF 1 SHEETS STA.

DATE

REVISED

D.S. 05-24

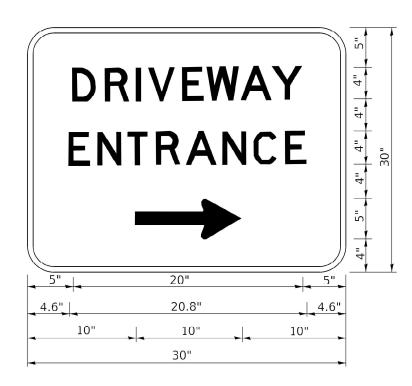


NOTES:

- 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.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

	USER NAME = footemj	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL	ROAD	F.A. P . RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS	INFORMATIO	N SIGN	0341	FAP 0341 23 SMART	COOK	60	58
	PLOT SCALE - 50.0000 ' / in.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DELITATIONE OF THE STATE OF THE			TC-22	CONTRAC	.T NO. 6	32V85	
	PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 01-31-07	SCALE: NO	NE SHEET 1 OF 1 SHEE	TS STA. TO STA.		ILLINOIS FED. A	D PROJECT		



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

NOTES:

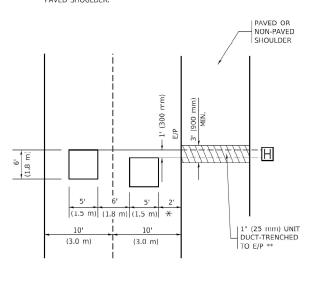
- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOOPS NEXT TO SHOULDERS

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

 $\frac{*}{}$ = (600 mm)



* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

JSER NAME = footem

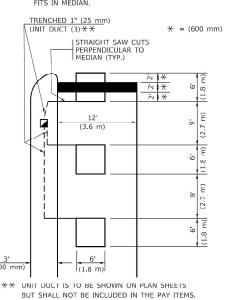
LOT SCALE = 50.0000 ' / in

LEFT TURN LANES WITH MEDIANS

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

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



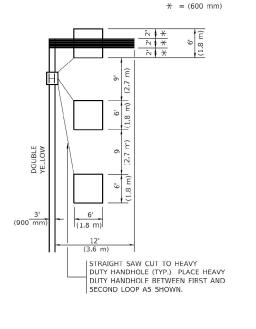
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS

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

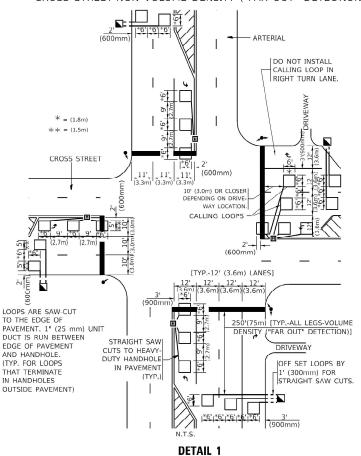
(PROTECTED / PERMITTED LEFT TURN PHASING)



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

SCALE: NONE

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



N.T.S.

DESIGNED

CHECKED -

R.K.F.

DRAWN

DATE

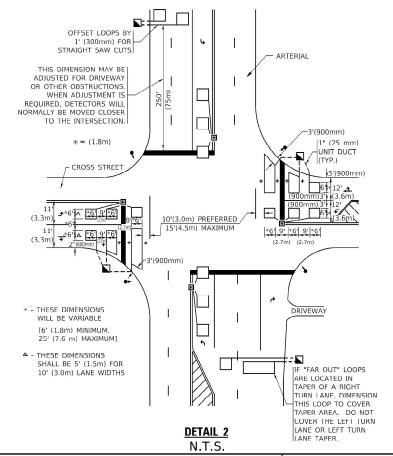
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REVISED

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



NOTES:

VEHICLES LOOP DETECTORS

- * 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

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

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

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

NOTE:

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

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

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT 1 - DETECTOR LOOP INSTALLATION **DETAILS FOR ROADWAY RESURFACING** SHEET 1 OF 1 SHEETS STA.

SECTION COUNTY 0341 FAP 0341 23 SMART COOK 60 60 TS-07 CONTRACT NO. 62V85