

01-17-2020 LETTING ITEM 001

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PROPOSED HIGHWAY PLANS

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-1	COOK	88	1
ILLINOIS CONTRACT NO. 60M68				

\* 88 + 2 = 90 TOTAL SHEETS

D-91-153-11

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**DESIGN DESIGNATION:**  
**OTHER PRINCIPAL ARTERIAL**  
 FAP ROUTE 346: US 41 EDENS EXPY.  
 2018 ADT=62,400 (SOUTH OF LAKE COOK ROAD)  
 2018 ADT=56,400 (NORTH OF LAKE COOK ROAD)  
 SPEED LIMIT 55 MPH

**ARTERIAL:**  
 FAP ROUTE 379: LAKE COOK ROAD  
 2018 ADT=31,500 (WEST OF US 41)  
 2018 ADT=11,000 (EAST OF US 41)  
 SPEED LIMIT 35 MPH

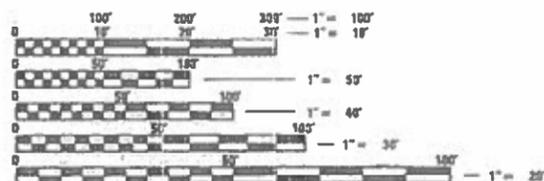
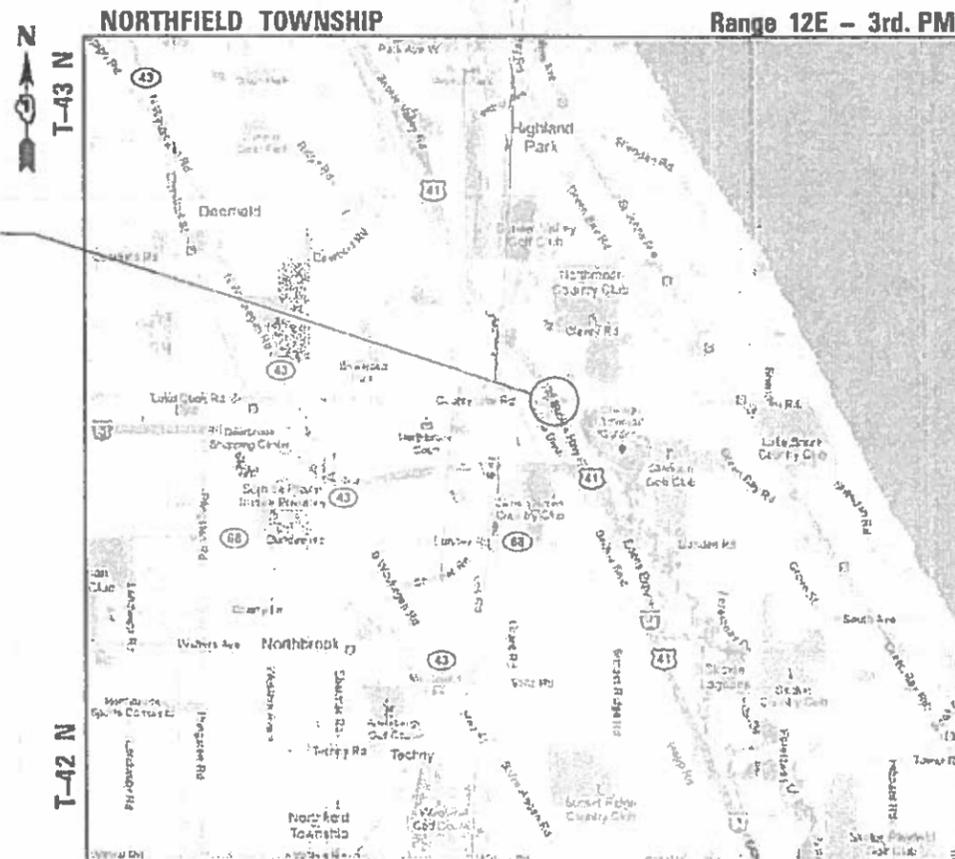
**FAP ROUTE 379: LAKE COOK ROAD  
 AT US 41 EDENS EXPY. (1.2 MI. N. OF IL 68)  
 SECTION 2010-120-1  
 PROJECT NUMBER: NHPP-OMSU(054)  
 BRIDGE DECK OVERLAY, BRIDGE JOINT REPAIR  
 AND SUPERSTRUCTURE REPAIR  
 COOK COUNTY**

C-91-153-11



IMPROVEMENT LOCATED IN THE VILLAGE OF NORTHBROOK

IMPROVEMENT LOCATION LAKE COOK ROAD AT US 41 EDENS EXPY. STRUCTURE NO. 016-0811



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
 1-800-892-0123  
 OR 811

PROJECT MANAGER: MR. FAWAD AQUEEL, PE, PTOE (847) 705-4247  
 PROJECT ENGINEER: MR. PRAVEEN KAINI, PE (847) 705-4237

CONTRACT NO. 60M68



Accurate GROUP, INC.

WWW.ACCGI.COM  
 101 SCHELTER RD., SUITE B-200  
 LINCOLNSHIRE, ILLINOIS 60069  
 T (847) 613-1100 F (847) 613-1110  
 ILLINOIS PROFESSIONAL DESIGN FIRM NO. 194,0029 J

*J. Miller*  
 THOMAS G. MILLER  
 LICENSED PROFESSIONAL ENGINEER  
 OF ILLINOIS

DATE SIGNED: 8/5/2019  
 EXP. DATE: 11/30/2019  
 SHEETS: 1451773588



DATE SIGNED: 08/05/2019  
 EXP. DATE: 11/30/2020  
 SHEETS: 52-72

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUBMITTED August 8, 2019

*Anthony J. Dwyer/AS*  
 REGIONAL ENGINEER

*Dec 19 2019*  
 ENGINEER OF DESIGN AND ENVIRONMENT

*Paul P. Chaf*  
 DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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## STATE OF ILLINOIS HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-09	PAVEMENT JOINTS
442101-09	CLASS B PATCHES
442201-03	CLASS C AND D PATCHES
515001-04	NAME PLATE FOR BRIDGES
604001-05	FRAME AND LIDS TYPE I
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
642001-02	SHOULDER RUMBLE STRIPS, 16 IN.
643001-02	SAND MODULE IMPACT ATTENUATORS
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE
701400-09	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-12	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS < 40 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701446-10	TWO LANE CLOSURE, FREEWAY/EXPRESSWAY
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A AND B POSTS
731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-03	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING
878001-10	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS

## COMMITMENTS

NONE

## GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOURS NOTIFICATION REQUIRED)
- THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM IDOT FIELD MAINTENANCE ENGINEERS.
- 10 FT (3 M) TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
- WHERE ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- THE CONTRACTOR MUST CONTACT THE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV AND THE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR AT (847) 705-4155 AT LEAST 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE RESIDENT ENGINEER SHALL CONTACT CORY JUCIUS, ARTERIAL TRAFFIC FIELD ENGINEER AT CORY.JUCIUS@ILLINOIS.GOV AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- ALL PAVEMENT MARKINGS AND RAISED REFLECTORS AFFECTED BY THE BRIDGE AND PAVEMENT REPAIRS SHALL BE REPLACED. QUANTITIES HAVE BEEN INCLUDED IN THE CONTRACT FOR THIS WORK.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- DO NOT SCALE THESE PLANS FOR CONSTRUCTION PURPOSES.
- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED UPON THE UNIT PRICE BID FOR THE WORK.
- DURING CONSTRUCTION OPERATIONS, LOOSE MATERIAL DEPOSITS THAT OBSTRUCT THE FLOW OF WATER DRAINING AN AREA SHALL BE REMOVED BEFORE THE END OF EACH WORK DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES (NEW AND EXISTING) SHALL BE FREE FROM ALL DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COSTS OF THE CONTRACT.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES, LETTERS AND SYMBOLS (AND RAISED REFLECTIVE MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE AS DIRECTED BY THE ENGINEER.
- THE PLANS DO NOT REPRESENT A COMPLETE DEPICTION OF ALL UTILITIES THAT MAY BE IMPACTED BY THE PROPOSED WORK. THE CONTRACTOR SHALL CONDUCT HIS OR HER OWN INVESTIGATION TO DETERMINE THE OWNERSHIP OF IMPACTED UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNERS AND MAY BE REQUIRED TO PROVIDE TEMPORARY SUPPORT, ADJUST, RELOCATE OR REMOVE UTILITIES THAT ARE IMPACTED BY THE PROPOSED IMPROVEMENT. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COSTS OF THE CONTRACT.
- CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT [www.idotcs.com](http://www.idotcs.com) ONE WORK DAY (TWENTY-FOUR (24) HOURS) IN ADVANCE OF ALL DAILY LANE, RAMP AND SHOULDER CLOSURES ON ALL FREEWAYS AND/OR EXPRESSWAYS IN DISTRICT ONE. THIS ADVANCE NOTIFICATION AND APPROVAL IS CALCULATED BASED ON WORKDAYS OF MONDAY THROUGH FRIDAY EXCLUSIVE OF WEEKENDS AND HOLIDAYS.
- A MAINTENANCE OF TRAFFIC PLAN SHALL BE SUBMITTED TO THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR 14 DAYS IN ADVANCE OF ANY STAGE CHANGES OR FULL EXPRESSWAY CLOSURES. THE MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE, BUT NOT BE LIMITED TO LANE AND RAMP CLOSURES, EXISTING GEOMETRICS, AND EQUIPMENT AND MATERIAL LOCATIONS.
- THE CONTRACTOR SHALL PROVIDE MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION (1 EACH) AT THE SKOKIE BLVD AND LAKE COOK RD INTERSECTION.
- JACK BIELAK AT COOK COUNTY SHALL BE NOTIFIED AT (312) 603-7336 FOR FINAL INSPECTION. AFTER THE LAKE COOK ROAD CONSTRUCTION IS COMPLETE, AS-BUILT PLANS SHALL BE SENT TO COOK COUNTY AS THEY BECOME AVAILABLE.
- THE RESIDENT ENGINEER SHALL CONTACT PACE TRANSPORTATION ENGINEER RICK WILLMAN AT RICHARD.WILLMAN@PACEBUS.COM OR (847) 228-3584 AT LEAST 10 DAYS IN ADVANCE OF BEGINNING WORK.

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PLOT DATE = 11/13/2019	DATE - 09/20/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, STATE HIGHWAY STANDARDS  
AND GENERAL NOTES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	2
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				NHPP 80% FED / 20% STATE BRIDGE 0047 S.N. 016-0811
20200100	EARTH EXCAVATION	CU YD	1085	1085
* 21101615	TOPSOIL FURNISH AND PLACE,4"	SQ YD	79	79
* 25000210	SEEDING, CLASS2A	ACRE	0.25	0.25
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	2	2
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	2	2
25100630	EROSION CONTROL BLANKET	SQ YD	79	79
28100803	STONE DUMPED RIPRAP, CLASS A2	TON	18	18
28200200	FILTER FABRIC	SQ YD	14	14
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	1625	1625
35101800	AGGREGATE BASE COURSE, TYPE B6"	SQ YD	14	14
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	16	16
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	850	850
40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	397	397
40605026	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80	TON	925	925

\* SPECIALTY ITEMS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				NHPP 80% FED / 20% STATE BRIDGE 0047 S.N. 016-0811
40700200	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	6378	6378
42000541	PORTLAND CEMENT CONCRETE PAVEMENT 12" (JOINTED)	SQ YD	1625	1625
42001300	PROTECTIVE COAT	SQ YD	717	717
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	60	60
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1325	1325
44000600	SIDEWALK REMOVAL	SQ FT	60	60
44200990	CLASS B PATCHES, TYPE I,12 INCH	SQ YD	11	11
44200994	CLASS B PATCHES, TYPE II,12 INCH	SQ YD	1064	1064
44200998	CLASS B PATCHES, TYPE III, 12 INCH	SQ YD	164	164
44201000	CLASS B PATCHES, TYPE IV,12 INCH	SQ YD	237	237
44201696	CLASS D PATCHES, TYPE IV,4 INCH	SQ YD	8	8
50102400	CONCRETE REMOVAL	CU YD	70.1	70.1
50157300	PROTECTIVE SHIELD	SQ YD	1181	1181
50300255	CONCRETE SUPERSTRUCTURE	CU YD	74.5	74.5

\* SPECIALTY ITEMS

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
LAKE COOK ROAD AT US 41

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-1	COOK	88	3
CONTRACT NO. 60M68			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				NHPP 80% FED / 20% STATE BRIDGE 0047 S.N. 016-0811
50300260	BRIDGE DECK GROOVING	SQ YD	1850	1850
50300300	PROTECTIVE COAT	SQ YD	2540	2540
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	2450	2450
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	8530	8530
50800515	BAR SPLICERS	EACH	48	48
52000110	PREFORMED JOINT STRIP SEAL	FOOT	206	206
59000200	EPOXY CRACK INJECTION	FOOT	6	6
60255700	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	2	2
60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1
60260100	INLETS TO BE ADJUSTED	EACH	4	4
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	2216	2216
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12
67100100	MOBILIZATION	L SUM	1	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	56	56

\* SPECIALTY ITEMS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				NHPP 80% FED / 20% STATE BRIDGE 0047 S.N. 016-0811
* 70300900	PAVEMENT MARKING TAPE, TYPE IV - LETTERS AND SYMBOLS	SQ FT	3075	3075
* 70300904	PAVEMENT MARKING TAPE, TYPE IV4"	FOOT	26652	26652
* 70300905	PAVEMENT MARKING TAPE, TYPE IV5"	FOOT	3680	3680
* 70300906	PAVEMENT MARKING TAPE, TYPE IV6"	FOOT	5735	5735
* 70300908	PAVEMENT MARKING TAPE, TYPE IV8"	FOOT	1068	1068
* 70300912	PAVEMENT MARKING TAPE, TYPE IV12"	FOOT	384	384
* 70300924	PAVEMENT MARKING TAPE, TYPE IV24"	FOOT	724	724
70400100	TEMPORARY CONCRETE BARRIER	FOOT	900	900
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1075	1075
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	4
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	4
72000100	SIGN PANEL - TYPE 1	SQ FT	52	52

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES  
LAKE COOK ROAD AT US 41**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 379	SECTION 2010-120-1	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 4
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				NHPP 80% FED / 20% STATE BRIDGE 0047 S.N. 016-0811
* 72400600	RELOCATE SIGN PANEL ASSEMBLY - TYPE B	EACH	4	4
* 72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	20	20
* 72400730	RELOCATE SIGN PANEL - TYPE 3	SQ FT	135	135
* 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	95	95
* 73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	4	4
* 73400100	CONCRETE FOUNDATIONS	CU YD	8	8
* 73500300	REMOVE AND RELOCATE GROUND MOUNTED SIGN SUPPORT	EACH	4	4
* 73700200	REMOVE CONCRETE FOUNDATION - GROUND MOUNT	EACH	4	4
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	68	68
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE4"	FOOT	10426	10426
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE6"	FOOT	507	507
* 78000500	THERMOPLASTIC PAAVEMENT MARKING LINE - LINE 8"	FOOT	133	133
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	538	538
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	104	104
* 78003120	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE5"	FOOT	1420	1420

\* SPECIALTY ITEMS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				NHPP 80% FED / 20% STATE BRIDGE 0047 S.N. 016-0811
* 78004100	PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LETTERS AND SYMBOLS	SQ FT	146	146
* 78004110	PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LINE4"	FOOT	621	621
* 78004130	PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LINE6"	FOOT	538	538
* 78004180	PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LINE 24"	FOOT	106	106
* 78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	16	16
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	484	484
* 78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	16	16
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	270	270
* 78100300	REPLACEMENT REFLECTOR	EACH	188	188
78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	108	108
* 80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	1	1
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	193	193
* 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	153	153
* 81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	236	236

\* SPECIALTY ITEMS



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES  
LAKE COOK ROAD AT US 41**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 379	SECTION 2010-120-1	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 5
CONTRACT NO. 60M68			ILLINOIS FED. AID PROJECT	

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				NHPP 80% FED / 20% STATE BRIDGE 0047 S.N. 016-0811
* 81400100	HANDHOLE	EACH	1	1
* 81400300	DOUBLE HANDHOLE	EACH	1	1
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3	3
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 143C	FOOT	1736	1736
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 145C	FOOT	5261	5261
* 87301715	ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 186 PAIR	FOOT	883	883
* 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO.62 C	FOOT	212	212
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO.61C	FOOT	1348	1348
* 87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	6	6
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	24	24
* 87900200	DRILL EXISTING HANDHOLE	EACH	4	4
* 88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6	6
* 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2	2
* 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	10299	10299

\* SPECIALTY ITEMS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				NHPP 80% FED / 20% STATE BRIDGE 0047 S.N. 016-0811
* 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2	2
* 89502376	REBUILD EXISTING HANDHOLE	EACH	2	2
89502380	REMOVE EXISTING HANDHOLE	EACH	1	1
89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1	1
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	6	6
* X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	857	857
* X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	500	500
X0326650	FILLING EXISTING RUMBLE STRIP	FOOT	2216	2216
X0326766	CLEAN & RESEAL RELIEF JOINT	FOOT	160	160
* X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	4030	4030
X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD	1516	1516
X4402020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	12073	12073
X4402810	ISLAND SURFACE REMOVAL AND REPLACEMENT	SQ FT	2247	2247
X6060500	CORRUGATED MEDIAN REMOVAL	SQ FT	1208	1208

\* SPECIALTY ITEMS



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
LAKE COOK ROAD AT US 41

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	6
CONTRACT NO.			60M68	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				NHPP 80% FED / 20% STATE BRIDGE 0047 S.N. 016-0811
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1
X7013820	TRAFFIC CONTROL SURVEILLANCE, EXPRESSWAYS	CAL DA	90	90
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	10006	10006
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	162	162
* X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	150	150
* X7830076	GROOVING FOR RECESSED PAVEMENT MARKING 9"	FOOT	1310	1310
* X8100105	CONDUIT SPLICE	EACH	1	1
Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	77	77
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	10	10
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	2130	2130
Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	1953	1953
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1953	1953
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	523	523

\* SPECIALTY ITEMS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				NHPP 80% FED / 20% STATE BRIDGE 0047 S.N. 016-0811
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	21	21
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	3	3
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	143	143
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	59	59
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	128.5	128.5
* Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1	1
Z0062458	TEMPORARY PAVEMENT (VARIABLE DEPTH)	TON	15	15
* Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	5	5
* Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	3	3
Ø Z0076600	TRAINEES	HOUR	500	500
Ø Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500
* Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	341	341
* X6061800	CONCRETE MEDIAN, TYPE SB (DOWELLED)	SQ FT	3237	3237

\* SPECIALTY ITEMS

Ø 0042

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

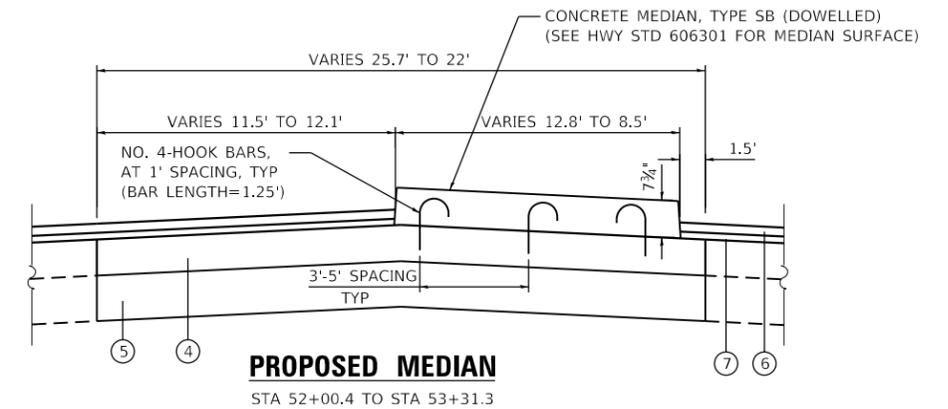
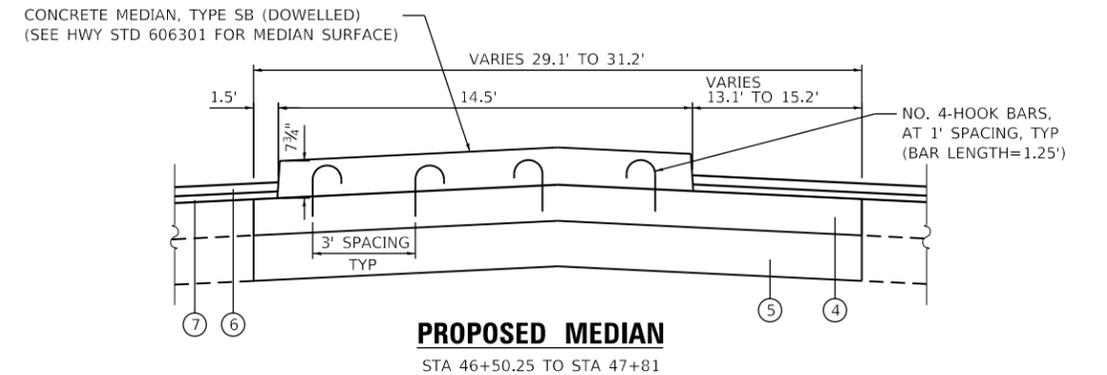
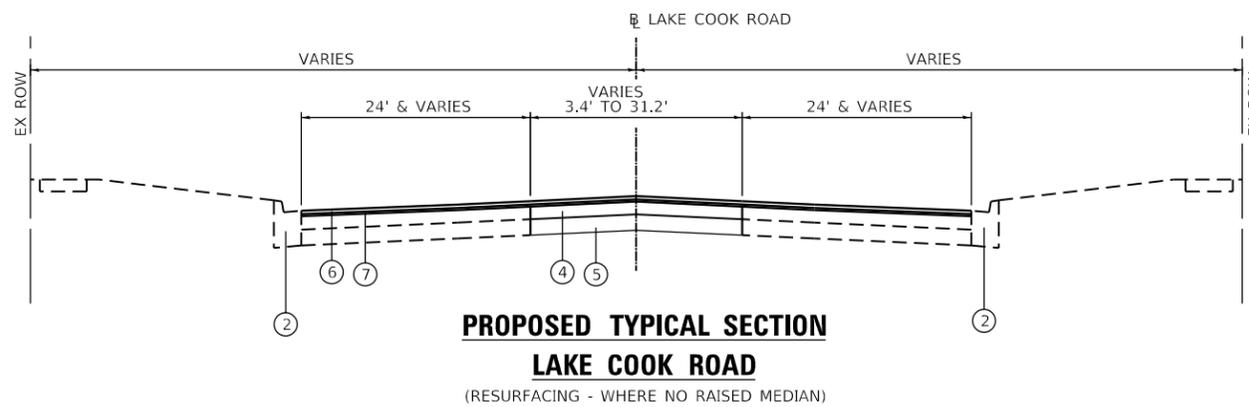
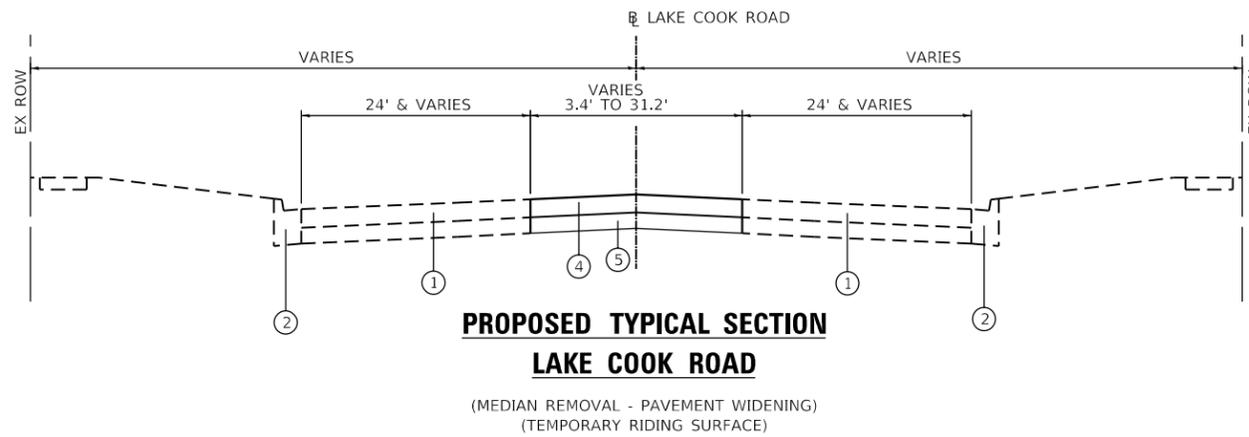
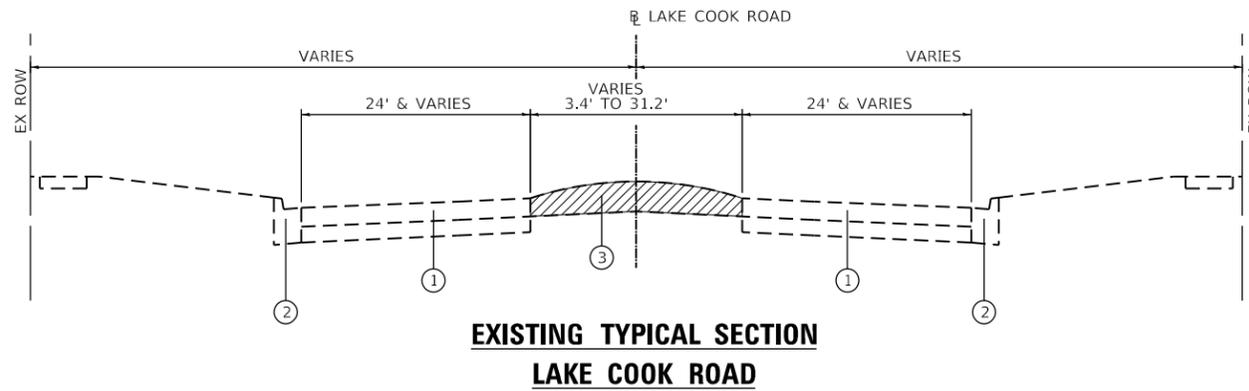
SUMMARY OF QUANTITIES  
LAKE COOK ROAD AT US 41

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-1	COOK	88	7
CONTRACT NO.			60M68	
ILLINOIS FED. AID PROJECT				

**PROPOSED LEGEND**

- ① EXISTING PAVEMENT
- ② EXISTING COMBINATION CURB AND GUTTER
- ③ EXISTING MEDIAN REMOVAL
- ④ PROPOSED PCC PAVEMENT 12" (JOINTED)
- ⑤ PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
- ⑥ PROPOSED POLYMERIZED HMA SURFACE COURSE, SMA, 9.5, MIX "F", N80, 1 3/4"
- ⑦ PROPOSED POLYMERIZED HMA BINDER COURSE, IL-4.75, N50, 3/4"



<b>HOT-MIX ASPHALT MIXTURE REQUIREMENTS</b>			
OPERATION	MIXTURE TYPE	AIR VOIDS @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)
PAVEMENT RESURFACING	1 3/4" POLYMERIZED HMA SURFACE COURSE, SMA, 9.5, MIX "F", N80 3/4" POLYMERIZED HMA BINDER COURSE, IL-4.75, N50	3.5% @ 80 GYR. 3.5% @ 50 GYR.	QC/QA
FILLING EXISTING RUMBLE STRIP	HMA SURFACE COURSE, MIX "D", N70 (IL-9.5MM), 2 1/4"	4% @ 70 GYR.	QC/QA
CLASS D PATCHES, TYPE IV	CLASS D PATCH (HMA BINDER IL-19.0), 4"	4% @ 70 GYR.	QC/QA
TEMPORARY PAVEMENT (VARIABLE DEPTH) (FOR MOT)	HMA SURFACE COURSE, MIX "D", N70 (IL-9.5MM), VARIES 2 1/2" TO 3/4"	4% @ 70 GYR.	QC/QA
QMP DESIGNATIONS: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QFP); PAY FOR PERFORMANCE (PFP)			

**NOTE :**

- THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA MIXES THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
- FOR USE OF RECYCLED MATERIALS, SEE SPECIAL PROVISIONS.
- QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

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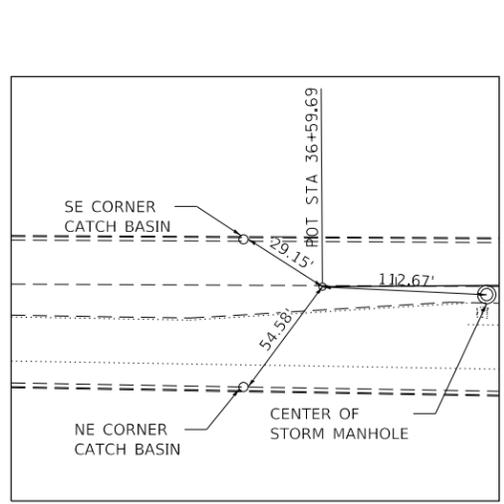
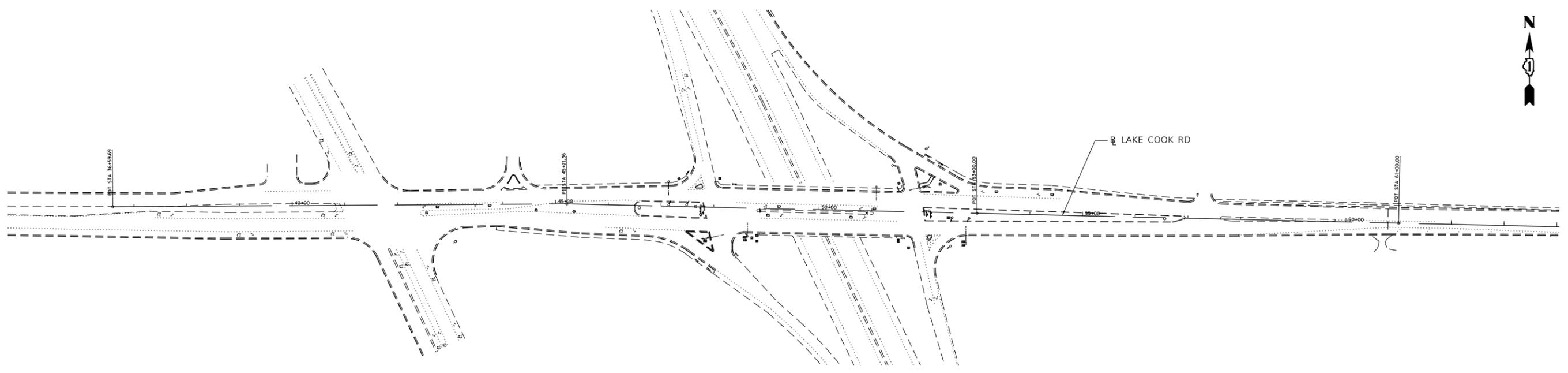
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LAKE COOK ROAD TYPICAL SECTIONS  
LAKE COOK ROAD AT US 41**

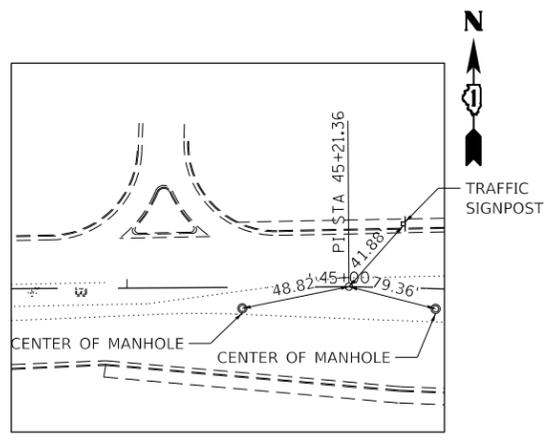
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	8
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



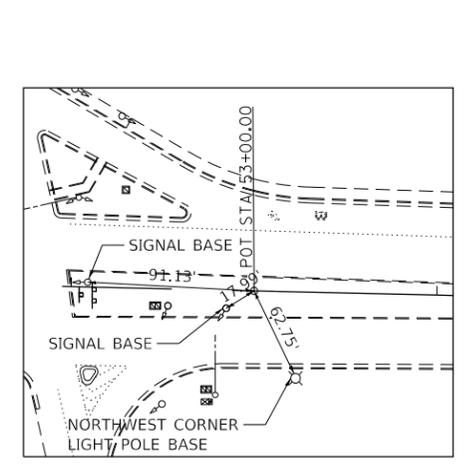
**POT STA 36 + 59.69**

MAG NAIL  
 N: 1998621.685  
 E: 1127869.253  
 ELEV: 633.27



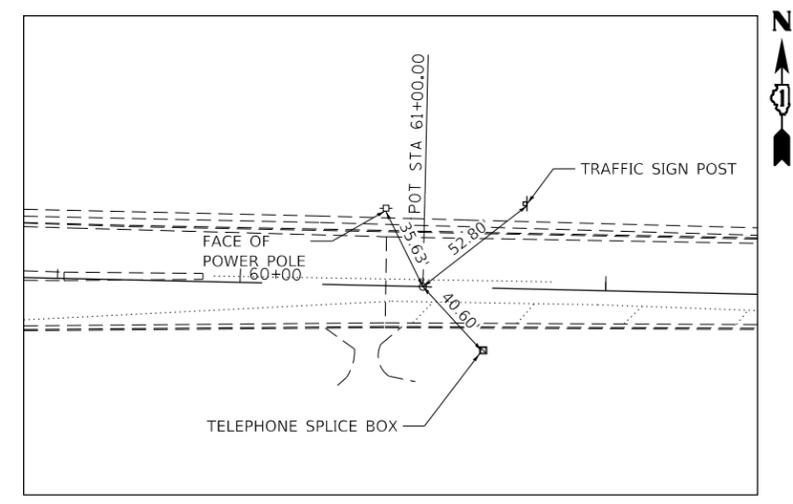
**PI STA 45 + 21.36**

MAG NAIL  
 N: 1998642.515  
 E: 1128730.672  
 ELEV: 645.80



**POT STA 53 + 00.00**

CUT CROSS  
 N: 1998638.328  
 E: 1129509.304  
 ELEV: 648.90



**POT STA 61 + 00.00**

MAG NAIL  
 N: 1998634.024  
 E: 1130309.293  
 ELEV: 937.42

BENCHMARK TBM "A":  
 CUT CROSS ON THE NORTH FACE OF THE  
 FIRST SIGNAL LIGHT ON THE MEDIAN TO  
 WEST OF US 41 IN MIDDLE OF LAKE COOK RD.

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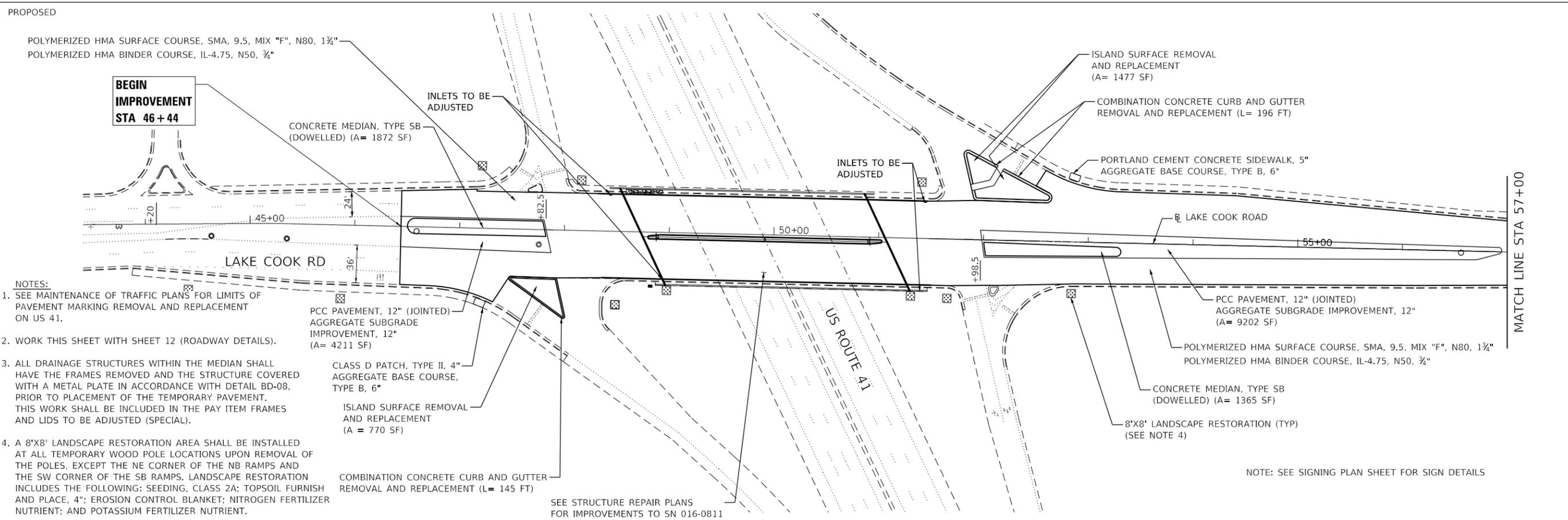
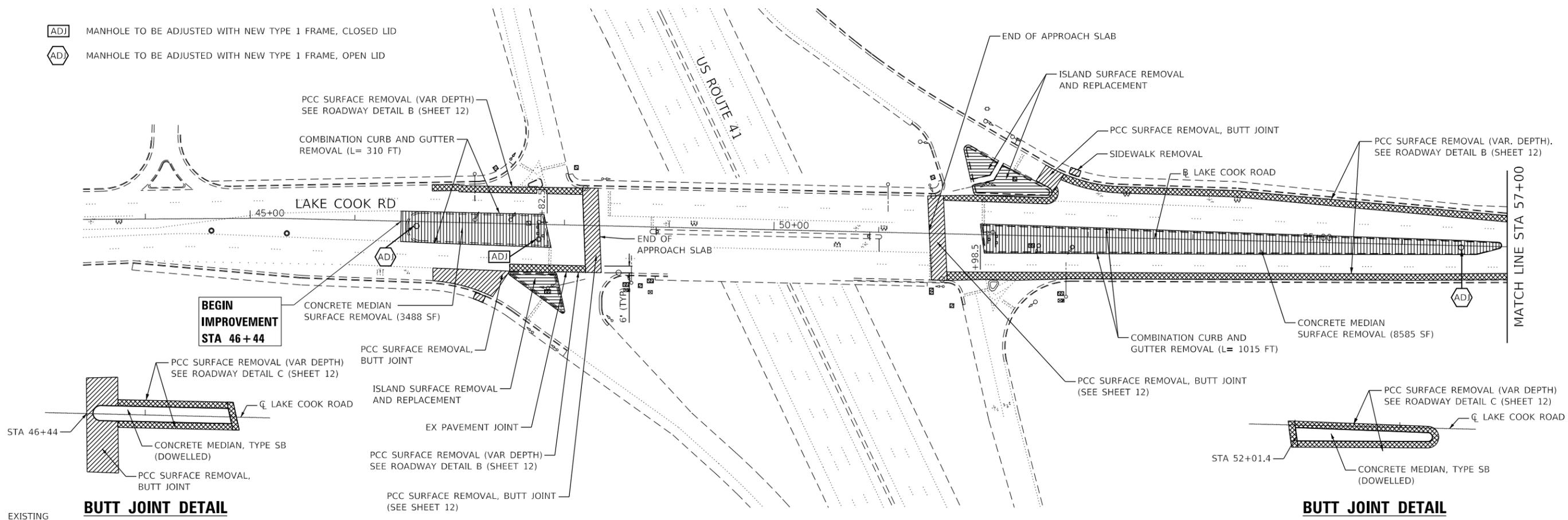
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ALIGNMENT, TIES AND BENCHMARKS  
 LAKE COOK ROAD AT US 41**

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	9
CONTRACT NO.			60M68	
ILLINOIS FED. AID PROJECT				

- ADJ MANHOLE TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID
- AD MANHOLE TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID



- NOTES:
- SEE MAINTENANCE OF TRAFFIC PLANS FOR LIMITS OF PAVEMENT MARKING REMOVAL AND REPLACEMENT ON US 41.
  - WORK THIS SHEET WITH SHEET 12 (ROADWAY DETAILS).
  - ALL DRAINAGE STRUCTURES WITHIN THE MEDIAN SHALL HAVE THE FRAMES REMOVED AND THE STRUCTURE COVERED WITH A METAL PLATE IN ACCORDANCE WITH DETAIL BD-08, PRIOR TO PLACEMENT OF THE TEMPORARY PAVEMENT. THIS WORK SHALL BE INCLUDED IN THE PAY ITEM FRAMES AND LIDS TO BE ADJUSTED (SPECIAL).
  - A 8'X8' LANDSCAPE RESTORATION AREA SHALL BE INSTALLED AT ALL TEMPORARY WOOD POLE LOCATIONS UPON REMOVAL OF THE POLES, EXCEPT THE NE CORNER OF THE NB RAMPS AND THE SW CORNER OF THE SB RAMPS. LANDSCAPE RESTORATION INCLUDES THE FOLLOWING: SEEDING, CLASS 2A; TOPSOIL FURNISH AND PLACE, 4"; EROSION CONTROL BLANKET; NITROGEN FERTILIZER NUTRIENT; AND POTASSIUM FERTILIZER NUTRIENT.

SEE STRUCTURE REPAIR PLANS FOR IMPROVEMENTS TO SN 016-0811



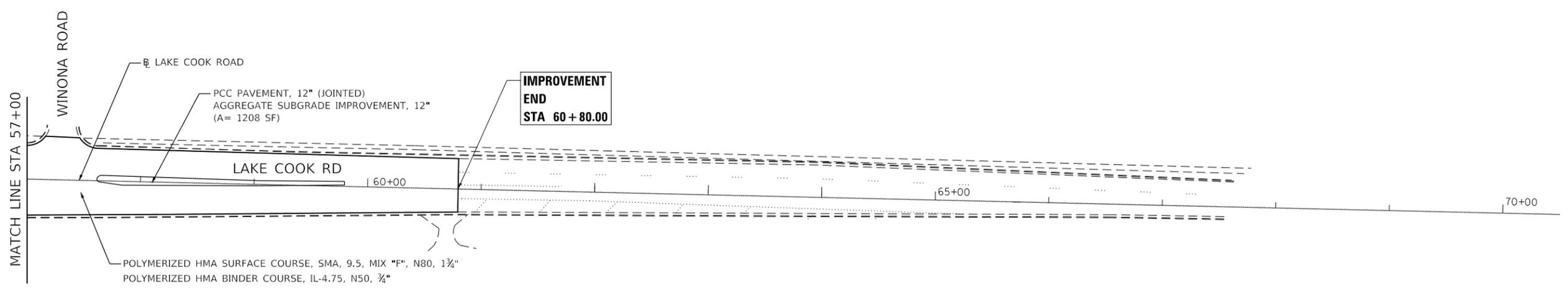
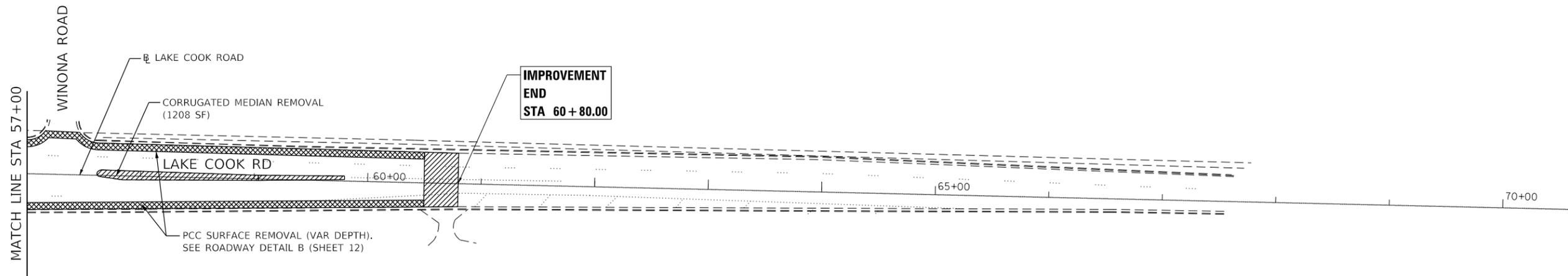
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN LAKE COOK ROAD AT US 41			
SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE. 379	SECTION 2010-120-I	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 10
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

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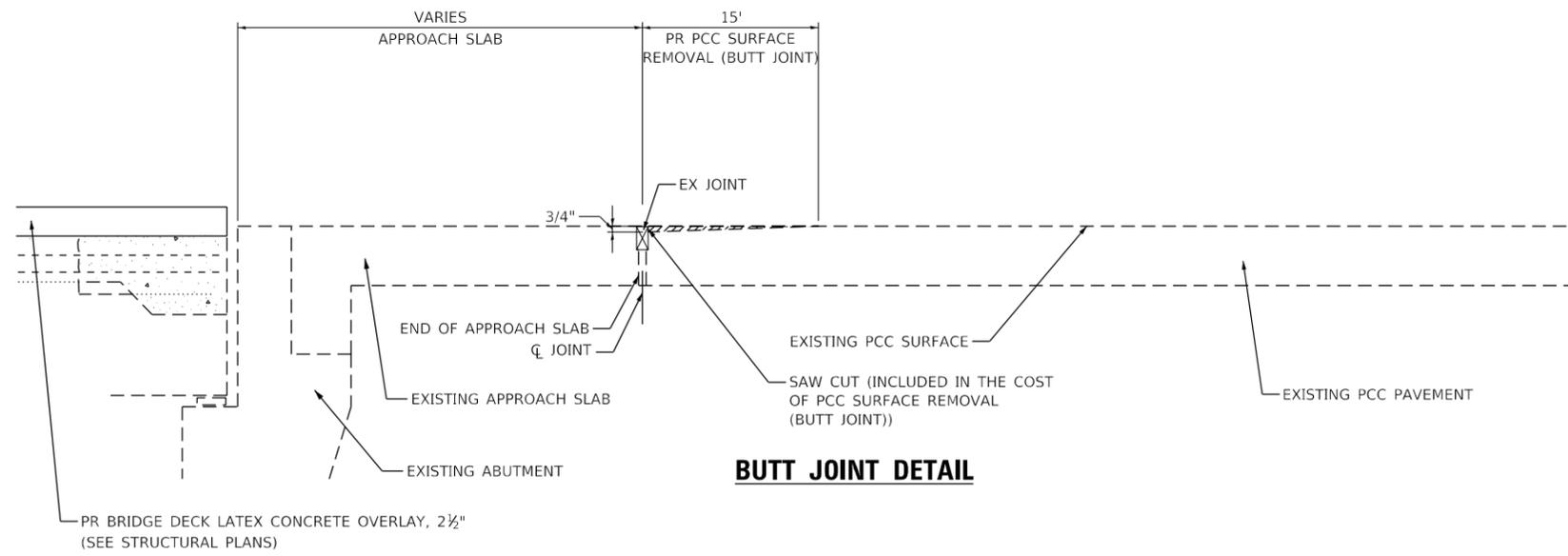
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DEPARTMENT OF TRANSPORTATION**

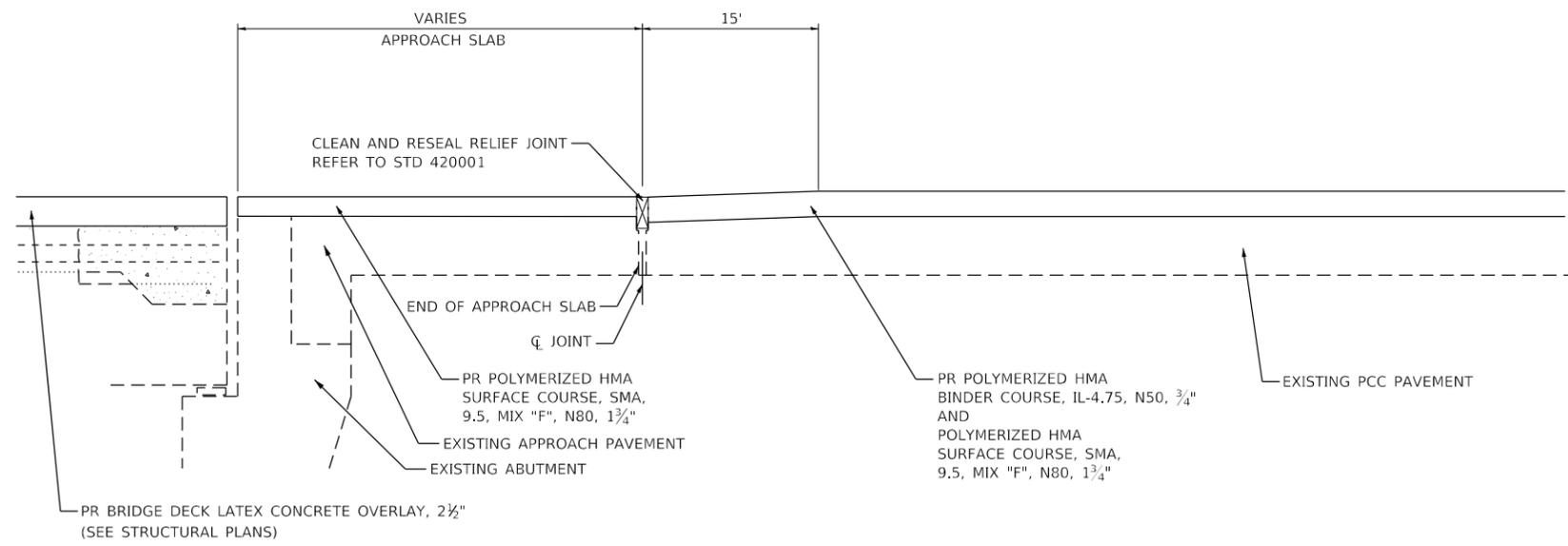
**ROADWAY PLAN-II  
LAKE COOK ROAD AT US 41**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	11
CONTRACT NO.			60M68	
ILLINOIS FED. AID PROJECT				



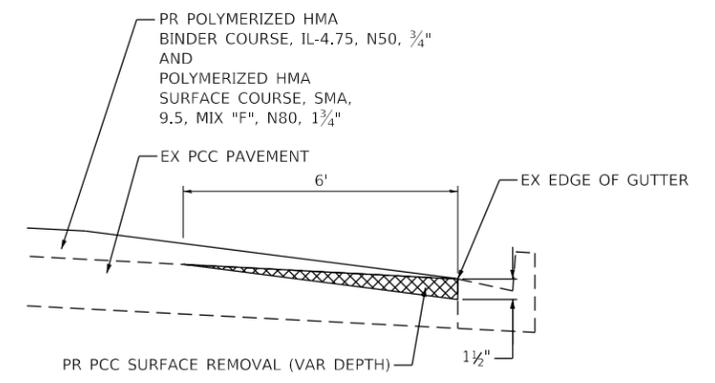
**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

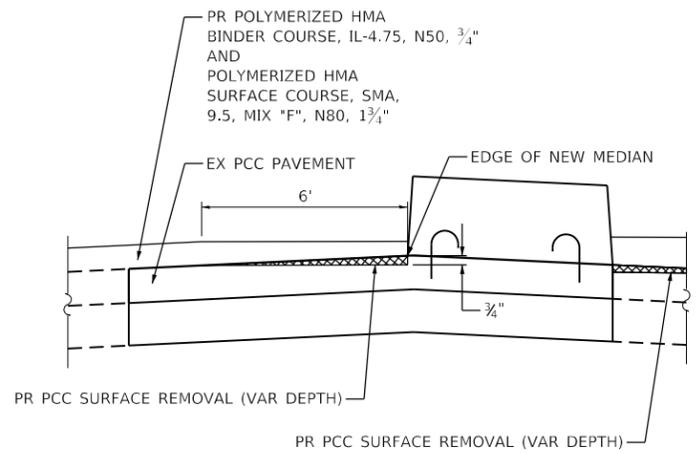
**DETAIL A**

**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**



**DETAIL B**

**HMA TAPER AT EDGE OF PCC PAVEMENT**



**DETAIL C**

**HMA TAPER AT EDGE OF NEW RAISED MEDIANS**

- NOTES:
- SEE DETAIL BD-32 FOR BUTT JOINT AND HMA TAPER DETAILS.
  - CONTRACTOR SHALL SAW CUT LONGITUDINAL EDGE OF HMA RESURFACING ON THE BRIDGE APPROACHES IF RESURFACING TO BE DONE IN MULTIPLE STAGES OR THE EDGE IS DAMAGED. THE EDGE SHALL BE SAW CUT JUST PRIOR TO PLACING THE SUBSEQUENT HMA RESURFACING TO PROVIDE A CLEAN, DISTINCT EDGE TO MATCH.

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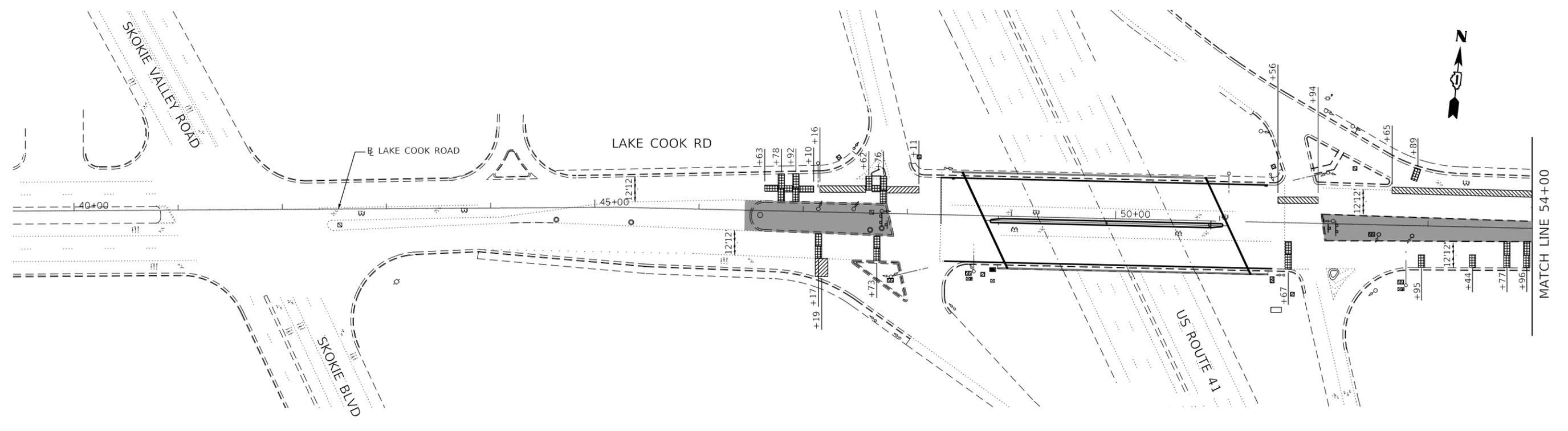


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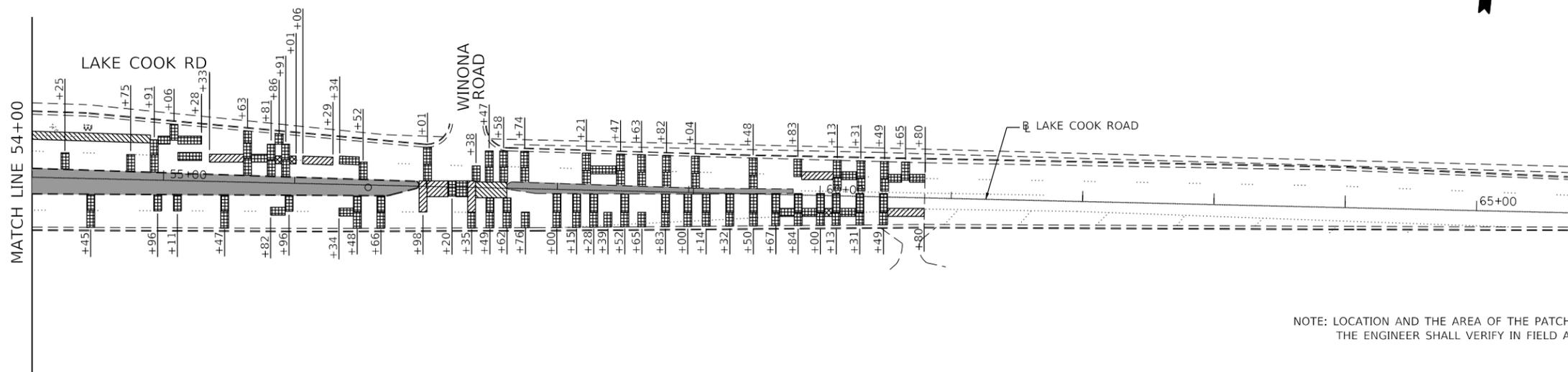
ROADWAY DETAILS			
LAKE COOK ROAD AT US 41			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	12
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



**LEGEND**

-  CLASS B PATCHES, TYPE I, 12 INCH (11 SY)
-  CLASS B PATCHES, TYPE II, 12 INCH (1064 SY)
-  CLASS B PATCHES, TYPE III, 12 INCH (164 SY)
-  CLASS B PATCHES, TYPE IV, 12 INCH (237 SY)
-  PORTLAND CEMENT CONCRETE PAVEMENT 12" (JOINTED)



NOTE: LOCATION AND THE AREA OF THE PATCHES SHOWN ARE APPROXIMATE.  
THE ENGINEER SHALL VERIFY IN FIELD AT THE TIME OF CONSTRUCTION.

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT PATCHING PLAN  
LAKE COOK ROAD AT US 71**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	13
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

**TRAFFIC CONTROL GENERAL NOTES**

- THE TRAFFIC CONTROL DEPICTED HEREIN IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES AS SPECIFIED IN THE HIGHWAY STANDARDS AS SHOWN IN THE INDEX OF SHEETS AND THE SPECIAL PROVISIONS SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. ALL TRAFFIC CONTROL DEVICES ON LAKE-COOK ROAD SHALL BE CONSIDERED INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL) UNLESS OTHERWISE INDICATED WITHIN THESE GENERAL NOTES, PLANS OR SPECIAL PROVISIONS. ALL TRAFFIC CONTROL DEVICES ON US 41 ASSOCIATED RAMPS SHALL BE CONSIDERED INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS) UNLESS OTHERWISE.
- TRAFFIC CONDITIONS, ACCIDENTS, AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL PROMPTLY RESPOND AT THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.
- DRUMS OR TYPE II BARRICADES SHALL BE PROVIDED AS SHOWN IN THE PLANS AND SPACED 50 FEET CENTER TO CENTER IN TANGENTS, 20 FEET CENTER TO CENTER IN TAPERS, AND 10 FEET CENTER TO CENTER IN RADII IN THE CONSTRUCTION WORK ZONE.
- ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION.
- ALL TEMPORARY PAVEMENT MARKINGS SHOWING DETERIORATION AFTER 7 DAYS OF SERVICE SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. SUFFICIENT QUANTITIES FOR THE INITIAL PLACEMENT AND A ONE-TIME REPLACEMENT HAVE BEEN PROVIDED FOR EACH STAGE. ALL MARKINGS THAT REQUIRE REPLACEMENT PRIOR TO 7 DAYS OF SERVICE OR AFTER THE INITIAL REPLACEMENT SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING LABOR, SIGNS AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.
- ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED, COVERED OR TURNED AWAY FROM THE TRAFFIC IMMEDIATELY WHEN THEY ARE NO LONGER NECESSARY. WHEN A SIGN IS COVERED, ITS POST SHALL HAVE A REFLECTIVE 3" x 6" DELINEATOR INSTALLED. COST OF THE DELINEATOR IS INCLUDED IN TRAFFIC CONTROL AND PROTECTION, (SPECIAL).
- WORK ZONE SPEED LIMIT SHALL BE 35 MPH ON LAKE COOK ROAD AND 45 MPH ON US ROUTE 41.
- THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS, SPECIAL PROVISIONS, APPLICABLE STATE STANDARDS, AND AS DIRECTED BY THE ENGINEER. ANY CHANGES TO THE TRAFFIC CONTROL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTING ANY CHANGES.
- THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY PROPOSED CHANGE TO THE SUGGESTED STAGE OF CONSTRUCTION AND TRAFFIC CONTROL PLAN.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY DRAINAGE AND EROSION CONTROL PROTECTION DURING ALL STAGES OF CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE DESIGNATED TRAFFIC CONTROL AS SHOWN IN THE PLANS.
- TEMPORARY CONCRETE BARRIER AND TEMPORARY IMPACT ATTENUATORS SHALL BE PLACED AS INDICATED IN THE PLANS. FURNISHING, AND INSTALLING TEMPORARY CONCRETE BARRIER AND TEMPORARY IMPACT ATTENUATORS SHALL BE IN ACCORDANCE WITH IDOT SPECIAL PROVISIONS, IDOT HIGHWAY STANDARDS, STANDARD SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER.
- IMMEDIATELY AFTER THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL RESTORE ALL PERMANENT PAVEMENT MARKINGS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES THAT WERE COVERED, REMOVED, DAMAGED, OR OTHERWISE AFFECTED BY CONSTRUCTION.
- ALL TEMPORARY PAVEMENT MARKINGS SHALL BE PAVEMENT MARKING TAPE, TYPE IV, UNLESS OTHERWISE NOTED.
- A MONO-DIRECTIONAL FLASHING AMBER BEACON SHALL BE MOUNTED ON THE FIRST TWO WARNING SIGNS ON EACH APPROACH DURING HOURS OF DARKNESS.
- THE CONTRACTOR SHALL NOT MOUNT SIGNS ON EXISTING SIGNS.
- CONTRACTOR SHALL MAINTAIN SATISFACTORY INGRESS AND EGRESS TO ADJACENT PROPERTIES THROUGHOUT CONSTRUCTION.
- TEMPORARY TRAFFIC SIGNALS SHALL BE IN PLACE AND MADE OPERATIONAL AT THE FOLLOWING INTERSECTIONS:
  - A) LAKE COOK ROAD AT US ROUTE 41 SOUTHBOUND RAMPS
  - B) LAKE COOK ROAD AT US ROUTE 41 NORTHBOUND RAMPS
- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE ENGINEER.
- THE CONTRACTOR SHALL PLACE ONE (1) CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH APPROPRIATE INFORMATION SHALL BE PLACED TWO WEEKS BEFORE START OF CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT [www.idotlcs.com](http://www.idotlcs.com) TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP, AND SHOULDER CLOSURES AND 7 DAYS IN ADVANCE OF ALL PERMANENT AND WEEKEND CLOSURES ON ALL FREEWAYS AND/OR EXPRESSWAYS IN DISTRICT ONE. THIS ADVANCE NOTIFICATION IS CALCULATED BASED ON WORKWEEK OF MONDAY THROUGH FRIDAY AND SHALL NOT INCLUDE WEEKENDS OR HOLIDAYS.
- ALL STAGE CHANGES REQUIRING THE STOPPING AND/OR THE PACING OF TRAFFIC SHALL TAKE PLACE DURING THE ALLOWABLE HOURS FOR FULL EXPRESSWAY CLOSURES AND SHALL BE APPROVED BY THE DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR AT LEAST 3 WORKING DAYS (WEEKENDS AND HOLIDAYS DO NOT COUNT TO THE 72 HOURS NOTIFICATION) IN ADVANCE OF ANY PROPOSED STAGE CHANGE.
- A MAINTENANCE OF TRAFFIC PLAN SHALL BE SUBMITTED TO THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR 14 DAYS IN ADVANCE OF ANY STAGE CHANGES OR FULL EXPRESSWAY CLOSURES. THE MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE, BUT NOT BE LIMITED TO: LANE AND RAMP CLOSURES, EXISTING GEOMETRICS, AND EQUIPMENT AND MATERIAL LOCATION.
- ON US 41, SHOULDER WIDTH BETWEEN THE FACE OF THE TEMPORARY CONCRETE BARRIER WALL AND THE EDGE LINE SHALL BE 1 FOOT MINIMUM.
- CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT [WWW.IDOTLCS.COM](http://www.idotlcs.com) TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP, AND SHOULDER CLOSURES.

**SEQUENCE OF CONSTRUCTION  
PRE-STAGE I (LAKE COOK ROAD)**

UTILIZING DAILY DAYTIME LANE CLOSURES, USE HWY STANDARD 701601 TO:

- INSTALL TEMPORARY SIGNALS.
- REMOVE EXISTING RAISED MEDIANS AND REPLACE WITH PCC PAVEMENT, 12" (JOINTED).

**STAGE I (LAKE COOK ROAD)**

ESTABLISH TRAFFIC CONTROL PER HWY STANDARD 701601 AND AS DETAILED IN THE TRAFFIC CONTROL PLAN.

- REPAIR OUTSIDE LANE JOINTS OF WB LAKE COOK RD AND INSIDE LANE JOINTS OF EB LAKE COOK RD. SEE SPECIAL PROVISION "KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC (LANE CLOSURES ONLY)".
- LAKE COOK ROAD MOT SHALL CHANGE TO STAGE IA WHEN PAVEMENT PATCHING IS COMPLETE IN THE AREAS OF THE TEMPORARY TURN LANES AND TAPERS.
- PERFORM DECK AND APPROACH SLAB REPAIRS IN WESTBOUND LANES.
- PLACE LATEX CONCRETE OVERLAY AND RECONSTRUCT TRANSVERSE JOINTS ON STRUCTURE.
- WORK CANNOT PROGRESS TO STAGE II UNTIL 'REPAIR A' HAS BEEN COMPLETED ON PIER 2 (SEE STRUCTURAL PLANS).

**STAGE II (LAKE COOK ROAD)**

RELOCATE STAGE TRAFFIC CONTROL AND MOVE TRAFFIC TO THE WESTBOUND AND EASTBOUND LANES ON STRUCTURE, PER HWY STANDARD 701601 AND AS DETAILED IN THE TRAFFIC CONTROL PLAN.

- REPAIR INSIDE LANE JOINTS OF WB LAKE COOK RD AND OUTSIDE LANE JOINTS OF EB LAKE COOK RD. SEE SPECIAL PROVISION "KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC (LANE CLOSURES ONLY)".
- PERFORM DECK AND APPROACH SLAB REPAIRS IN THE LEFT TURN LANES AND MEDIAN.
- PLACE LATEX CONCRETE OVERLAY AND RECONSTRUCT TRANSVERSE JOINTS ON STRUCTURE.

**STAGE III (LAKE COOK ROAD)**

RELOCATE STAGE TRAFFIC CONTROL AND MOVE TRAFFIC TO THE WESTBOUND LANES AND EASTBOUND LEFT TURN LANE ON STRUCTURE, PER HWY STANDARD 701601 AND AS DETAILED IN THE TRAFFIC CONTROL PLAN.

- REPAIR OUTSIDE LANE JOINTS FOR EB LAKE COOK RD WEST OF THE BRIDGE. SEE SPECIAL PROVISION "KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC (LANE CLOSURES ONLY)."
- PERFORM DECK AND APPROACH SLAB REPAIR IN EASTBOUND LANES.
- PLACE LATEX CONCRETE OVERLAY AND RECONSTRUCT TRANSVERSE JOINTS ON STRUCTURE.
- WORK CANNOT PROGRESS TO STAGE IV UNTIL 'REPAIR B' HAS BEEN COMPLETED ON PIER 2 (SEE STRUCTURAL PLANS).

**STAGE IV (LAKE COOK ROAD)**

RELOCATE TRAFFIC TO PRE-EXISTING LANE CONFIGURATION, EXCEPT US RTE 41 OFF RAMPS SHALL REMAIN CONFIGURED AS STAGES I - III. UTILIZING DAILY DAYTIME LANE CLOSURES, USE HWY STANDARD 701601 TO:

- CONSTRUCT RAISED MEDIANS BY DOWELLING INTO EXISTING PCC PAVEMENT.
- REPAIR ANY UNCOMPLETED LANE JOINTS. SEE SPECIAL PROVISION "KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC (LANE CLOSURES ONLY)".
- INSTALL PERMANENT TRAFFIC SIGNAL EQUIPMENT.
- MILL PCC SURFACE IN PREPARATION FOR HMA OVERLAY.
- PLACE POLYMERIZED HMA BINDER AND SURFACE COURSES; CLEAN AND SEAL RELIEF JOINTS.
- COMPLETE FINAL PAVEMENT MARKING, RE-ENERGIZE TRAFFIC SIGNALS AND REMOVE TEMPORARY TRAFFIC SIGNAL INSTALLATIONS.

**SEQUENCE OF CONSTRUCTION  
STAGE I (US ROUTE 41)**

ESTABLISH TRAFFIC CONTROL ALONG US ROUTE 41 CLOSING OUTSIDE SHOULDERS OF NORTHBOUND US ROUTE 41 AND SOUTHBOUND US ROUTE 41. (SEE - US ROUTE 41 MAINTENANCE OF TRAFFIC STAGE I).

- INSTALL TEMPORARY SHORING AND CRIBBING AT PIER 3. (SEE STRUCTURAL PLANS)
- PERFORM STRUCTURAL REPAIRS OF PIERS 1 AND 3.
- SEE STRUCTURAL PLANS FOR CONSTRUCTION SEQUENCING.

**STAGE II (US ROUTE 41)**

ESTABLISH TRAFFIC CONTROL ALONG US ROUTE 41. FILL EXISTING RUMBLE STRIPS ALONG OUTSIDE SHOULDERS AS DIRECTED BY THE ENGINEER. (SEE - US ROUTE 41 MAINTENANCE OF TRAFFIC STAGE II)

- ESTABLISH TRAFFIC CONTROL IN ACCORDANCE WITH DISTRICT DETAIL TC-09 (MULTI-LANE WEAVE) TO ACCOMMODATE THE WORK ZONE.
- COMPLETE STRUCTURAL REPAIR OF PIER 2.
- SEE STRUCTURAL PLANS FOR CONSTRUCTION SEQUENCING.

**STAGE III (US ROUTE 41)**

RELOCATE TRAFFIC TO PRE-EXISTING LANE CONFIGURATION. UTILIZING NIGHT TIME LANE CLOSURES PER THE KEEPING EXPRESSWAYS OPEN TO TRAFFIC SPECIAL PROVISION AND HIGHWAY STANDARDS 701400, 701401, 701428, 701446, AND DISTRICT DETAILS TC-09 AND TC-12 TO:

- REMOVE STAGE II PAVEMENT MARKINGS AND RE-ESTABLISH PRE-EXISTING PAVEMENT MARKINGS.
- RE-ESTABLISH SHOULDER RUMBLE STRIPS REMOVED FOR STAGE II.
- REMOVE ALL MOT SIGNAGE AND RE-ESTABLISH PRE-EXISTING TRAFFIC SIGNAGE.

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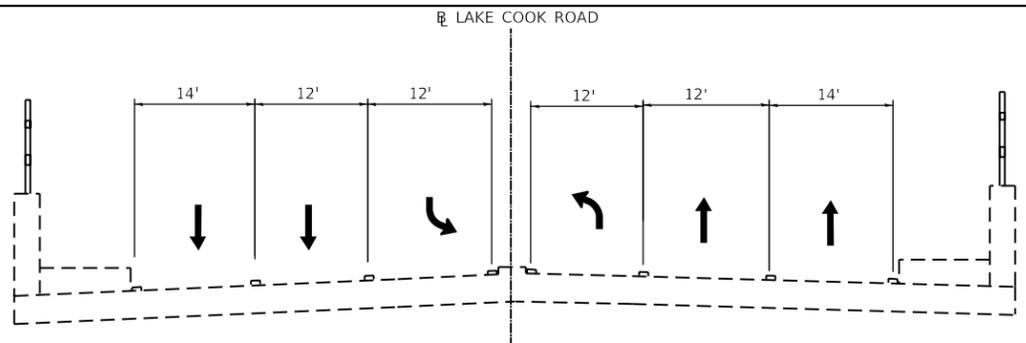


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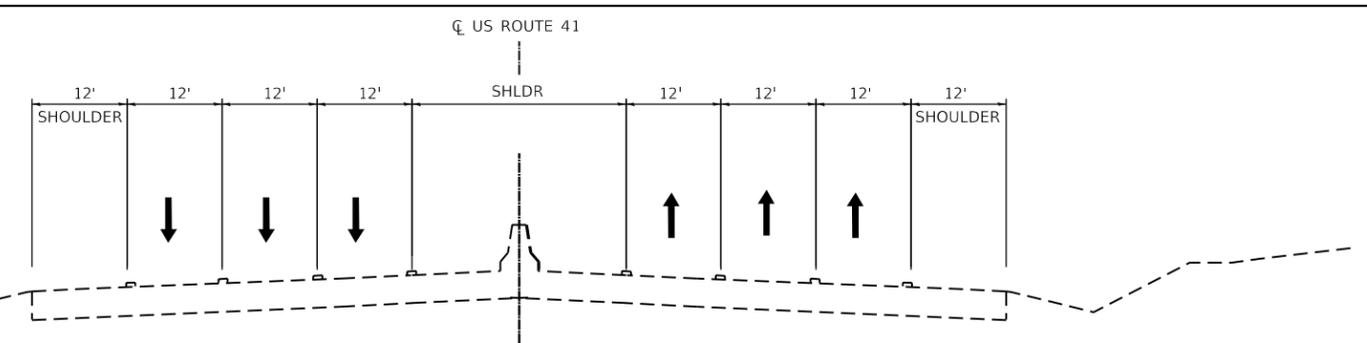
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SUGGESTED TRAFFIC CONTROL AND PROTECTION			
GENERAL NOTES			
SCALE: 1"=50'	SHEET	OF SHEETS	STA. TO STA.

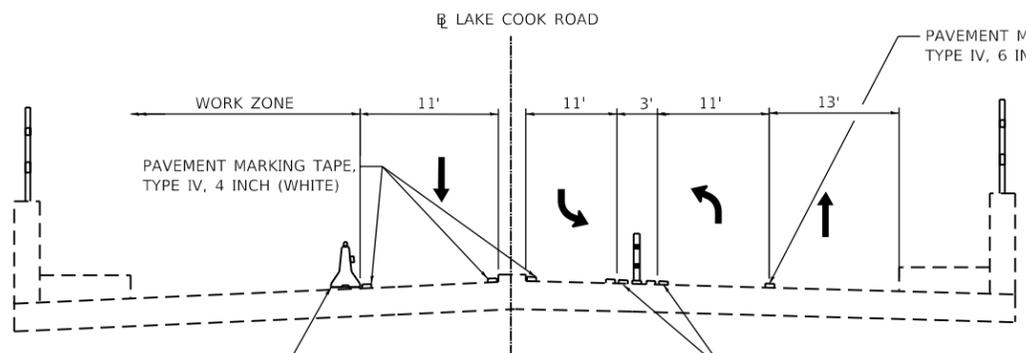
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CONTRACT NO.			60M68	
ILLINOIS FED. AID PROJECT				



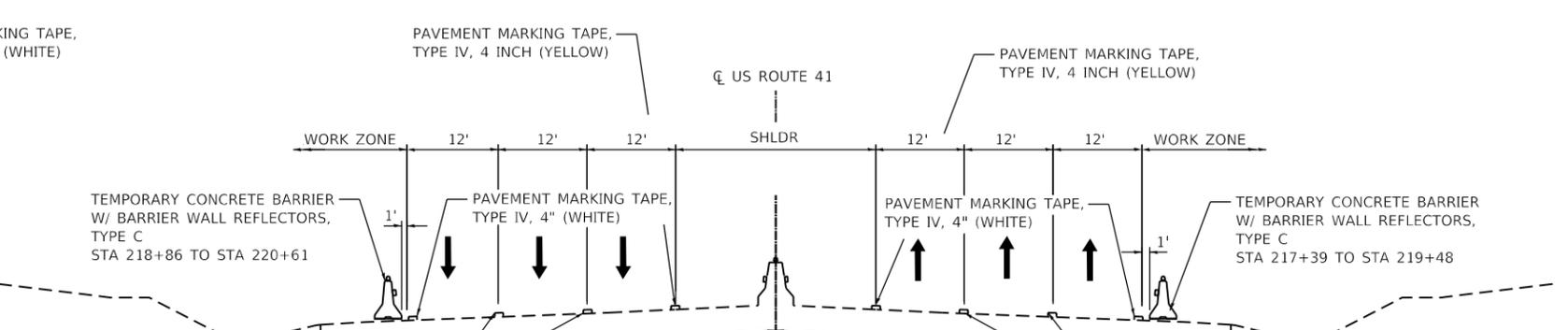
**EXISTING TYPICAL SECTION  
LAKE COOK ROAD**



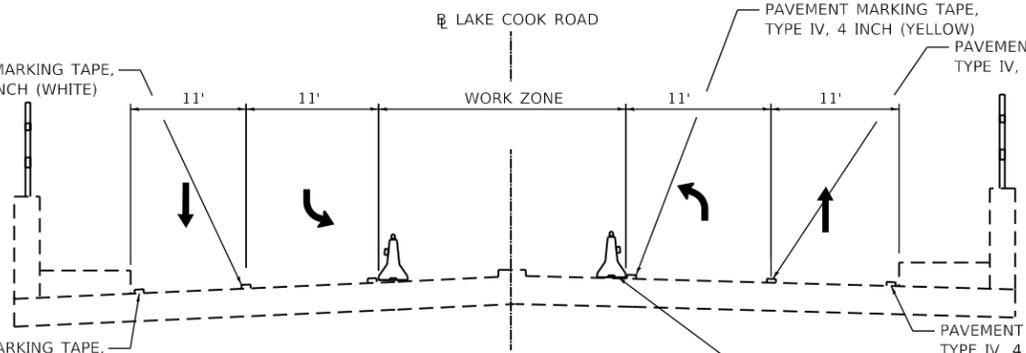
**EXISTING TYPICAL SECTION  
US ROUTE 41**



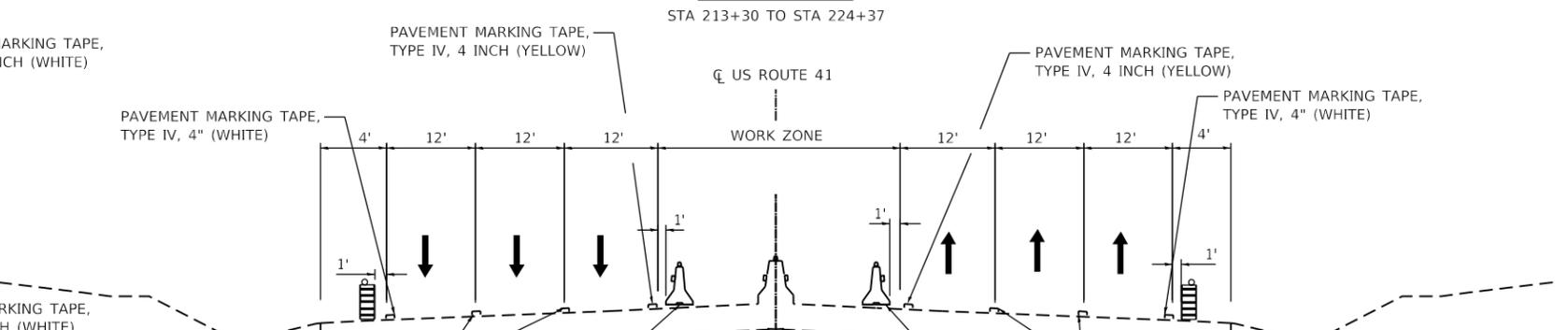
**STAGE I - TYPICAL SECTION  
LAKE COOK ROAD  
STA 43+36 TO STA 61+13**



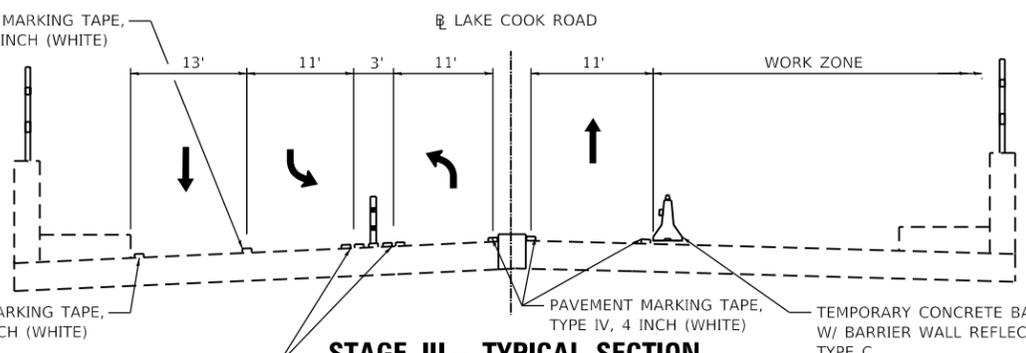
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US ROUTE 41  
STA 213+30 TO STA 224+37**



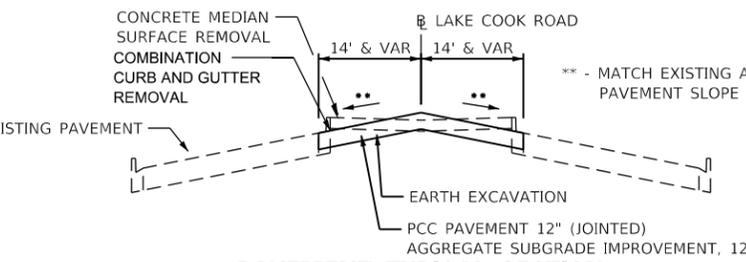
**STAGE II - TYPICAL SECTION  
LAKE COOK ROAD  
STA 43+36 TO STA 61+13**



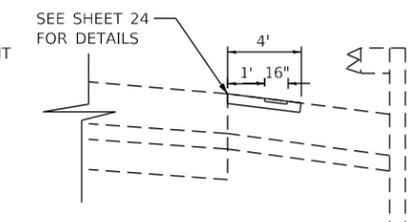
**STAGE II - TYPICAL SECTION  
US ROUTE 41  
STA 213+30 TO STA 225+08**



**STAGE III - TYPICAL SECTION  
LAKE COOK ROAD  
STA 38+84 TO STA 56+85**



**PAVEMENT TYPICAL SECTION  
EAST AND WEST OF THE BRIDGE**



**TYPICAL HMA SHOULDER  
FILLING EXISTING RUMBLE STRIP DETAIL  
(US 41)**

- LEGEND**
- PAVEMENT MARKING
  - TEMPORARY CONCRETE BARRIER WITH BARRIER WALL REFLECTOR, TYPE C
  - DIRECTION OF TRAFFIC
  - TUBULAR MARKERS AT 20' C-C SPACING
  - DRUM OR TYPE II BARRICADES AT 50' C-C SPACING IN TAPERS AND 100' C-C SPACING IN TANGENTS
  - EXISTING CONCRETE BARRIER WITH BARRIER WALL REFLECTOR, TYPE C

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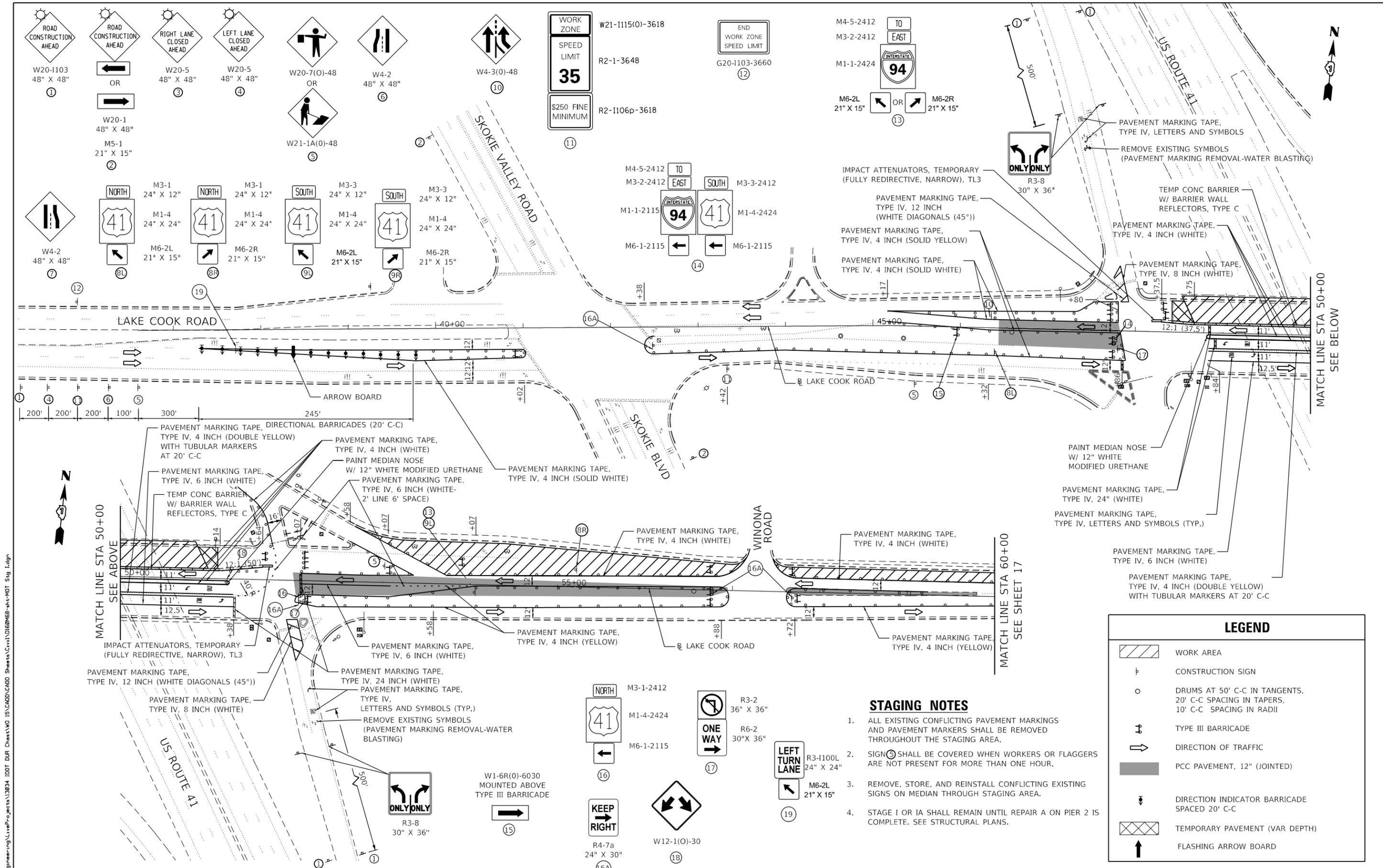


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	DATE - 09/20/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>SUGGESTED TRAFFIC CONTROL AND PROTECTION TYPICAL SECTIONS</b>			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	15
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



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 PLOT DATE = 11/13/2019

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**STATE OF ILLINOIS  
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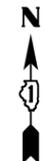
**SUGGESTED TRAFFIC CONTROL AND PROTECTION  
 LAKE COOK ROAD - STAGE I**

SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	16
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

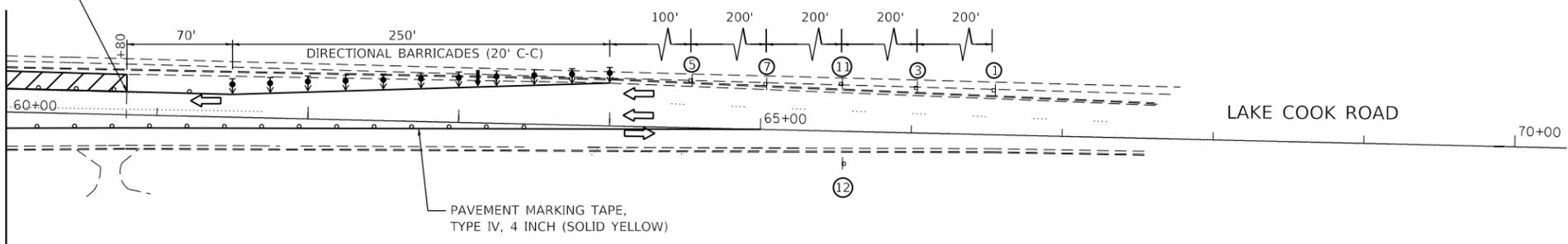
LEGEND	
	WORK AREA
	CONSTRUCTION SIGN
	DRUMS AT 50' C-C IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' C-C SPACING IN RADII
	TYPE III BARRICADE
	DIRECTION OF TRAFFIC
	PCC PAVEMENT, 12" (JOINTED)
	DIRECTION INDICATOR BARRICADE SPACED 20' C-C
	TEMPORARY PAVEMENT (VAR DEPTH)
	FLASHING ARROW BOARD

- STAGING NOTES**
- ALL EXISTING CONFLICTING PAVEMENT MARKINGS AND PAVEMENT MARKERS SHALL BE REMOVED THROUGHOUT THE STAGING AREA.
  - SIGN (C) SHALL BE COVERED WHEN WORKERS OR FLAGGERS ARE NOT PRESENT FOR MORE THAN ONE HOUR.
  - REMOVE, STORE, AND REINSTALL CONFLICTING EXISTING SIGNS ON MEDIAN THROUGH STAGING AREA.
  - STAGE I OR IA SHALL REMAIN UNTIL REPAIR A ON PIER 2 IS COMPLETE. SEE STRUCTURAL PLANS.



PAVEMENT MARKING TAPE,  
TYPE IV, 4 INCH (SOLID WHITE)

MATCH LINE STA 60+00  
SEE SHEET 16



LAKE COOK ROAD

70+00

### LEGEND

-  WORK AREA
-  CONSTRUCTION SIGN
-  DRUMS AT 50' C-C IN TANGENTS,  
20' C-C SPACING IN TAPERS,  
10' C-C SPACING IN RADII
-  TYPE III BARRICADE
-  DIRECTION OF TRAFFIC
-  PCC PAVEMENT, 12" (JOINTED)
-  DIRECTION INDICATOR BARRICADE  
SPACED 20' C-C
-  TEMPORARY PAVEMENT (VAR DEPTH)
-  FLASHING ARROW BOARD

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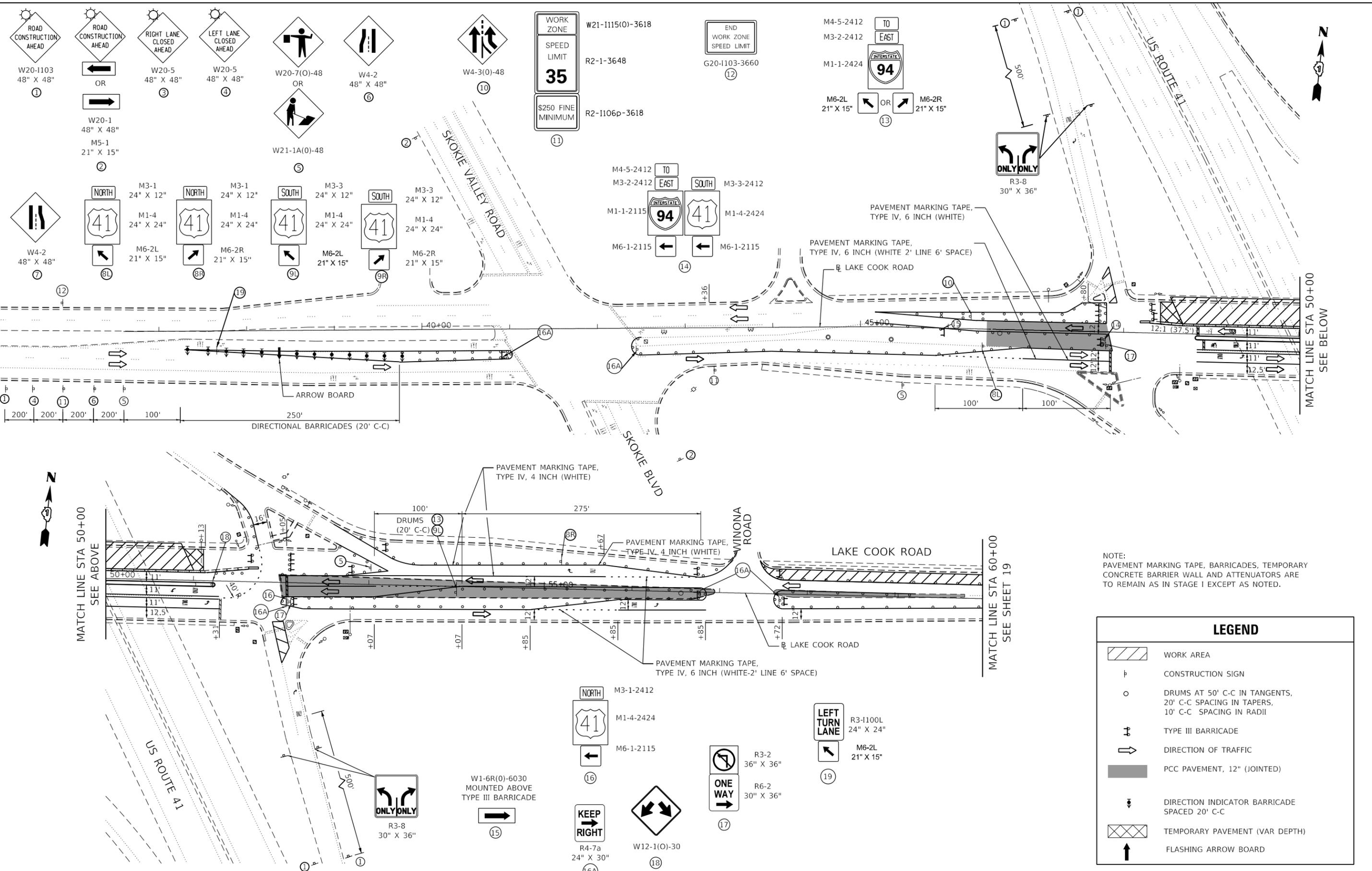
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED TRAFFIC CONTROL AND PROTECTION  
LAKE COOK ROAD - STAGE 1-2**

SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	17
CONTRACT NO. 60M68			ILLINOIS FED. AID PROJECT	

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NOTE:  
PAVEMENT MARKING TAPE, BARRICADES, TEMPORARY CONCRETE BARRIER WALL AND ATTENUATORS ARE TO REMAIN AS IN STAGE I EXCEPT AS NOTED.

LEGEND	
	WORK AREA
	CONSTRUCTION SIGN
	DRUMS AT 50' C-C IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' C-C SPACING IN RADII
	TYPE III BARRICADE
	DIRECTION OF TRAFFIC
	PCC PAVEMENT, 12" (JOINTED)
	DIRECTION INDICATOR BARRICADE SPACED 20' C-C
	TEMPORARY PAVEMENT (VAR DEPTH)
	FLASHING ARROW BOARD

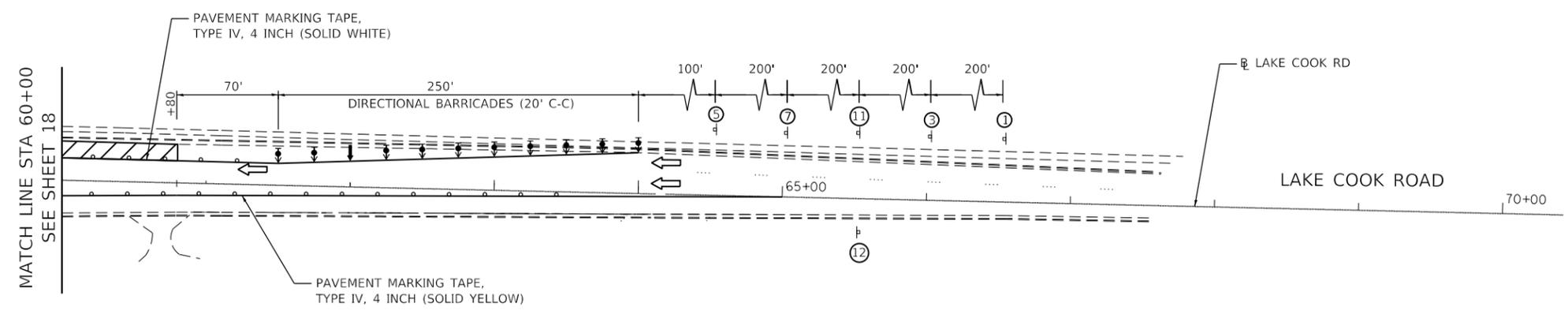


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PLOT DATE = 11/13/2019	DATE - 09/20/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUGGESTED TRAFFIC CONTROL AND PROTECTION LAKE COOK ROAD - STAGE IA			
SCALE:	SHEET 1 OF 3 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	18
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



**LEGEND**

	WORK AREA
	CONSTRUCTION SIGN
	DRUMS AT 50' C-C IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' C-C SPACING IN RADII
	TYPE III BARRICADE
	DIRECTION OF TRAFFIC
	PCC PAVEMENT, 12" (JOINTED)
	DIRECTION INDICATOR BARRICADE SPACED 20' C-C
	TEMPORARY PAVEMENT (VAR DEPTH)
	FLASHING ARROW BOARD

**STAGING NOTES**

- LAKE COOK ROAD MOT SHALL CHANGE TO STAGE IA WHEN PAVEMENT PATCHING IS COMPLETED IN THE AREAS OF THE TEMPORARY TURN LANES AND TAPERS.
- ALL EXISTING CONFLICTING PAVEMENT MARKINGS AND PAVEMENT MARKERS SHALL BE REMOVED THROUGHOUT THE STAGING AREA.
- SIGN (S) SHALL BE COVERED WHEN WORKERS OR FLAGGERS ARE NOT PRESENT FOR MORE THAN ONE HOUR.
- REMOVE, STORE, AND REINSTALL CONFLICTING EXISTING SIGNS ON MEDIAN THROUGH STAGING AREA.
- STAGE I OR IA SHALL REMAIN UNTIL REPAIR A ON PIER 2 IS COMPLETE. SEE STRUCTURAL PLANS.

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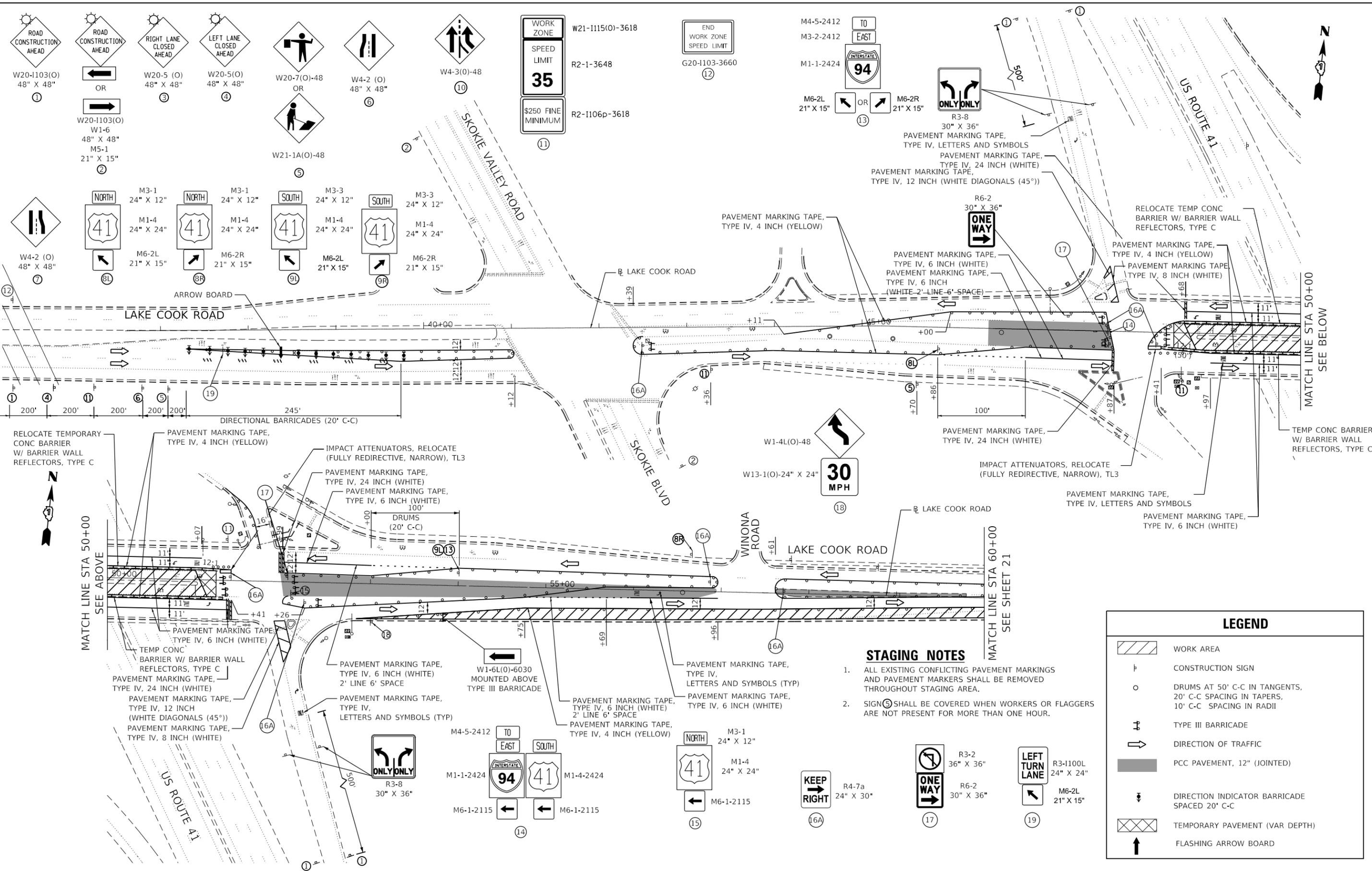
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED TRAFFIC CONTROL AND PROTECTION  
LAKE COOK ROAD - STAGE IA-2**

SCALE:	SHEET 1 OF 3 SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	19
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

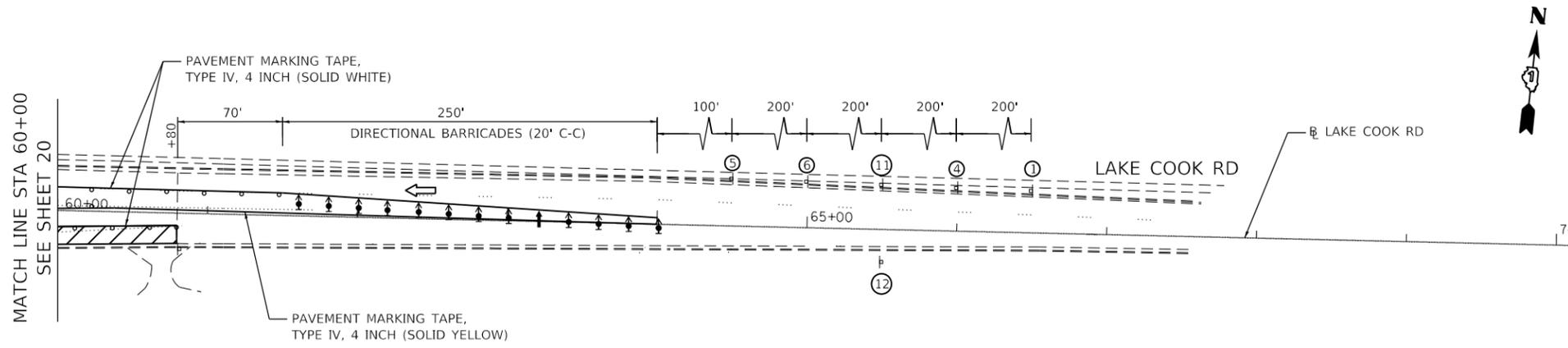
**SUGGESTED TRAFFIC CONTROL AND PROTECTION  
LAKE COOK ROAD - STAGE II**

SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.

F.A.P. RTE. 379	SECTION 2010-120-I	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 20
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

LEGEND	
	WORK AREA
	CONSTRUCTION SIGN
	DRUMS AT 50' C-C IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' C-C SPACING IN RADII
	TYPE III BARRICADE
	DIRECTION OF TRAFFIC
	PCC PAVEMENT, 12" (JOINTED)
	DIRECTION INDICATOR BARRICADE SPACED 20' C-C
	TEMPORARY PAVEMENT (VAR DEPTH)
	FLASHING ARROW BOARD

- STAGING NOTES**
- ALL EXISTING CONFLICTING PAVEMENT MARKINGS AND PAVEMENT MARKERS SHALL BE REMOVED THROUGHOUT STAGING AREA.
  - SIGN (C) SHALL BE COVERED WHEN WORKERS OR FLAGGERS ARE NOT PRESENT FOR MORE THAN ONE HOUR.



**STAGING NOTES**

1. ALL EXISTING CONFLICTING PAVEMENT MARKINGS AND PAVEMENT MARKERS SHALL BE REMOVED THROUGHOUT STAGING AREA.
2. SIGN (12) SHALL BE COVERED WHEN WORKERS OR FLAGGERS ARE NOT PRESENT FOR MORE THAN ONE HOUR.

**LEGEND**

	WORK AREA
	CONSTRUCTION SIGN
	DRUMS AT 50' C-C IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' C-C SPACING IN RADII
	TYPE III BARRICADE
	DIRECTION OF TRAFFIC
	PCC PAVEMENT, 12" (JOINTED)
	DIRECTION INDICATOR BARRICADE SPACED 20' C-C
	TEMPORARY PAVEMENT (VAR DEPTH)
	FLASHING ARROW BOARD

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**SUGGESTED TRAFFIC CONTROL AND PROTECTION  
LAKE COOK ROAD - STAGE II-2**

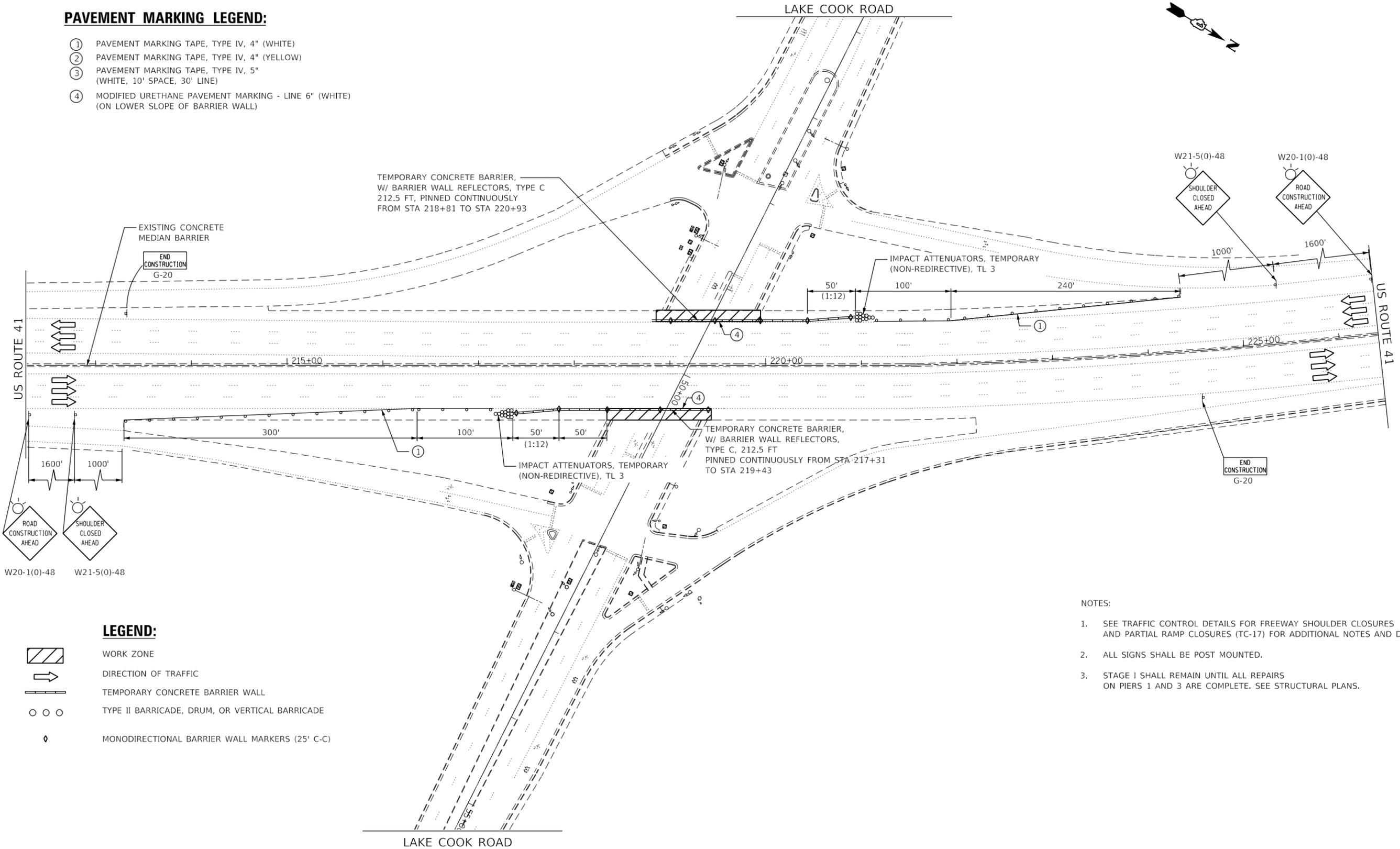
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	21
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60M68	



**PAVEMENT MARKING LEGEND:**

- ① PAVEMENT MARKING TAPE, TYPE IV, 4" (WHITE)
- ② PAVEMENT MARKING TAPE, TYPE IV, 4" (YELLOW)
- ③ PAVEMENT MARKING TAPE, TYPE IV, 5" (WHITE, 10' SPACE, 30' LINE)
- ④ MODIFIED URETHANE PAVEMENT MARKING - LINE 6" (WHITE) (ON LOWER SLOPE OF BARRIER WALL)



**LEGEND:**

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY CONCRETE BARRIER WALL
- TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE
- MONODIRECTIONAL BARRIER WALL MARKERS (25' C-C)

**NOTES:**

1. SEE TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17) FOR ADDITIONAL NOTES AND DETAILS.
2. ALL SIGNS SHALL BE POST MOUNTED.
3. STAGE I SHALL REMAIN UNTIL ALL REPAIRS ON PIERS 1 AND 3 ARE COMPLETE. SEE STRUCTURAL PLANS.

FILE NAME = Q:\Engineering\LiveProjects\13034 IDOT DUR Chest\MO IS\CADD\CADD Sheets\Civil\060668-shr-MOT US41 Stage I.dgn



USER NAME = johnn	DESIGNED - AB	REVISED -
DRAWN - AB	REVISIONS -	
PLOT SCALE = 100.0000' / 1" =	CHECKED - TGM	REVISIONS -
PLOT DATE = 11/13/2019	DATE - 09/20/2019	REVISIONS -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED TRAFFIC CONTROL AND PROTECTION  
US 41 - STAGE I**

SCALE: SHEET OF SHEETS STA. TO STA.

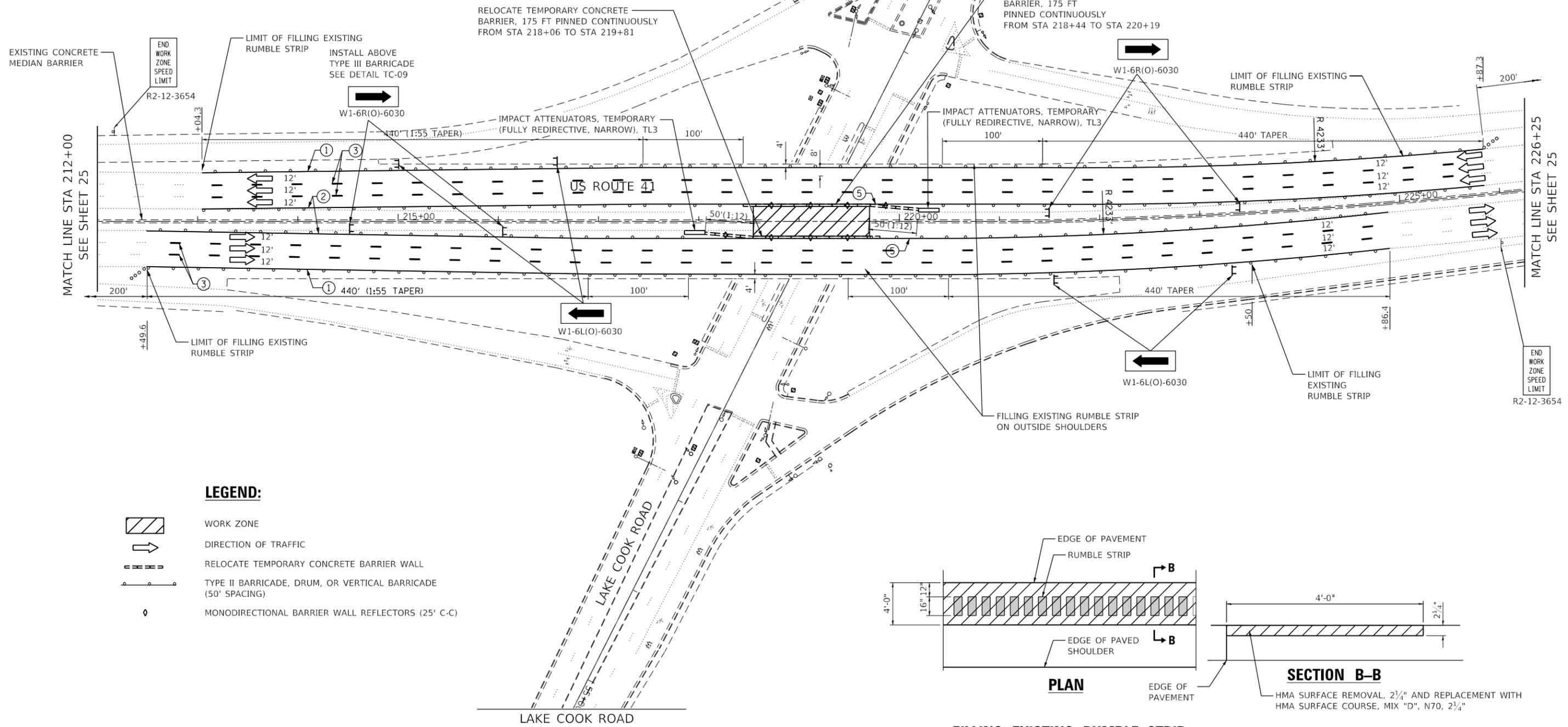
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	23
				CONTRACT NO. 60M68
ILLINOIS FED. AID PROJECT				

**PAVEMENT MARKING LEGEND:**

- ① PAVEMENT MARKING TAPE, TYPE IV, 4" (WHITE)
- ② PAVEMENT MARKING TAPE, TYPE IV, 4" (YELLOW)
- ③ PAVEMENT MARKING TAPE, TYPE IV, 5" (WHITE, 10' SPACE, 30' LINE)
- ④ MODIFIED URETHANE PAVEMENT MARKING - LINE 6" (WHITE) (ON LOWER SLOPE OF BARRIER WALL)
- ⑤ PAVEMENT MARKING TAPE, TYPE IV, 6" (YELLOW) (ON LOWER SLOPE OF BARRIER WALL)

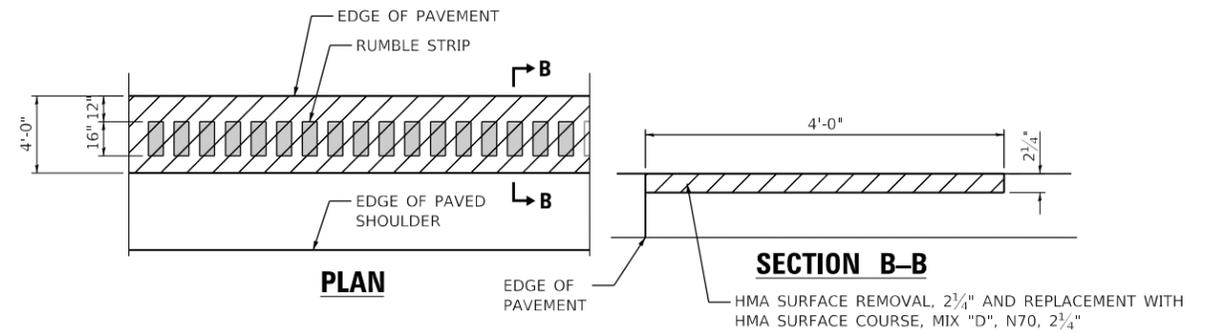
**NOTES:**

1. SEE TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17) FOR ADDITIONAL SIGNS AND SIGNING DETAILS.
2. ALL EXISTING CONFLICTING PAVEMENT MARKING LINES AND PAVEMENT REFLECTORS SHALL BE REMOVED.
3. ALL SIGNS SHALL BE POST MOUNTED.
4. REFER TO DISTRICT DETAIL TC-12 AND SHEET 22 FOR REINSTALLATION OF PERMANENT PAVEMENT MARKINGS.
5. STAGE II SHALL REMAIN UNTIL ALL REPAIRS ON PIER 2 ARE COMPLETE. SEE STRUCTURAL PLANS.



**LEGEND:**

- WORK ZONE
- DIRECTION OF TRAFFIC
- RELOCATE TEMPORARY CONCRETE BARRIER WALL
- TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE (50' SPACING)
- MONODIRECTIONAL BARRIER WALL REFLECTORS (25' C-C)



**FILLING EXISTING RUMBLE STRIP**

FILE NAME = Q:\Engineering\LiveProjects\130234 IDOT DUR Chest\MO IS\CADD\CADD Sheets\Civil\10160M68-shr-MOT US41 Stage II.dgn



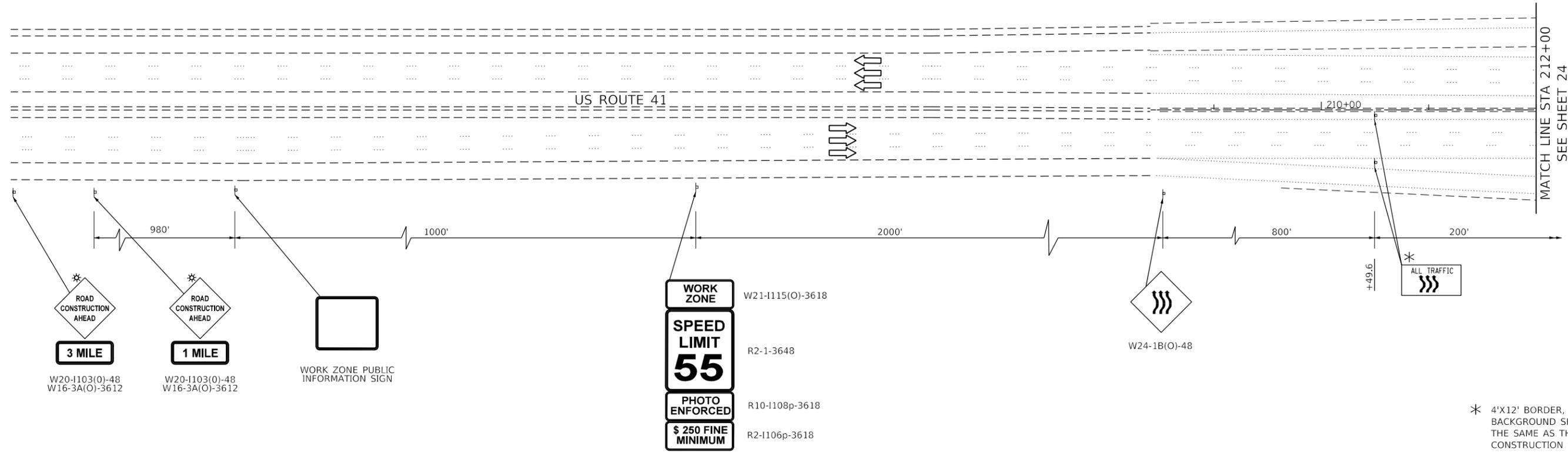
USER NAME = johnn	DESIGNED - AB	REVISED -
DRAWN - AB	REVISED -	
PLOT SCALE = 100.0000' / 1" =	CHECKED - TGM	REVISED -
PLOT DATE = 11/13/2019	DATE - 09/20/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

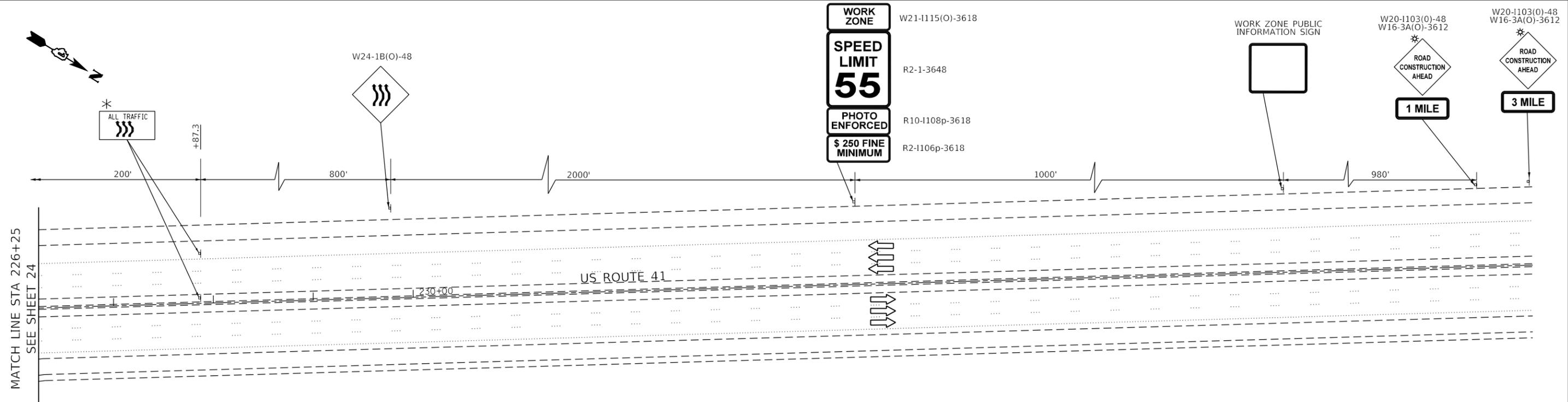
**SUGGESTED TRAFFIC CONTROL AND PROTECTION  
US 41 - STAGE II - 1**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	24
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



\* 4'X12' BORDER, 10" CAPITAL LETTERS BACKGROUND SHEETING SHALL BE THE SAME AS THE DIAMOND SHAPED CONSTRUCTION SIGNS



\* 4'X12' BORDER, 10" CAPITAL LETTERS BACKGROUND SHEETING SHALL BE THE SAME AS THE DIAMOND SHAPED CONSTRUCTION SIGNS

FILE NAME = Q:\Engineering\Live\Projects\13034 IDOT DUR Chest\MO 15\CADD\CADD Sheets\Civil\1160M68-shr-MOT US41 Stage II -2.dgn



USER NAME = johnn	DESIGNED - AB	REVISED -
DRAWN - AB	REVISIONS -	
PLOT SCALE = 100.0000' / 1in.	CHECKED - TGM	REVISED -
PLOT DATE = 11/13/2019	DATE - 09/20/2019	REVISED -

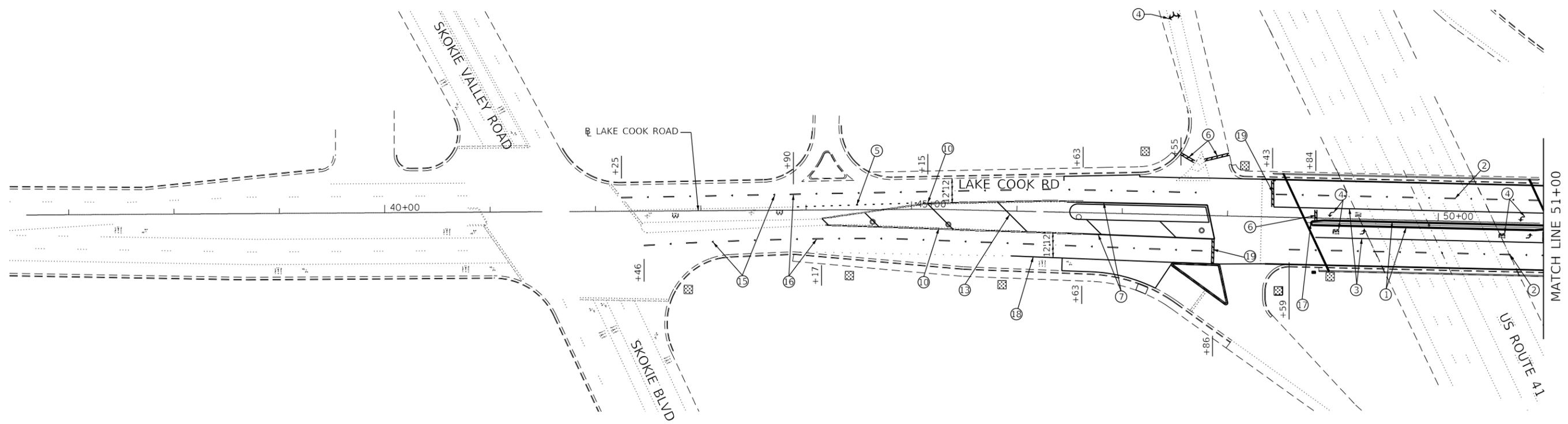
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED TRAFFIC CONTROL AND PROTECTION  
US 41 - STAGE II - 2  
LAKE COOK ROAD AT US 41**

SCALE: SHEET OF SHEETS STA. TO STA.

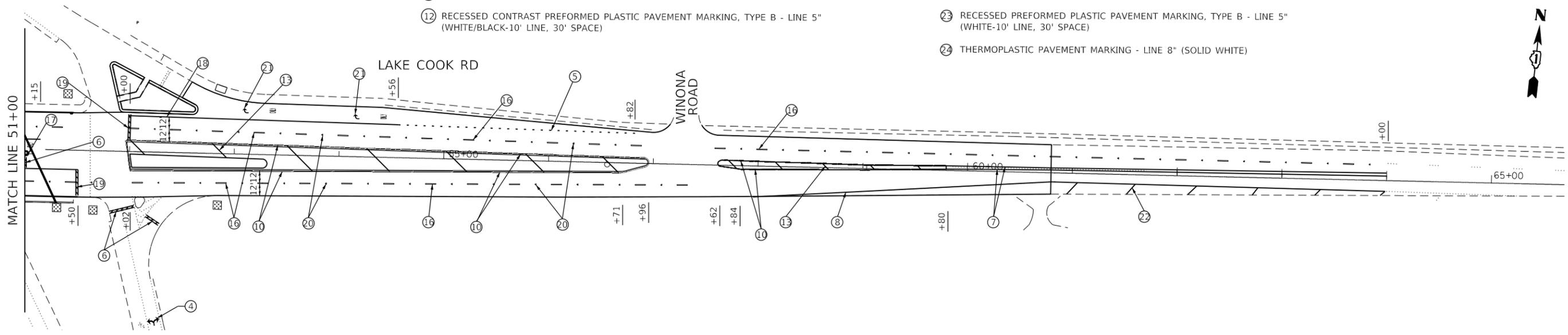
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	25
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

FILE NAME = D:\Engineering\LiveProjects\13034 IDOT DUR Chest\NO 15\CADD\CADD Sheets\Civil\1060668-shr.pmk-Lake Cook Rd.dgn



**PAVEMENT MARKING LEGEND:**

- ① PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LINE 4" (SOLID YELLOW)
- ② PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LINE 4" (WHITE-10' LINE, 30' SPACE)
- ③ PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LINE 6" (SOLID WHITE)
- ④ PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LETTERS AND SYMBOLS (WHITE)
- ⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (2' LINE - 6' SPACE)
- ⑥ PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LINE 24" (SOLID WHITE)
- ⑦ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (SOLID YELLOW)
- ⑧ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (SOLID WHITE)
- ⑨ MODIFIED URETHANE PAVEMENT MARKING - LINE 4" (SOLID WHITE)
- ⑩ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW) @ 11" C-C
- ⑪ THERMOPLASTIC PAVEMENT MARKING - LINE 5" (WHITE-10' LINE, 30' SPACE)
- ⑫ RECESSED CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 5" (WHITE/BLACK-10' LINE, 30' SPACE)
- ⑬ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS), SEE DISTRICT DETAIL TC-13 FOR PROPER SPACING
- ⑭ MODIFIED URETHANE PAVEMENT MARKING - LINE 4" (SOLID YELLOW)
- ⑮ REPLACEMENT REFLECTOR
- ⑯ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE-10' LINE, 30' SPACE)
- ⑰ POLYUREA PAVEMENT MARKING, TYPE I- LINE 12" (MEDIAN NOSE)
- ⑱ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (SOLID WHITE)
- ⑲ THERMOPLASTIC PAVEMENT MARKING - LINE 24" (SOLID WHITE)
- ⑳ RAISED REFLECTIVE PAVEMENT MARKER
- ㉑ THERMOPLASTIC PAVEMENT MARKINGS - LETTERS AND SYMBOLS (WHITE)
- ㉒ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS), SEE DISTRICT DETAIL TC-13 FOR PROPER SPACING
- ㉓ RECESSED PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 5" (WHITE-10' LINE, 30' SPACE)
- ㉔ THERMOPLASTIC PAVEMENT MARKING - LINE 8" (SOLID WHITE)



USER NAME = sapont  
 PLOT SCALE = 100.0000' / 1" = 1000  
 PLOT DATE = 11/14/2019

DESIGNED - MN  
 DRAWN - MN  
 CHECKED - JMT  
 DATE - 09/20/2019

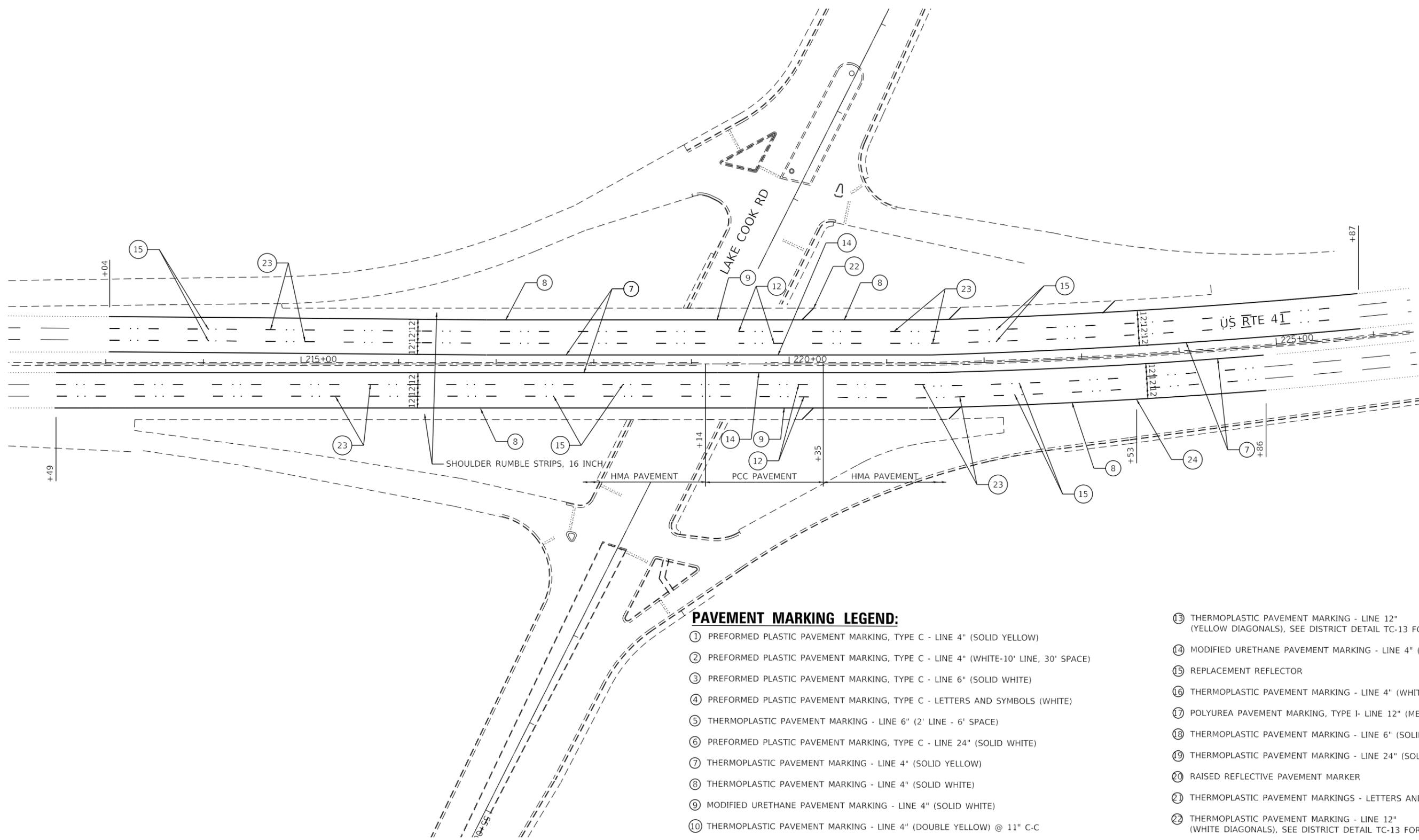
REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN - LAKE COOK RD.  
 LAKE COOK ROAD AT US 41**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	26
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



**PAVEMENT MARKING LEGEND:**

- ① PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LINE 4" (SOLID YELLOW)
- ② PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LINE 4" (WHITE-10' LINE, 30' SPACE)
- ③ PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LINE 6" (SOLID WHITE)
- ④ PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LETTERS AND SYMBOLS (WHITE)
- ⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (2' LINE - 6' SPACE)
- ⑥ PREFORMED PLASTIC PAVEMENT MARKING, TYPE C - LINE 24" (SOLID WHITE)
- ⑦ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (SOLID YELLOW)
- ⑧ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (SOLID WHITE)
- ⑨ MODIFIED URETHANE PAVEMENT MARKING - LINE 4" (SOLID WHITE)
- ⑩ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW) @ 11" C-C
- ⑪ THERMOPLASTIC PAVEMENT MARKING - LINE 5" (WHITE-10' LINE, 30' SPACE)
- ⑫ RECESSED CONTRAST PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 5" (WHITE/BLACK-10' LINE, 30' SPACE)
- ⑬ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS), SEE DISTRICT DETAIL TC-13 FOR PROPER SPACING
- ⑭ MODIFIED URETHANE PAVEMENT MARKING - LINE 4" (SOLID YELLOW)
- ⑮ REPLACEMENT REFLECTOR
- ⑯ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE-10' LINE, 30' SPACE)
- ⑰ POLYUREA PAVEMENT MARKING, TYPE I- LINE 12" (MEDIAN NOSE)
- ⑱ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (SOLID WHITE)
- ⑲ THERMOPLASTIC PAVEMENT MARKING - LINE 24" (SOLID WHITE)
- ⑳ RAISED REFLECTIVE PAVEMENT MARKER
- ㉑ THERMOPLASTIC PAVEMENT MARKINGS - LETTERS AND SYMBOLS (WHITE)
- ㉒ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS), SEE DISTRICT DETAIL TC-13 FOR PROPER SPACING
- ㉓ RECESSED PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 5" (WHITE-10' LINE, 30' SPACE)
- ㉔ THERMOPLASTIC PAVEMENT MARKING - LINE 8" (SOLID WHITE)

FILE NAME = O:\Engineering\LiveProjects\13034 IDOT DUR Chest\MO IS\CADD\CADD Sheets\Civil\1160M68-shr.pmk-US 41.dgn



USER NAME = sapont	DESIGNED - MN	REVISED -
	DRAWN - MN	REVISED -
PLOT SCALE = 100.0000' / 1" =	CHECKED - JMT	REVISED -
PLOT DATE = 11/14/2019	DATE - 09/20/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

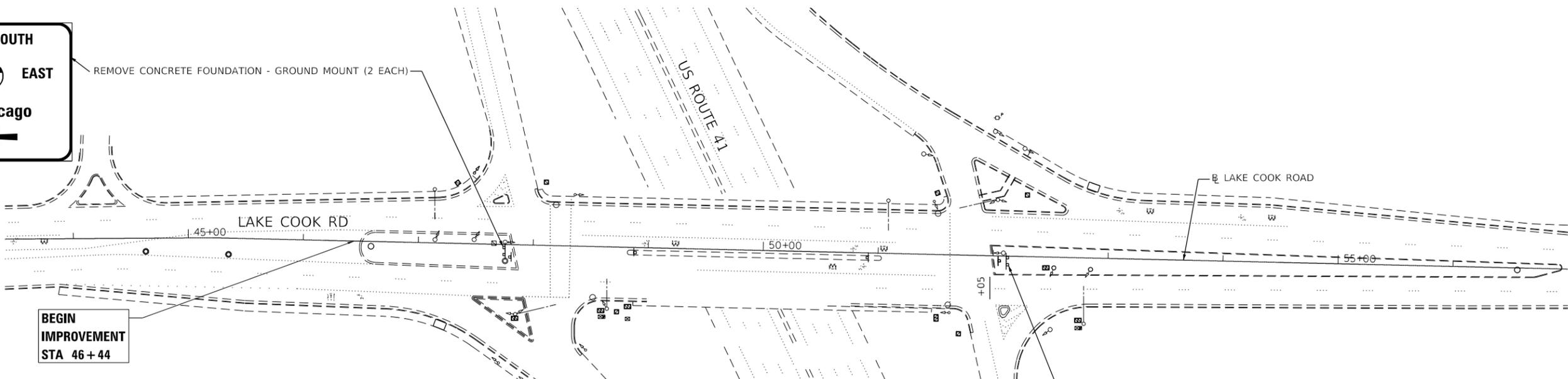
**PAVEMENT MARKING PLAN - US 41  
LAKE COOK ROAD AT US 41**

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	27
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



REMOVE CONCRETE FOUNDATION - GROUND MOUNT (2 EACH)

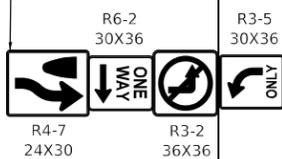


BEGIN IMPROVEMENT STA 46+44

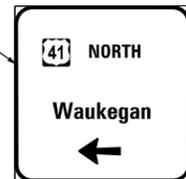
EXISTING

PROPOSED

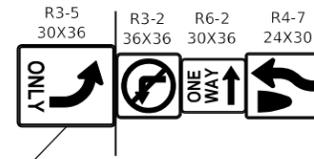
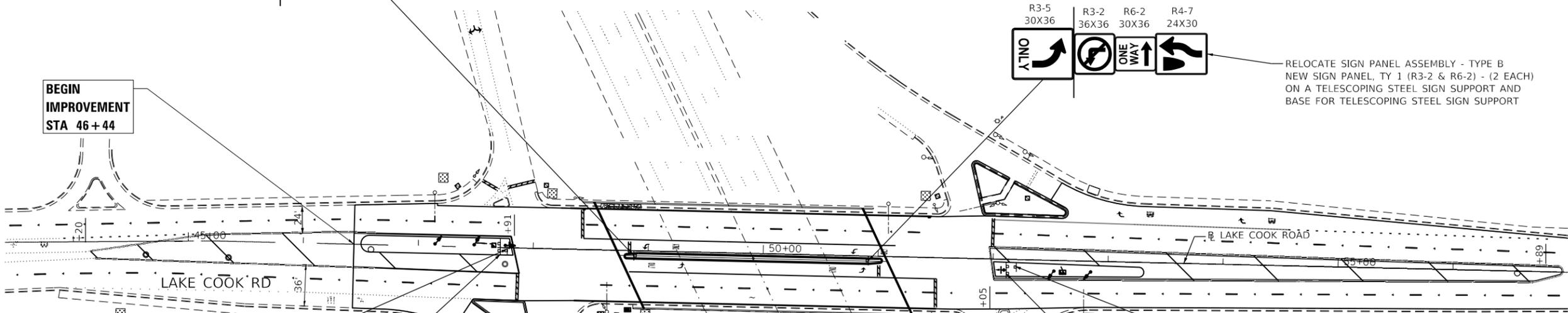
RELOCATE SIGN PANEL ASSEMBLY - TYPE B  
NEW SIGN PANEL, TY 1 (R3-2 & R6-2) - (2 EACH)  
ON A TELESCOPING STEEL SIGN SUPPORT AND  
BASE FOR TELESCOPING STEEL SIGN SUPPORT



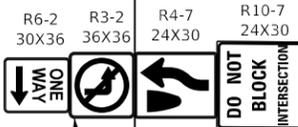
REMOVE CONCRETE FOUNDATION - GROUND MOUNT (2 EACH)



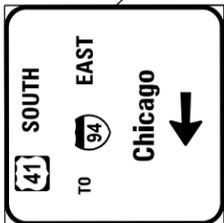
BEGIN IMPROVEMENT STA 46+44



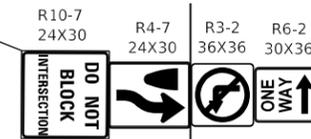
RELOCATE SIGN PANEL ASSEMBLY - TYPE B  
NEW SIGN PANEL, TY 1 (R3-2 & R6-2) - (2 EACH)  
ON A TELESCOPING STEEL SIGN SUPPORT AND  
BASE FOR TELESCOPING STEEL SIGN SUPPORT



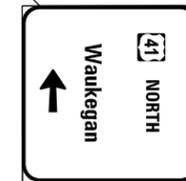
RELOCATE SIGN PANEL ASSEMBLY - TYPE B  
NEW SIGN PANEL, TY 1 (R3-2 & R10-7) - (2 EACH)  
ON A TELESCOPING STEEL SIGN SUPPORT AND  
BASE FOR TELESCOPING STEEL SIGN SUPPORT (2 EACH)



RELOCATE SIGN PANEL - TYPE 3  
REMOVE AND RELOCATE GROUND MOUNTED  
SIGN SUPPORT (2 EACH)  
CONCRETE FOUNDATIONS (4 CY)



RELOCATE SIGN PANEL ASSEMBLY - TYPE B  
NEW SIGN PANEL, TY 1 (R4-7, R3-2 & R6-2) - (3 EACH)  
RELOCATE SIGN PANEL, TY 1 (R10-7) - (1 EACH)  
ON A TELESCOPING STEEL SIGN SUPPORT AND  
BASE FOR TELESCOPING STEEL SIGN SUPPORT (2 EACH)



RELOCATE SIGN PANEL - TYPE 3  
REMOVE AND RELOCATE GROUND MOUNTED  
SIGN SUPPORT (2 EACH)  
CONCRETE FOUNDATIONS (4 CY)

- NOTES:  
1. TYPE ZZ SIGN SHEETING AND TELESCOPING STEEL SIGN SUPPORTS ARE REQUIRED FOR COUNTY MAINTAINED PERMANENT SIGNAGE.

FILE NAME = Q:\Engineering\Live\Projects\130234 IDOT DUR Chest\MO IS\CADD\CADD Sheets\Civil\1060668-shr-Sign Plan.dgn



USER NAME = johnn  
DRAWN - LRC  
CHECKED - TGM  
DATE - 09/20/2019

DESIGNED - LRC  
DRAWN - LRC  
CHECKED - TGM  
DATE - 09/20/2019

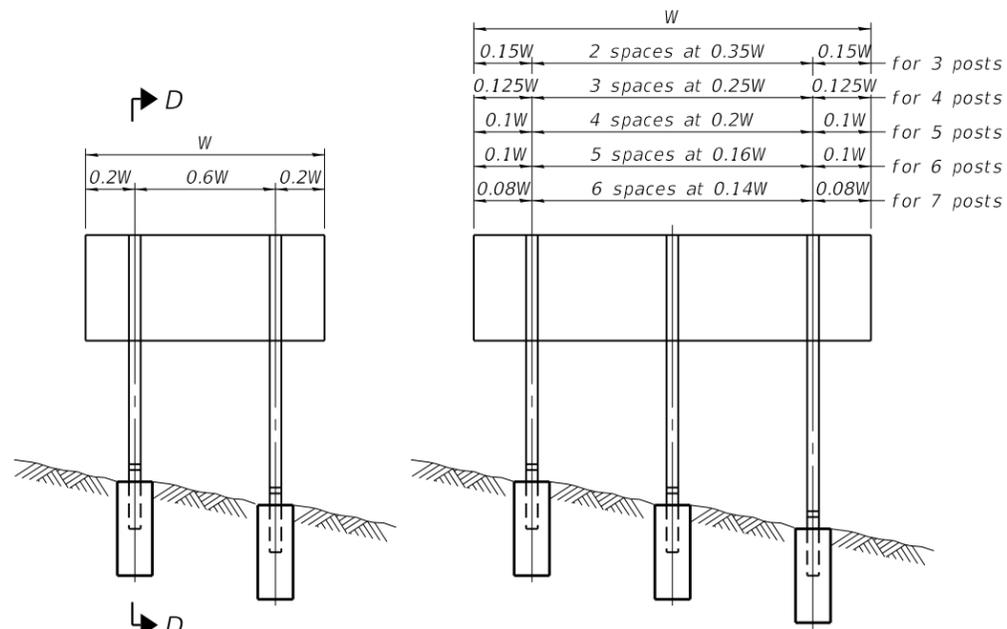
REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
LAKE COOK ROAD AT US 41

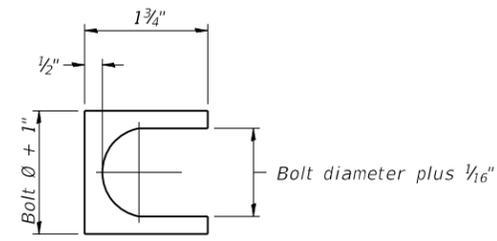
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	28
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



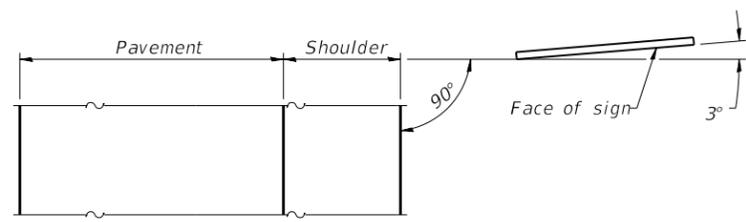
0.15W	2 spaces at 0.35W	0.15W	for 3 posts
0.125W	3 spaces at 0.25W	0.125W	for 4 posts
0.1W	4 spaces at 0.2W	0.1W	for 5 posts
0.1W	5 spaces at 0.16W	0.1W	for 6 posts
0.08W	6 spaces at 0.14W	0.08W	for 7 posts

**ELEVATION**

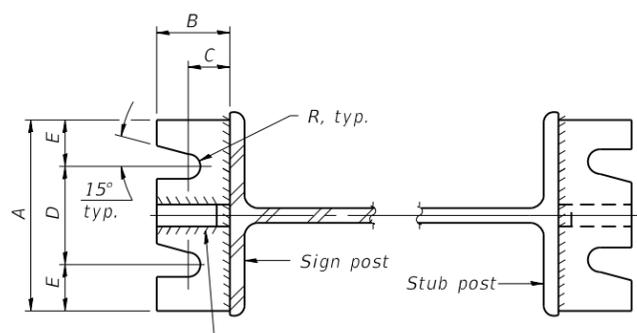


**SHIM DETAIL**

Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.

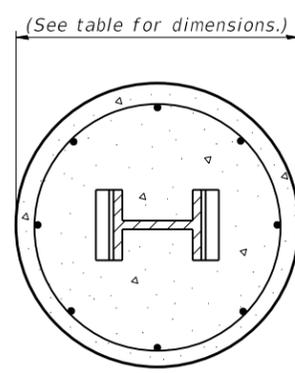


**LOCATION SKETCH**

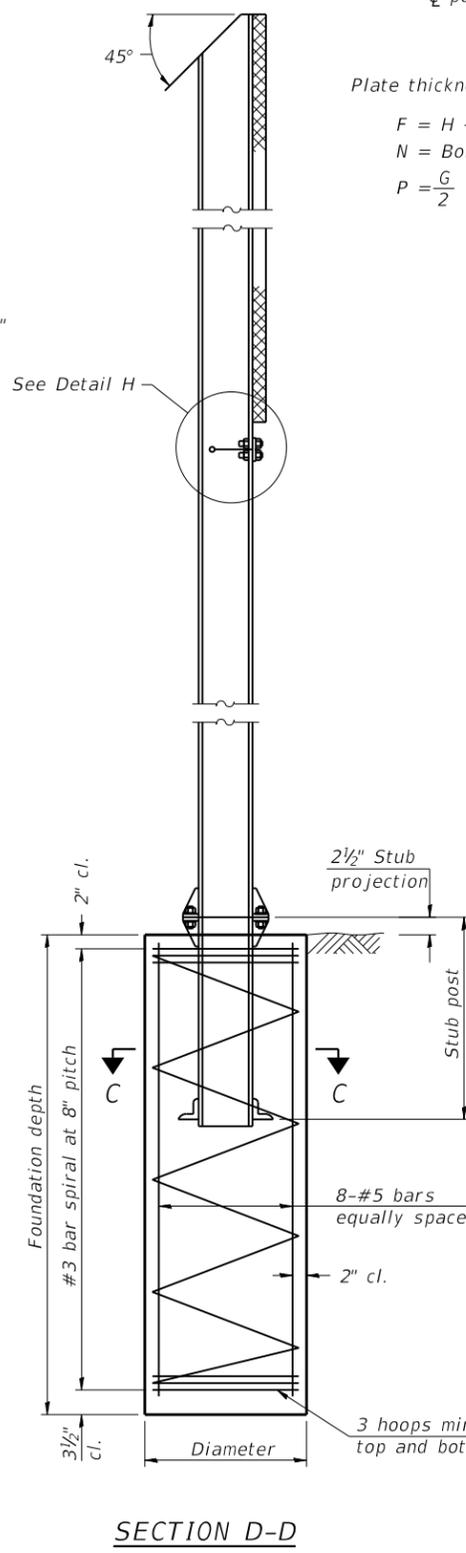


**SECTION A-A**

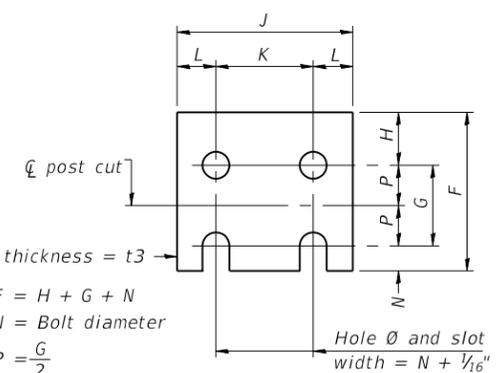
**SECTION B-B**



**SECTION C-C**

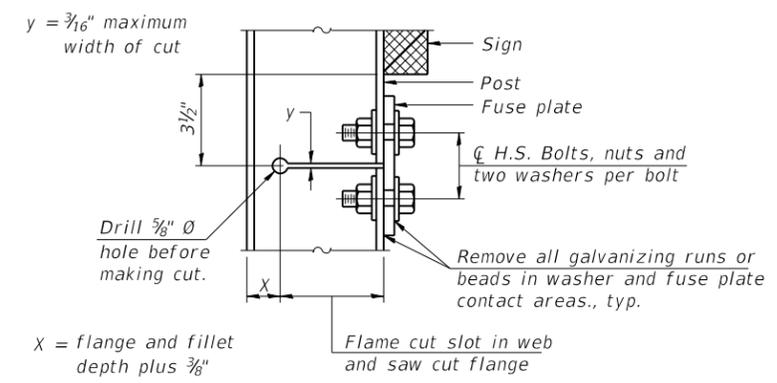


**SECTION D-D**

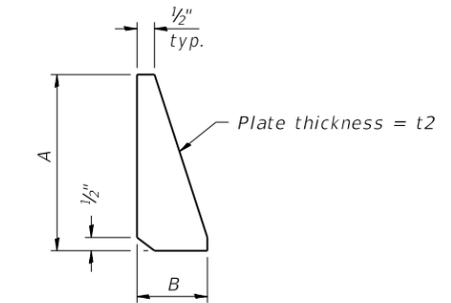


**FUSE PLATE DETAIL**  
(Install with notches down.)

N = Bolt Diameter	G	H
1/2"	2"	1 1/8"
5/8"	2 1/4"	1 1/4"
3/4"	2 1/2"	1 3/8"
7/8"	2 3/4"	1 1/2"
1"	3"	1 5/8"
1 1/8"	3 1/4"	1 3/4"
1 1/4"	3 1/2"	1 7/8"



**DETAIL H**



**STIFFENER PLATE DETAIL**

**GENERAL NOTES**

Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article 727.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

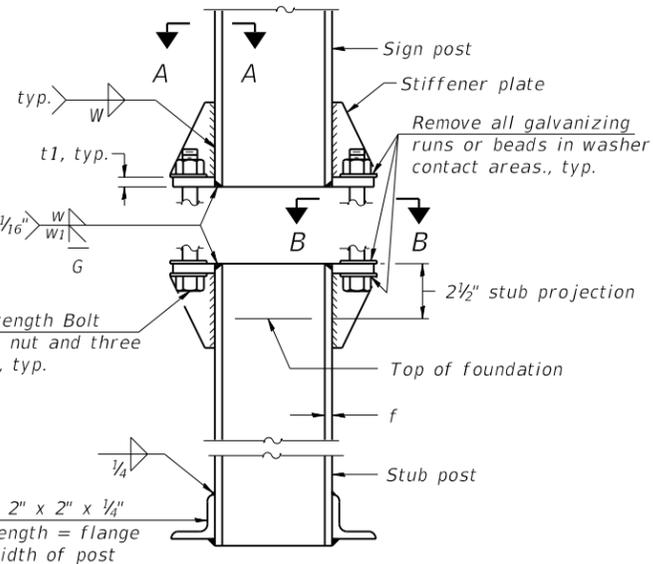
LOADING: 80 m.p.h. wind with 30% gust factor, normal to sign.

DESIGN STRESSES:  
Structural steel - 20,000 p.s.i.  
Reinforcing steel - 20,000 p.s.i.  
Concrete - 1,400 p.s.i.  
Footing soil pressure - 2,000 p.s.f.

After fabrication, the post, fuse plate and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

Work this sheet with Base Sheet BAW-A-2.

MODEL: Default  
FILE NAME: C:\Engineering\Live\Projects\13034 IDOT DUR Chast\WO 15\CADD\CADD Sheets\CIV\160M68-sh-Post-Sign\_Support.dgn



**ELEVATION**  
**SIGN POST & STUB POST**

BAW-A-1

2-17-2017

USER NAME = John	DESIGNED - SAT	REVISED -
PLOT SCALE = 0:2,000 = 1/8" = 1"	CHECKED - JMT	REVISED -
PLOT DATE = 10/31/2019	DRAWN - IH	REVISED -
	CHECKED - SPS	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BREAK-AWAY WIDE FLANGE  
STEEL SIGN POST DETAILS

SHEET OF S-21 SHEETS

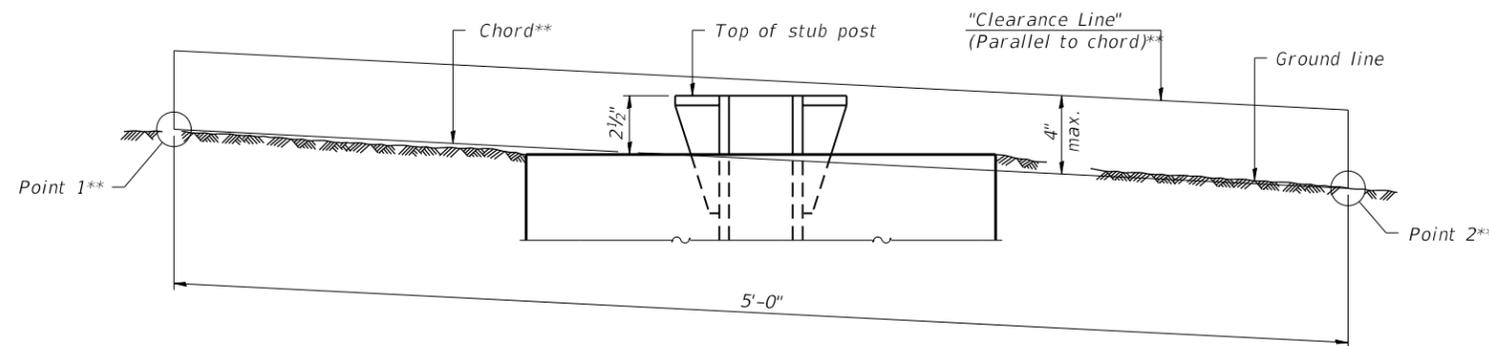
F.A.P. RTE. 379	SECTION 2010-120-4	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 28A
CONTRACT NO. 60M68				

ILLINOIS FED. AID PROJECT

POST	CONCRETE FOUNDATION TABLE							POST TO STUB POST CONNECTION DATA								FUSE PLATE DATA						
	Foundation			Reinforcement			Stub Post Length	Bolt Size	A	B	C	D	E	t1	t2	R	W	J	K	L	t3	
	Diameter*	Minimum Depth	Concrete (1) cu. yds.)	Vertical Bars Length	Bar Spirals Diameter	Length																lbs. (2)
W6x9	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-3"	5/8" x 3 1/4"	6"	2 1/4"	1 1/4"	3 1/2"	1 1/4"	3/4"	1/2"	1 1/32"	1/4"	4"	2 1/4"	7/8"	1/4"
W6x15	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	5/8" x 3 1/4"	6"	2 1/4"	1 1/4"	3 1/2"	1 1/4"	3/4"	1/2"	1 1/32"	1/4"	6"	3 1/2"	1 1/4"	3/8"
W8x18	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	3/4" x 3 3/4"	6"	2 1/2"	1 3/8"	3 1/4"	1 3/8"	1"	1/2"	1 3/32"	5/16"	5 1/4"	2 3/4"	1 1/4"	3/8"
W10x22	2'-6"	6'-6"	1.18	6'-3"	2'-2 1/2"	105'-0"	92	3'-0"	3/4" x 3 3/4"	6"	2 1/2"	1 3/8"	3 1/4"	1 3/8"	1"	1/2"	1 3/32"	5/16"	5 3/4"	2 3/4"	1 1/2"	1/2"
W10x26	2'-6"	7'-0"	1.27	6'-9"	2'-2 1/2"	112'-0"	98	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	1 5/32"	3/8"	5 3/4"	2 3/4"	1 1/2"	5/8"
W12x26	2'-6"	7'-9"	1.41	7'-6"	2'-2 1/2"	119'-0"	107	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	1 5/32"	3/8"	6 1/2"	3 1/2"	1 1/2"	5/8"
W14x30	3'-0"	7'-3"	1.90	7'-0"	2'-8 1/2"	145'-0"	113	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	1 5/32"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W14x38	3'-0"	8'-0"	2.09	7'-9"	2'-8 1/2"	153'-0"	122	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	1 7/32"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W16x45	3'-0"	8'-6"	2.23	8'-3"	2'-8 1/2"	162'-0"	130	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	1 7/32"	3/8"	7"	3 1/2"	1 3/4"	1/2"

\*Dimensional changes required for varying site conditions shall be approved by the Engineer.

POST	FUSE PLATE BOLT SIZE																				
	Sign Height																				
	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	21'-0"	22'-0"	23'-0"	24'-0"
W6x9	1/2" x 1 1/2"	1/2" x 1 1/2"	1/2" x 1 1/2"	1/2" x 1 1/2"	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
W6x15	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	—	—	—	—	—	—	—	—	—	—	—
W8x18	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	—	—	—	—	—	—	—	—	—	—	—
W10x22	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	—	—	—	—	—	—	—	—					
W10x26	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	—	—	—	—	—	—	—						
W12x26	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	—	—	—	—	—	—							
W14x30	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	—	—	—	—	—								
W14x38	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"													
W16x45	—	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	3/4" x 2 1/2"												



**ELEVATION**  
**GROUND LINE & STUB POST**

\*\* For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.

- ① Quantity includes all concrete necessary for one foundation.
- ② Includes reinforcement bars and spiral hooping for one foundation.

MODEL: Default  
FILE NAME: Q:\Engineering\Live\Projects\13034 IDOT DUR Chast\WO 15\CADD\CADD Sheets\Civil\60M68-shl-Sign Support Tables.dgn

BAW-A-2

2-17-2017

(Sheet 2 of 2)



USER NAME =	John	DESIGNED -	SAT	REVISED -	
CHECKED -	JMT	REVISIONS -			
PLOT SCALE =	0:2,000" = 1" in.	DRAWN -	IH	REVISED -	
PLOT DATE =	10/31/2019	CHECKED -	SPS	REVISED -	

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

**BREAK-AWAY WIDE FLANGE**  
**STEEL SIGN POST TABLES**

SHEET OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	28B
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

# TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

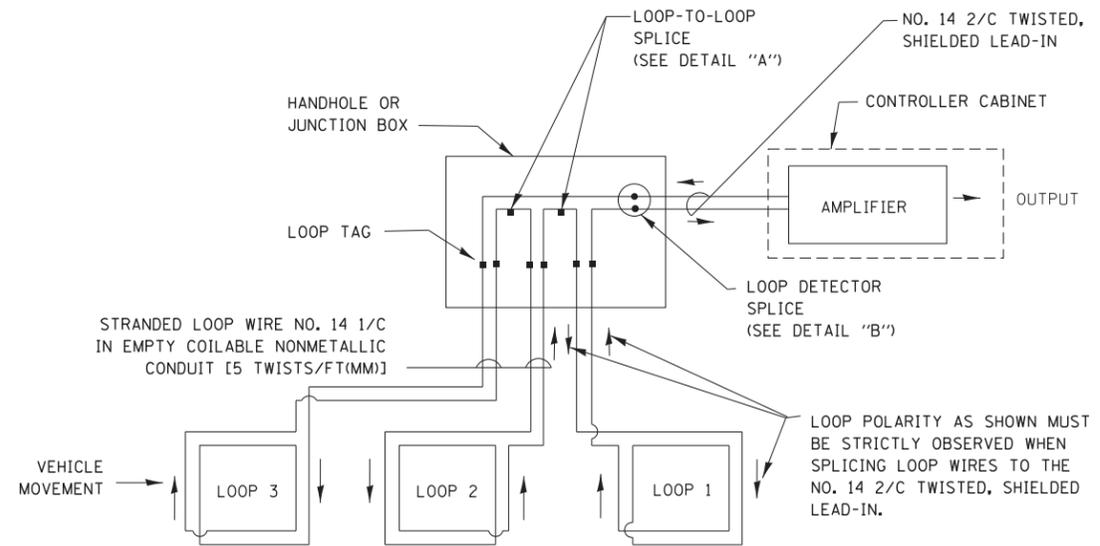
ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	 	 	RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM	S	SP	FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM	I	IP	GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM		R			
SIGNAL HEAD			RELOCATE ITEM		RL			
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM		A			
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF			
FLASHER INSTALLATION -(FS) SOLAR POWERED	 	 	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF			
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF			
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PREFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

TS SHT NO. 1

FILE NAME = ts05.dgn	USER NAME = lgyso	DESIGNED - IP	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	F.A.P. RTE. 379	SECTION 2010-120-I	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 29		
Default	PLOT SCALE = 50.0000' / 1in.	CHECKED - LP	REVISED -			SCALE: NONE	SHEET 1 OF 7 SHEETS	TS-05		CONTRACT NO. 60M68		
	PLOT DATE = 9/29/2016	DATE - 9/29/2016	REVISED -			STA. TO STA.		ILLINOIS FED. AID PROJECT				

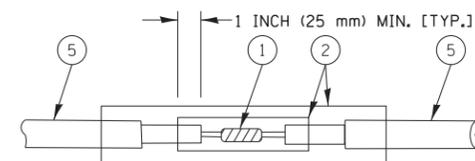
**LOOP DETECTOR NOTES**

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.

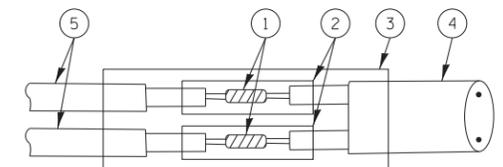


**DETECTOR LOOP WIRING SCHEMATIC**

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



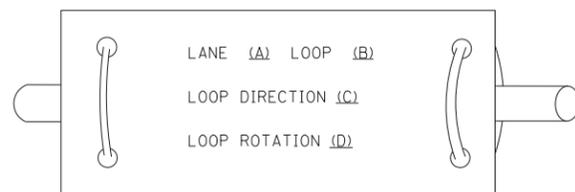
DETAIL "A"  
LOOP-TO-LOOP SPLICE



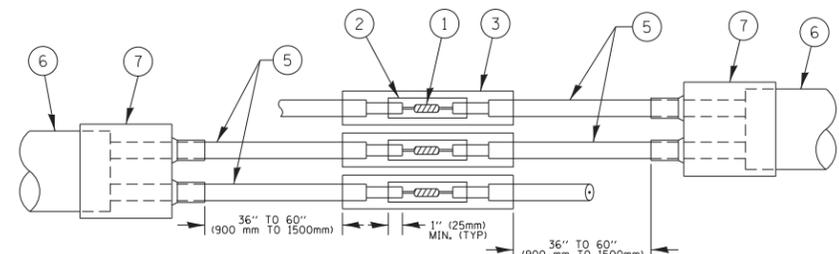
DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**

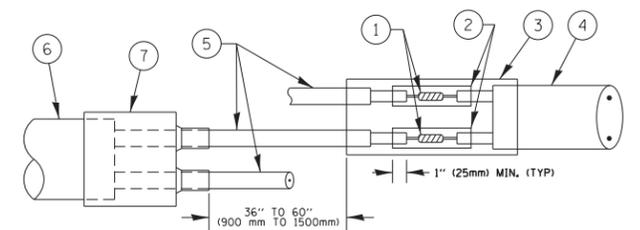
**LOOP LEAD-IN CABLE TAG**



- 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.



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**PREFORMED LOOP**

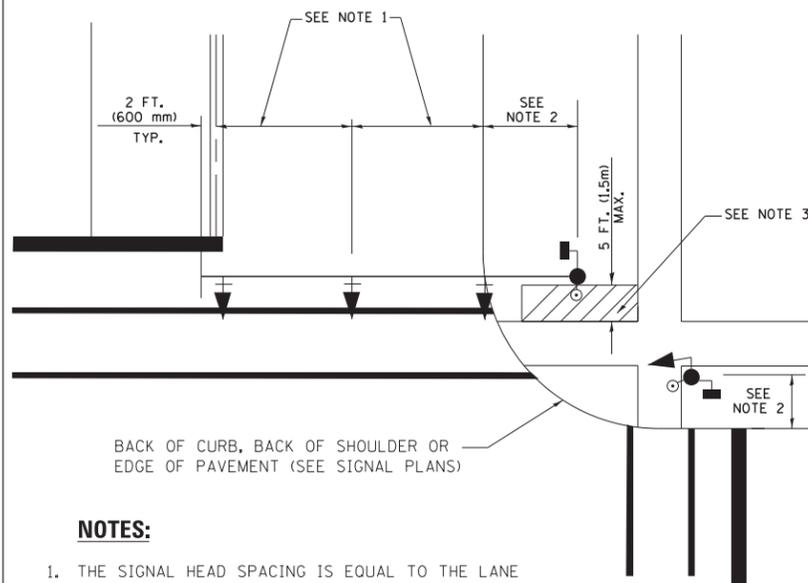
**LOOP DETECTOR SPLICE**

- 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 LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PREFORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

TS SHT NO. 2

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pwwork\pwwork\footemj\d0108315\ts05.dgn	DRAWN - BCK	REVIS	REVISED -			379	2010-120-I	COOK	88	30
PLOT SCALE = 50.0000' / in.	CHECKED - DAD	REVIS	REVISED -			<b>TS-05</b>		CONTRACT NO. 60M68		
PLOT DATE = 1/13/2014	DATE - 10-28-09	REVIS	REVISED -			SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

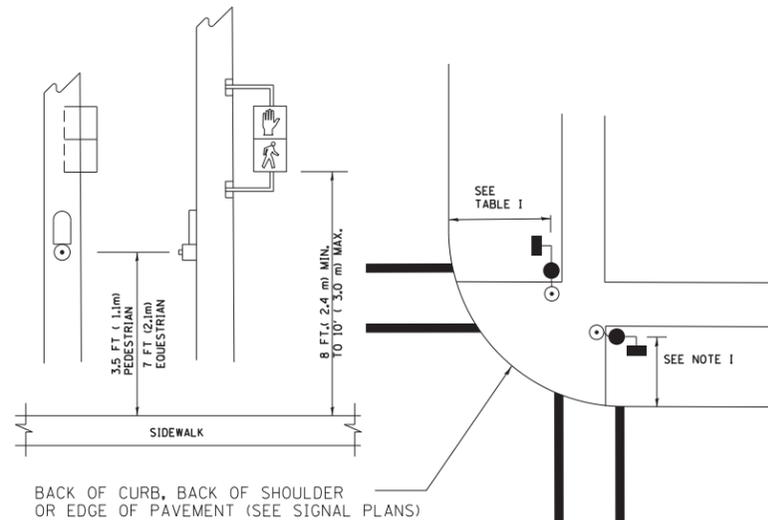
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



**NOTES:**

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. 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."

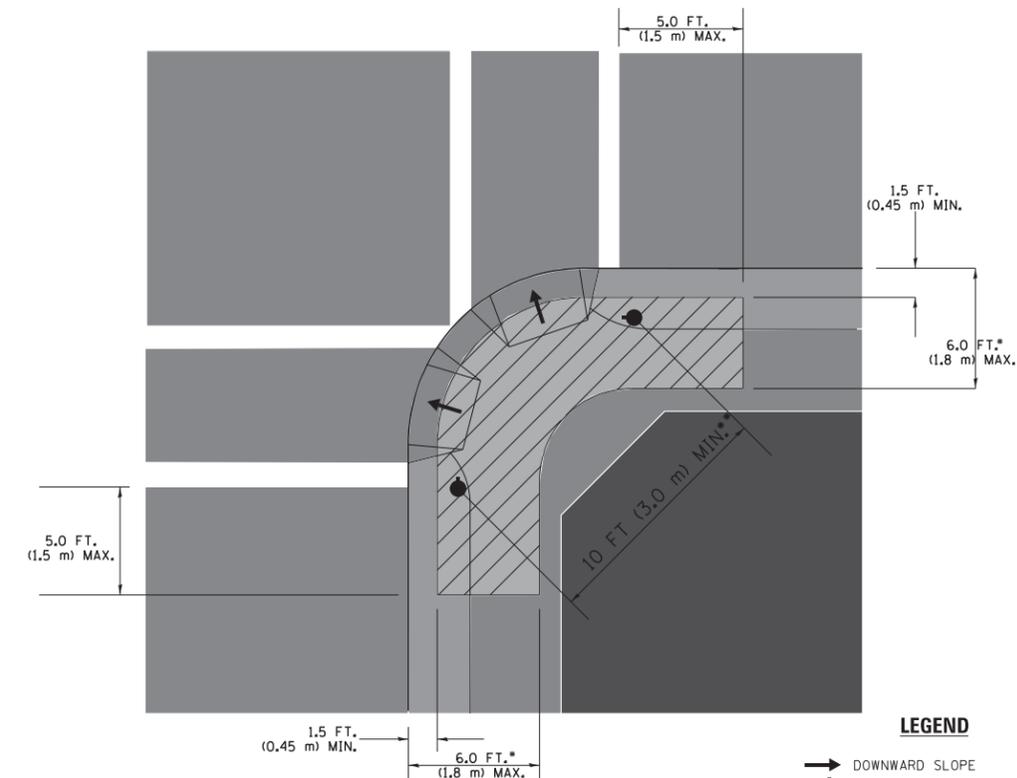
**PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST**



**NOTES:**

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. 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.
3. 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."

**RECOMMENDED PUSHBUTTON LOCATIONS**



**LEGEND**

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

- 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:**

1. 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.
2. 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 PAVEMENT.

**TRAFFIC SIGNAL EQUIPMENT OFFSET**

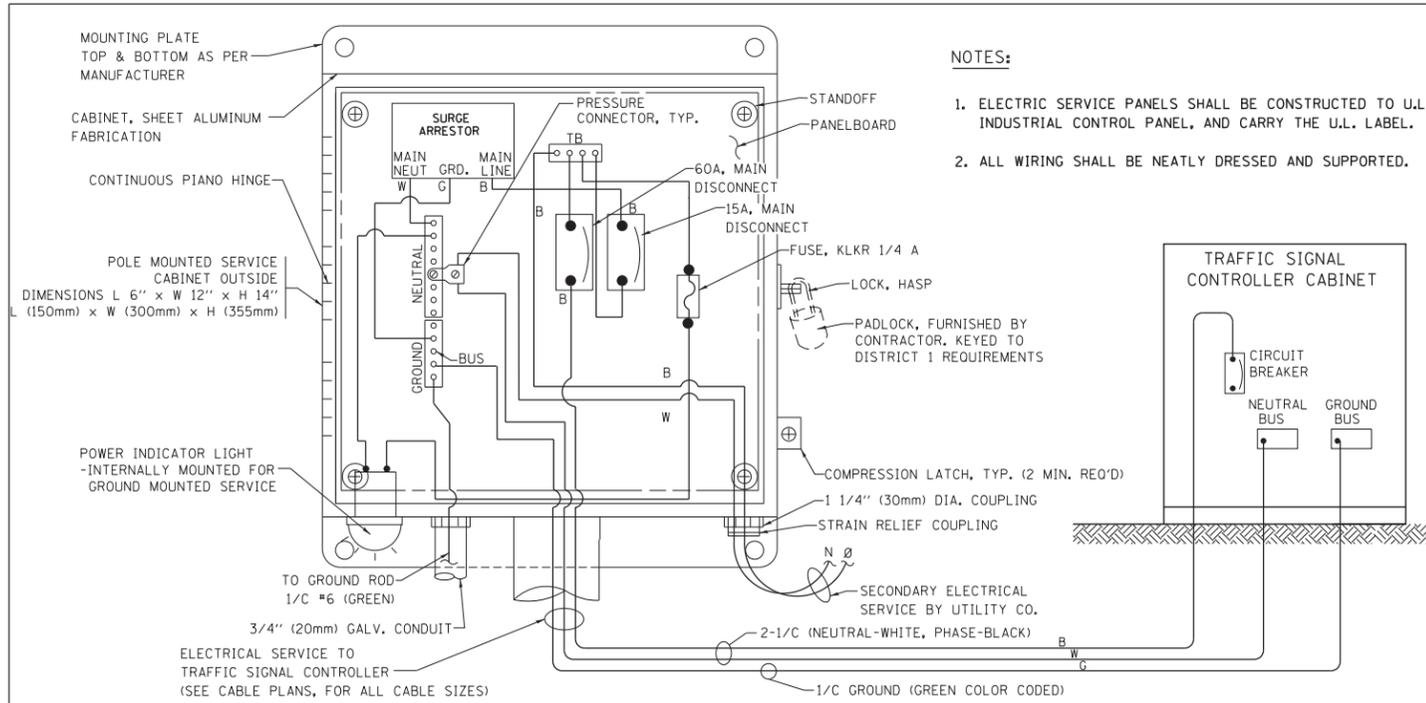
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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:**

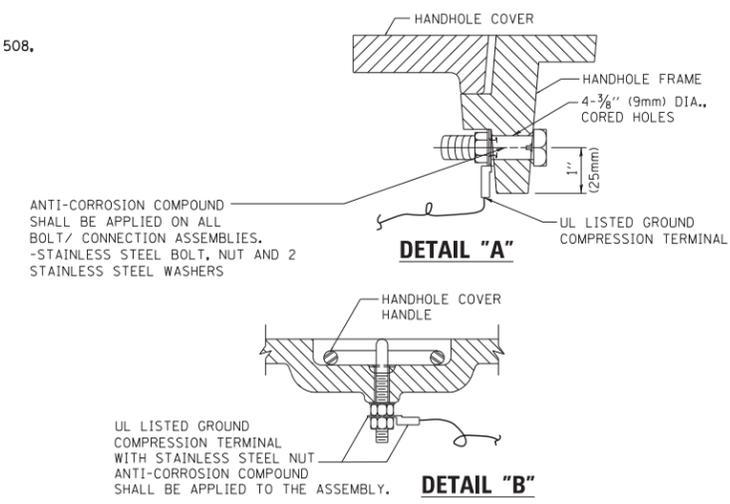
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE 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.

TS SHT NO. 3

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pwwork\pwwork\footemj\d0108315\ts05.dgn	DRAWN - BCK	REVISED -	379			2010-120-I	COOK	88	31	
PLOT SCALE = 50.0000' / in.	CHECKED - DAD	REVISED -	<b>TS-05</b>			CONTRACT NO. 60M68				
PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -	SCALE: NONE			SHEET NO. 3 OF 7 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

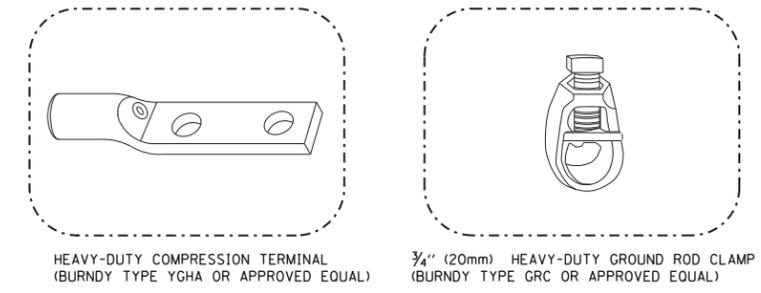
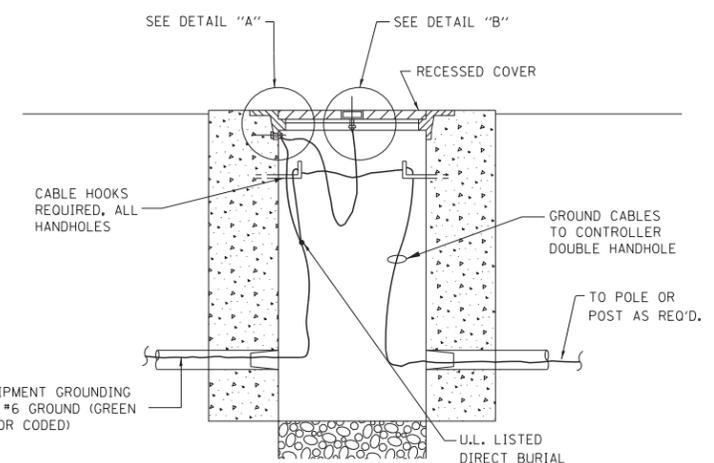


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)  
SERVICE INSTALLATION POLE MOUNT (SHOWN)  
(NOT TO SCALE)**

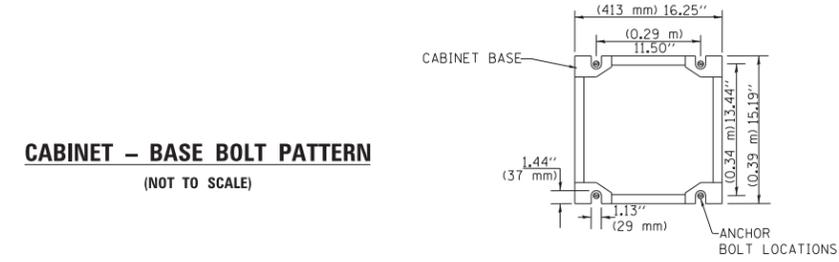
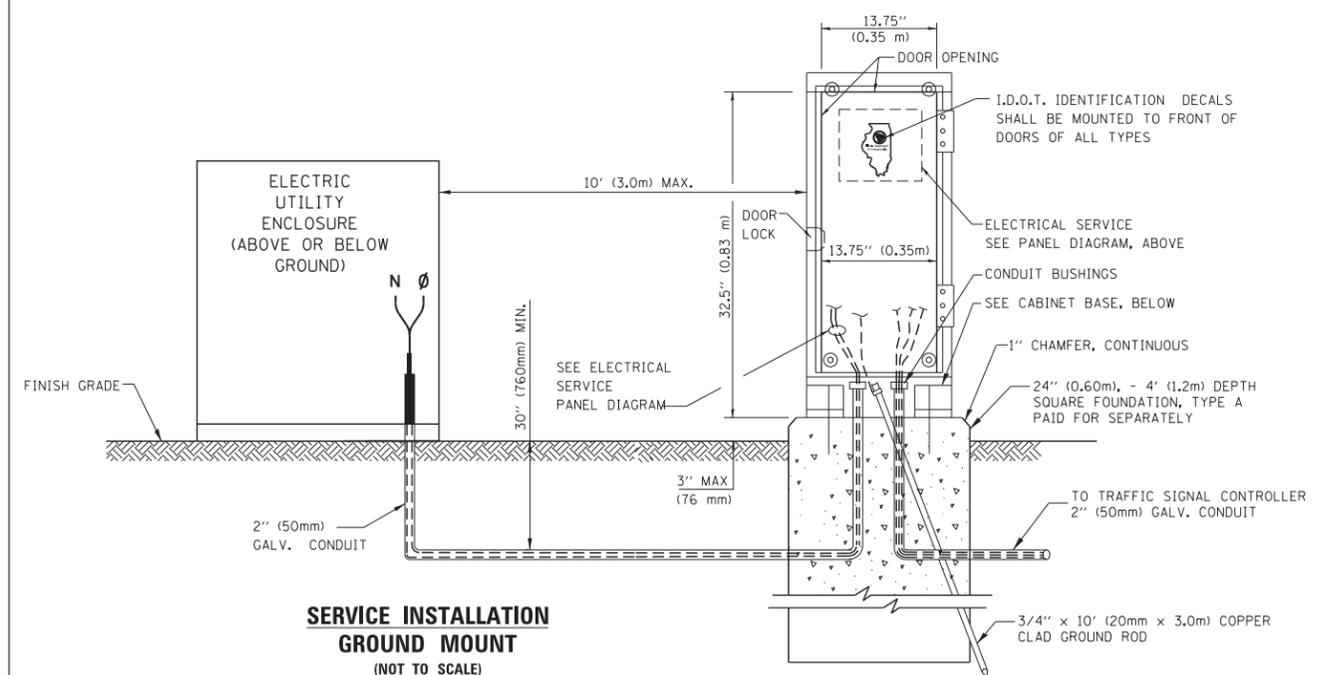
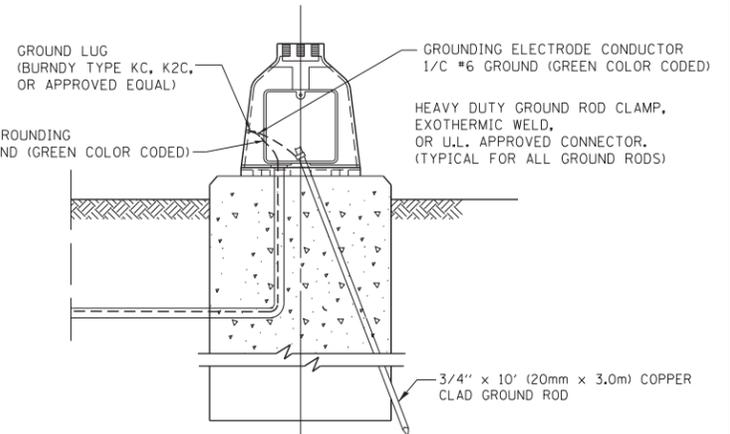
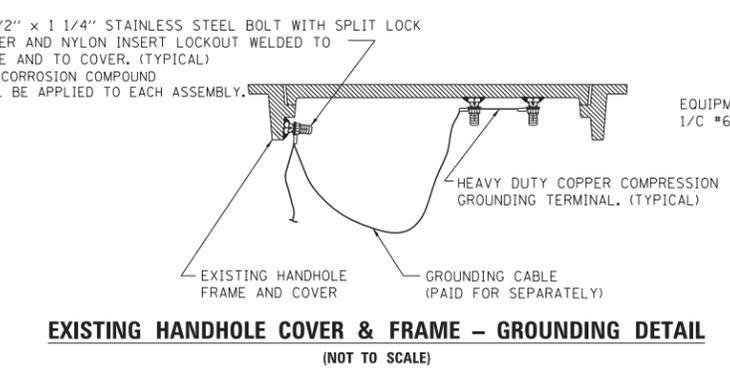


**NOTES:  
GROUNDING SYSTEM**

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

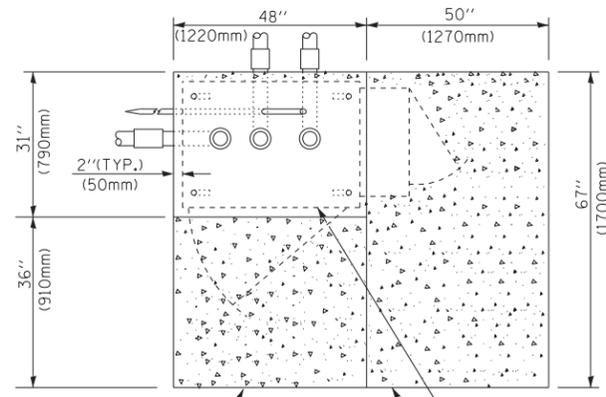


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
  - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

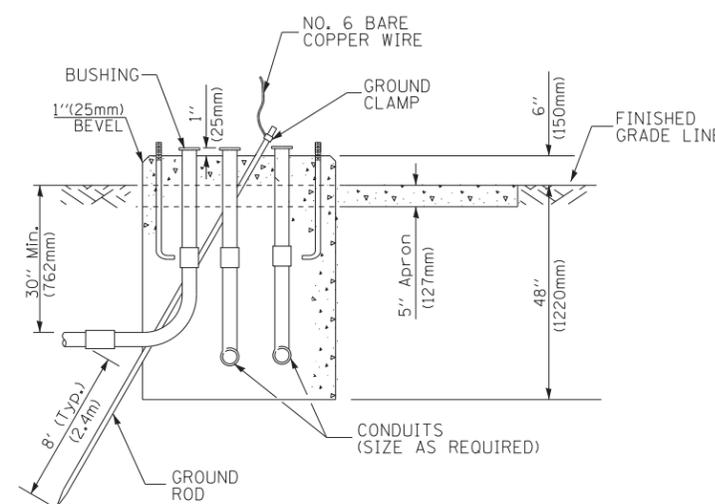


TS SHT NO. 4

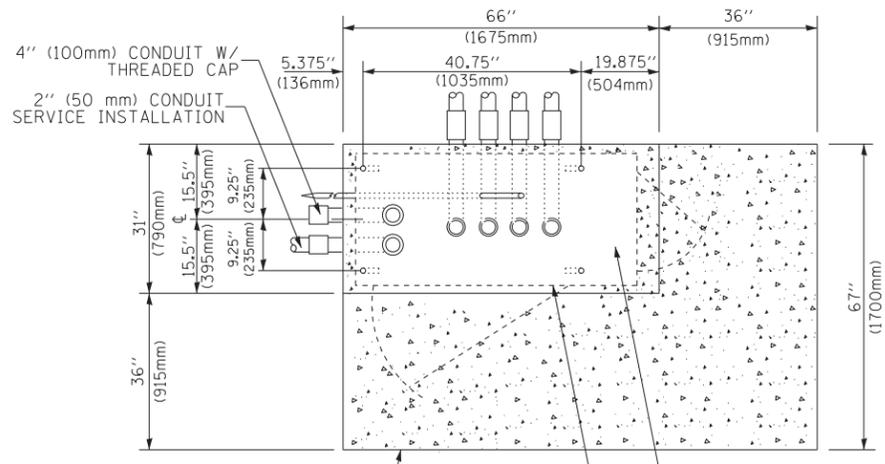
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ca:\pw_work\p1dot\footemj\d0108315\ts05.pgn	DRAWN - BCK	REVISIED -	REVISIED -			379	2010-120-1	COOK	88	32
PLOT SCALE = 50.0000' / in.	CHECKED - DAD	REVISIED -	REVISIED -			<b>TS-05</b>		CONTRACT NO. 60M68		
PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISIED -	REVISIED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
				SCALE: NONE	SHEET NO. 4 OF 7 SHEETS	STA.	TO STA.			



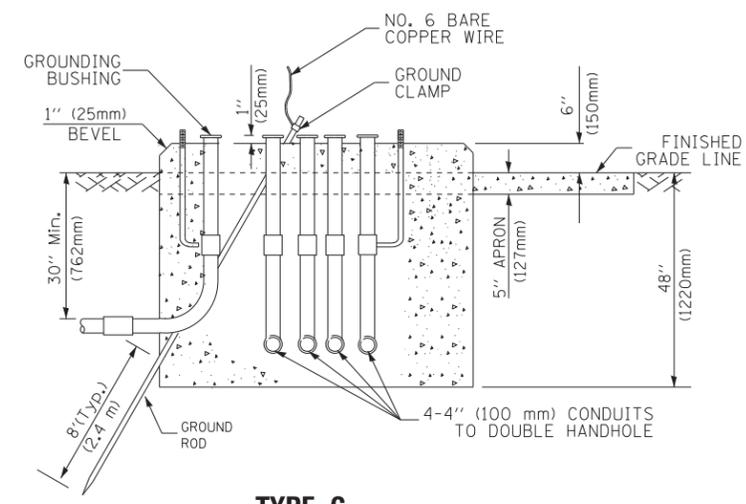
**TOP VIEW**



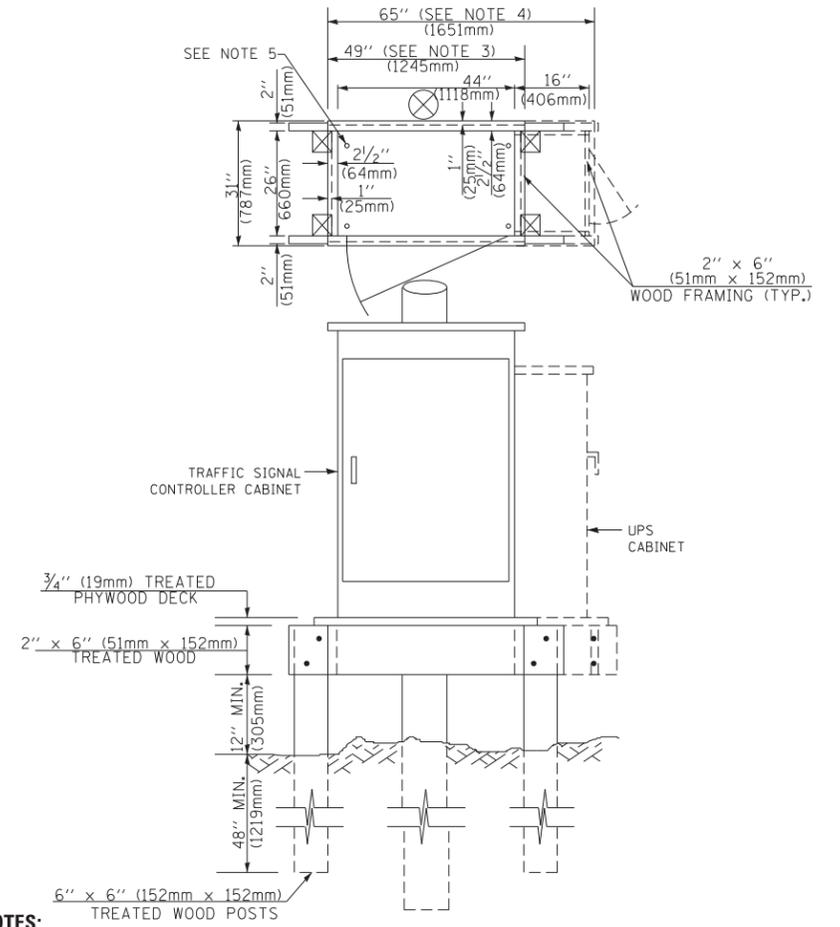
**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**



**TOP VIEW**



**TYPE C  
FOR GROUND MOUNTED  
SUPER P (TYPE IV) AND SUPER R (TYPE V)  
CONTROLLER CABINETS**



**NOTES:**

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
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

**CABLE SLACK**

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**

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	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 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	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 less 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)

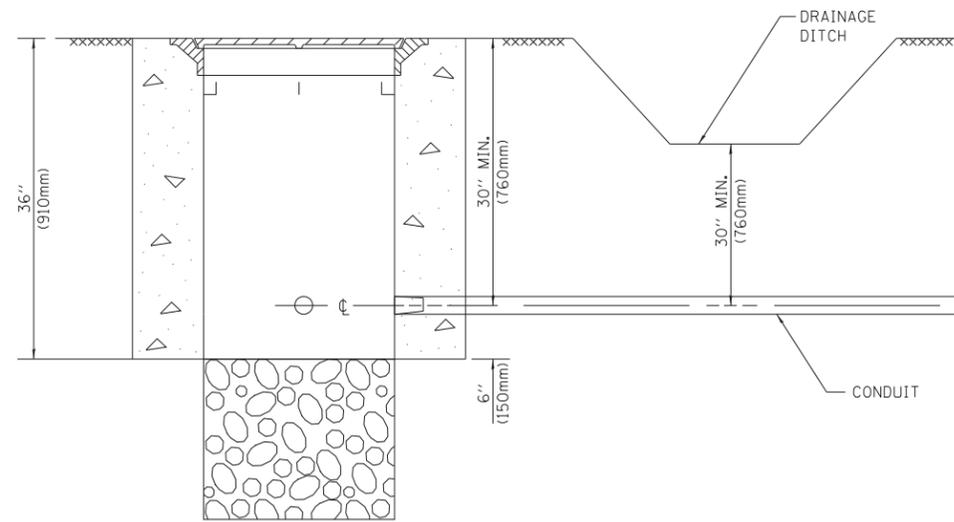
**NOTES:**

1. 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 (Qu) > 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 mast arm assemblies with dual arms refer to state standard 878001..

**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**

TS SHT NO. 5

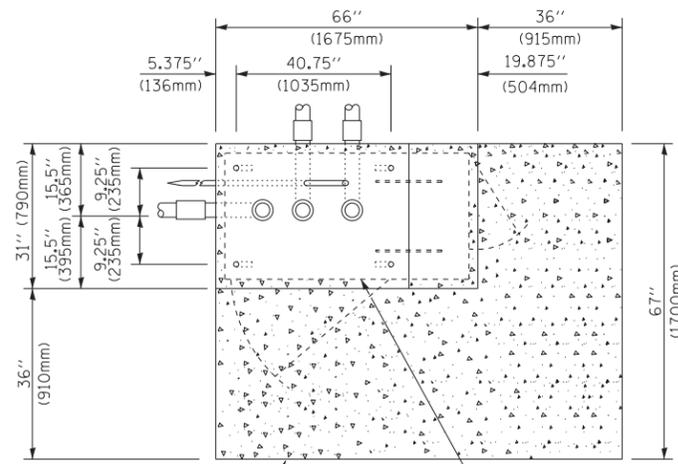
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ca:\pwwork\p1dot\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -			379	2010-120-1	COOK	88	33
		CHECKED - DAD	REVISED -			<b>TS-05</b>		CONTRACT NO. 60M68		
		DATE - 10-28-09	REVISED -			SCALE: NONE	SHEET NO. 5 OF 7 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	



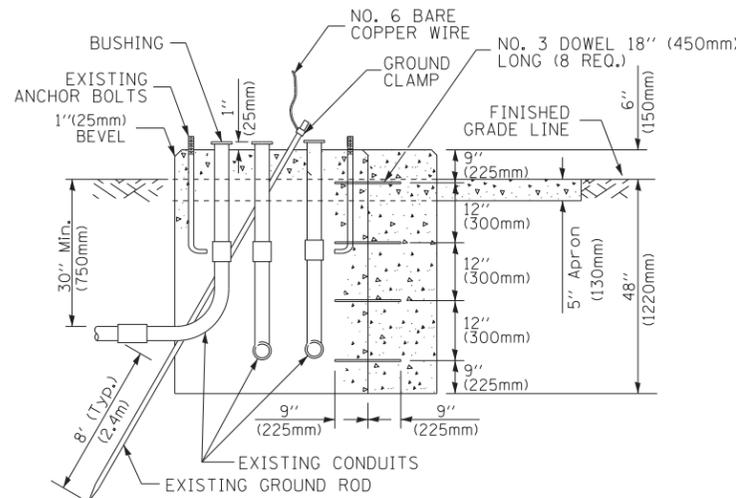
**NOTES:**

- 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.
- THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



**TOP VIEW**  
(NOT TO SCALE)

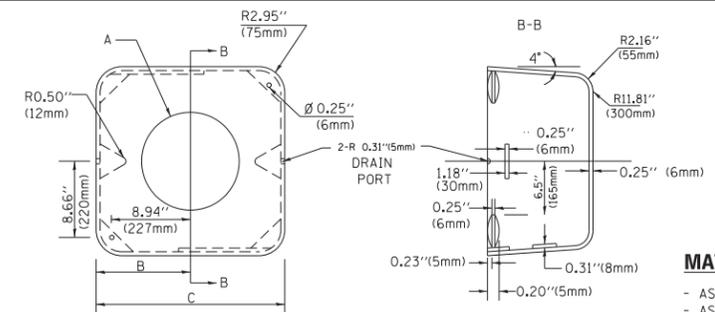


**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

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	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (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
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 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 EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



**MATERIAL:**  
- ASTM A36 STEEL  
- ASTM A-123 HOT DIPPED GALVANIZED

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

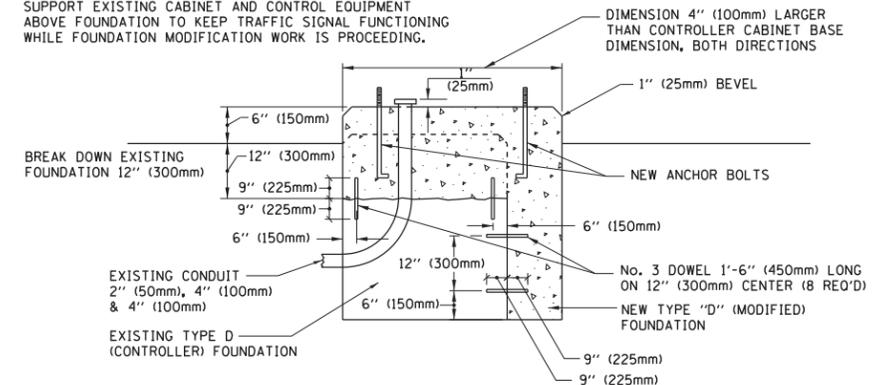
**SHROUD**

**NOTES:**

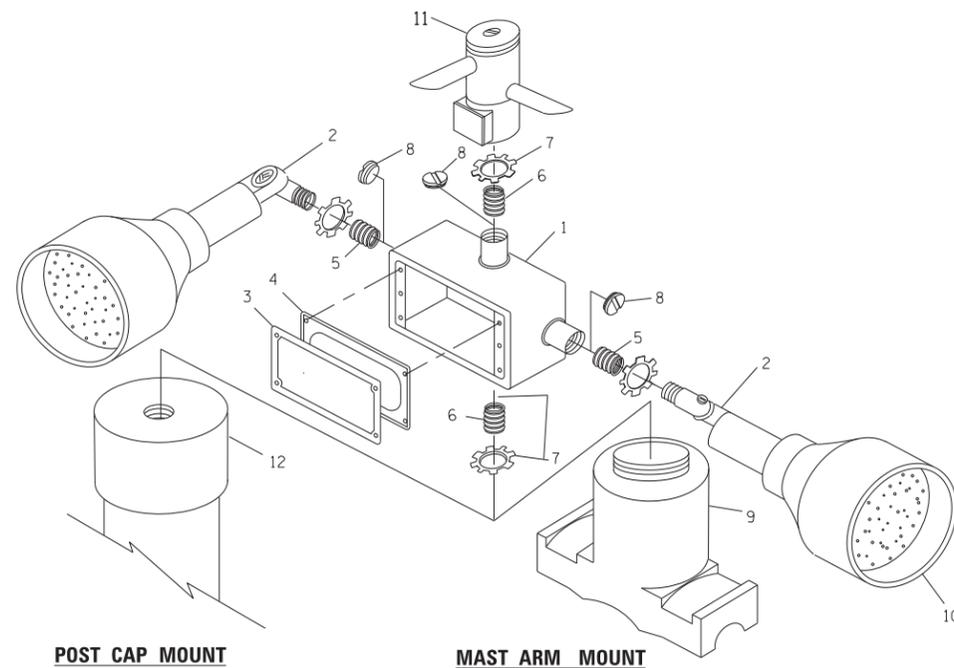
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**NOTE:**

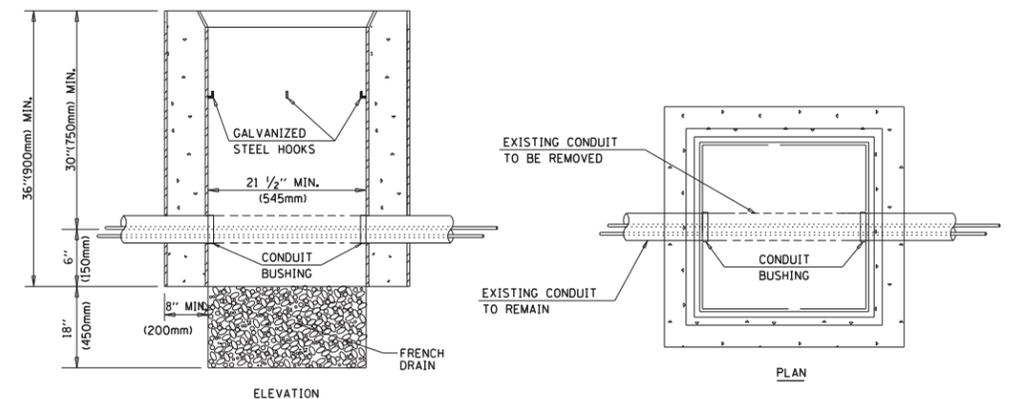
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



**MODIFY EXISTING TYPE "D" FOUNDATION**



**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**



**NOTES:**

- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 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**

TS SHT NO. 6

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
ca:\pwwork\pwwork\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -
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	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

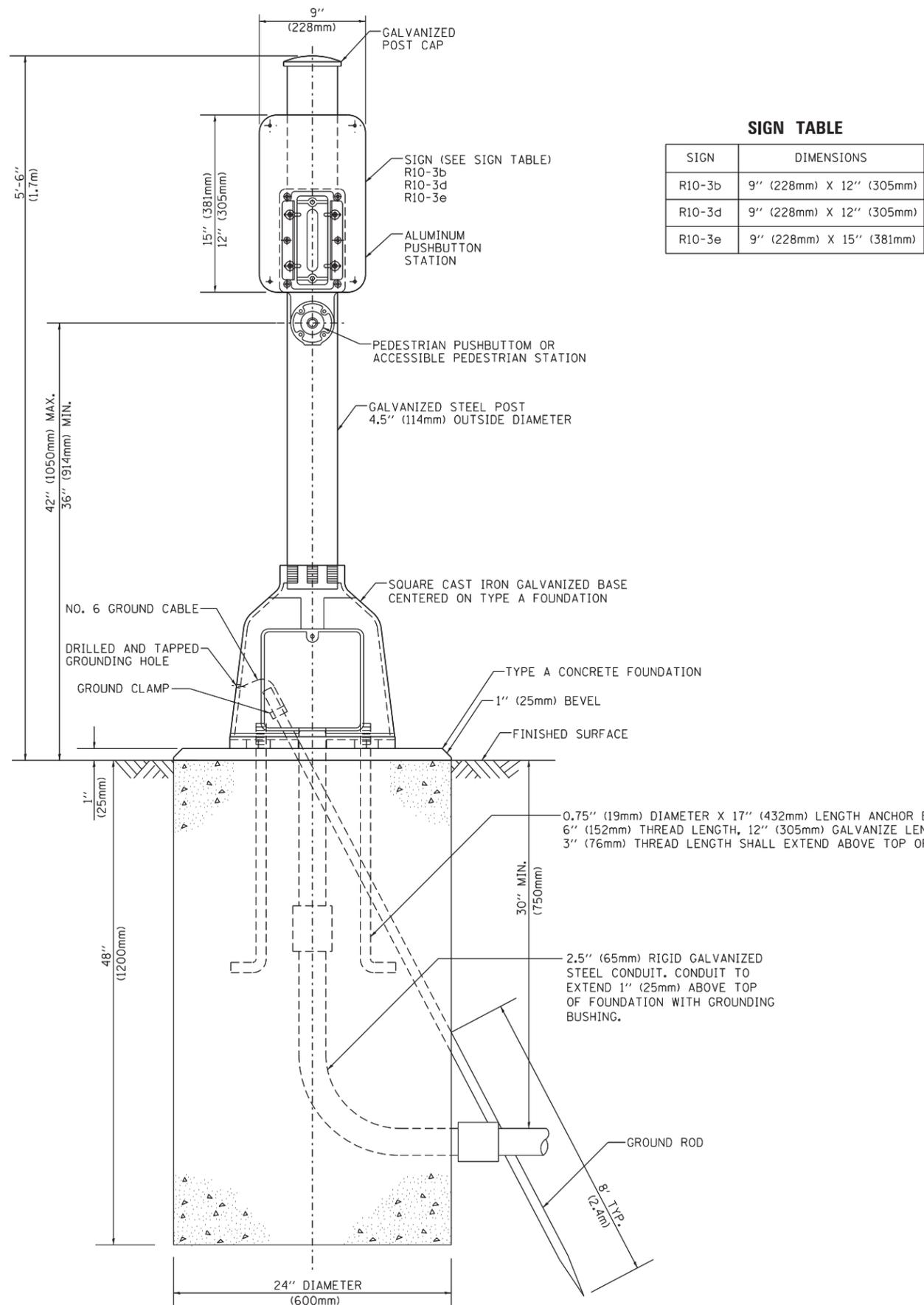
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.

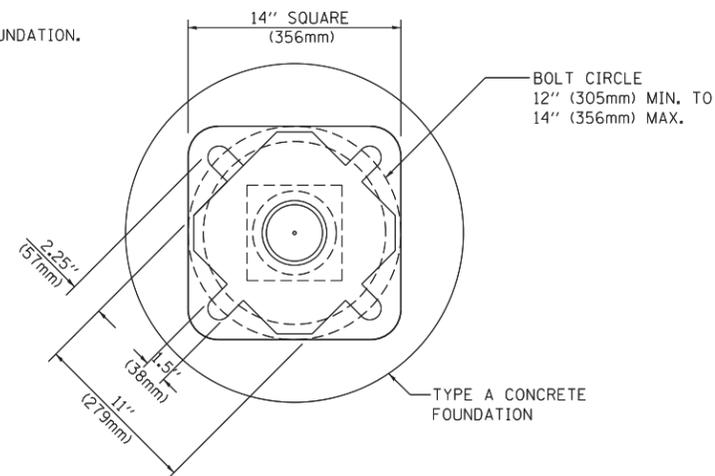
FAP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-1	COOK	88	34
TS-05		CONTRACT NO. 60M68		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

TS SHT NO. 7



**SIGN TABLE**

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



**BOLT PATTERN**

**PEDESTRIAN PUSH BUTTON POST, TYPE A**

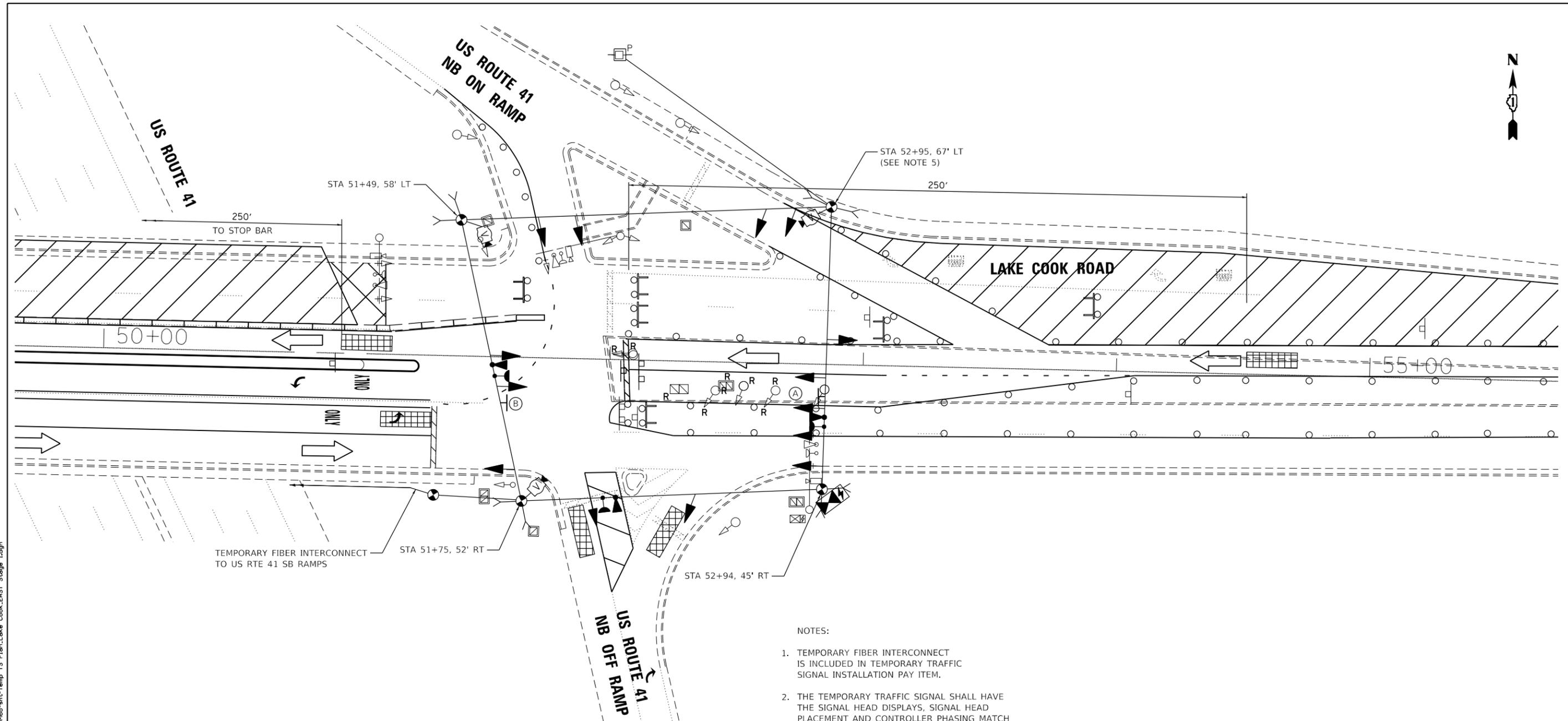
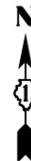
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	PLOT DATE = 1/13/2014	DATE - 10/1/2012	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 7 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	35
<b>TS-05</b>		CONTRACT NO. 60M68		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- NOTES:
1. TEMPORARY FIBER INTERCONNECT IS INCLUDED IN TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.
  2. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENT AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
  3. THE EXISTING SIGNAL HEADS NOT IN USE SHALL BE BAGGED AND DISABLED DURING TEMPORARY TRAFFIC SIGNAL OPERATIONS.
  4. IF TEMPORARY TRAFFIC SIGNALS ARE IN CONFLICT WITH THE PERMANENT TRAFFIC SIGNALS, THE MAST ARMS SHALL BE ROTATED OR REMOVED AND STORED OUTSIDE OF R.O.W. AND WILL BE THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE EQUIPMENT SAFE. THIS IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
  5. SIDEWALK REMOVAL REQUIRED TO INSTALL TEMPORARY WOOD POLE IN NE CORNER.



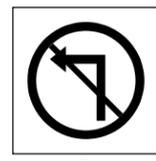
**REMOVAL AND RELOCATION NOTES:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 3 EACH SIGNAL POST



(A)  
R10-5  
(30"X36")  
1 REQUIRED



(B)  
R3-2  
(36"X36")  
1 REQUIRED

TS SHT NO. 8

FILE NAME = Q:\Engineering\Live\Projects\13034 IDOT DUR Chest\NO 15\CADD\CADD Sheets\Civil\106068-shr-Temp TS Plan-Lake Cook-East Stage 1.dgn



USER NAME = johnn	DESIGNED - TGM	REVISED -
	DRAWN - JN	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JMT	REVISED -
PLOT DATE = 10/31/2019	DATE - 09/20/2019	REVISED -

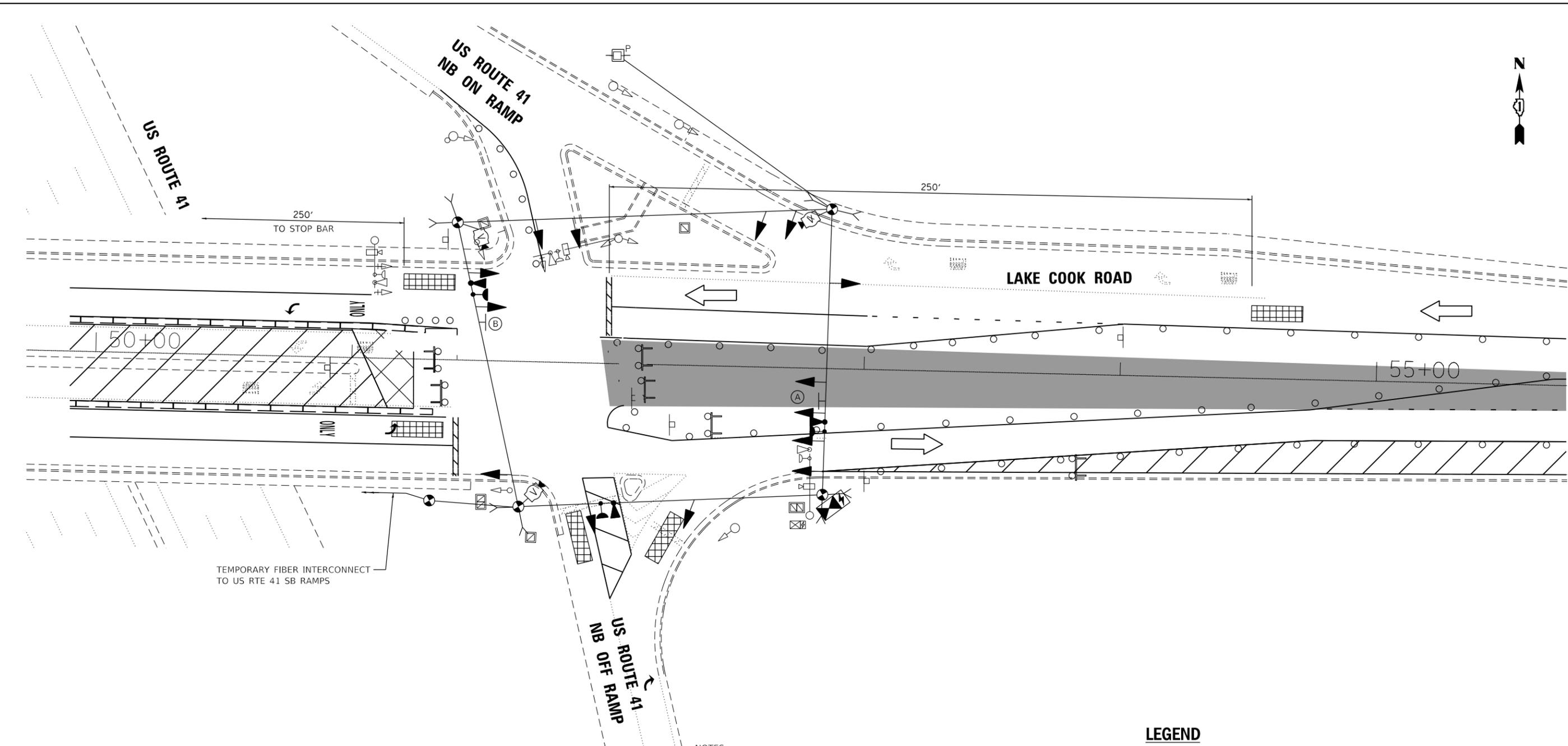
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REMOVE EXISTING TRAFFIC SIGNAL AND TEMPORARY  
TRAFFIC SIGNAL INSTALLATION PLAN - STAGE I  
LAKE COOK ROAD AT US 41 NB RAMPS**

SCALE: SHEET TS-08 OF TS-23 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	36
CONTRACT NO.			60M68	
ILLINOIS FED. AID PROJECT				

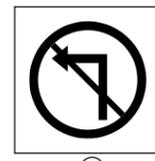
**TS#1550**



TEMPORARY FIBER INTERCONNECT TO US RTE 41 SB RAMPS



(A)  
R10-5  
(30" X 36")  
1 REQUIRED



(B)  
R3-2  
(36" X 36")  
1 REQUIRED

NOTES:

1. TEMPORARY FIBER INTERCONNECT IS INCLUDED IN TEMPORARY TRAFFIC SIGNAL PAY ITEM.
2. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENT AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
3. THE EXISTING SIGNAL HEADS NOT IN USE SHALL BE BAGGED AND DISABLED DURING TEMPORARY TRAFFIC SIGNAL OPERATIONS.
4. IF TEMPORARY TRAFFIC SIGNALS ARE IN CONFLICT WITH THE PERMANENT TRAFFIC SIGNALS, THE MAST ARMS SHALL BE ROTATED OR REMOVED AND STORED OUTSIDE OF R.O.W. AND WILL BE THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE EQUIPMENT SAFE. THIS IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

LEGEND

PORTLAND CEMENT CONCRETE PAVEMENT 12" (JOINTED)



SCALE 1"=20'-0"



USER NAME = johnn	DESIGNED - TGM	REVISED -
DRAWN - JN	REVISED -	
CHECKED - JMT	REVISED -	
DATE - 09/20/2019	REVISED -	

PLLOT SCALE = 40.0000' / in.
PLLOT DATE = 10/31/2019

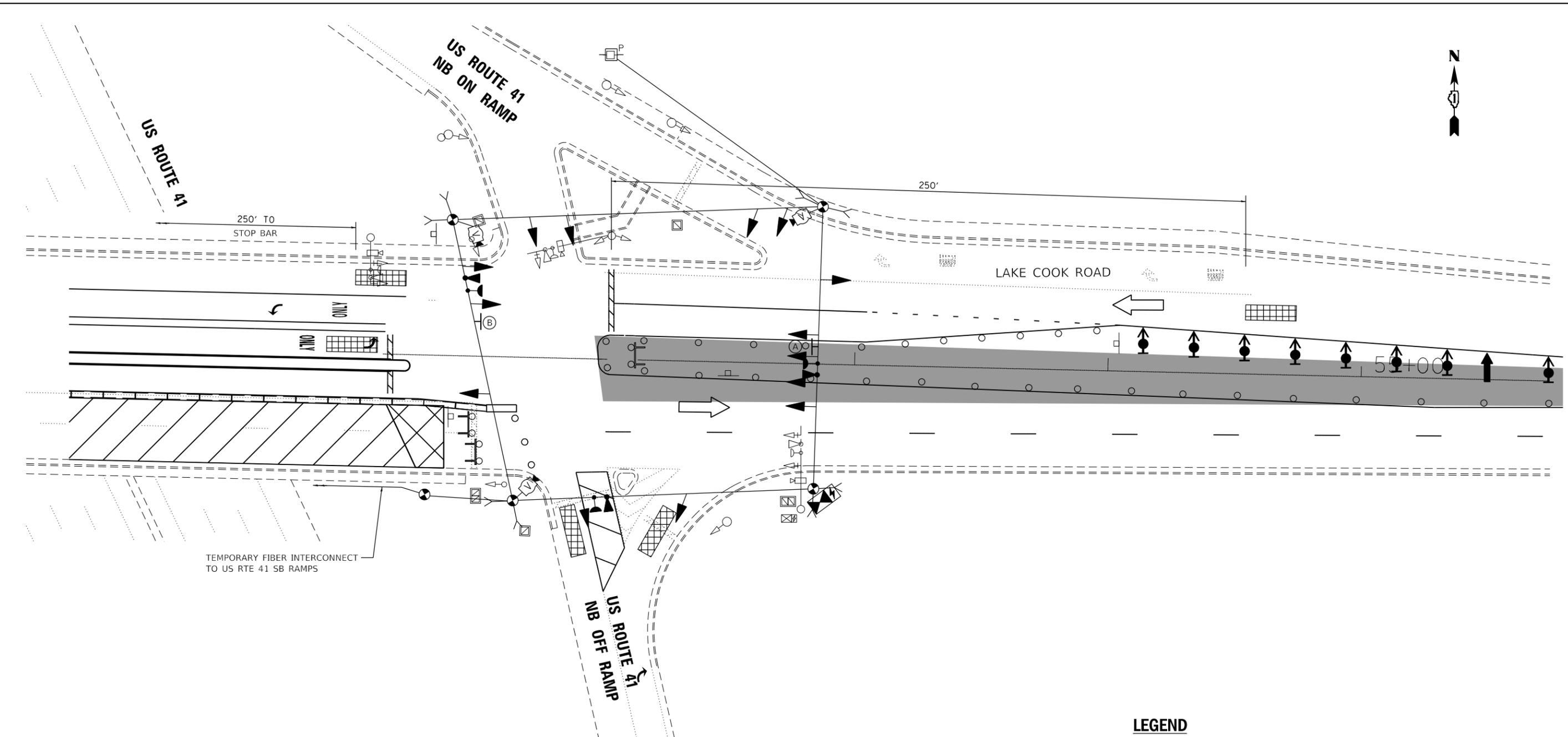
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL PLAN - STAGE II  
LAKE COOK ROAD AT US 41 NB RAMPS

SCALE: SHEET TS-09 OF TS-23 SHEETS STA. TO STA.

F.A.P. RTE. 379	SECTION 2010-120-I	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 37
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

TS#1550



(A)  
R10-5  
(30" X 36")  
1 REQUIRED



(B)  
R3-2  
(36" X 36")  
1 REQUIRED

NOTES:

1. TEMPORARY FIBER INTERCONNECT IS INCLUDED IN TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.
2. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENT AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
3. THE EXISTING SIGNAL HEADS NOT IN USE SHALL BE BAGGED AND DISABLED DURING TEMPORARY TRAFFIC SIGNAL OPERATIONS.
4. IF TEMPORARY TRAFFIC SIGNALS ARE IN CONFLICT WITH THE PERMANENT TRAFFIC SIGNALS, THE MAST ARMS SHALL BE ROTATED OR REMOVED AND STORED OUTSIDE OF R.O.W. AND WILL BE THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE EQUIPMENT SAFE. THIS IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

LEGEND

PORTLAND CEMENT CONCRETE PAVEMENT 12" (JOINTED)



SCALE 1"=20'-0"



USER NAME = johnn	DESIGNED - TGM	REVISED -
	DRAWN - JN	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JMT	REVISED -
PLOT DATE = 10/31/2019	DATE - 09/20/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

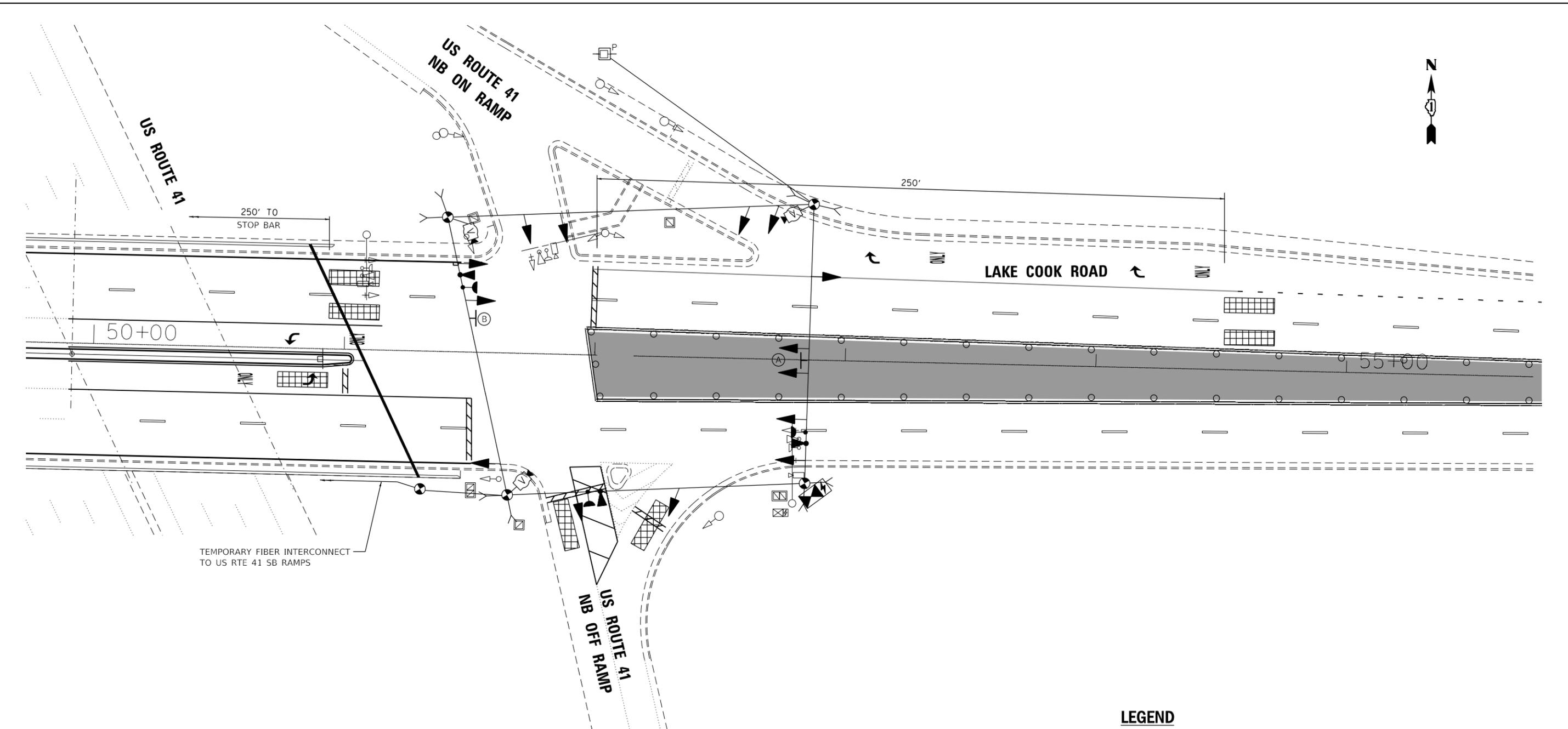
TEMPORARY TRAFFIC SIGNAL PLAN - STAGE III  
LAKE COOK ROAD AT US 41 NB RAMPS

SCALE: SHEET TS-10 OF TS-23 SHEETS STA. TO STA.

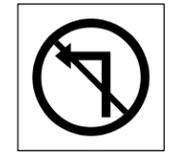
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	38
CONTRACT NO. 60M68			ILLINOIS FED. AID PROJECT	

TS#1550

TS SHT NO. 11  
 FILE NAME = Q:\Engineering\LiveProjects\13034 IDOT DUR Chest\MO 15\CADD\CADD Sheets\Civil\1160668-sht-Temp TS Plan\_Lake Cook\_EAST Stage 4.dgn



(A)  
R10-5  
(30" X 36")  
1 REQUIRED



(B)  
R3-2  
(36" X 36")  
1 REQUIRED

NOTES:

1. TEMPORARY FIBER INTERCONNECT IS INCLUDED IN TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.
2. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENT AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
3. THE EXISTING SIGNAL HEADS NOT IN USE SHALL BE BAGGED AND DISABLED DURING TEMPORARY TRAFFIC SIGNAL OPERATIONS.
4. IF TEMPORARY TRAFFIC SIGNALS ARE IN CONFLICT WITH THE PERMANENT TRAFFIC SIGNALS, THE MAST ARMS SHALL BE ROTATED OR REMOVED AND STORED OUTSIDE OF R.O.W. AND WILL BE THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE EQUIPMENT SAFE. THIS IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

LEGEND

PORTLAND CEMENT CONCRETE PAVEMENT 12" (JOINTED)



SCALE 1"=20'-0"



USER NAME = johnn	DESIGNED - TGM	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - JN	REVISED -
PLOT DATE = 10/31/2019	CHECKED - JMT	REVISED -
	DATE - 09/20/2019	REVISED -

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

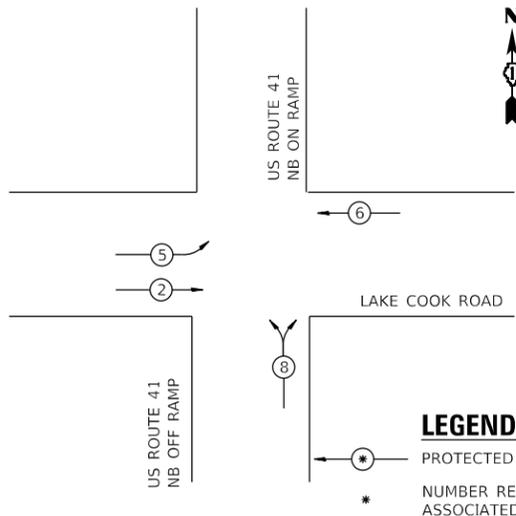
**TEMPORARY TRAFFIC SIGNAL PLAN - STAGE IV**  
**LAKE COOK ROAD AT US 41 NB RAMPS**

SCALE: SHEET TS-11 OF TS-23 SHEETS STA. TO STA.

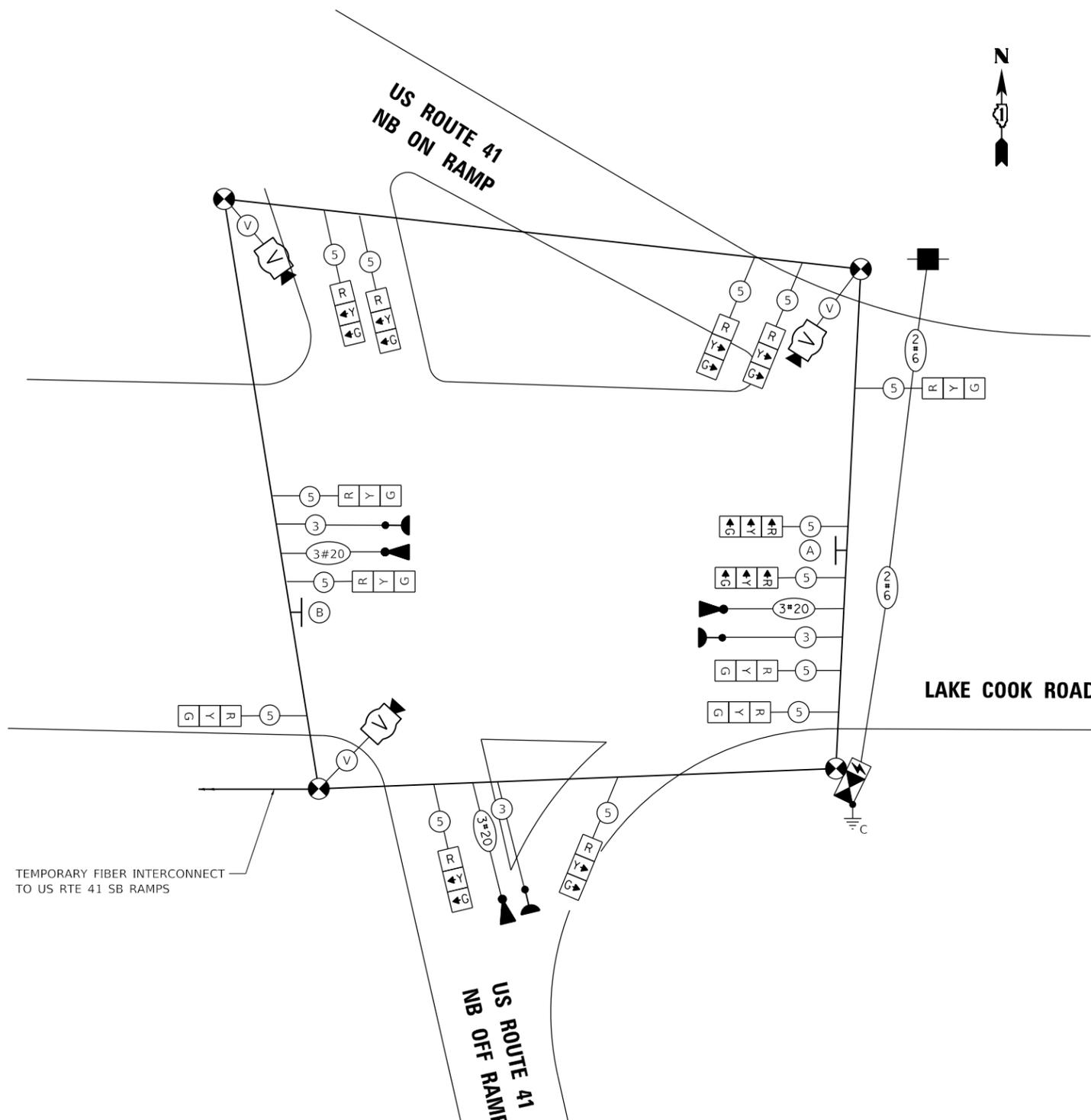
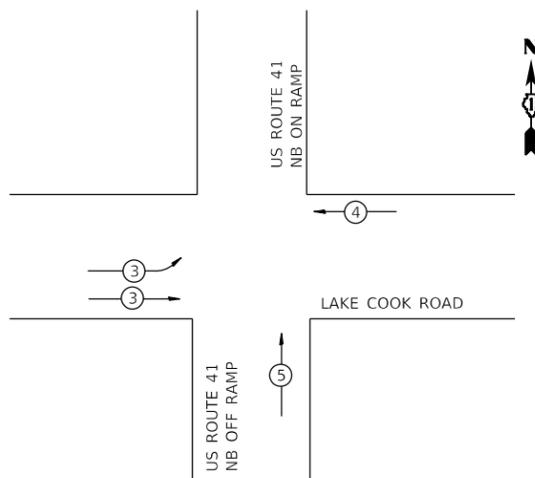
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	39
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

**TS#1550**

**TEMPORARY CONTROLLER SEQUENCE**



**TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE**

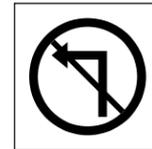


**TEMPORARY CABLE PLAN**

N.T.S.



(A)  
R10-5  
(30"x36")  
1 REQUIRED



(B)  
R3-2  
(36"x36")  
1 REQUIRED

**NOTES:**

1. TEMPORARY FIBER INTERCONNECT IS INCLUDED IN TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.
2. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENT AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
3. THE EXISTING SIGNAL HEADS NOT IN USE SHALL BE BAGGED AND DISABLED DURING TEMPORARY TRAFFIC SIGNAL OPERATIONS.
4. IF TEMPORARY TRAFFIC SIGNALS ARE IN CONFLICT WITH THE PERMANENT TRAFFIC SIGNALS, THE MAST ARMS SHALL BE ROTATED OR REMOVED AND STORED OUTSIDE OF R.O.W. AND WILL BE THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE EQUIPMENT SAFE. THIS IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	11	50	82.5
(YELLOW)	15	20	5	15
(GREEN)	15	12	45	81
PERMISSIVE ARROW		12	10	
PED. SIGNAL		25	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
ILLUM. SIGN	-	35	5	-
FLASHER	-	25	50	-
<b>TOTAL =</b>				<b>453.5</b>

ENERGY COSTS TO:

Illinois Department of Transportation  
 Division of Highways / District 1  
 201 W Center Court, Schaumburg, Illinois 60196-1096

ENERGY SUPPLY: CONTACT: JEAN WILL  
 PHONE: 847-816-5459  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER: ---

TS SHT NO. 12

FILE NAME = Q:\Engineering\LiveProjects\13034 IDOT DUR Chest\NO 15\CADD\CADD Sheets\Civil\60M68-shr-Temp TS Cable Plan-Lake Cook-EAST.dgn



USER NAME = johnn	DESIGNED - TGM	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - GP	REVISED -
PLOT DATE = 10/31/2019	CHECKED - JMT	REVISED -
	DATE - 09/20/2019	REVISED -

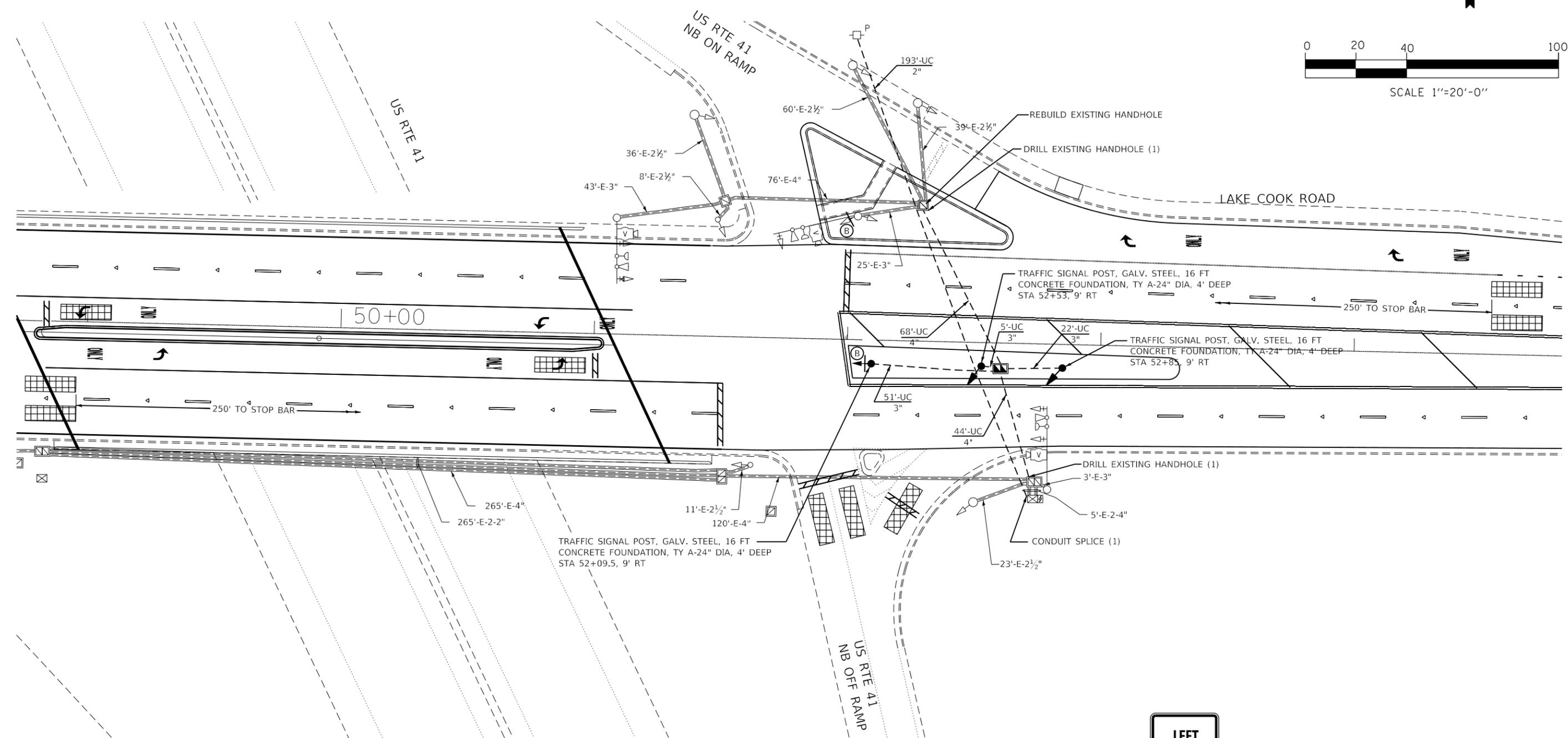
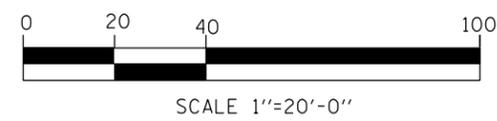
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM  
 AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
 LAKE COOK ROAD AT US 41 NB RAMPS

SCALE: SHEET TS-12 OF TS-23 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	40
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

TS#1550



Ⓟ  
R10-10  
(30"X36")  
2 REQUIRED

TS SHT NO. 13

FILE NAME = Q:\Engineering\LiveProjects\130234 IDOT DUR Chest\MO 15\CADD\CADD Sheets\Civil\1060M68-shr-Prop TS Plan\_Lake Cook\_EAST.dgn



USER NAME = johnn	DESIGNED - TGM	REVISED -
DRAWN - GP	REVISED -	
PLOT SCALE = 40.0000' / in.	CHECKED - JMT	REVISED -
PLOT DATE = 10/31/2019	DATE - 09/20/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

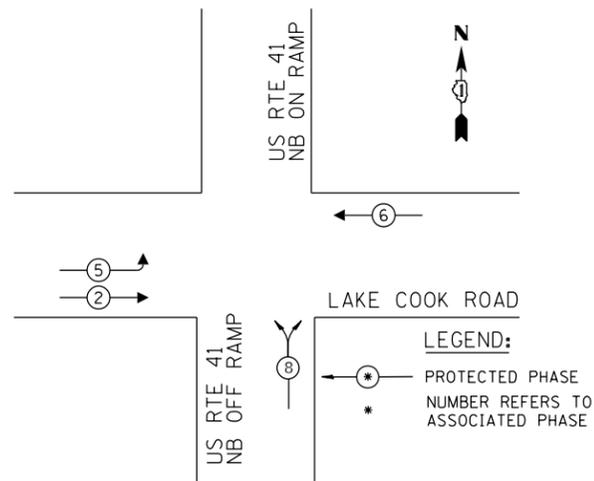
TRAFFIC SIGNAL MODERNIZATION PLAN  
LAKE COOK ROAD AT US 41 NB RAMPS

SCALE: SHEET OF SHEETS STA. TO STA. TS-3 TS-23

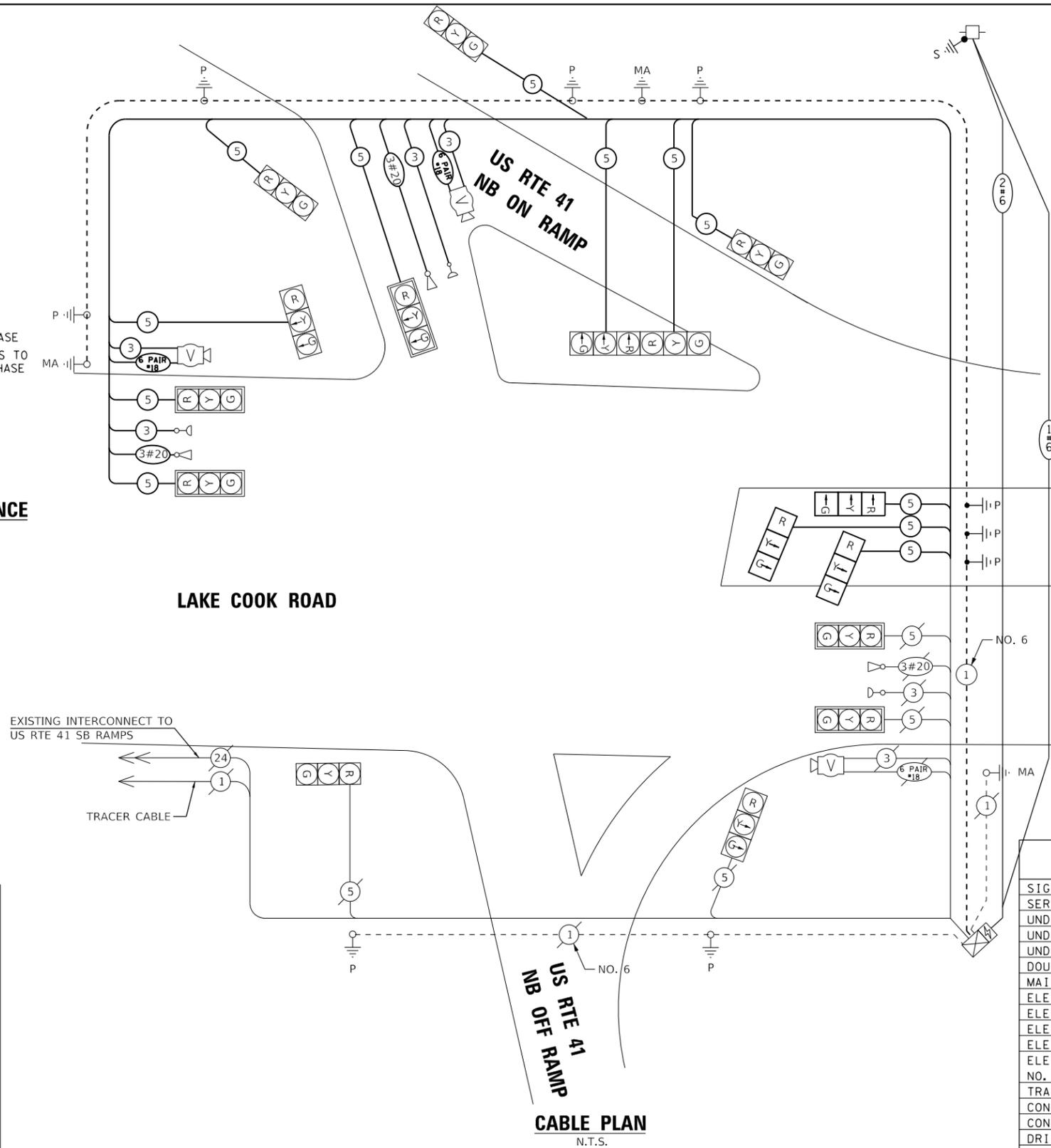
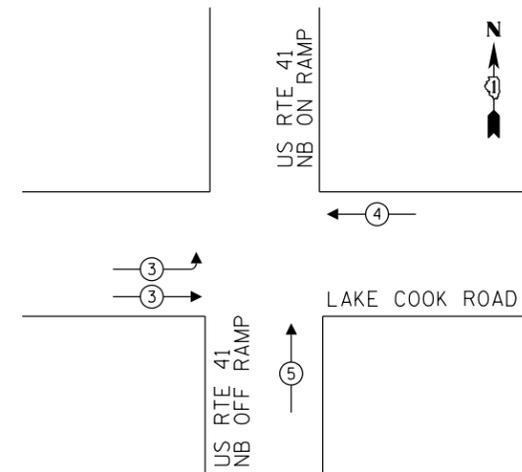
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	41
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

TS#1550

**CONTROLLER SEQUENCE**



**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**CABLE PLAN**  
N.T.S.

**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	15
SERVICE INSTALLATION-POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	193
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	78
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	112
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1119
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2896
ELECTRIC CABLE IN CONDUIT, COMMUNICATION, NO. 18 6 PAIR	FOOT	569
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	212
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	783
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONDUIT SPLICE	EACH	1
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6129
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING DOUBLE HANDHOLE	EACH	3
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
EMERGENCY VEHICLE PRIORITY LINE SENSOR CABLE, NO. 20 3C	FOOT	552
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	-	12	10	-
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
ILLUM. SIGN	-	35	5	-
FLASHER	-	25	50	-
STREET NAME SIGN	-	-	-	-
LUMINAIRE	-	-	-	-
TOTAL =				465.4

ENERGY COSTS TO:

Illinois Department of Transportation  
 Division of Highways / District 1  
 201 W Center Court, Schaumburg, Illinois 60196-1096

ENERGY SUPPLY: CONTACT: JEAN WILL  
 PHONE: (847) 816-5459  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER: ---



USER NAME = johnn	DESIGNED - TGM	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - GP	REVISED -
PLOT DATE = 10/31/2019	CHECKED - JMT	REVISED -
	DATE - 09/20/2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, CONTROLLER SEQUENCE,  
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE  
 LAKE COOK ROAD AT US 41 NB RAMPS

SCALE: SHEET TS-14 OF TS-23 SHEETS STA. TO STA.

F.A.P. RTE. 379	SECTION 2010-120-I	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 42
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

TS#1550

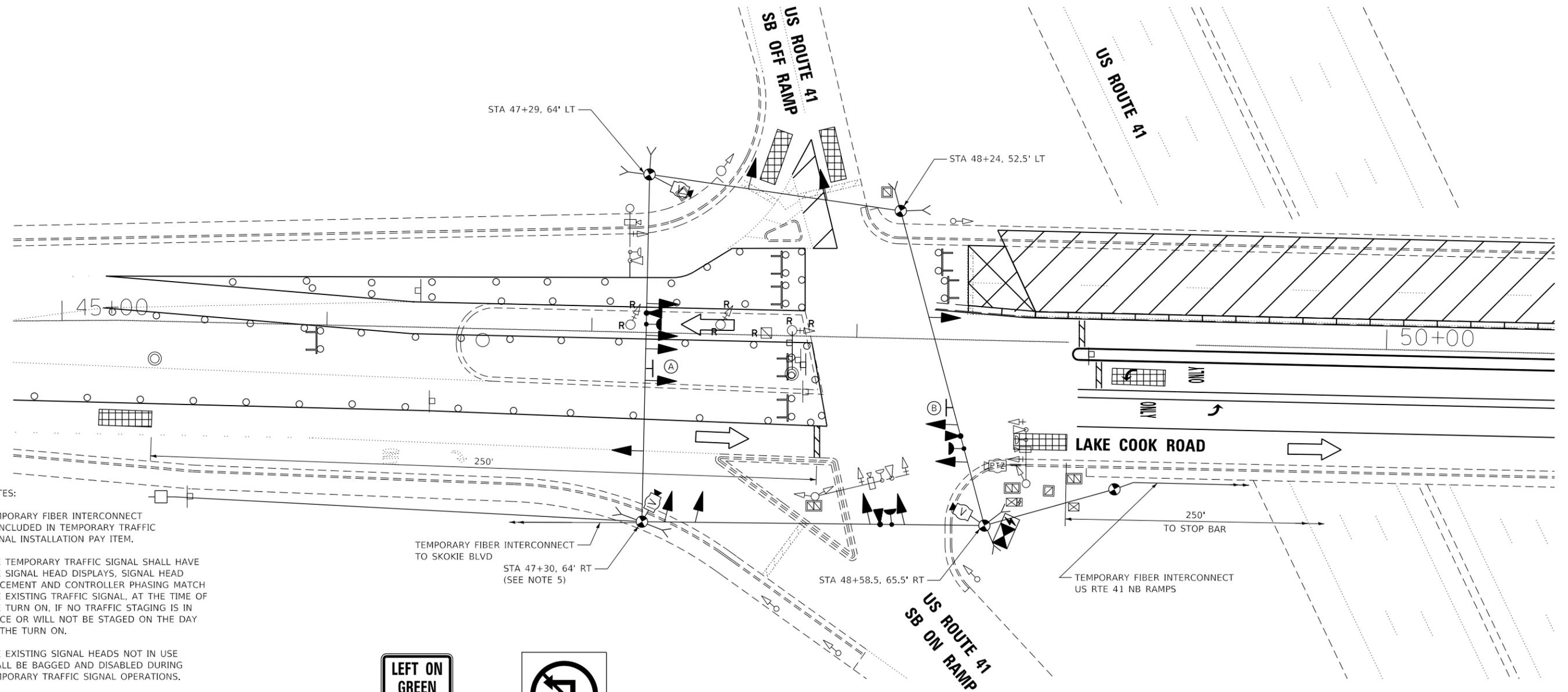
TS SHT NO. 14

FILE NAME = Q:\Engineering\Live\Projects\13034 IDOT DUR Chest\NO 15\CADD\CADD Sheets\Civil\160M68-shr-Prop TS Cable Plan-Lake Cook-EAST.dgn

**REMOVAL AND RELOCATION NOTES:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 3 EACH SIGNAL POST



**NOTES:**

1. TEMPORARY FIBER INTERCONNECT IS INCLUDED IN TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.
2. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENT AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
3. THE EXISTING SIGNAL HEADS NOT IN USE SHALL BE BAGGED AND DISABLED DURING TEMPORARY TRAFFIC SIGNAL OPERATIONS.
4. IF TEMPORARY TRAFFIC SIGNALS ARE IN CONFLICT WITH THE PERMANENT TRAFFIC SIGNALS, THE MAST ARMS SHALL BE ROTATED OR REMOVED AND STORED OUTSIDE OF R.O.W. AND WILL BE THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE EQUIPMENT SAFE. THIS IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
5. HMA PAVEMENT REMOVAL REQUIRED FOR THE TEMPORARY POLE IN THE SW CORNER



(A)  
R10-5  
(30"X36")  
1 REQUIRED



(B)  
R3-2  
(36"X36")  
1 REQUIRED



SCALE 1"=20'-0"

TS SHT NO. 15

FILE NAME = Q:\Engineering\Live\Projects\13034 IDOT DUR Chest\NO 15\CADD\CADD Sheets\Civil\160M68-sht-temp TS Plan-Lake Cook.WEST Stage 1.dgn



USER NAME = johnn	DESIGNED - TGM	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - GP	REVISED -
PLOT DATE = 10/31/2019	CHECKED - JMT	REVISED -
	DATE - 09/20/2019	REVISED -

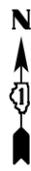
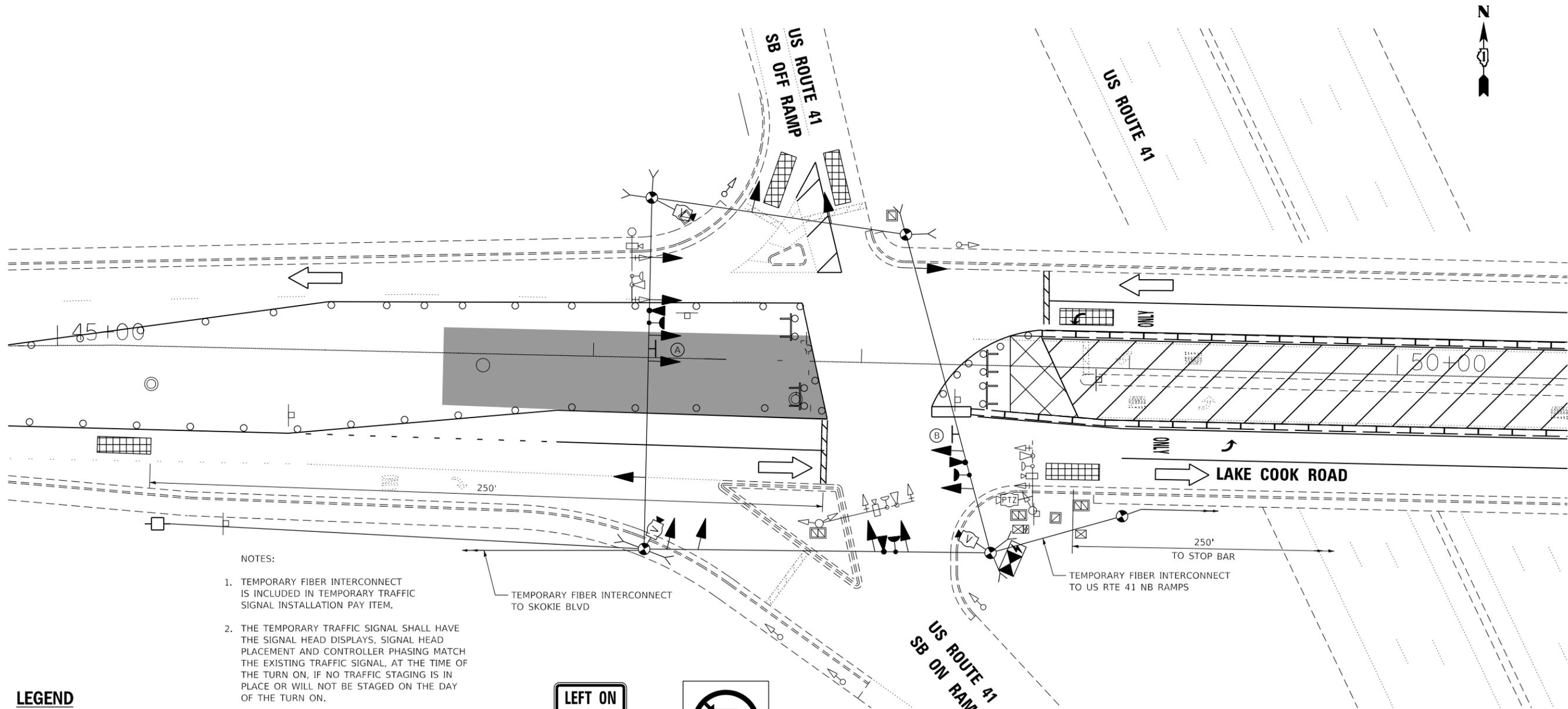
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REMOVE EXISTING TRAFFIC SIGNAL AND TEMPORARY  
TRAFFIC SIGNAL INSTALLATION PLAN - STAGE I  
LAKE COOK ROAD AT US 41 SB RAMPS**

SCALE: SHEET TS-15 OF TS-23 SHEETS STA. TO STA.

F.A.P. RTE. 379	SECTION 2010-120-I	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 43
			CONTRACT NO. 60M68	
ILLINOIS FED. AID PROJECT				

**TS#1561**



NOTES:

1. TEMPORARY FIBER INTERCONNECT IS INCLUDED IN TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.
2. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENT AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
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LEGEND

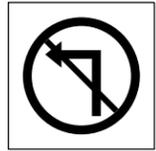
 PORTLAND CEMENT CONCRETE PAVEMENT 12" (JOINTED)

TEMPORARY FIBER INTERCONNECT TO SKOKIE BLVD

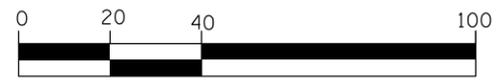
TEMPORARY FIBER INTERCONNECT TO US RTE 41 NB RAMPS



(A)  
R10-5  
(30"X36")  
1 REQUIRED



(B)  
R3-2  
(36"X36")  
1 REQUIRED



SCALE 1"=20'-0"



USER NAME = johnn	DESIGNED - TGM	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - AB	REVISED -
PLOT DATE = 10/31/2019	CHECKED - JMT	REVISED -
	DATE - 09/20/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

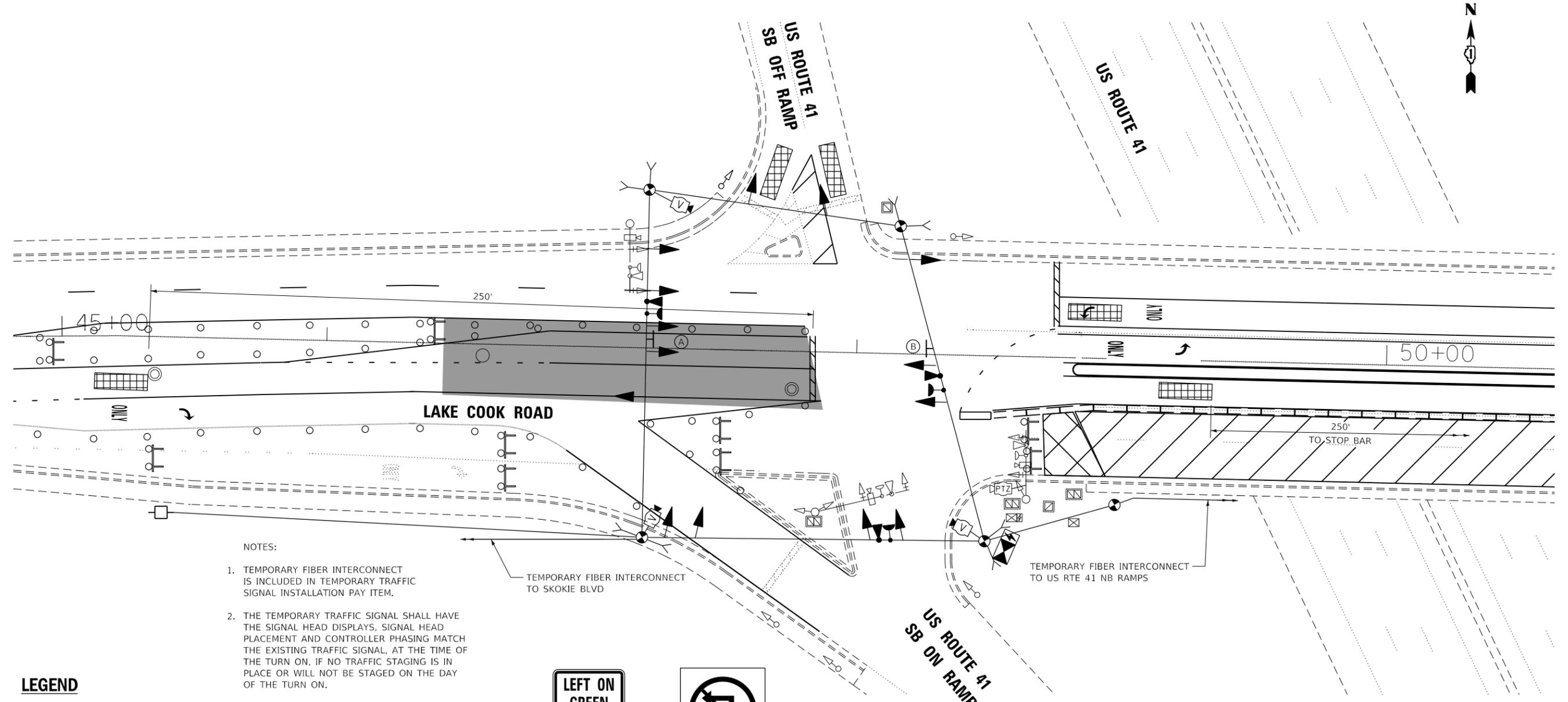
TEMPORARY TRAFFIC SIGNAL PLAN - STAGE II  
LAKE COOK ROAD AT US 41 SB RAMPS

SCALE: SHEET TS-16 OF TS-23 SHEETS STA. TO STA.

F.A.P. RTE. 379	SECTION 2010-120-I	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 44
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

TS#1561

TS SHT NO. 17  
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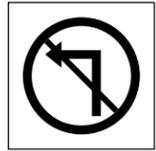
- NOTES:
- TEMPORARY FIBER INTERCONNECT IS INCLUDED IN TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.
  - THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENT AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
  - THE EXISTING SIGNAL HEADS NOT IN USE SHALL BE BAGGED AND DISABLED DURING TEMPORARY TRAFFIC SIGNAL OPERATIONS.
  - IF TEMPORARY TRAFFIC SIGNALS ARE IN CONFLICT WITH THE PERMANENT TRAFFIC SIGNALS, THE MAST ARMS SHALL BE ROTATED OR REMOVED AND STORED OUTSIDE OF R.O.W. AND WILL BE THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE EQUIPMENT SAFE. THIS IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

**LEGEND**

PORTLAND CEMENT CONCRETE PAVEMENT 12" (JOINTED)



(A)  
R10-5  
(30"X36")  
1 REQUIRED



(B)  
R3-2  
(36"X36")  
1 REQUIRED



SCALE 1"=20'-0"



USER NAME = johnn	DESIGNED - TGM	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - AB	REVISED -
PLOT DATE = 10/31/2019	CHECKED - JMT	REVISED -
	DATE - 09/20/2019	REVISED -

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

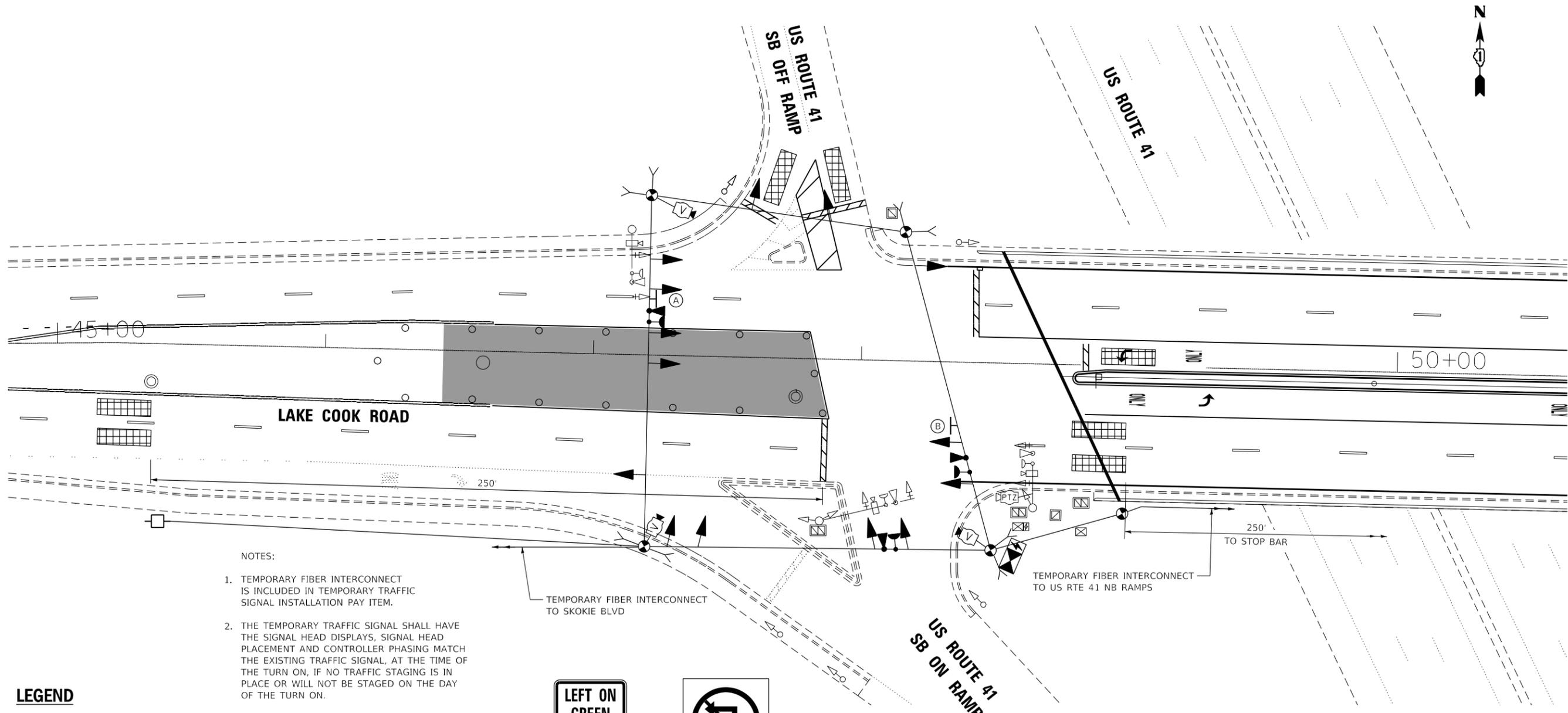
**TEMPORARY TRAFFIC SIGNAL PLAN - STAGE III**  
**LAKE COOK ROAD AT US 41 SB RAMPS**

SCALE: SHEET TS-17 OF TS-23 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	45
CONTRACT NO. 60M68			ILLINOIS FED. AID PROJECT	

**TS#1561**

TS SHT NO. 18  
 FILE NAME = D:\Engineering\Live\Projects\13024 IDOT DUR Chest\MO 15\CADD\CADD Sheets\Civil\106068-shr-temp TS Plan\_Lake Cook\_WEST Stage 4.dgn



**NOTES:**

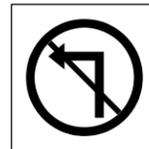
1. TEMPORARY FIBER INTERCONNECT IS INCLUDED IN TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.
2. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENT AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
3. THE EXISTING SIGNAL HEADS NOT IN USE SHALL BE BAGGED AND DISABLED DURING TEMPORARY TRAFFIC SIGNAL OPERATIONS.
4. IF TEMPORARY TRAFFIC SIGNALS ARE IN CONFLICT WITH THE PERMANENT TRAFFIC SIGNALS, THE MAST ARMS SHALL BE ROTATED OR REMOVED AND STORED OUTSIDE OF R.O.W. AND WILL BE THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE EQUIPMENT SAFE. THIS IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

**LEGEND**

 PORTLAND CEMENT CONCRETE PAVEMENT 12" (JOINTED)



(A)  
 R10-5  
 (30"X36")  
 1 REQUIRED



(B)  
 R3-2  
 (36"X36")  
 1 REQUIRED



SCALE 1"=20'-0"



USER NAME = johnn	DESIGNED - TGM	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - AB	REVISED -
PLOT DATE = 10/31/2019	CHECKED - JMT	REVISED -
	DATE - 09/20/2019	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

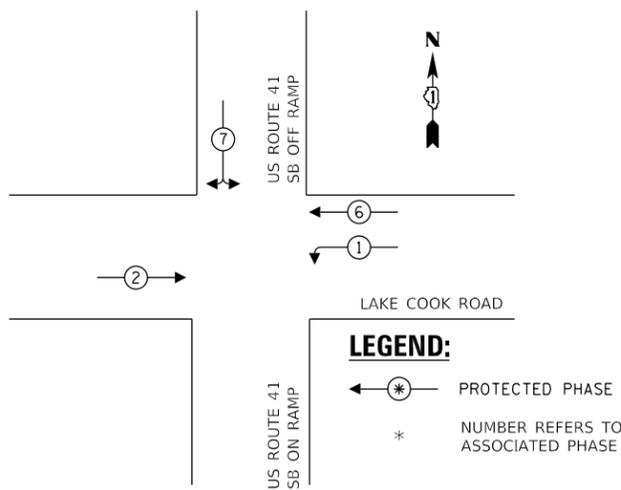
**TEMPORARY TRAFFIC SIGNAL PLAN - STAGE IV  
 LAKE COOK ROAD AT US 41 SB RAMPS**

SCALE: SHEET TS-18 OF TS-23 SHEETS STA. TO STA.

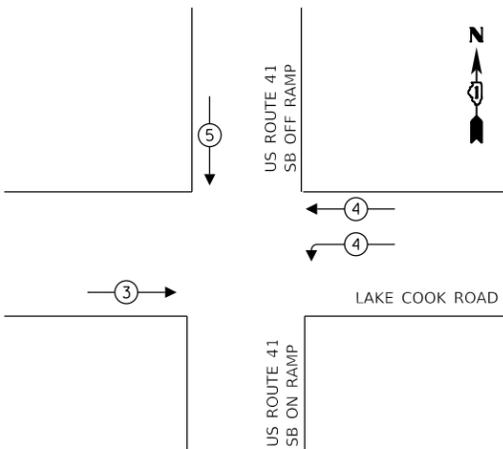
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	46
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

**TS#1561**

**TEMPORARY CONTROLLER SEQUENCE**



**TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE**



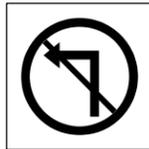
**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW		12	10	-
PED. SIGNAL		25	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
ILLUM. SIGN	-	35	5	-
FLASHER	-	25	50	-
STREET NAME SIGN	-	-	-	-
LUMINAIRE	-	-	-	-
<b>TOTAL =</b>				<b>441.6</b>

ENERGY COSTS TO:  
 ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS / DISTRICT 1  
 201 W CENTER COURT, SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: JEAN WILL  
 PHONE: (847) 816-5459  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER: ---



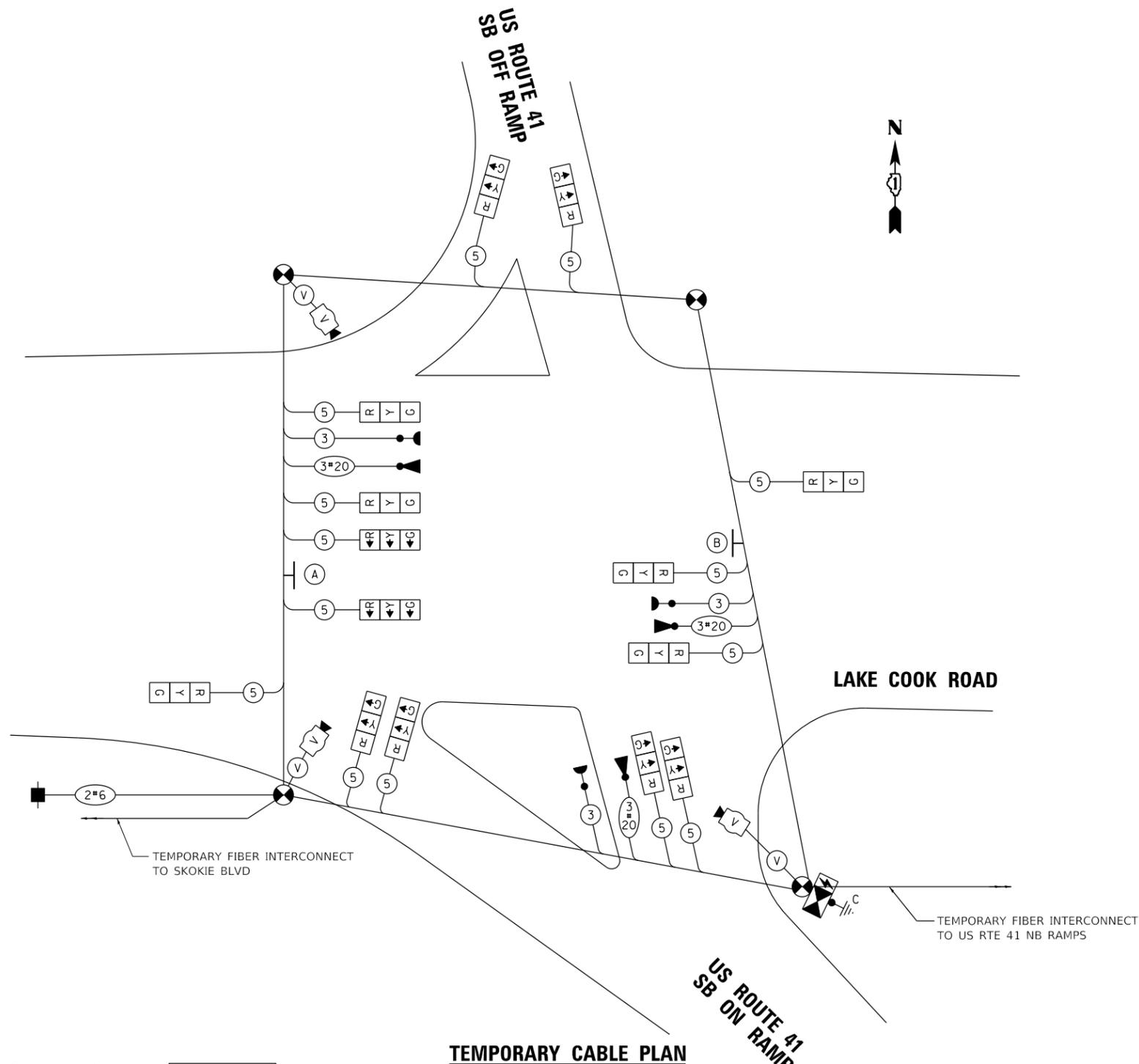
**A**  
 R10-5  
 (30"X36")  
 1 REQUIRED



**B**  
 R3-2  
 (36"X36")  
 1 REQUIRED

**TEMPORARY CABLE PLAN**

N.T.S.



**NOTES:**

- TEMPORARY FIBER INTERCONNECT IS INCLUDED IN TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENT AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- THE EXISTING SIGNAL HEADS NOT IN USE SHALL BE BAGGED AND DISABLED DURING TEMPORARY TRAFFIC SIGNAL OPERATIONS.
- IF TEMPORARY TRAFFIC SIGNALS ARE IN CONFLICT WITH THE PERMANENT TRAFFIC SIGNALS, THE MAST ARMS SHALL BE ROTATED OR REMOVED AND STORED OUTSIDE OF R.O.W. AND WILL BE THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE EQUIPMENT SAFE. THIS IS INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

**TS#1561**

**TS SHT NO. 19**

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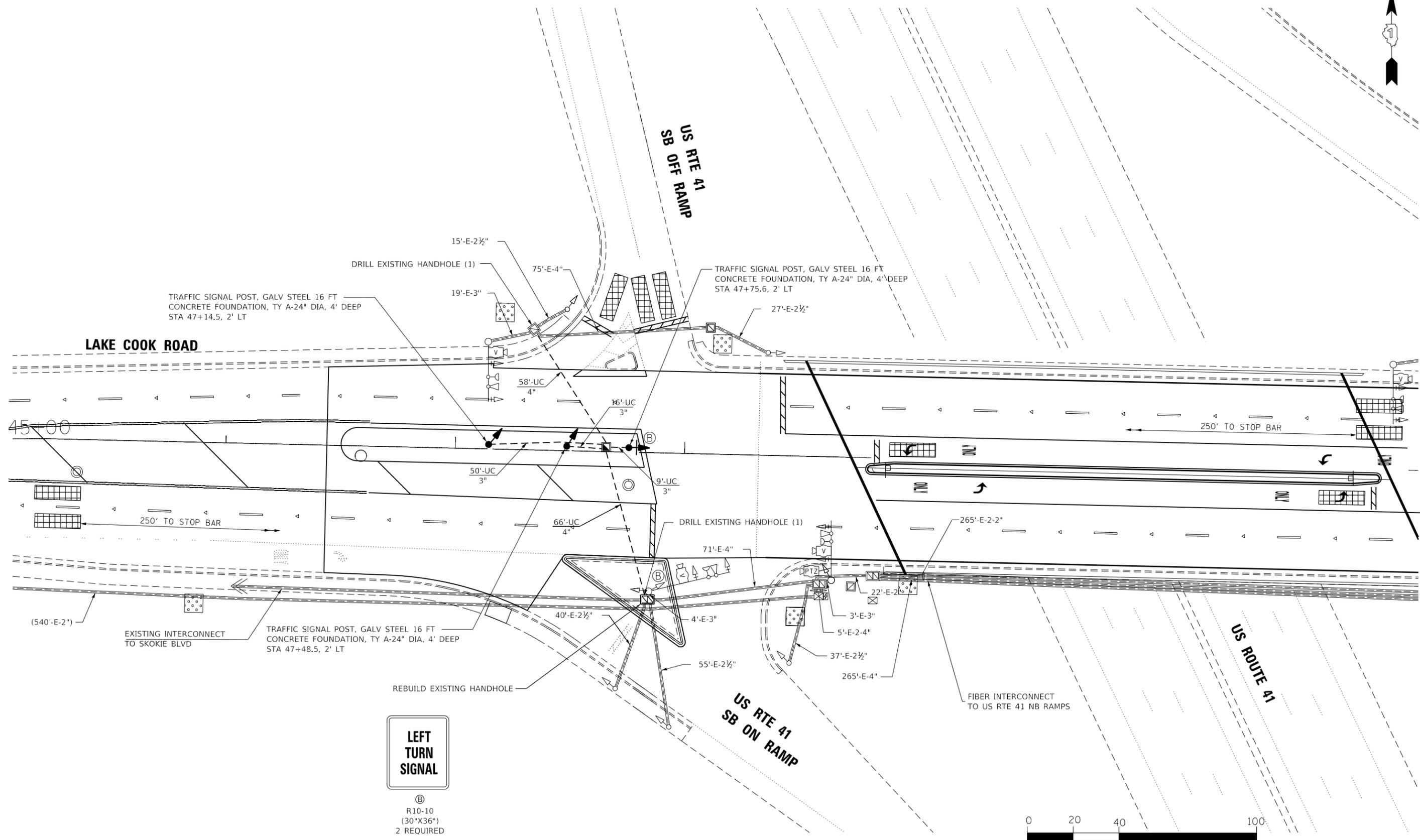
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PLOT DATE = 10/31/2019	CHECKED - JMT	REVISED -
	DATE - 09/20/2019	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM  
 AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
 LAKE COOK ROAD AT US 41 SB RAMPS**

SCALE: SHEET TS-19 OF TS-23 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	47
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



**LEFT  
TURN  
SIGNAL**

ⓑ  
R10-10  
(30"X36")  
2 REQUIRED



SCALE 1"=20'-0"

TS SHT NO. 20  
FILE NAME = Q:\Engineering\Live\Projects\130234 IDOT DUR Chest\NO 15\CADD\CADD Sheets\Civil\160668-shr-Prop TS Plan\_Lake Cook\_WEST.dgn



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PLOT SCALE = 40.0000' / in.	DRAWN - AB	REVISED -
PLOT DATE = 10/31/2019	CHECKED - JMT	REVISED -
	DATE - 09/20/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

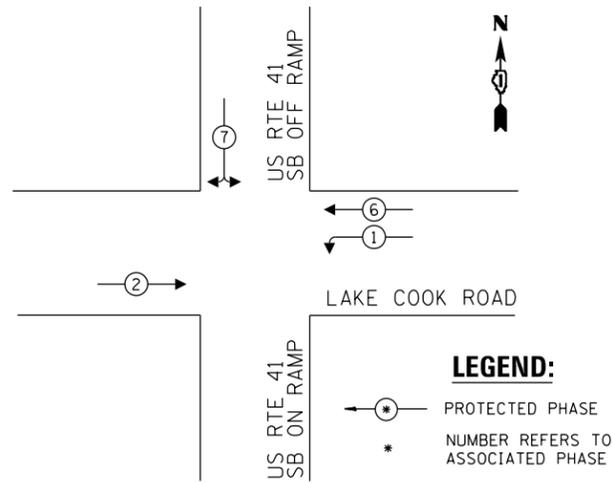
**TRAFFIC SIGNAL MODERNIZATION PLAN  
LAKE COOK ROAD AT US 41 SB RAMPS**

SCALE: SHEET TS-20 OF TS-23 SHEETS STA. TO STA.

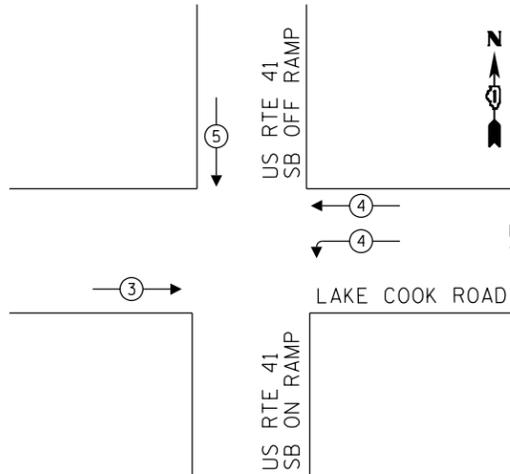
F.A.P. RTE. 379	SECTION 2010-120-I	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 48
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

**TS#1561**

**CONTROLLER SEQUENCE**

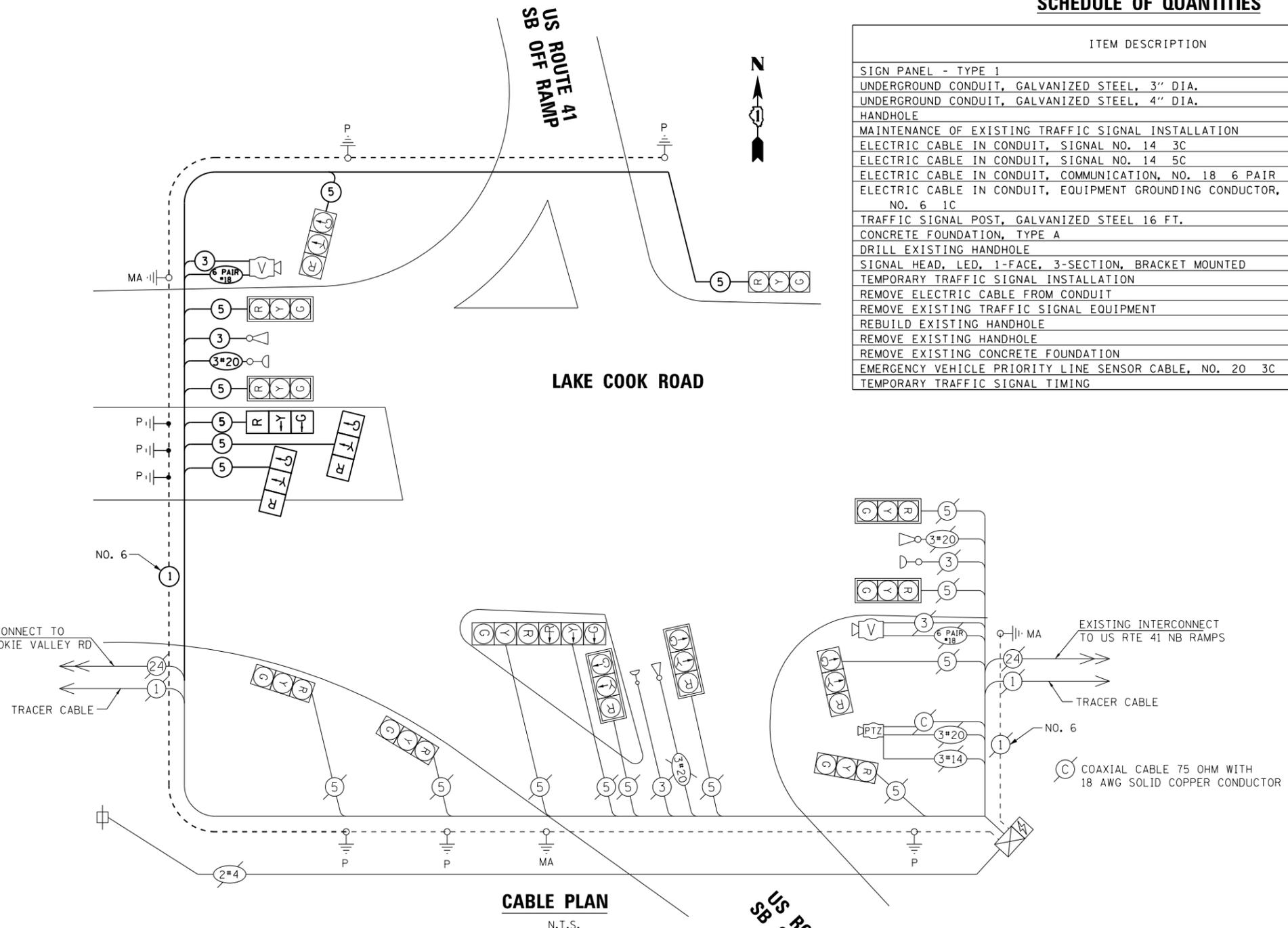


**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	50 FT	15
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	75
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	124
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	617
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2366
ELECTRIC CABLE IN CONDUIT, COMMUNICATION, NO. 18 6 PAIR	FOOT	315
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	566
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
CONCRETE FOUNDATION, TYPE A	FOOT	12
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4170
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
EMERGENCY VEHICLE PRIORITY LINE SENSOR CABLE, NO. 20 3C	FOOT	306
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	17	11	50	93.5
(YELLOW)	17	20	5	17
(GREEN)	17	12	45	91.8
PERMISSIVE ARROW		12	10	
PED. SIGNAL		25	100	
CONTROLLER	1	100	100	100
ILLUM. SIGN		35	5	
VIDEO SYSTEM	1	150	100	150
UPS	1	25	100	25
FLASHER		25	50	
<b>TOTAL =</b>				<b>477.3</b>

ENERGY COST TO: Illinois Department of Transportation  
 Division of Highways / District 1  
 201 W Center Court, Schaumburg, Illinois 60196-1096  
 ENERGY SUPPLY: CONTACT: JEAN WILL  
 PHONE: 847-816-5459  
 COMPANY: ComEd

TS SHT NO. 21

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PLOT DATE = 10/17/2019	CHECKED - JMT	REVISED -
	DATE - 09/20/2019	REVISED -

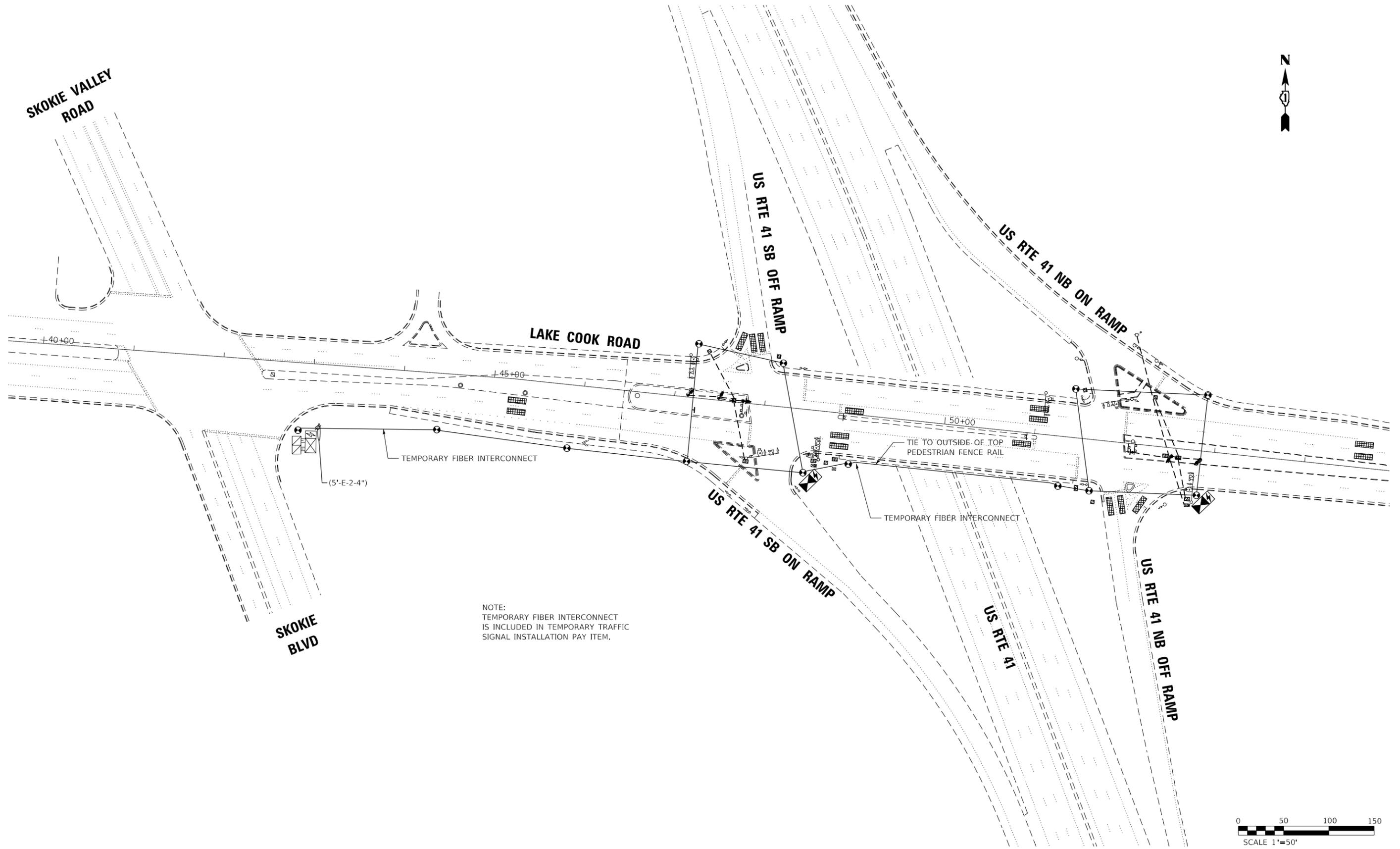
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, CONTROLLER SEQUENCE,  
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE  
LAKE COOK ROAD AT US 41 SB RAMPS

SCALE: SHEET TS-21 OF TS-23 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	49
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

TS#1561



TS SHT NO. 22  
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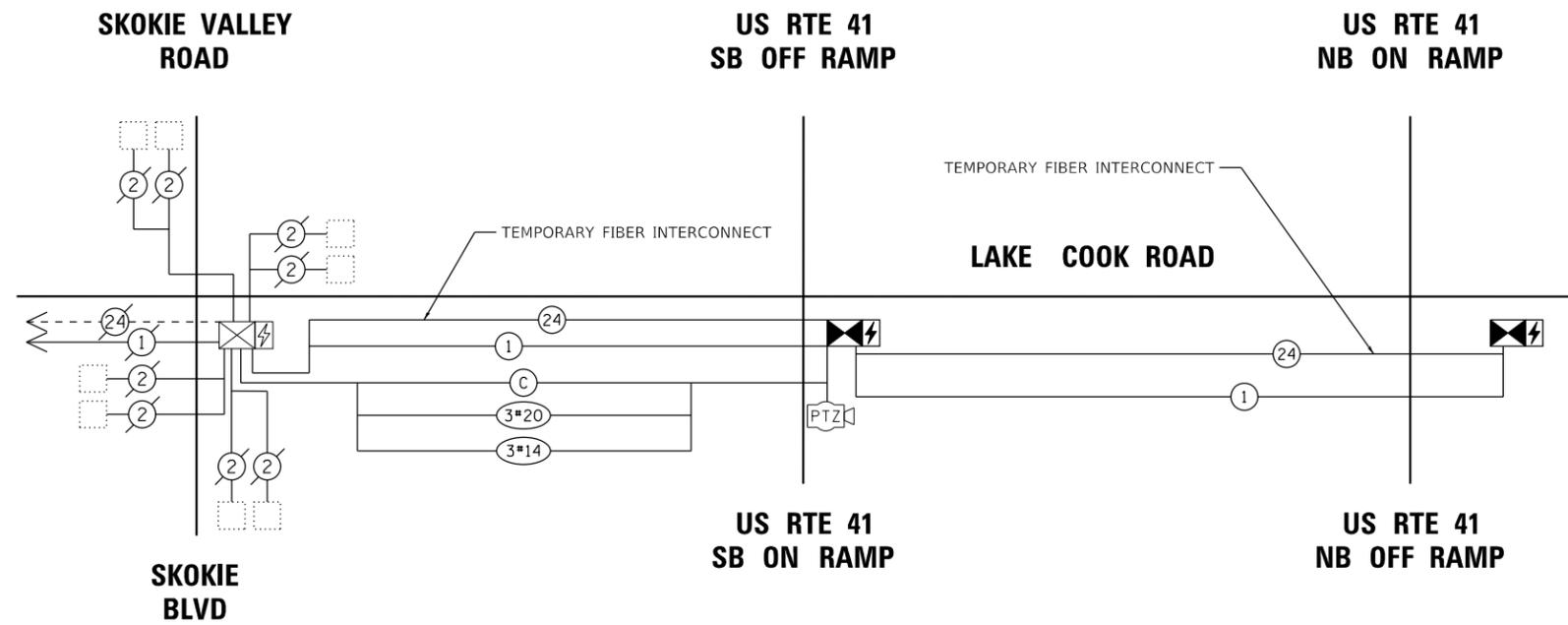
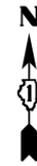
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DRAWN - JN	REVISED -	
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PLOT DATE = 10/17/2019	DATE - 09/20/2019	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT PLAN  
 LAKE COOK ROAD AT US 41**

SCALE: SHEET TS-15 OF TS-23 SHEETS STA. TO STA.

F.A.P. RTE. 379	SECTION 2010-120-I	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 50
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



Ⓢ COAXIAL CABLE 75 OHM WITH  
18 AWG SOLID COPPER CONDUCTOR

TS SHT NO. 23

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PLOT DATE = 10/17/2019	DATE - 09/20/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

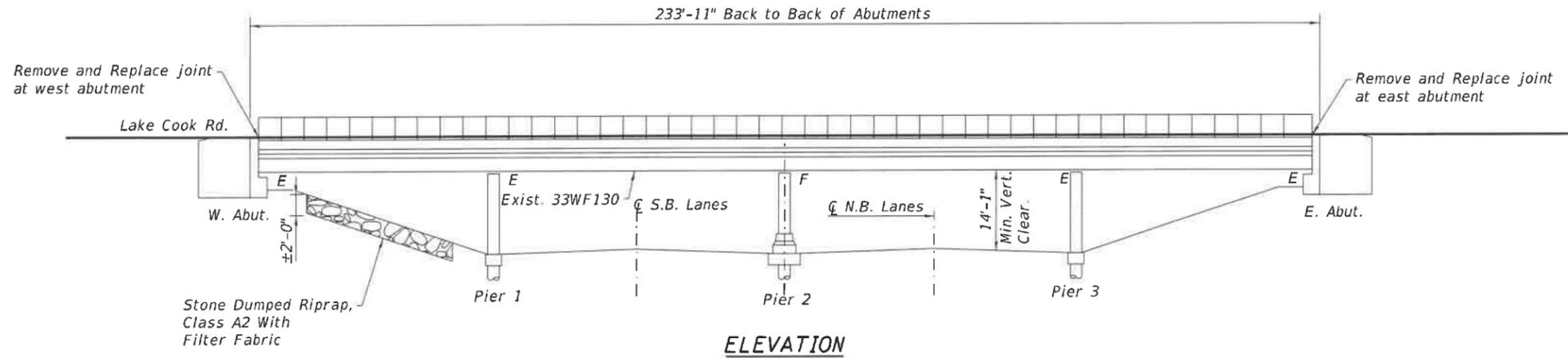
TEMPORARY INTERCONNECT SCHEMATIC  
LAKE COOK ROAD AT US 41

SCALE: SHEET TS-23 OF TS-23 SHEETS STA. TO STA.

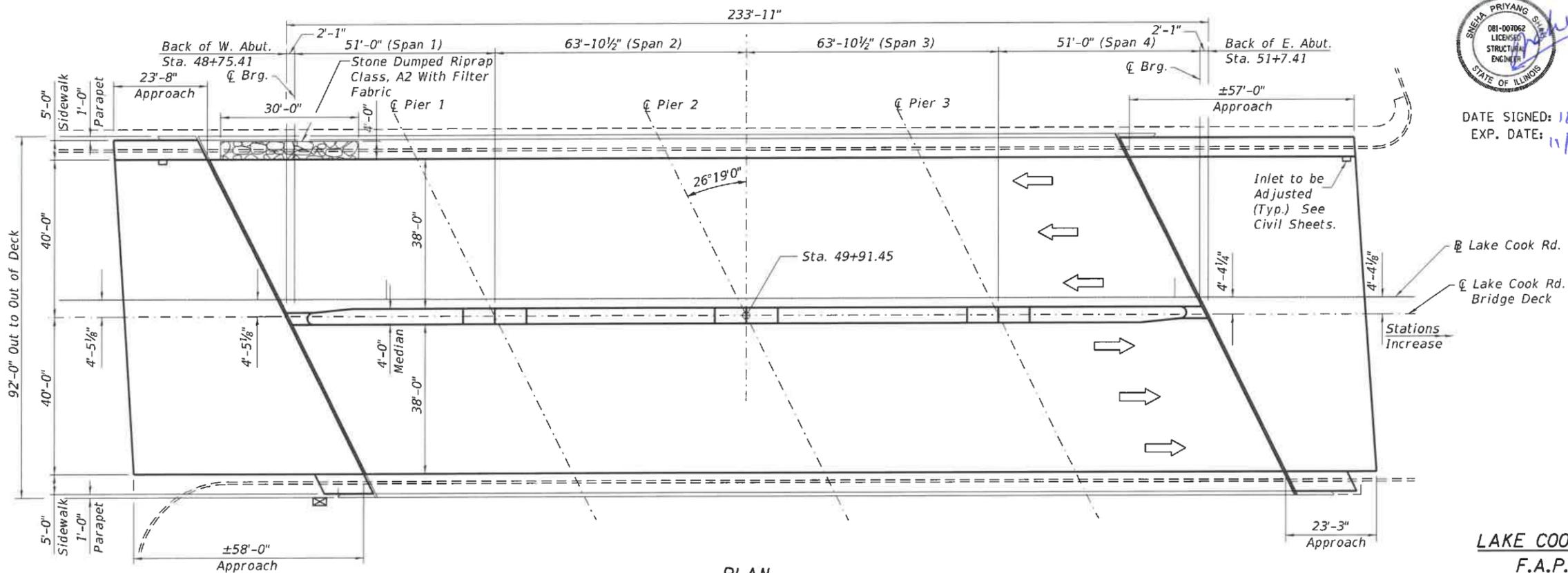
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	51
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

Existing Structure: The existing structure is a 4 span steel beam bridge with a 7½" reinforced concrete deck.  
 The original structure was built in 1950 as Section 1977-208K and reconstructed in 1982.  
 Staged construction shall be utilized to maintain traffic during construction.

No Salvage.



**ELEVATION**



**PLAN**

**SCOPE OF WORK**

1. Install Temporary Protective Shield over traffic as shown on sheet 5-5.
2. Bridge deck scarification.
3. Repair bridge deck.
4. Replace median and close the open joint along Bridge ~.
5. Repair approach Slab.
6. Reconstruct deck joints at each abutment with preformed joint strip seal.
7. Place new overlay on bridge deck and approaches.
8. Repair substructure.
9. Replace diaphragms.



DATE SIGNED: 11/13/2019  
 EXP. DATE: 11/30/2020

**DESIGN SPECIFICATIONS**  
 2002 AASHTO Standard Specifications for Highway Bridges (17th Edition)

**LOADING HS20-44**  
 Original Construction

**DESIGN STRESSES**

**FIELD UNITS**  
 $f_y = 60,000$  psi (reinforcement)  
 $f_y = 36,000$  psi (M270 Grade 36)

**GENERAL PLAN**  
**LAKE COOK ROAD AT US 41 (EDENS EXPY.)**  
**F.A.P. RT. 379 - SEC. 2010-120-1**  
**COOK COUNTY**  
**STATION 49+91.45**  
**STRUCTURE NO. 016-0811**

MODEL: Default  
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PLOT DATE =	11/13/2019	CHECKED -	SPS	REVISED -	

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

SHEET 5-1 OF 5-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-1	COOK	88	52
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

**INDEX OF SHEETS**

- S-1 General Plan
- S-2 General Notes, Index of Sheets and Total Bill of Material
- S-3 Stage Construction Typical Sections
- S-4 Temporary Concrete Barrier For Staged Construction
- S-5 Bridge Deck Repair I
- S-6 Bridge Deck Repair II
- S-7 Raised Median Details
- S-8 Abutment Repairs
- S-9 Pier 1 Repairs
- S-10 Pier 2 Repairs
- S-11 Pier 3 Repairs
- S-12 Structural Steel Repairs
- S-13 Expansion Joint Repairs
- S-14 Expansion Joint Details
- S-15 Prefomed Joint Strip Seal - Sidewalk (1 of 2)
- S-16 Prefomed Joint Strip Seal - Sidewalk (2 of 2)
- S-17 Bar Splicer Assembly and Mechanical Splicer Details
- S-18 Existing Structure Plans (For Information Only) - I
- S-19 Existing Structure Plans (For Information Only) - II
- S-20 Existing Structure Plans (For Information Only) - III
- S-21 Existing Structure Plans (For Information Only) - IV

**GENERAL NOTES:**

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
3. The Contractor shall exercise care during removal of existing joints to ensure that the slab, beams, and diaphragms' integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the slab, beams, diaphragms caused by his operation as directed by the Engineer at no additional cost to the Department.
4. Cost for removal and disposal of existing expansion joints is included in the cost of Concrete Removal.
5. Staged construction shall be utilized to maintain traffic during construction.
6. All structural steel shall conform to AASHTO M-270 Gr. 36, unless otherwise noted.
7. The existing structural steel coating may contain lead. The Contractor shall take appropriate precautions to deal with the presence of lead in this project.
8. Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
9. All new structural steel shall be Hot-dip galvanized. See Special Provisions for "Hot dip Galvanizing for Srtuctural Steel". Cost included with the cost of Furnishing and Erecting Structural Steel
10. Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.
11. Protective coat shall be applied to the bridge sidewalks, median, overlay, and inside and top faces of parapets of new and existing concrete.
12. Fasteners shall be AASHTO M164 Type I, mechanically galvanized bolts. Bolts 3/4" dia., holes 13/16" dia., unless otherwise noted.
13. Expansion joints shall be fabricated to conform to the existing cross slope of the bridge.

**TOTAL BILL OF MATERIAL**

ITEM DESCRIPTION	UNIT	SUB	SUPER	QUANTITY
Stone Dumped Riprap, Class A2	Ton	18		18
Filter Fabric	Sq. Yd.	14		14
Concrete Removal	Cu. Yd.		70.1	70.1
Protective Shield	Sq. Yd.		1,181	1,181
Concrete Superstructure	Cu. Yd.		74.5	74.5
Bridge Deck Grooving	Sq. Yd.		1,850	1,850
Protective Coat	Sq. Yd.		2,540	2,540
Furnishing and Erecting Structural Steel	Pound		2,450	2,450
Reinforcement Bars, Epoxy Coated	Pound		8,530	8,530
Bar Splicers	Each		48	48
Prefomed Joint Strip Seal	Foot		206	206
Epoxy Crack Injection	Foot	6		6
Approach Slab Repair (Full Depth)	Sq. Yd.		77	77
* Approach Slab Repair (Partial Depth)	Sq. Yd.		10	10
Structural Steel Removal	Pound		2,130	2,130
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq. Yd.		1,953	1,953
Bridge Deck Scarification, 3/4"	Sq. Yd.		1,953	1,953
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.	497	26	523
Structural Repair of Concrete (Depth Greater Than 5")	Sq. Ft.	21		21
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.		3	3
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.		143	143
Deck Slab Repair (Partial)	Sq. Yd.		59	59
Temporary Shoring and Cribbing	Each	5		5

\* Nominal quantity to be used as needed and as approved by the Engineer.

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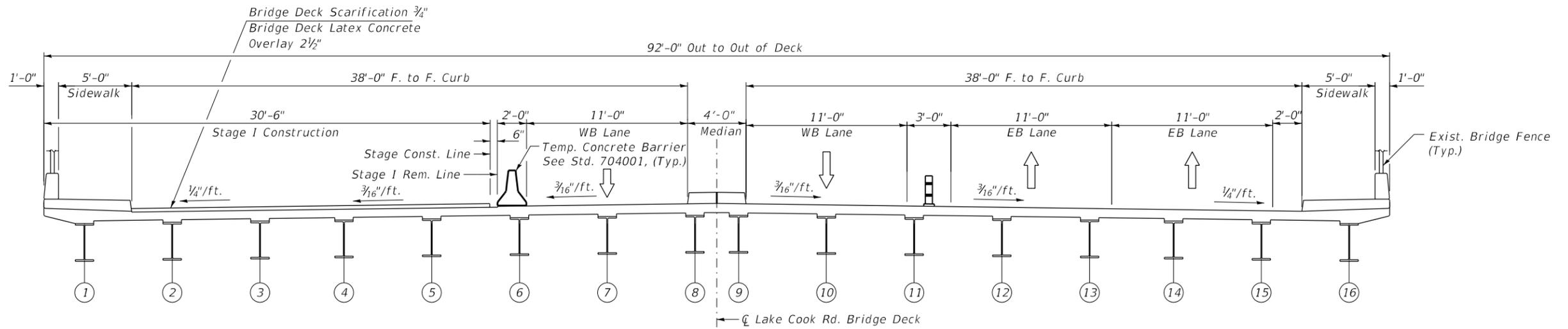


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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

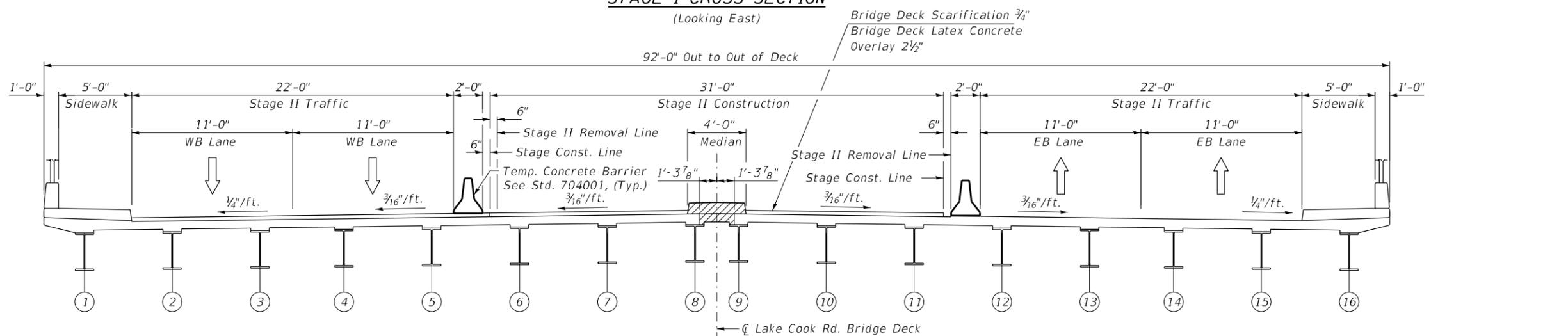
**GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIAL  
STRUCTURE NO. 016-0811**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	53
CONTRACT NO. 60M68				
		ILLINOIS	FED. AID PROJECT	



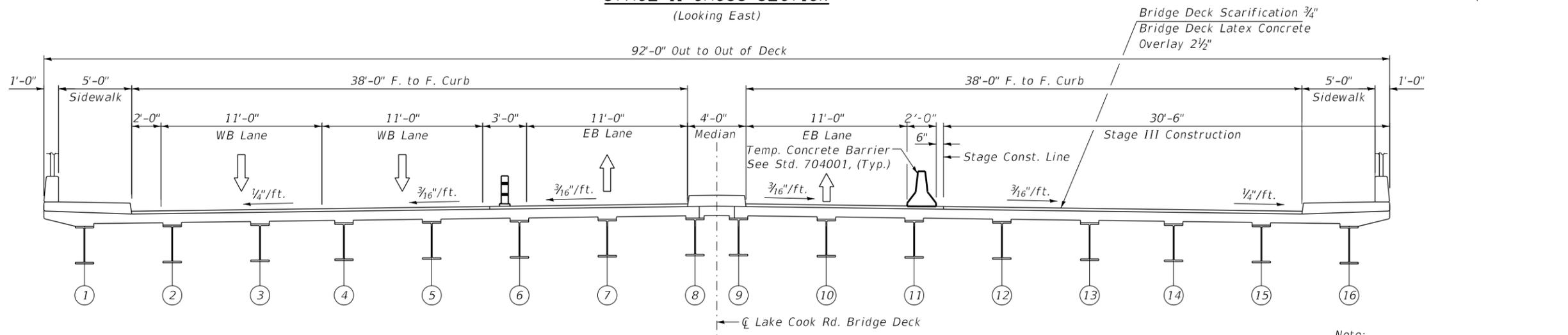
**STAGE I CROSS SECTION**

(Looking East)



**STAGE II CROSS SECTION**

(Looking East)



**STAGE III CROSS SECTION**

(Looking East)

Note:  
 See sheets S-10 and S-11 for Piers 2 and 3 repairs during Stage I and Stage III.

All dimensions are perpendicular to  
 Lake Cook Rd. Bridge Deck.

MODEL: Default  
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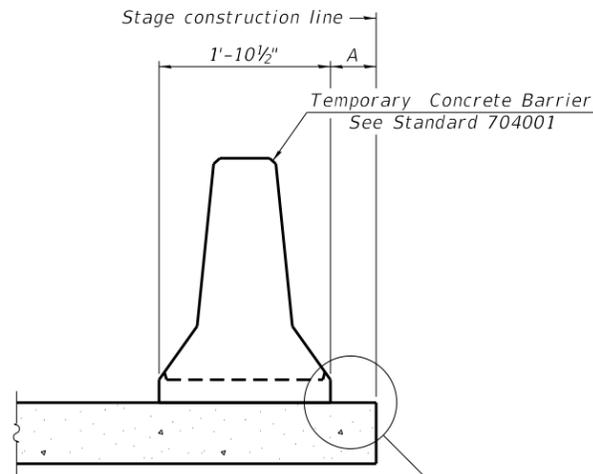
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CHECKED - JMT	REVISIONS -	
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PLOT DATE = 11/13/2019	CHECKED - SPS	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION TYPICAL SECTIONS  
 STRUCTURE NO. 016-0811

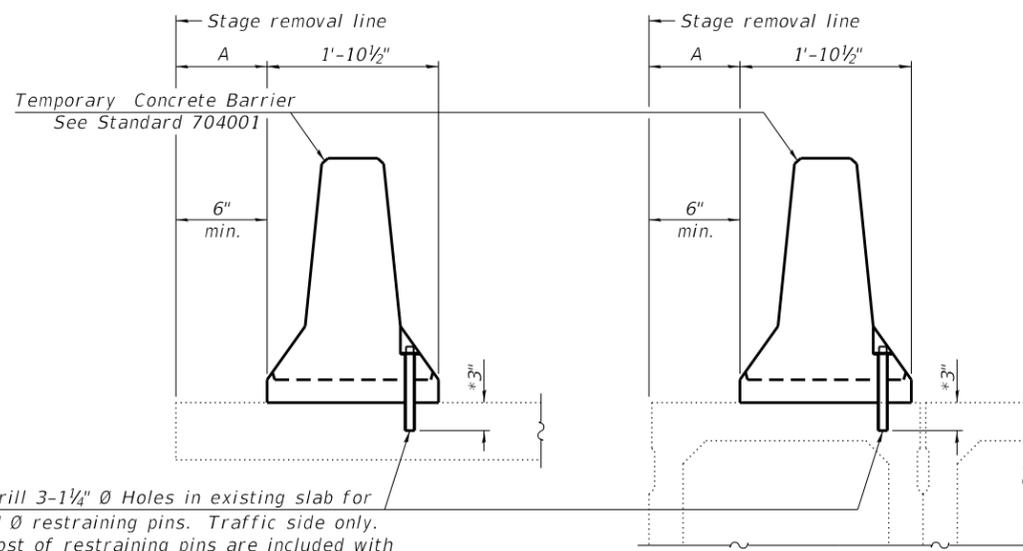
SHEET S-3 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-4	COOK	88	54
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

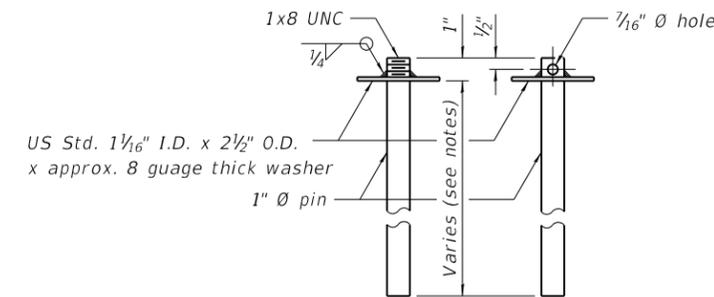


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

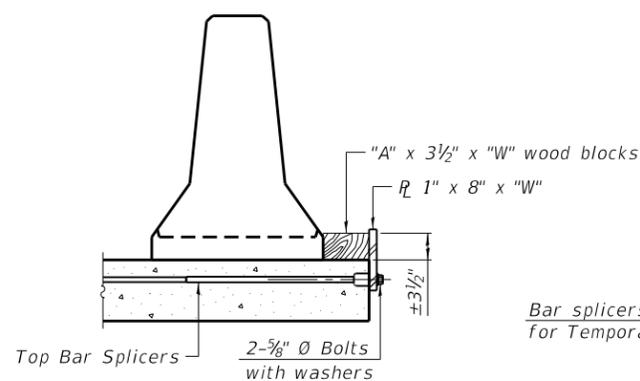
\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

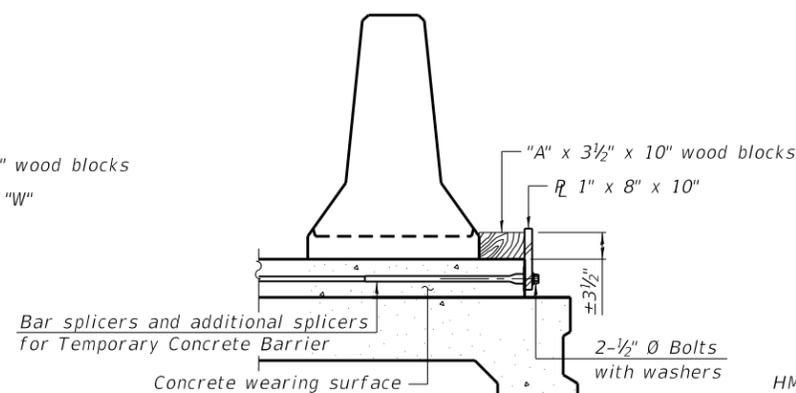


RESTRAINING PIN

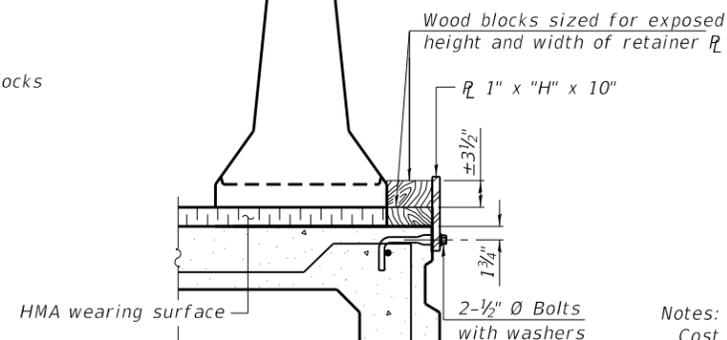
SECTIONS THRU SLAB OR DECK BEAM



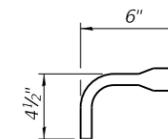
DETAIL I



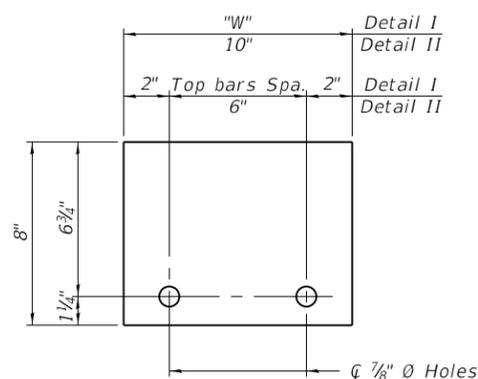
DETAIL II



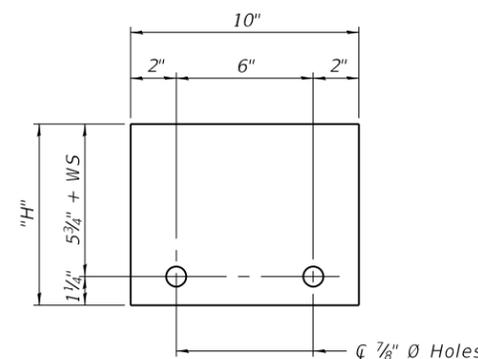
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER 1" x 8" x "W"  
(Detail I and II)



STEEL RETAINER 1" x "H" x 10"  
(Detail III)

Notes:  
 Cost of retainer assembly is included with Temporary Concrete Barrier.  
 A retainer assembly shall be located at the approximate center of each temporary concrete barrier.  
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.  
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate.  
 For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.  
 Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.  
 Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

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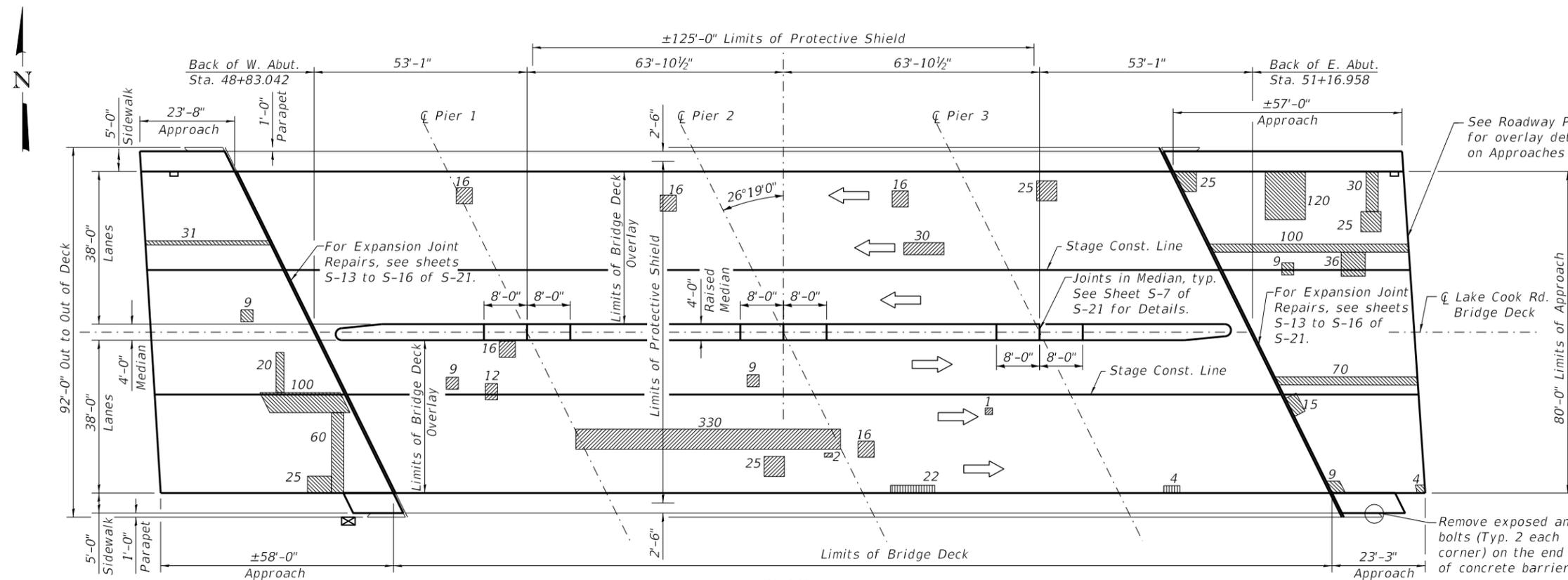
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
 STRUCTURE NO. 016-0811

SHEET S-4 OF S-21 SHEETS

F.A.P. RTE. 379	SECTION 2010-120-4	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 55
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



**PLAN**

See sheet S-6 for more Bridge Deck Repairs

**NOTES:**

- Deck and approach slab repair areas are estimated based on visual inspection and will be paid for as specified in the Special Provision. Actual repair areas and locations shall be determined by the Engineer and shown on As-built plans. Engineer shall sound deck after deck scarification.
- Protective Coat shall be applied to the bridge sidewalks, median, overlay, and front and top faces of the parapets (new & existing concrete).
- All dimensions are perpendicular to  $\bar{C}$  Lake Cook Rd Bridge Deck.
- Approach reinforcement details are unknown. Contractor shall be cautious when saw cutting into approach. Any damaged reinforcement shall be replaced in-kind at no additional cost.
- Cost of anchor bolt removal and sealing shall be included in Concrete Removal.
- Protective Shield shall be placed over traffic lanes and half the shoulder widths on US 41 (Edens Expressway).
- Full depth Approach Slab repairs shall be done in stages with 4 ft. long (max.) sections removed at a time and a 4 ft. section (min.) between removed sections or as directed by the Engineer, to ensure the approach slab stability and strength.
- Quantity for Concrete Removal is on Sheet S-7 of S-21.
- All areas shown in the Plan View are in Square Feet.
- Full Depth Deck Repairs shown on Sheet S-6 of S-21.

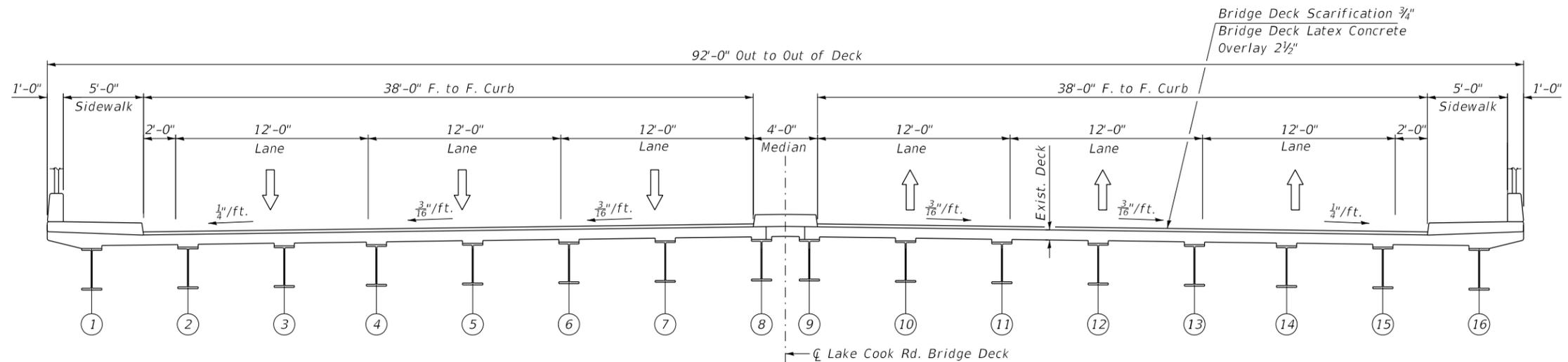
**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Deck Slab Repair (Partial)	Sq. Yd.	59
Approach Slab Repair (Full Depth)	Sq. Yd.	77
* Approach Slab Repair (Partial Depth)	Sq. Yd.	10
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.	26
Protective Coat	Sq. Yd.	2,408
Bridge Deck Grooving	Sq. Yd.	1,850
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq. Yd.	1,953
Bridge Deck Scarification, 3/4"	Sq. Yd.	1,953
Protective Shield	Sq. Yd.	1,181

\* Nominal quantity to be used as needed and as approved by the Engineer.

**LEGEND**

- Deck Slab Repair (Partial)
- Approach Slab Repair (Full Depth)
- Structural Repair of Concrete (Depth Equal to or Less Than 5")



**DECK CROSS SECTION**

(Looking East)  
(All dimensions are perpendicular to  $\bar{C}$  Lake Cook Road Bridge Deck)

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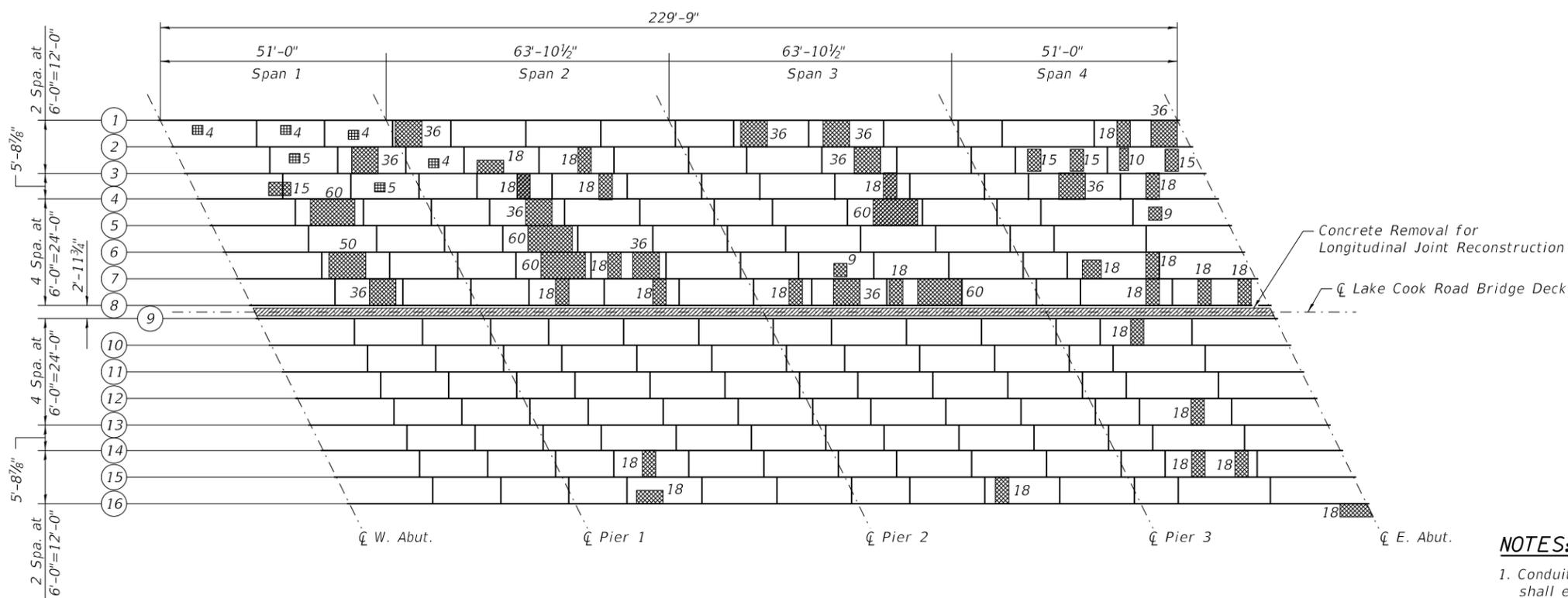
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK REPAIR - I  
STRUCTURE NO. 016-0811**

SHEET S-5 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-4	COOK	88	56
CONTRACT NO. 60M68				

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**DECK SOFFIT PLAN**

**NOTES:**

1. Conduits are located throughout the underside of the deck. The Contractor shall exercise extreme care with existing conduits to protect and support the conduits. Broken clips shall be replaced. Cost included in Deck Slab Repair (Full Depth, Type I). The Contractor will be required to repair any damage done to the conduit to the satisfaction of the Engineer. No splicing will be allowed to any cable damage resulting from this work, instead the Contractor will be required to repair the entire span of any damaged cable at no additional cost to the Department.
2. All areas shown in the plan view are in Square Feet.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	3
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	143

**LEGEND**

- Deck Slab Repair (Full Depth, Type I)
- Deck Slab Repair (Full Depth, Type II)

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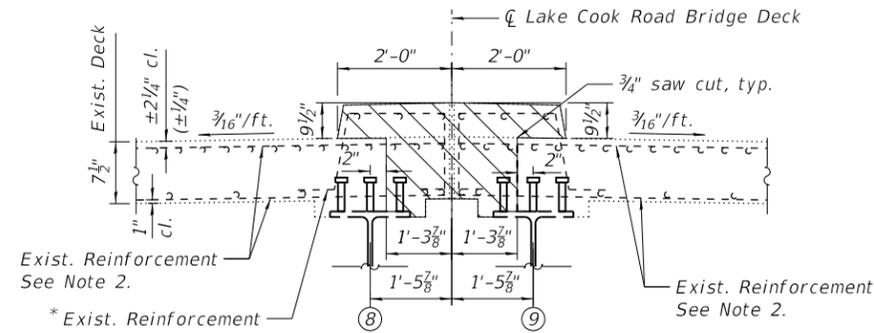
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

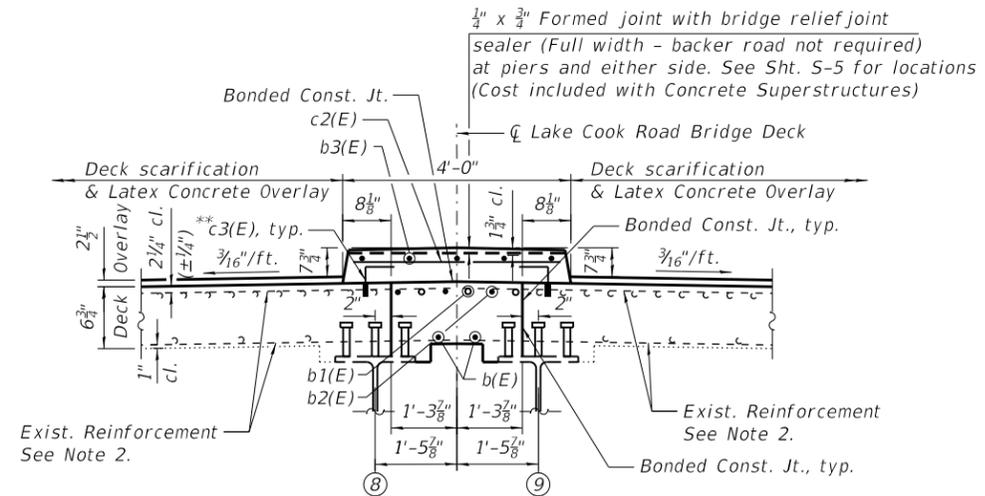
**BRIDGE DECK REPAIR - II  
STRUCTURE NO. 016-0811**

SHEET S-6 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	57
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



**SECTION THRU EXISTING  
LONGITUDINAL JOINT & MEDIAN**



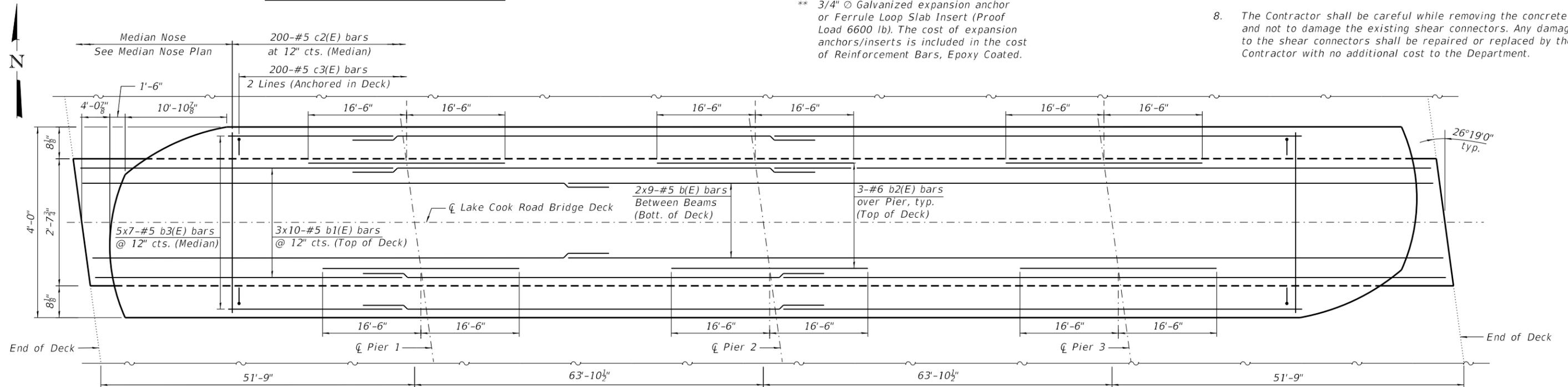
**SECTION THRU MEDIAN**

**NOTES**

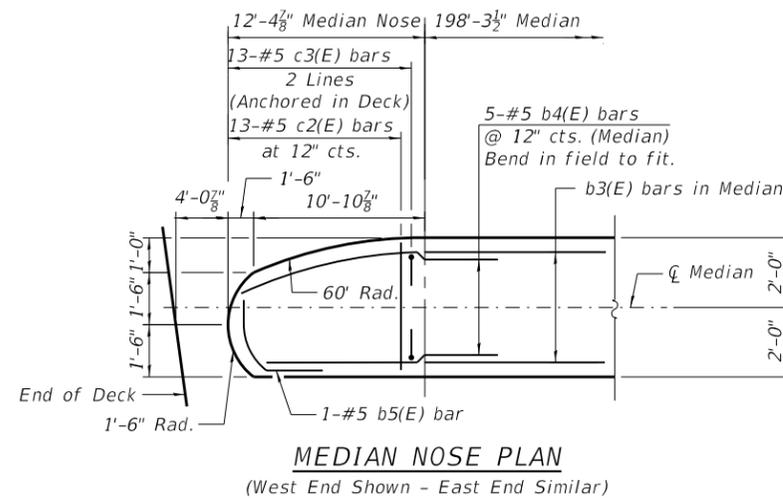
1. Any reinforcement bars to remain that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
2. Existing Reinforcement bars to remain shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
3. Longitudinal joint removal cost included with Concrete Removal.
4. Hatched areas indicate concrete section to be removed. Perimeters of Concrete Removal areas shall be saw cut 3/4" prior to the removal of the concrete.
5. Bar indicated thus 5x9-#5, etc. indicates 5 lines of bars with 9 lengths per line.
6. See Sheet S-2 of S-21 for the Bill of Materials.
7. See Sheets S-13 to S-16 of S-21 for Expansion Joint Replacement Details.
8. The Contractor shall be careful while removing the concrete and not to damage the existing shear connectors. Any damage to the shear connectors shall be repaired or replaced by the Contractor with no additional cost to the Department.

\* Cut bars at concrete removal line between the deck and the median.

\*\* 3/4" Galvanized expansion anchor or Ferrule Loop Slab Insert (Proof Load 6600 lb). The cost of expansion anchors/inserts is included in the cost of Reinforcement Bars, Epoxy Coated.



**MEDIAN PLAN**

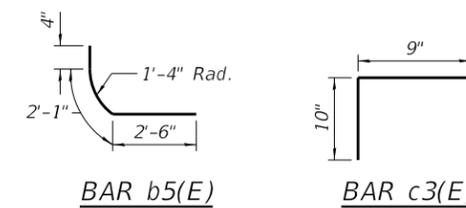


**MEDIAN NOSE PLAN**

(West End Shown - East End Similar)

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
b(E)	18	#5	28'-10"	—
b1(E)	30	#5	26'-4"	—
b2(E)	9	#6	33'-0"	—
b3(E)	35	#5	27'-11"	—
b4(E)	10	#5	15'-9"	—
b5(E)	2	#5	4'-11"	—
c2(E)	226	#5	3'-8"	—
c3(E)	452	#5	1'-7"	—
Concrete Removal			Cu. Yd.	41.4
Concrete Superstructure			Cu. Yd.	42.4
Protective Coat			Sq. yd.	132
Reinforcement Bars, Epoxy Coated			Pound	4,620



**MIN BAR LAP**  
#5 Bar = 3'-0"

**BAR b5(E)**

**BAR c3(E)**

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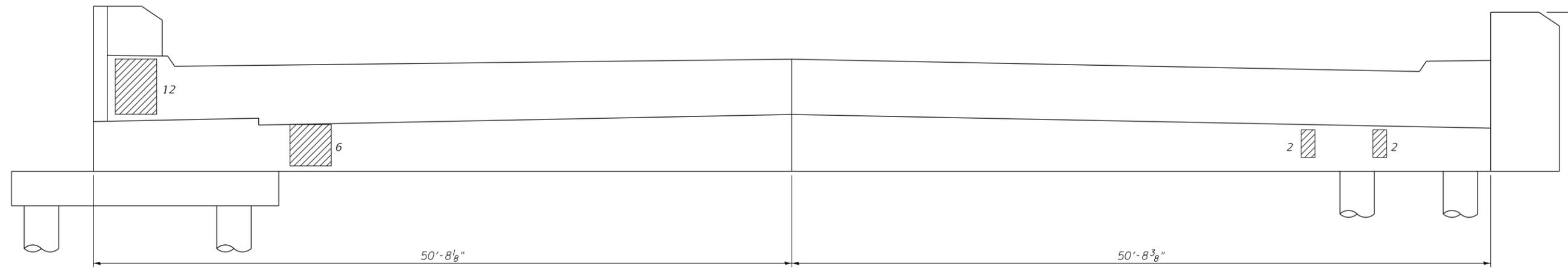
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

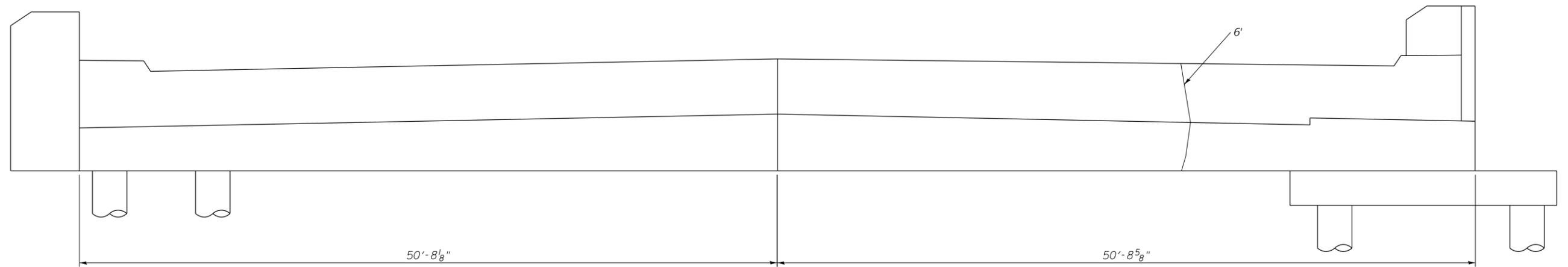
**RAISED MEDIAN DETAILS  
STRUCTURE NO. 016-0811**

SHEET S-7 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-4	COOK	88	58
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



**EAST ABUTMENT ELEVATION**  
(Looking East)



**WEST ABUTMENT ELEVATION**  
(Looking West)

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5')	Sq. Ft.	22
Epoxy Crack Injection	Foot	6

**LEGEND**

- Structural Repair of Concrete  
(Depth Equal to or Less than 5')
- Epoxy Crack Injection

**Notes:**

1. All Areas shown in the Elevation Views are in Square Feet.
2. Repair areas shown on this sheet shall be verified in the field for actual locations, size and depth.

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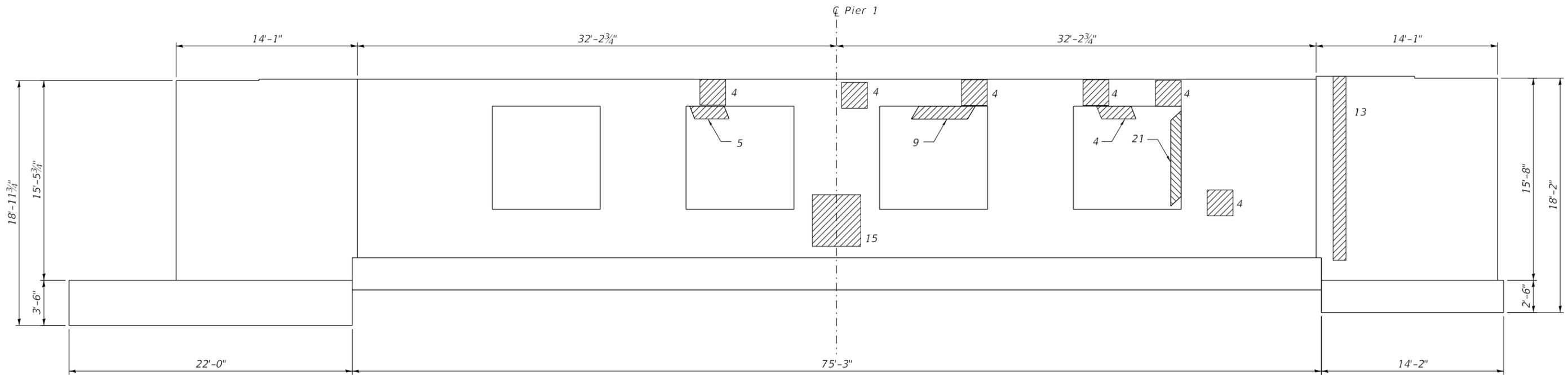
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT REPAIRS  
STRUCTURE NO. 016-0811**

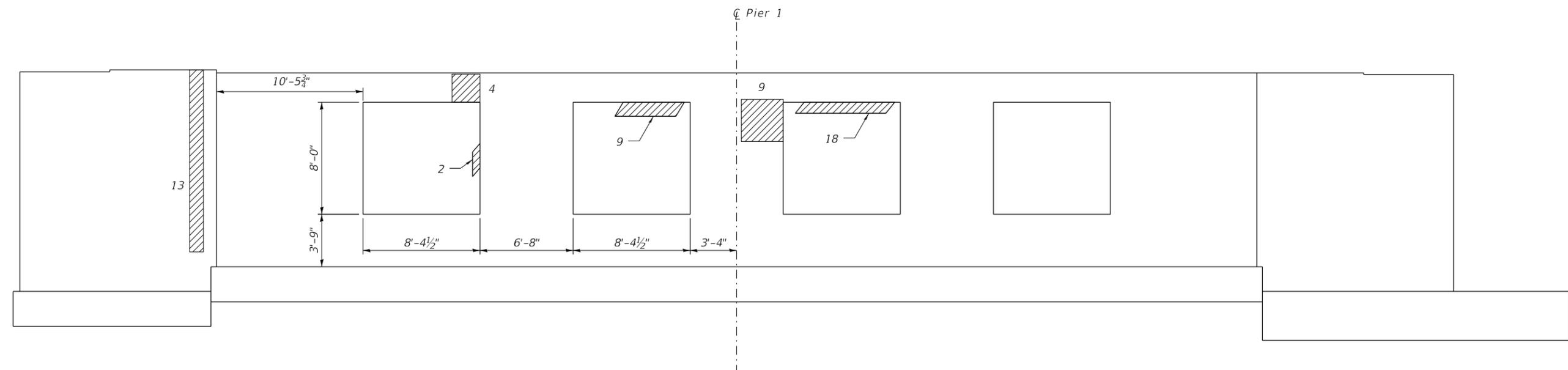
SHEET S-8 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	59
CONTRACT NO. 60M68				
		ILLINOIS	FED. AID PROJECT	

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**PIER 1 ELEVATION**  
 (Looking West)



**PIER 1 ELEVATION**  
 (Looking East)

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.	125
Structural Repair of Concrete (Depth Greater than 5")	Sq. Ft.	21

**LEGEND**

Structural Repair of Concrete (Depth Equal to or Less than 5")

Structural Repair of Concrete (Depth Greater than 5")

Notes:  
 1. All Areas shown in the Elevation Views are in Square Feet.  
 2. Repair areas shown on this sheet shall be verified in the field for actual locations, size and depth.



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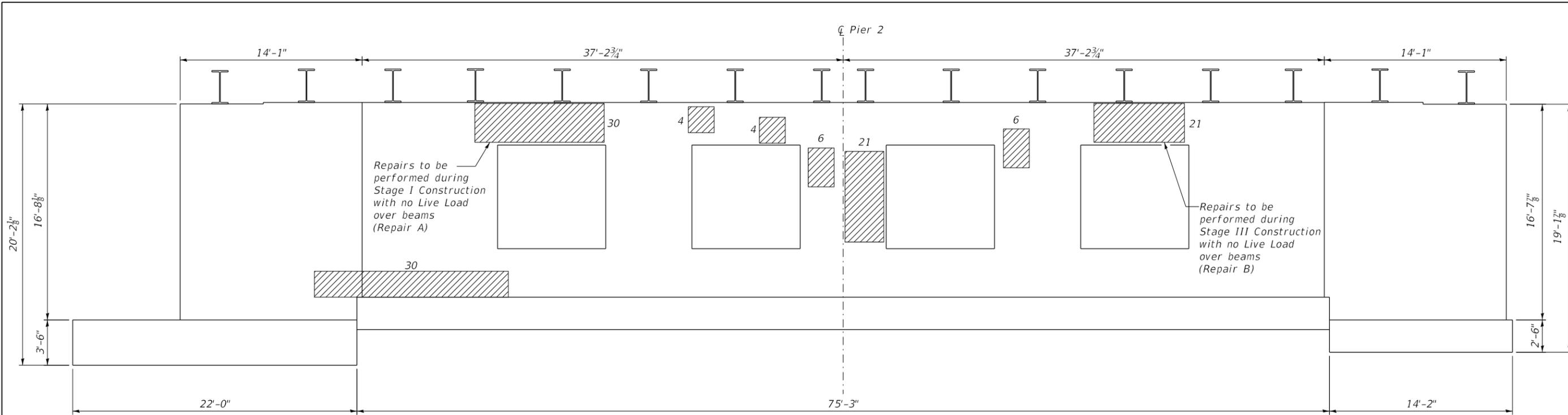
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PIER 1 REPAIRS**  
**STRUCTURE NO. 016-0811**

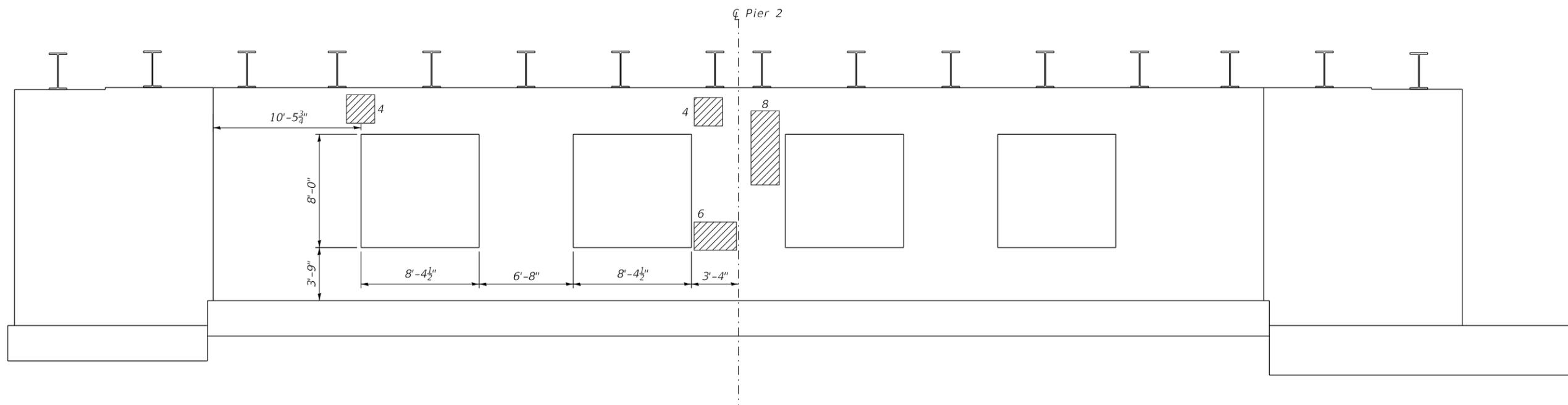
SHEET S-9 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-4	COOK	88	60
CONTRACT NO. 60M68				

ILLINOIS FED. AID PROJECT



**PIER 2 ELEVATION**  
(Looking East)



**PIER 2 ELEVATION**  
(Looking West)

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.	144

**LEGEND**

Structural Repair of Concrete  
(Depth Equal to or Less than 5")

**Notes:**

- All Areas shown in the Elevation Views are in Square Feet.
- Staging References shown are for Stages on Lake Cook Road.
- Repair areas shown on this sheet shall be verified in the field for actual locations, size and depth.

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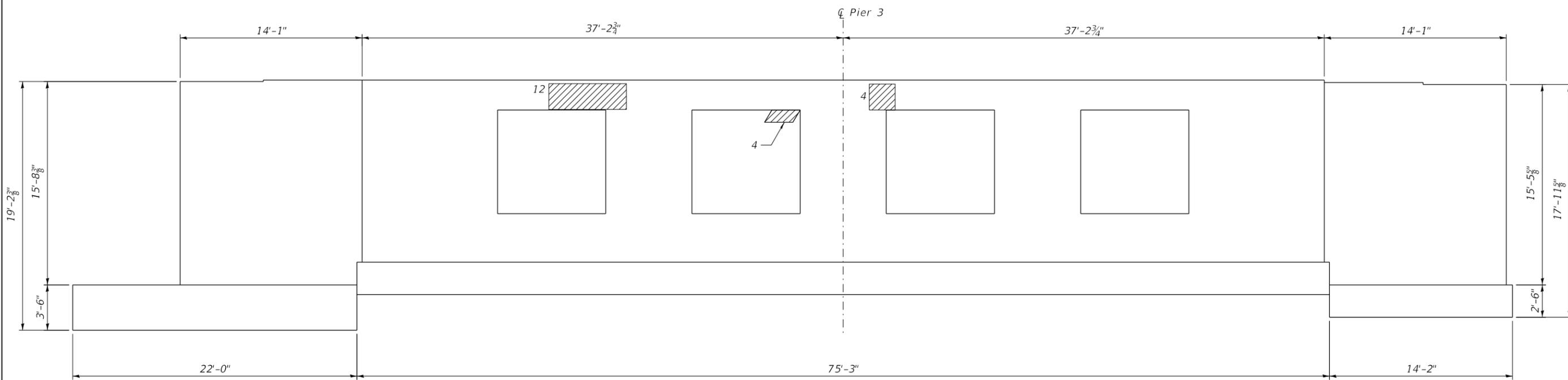
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

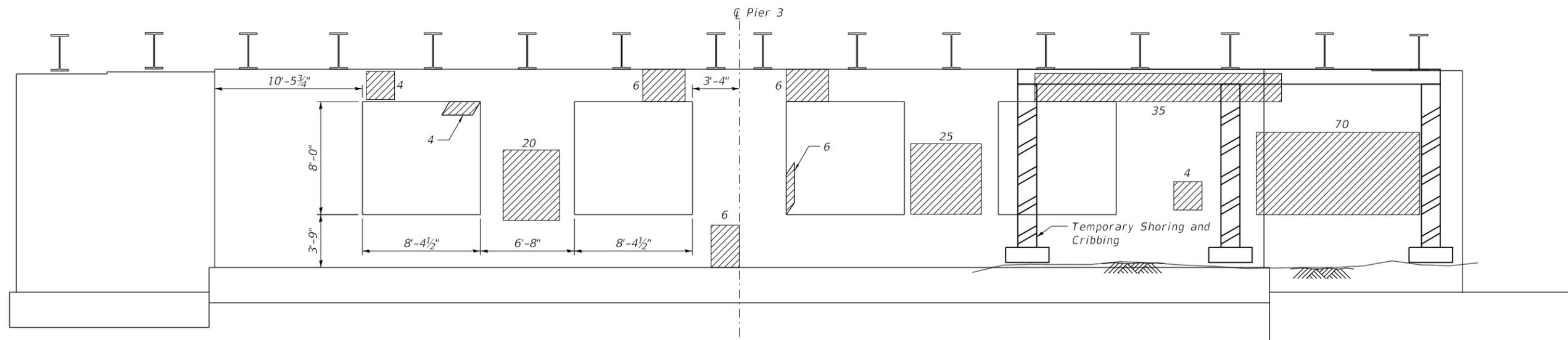
**PIER 2 REPAIRS**  
**STRUCTURE NO. 016-0811**

SHEET S-10 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	61
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



**PIER 3 ELEVATION**  
(Looking West)



**PIER 3 ELEVATION**  
(Looking East)

**BEAM REACTION TABLE**

- Prior to removal of concrete, the existing beams over the repair area shall be temporarily supported (See Pier Reaction Table and See Special Provision for Temporary Shoring and Cribbing).

**BEAM REACTION TABLE**

Pier 3	Load (kips)
DL	64.9
LL	38.9
IM	10.3
Total	114.1

Reactions shown in table are per girder.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.	206
Temporary Shoring and Cribbing	Each	5

**LEGEND**

Structural Repair of Concrete (Depth Equal to or Less than 5")

**Notes:**

- All Areas shown in the Elevation Views are in Square Feet.
- Repair areas shown on this sheet shall be verified in the field for actual locations, size and depth.

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PIER 3 REPAIRS  
STRUCTURE NO. 016-0811**

SHEET S-11 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-1204	COOK	88	62
CONTRACT NO. 60M68				

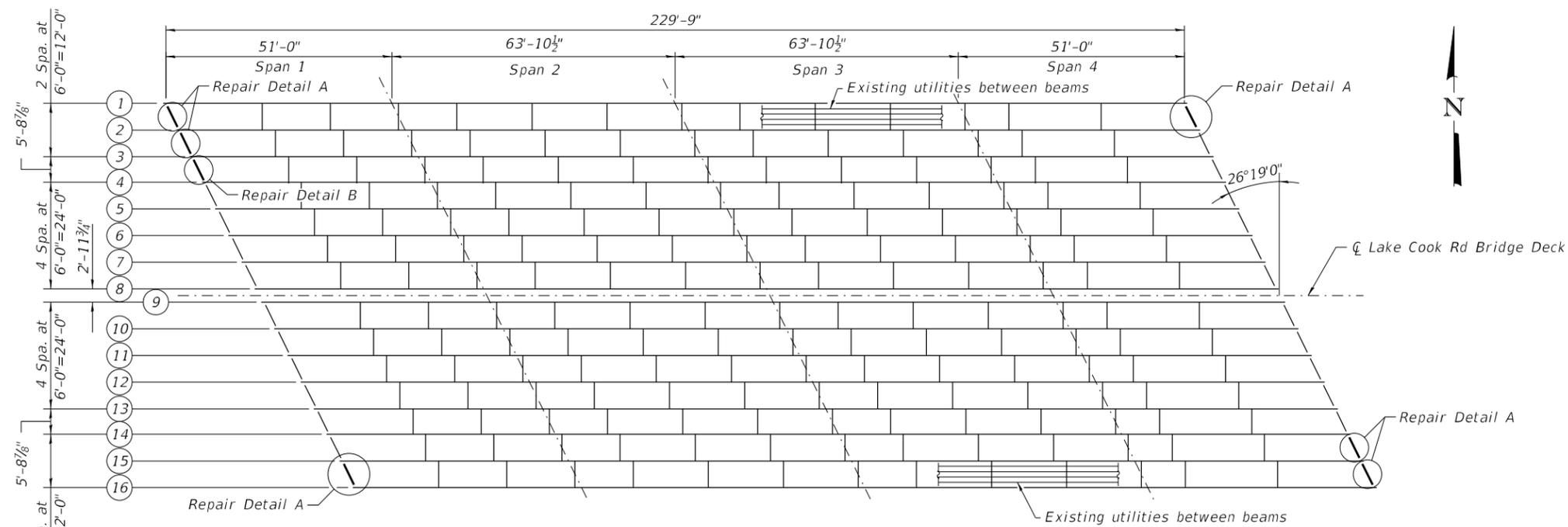
ILLINOIS FED. AID PROJECT

**BILL OF MATERIAL**

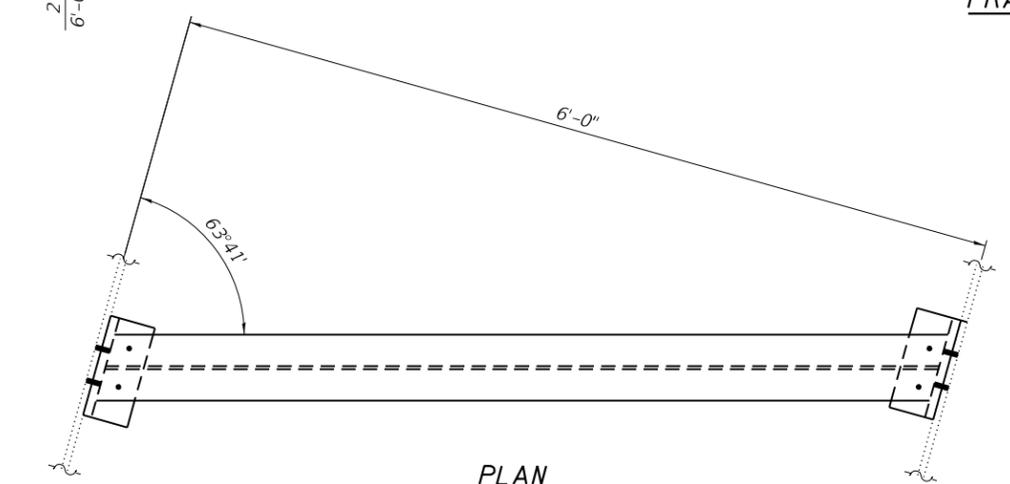
ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	2,450
Structural Steel Removal	Pound	2,130

**NOTES:**

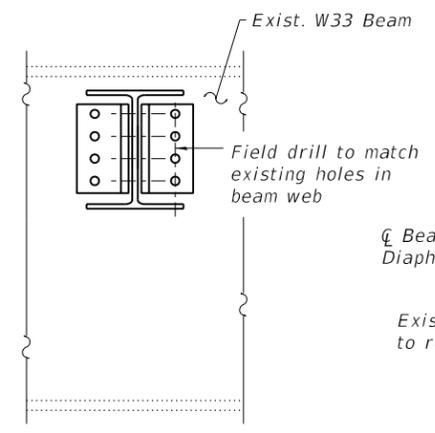
- Field drill holes in new diaphragms.
- Cost of removal and disposal of existing diaphragms shall be included with the cost of Structural Steel Removal.
- Coordinate diaphragm removal and replacement with Expansion Joint Replacement.
- Cost of field drilling is included with the cost of Furnishing and Erecting Structural Steel.
- Contractor to field measure diaphragms and connection plates to be replaced prior to ordering new diaphragms.



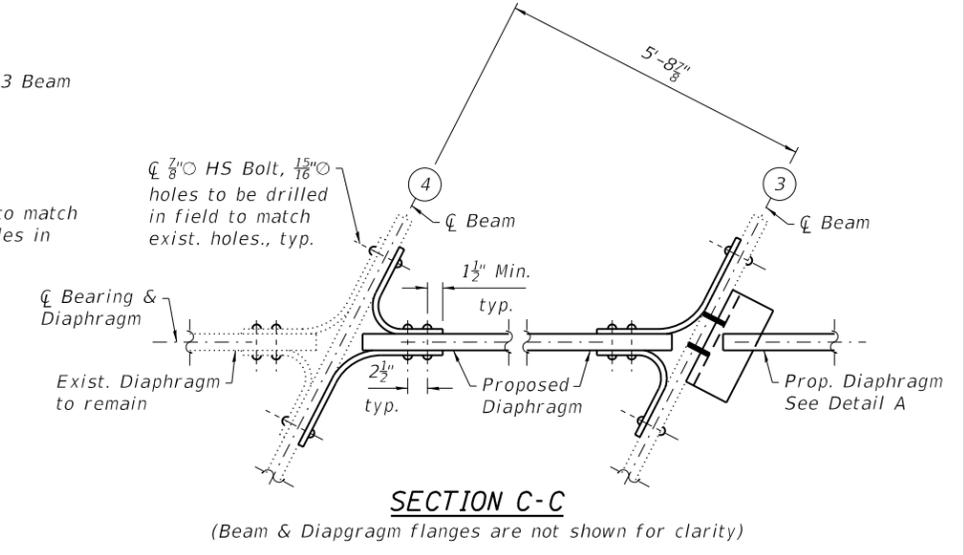
**FRAMING PLAN**



**PLAN**

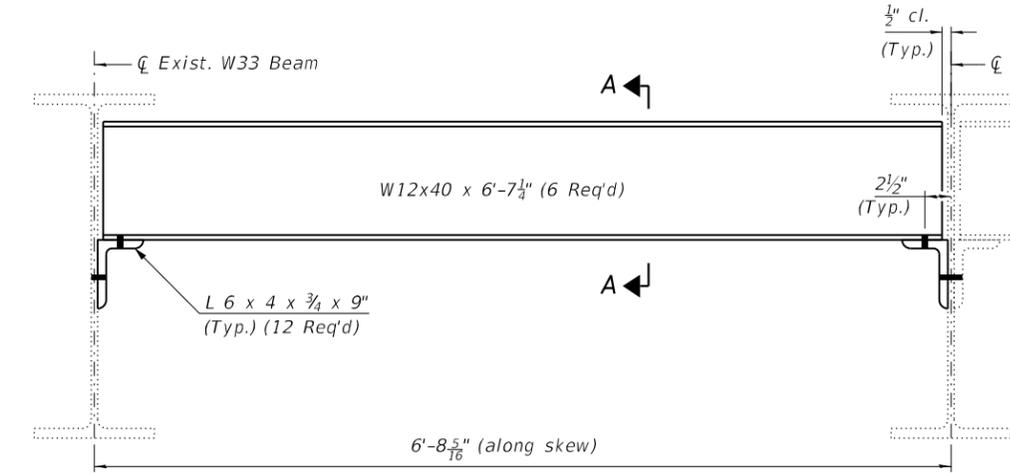


**SECTION B-B**

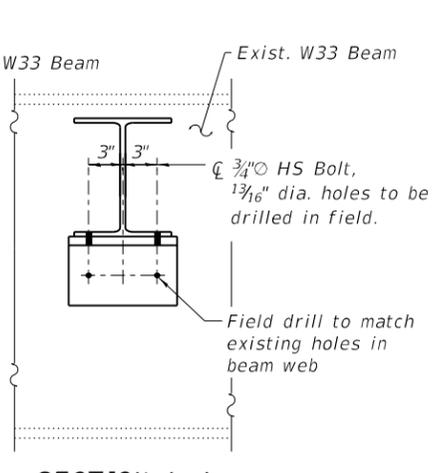


**SECTION C-C**

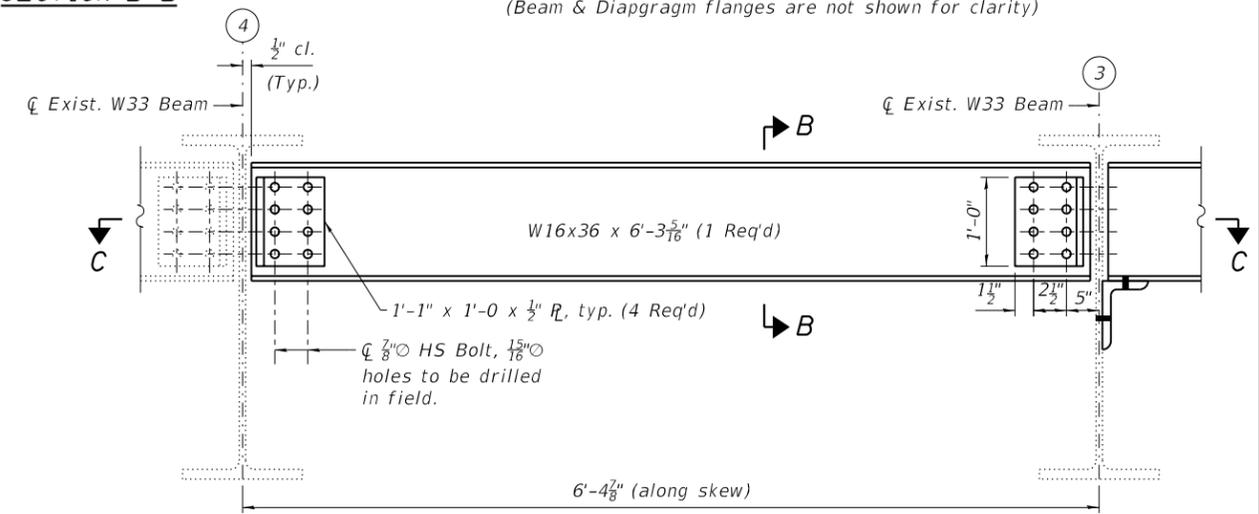
(Beam & Diaphragm flanges are not shown for clarity)



**ELEVATION**



**SECTION A-A**



**ELEVATION**

**REPAIR DETAIL B**

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL REPAIRS  
STRUCTURE NO. 016-0811**

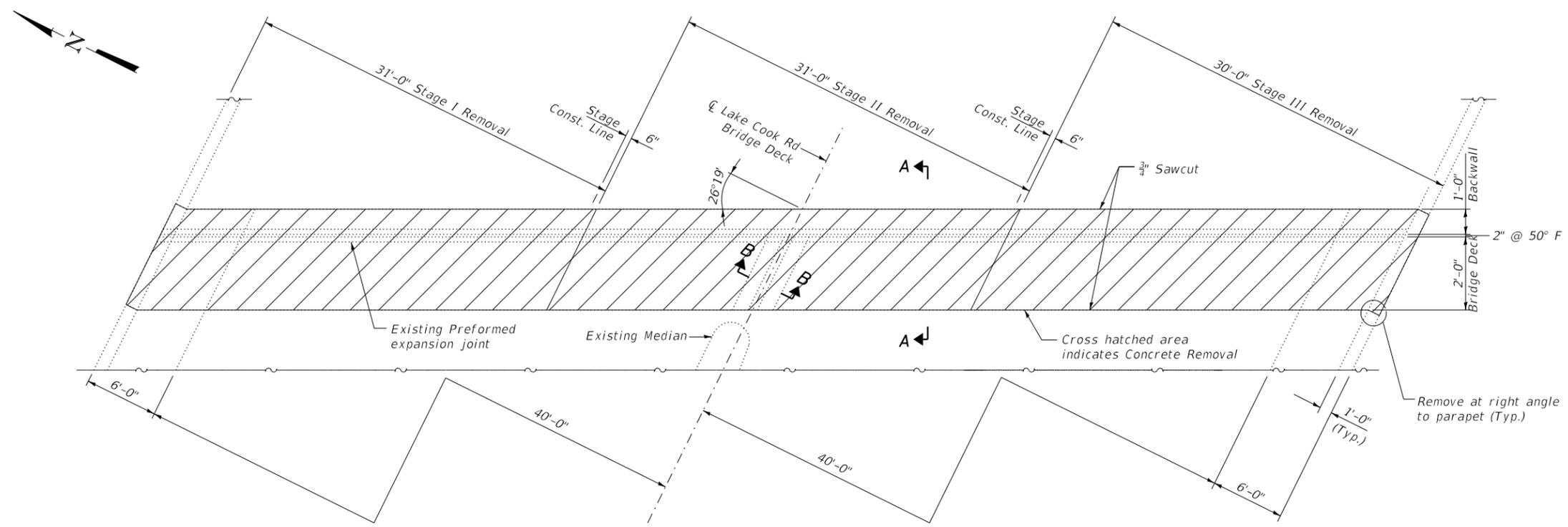
SHEET S-12 OF S-21 SHEETS

F.A.P. RTE. 379	SECTION 2010-120-1	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 63
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

**TWO ABUTMENTS  
BILL OF MATERIAL**

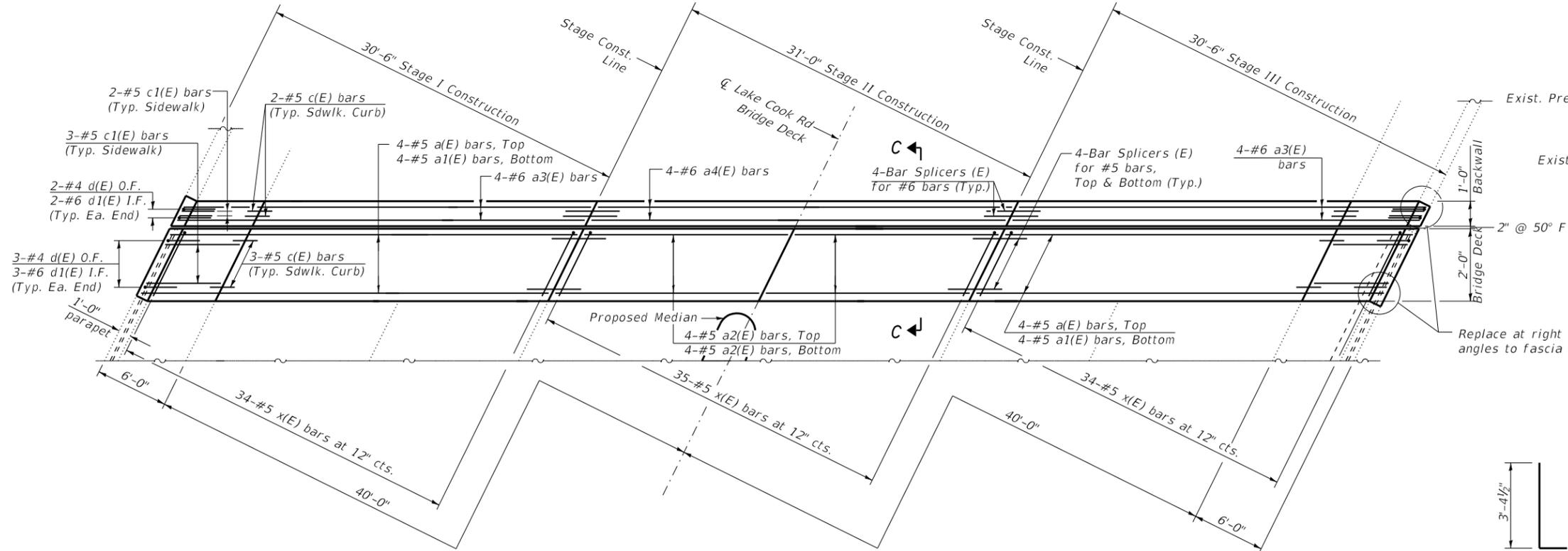
Bar	No.	Size	Length	Shape
a(E)	16	#5	33'-8"	—
a1(E)	16	#5	33'-2"	—
a2(E)	16	#5	34'-3"	—
a3(E)	16	#6	33'-8"	—
a4(E)	8	#6	34'-3"	—
c(E)	20	#5	3'-1"	—
c1(E)	20	#5	5'-7"	—
d(E)	20	#4	5'-1"	—
d1(E)	20	#6	4'-3"	—
d2(E)	8	#4	2'-0"	—
x(E)	206	#5	2'-10"	—
Concrete Removal			Cu. Yd.	28.7
Concrete Superstructure			Cu. Yd.	32.1
Reinforcement Bars, Epoxy Coated			Pound	3,910

- Notes:
1. Work this sheet with Expansion Joint Details and Bar Splicer Assembly Details Sheet.
  2. I.F. denotes Inside Face.  
O.F. denotes Outside Face.
  3. x(E) bar spacing measured along skew.
  4. Coordinate Expansion Joint replacement with steel repairs. See sheet S-12 of S-21.



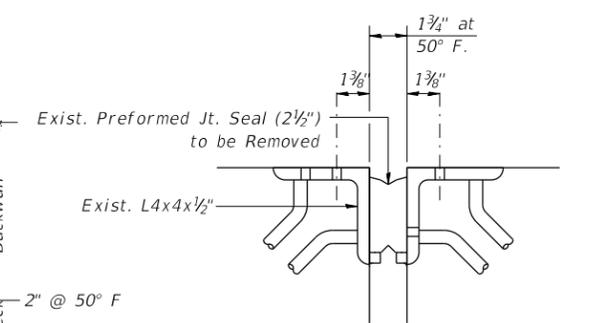
**JOINT REMOVAL PLAN**

East Abutment Shown, West Abutment Similar but Opposite Hand

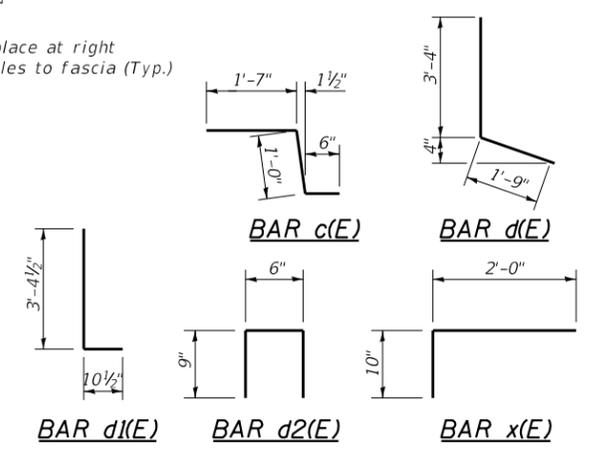


**JOINT REPLACEMENT PLAN**

Refer to Section C-C on  
Expansion Joint Details Sheet (Sheet S-14)  
For More Information



**SECTION B-B**  
(For Information Only)



MODEL: Default  
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10/31/2019 11:34:13 AM



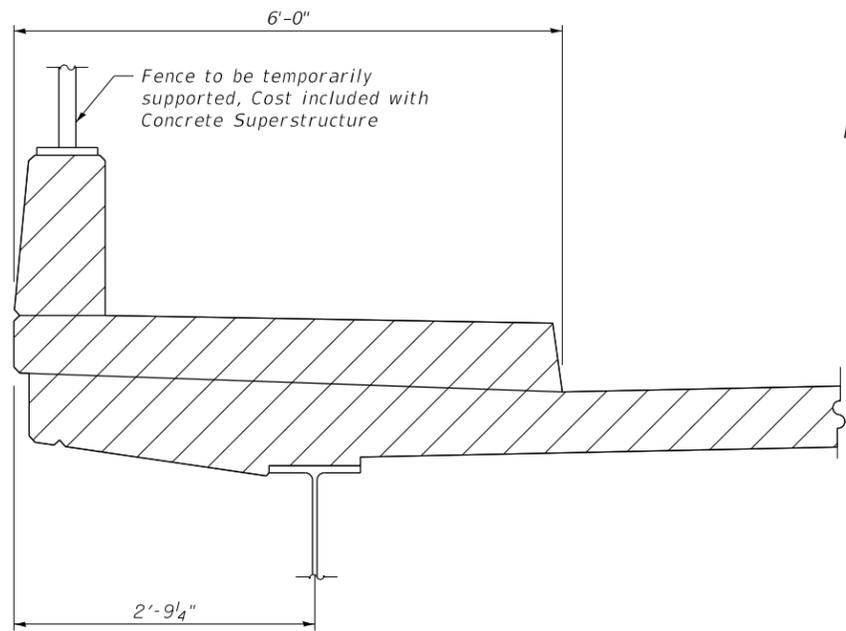
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CHECKED -	JMT	REVISOR -		REVISED -	
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

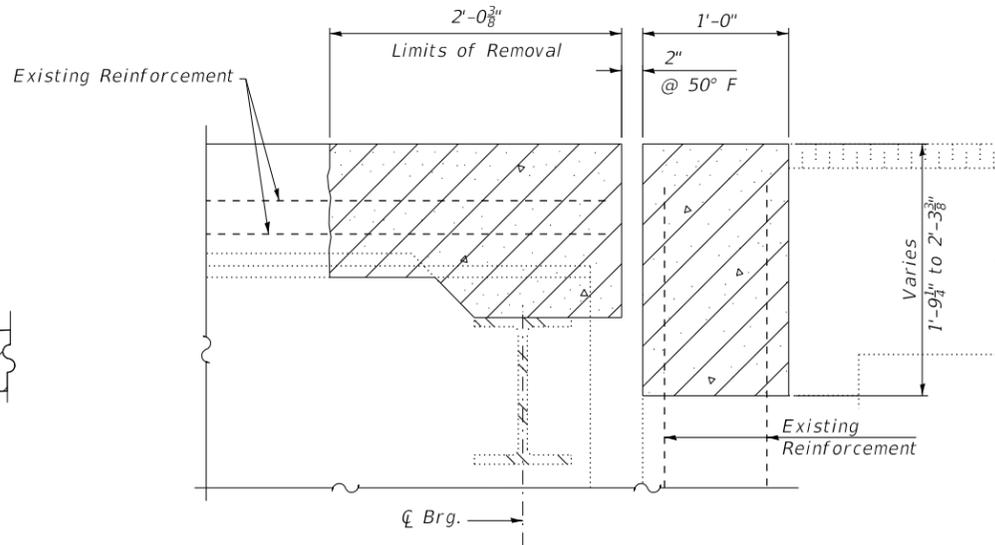
**EXPANSION JOINT REPAIRS  
STRUCTURE NO. 016-0811**

SHEET S-13 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-4	COOK	88	64
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				



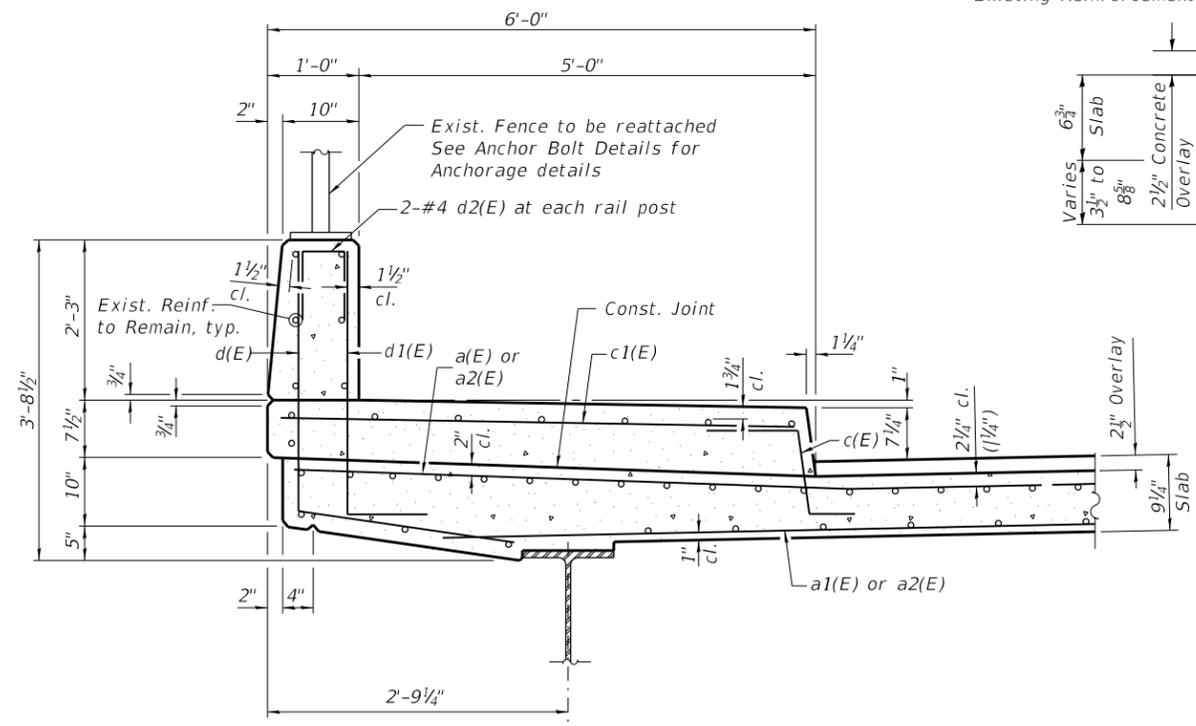
**EXISTING NORTH PARAPET SECTION**  
(North Parapet shown - South Parapet similar)



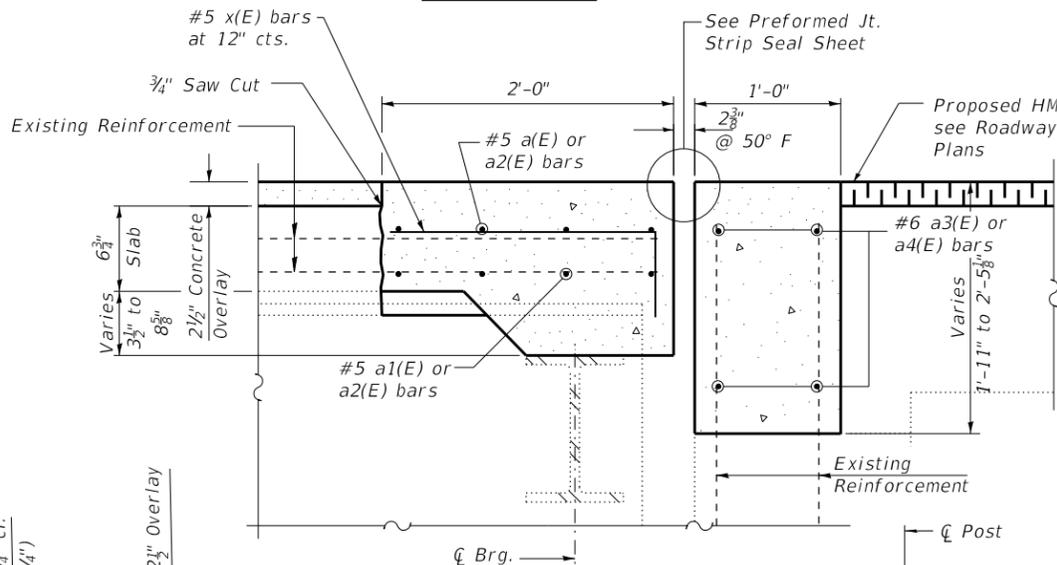
**SECTION A-A**

**NOTES:**

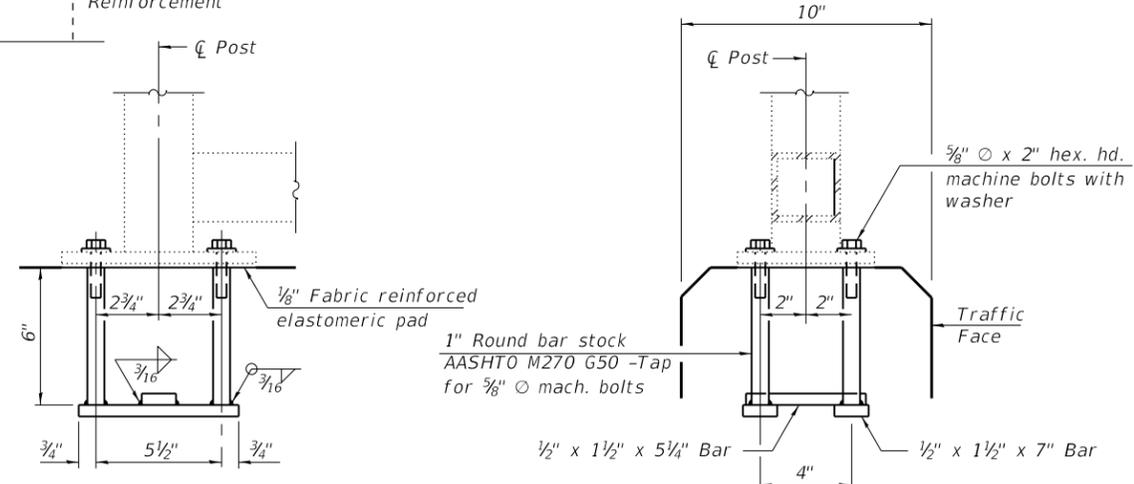
- Existing reinforcement bars extending into the concrete removal area shall be cleaned straightened and incorporated into the new construction. Any reinforcement bars damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- Existing reinforcement bars in the concrete removal area parallel to the expansion joints shall be removed.
- Removal and disposal of the existing expansion joints will not be paid for separately, but shall be included with the cost of Concrete Removal.
- If existing name plate falls within the limits of Concrete Removal, it shall be removed and reinstalled in its original location in accordance with IDOT Std. 515001. Cost included with Concrete Superstructure.
- The Contractor shall exercise extreme care with the existing conduits in sections of the parapet to be removed and to protect and support the conduit. The Contractor will be required to repair any damage done to the conduit to the satisfaction of the Engineer. No splicing will be allowed to any cable damage resulting from this work, instead the Contractor will be required to repair the entire span of any damaged cable at no additional cost to the Department.
- Work this sheet with Expansion Joint Repairs sheet (Sheet S-13).
- Cost of removal and storage of terminal rail section and new anchorage shall be included with the cost of Concrete Superstructure.



**PROPOSED NORTH PARAPET SECTION**  
(North Parapet shown - South Parapet similar)



**SECTION C-C**



**ANCHOR BOLT DETAILS**

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications. Cost included with Concrete Superstructures.  
The Contractor to verify existing dimensions and adjust dimensions shown as required.

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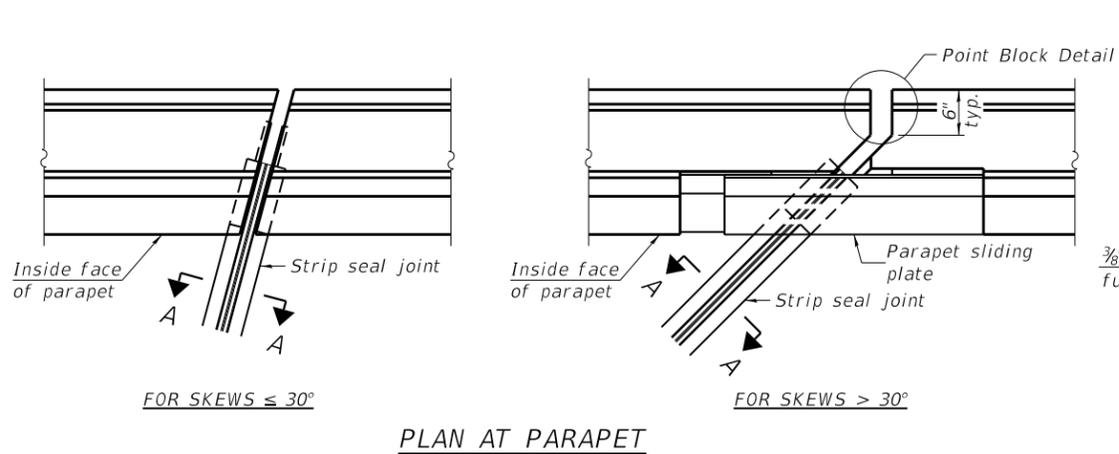
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXPANSION JOINT DETAILS  
STRUCTURE NO. 016-0811**

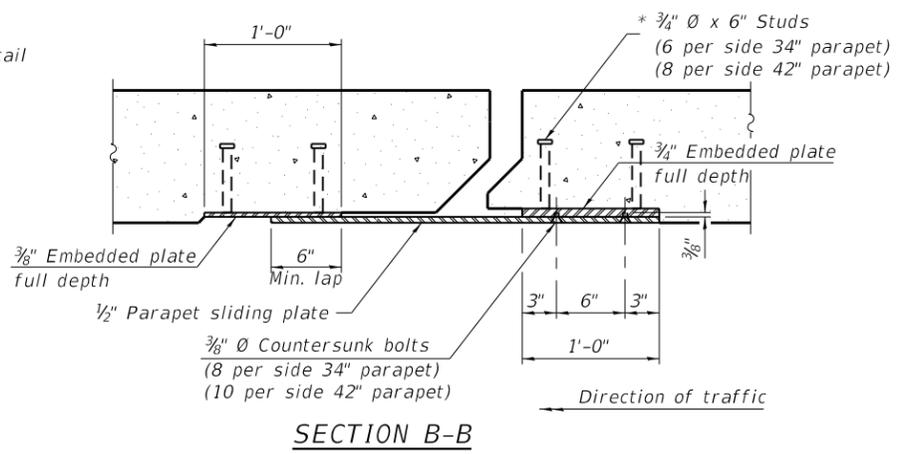
SHEET S-14 OF S-21 SHEETS

F.A.P. RTE. 379	SECTION 2010-120-4	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 65
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

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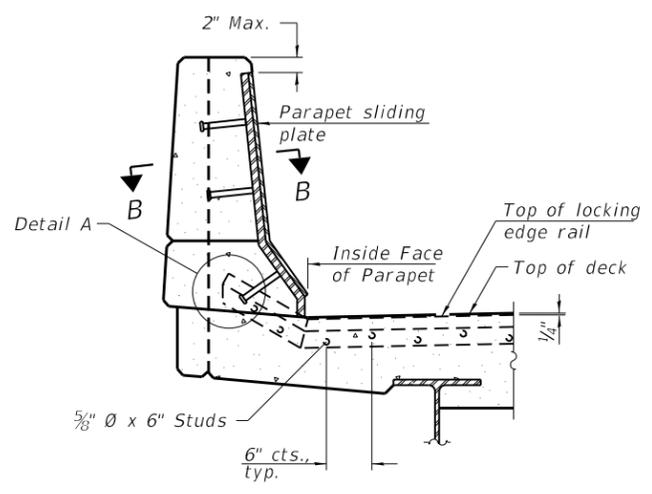


PLAN AT PARAPET



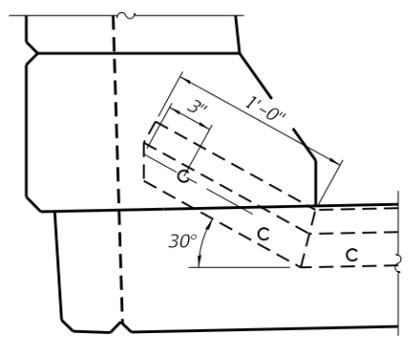
SECTION B-B

**Notes:**  
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.  
 The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.  
 The manufacturer's recommended installation methods shall be followed.  
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.  
 The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.  
 The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.  
 Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.  
 34" F-shape barrier shown, 42" F-shape similar as noted.  
 The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

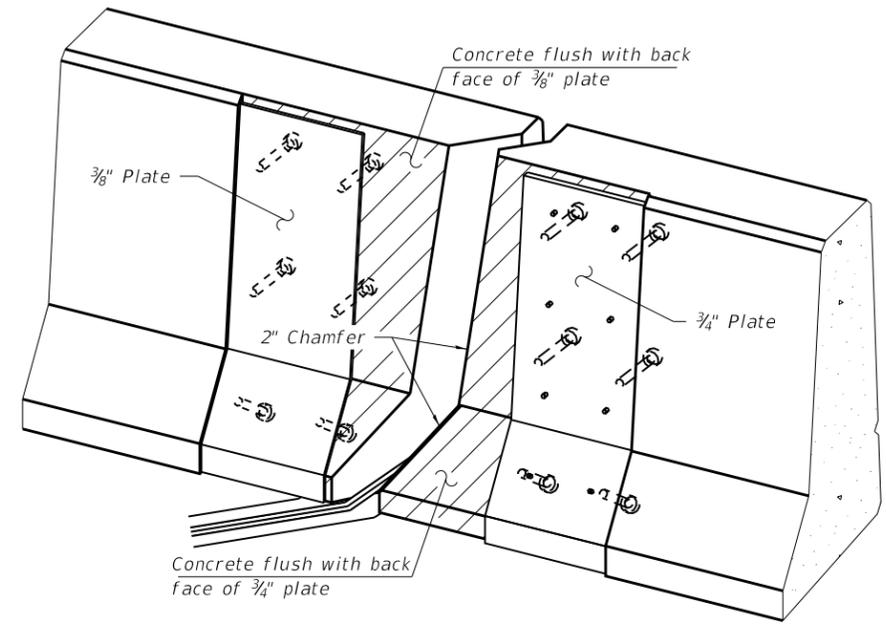


ELEVATION AT PARAPET

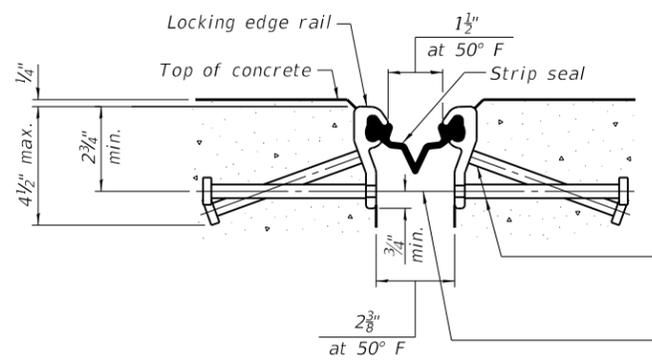
(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL A

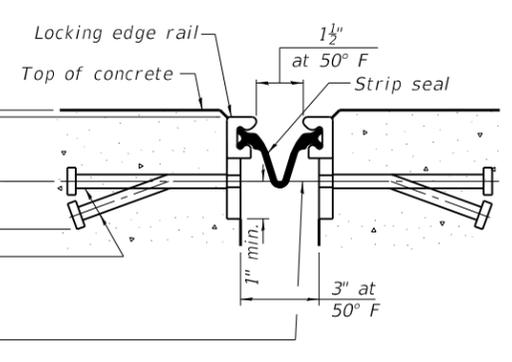


TRIMETRIC VIEW  
 (Showing embedded plates only)

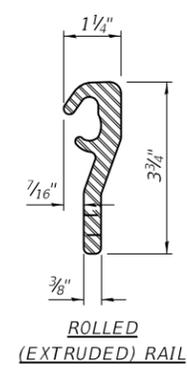


SHOWING ROLLED RAIL JOINT

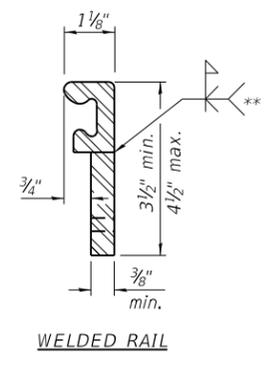
\* 5/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)  
 3/8" Ø threaded rods in 7/16" Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



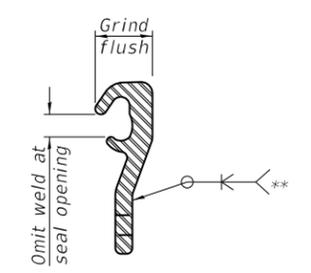
SHOWING WELDED RAIL JOINT



ROLLED (EXTRUDED) RAIL



WELDED RAIL



LOCKING EDGE RAIL SPLICE  
 The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

**LOCKING EDGE RAILS**  
 \*\* Back gouge not required if complete joint penetration is verified by mock-up.

SECTION A-A

\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	206

EJ-SS-S 8-11-17



USER NAME = Johnn	DESIGNED - SAT	REVISED -
PLOT SCALE = 0:2,000" = 1/4"	CHECKED - JMT	REVISED -
PLOT DATE = 10/17/2019	DRAWN - IH	REVISED -
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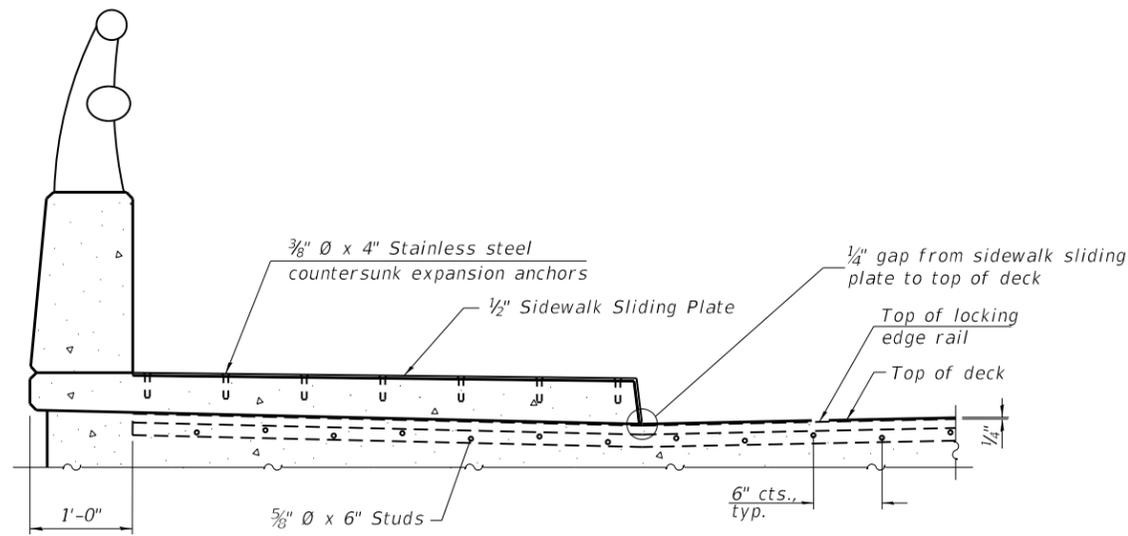
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL - SIDEWALK  
 STRUCTURE NO. 016-0811

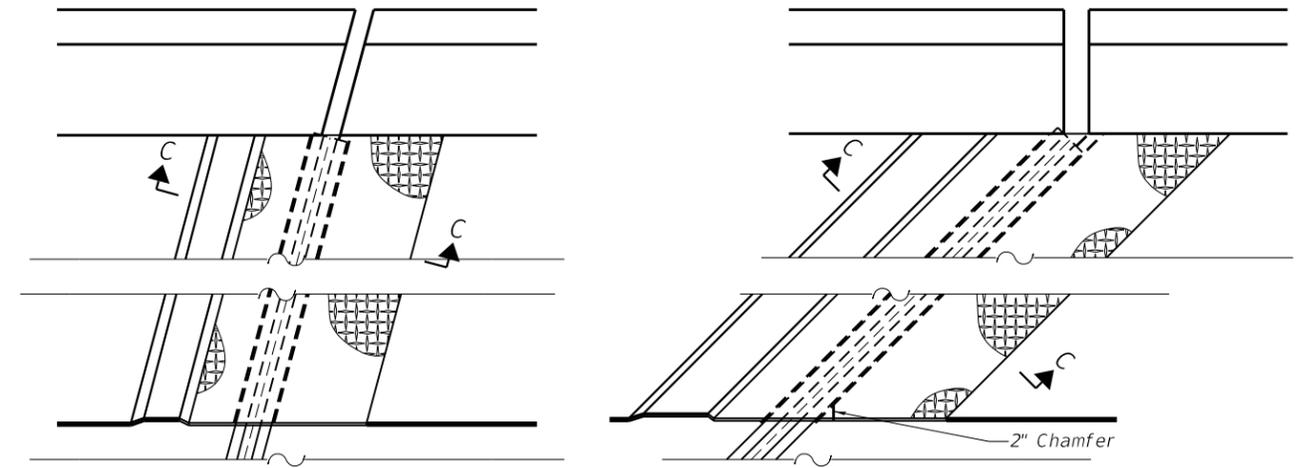
SHEET S-15 OF S-21 SHEETS

F.A.P. RTE. 379	SECTION 2010-120-4	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 66
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

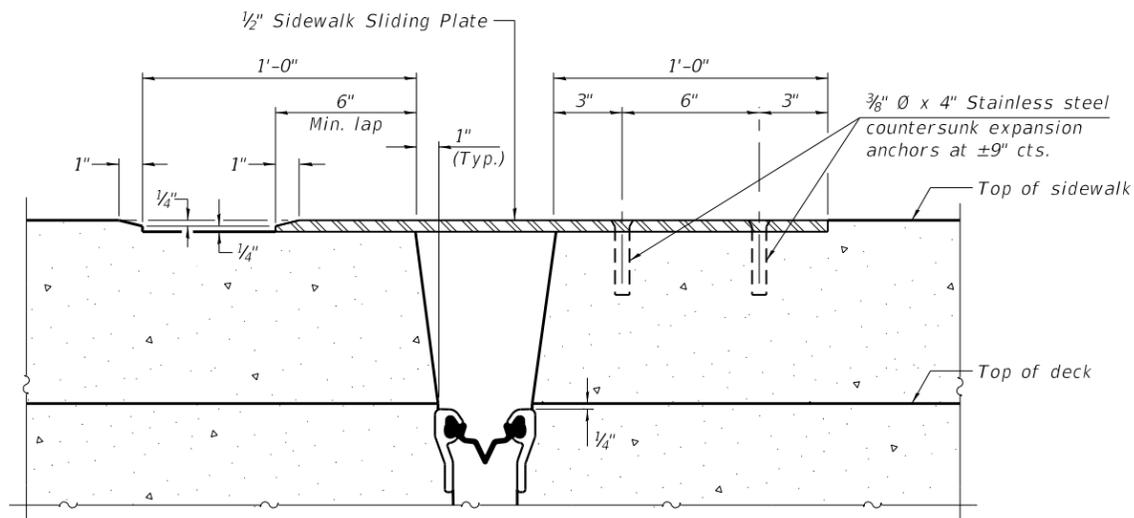
(Sheet 1 of 2)



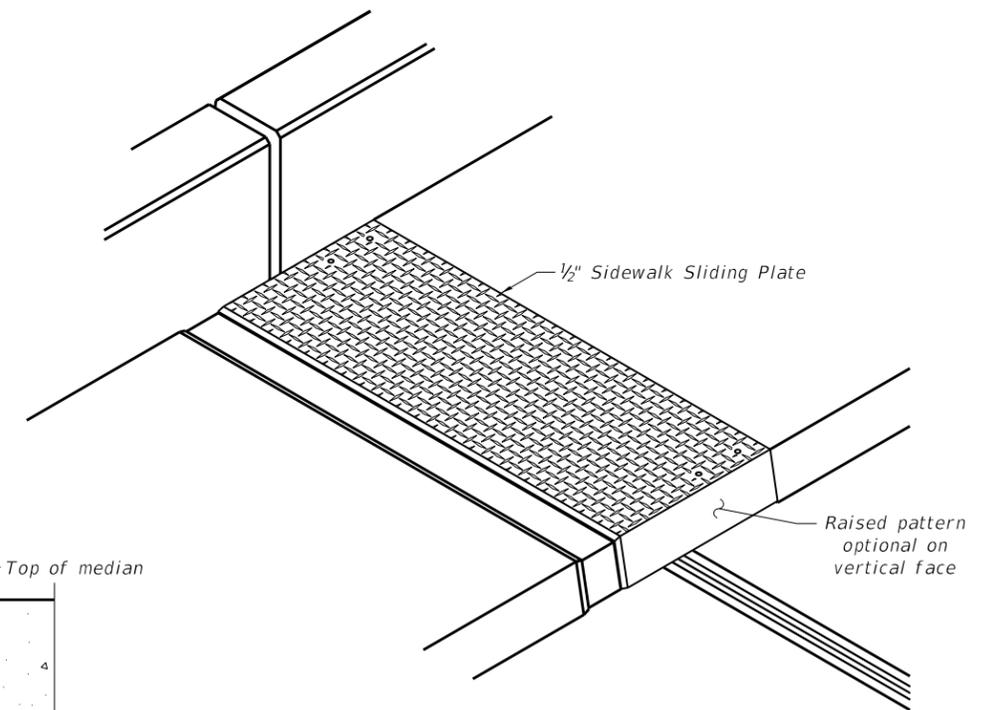
**ELEVATION AT RAISED SIDEWALK**



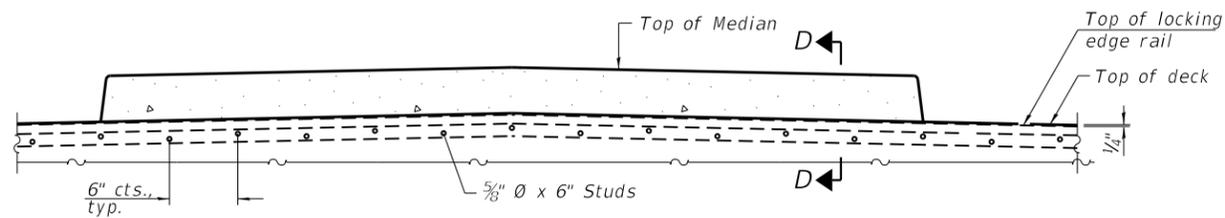
**PLAN AT RAISED SIDEWALK**



**SECTION C-C**

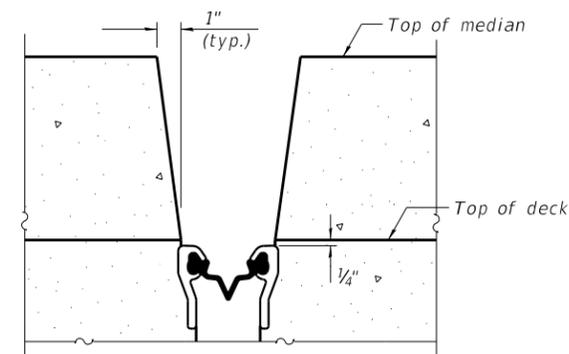


**TRIMETRIC VIEW**



**ELEVATION AT MEDIAN**

For skews  $> 30^\circ$ , chamfer acute corners 2" similar to sidewalk.



**SECTION D-D**  
(at Rt. L's)

(Sheet 2 of 2)

MODEL: Default  
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EJ-SS-S

8-11-17



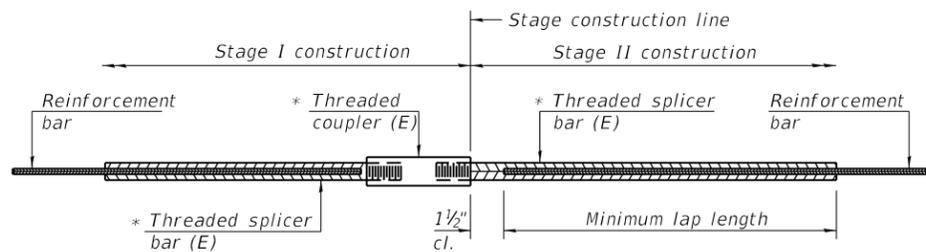
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL - SIDEWALK  
STRUCTURE NO. 016-0811

SHEET S-16 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-4	COOK	88	67
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

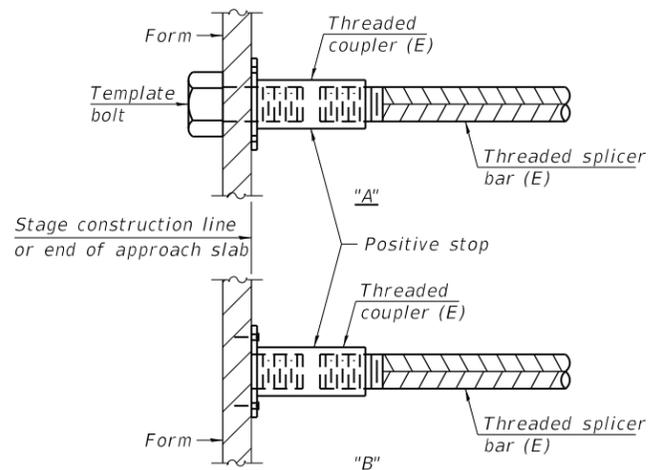


**STANDARD BAR SPLICER ASSEMBLY**

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

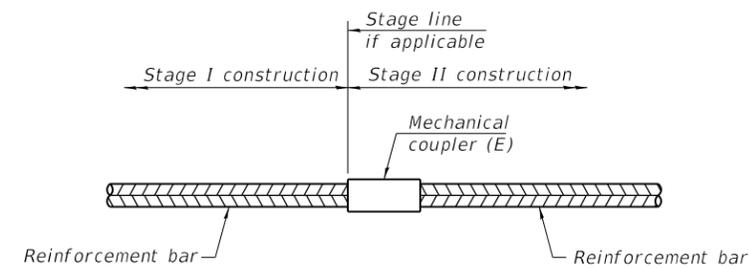
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#5	32	3'-6"
Abut Hatch	#6	16	4'-0"



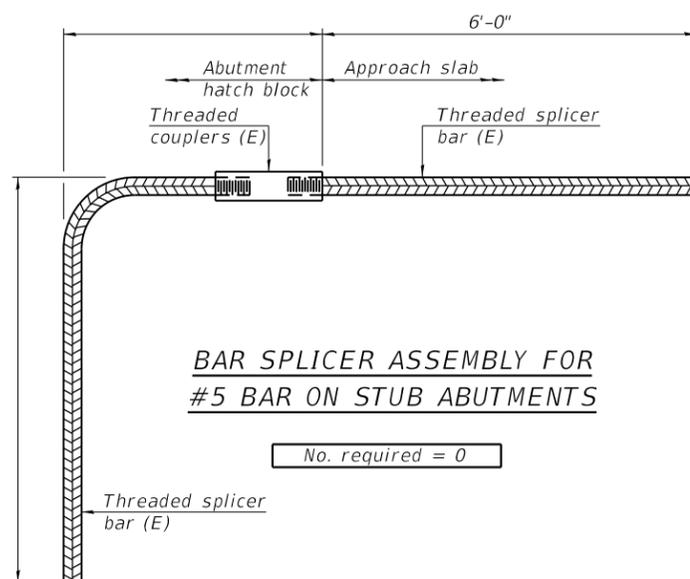
**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
 (E) : Indicates epoxy coating.



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required = 0

**NOTES**

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.  
 All reinforcement shall be lapped and tied to the splicer bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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BSD-1

2-17-2017



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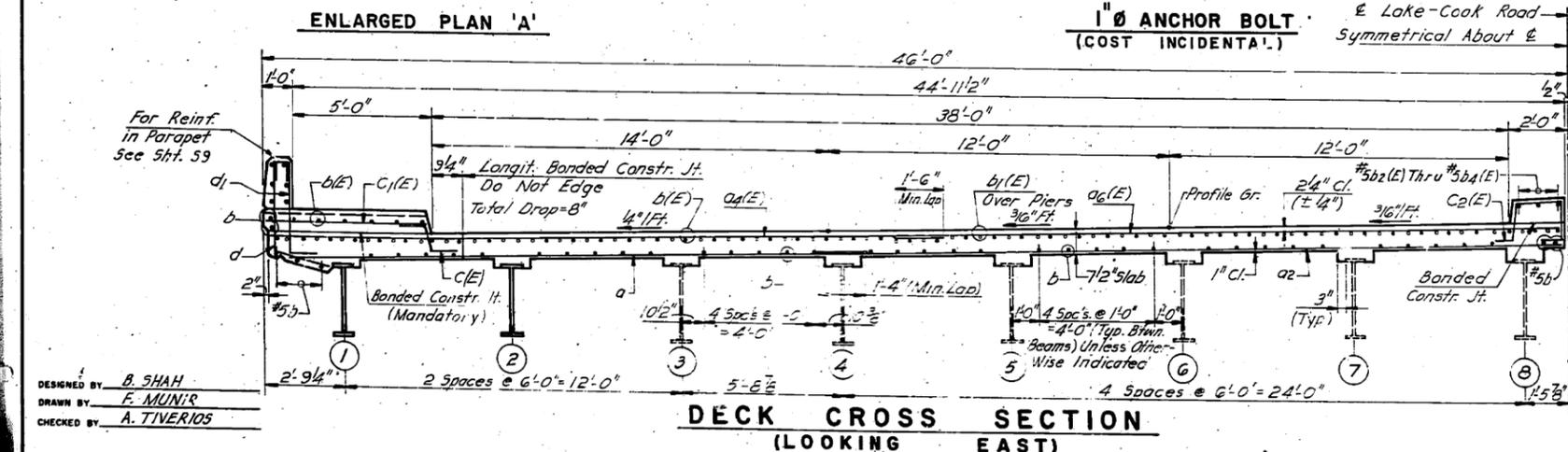
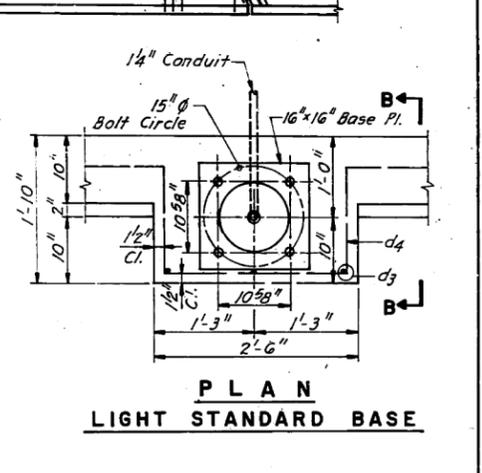
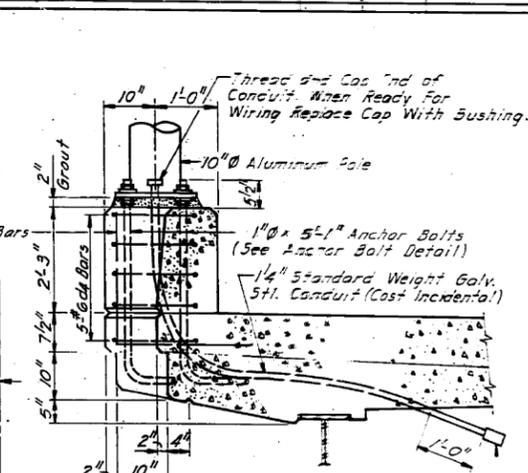
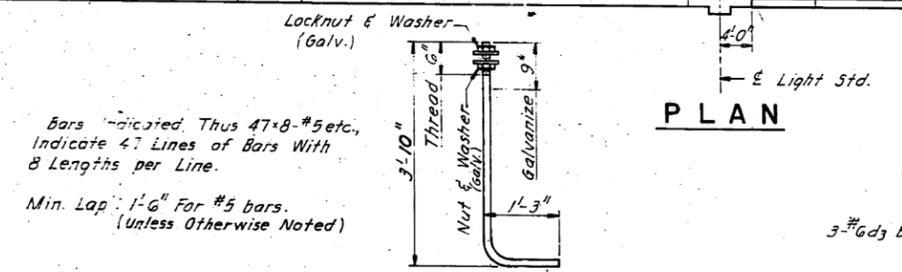
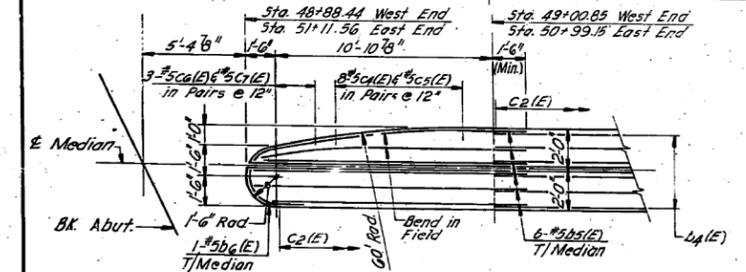
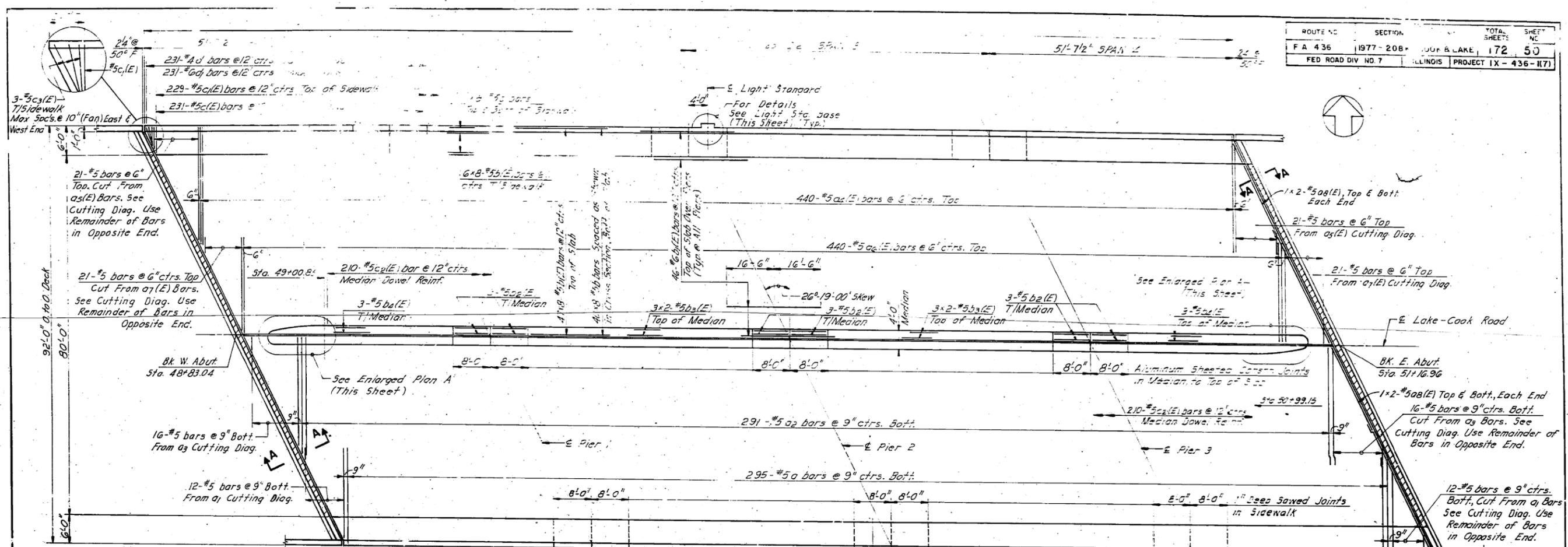
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 016-0811

SHEET S-17 OF S-21 SHEETS

F.A.P. RTE. 379	SECTION 2010-120-I	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 68
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

ROUTE NO	SECTION	TOTAL SHEETS	SHEET NO
FA 436	1977-208	172	50
FED ROAD DIV NO 7	ILLINOIS PROJECT IX - 436-117		



**NOTE:**  
Grout Mixture Shall Consist of 1 Part Sand, 1 Part Cement and 1 Part Gravel (See Gravel). The Grout Shall Contain Water For a 1" Slump. Cost Incidental To Pole.

**NOTES:**  
For Sections, Details & E of Material See Sht. 59.  
For Expansion and Longitudinal Joint Details See Sht. 52.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DECK PLAN & CROSS SECTION  
LAKE-COOK ROAD OVER  
EDENS EXPRESSWAY  
(U.S. 41)

FA RT 436  
LAKE-COOK COUNTY SECTION 1977-208-K

CHRISTIAN-ROGE AND ASSOC.  
ENGINEERS  
CHICAGO, ILLINOIS

SHEET  
56 OF 546

DESIGNED BY B. SHAH  
DRAWN BY F. MUNIR  
CHECKED BY A. TIVERIOS

MODEL: Default  
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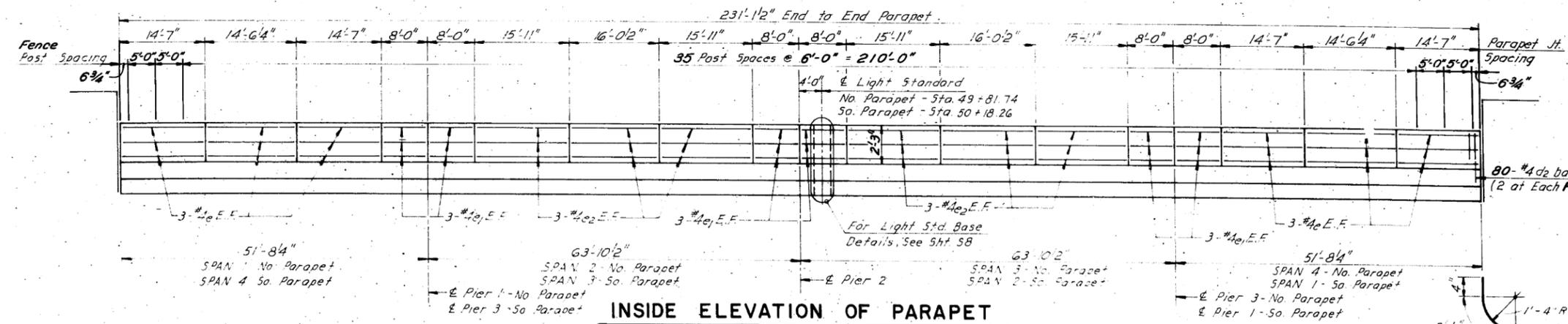
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY) - I  
STRUCTURE NO. 016-0811

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-4	COOK	88	69
CONTRACT NO. 60M68				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY 7-14-81 Revised Parapet Height

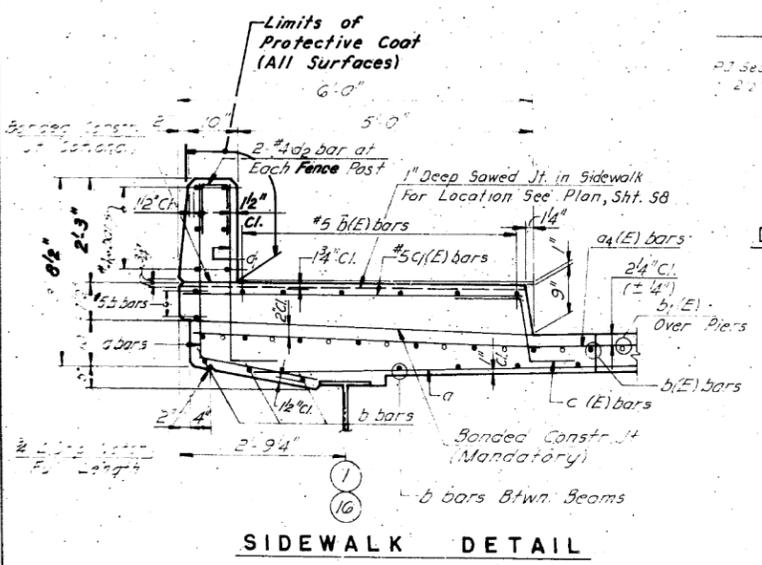
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F A 436	1977-208K	COOK & LAKE	172	51
FED ROAD DIV NO 7	ILLINOIS	PROJECT IX-436-1(7)		



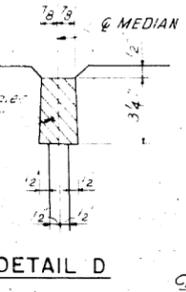
**BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a	590	#5	19'-10"
a1	24	#5	21'-8"
a2	382	#5	26'-0"
a3	32	#5	27'-9"
a4(E)	880	#5	24'-0"
a5(E)	42	#5	25'-3"
a6(E)	880	#5	23'-7"
a7(E)	42	#5	24'-5"
a8(E)	16	#5	26'-2"
b	672	#5	30'-2"
b1(E)	948	#5	30'-2"
b1(E)	276	#6	33'-0"
b2(E)	36	#5	7'-8"
b3(E)	24	#5	24'-7"
b4(E)	12	#5	27'-2"
b5(E)	12	#5	13'-10"
b6(E)	2	#5	3'-11"
c(E)	462	#5	2'-5"
c1(E)	458	#5	5'-7"
c2(E)	420	#5	4'-8"
c3(E)	12	#5	4'-0"
c4(E)	16	#5	2'-8"
c5(E)	16	#5	2'-8"
c6(E)	6	#5	2'-3"
c7(E)	6	#5	2'-3"
d	462	#4	5'-11"
d1	462	#6	4'-3"
d2	160	#4	2'-0 1/2"
d3	6	#6	4'-11"
d4	10	#6	8'-11"
e	72	#4	14'-3"
e1	72	#4	7'-9"
e2	72	#4	15'-8"

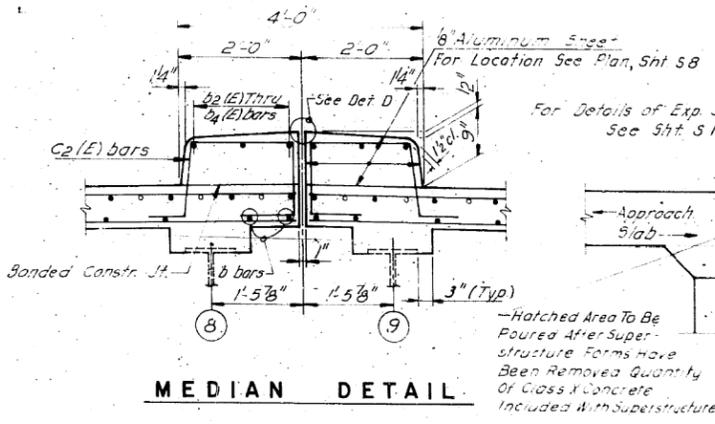
**INSIDE ELEVATION OF PARAPET**



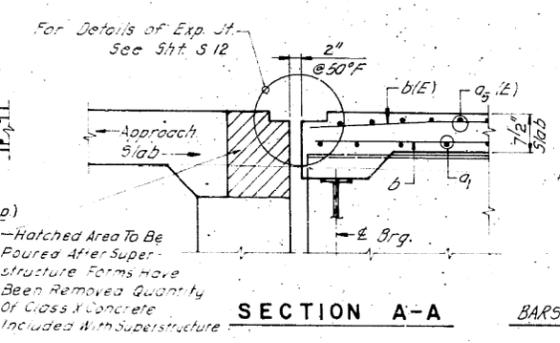
**SIDEWALK DETAIL**



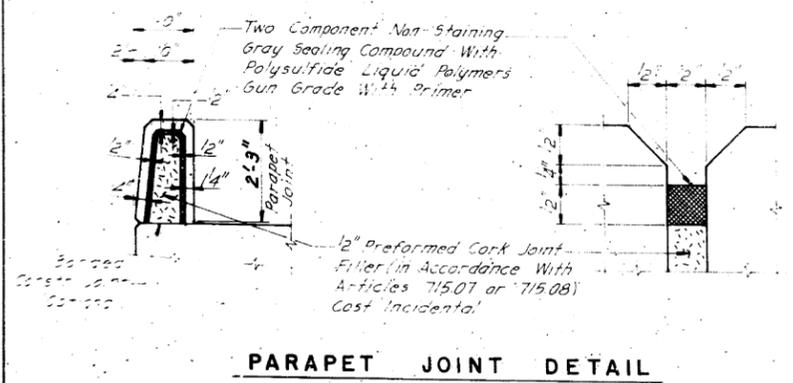
**DETAIL D**



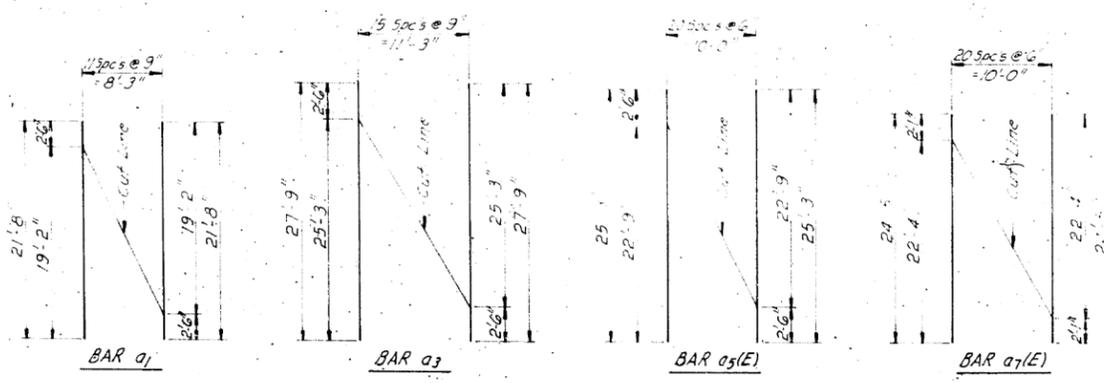
**MEDIAN DETAIL**



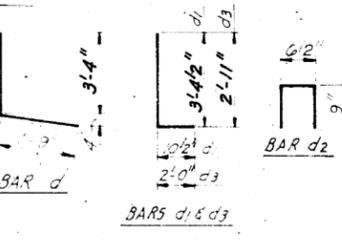
**SECTION A-A**



**PARAPET JOINT DETAIL**



**BAR CUTTING DIAGRAMS**



**BAR d**

**BAR d1**

**BAR d2**

**BAR d3**

**BAR d4**

**BAR e**

**BAR e1**

**BAR e2**

DESIGNED BY: **B. SHAH**  
 DRAWN BY: **F. MUNIR**  
 CHECKED BY: **A. TIVERIOS**

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DECK DETAILS  
 LAKE-COOK ROAD OVER  
 EDENS EXPRESSWAY  
 (U.S. 41)  
 LAKE-COOK COUNTY SECTION 1977-208-K  
 CHRISTIAN-ROGE AND ASSOC  
 ENGINEERS  
 CHICAGO, ILLINOIS

SHEET NO. 59 OF 546

REVISOR: **7-14-81 Revised Parapet Height**  
 FOR INFORMATION ONLY

MODEL: Default  
 FILE NAME: C:\Engineering\Live\Projects\13034 IDOT DUR Chastrow 15\CADD\CADD Sheets\Structural\0160811-60M68-019-Exist. Str. Plans - Ildgn



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CHECKED	-	JMT
PLOT SCALE	=	02,0000 1/16"
PLOT DATE	=	10/17/2019

DESIGNED	-	SAT
CHECKED	-	JMT
DRAWN	-	IH
CHECKED	-	SPS

REVISED	-	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

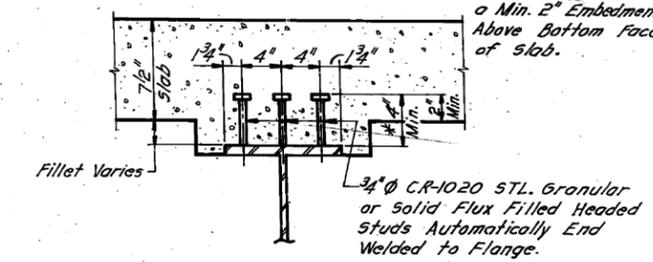
EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY) - II  
 STRUCTURE NO. 016-0811

SHEET S-18 OF S-21 SHEETS

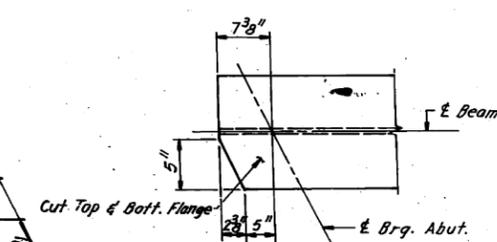
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-4	COOK	88	70
			CONTRACT NO. 60M68	
		ILLINOIS	FED. AID PROJECT	

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. 436	1977-208K	COOK & LAKE	172	53
FED. ROAD DIV. NO. 7	ILLINOIS	PROJECT IX-436-1171		

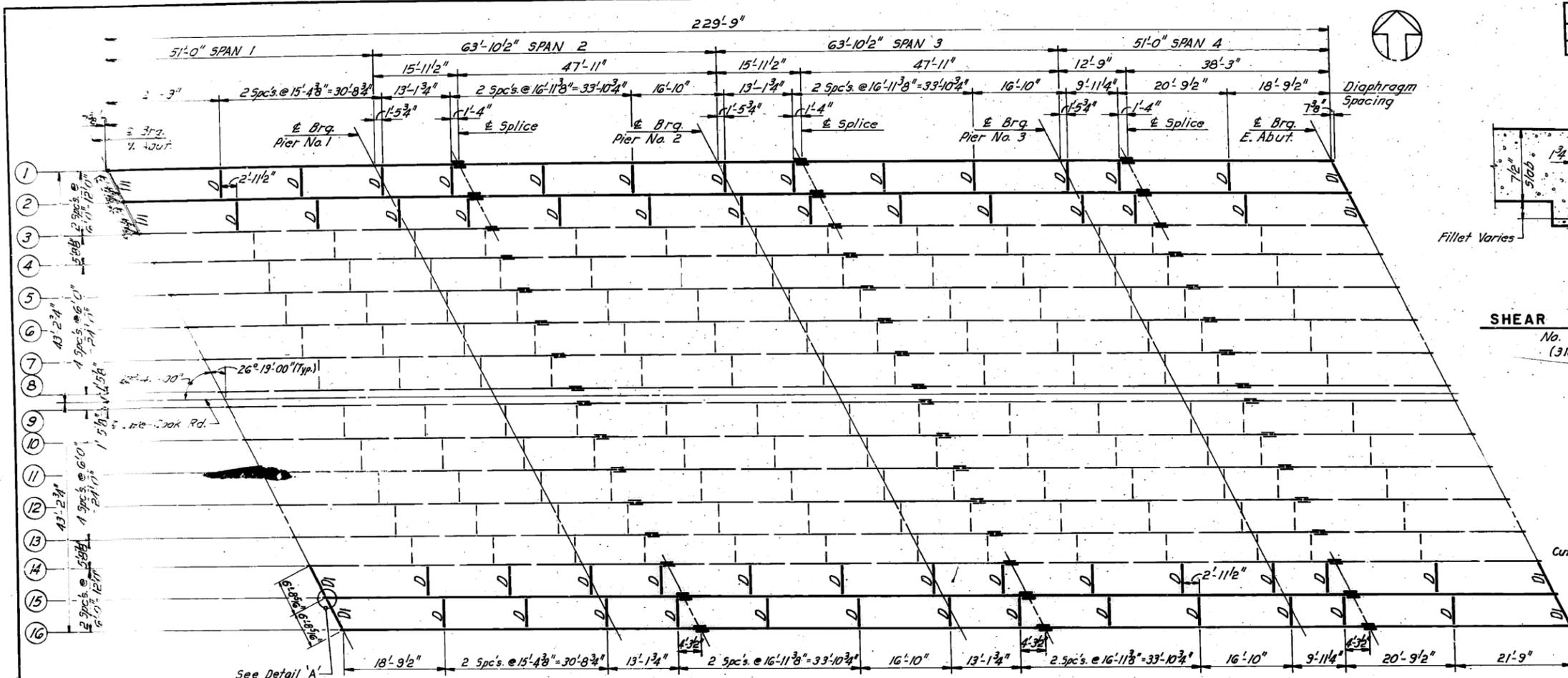
\* Height of studs to be Determined by Field Measurement to Provide a Min. 2" Embedment Above Bottom Face of Slab.



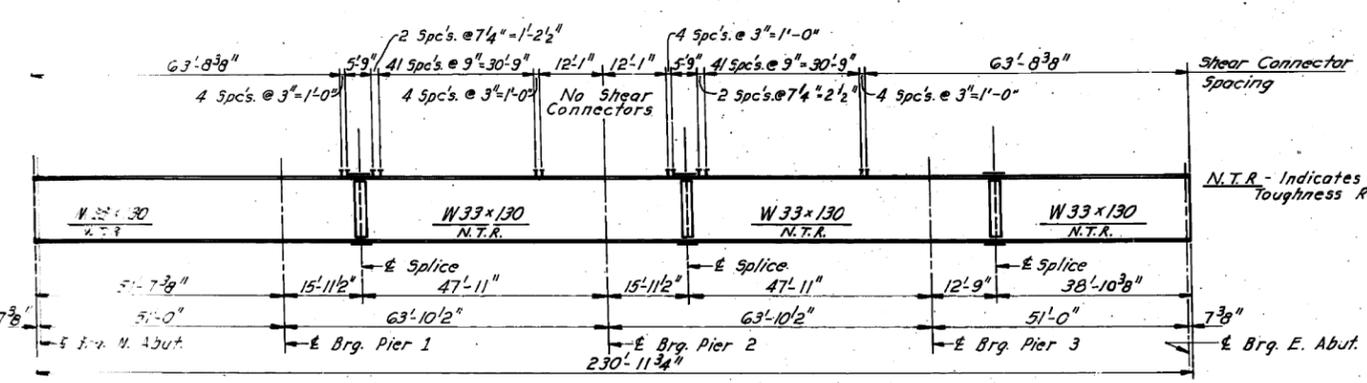
**SHEAR CONNECTOR DETAIL**  
No. Required = 5,088  
(318 Studs per Beam)



**DETAIL 'A' @ ABUTMENTS**



**FRAMING PLAN**



**BEAM ELEVATION**

**INTERIOR BEAM MOMENT TABLE**

	.4 SPAN 1 6 SPAN 4	PIER 1 PIER 3	.5 SPAN 2 5 SPAN 3	PIER 2
$I_s$ (in <sup>4</sup> )	6,710	6,710	6,710	6,710
$I_c$ (in <sup>4</sup> )			16,592	
$S_s$ (in <sup>3</sup> )	406	406	406	406
$S_c$ (in <sup>3</sup> )			580	
$D$ (in)	.73	.73	.73	.73
$M_{\phi}$ (K)	131.0	-241.9	126.1	-250.3
$f_s \phi$ Non-Comp. (Ksi)	3.87	7.15	3.73	7.40
$S_{\phi}$ (K/in)	.29	.29	.29	.29
$M_{s\phi}$ (K)	55.1	-88.3	64.3	-78.8
$M_{\phi}$ (K)	273.4	-205.8	347.6	-200.5
$M_{IMP}$ (K)	77.7	-56.6	92.1	-53.1
Total (K)	406.2	-350.7	504.0	-332.4
$f_s (S_{\phi} + I + I)$	12.01	10.37	10.42	9.82
Comp (Ksi)				
$f_s$ Total (Ksi)	15.88	17.52	14.15	17.22
VR (K)			38.8	

N.T.R. - Indicates Notch Toughness Requirements.

**TOP OF BEAM ELEVATION**

BEAM	BRG. W. ABUT.	PIER 1	SPLICE NO. 1	PIER 2	SPLICE NO. 2	PIER 3	SPLICE NO. 3	BRG. E. ABUT.
1	650.823	651.209	651.330	651.479	651.528	651.429	651.402	651.223
2	650.934	651.320	651.441	651.590	651.639	651.540	651.513	651.334
3 THROUGH Existing Beams to Remain in Place								
15	651.334	651.550	651.618	651.608	651.605	651.347	651.278	650.972
16	651.185	651.401	651.469	651.459	651.456	651.198	651.129	650.823

**INTERIOR BEAM REACTION TABLE**

	ABUT. W. & E.	PIER 1 & 3	PIER 2
$R_{\phi}$ (K)	19.4	64.9	65.0
$R_{\phi}$ (K)	32.1	38.9	37.8
Imp. (K)	9.1	10.3	10.4
$R$ Total (K)	60.6	114.1	113.2

$I_s$  and  $S_s$  are The Moment of Inertia and Section Modulus of The Steel Used in Computing  $f_s \phi$ .  
 $I_c$  and  $S_c$  are The Moment of Inertia and Section Modulus of The Composite Section Used in Computing  $f_s (S_{\phi} + I + I)$ .  
VR is The Maximum  $\pm$  Impact Shear Range in Span, Used to Determine Shear Connector Spacing.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
**FRAMING PLAN & DETAILS**  
LAKE-COOK ROAD OVER  
EDENS EXPRESSWAY  
(U. S. 41)

LAKE-COOK COUNTY SECTION 1977-208-K  
CHRISTIAN-ROGE AND ASSOC.  
ENGINEERS  
CHICAGO, ILLINOIS

SHEET 51 of 546

FOR INFORMATION ONLY

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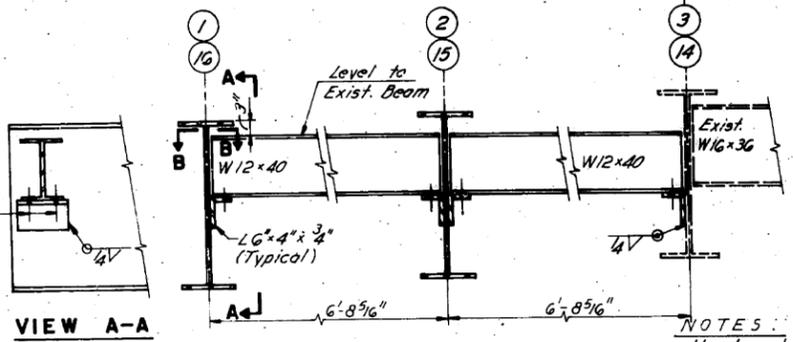
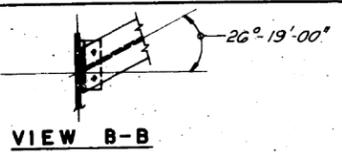
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY) - III  
STRUCTURE NO. 016-0811  
SHEET S-18 OF S-21 SHEETS

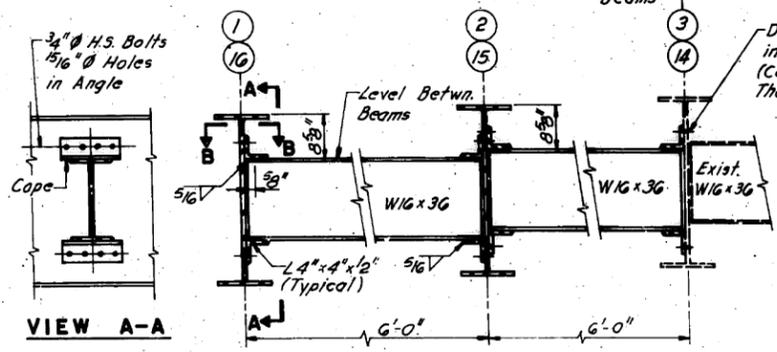
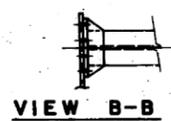
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-1204	COOK	88	71
ILLINOIS				FED. AID PROJECT

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 436	1977-208K	COOK & LAKE	172	54
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT IX - 436-(17)	



**ELEVATION  
DIAPHRAGM D1  
(8 REQUIRED)**

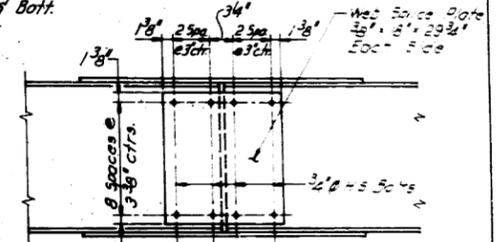
**NOTES:**  
Hardened Washers Shall Be Required Over 1 5/16" Ø Holes in Angles.  
All Contact Surfaces of Joints For The Diaphragms Shall Be Free of Paint or Lacquer.



**ELEVATION  
DIAPHRAGM D  
(52 REQUIRED)**



**FLANGE SPLICE**

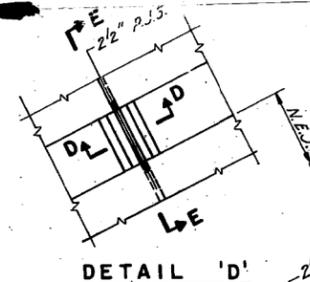


**WEB SPLICE**

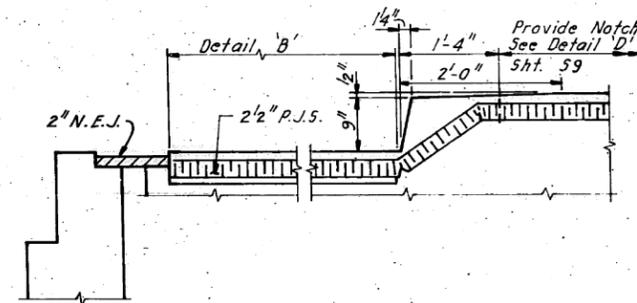
**SPLICE DETAIL**

**ALTERNATE NEOPRENE EXPANSION JOINTS (2")**  
(See Special Provisions)

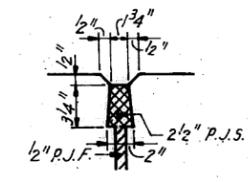
Model	Supplier	Backstop Dimensions
TRANSFLEX, MODEL 200A	General Tire Company	T=1 3/8" A=1 1/8" B=3 5/8"
FEL-SPAN, MODEL T-30 Set joint seal 1 5/8" at 50°F	Fel-Pro Building Products Inc	T=3/8" A=2 1/4" B=2 3/8"
WABO ELASTODAM, TYPE 300 Set joint seal 1 5/8" at 50°F	Watson Bowman Associates, Inc	T=3/8" A=2 1/4" B=2 3/8"
WABO ALU-STRIP, TYPE III S 300 Set joint seal 1 5/8" at 50°F Permitted for 0° skew only	Watson Bowman Associates, Inc	T=3/8" A=2 5/8" B=2 3/8"
LOW PROFILE ONFLEX-25 Set joint seal 1 5/8" at 50°F Roadway bolt channel shall be filled with approved grout Permitted for up to 50° skew	Structural Accessories, Inc	T=3/8" A=1 5/8" B=2 3/8"



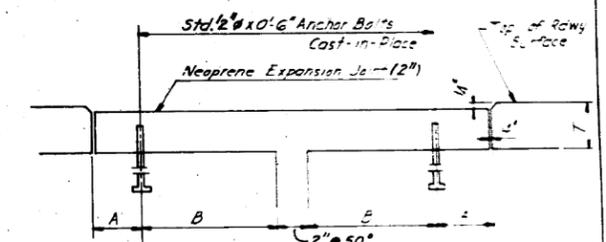
**DETAIL 'D'**



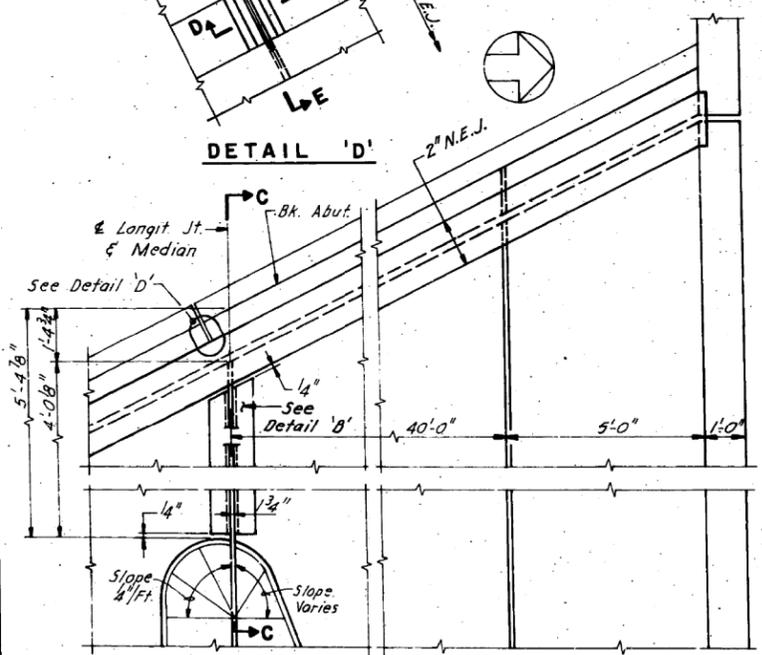
**SECTION C-C  
DETAIL OF SEALER PLACEMENT  
(AT LONGITUDINAL JOINT)**



**SECTION D-D  
SEALER CUT-OUT  
(AT MEDIAN)**

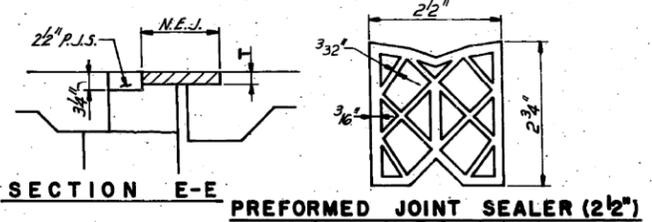


**CROSS SECTION**  
Dimensions Are at Right Angles

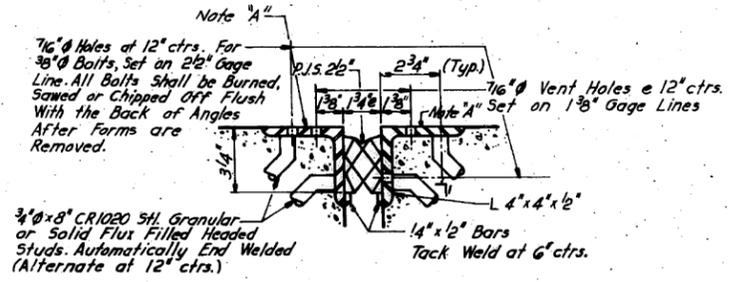


**EXPANSION DETAILS AT W. ABUT.  
(AT E. ABUT. OPPOSITE HAND)**

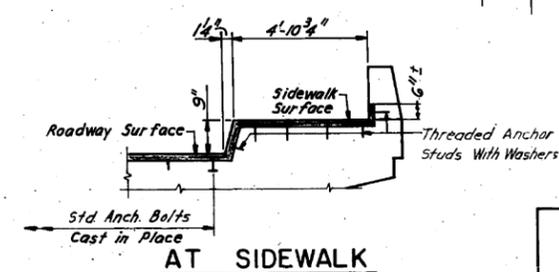
**NOTE 'A'**  
Epoxy Pressure Grout By Injection in Any Voids After Concrete is Placed. This Work Shall Be Performed at no Extra Cost as an Incidental to The Cost of Setting Expansion Angles.



**SECTION E-E  
PREFORMED JOINT SEALER (2 1/2")**



**DETAIL 'B'**



**AT SIDEWALK**

**NOTE:**  
Joint Opening Shall be Adjusted in Accordance With Article 503.07(C) of the Standard Specifications, When the Deck is Poured at an Ambient Temperature Other Than 50°F.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
**STEEL & SEALER DETAILS  
LAKE-COOK ROAD OVER  
EDENS EXPRESSWAY  
(U.S. 41)**  
LAKE-COOK COUNTY SECTION 1977-208-K  
F.A. RT 436  
CHRISTIAN-ROGE AND ASSOC. ENGINEERS  
CHICAGO, ILLINOIS

SHEET NO. S12 OF S46

FOR INFORMATION ONLY

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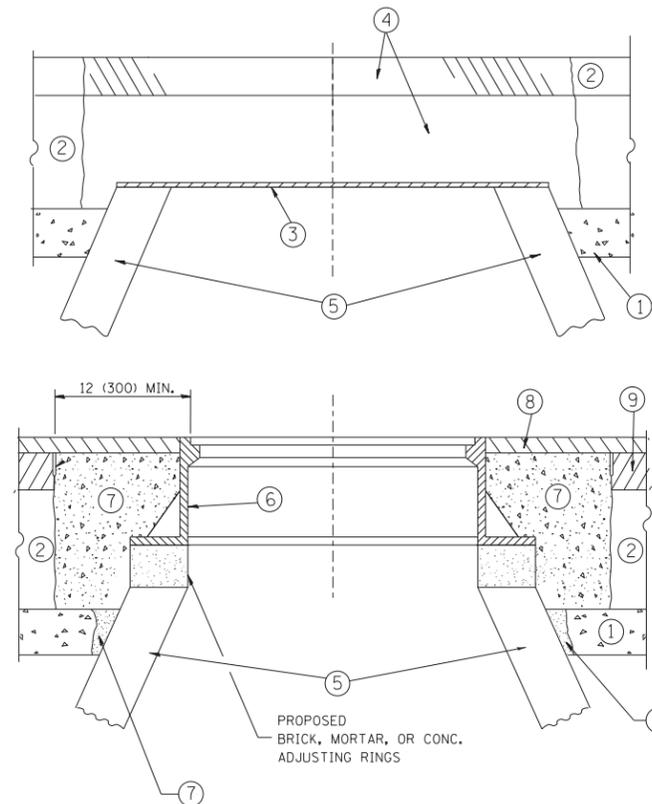
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CHECKED -	SPS	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY) - IV  
STRUCTURE NO. 016-0811

SHEET S-18 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-1204	COOK	88	72
ILLINOIS				FED. AID PROJECT



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

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

**STAGE 2 (AFTER PAVEMENT MILLING)**

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

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

**LEGEND**

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

**LOCATION OF STRUCTURES:**

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

**BASIS OF PAYMENT:**

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.

**NOTES:**

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.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

BD SHT NO. 1

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
ct:\pw\work\p\dot\bauerdl\d0108315\bd08.dgn		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F&P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	73
<b>BD600-03 (BD-8)</b>		CONTRACT NO. 60M68		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

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

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

1/4" (5) \*\*

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

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

BASIS OF PAYMENT:  
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

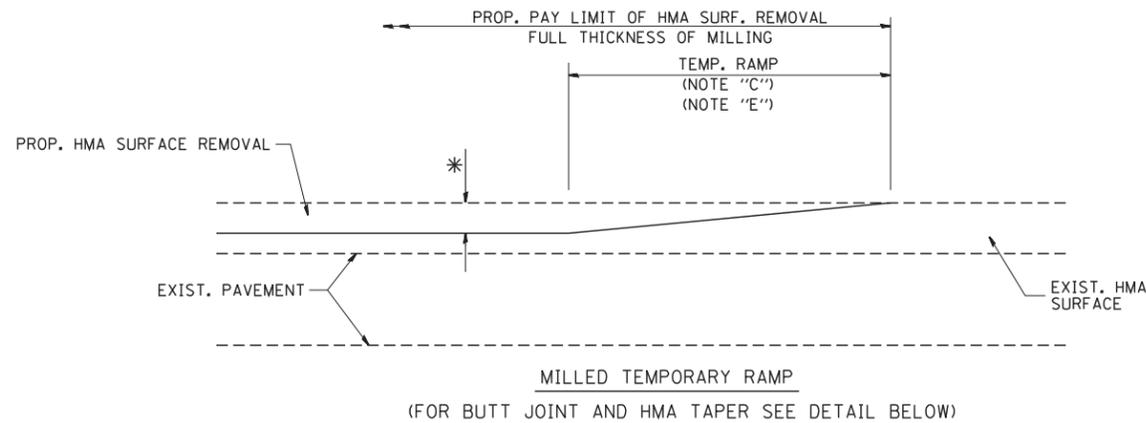
⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

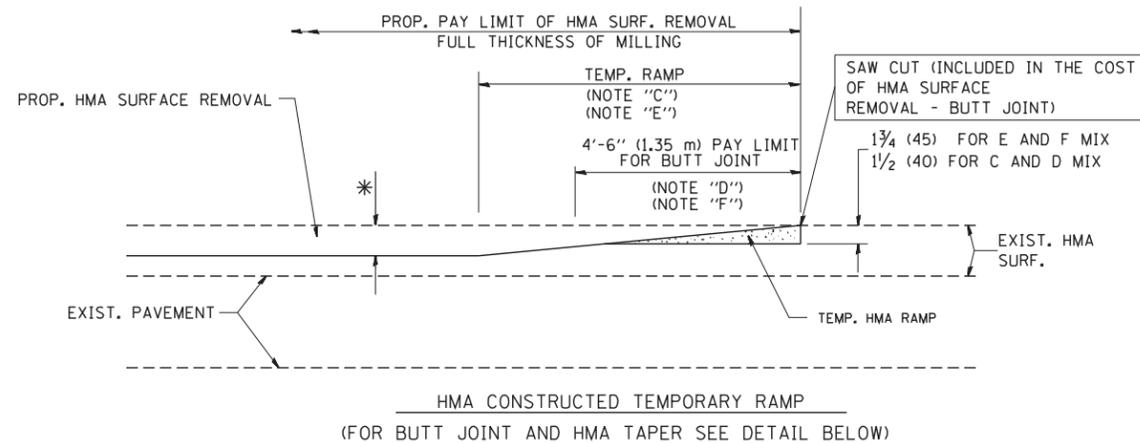
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BD.SHT NO. 2

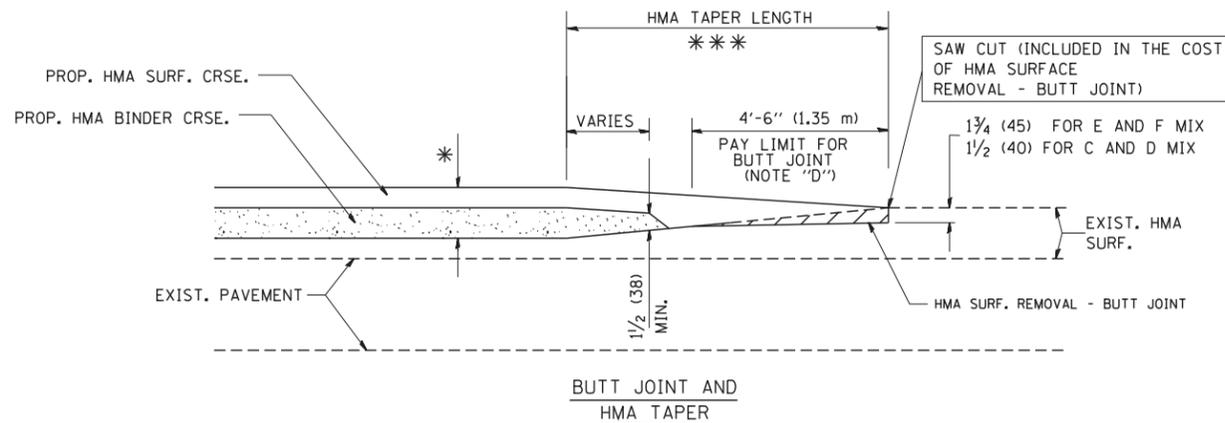
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PLOT DATE = 12/15/2009	DATE - 03-11-94	REVISED - R. BORO 12-15-09	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	



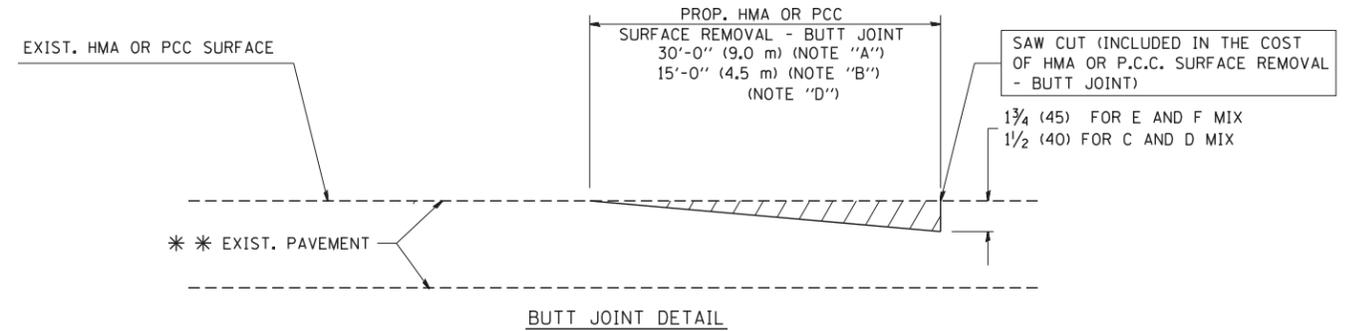
**OPTION 1**



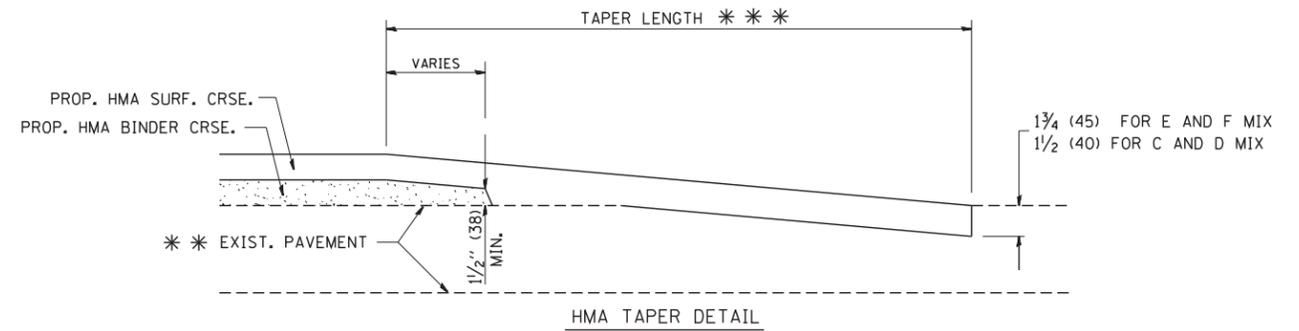
**OPTION 2  
TYPICAL TEMPORARY RAMP**



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



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**TYPICAL BUTT JOINT AND HMA TAPER  
FOR RESURFACING ONLY**

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

**NOTES**

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - 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'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
  - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \* \* \* 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".

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

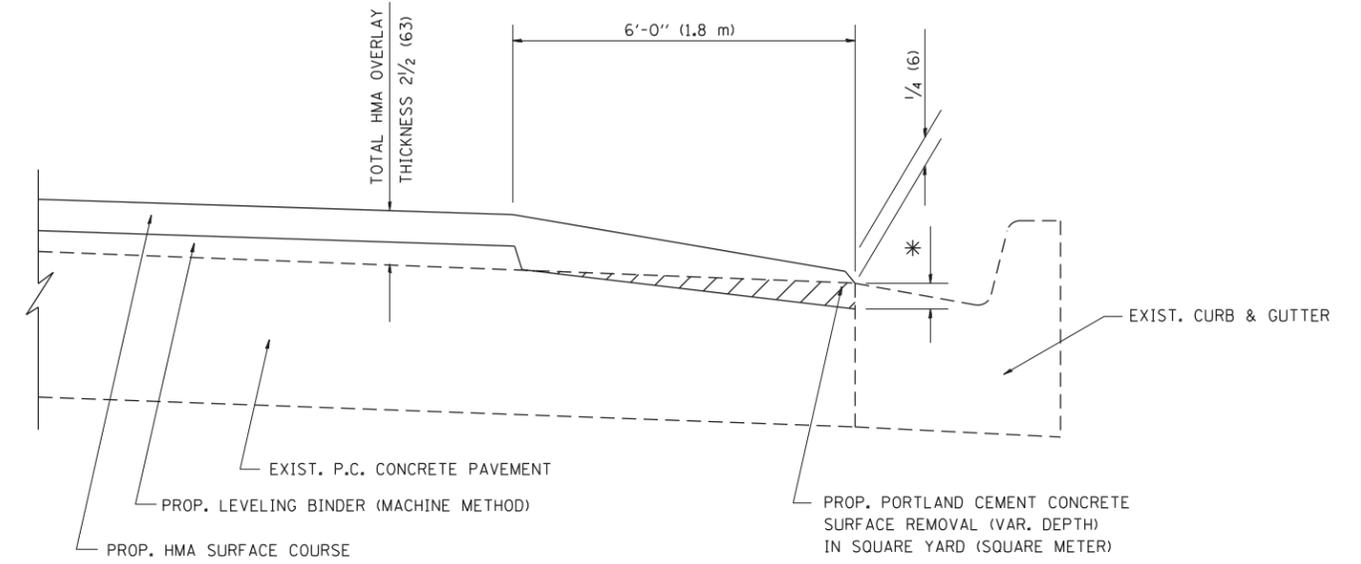
BD SHT NO. 3

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		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>BUTT JOINT AND HMA TAPER DETAILS</b>	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A.P. RTE. 379	SECTION 2010-120-1	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 75
<b>BD400-05 BD32</b>		CONTRACT NO. 60M68		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



HMA TAPER AT  
EDGE OF P.C.C. PAVEMENT

HMA SURFACE	THICKNESS	LEVELING BINDER	THICKNESS	* MILLING AT GUTTER FLAG
C OR D	1 1/2 (38)	1 (25)	1 1/4 (33)	
E	1 3/4 (44)	3/4 (19)	1 1/2 (38)	

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

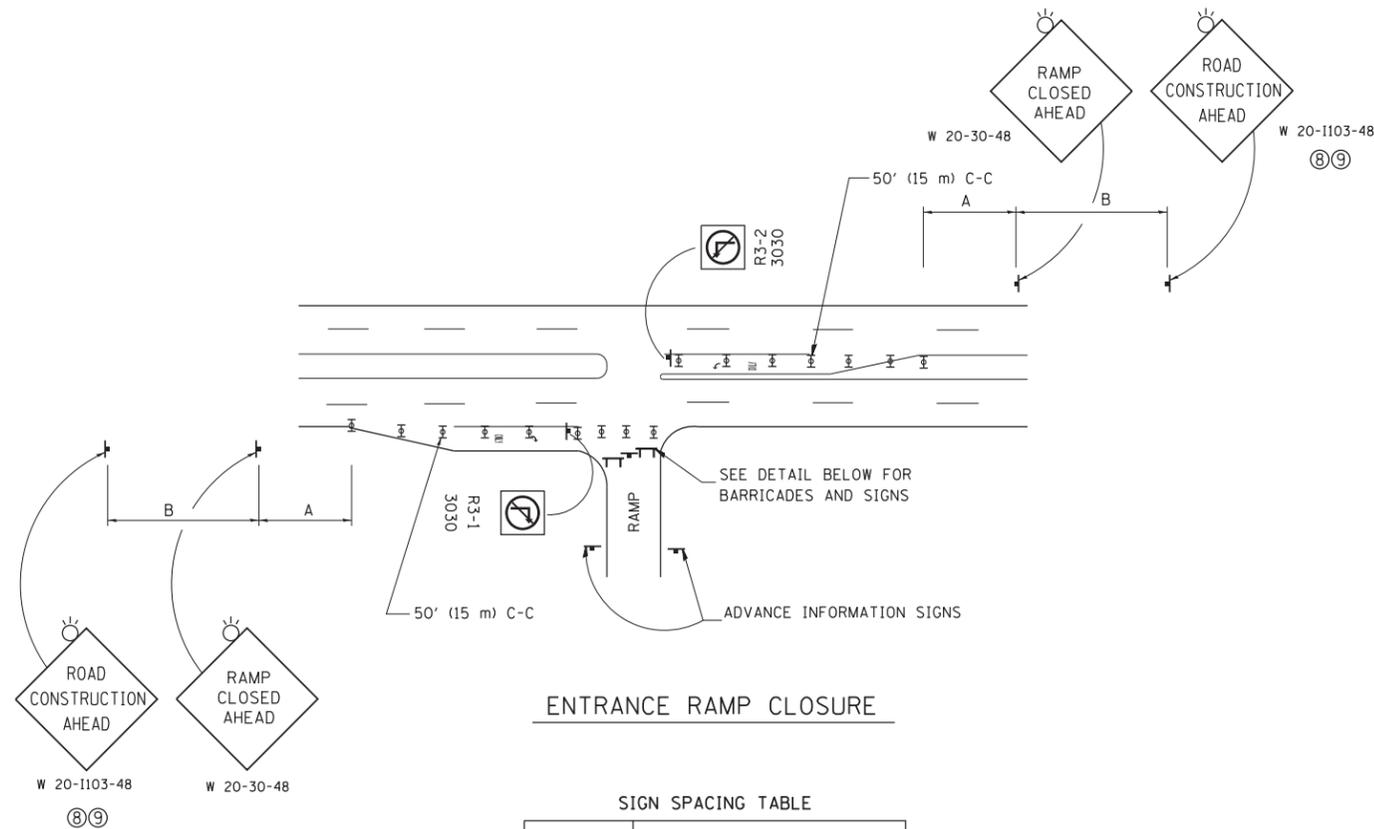
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	PLOT DATE = 7/7/2016	DATE - 09-10-94	REVISED - JP CHANG 07-08-16

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

HMA TAPER AT  
EDGE OF P.C.C. PAVEMENT

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	2010-120-I	COOK	88	76
BD400-06 (BD33)		CONTRACT NO. 60M68		
ILLINOIS FED. AID PROJECT				

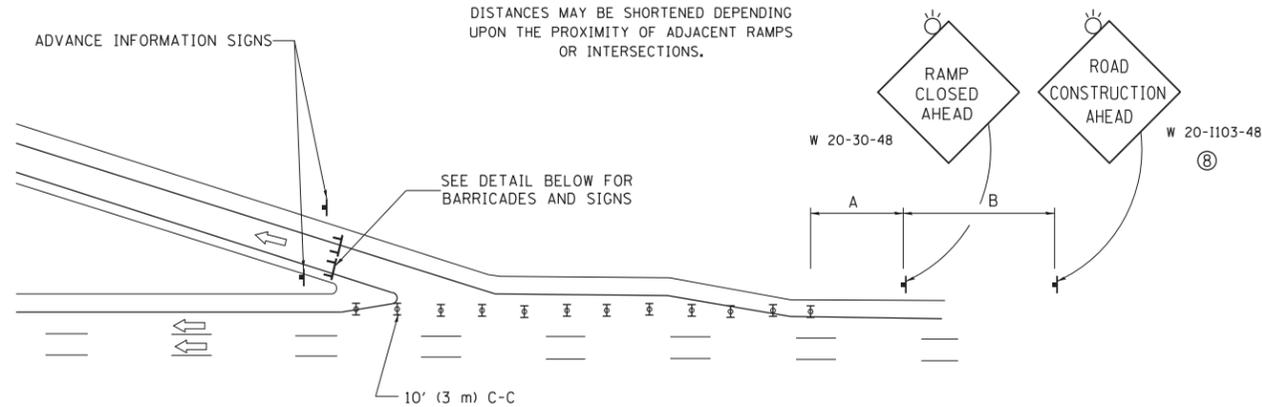


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY <24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

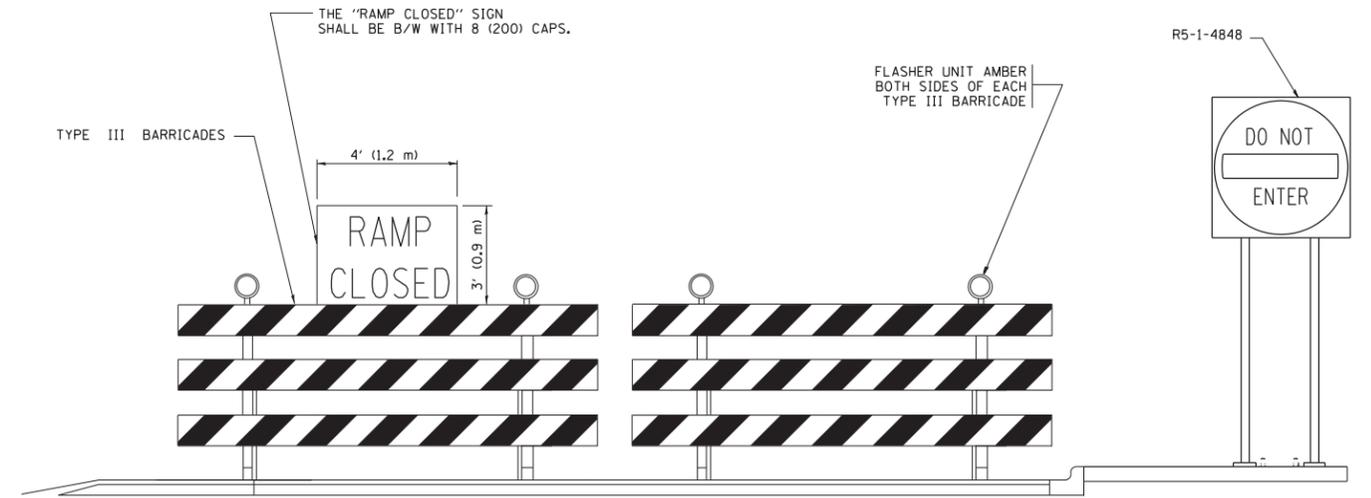
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



EXIT RAMP CLOSURE

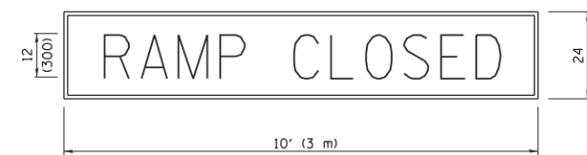
**SYMBOLS**

- ⊥ TYPE II BARRICADE OR DRUM
- ⊥ TYPE III BARRICADE WITH 2 FLASHING LIGHTS



DETAIL FOR REQUIRED BARRICADES & SIGNS

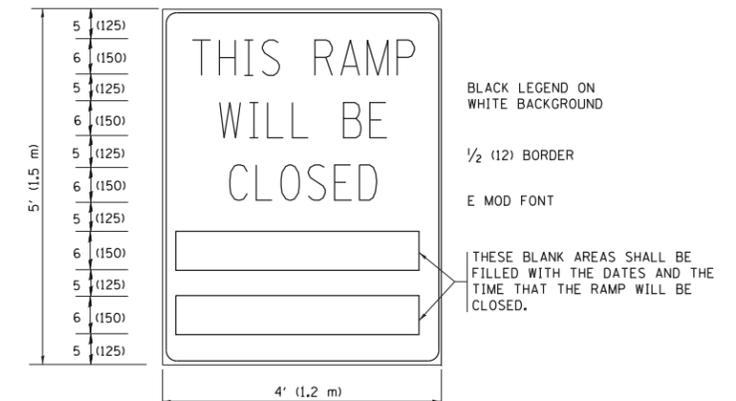
RAMP CLOSURE ADVANCE WARNING SIGN



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

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

RAMP CLOSURE ADVANCE INFORMATION SIGN



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:**

- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- ② VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- ③ A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEDED BY A W20-7 FLAGGER WARNING SIGN.
- ④ ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- ⑤ THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- ⑥ AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- ⑦ 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.
- ⑨ 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.

TC-SHT NO. 1

FILE NAME =	USER NAME = footemj	DESIGNED - D.W.S.	REVISED - S.P.B. 01-07
pw:\IL\084EBID\INTEG\illinois.gov\PIWID\Documents\IDOT Offices\District 1\Projects\Dist 1\084EBID\CADD\CAD\Drawings\TC08.dgn		CHECKED -	REVISED - S.P.B. 12-09
Default	PLOT SCALE = 50.000' / in.	DATE - 02-83	REVISED - M.D. 06-13
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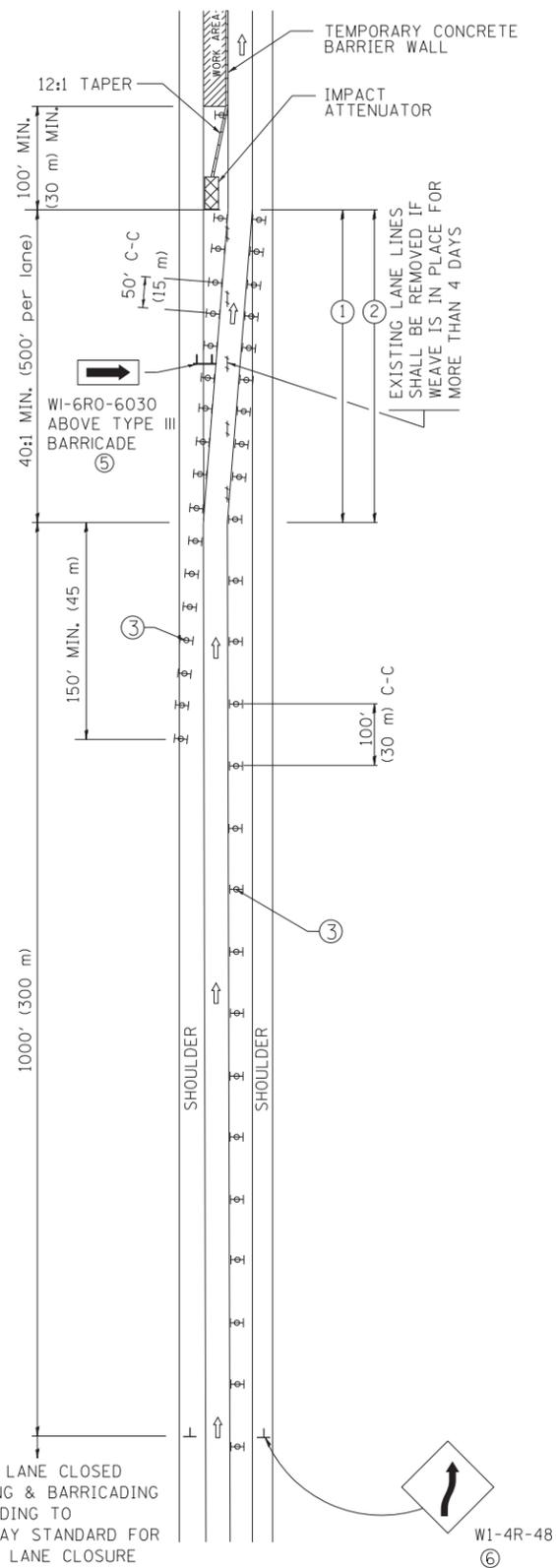
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ENTRANCE AND EXIT RAMP  
CLOSURE DETAILS

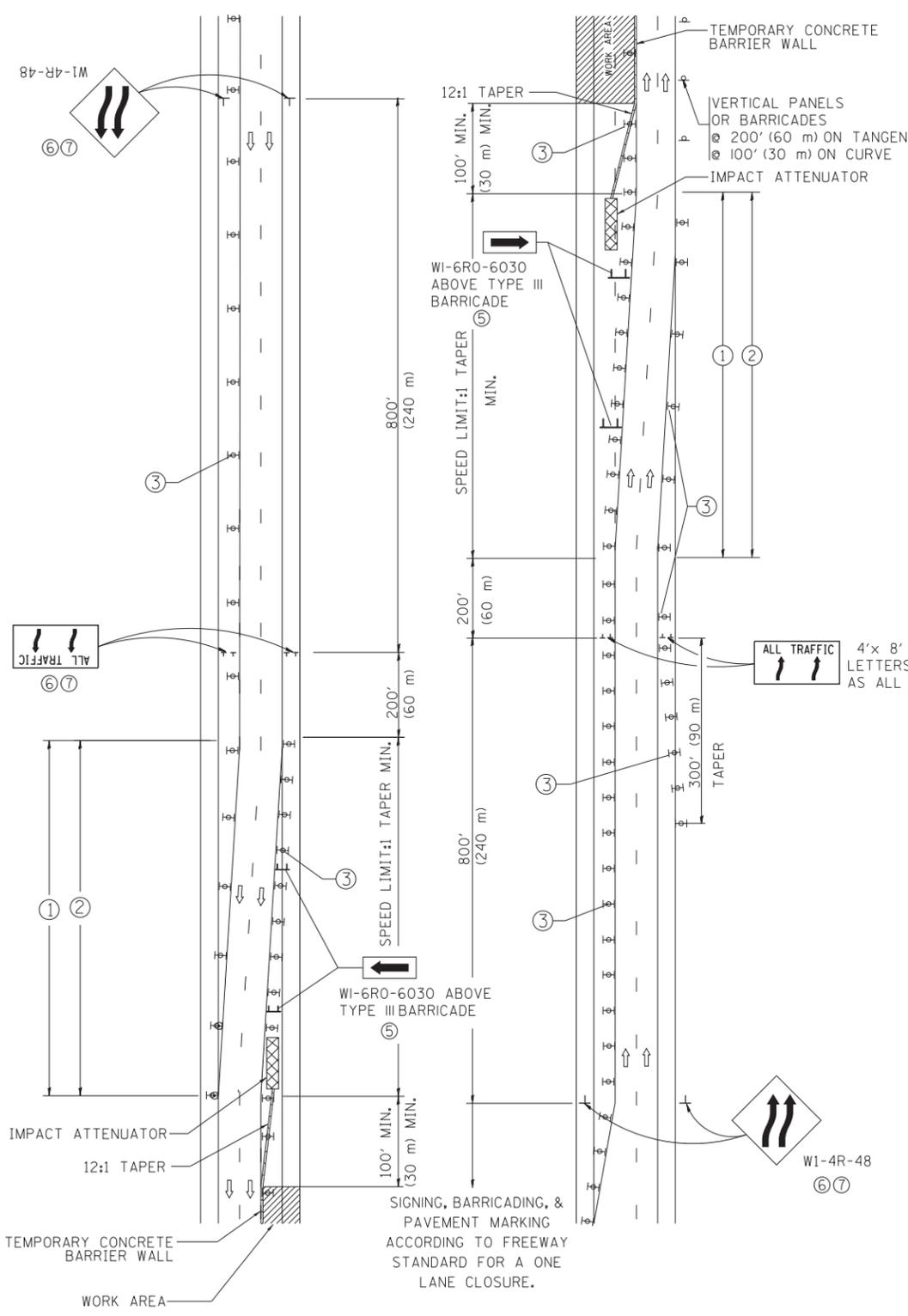
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-1	COOK	88	77
TC-08		CONTRACT NO. 60M68		
ILLINOIS FED. AID PROJECT				

# SINGLE LANE WEAVE

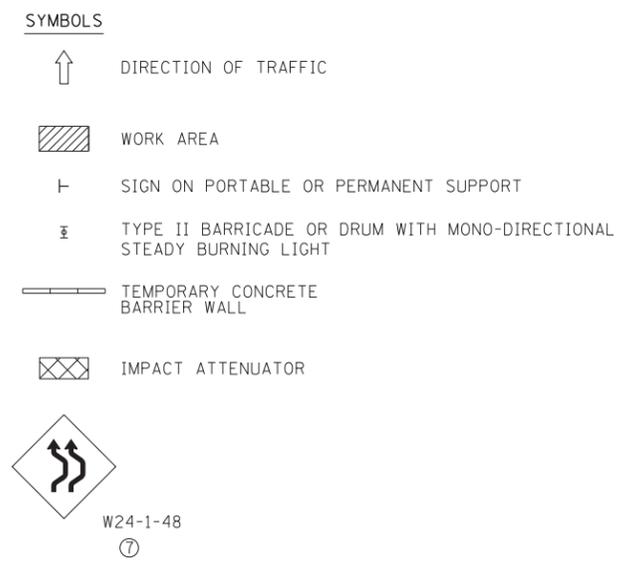


# MULTI-LANE WEAVE



- ### GENERAL NOTES
- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.
  - CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.
  - PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
  - ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
  - TYPE III BARRICADES MAY BE OMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.
  - WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.
  - THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

4'x 8' (1.2 m x 2.4 m); 1 (25) BORDER; 10 (250) CAPITAL LETTERS BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS.



ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

TC-SHT NO. 2

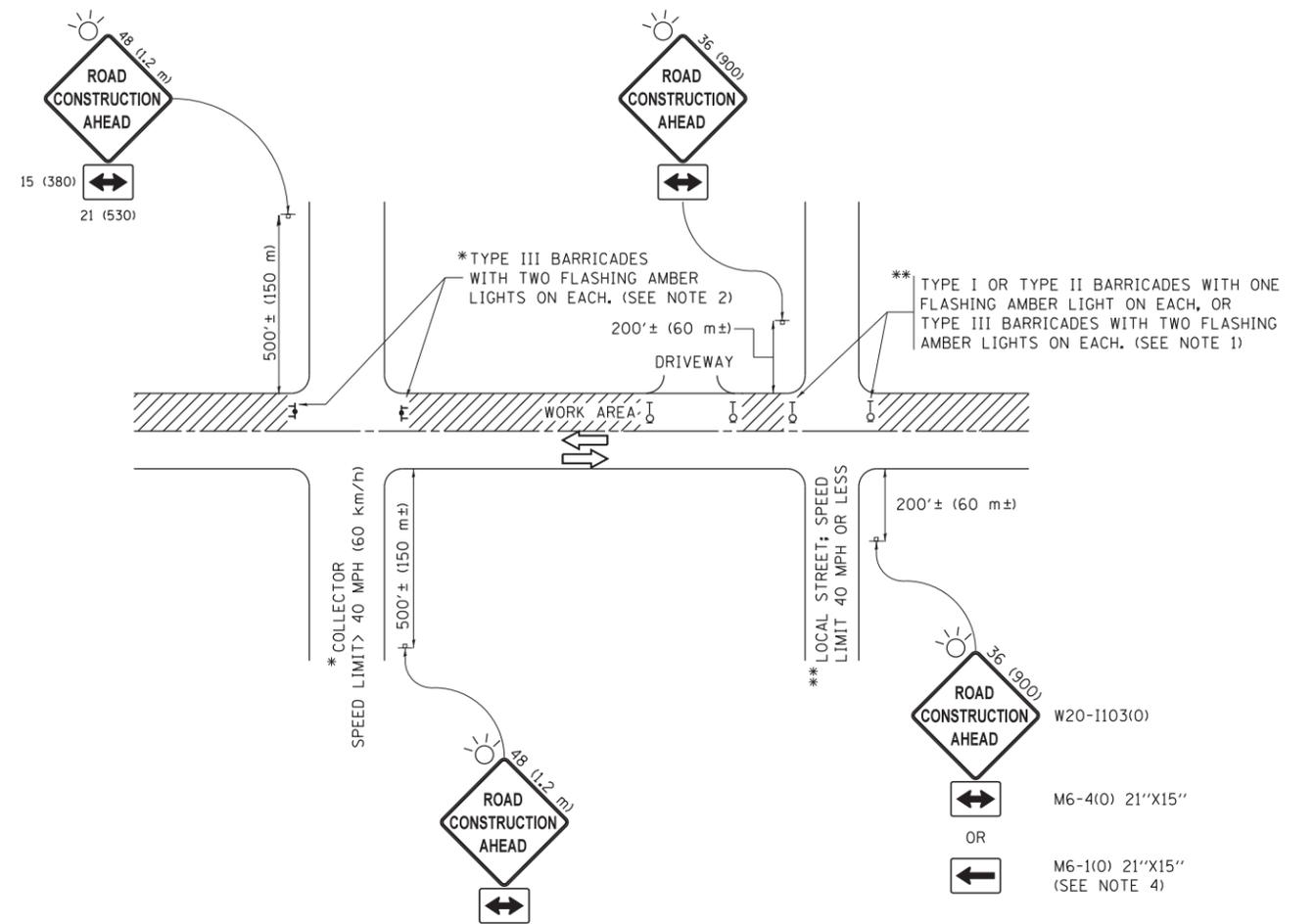
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	PLOT DATE = 7/1/2013	DATE - 02-87	REVISED - MD 06-13

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

## TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F&P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	78
TC-09		CONTRACT NO. 60M68		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY 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.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE 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.

TC-SHT NO. 3

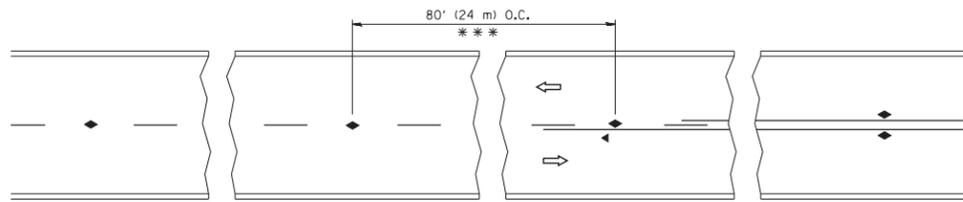
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	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

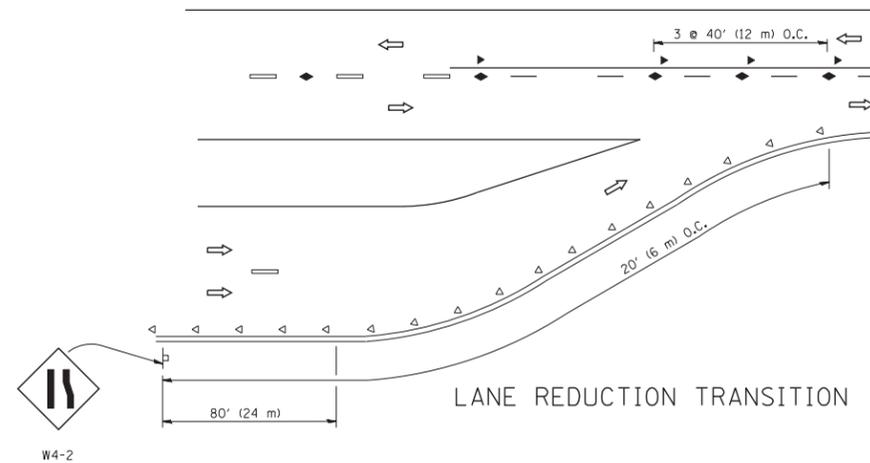
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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<b>TC-10</b>		<b>CONTRACT NO. 60M68</b>		
ILLINOIS FED. AID PROJECT				

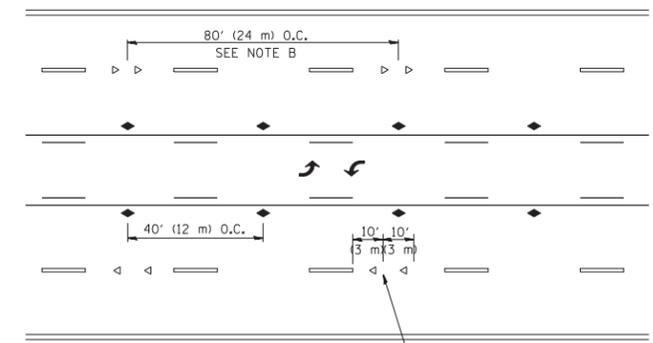


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

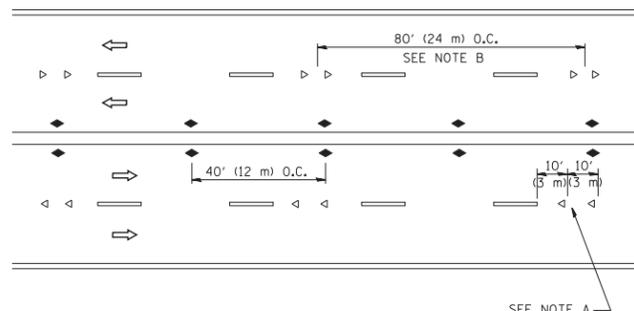
TWO-LANE/TWO-WAY



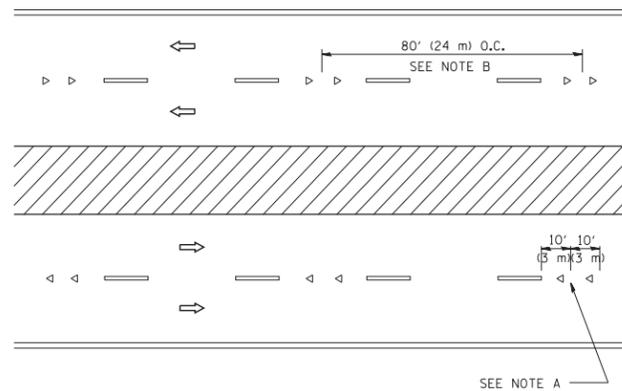
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

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.

SYMBOLS

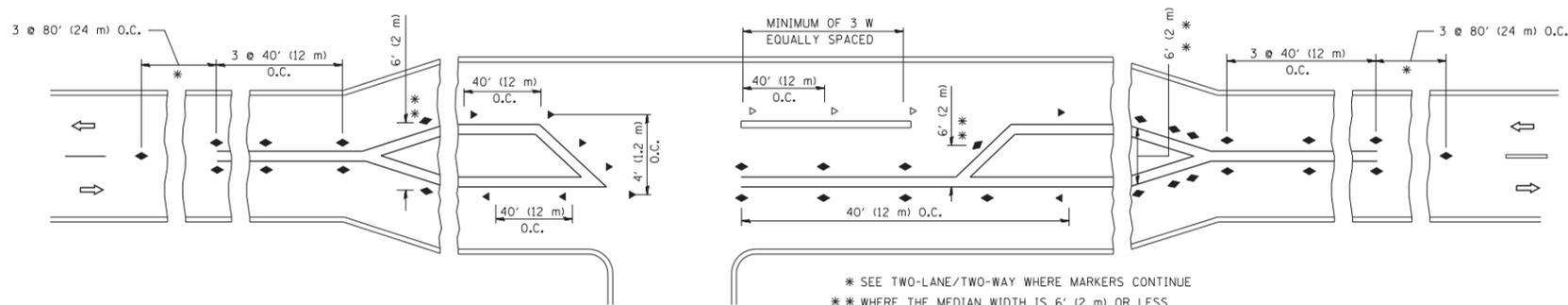
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.



LEFT TURN

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

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

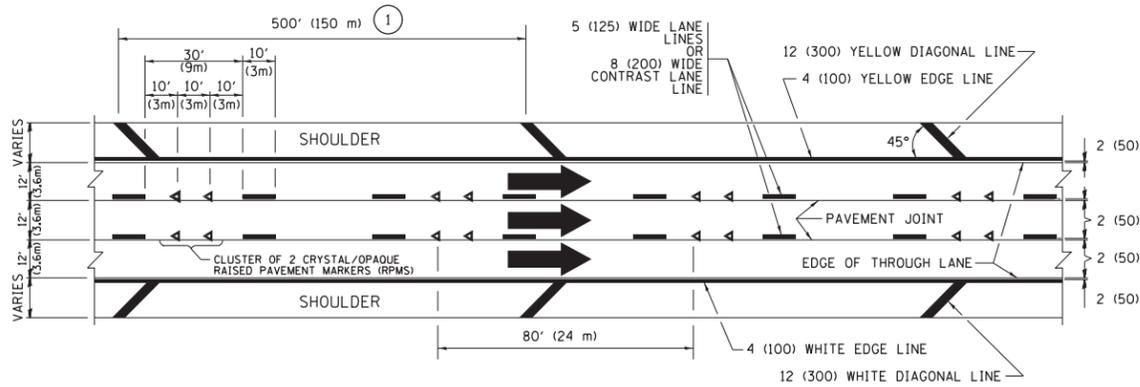
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	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

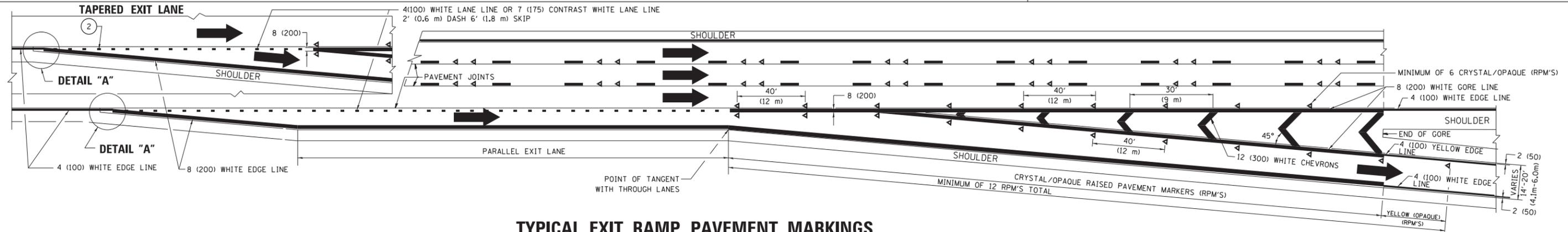
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379	2010-120-1	COOK	88	80
TC-11		CONTRACT NO. 60M68		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



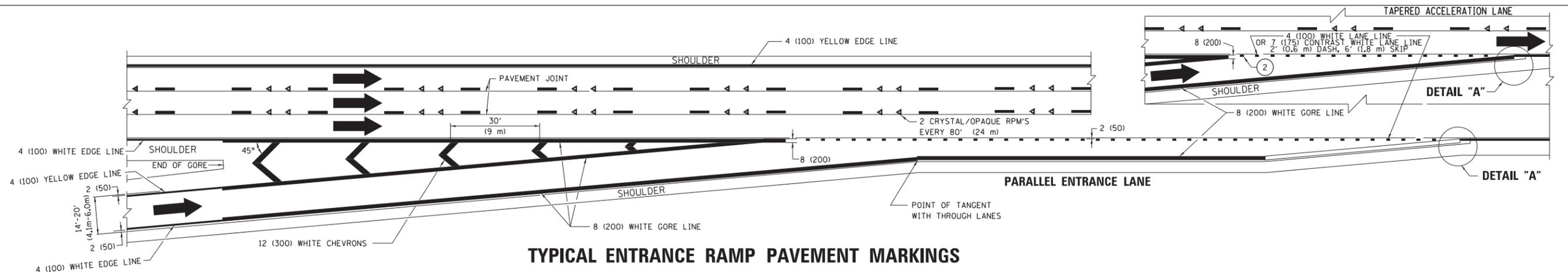
**TYPICAL EDGE LINES & LANE LINES**

**PAVEMENT MARKING MATERIALS**

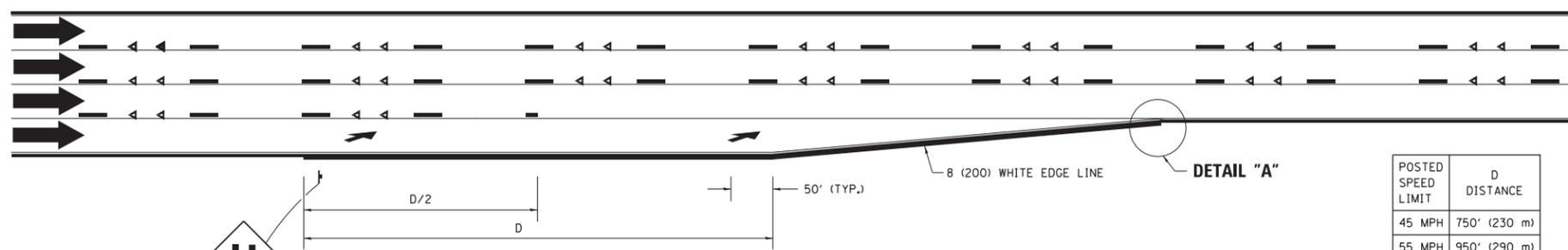
1. THERMOPLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR ALL EDGE LINES, GORE LINES, AND DIAGONAL LINES ON HMA PAVEMENTS.
2. POLYUREA OR MODIFIED URETHANE PAVEMENT MARKING LINE SHALL BE USED FOR ALL EDGE LINES, GORE LINES, AND DIAGONAL LINES ON PCC PAVEMENTS.
3. PREFORMED PLASTIC PAVEMENT MARKING LINE TYPE B, INLAID OR GROOVE IN, SHALL BE USED FOR ALL LANE LINES ON HMA PAVEMENTS.
4. CONTRAST PREFORMED PLASTIC PAVEMENT MARKING LINE TYPE B, GROOVE IN, SHALL BE USED FOR ALL LANE LINES ON PCC PAVEMENT.



**TYPICAL EXIT RAMP PAVEMENT MARKINGS**

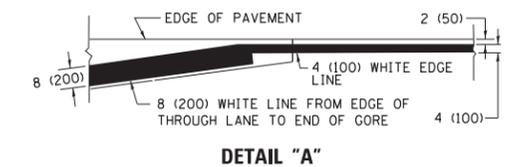


**TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS**



**LANE REDUCTION PAVEMENT MARKINGS**

POSTED SPEED LIMIT	D DISTANCE
45 MPH	750' (230 m)
55 MPH	950' (290 m)
65 MPH	1200' (365 m)



- NOTES:**
- ① THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH. THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH.
  - ② 4" (2' DASH, 6' SKIP) MARKING ON TAPERED ENTRANCE AND EXIT RAMP SHALL BE OMITTED ON TANGENT SECTIONS.

TC-SHT NO. 5

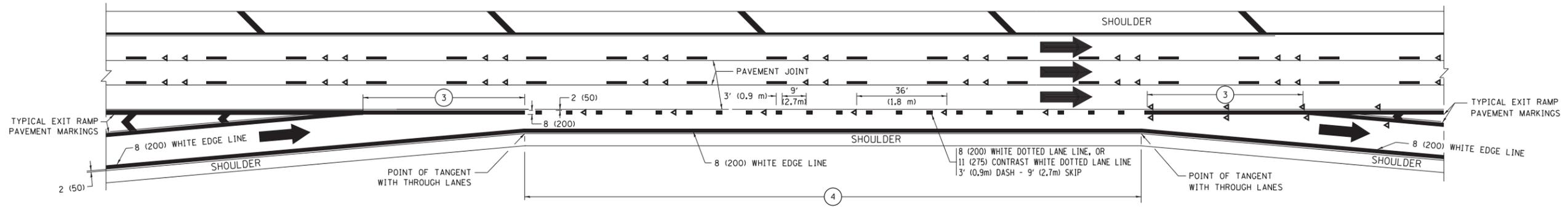
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Default	PLOT SCALE = 50.000' / in.	DATE - 01-90	REVISED - M.D. 05-13
	PLOT DATE = 9/6/2017		REVISED - M.D. 09-17

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

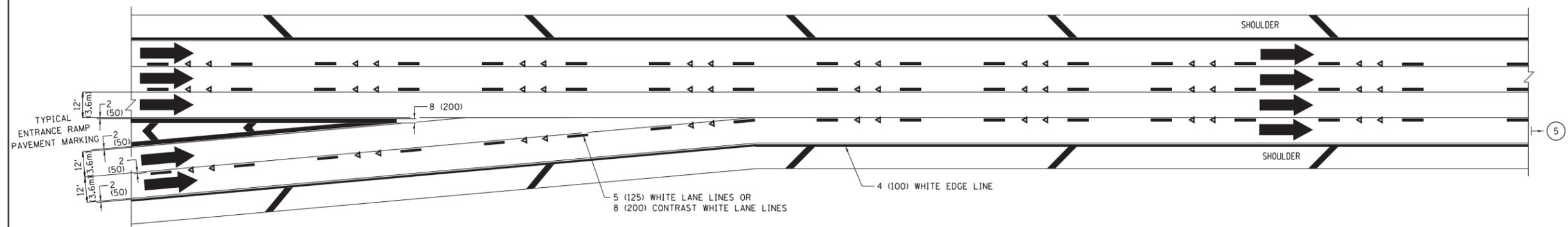
**MULTI-LANE FREEWAY  
PAVEMENT MARKING DETAILS**

SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

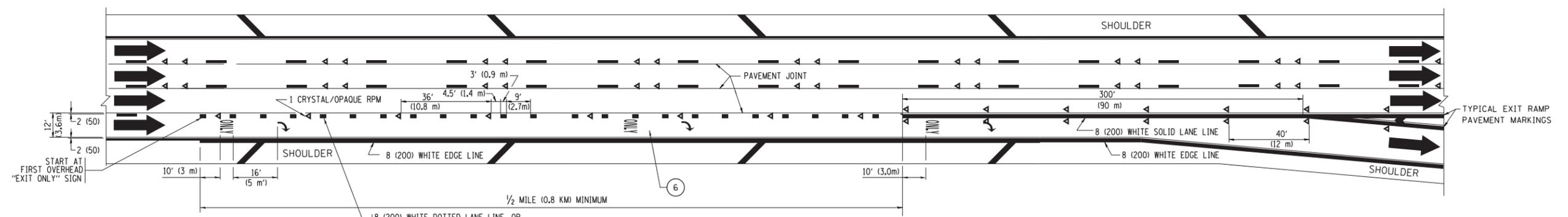
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-1	COOK	88	81
<b>TC-12</b>		CONTRACT NO. 60M68		
ILLINOIS FED. AID PROJECT				



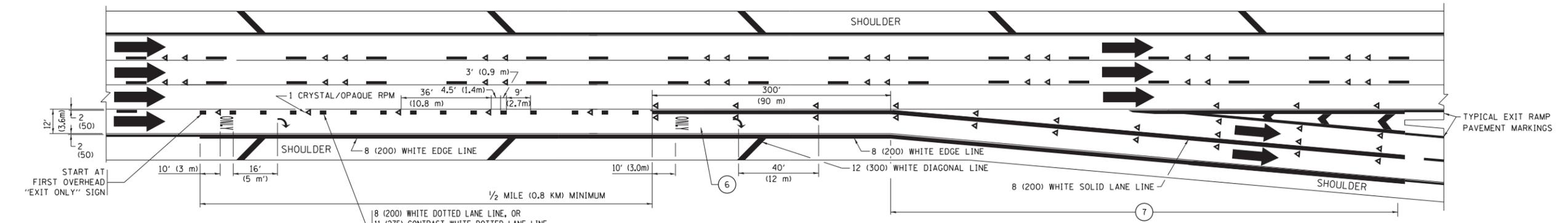
**AUXILIARY LANE MARKINGS**



**TWO LANE ENTRANCE RAMP WITH MERGE MARKINGS**



**EXIT ONLY LANE MARKINGS**



**EXIT ONLY WITH OPTION LANE MARKINGS**

- NOTES:**
- ③ OMIT WHEN LENGTH OF AUXILIARY LANE IS LESS THAN 500' (150 m).
  - ④ 8-INCH WIDE DOTTED LANE LINE MARKINGS SHALL BE USED WHEN THE LENGTH OF THE AUXILIARY LANE IS 2 MILES OR LESS.
  - ⑤ FOR TWO-LANE ENTRANCE RAMP, IF RIGHT LANE ENDS, USE TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS.
  - ⑥ ONLY AND ARROWS EQUALLY SPACED, 500' (150 m) MAXIMUM SPACING. FULL SIZE LETTERS AND ARROW SHALL BE USED.
  - ⑦ CONTINUE 8" SOLID LANE LINE THROUGH EXIT TO END OF PAVED GORE.

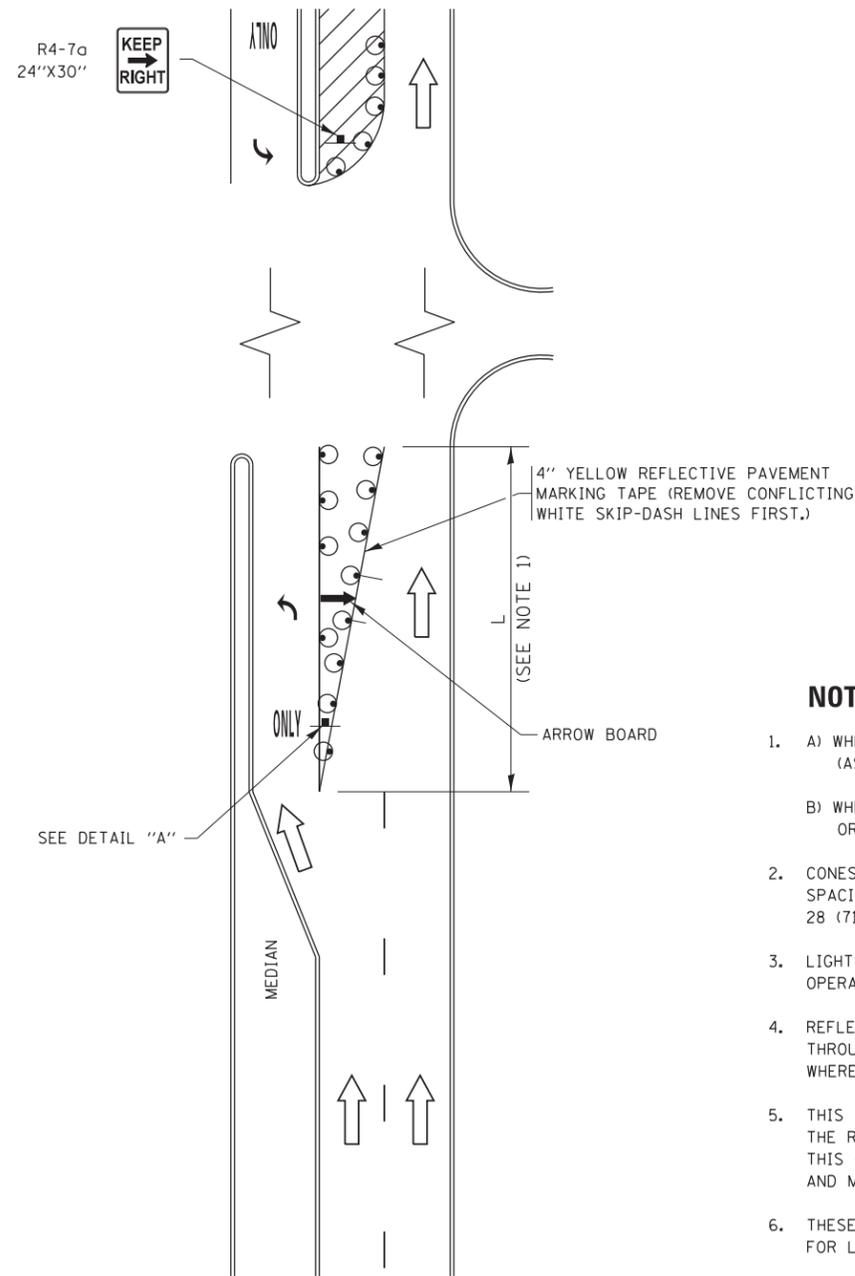
TC-SHT NO. 6

FILE NAME =	USER NAME = footemj	DESIGNED - D.W.S.	REVISED - J.A.F. 02-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBID\INTEG\illinois.gov\PI\DOT\Documents\DOT Offices\District 1\Projects\Dist 1\084EBID\CADD\CAD\Drawings\TC12.dgn		CHECKED -	REVISED - S.P.B. 01-07					379	2010-120-1	COOK	88	82
Default		PLOT SCALE = 50.0000' / in.	REVISED - S.P.B. 01-10					<b>TC-12</b>			CONTRACT NO. 60M68	
		PLOT DATE = 9/6/2017	REVISED - M.D. 09-17					ILLINOIS	FED. AID PROJECT			

SCALE: NONE SHEET 2 OF 2 SHEETS STA. TO STA.

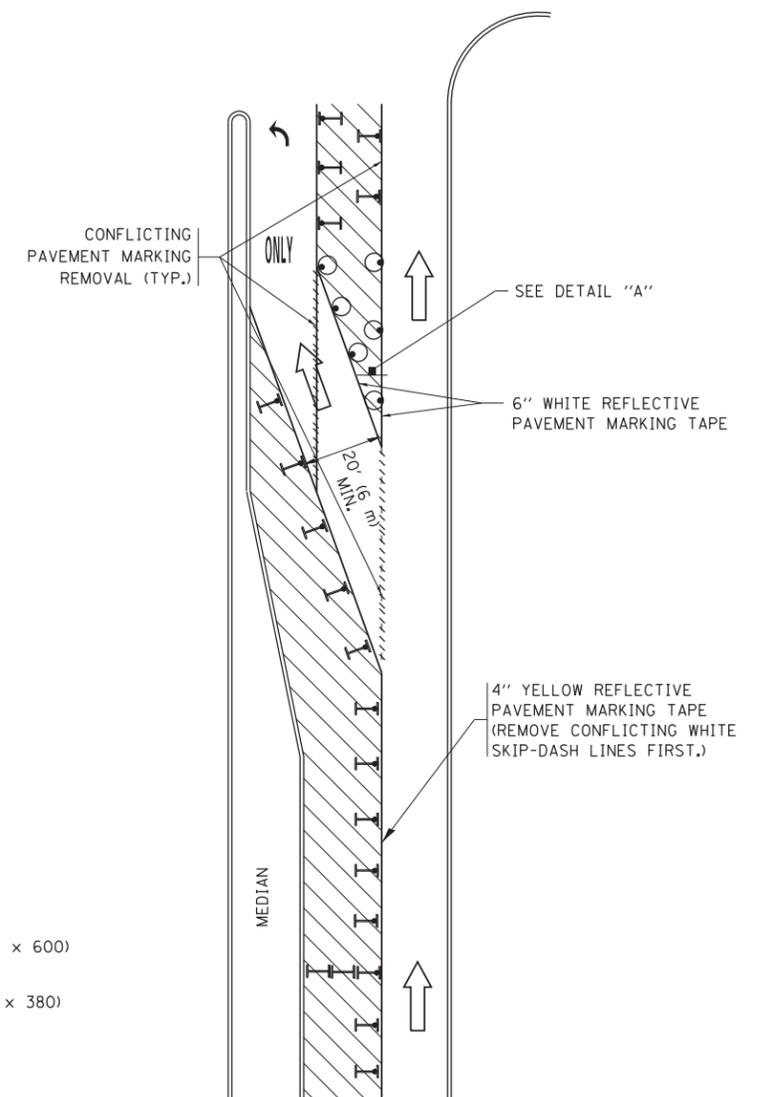


# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



**FIGURE 1**

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE



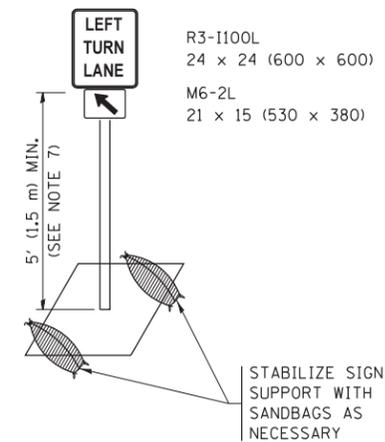
**FIGURE 2**

## 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

## NOTES:

1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 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 PRE REQUIREMENTS.
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.

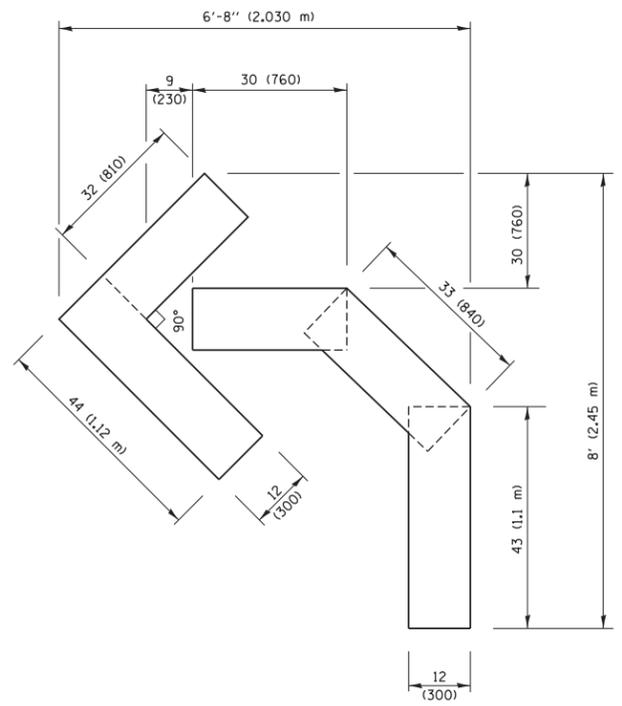


**DETAIL A**

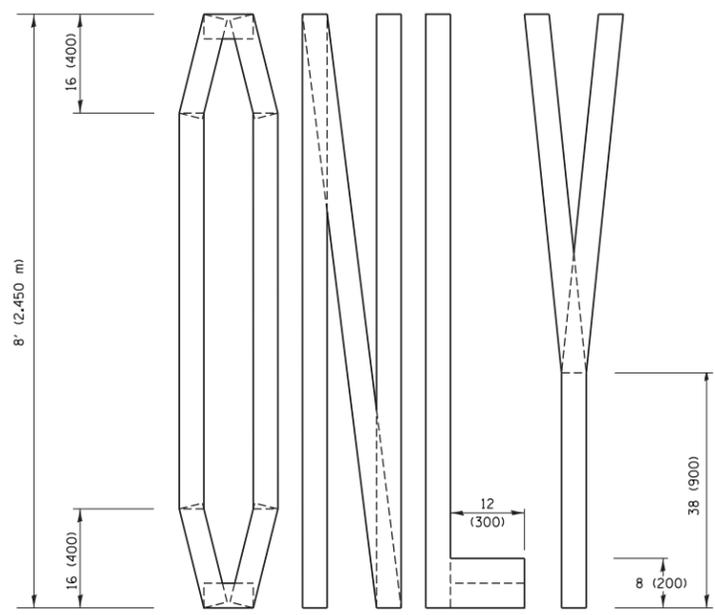
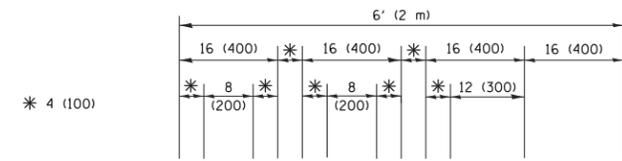
All dimensions are in inches (millimeters) unless otherwise shown.

TC-SHT NO. 8

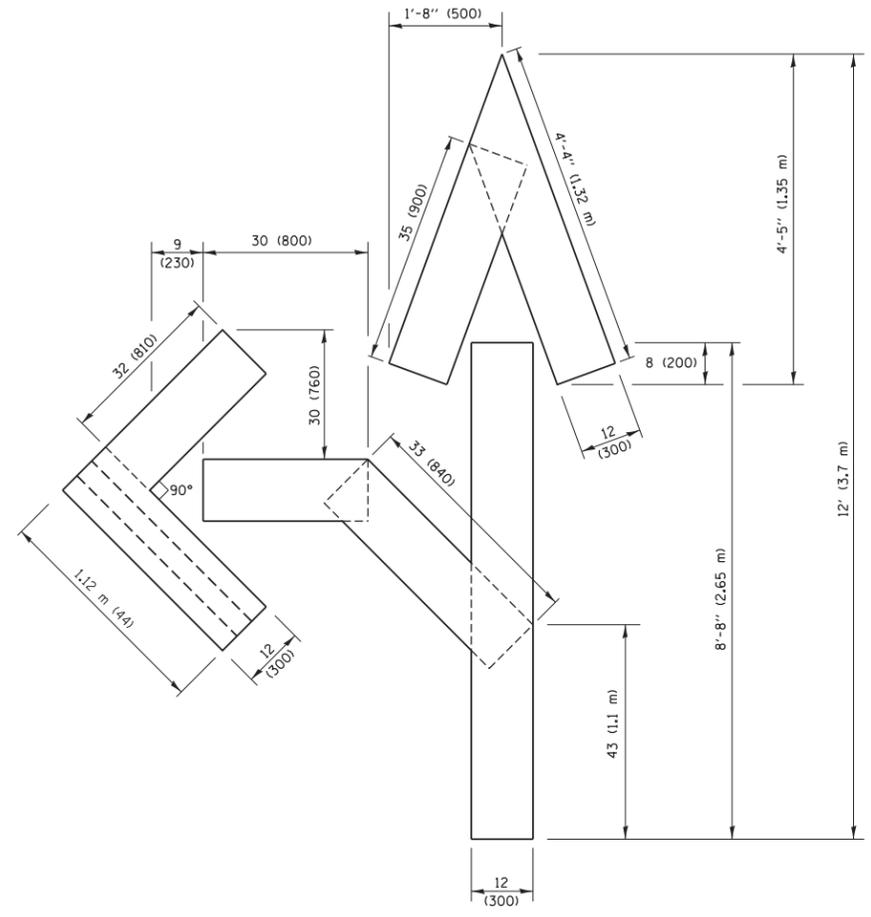
FILE NAME =	USER NAME = footemj	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)</b>	F.A.P. RTE. 379	SECTION 2010-120-I	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 84	
Default	PLOT SCALE = 50.0000' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16			SCALE: NONE	SHEET 1 OF 1 SHEETS	STA. TO STA.	<b>TC-14</b>		CONTRACT NO. 60M68
	PLOT DATE = 9/15/2016	REVISED - T. RAMMACHER 01-06-00	REVISED -					ILLINOIS FED. AID PROJECT			



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

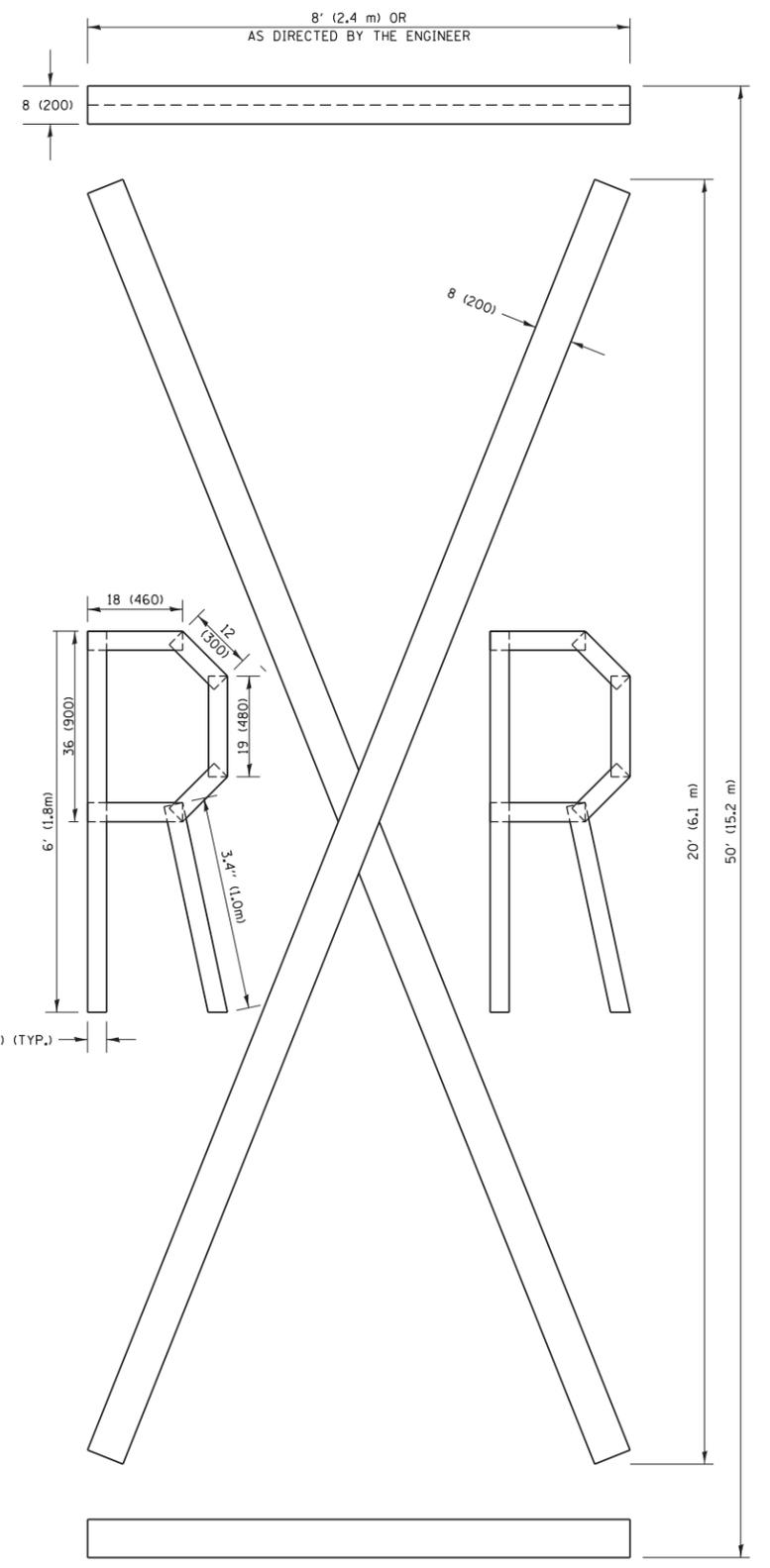


**QUANTITY**  
 4 (100) LINE = 64.1 ft. (19.5 m)  
 21.4 sq. ft. (1.99 sq. m)



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

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



**QUANTITY**  
 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.

TC-SHT NO. 9

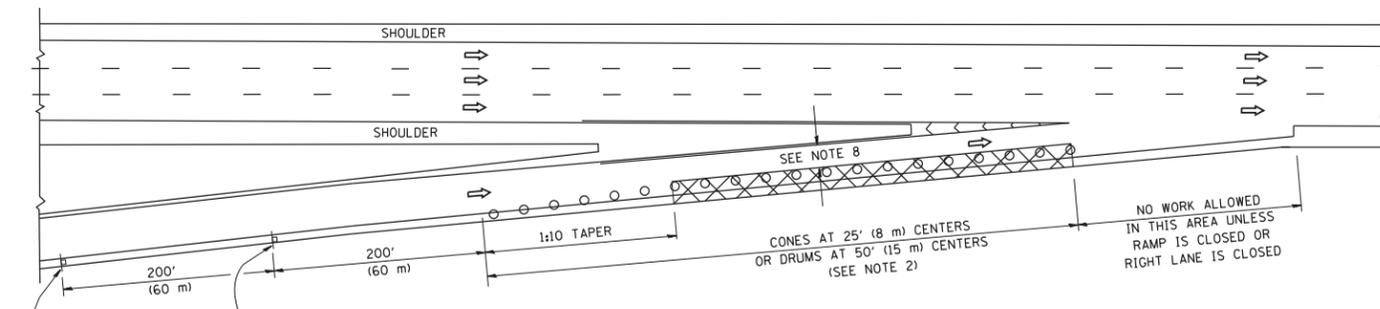
FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
p:\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\Dist 1\084EBIDINTEG\CADD\Drawings\TC16.dgn		CHECKED -	REVISED - E. GOMEZ 08-28-00
		DATE -	REVISED - E. GOMEZ 08-28-00
			REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

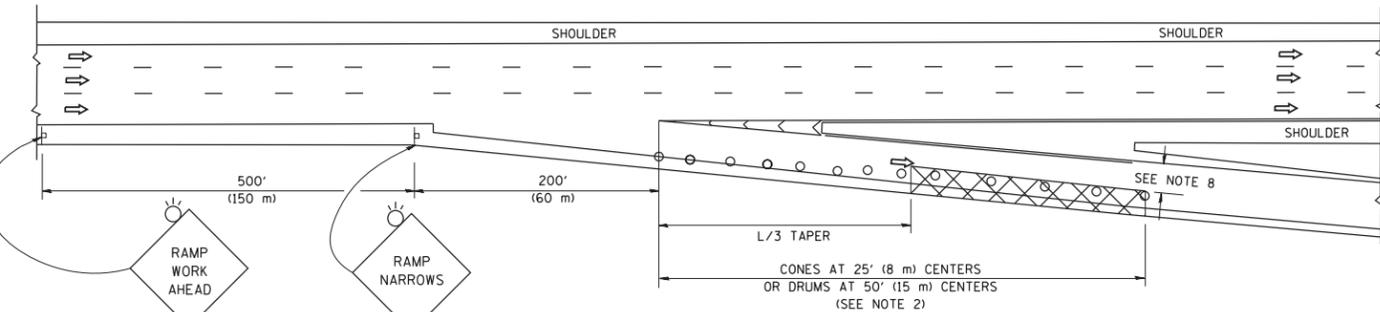
<b>SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-I	COOK	88	85
<b>TC-16</b>		<b>CONTRACT NO. 60M68</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

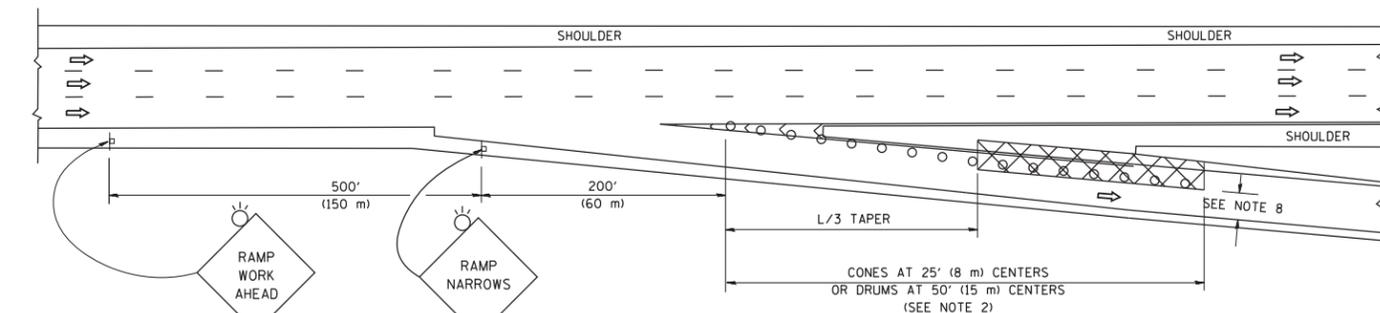
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

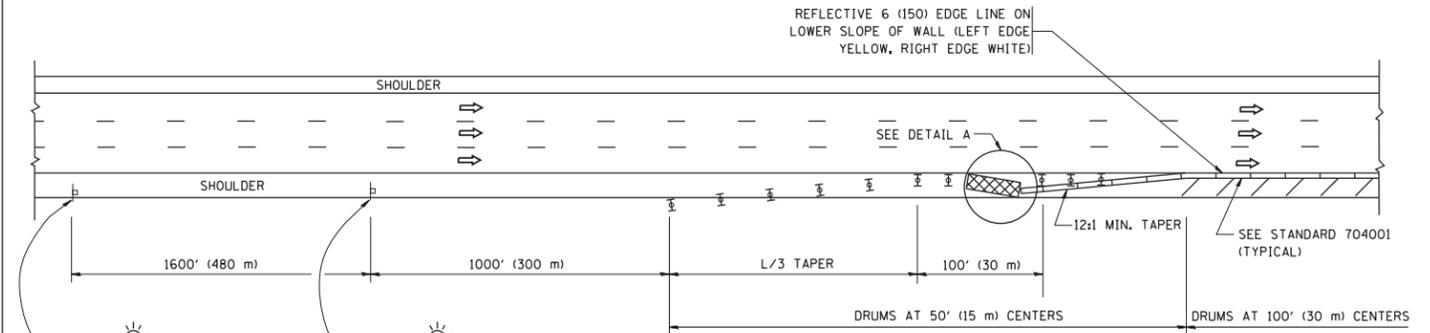
- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES

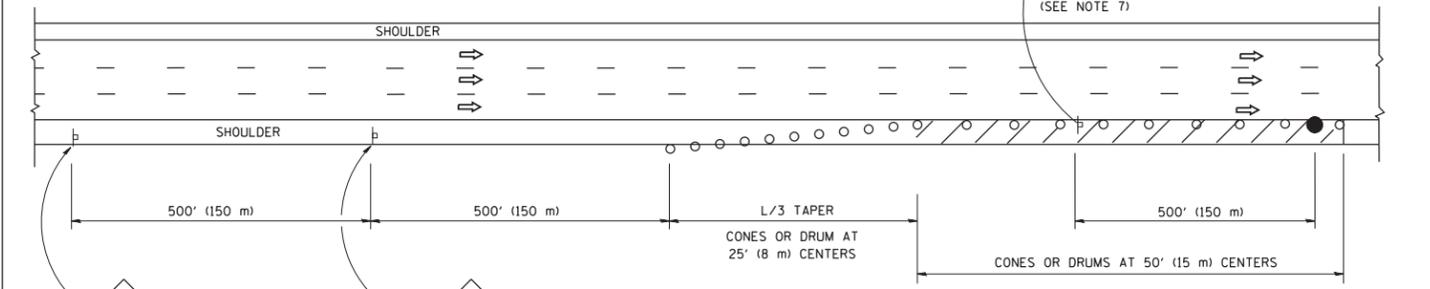
1. THE "L" DISTANCE EQUALS:
 

SPEED LIMIT	FORMULAS
45 mph (80 km/h)	METRIC ENGLISH
OR GREATER:	L=0.65(W)(S) L=(W)(S)
W = WIDTH OF OFFSET IN FEET (METERS)	
S = NORMAL POSTED SPEED MPH (KM/H)	
2. TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTACLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
  - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
  - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12' MIN. WIDTH TANGENT SECTION  
16' MIN. WIDTH CURVE SECTION.

SHOULDER CLOSURE DETAILS

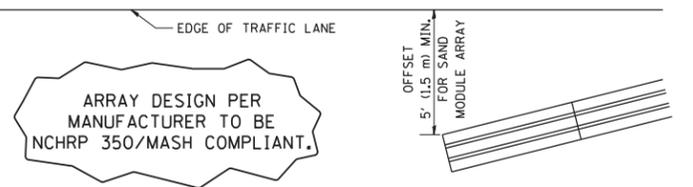


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:  
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

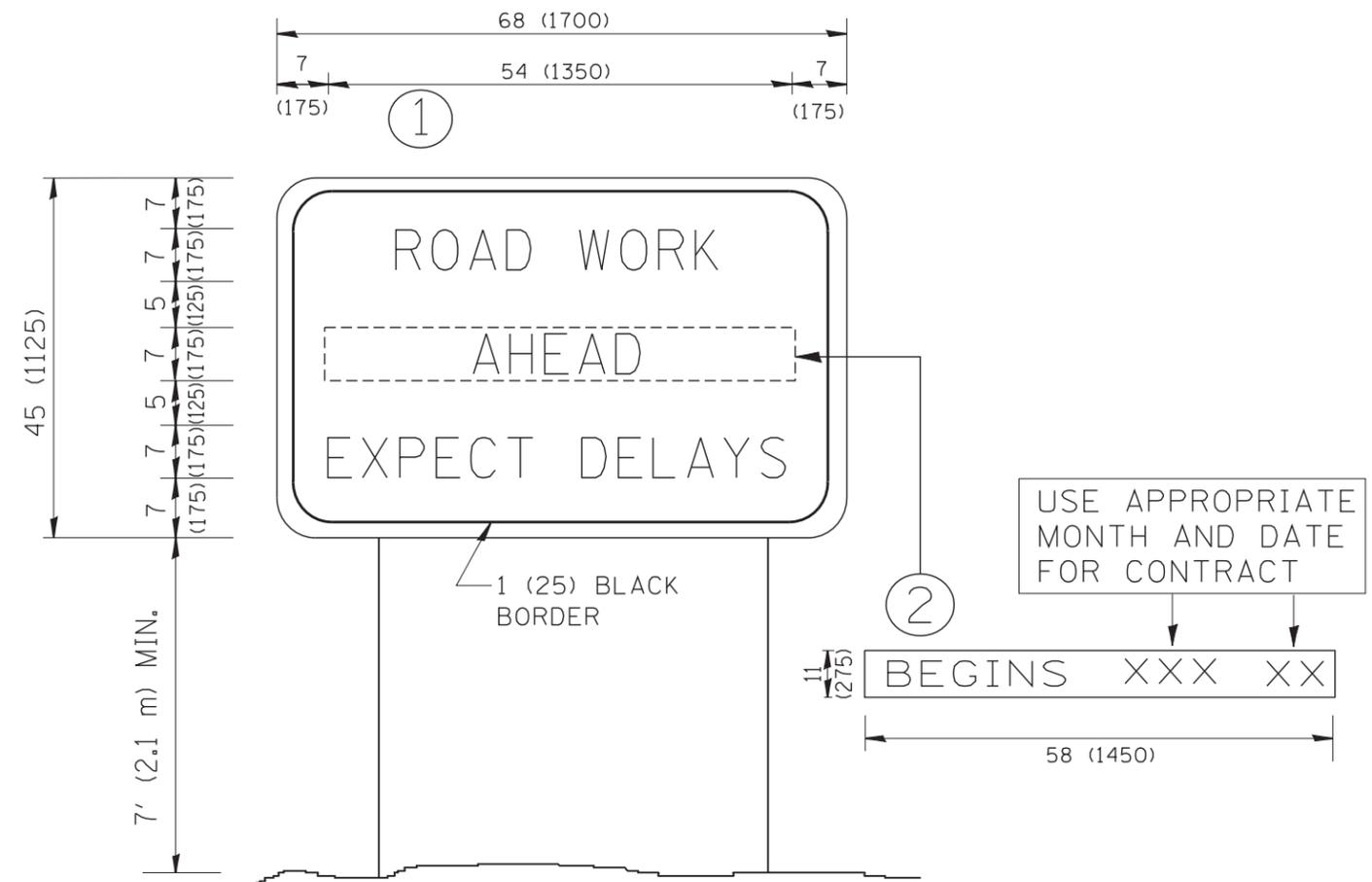


DETAIL "A"  
IMPACT ATTENUATOR, TEMPORARY  
(SEE NOTE 5)

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

TC-SHT NO. 10

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - S.P.B. 01-07	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
			REVISED - S.P.B. 12-09			379	2010-120-1	COOK	88	86	
			REVISED - M.D. 06-13			<b>TC-17</b>		CONTRACT NO. 60M68			
			REVISED - M.D. 01-18			SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT			



**NOTES:**

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

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

TC-SHT NO. 11

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED - REVISED -
		DESIGNED - CHECKED -	REVISED - REVISED -
		DESIGNED - DATE -	REVISED - REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 379	SECTION 2010-120-1	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 87
<b>TC-22</b>		CONTRACT NO. 60M68		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

TC-SHT NO. 12

FILE NAME =	USER NAME = gegl1enobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
ct:\pwork\pwork\gagl1enobt\d0108315\tc26.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/13/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DRIVEWAY ENTRANCE SIGNING**

SCALE: NONE    SHEET NO. 1 OF 1 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	2010-120-1	COOK	88	88
<b>TC-26</b>		CONTRACT NO. 60M68		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				