005

01-18-2019 LETTING ITEM 005

C.S.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74*	1
	ILLINOIS	CONTRACT NO. 62F30		

*74 + 1 = 75 TOTAL SHEETS

D-91-276-17

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

FAU ROUTE 3565: IL 171 (ARCHER RD)
SECTION 46VB-2-BR
OVER INGREDION RAILROAD SPUR
PROJECT: STP F1JH(812)
BRIDGE REHABILITATION
COOK COUNTY

C-91-276-17

FOR INDEX OF SHEETS, SEE SHEET NO. 2

DESIGN DESIGNATION
IL 171 (ARCHER RD): MINOR ARTERIAL

ADT (YEAR)
27,900 (2017)

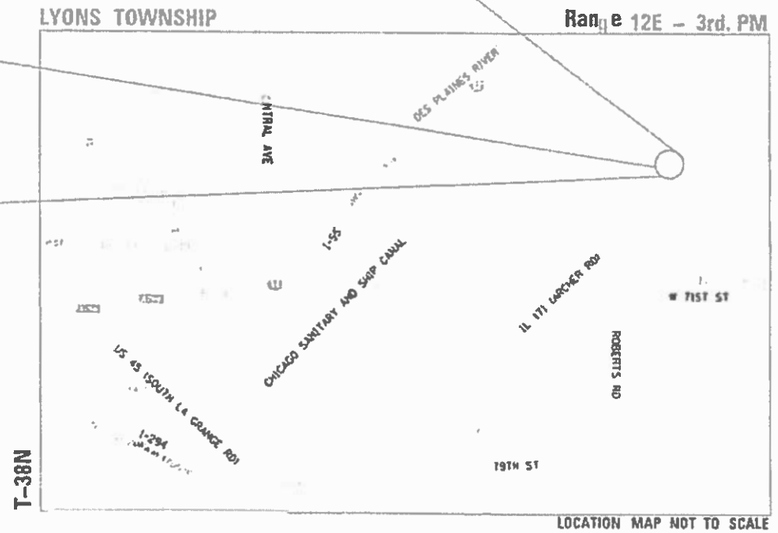
DESIGN SPEED (POSTED SPEED)
30 MPH (30 MPH)

IMPROVEMENT LOCATED IN
VILLAGES OF SUMMIT AND BEDFORD PARK

END STA. 101+55.93 (IL 171)

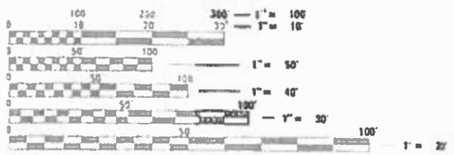
IMPROVEMENT LOCATION
IL 171 (ARCHER RD)
OVER INDREDION RAILROAD
STRUCTURE NO. 016-2544

BEGIN STA. 94+97.50 (IL 171)



LOCATION MAP NOT TO SCALE

GROSS LENGTH = 658.43 FT. = 0.125 MILE
NET LENGTH = 658.43 FT. = 0.125 MILE



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

LICENSED PROFESSIONAL ENGINEER
EDDIE E CHOI
062-069424
OF ILLINOIS

STATE OF ILLINOIS
STRUCTURAL ENGINEER

COLLINS ENGINEERS, INC.
ZACHARY J. TANNER, P.E.
NO. 062-068582
EXPIRES 11-30-2019

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 10-10 2018
REGIONAL ENGINEER

Dec 7 2018
ENGINEER OF DESIGN AND ENVIRONMENT

Dec 7 2018
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

3

PROJECT ENGINEER:
PROJECT MANAGER: MR. FAWAD AQUEEL, P.E. (847) 705-4247
CONTRACT NO. 62F30

COLLINS ENGINEERS INC
123 N. WACKER DR., SUITE 900
CHICAGO, IL 60606
(312) 704-9100

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV. 11/21/18

INDEX OF SHEETS

HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
601001-05	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
635001-02	DELINEATORS
643001-02	SAND MODULE IMPACT ATTENUATORS
666001-01	RIGHT-OF-WAY MARKERS
667101-02	PERMANENT SURVEY MARKERS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS <= 40 MPH
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN SINGLE LANE CLOSURE, MUTLILANE, 2W WITH MOUNTABLE MEDIAN
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
725001-01	OBJECT AND TERMINAL MARKERS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS)
731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

GENERAL NOTES:

1 BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS UTILITIES (48 HOUR NOTICE IS REQUIRED).

2 THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE RIGHT-OF-WAY OR PROPERTY WITHOUT PRIOR WRITTEN PERMISSION FROM THE ENGINEER.

3 THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH AFFECTED UTILITY COMPANIES AND THE VILLAGE OF SUMMIT AND BEDFORD PARK.

4 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB AND GUTTER AND MEDIAN ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED LARGER ITEM OF SPECIFIED WORK.

5 THE RESIDENT ENGINEER SHALL CONTACT THE ARTERIAL TRAFFIC FIELD ENGINEER, CORY JUCIUS AT CORY.JUCIUS@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

6 BEFORE BEGINNING ANY WORK THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

7 FOR WORK OUTSIDE THE LIMITS OF THE STRUCTURE, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.

8 THE CONTRACTOR SHALL MAINTAIN ALL ROADWAYS OPEN TO TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS.

9 THE CONTRACTOR SHALL CONTACT THE IDOT DISTRICT 1 TRAFFIC CONTROL SUPERVISOR, AT 847-705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

10 THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.

11 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

12 THE CONTRACTOR SHALL MAINTAIN THE SURFACE DRAINAGE OF ALL ROADWAYS DURING CONSTRUCTION OF THIS PROJECT. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, INLETS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER. WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE SAME. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM ALL THESE TEMPORARY CONNECTIONS UNTIL INSTALLATION IS COMPLETE, INCLUDING PAVEMENT. THIS WORK SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT. COORDINATION WITH ALL AGENCIES INVOLVED IS REQUIRED.

13 DURING CONSTRUCTION OPERATIONS, IF ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DUST AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

14 THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH AGGREGATE SUBGRADE IMPROVEMENT SHOULD BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER OR SOILS INSPECTOR. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE STANDARD SPECIFICATIONS AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. ANY MATERIAL NOT NEEDED FOR UNDERCUT REPLACEMNET AT THE TIME OF CONSTRUCTION SHOULD BE DELETED FROM THE CONTRACT WITH NO EXTRA COMPENSATION TO THE CONTRACTOR.

15 WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40MM) WHERE THE SPEED LIMIT IS 40 MPH (80 KM/HR) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80KM/HR). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

GENERAL NOTES (CONT.):

16 IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

17 THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.

18 DO NOT SCALE PLANS FOR CONSTRUCTION PURPOSES.

19 DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)".

20 THE CONTRACTOR SHALL TAKE WHATEVER PRECAUTIONS WHICH MAY BE NECESSARY TO PROTECT THE PROPERTY OF THE VARIOUS PUBLIC UTILITIES WHICH MAY BE LOCATED UNDERGROUND OR ABOVE GROUND, AT OR ADJACENT TO THE SITE OF THIS IMPROVEMENT. THE CONTRACTOR WILL BE REQUIRED TO REPAIR OR REPLACE AT HIS/HER OWN EXPENSE, OR BEAR THE COST, TO REPAIR OR REPLACE, ANY PUBLIC UTILITY PROPERTY WHICH HAS BEEN DAMAGED THROUGH HIS/HER EFFORTS.

21 OVERHEAD WIRES ARE NOT INSULATED AND EXTRA CAUTION AND VIGILANCE SHALL BE ADHERED TO WHEN WORKING NEARBY. CONTRACTORS SHALL ALWAYS USE CAUTION WHILE OPERATING CRANES AND OR OTHER EQUIPMENT NEAR OVERHEAD ELECTRICAL FACILITIES. THE OCCUPATIONAL HEALTH AND SAFETY ORGANIZATION (OSHA) RULES REQUIRE THAT WORKERS AND EQUIPMENT SHALL NOT APPROACH WITHIN TEN (10) FEET AWAY OF OVERHEAD ELECTRICAL EQUIPMENT WITHOUT APPROPRIATE SUPPLEMENTAL PROTECTION. BE CERTAIN THAT ALL WORKERS ON THIS PROJECT HAVE BEEN FULLY TRAINED AND CONFORM TO OSHA RULES AND OTHER APPLICABLE GUIDELINES REGARDING WORKING SAFELY AROUND ELECTRICAL POWER LINES.

22 WHEN 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 AREA.

23 PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATION. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATION SHALL NOT CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.

24 BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH DISTRICT ONE STANDARD BD32 "BUTT JOINT AND HMA TAPER DETAILS," UNLESS OTHERWISE SPECIFIED.

25 THE CONTRACTOR SHALL CONTACT THE ROADSIDE DEVELOPMENT UNIT AT (847)705-4171 AT LEAST 72 HOURS PRIOR TO HERBICIDE TREATMENT WORK.

26 ONE CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED AT EACH END OF THE PROJECT. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER BEFORE PLACEMENT OF THE CHANGEABLE MESSAGE SIGNS.

COMMITMENTS

NONE

FILE NAME = D:\03303 PTB 182 04\03303.11 - IL Rte 171 over Ingredion RR\CAD\CADD Sheets\D1E2F30-sht-gennotes.dgn

COLLINS ENGINEERS INC

USER NAME = cseltzer	DESIGNED - ZJT	REVISED -
	DRAWN - ZJT	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - CEI	REVISED -
PLOT DATE = 10/21/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
INDEX OF SHEETS, GENERAL NOTES, AND HIGHWAY STANDARDS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	2
		CONTRACT NO. 62F30		
		ILLINOIS FED. AID PROJECT		

REV. 11/21/18

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 80% FED / 20% STATE ROADWAY 0013 URBAN	CONSTRUCTION CODE: 80% FED / 20% STATE BRIDGE 0013 S.N. 016-2544
	20200100	EARTH EXCAVATION	CU YD	51	51	0
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	400	400	0
	21101630	TOPSOIL FURNISH AND PLACE, 8"	SQ YD	331	331	0
	25200110	SODDING, SALT TOLERANT	SQ YD	731	731	0
	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	156	156	0
	31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	325	325	0
	31101600	SUBBASE GRANULAR MATERIAL, TYPE B 8"	SQ YD	76	76	0
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	953	953	0
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	30	30	0
	40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	251	251	0
	40603240	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90	TON	581	581	0
	42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	138	138	0
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	3597	3597	0
*	42400800	DETECTABLE WARNINGS	SQ FT	150	150	0

LEGEND:
* - DENOTES SPECIALTY ITEM

FILE NAME = h:\0303 PTB 182 04\0303311 - IL Rte 171 over Ingredion RR\CAD\CADD Sheets\D162F30-sht-SUM.dgn

COLLINS ENGINEERS INC

USER NAME = eseiber	DESIGNED - ZJT	REVISED -
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PLOT SCALE = 2.0000 ' / in.	CHECKED - CEI	REVISED -
PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	3
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

REV. 11/21/18

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 80% FED / 20% STATE ROADWAY 0013 URBAN	CONSTRUCTION CODE: 80% FED / 20% STATE BRIDGE 0013 S.N. 016-2544
44000100	PAVEMENT REMOVAL	SQ YD	413	413	0
44000153	HOT-MIX ASPHALT SURFACE REMOVAL, 1"	SQ YD	1477	1477	0
44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	SQ YD	300	300	0
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1234	1234	0
44000600	SIDEWALK REMOVAL	SQ FT	3512	3512	0
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1	0	1
50102400	CONCRETE REMOVAL	CU YD	29.9	0	29.9
50200100	STRUCTURE EXCAVATION	CU YD	138	0	138
50300225	CONCRETE STRUCTURES	CU YD	49.2	0	49.2
50300255	CONCRETE SUPERSTRUCTURE	CU YD	100.1	0	100.1
50300260	BRIDGE DECK GROOVING	SQ YD	479	0	479
50300300	PROTECTIVE COAT	SQ YD	912	0	912
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	193.9	0	193.9
50400105	PRECAST CONCRETE BRIDGE SLAB	SQ FT	1601	0	1601

LEGEND:
* - DENOTES SPECIALTY ITEM

FILE NAME = h:\0383 PTB 182 04\0383il - IL Rte 171 over Ingredion RR\CADD\CADD Sheets\01625F30-sht-500.dgn

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PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	4
		CONTRACT NO. 62F30		
	ILLINOIS	FED. AID PROJECT		

REV. 11/21/18

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED / 20% STATE ROADWAY 0013 URBAN	CONSTRUCTION CODE 80% FED / 20% STATE BRIDGE 0013 S.N. 016-2544
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	99560	0	99560
50800515	BAR SPLICERS	EACH	315	0	315
50901730	BRIDGE FENCE RAILING	FOOT	264	0	264
51500100	NAME PLATES	EACH	1	0	1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	73	0	73
52200010	TEMPORARY SHEET PILING	SQ FT	185	0	185
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	7	7	0
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	268	268	0
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	873	873	0
66400305	CHAIN LINK FENCE, 6'	FOOT	71	71	0
66900200	NON-SPECIAL WASTED DISPOSAL	CU YD	127	127	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	6	6
66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1	
67100100	MOBILIZATION	L SUM	1	0.5	0.5
66901001	REGULATED SUBSTANCES PRECONSTRUCTION PLAN	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DAY	14	14	0
66901001	ON-SITE MONITORING OF REGULATED SUBSTANCES	DAYS	7	7	
70107025	CHANGEABLE MESSAGE SIGN	CAL DAY	270	270	0
66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1	

LEGEND:
* - DENOTES SPECIALTY ITEM

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COLLINS ENGINEERS INC

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	5
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

REV. 11/29/18 REV. 11/21/18

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED / 20% STATE ROADWAY 0013 URBAN	CONSTRUCTION CODE 80% FED / 20% STATE BRIDGE 0013 S.N. 016-2544
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	105	105	0
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	35	35	0
	70300900	PAVEMENT MARKING TAPE, TYPE IV - LETTERS AND SYMBOLS	SQ FT	73	73	0
	70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	6812	6812	0
	70300906	PAVEMENT MARKING TAPE, TYPE IV 6"	FOOT	579	579	0
	70300912	PAVEMENT MARKING TAPE, TYPE IV 12"	FOOT	85	85	0
	70300924	PAVEMENT MARKING TAPE, TYPE IV 24"	FOOT	88	88	0
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	250	250	0
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	250	250	0
	70600235	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE), TEST LEVEL 2	EACH	2	2	0
	70600320	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 2	EACH	2	2	0
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	37	37	0
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3171	3171	0
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	718	718	0

LEGEND:
* - DENOTES SPECIALTY ITEM

FILE NAME = i:\10303 PTB 182 84\10303131 - IL Rte 171 over Ingredion RR\CAD\CADD Sheets\D62F30-sht-SQD.dgn

COLLINS ENGINEERS INC

USER NAME = aseiber	DESIGNED - ZJT	REVISED -
	DRAWN - ZJT	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - CEI	REVISED -
PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	6
		CONTRACT NO. 62F30		
	ILLINOIS	FED. AID PROJECT		

REV. 11/27/18 REV. 11/21/18

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED / 20% STATE ROADWAY 0013 URBAN	CONSTRUCTION CODE 80% FED / 20% STATE BRIDGE 0013 S.N. 016-2544
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	50	50	0
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	96	96	0
*	78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	37	37	0
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	2852	2852	0
*	78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	40	40	0
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	100	100	0
	78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER	EACH	35	35	0
*	78100300	REPLACEMENT REFLECTOR	EACH	113	113	0
*	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	40	40	0
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	100	100	0
*	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	100	100	0
*	81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	26	26	0
*	81100605	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL	FOOT	150	150	0
*	81300800	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 12" X 6"	EACH	2	2	0

LEGEND:
* - DENOTES SPECIALTY ITEM

FILE NAME = h:\80383 PTB 182 84\80383.11 - IL Rte 171 over Ingredion RR\CADD\CADD Sheets\01F2F38-sht-S00.dgn

COLLINS ENGINEERS INC

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	DRAWN - ZJT	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - CEI	REVISED -
PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	7
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

REV. 11/21/18

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED / 20% STATE ROADWAY 0013 URBAN	CONSTRUCTION CODE 80% FED / 20% STATE BRIDGE 0013 S.N. 016-2544
*	81400100	HANDHOLE	EACH	2	2	0
*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2	2	0
*	87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1600	1600	0
*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	358	358	0
*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	372	372	0
*	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	28	28	0
*	87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1	1	0
*	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1	1	0
	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8	8	0
*	87900200	DRILL EXISTING HANDHOLE	EACH	4	4	0
*	88102710	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2	2	0
*	88800100	PEDESTRIAN PUSH-BUTTON	EACH	2	2	0
*	89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	1	1	0
*	89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	1	1	0

LEGEND:
* - DENOTES SPECIALTY ITEM

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COLLINS ENGINEERS INC

USER NAME = aseiber	DESIGNED - ZJT	REVISED -
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PLOT SCALE = 2.0000 ' / in.	CHECKED - CEI	REVISED -
PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	8
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

REV. 11/21/18

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED / 20% STATE ROADWAY 0013 URBAN	CONSTRUCTION CODE 80% FED / 20% STATE BRIDGE 0013 S.N. 016-2544
*	89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1	1	0
*	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3174	3174	0
*	89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	30	30	0
*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1	0
*	89502380	REMOVE EXISTING HANDHOLE	EACH	2	2	0
	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	1	1	0
*	X0320100	GROOVING FOR RECESSED PAVEMENT MARKING 10"	FOOT	153	153	0
*	X0320110	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 9"	FOOT	153	153	0
*	X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	500	500	0
	X0325222	WEED CONTROL, BASAL TREATMENT	GALLON	2.5	2.5	0
	X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	984	984	0
	X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	123	123	0
*	X2700003	GROOVING FOR RECESSED PAVEMENT MARKING 8"	FOOT	395	395	0
*	X2700004	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 7"	FOOT	395	395	0

LEGEND:
* - DENOTES SPECIALTY ITEM

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COLLINS ENGINEERS INC

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PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	9
		CONTRACT NO. 62F30		
	ILLINOIS	FED. AID PROJECT		

REV. 11/21/18

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED / 20% STATE ROADWAY 0013 URBAN	CONSTRUCTION CODE 80% FED / 20% STATE BRIDGE 0013 S.N. 016-2544
	X4060004	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80	TON	405	405	0
	X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD	104	104	0
	X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	182	0	182
	58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	137	0	137
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	0
	X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	2271	2271	0
*	X8100105	CONDUIT SPLICE	EACH	2	2	0
*	X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	1574	1574	0
*	X8900010	TEMPORARY TRAFFIC SIGNAL INTERCONNECT	EACH	1	1	0
	Z0004552	APPROACH SLAB REMOVAL	SQ YD	361	361	0
	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	112	0	112
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.7	0.3
	Z0022800	FENCE REMOVAL	FOOT	285	285	0
	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	52	52	0

LEGEND:
* - DENOTES SPECIALTY ITEM

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COLLINS ENGINEERS PC

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	10
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

REV. 11/21/18

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED / 20% STATE ROADWAY 0013 URBAN	CONSTRUCTION CODE 80% FED / 20% STATE BRIDGE 0013 S.N. 016-2544
	Z0038114	PORTLAND CEMENT CONCRETE SURFACE REMOVAL 1/4"	SQ YD	526	526	0
	Z0038119	PORTLAND CEMENT CONCRETE SURFACE REMOVAL 1 1/2"	SQ YD	534	534	0
	Z0038123	PORTLAND CEMENT CONCRETE SURFACE REMOVAL 2 1/2"	SQ YD	245	245	0
	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1	0
	Z0062456	TEMPORARY PAVEMENT	SQ YD	255	255	0
	Z0062458	TEMPORARY PAVEMENT (VARIABLE DEPTH)	TON	90	90	0
	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2	2	0
**	Z0076600	TRAINEES	HOUR	500	500	
**	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500	

LEGEND:
* - DENOTES SPECIALTY ITEM
**=0042

COLLINS ENGINEERS INC

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PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	10A
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

REV. 11/29/18 REV. 11/21/18

HOT–MIX ASPHALT MIXTURE REQUIREMENTS

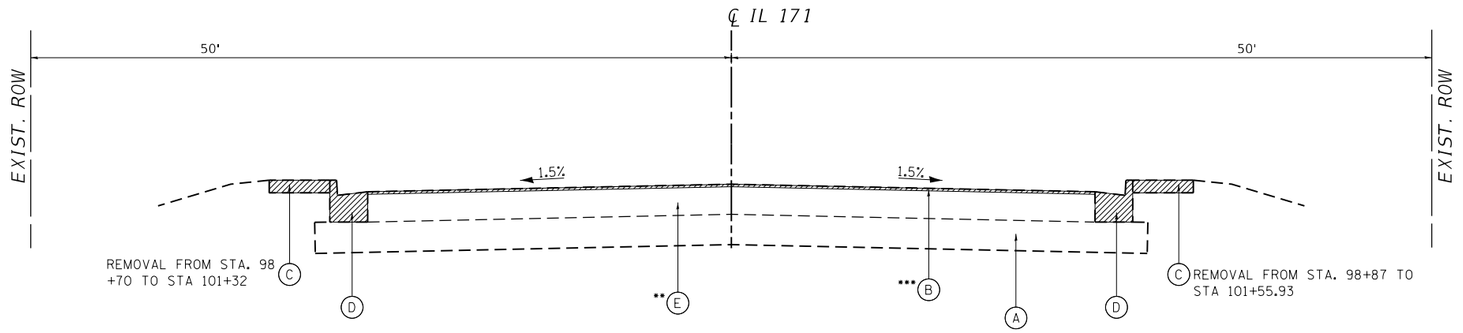
MIXTURE TYPE	AIR VOIDS	QMP
RESURFACING:		
POLYMERIZED HMA SURFACE COURSE, SMA, 9.5 N80	3.5% @ 80 GYR.	QC/QA
POLYMERIZED HMA BINDER COURSE, IL-19.0, N90 (2 1/4" MIN.)	4% @ 90 GYR.	QC/QA
PAVEMENT CONNECTOR:		
POLYMERIZED HMA SURFACE COURSE, SMA, 9.5 N80	3.5% @ 80 GYR.	QC/QA
POLYMERIZED HMA BINDER COURSE, IL-19.0, N90 (2 1/4" MIN.)	4% @ 90 GYR.	QC/QA
TEMPORARY PAVEMENT VAR DP:		
HMA SURFACE COURSE, MIX D, N70 (IL-9.5 mm)	4% @ 70 GYR.	QC/QA
TEMPORARY PAVEMENT 10:		
HMA SURFACE COURSE, MIX "D", N70 (IL 9.5 mm), 2"	4% @ 70 GYR.	QC/QA
HMA BINDER COURSE, IL-19.0, N70, 8"	4% @ 70 GYR.	QC/QA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)		

1) THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQYD/IN

2) THE AC TYPE FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS"

3) FOR USE OF RECYCLED MATERIALS, SEE SPECIAL PROVISIONS.

4) QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.



EXISTING TYPICAL SECTION
ILLINOIS ROUTE 38

•STA. 96+50 - STA 101+55.93

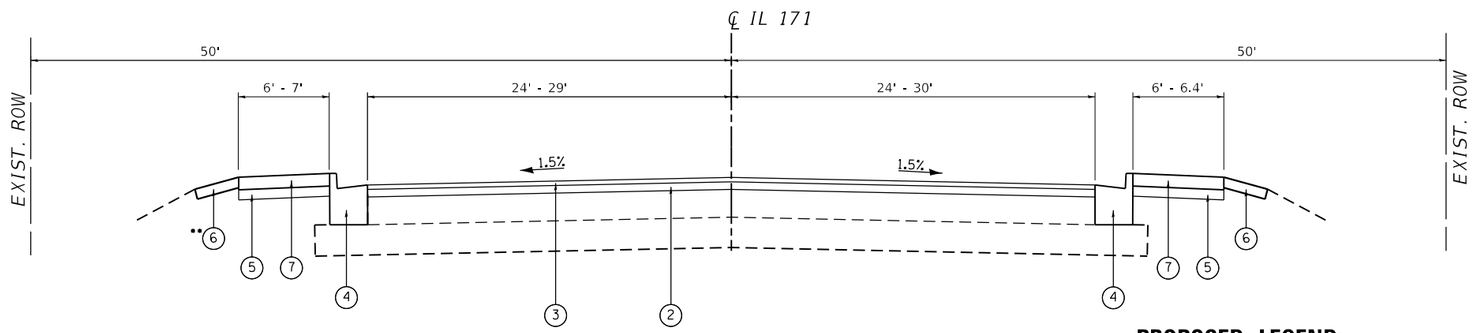
• OMIT STA. 99+48 TO STA. 100+50 FOR REMOVAL OF BRIDGE, BRIDGE APPROACHES AND PAVEMENT CONNECTOR.

•• HMA SURFACE REMOVAL OCCURS FROM STA. 96+50 TO 99+48 AND PCC SURFACE REMOVAL OCCURS FROM STA. 100+50 TO STA. 101+55.93. SEE REMOVAL PLAN FOR LIMITS AND DEPTHS OF SURFACE REMOVAL.

••• EXISTING HMA PAVMENT OVERLAY OCCURS ONLY FROM STA. 96+50 TO STA. 99+48.

EXISTING LEGEND:

- (A) EXIST. AGGREGRATE SUBGRADE
- (B) EXIST. HMA PAVEMENT OVERLAY, (3" & VAR.)
- (C) EXIST SIDEWALK
- (D) EXIST. 6.24 CURB AND GUTTER
- (E) EXIST. PCC PAVEMENT (9" & VAR.)
- TO BE REMOVED



PROPOSED TYPICAL SECTION
ILLINOIS ROUTE 38

•STA. 96+50 - STA 101+55.93

• OMIT STA. 99+48 TO STA. 100+50 FOR BRIDGE, BRIDGE APPROACHES AND PAVEMENT CONNECTOR.

•• PROPOSED TOPSOIL FURNISH AND PLACE, 8" OCCURS FROM STA. 96+50 TO STA. 99+41.

PROPOSED LEGEND:

1. PROP. AGG SUBGRADE IMP 12
2. PROP. P HMA BC IL19.0 N90 (2 1/4" MIN.)
3. PROP. P HMA SC SMA, 9.5, N80, 1 3/4"
4. PROP. 6.24 CURB AND GUTTER
5. PROP. SUBBASE GRANULAR MATERIAL, TYPE B 8"
6. PROP. SODDING, SALT TOLERANT PROP. TOPSOIL FURNISH AND PLACE, 4"
7. PROP. PCC CONCRETE SIDEWALK 5 INCH

FILE NAME = i:\10303 PTB 182 04\10303.11 - IL Rte 171 over Ingredion RR\CAD\(CADD Sheets\D162F30-sht-tgp.dgn

COLLINS ENGINEERS INC

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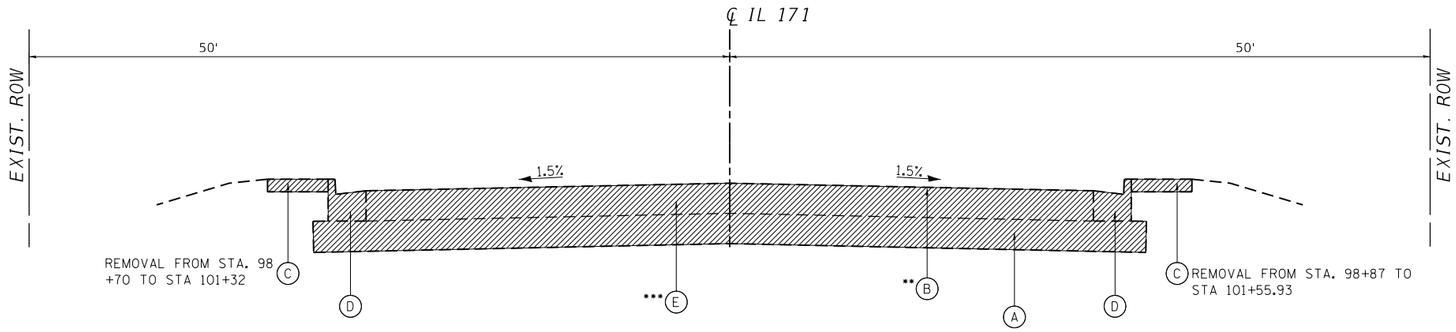
PLOT SCALE = 100.0000 ' / in.	CHECKED - CEI	REVISED -	
PLOT DATE = 10/19/2018	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
TYPICAL SECTIONS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	11
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



EXISTING TYPICAL SECTION
ILLINOIS ROUTE 38

- STA. 99+48 - STA 100+50

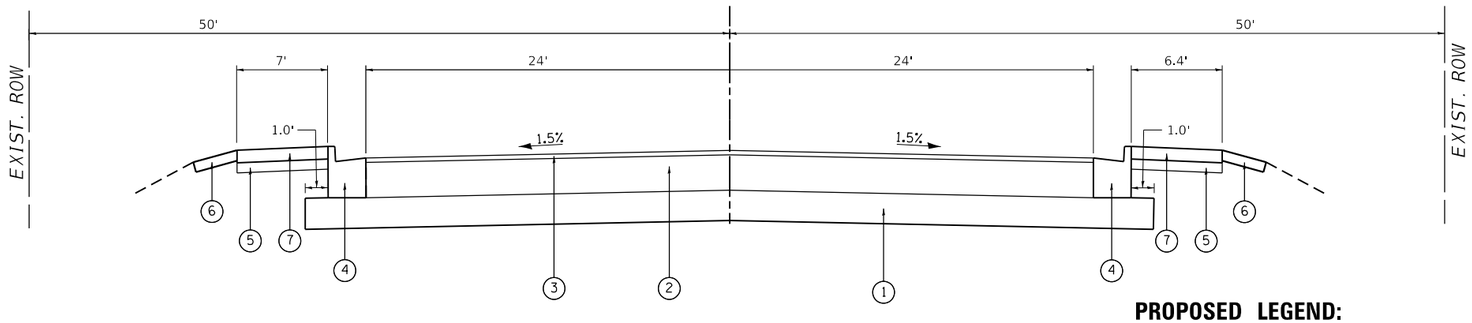
• OMIT STA. 99+61.5 TO STA. 100+40 FOR REMOVAL OF BRIDGE AND BRIDGE APPROACHES.

•• EXISTING HMA PAVEMENT OVERLAY OCCURS ONLY FROM STA. 99+48 TO STA. 99+61.5.

••• PAVEMENT REMOVAL OCCURS FROM STA. 99+48 TO STA. 99+61.5 AND STA. 100+40 TO STA. 100+50.

EXISTING LEGEND:

- (A) EXIST. AGGREGRATE SUBGRADE
- (B) EXIST. HMA PAVEMENT, OVERLAY (3'' & VAR.)
- (C) EXIST SIDEWALK
- (D) EXIST. 6.24 CURB AND GUTTER
- (E) EXIST. PCC PAVEMENT (9'' & VAR.)
- TO BE REMOVED



PROPOSED TYPICAL SECTION
ILLINOIS ROUTE 38

•STA. 99+48 - STA 100+50

• OMIT STA. 99+58 TO STA. 100+40 FOR BRIDGE AND BRIDGE APPROACHES.

PROPOSED LEGEND:

1. PROP. AGG SUBGRADE IMP 12
2. PROP. P HMA BC IL19.0 N90 (2 1/4'' MIN.)
3. PROP. P HMA SC SMA, 9.5, N80, 1 3/4''
4. PROP. 6.24 CURB AND GUTTER
5. PROP. SUBBASE GRANULAR MATERIAL, TYPE B 8''
6. PROP. SODDING, SALT TOLERANT PROP. TOPSOIL FURNISH AND PLACE, 4''
7. PROP. PCC CONCRETE SIDEWALK 5 INCH

FILE NAME = i:\10303 PTB 182 04\10303.11 - IL Rte 171 over Ingredion RR\CAD\CADD_Sheets\D162F30-sht-tup.dgn

COLLINS ENGINEERS INC

USER NAME = aseiber	DESIGNED - ZJT	REVISED -
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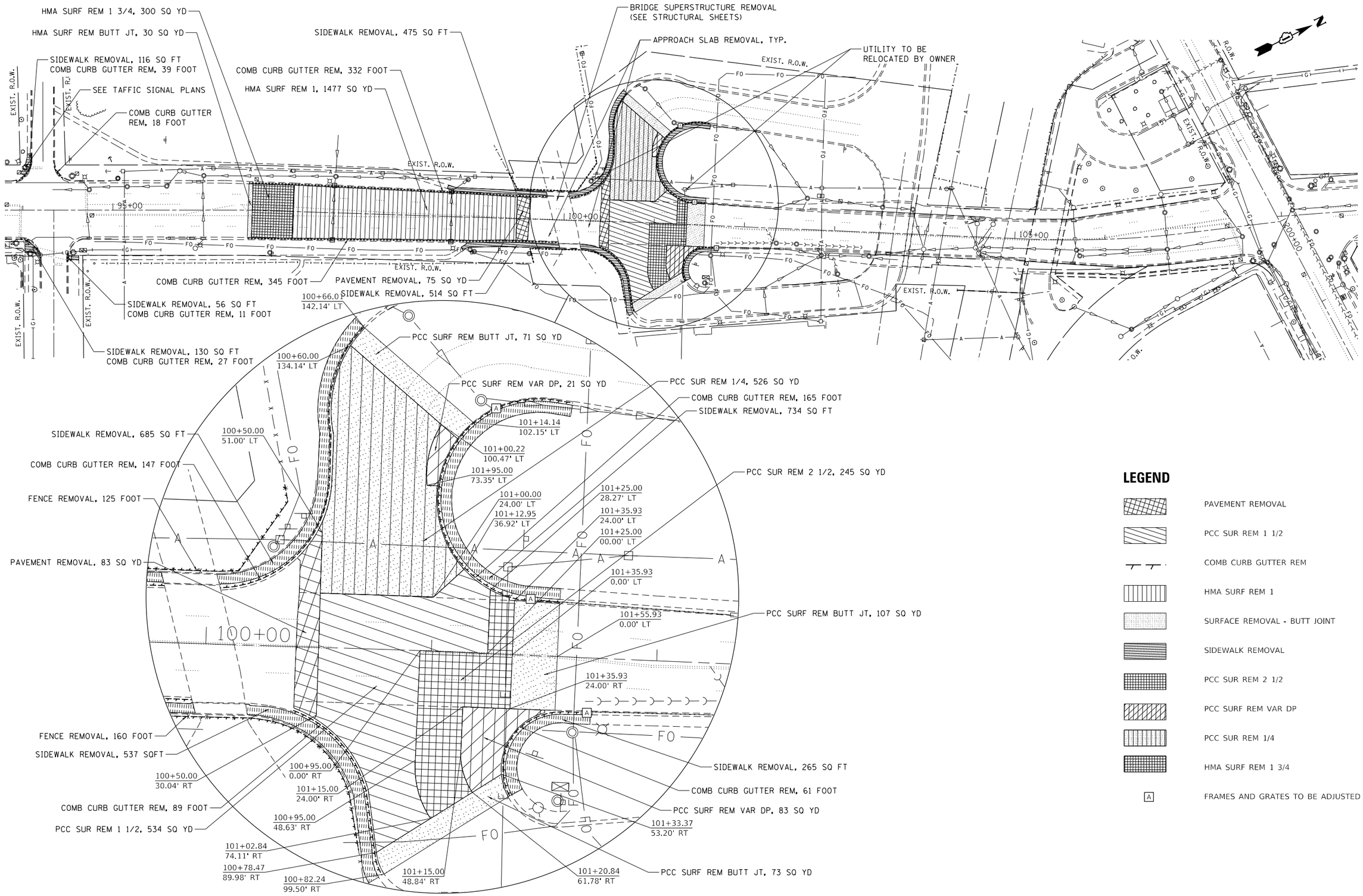
PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
TYPICAL SECTIONS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	12
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



LEGEND

- PAVEMENT REMOVAL
- PCC SUR REM 1 1/2
- COMB CURB GUTTER REM
- HMA SURF REM 1
- SURFACE REMOVAL - BUTT JOINT
- SIDEWALK REMOVAL
- PCC SUR REM 2 1/2
- PCC SURF REM VAR DP
- PCC SUR REM 1/4
- HMA SURF REM 1 3/4
- [A] FRAMES AND GRATES TO BE ADJUSTED

FILE NAME = i:\10303 PTB 182 04\10303.11 - IL Rte 171 over Ingredion RR\CAD\CADD_Sheets\D162F30-sht-rem.dgn

COLLINS ENGINEERS INC

USER NAME = eseiber	DESIGNED - ZJT	REVISED -
	DRAWN - ZJT	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - CEI	REVISED -
PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
REMOVAL PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	13
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

BEGIN IMPROVEMENT LIMITS
STA. 94+97.50

PROP. CONC SIDEWALK 5, 710 SQ FT
PROP. SUB GRAN MAT B 4, 79 SQ YD
PROP. DETECTABLE WARNINGS, 78 SQ FT
PROP. B-6.24 C&G, 95 FOOT

BEGIN RESURFACING LIMITS
STA. 96+50

PROP. P HMA SC SMA, 9.5, N80, (1 3/4"), 224 TONS
PROP. P HMA BC IL19.0 N90 (2 1/4" MIN.), 252 TONS

PROP. B-6.24 C&G, 316 FOOT

PROP. CONC SIDEWALK 5, 267 SQ FT
PROP. SUB GRAN MAT B 8, 30 SQ YD

PROP. B-6.12 C&G, 193 FT

PROP. CONC SIDEWALK 5, 1418 SQ FT
PROP. SUB GRAN MAT B 4, 158 SQ YD
PROP. DETECTABLE WARNINGS, 36 SQ FT

PROP. B-6.24 C&G, 57 FT
PROP. CH LK FENCE 6, 11 FT
PROP. PVT CON HMA BR APP SL, 138 SQ YD
PROP. AGG SUBGRADE IMPR 12, 156 SQ YD
PROP. CH LK FENCE 6, 20 FT
PROP. CONC SIDEWALK 5, 412 SQ FT
PROP. SUB GRAN MAT B 8, 46 SQ YD
PROP. B-6.24 C&G, 309 FOOT

PROP. B-6.24 C&G, 81 FT
PROP. CH LK FENCE 6, 40 FT
PROP. B-6.12 C&G, 75 FT
PROP. CONC SIDEWALK 5, 790 SQ FT
PROP. SUB GRAN MAT B 4, 88 SQ YD
PROP. DETECTABLE WARNINGS, 36 SQ FT

PROP. P HMA SC SMA, 9.5, N80, (1 3/4"), 181 TONS
PROP. P HMA BC IL19.0 N90 (2 1/4" MIN.), 329 TONS
PROP. B-6.24 C&G, 15 FOOT

END IMPROVEMENT LIMITS
STA. 101+55.93
END RESURFACING LIMITS
STA. 101+55.93

EXIST. R.O.W.
IL ROUTE 171
95+00
100+00
105+00
200+00
29.2'
29.4'
47.8'
5.0'
2.0'
6.0'
6.4'

K = 127
90.04' V.C.
612.40
612.42
+54.98 EL.
+45.02 EL. 613.08
+0.39%
+1.10%
VPI STA. 97+00.00
ELEVATION 612.59
PROPOSED ℄ PROFILE FOR IL. ROUTE 171
+1.10%
-6.17%
VPI STA. 100+51.1
ELEVATION 616.44
+81.26 EL. 615.67
SSD = 162'
K = 19
140.24' V.C.
+21.50 EL. 612.11
610.05
EXISTING ℄ PROFILE FOR IL. ROUTE 171 (SOUTH)
℄ 63rd STREET

620 615 610 605 600 595 590 585 580

612.58 612.26 612.29 612.40 612.59 612.67 613.14 613.40 613.69 614.23 614.05 614.78 615.33 615.14 615.79 615.20 613.22 613.32 610.35 607.23 600.85 595.48 594.53 598.25 605.02 611.84

94+00 95+00 96+00 97+00 98+00 99+00 100+00 101+00 102+00 103+00 104+00 105+00 106+00 107+00 108+00

PLAN
SURVEYED
PLOTTED
JOINT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.

FILE NAME = i:\0303 PTB 182 04\0303.11 - IL Rte 171 over Ingredion RR\CAD\CADD_Sheets\DI62F30-sht-plngrf.dgn

COLLINS ENGINEERS INC

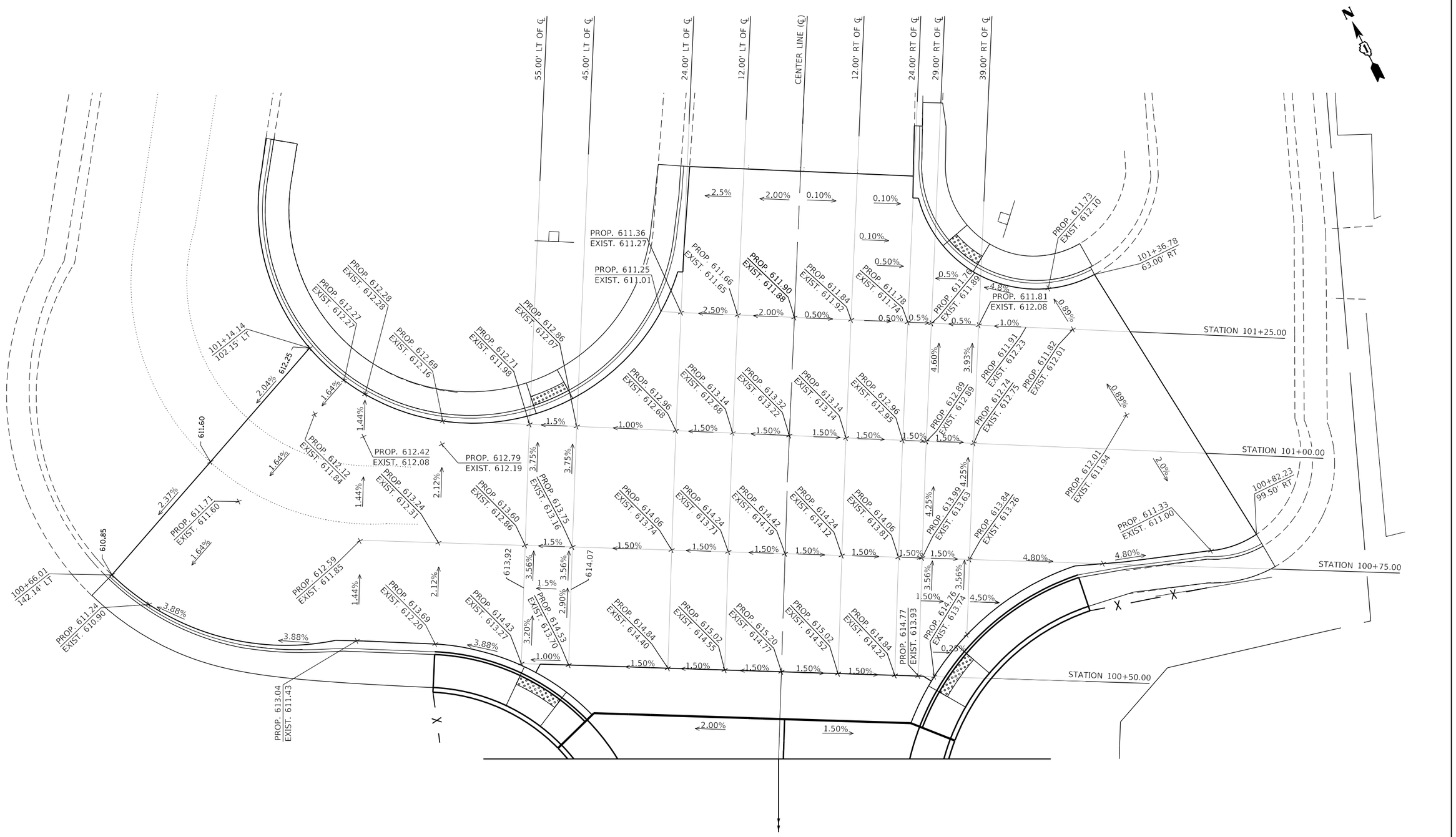
USER NAME = aseiber	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
ROADWAY PLAN AND PROFILE

SCALE: 1"=50' | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	71	14
		CONTRACT NO. 62F30		
		ILLINOIS FED. AID PROJECT		



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PLOT DATE = 10/19/2018	DATE -	REVISED -	

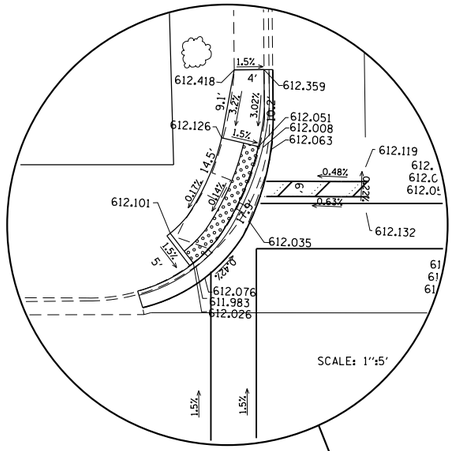
COLLINS ENGINEERS INC

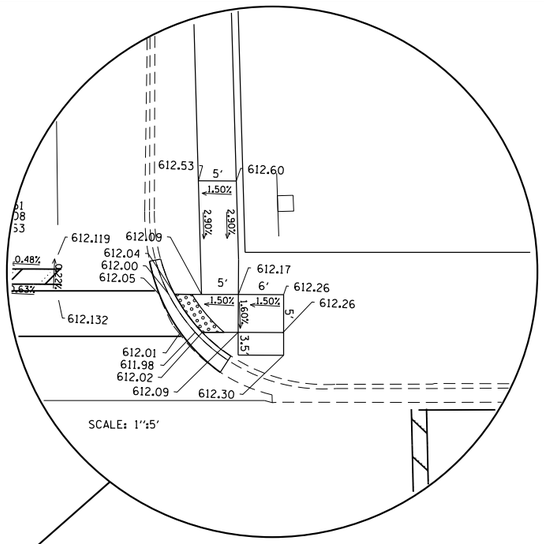
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

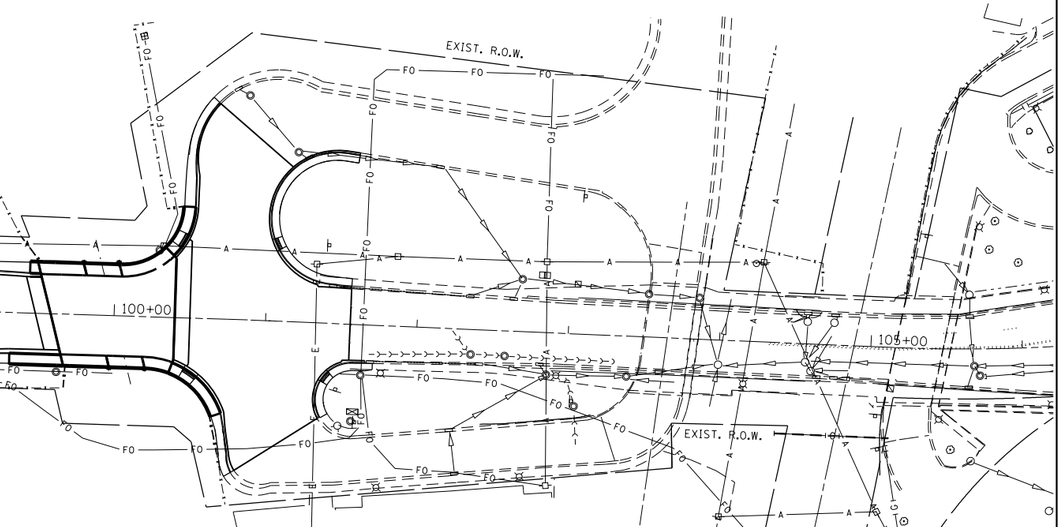
ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
INTERSECTION DETAILS

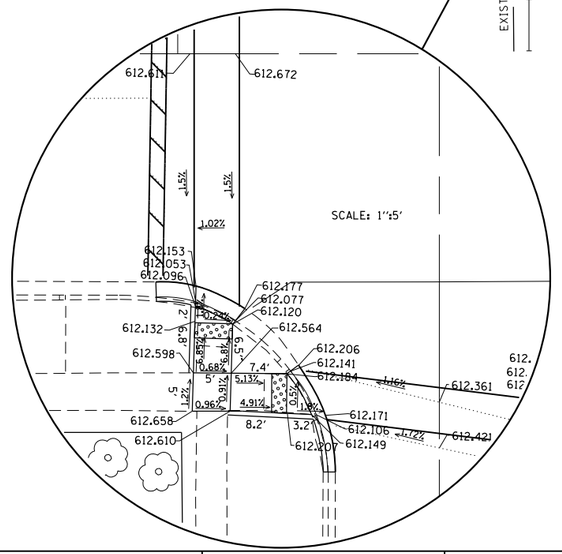
SCALE: | SHEET OF SHEETS | STA. | TO STA.

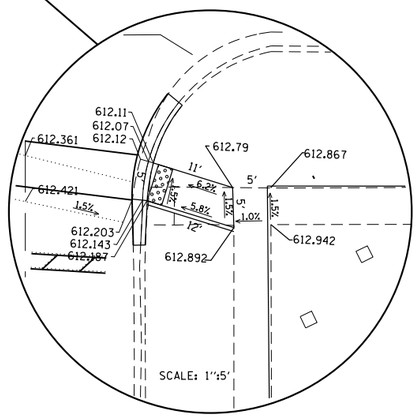
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	15
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			











NOTES:

1. SEE TRAFFIC SIGNAL PLANS.

0 50 100 150

SCALE IN FEET

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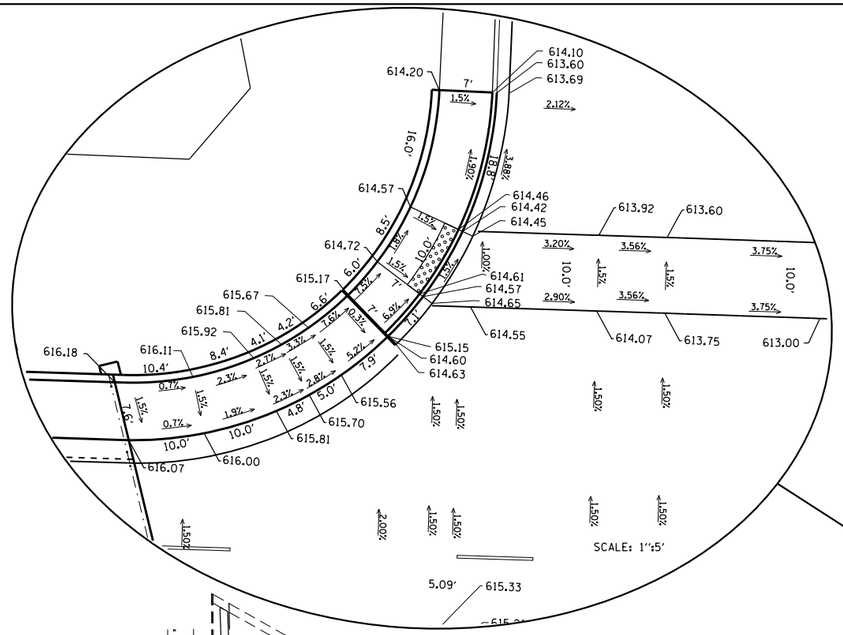
PLOT DATE = 10/19/2018	DATE -	REVISED -

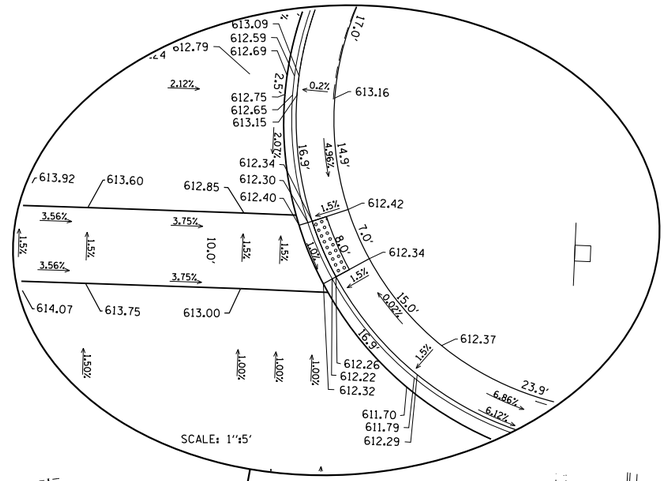
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

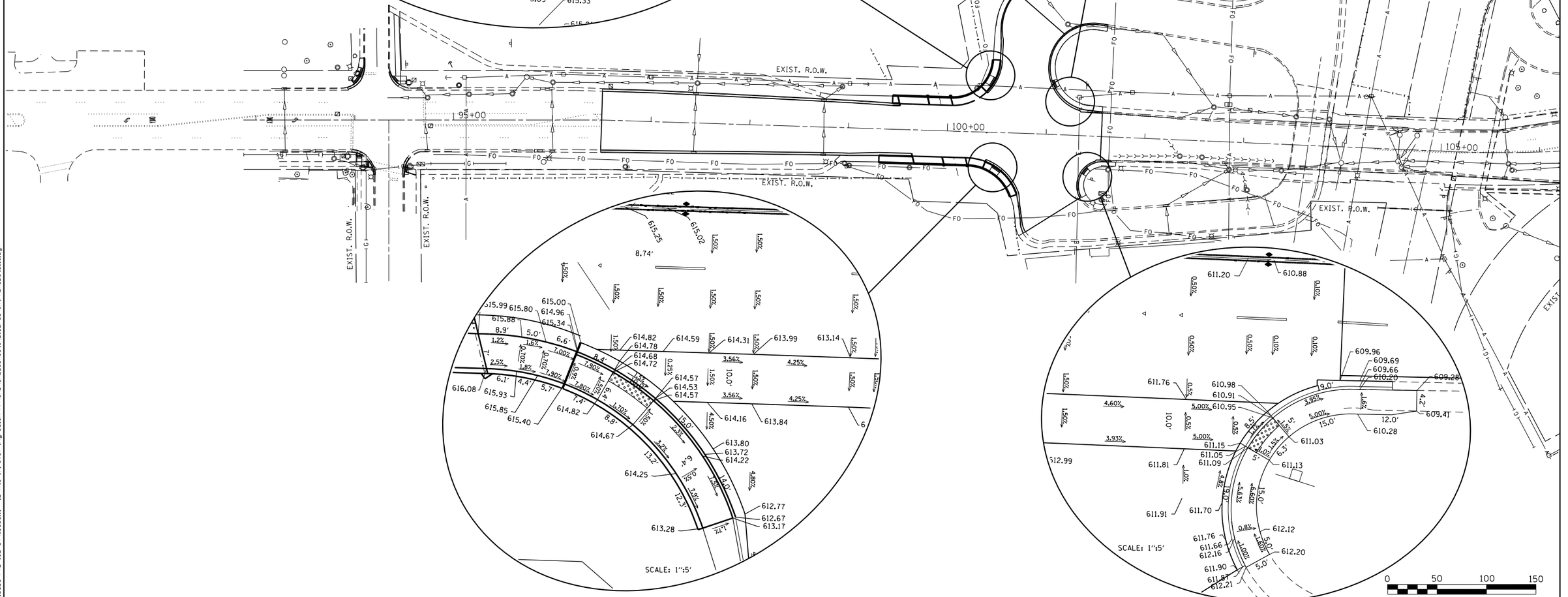
ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
PROPOSED ADA RAMPS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	16
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			







0 50 100 150
SCALE IN FEET

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PLOT DATE = 11/9/2018	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
PROPOSED ADA RAMPS

SCALE: 1":5' | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	17
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

MAINTENANCE OF TRAFFIC – GENERAL NOTES

1. SEE SPECIAL PROVISIONS TITLED TRAFFIC CONTROL AND PROTECTION (ARTERIALS).

2. THE CONTRACTOR SHALL REMOVE AND SAFELY STORE (FREE FROM THEFT OR DAMAGE) OR COVER ALL CONFLICTING EXISTING SIGNS FOR THE DURATION OF THE CONSTRUCTION. ALL SIGNS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE END OF CONSTRUCTION.

3. THE FOLLOWING APPLY TO CONSTRUCTION SIGNS:

   A) THE CONTRACTOR SHALL FURNISH ALL SIGNS.

   B) THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND REPLACE ANY SIGNS THAT ARE SUPPLIED BY OTHERS AND DAMAGED BY THE CONTRACTOR'S WORK FORCE OR SUBCONTRACTORS DURING RELOCATION OR CONSTRUCTION OPERATIONS.

   C) ALL SIGNS AND ASSEMBLIES SHALL BE CERTIFIED BY THE CONTRACTOR AS MEETING THE APPLICABLE REQUIREMENTS OF NCHRP REPORT 350. TEST LEVEL 2.

   D) ALL SIGNS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION (SPECIAL) PAY ITEM, EXCEPT FOR TEMPORARY INFORMATIONAL SIGNING AS NOTED ON THE PLANS.

4. ANY RAISED REFLECTIVE PAVEMENT MARKERS THAT CONFLICT WITH THE TEMPORARY TRAFFIC LANES MUST HAVE THE REFLECTIVE LENSES REMOVED AS DIRECTED BY THE ENGINEER.

5. ALL TEMPORARY PAVEMENT MARKINGS DURING STAGED CONSTRUCTION SHALL BE PAVEMENT MARKING TAPE, TYPE IV OF THE WIDTH AND COLOR SPECIFIED ON THE PLAN SHEETS.

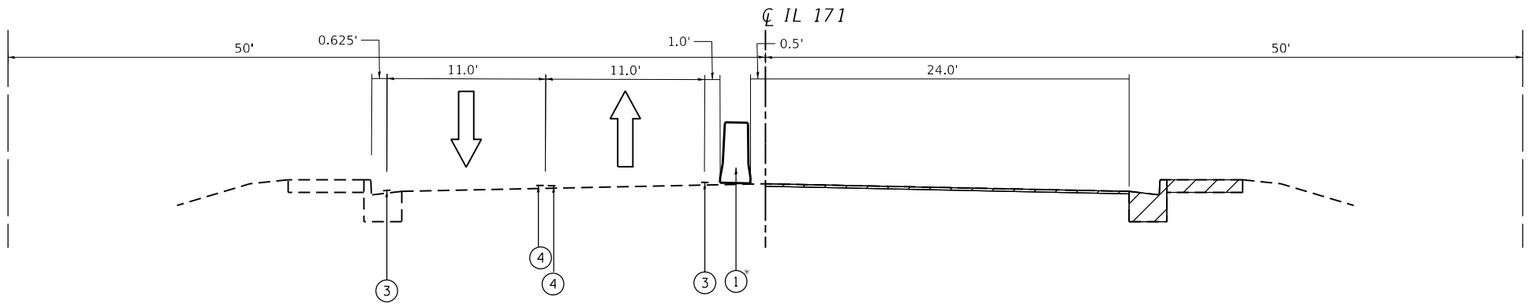
6. THE CONTRACTOR SHALL MAINTAIN DRAINAGE AND EROSION CONTROL DURING CONSTRUCTION FOR THE DURATION OF THE CONTRACT.

7. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS TO ALL COMMERCIAL AND RESIDENTIAL ENTRANCES FOR THE ENTIRE DURATION OF THE PROJECT UNLESS OTHERWISE NOTED ON THE PLANS.

8. SIDE ROAD, INTERSECTIONS, AND DRIVEWAY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE TYPICAL ENTRANCE SIGNING DETAIL, DISTRICT DETAILS TC-10 AND TC-26, AND AS SHOWN ON THE PLANS.

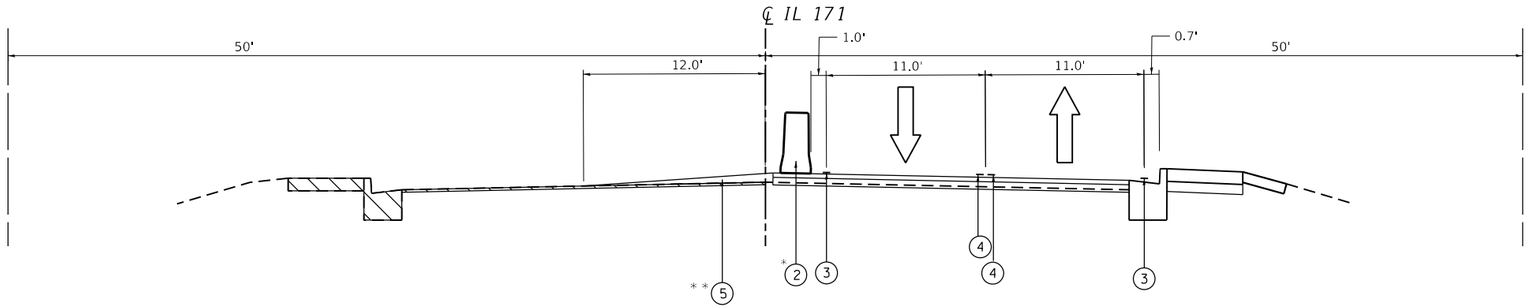
9. TEMPORARY PAVEMENT SHALL BE ACCORDING TO THE PAVEMENT STRUCTURE DETAILS AND MIX DESIGN REQUIREMENTS ON THE TYPICAL SECTIONS SHEETS.

10 PAYMENT FOR EXISTING SIGNS TO BE REMOVED, STORED AND REINSTALLED SHALL BE INCLUDED UNDER TRAFFIC CONTROL AND PROTECTION (SPECIAL).



PROPOSED TYPICAL SECTION
IL 171 – STAGE 1

STA. 96+46.4 - STA 101+50.38
* CONCRETE BARRIER FROM STA. 98+20 - STA. 101+20



PROPOSED TYPICAL SECTION
IL 171 – STAGE 2

STA. 96+46.4 - STA 101+50.38
* CONCRETE BARRIER FROM STA. 98+26 - STA. 101+15
* * TEMPORARY PAVEMENT FROM STA. 97+20 - STA 99+47
& STA. 100+60 - STA. 100+80

STAGING NOTES: STAGE 1

WORK IN THIS STAGE CONSISTS OF THE CONSTRUCTION OF NEW 11 INCH PRECAST SLAB COMPOSITE WITH 5 INCH CONCRETE WEARING SURFACE, RETAINING WALL MODIFICATIONS, APPROACH SLABS, PAVEMENT CONNECTORS & HMA RESURFACING ALONG THE NORTHBOUND LANES OF TRAFFIC ON IL 171.

INSTALL STAGE 1 TEMPORARY SIGNAGE.

SHIFT TRAFFIC INTO THE STAGE 1 CONFIGURATION AS SHOWN ON THE PLANS.

STAGING NOTES: STAGE 2

WORK IN THIS STAGE CONSISTS OF THE CONSTRUCTION OF NEW 11 INCH PRECAST SLAB COMPOSITE WITH 5 INCH CONCRETE WEARING SURFACE, RETAINING WALL MODIFICATIONS, APPROACH SLABS, PAVEMENT CONNECTORS & HMA RESURFACING ALONG THE SOUTHBOUND LANES OF TRAFFIC ON IL 171.

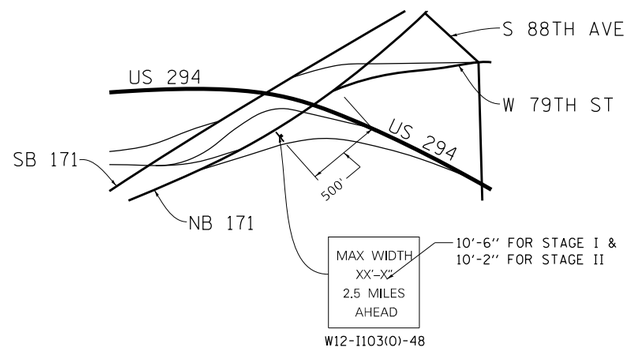
INSTALL STAGE 2 TEMPORARY SIGNAGE.

SHIFT NORTHBOUND TRAFFIC INTO THE STAGE 2 CONFIGURATION AS SHOWN ON THE PLANS.

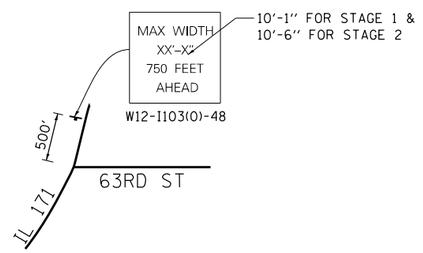
PRIOR TO SHIFTING SOUTHBOUND TRAFFIC INTO TEMPORARY LANE CONFIGURATION, TEMPORARY PAVEMENT SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS.

SHIFT SOUTHBOUND TRAFFIC INTO THE STAGE 2 CONFIGURATION AS SHOWN ON THE PLANS.

WIDTH RESTRICTION SIGNING IL 171
NORTHBOUND TRAFFIC



WIDTH RESTRICTION SIGNING IL 171
SOUTHBOUND TRAFFIC



PROPOSED LEGEND

1. TEMPORARY CONCRETE BARRIER
2. TEMPORARY CONCRETE BARRIER, RELOCATE
3. PAVEMENT MARKING TAPE, TYPE IV 4" WHITE
4. PAVEMENT MARKING TAPE, TYPE IV 4" YELLOW
5. TEMPORARY PAVMENT (VAR DP)

FILE NAME = i:\10303 PTB 182 04\10303.11 - IL Rte 171 over Ingredion RR\CAD\CADD Sheets\D162F30-ant-staging-tgb.dgn

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PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
MAINTENANCE OF TRAFFIC TYPICAL SECTIONS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	18
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

* MUST BE REMOVED WHEN FLAGGER OR WORKERS ARE NOT PRESENT FOR MORE THAN ONE HOUR

ROAD CONSTRUCTION AHEAD
W20-I103(0)-48

10'-6"
W12-I102(0)-48

RIGHT LANE CLOSED AHEAD
W20-5R(0)-48

END WORK ZONE SPEED LIMIT
G20-I103-6036

200' | 200' | 275' | 66TH PL | 300' | 66TH ST | 200' | 65TH PL | 250' TAPER

W21-I(0)-48 OR W20-7(0)-48 *

W21-III5(0)-3618
R2-1-3648
R10-I108p-3618
R2-I106p-3618
WORK ZONE
SPEED LIMIT 30
PHOTO ENFORCED
$375 FINE MINIMUM

STOP
EXIST. TO REMAIN

EXIST. TO REMAIN

PAVT MARK TAPE T4 6 (WHITE)
PAVT MARK TAPE T4 24 (WHITE)
TEMPORARY CONCRETE BARRIER
PAVT MARK TAPE T4 4 (WHITE)
PAVT MARK TAPE T4 4 (DOUBLE YELLOW @ 11" C-C) W/ TEMP RAIS PAV MK
PAVT MARK TAPE T4 4 (YELLOW)
PAVT MARK TAPE T4 4 (WHITE)

ONE WAY

EXIST. R.O.W.

27.5'

11.0'

W6-3(O)-48

100+00

8:1 TAPER

150' TAPER

W1-6L(0)-6030
(MOUNTED ABOVE TYPE III BARRICADE)

W6-3(O)-48

W20-7(0)-48
OR
W21-1(0)-48 *

W4-3(0)-48

LEFT LANE CLOSED AHEAD
W20-5L(0)-48

ROAD CONSTRUCTION AHEAD
W20-I103(0)-48
M6-4(0)-2115

10'-1"
W12-I102(0)-48

62ND PL

62ND ST

61ST PL

+30

200' | 200'

110+00

IL 171

EXIST. R.O.W.

LEFT LANE
R3-2100L

M6-2L

11.0'

110' TAPER

PAVT MARK TAPE T4 24 (WHITE)

W1-6R(0)-6030
(MOUNTED ABOVE TYPE III BARRICADE)

PAVT MARK TAPE T4 4 (YELLOW)

BE PREPARED TO STOP

WORK ZONE
SPEED LIMIT 30
PHOTO ENFORCED
$375 FINE MINIMUM
W21-III5(0)-3618
R2-1-3648
R10-I108p-3618
R2-I106p-3618

ROAD CONSTRUCTION AHEAD
W20-I103(0)-48

STOP
EXIST. TO REMAIN

END WORK ZONE SPEED LIMIT
G20-I103-6036

W20-I103(0)-48
M6-1(0)-2115

ROAD CONSTRUCTION AHEAD

EXIST.

PAVT MARK TAPE T4 4 (WHITE)

95+00

IL 171

EXIST. R.O.W.

65TH ST

W24-1L(O)-48

30 MPH
W13-1(O)-2424

WORK ZONE
SPEED LIMIT 30
PHOTO ENFORCED
$375 FINE MINIMUM
W21-III5(0)-3618
R2-1-3648
R10-I108p-3618
R2-I106p-3618

ROAD CONSTRUCTION AHEAD
W20-I103(0)-48
M6-4(0)-2115

EXIST. R.O.W.

63RD ST

105+00

200+00

IL 171

63RD ST

WORK AREA
TEMPORARY PAVEMENT
DRUMS OR TYPE II BARRICADES (SPACED 50' C-C OR AS NOTED BELOW)
DEVICES IN TAPER (20' C-C)
DEVICES IN RADII (10' C-C)
DIRECTION OF TRAFFIC FLOW
SIGN
ARROW BOARD
TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY THE ENGINEER)
IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2
CHANGEABLE MESSAGE SIGN

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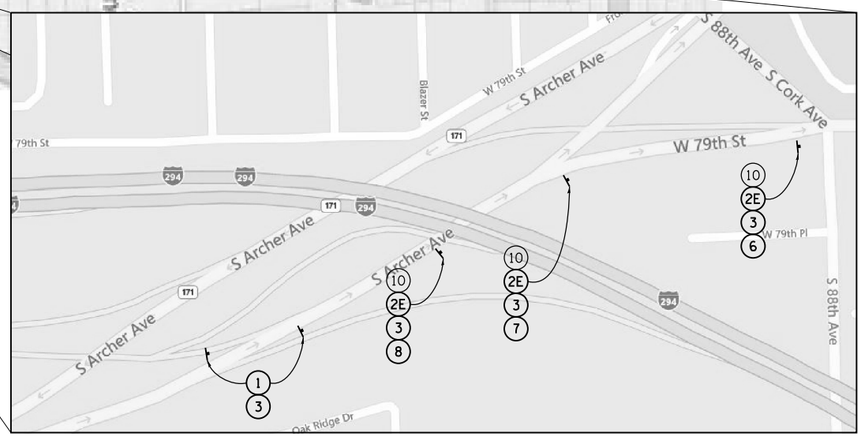
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
MAINTENANCE OF TRAFFIC – STAGE 1

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	19
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



DETOUR SIGNAGE

CONVENTIONAL ROAD SIGN SIZE (30x24)
EXPRESSWAY SIGN SIZE (48x36)

4R M4-9-3024

5R M4-9-3024

4L M4-9-3024

5L M4-9-3024

6 M4-9-3024

7 M4-9-3024

8 M5-6-3024

CARDINAL DIRECTION SIGNS

CONVENTIONAL ROAD SIGN SIZE (24x12)
EXPRESSWAY SIGN SIZE (30x21)

2E M3-2

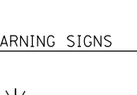
WARNING SIGNS

1 W20-2-48

MISCELLANEOUS SIGNS

3

BORDER
R=1.5"
TH=0.63"
BLACK LETTERING
ON ORANGE BACKGROUND



10 M4-5

LEGEND:

SERVICE ROAD ENTRANCE
DETOUR ROUTE

CONSTRUCTION ZONE

SIGN

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
MAINTENANCE OF TRAFFIC – STAGE 1 SERVICE RD DETOUR

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	20
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

* MUST BE REMOVED WHEN FLAGGER OR WORKERS ARE NOT PRESENT FOR MORE THAN ONE HOUR

END WORK ZONE SPEED LIMIT
G20-I103-6036

STOP
EXIST. SIGN TO BE REMOVED, STORED AND REINSTALLED.

EXIST. SIGN TO BE REMOVED, STORED AND REINSTALLED.

200' 200' 300' 42'

ROAD CONSTRUCTION AHEAD
W20-I103(0)-48

10'-2"
W12-I102(O)-48

LEFT LANE CLOSED AHEAD
W20-5L(0)-48

WORK ZONE
SPEED LIMIT 30
PHOTO ENFORCED
W21-III5(0)-3618
R2-1-3648
R10-I108p-3618

$375 FINE MINIMUM
R2-I106p-3618

REL TEMP CONC BARRIER

IMP ATTN REL FRD TL2

PAVT MARK TAPE T4 4 (YELLOW)

PAVT MARK TAPE T4 4 (WHITE)

EXIST. TO REMAIN

EXIST. R.O.W.

W1-3R(O)-48

30 MPH
W13-1(O)-2424

DO NOT ENTER

INGREDION/ SERVICE ENTRANCE
ORANGE SIGNS WITH BLACK LETTERS

W1-6L(0)-6030
(MOUNTED ABOVE TYPE III BARRICADE)

SEE ABOVE STA. 97+00

100+00

11.0'

EXIST. R.O.W.

W1-6R(0)-6030
(MOUNTED ABOVE TYPE III BARRICADE)

W6-3(O)-48

WORK ZONE
SPEED LIMIT 30
PHOTO ENFORCED
W21-III5(0)-3618
R2-1-3648
R10-I108p-3618

$375 FINE MINIMUM
R2-I106p-3618

120' TAPER

PAVT MARK TAPE T4 24 (WHITE)

PAVT MARK TAPE T4 12 (WHITE)

PAVT MARK TAPE T4 6 (3' DASH 9' SKIP, WHITE)

SOUTH ILLINOIS 171 | INGREDION/ SERVICE ENTRANCE
LEFT LANE | RIGHT LANE
ORANGE SIGN WITH BLACK LETTERS

W20-7(O)-48
OR
W21-1(O)-48

10'-6"
W12-I102(O)-48

ROAD CONSTRUCTION AHEAD
W20-I103(0)-48

110+00

115+00

62ND PL

61ST PL

END WORK ZONE SPEED LIMIT
G20-I103-6036

STOP
EXIST. TO REMAIN

EXIST. R.O.W.

63RD ST

105+00

200+00

RIGHT LANE LANE MUST TURN RIGHT
R-37

SOUTH ILLINOIS 171 | INGREDION/ SERVICE ENTRANCE
RIGHT LANE

WORK ZONE
SPEED LIMIT 30
PHOTO ENFORCED
W21-III5(0)-3618
R2-1-3648
R10-I108p-3618

$375 FINE MINIMUM
R2-I106p-3618

EXIST. R.O.W.

65TH PL

258'

65TH ST

95+00

180' TAPER

PAVT MARK TAPE T4 4 (WHITE)

SEE BELOW STA. 97+00

W21-1(O)-48 OR W20-7(O)-48

WORK AREA
TEMPORARY PAVEMENT
DRUMS OR TYPE II BARRICADES (SPACED 50' C-C OR AS NOTED BELOW) DEVICES IN TAPER (20' C-C) DEVICES IN RADII (10' C-C)
DIRECTION OF TRAFFIC FLOW
SIGN
ARROW BOARD
TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY THE ENGINEER)
IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2
CHANGEABLE MESSAGE SIGN

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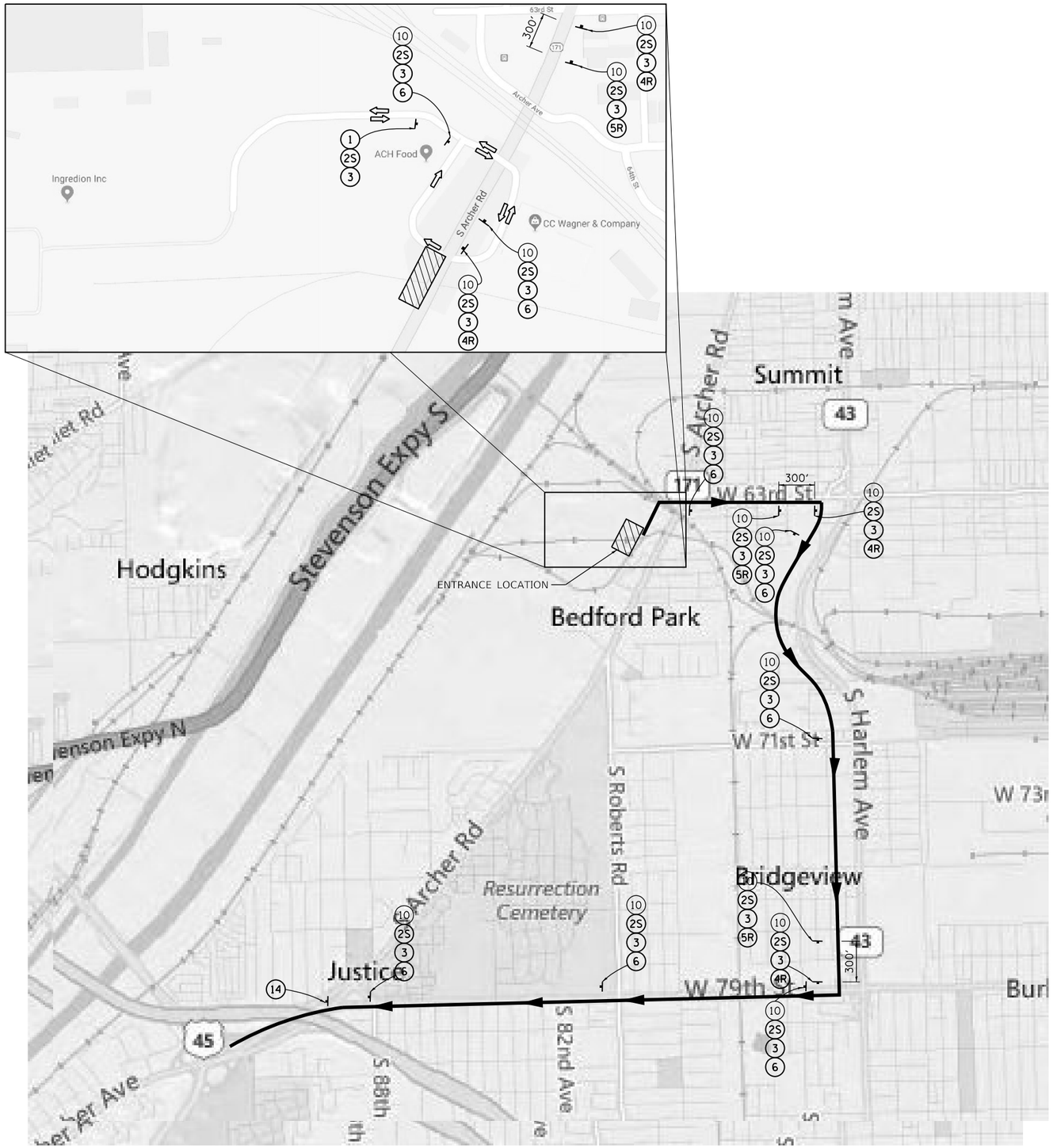
PLOT SCALE = 100.0000 ' / in.	CHECKED - CEI	REVISED -
PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
MAINTENANCE OF TRAFFIC – STAGE 2

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	21
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



DETOUR SIGNAGE

CONVENTIONAL ROAD SIGN SIZE (30x24)
EXPRESSWAY SIGN SIZE (48x36)

DETOUR — 4R M4-9-3024

DETOUR — 5R M4-9-3024

DETOUR — 4L M4-9-3024

DETOUR — 5L M4-9-3024

DETOUR — 6 M4-9-3024

DETOUR — 7 M4-9-3024

RIGHT LANE — 8 M5-6-3024

CARDINAL DIRECTION SIGNS

CONVENTIONAL ROAD SIGN SIZE (24x12)
EXPRESSWAY SIGN SIZE (30x21)

NORTH — 2N M3-1

SOUTH — 2S M3-3

WEST — 2W M3-4

EAST — 2E M3-2

WARNING SIGNS

DETOUR AHEAD — 1 W20-2-48

END DETOUR SIGN

CONVENTIONAL ROAD SIGN SIZE (24x18)
EXPRESSWAY SIGN SIZE (24x18)

END DETOUR — 14 M4-8N

ROUTE SHIELD

CONVENTIONAL ROAD SIGN SIZE (30x24)
EXPRESSWAY SIGN SIZE (45x36)

ILLINOIS 171 — 3 M1-I100-24

TO — 10 M4-5

LEGEND:

- SERVICE ROAD ENTRANCE / DETOUR ROUTE
- CONSTRUCTION ZONE
- SIGN

COLLINS ENGINEERS INC

USER NAME = aselber	DESIGNED - ZJT	REVISED -
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PLOT SCALE = 100.0000 ' / in.	CHECKED - CEI	REVISED -
PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
MAINTENANCE OF TRAFFIC – STAGE 2 SERVICE RD DETOUR

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	22
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

FILE NAME = i:\10303 PTB 182 04\10303.11 - IL Rte 171 over Ingredion RR\CAD\CADD.Sheets\D162F30-sht-staging-stg2-Detour.dgn

PART OF SECTIONS 13 AND 24 TOWNSHIP 38 NORTH RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN IN COOK COUNTY ILLINOIS

COORDINATES AND BEARINGS ARE ARBITRARILY BASED AND HAVE NO REFERENCE TO ANY OTHER GRID OR PROJECT

SCALE 1"=50'
0' 25' 50' 100'

SEGMENT 2
BEGIN PROJECT IX-6003(677)
STA. 5+55.00

LEGEND

- SECTION CORNER.
- QUARTER SECTION CORNER.
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APL — APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- 129.32' — MEASURED DIMENSION
- 129.32'(COMP) — COMPUTED DIMENSION
- ( ) — RECORD DATA
- EXISTING BUILDING

- IRON PIPE OR ROD FOUND
- REPLACED AFTER CONSTRUCTION
- CUT CROSS FOUND OR SET
- ● T1 **THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.** SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ● BT1, BT2, BT3 **THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.** BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ **STAKING OF PROPOSED RIGHT OF WAY.** SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- T2 PKNAIL & COLORED PLASTIC CAP IN UTILITY POLE USED AS TIE POINT
- T5 PKNAIL & COLORED PLASTIC CAP IN TREE USED AS TIE POINT
- T8 CORNER OF BUILDING USED AS TIE POINT
- T9 CROSS CUT IN CONCRETE USED AS TIE POINT

DEPT-01 RECORDING $56.50
T#3333 TRAN 4020 04/23/86 14:06:00
#4332 # A *-86-158927

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

THIS IS TO CERTIFY THAT WE, MACKIE CONSULTANTS, INC., AN ILLINOIS REGISTERED LAND SURVEYOR CORPORATION NO. 48-20 HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON BETWEEN SECTION 13, TOWNSHIP 38 N., RANGE 12 E., AND SECTION 24, TOWNSHIP 38 N., RANGE 12 E. OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF OUR KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 26TH DAY OF January 19 86 A.D.

MACKIE CONSULTANTS, INC.
Maynard H. Riley
Asst. Sec.
ILLINOIS REGISTERED LAND SURVEYOR NO. 2638

MACKIE CONSULTANTS, INC. 48-20 REGISTERED LAND SURVEYOR CORPORATION OF ILLINOIS

MACKIE CONSULTANTS, INC.
6330N CICERO AVENUE
CHICAGO ILLINOIS 60646
(312) 736-7666

86158927

DETAIL "D"
SCALE 1"=10'

DETAIL "E"
SCALE 1"=10'
NOTE: TIE POINTS IN STRAIGHT LINE WITH PROPOSED CORNER

TOTAL HOLDINGS DETAIL
APPROX. SCALE 1"=600'

DETAIL "A"
SCALE 1"=20'

DETAIL "B"
SCALE 1"=20'

DETAIL "C"
SCALE 1"=20'

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	PRE DED ACRES	REMAINDER ACRES	EASEMENT ACRES	EASEMENT PURPOSE	P.I.N.
0013 A	CPC INTERNATIONAL, INC., a Corporation of Delaware	± 282	0.593	—		N/A	N/A	18-24-100-001 - 005
0013 B			0.028	—		N/A	N/A	18-24-100-001
0013TE 1			N/A	N/A		0.758	drive reconstruction	18-24-100-001
0013 TE 2			N/A	N/A	± 281	0.029	drive reconstruction	18-24-100-008
0016	CPC INTERNATIONAL, INC., a Corporation of Delaware	0.965	0.042	—	0.923	N/A	N/A	18-24-105-005

PARCEL NUMBER	PROPERTY ACQUIRED BY
0013 A	WARRANTY DEED 8-21-87 #87463889
0013 B	WARRANTY DEED 8-21-87 #87463890
0016	WARRANTY DEED 8-21-87 #87463888

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	PRE DED ACRES	REMAINDER ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PIN
0001	LOUIS GUZLAS	0.730	0.175	N/A	0.555			18-13-311-013

ACQUIRED BY WARRANTY DEED 90018530 1/11/90

CENTERLINE CURVE DATA
R=1266.59'
T= 105.79'
Δ= 9°32'57"
L= 211.09'
D= 4°31'25"
E= 4.41'
M= 4.39'

THIS DOES NOT REQUIRE THE COUNTY CLERK'S ENDORSEMENT REQUIRED IN SECTION 516 CHAPTER 120 REVENUE LAW OF ILLINOIS.
Stanley T. Kusper, Jr. COUNTY CLERK
DATE 4-23-86

MAP 90

NOTE: COVER SHEET - SHEET "A"
SEGMENT 1, SHEETS 3,4,&5
SEGMENT 2, SHEETS 1,2,&3

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
FAU 3565 (ILL.171)

SECTION B-HRS(85) COOK COUNTY
PROJECT IX-6003(677) JOB NO. R-90-015-85
STATION 5+55.00 TO STATION 20+00
SCALE: 1"=50' SHEET 1 OF 5

BUREAU OF LAND ACQUISITION
1000 PLAZA DRIVE
SCHAUMBURG, ILLINOIS 60196

REVISION DATE 2/24/87
REVISION added Stations to title block
MADE BY

RECORDING: RECORDED ON
AS DOCUMENT NO.

MCI.1549 FILE 2-1-1

USER NAME = aseiber	DESIGNED - ZJT	REVISED -
	DRAWN - ZJT	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - CEI	REVISED -
PLOT DATE = 10/19/2018	DATE -	REVISED -

COLLINS ENGINEERS INC

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

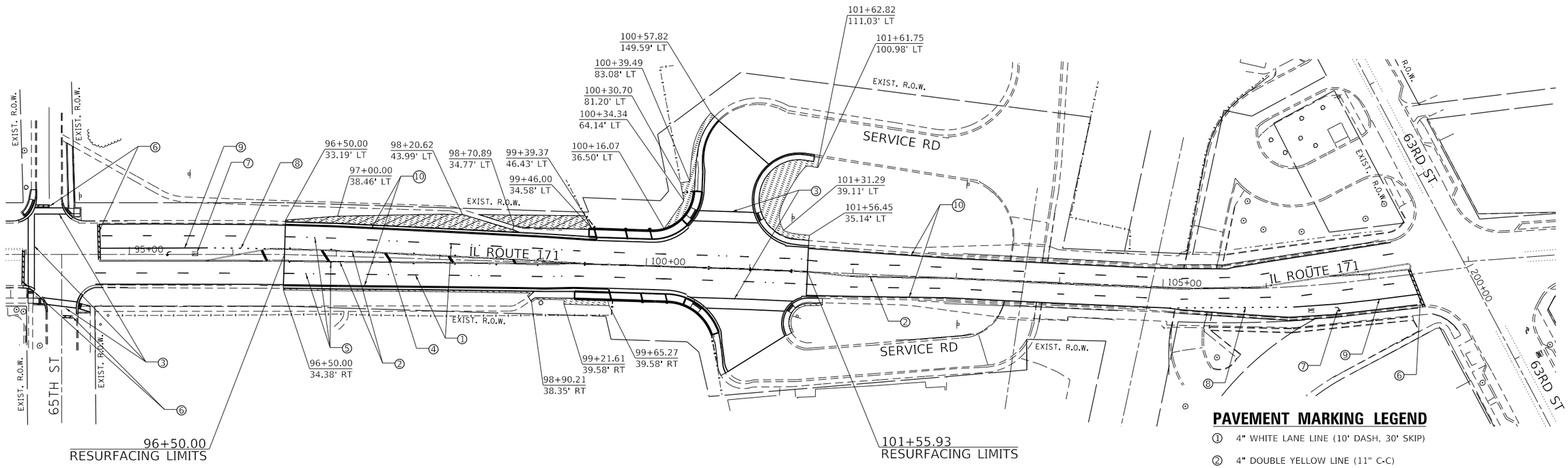
ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
PLAT OF HIGHWAYS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	23
		CONTRACT NO. 62F30		
		ILLINOIS FED. AID PROJECT		

FILE NAME = i:\10303 PTB 182 04\10303.11 - IL Rte 171 over Ingredion RR\CAD\CADD Sheets\D62F30-sht-ROW.dgn

PRECISION BLUE INC., LOMBARD, IL



NOTES:

1. REFER TO DISTRICT ONE DETAILS TC-11 AND TC-13 FOR ADDITIONAL INFORMATION.
2. ALL PAVEMENT MARKINGS ON THE BRIDGE DECK, APPROACHES AND CONCRETE PAVEMENT SHALL BE MODIFIED URETHANE EXCEPT LANE LINES WHICH SHALL BE CONTRAST PREFORMED PLASTIC.
3. ALL PAVEMENT MARKINGS ON HMA SHALL BE THERMOPLASTIC.

PAVEMENT MARKING LEGEND

① 4" WHITE LANE LINE (10' DASH, 30' SKIP)
② 4" DOUBLE YELLOW LINE (11" C-C)
③ 6" WHITE CROSSWALK LINE
④ 12" YELLOW DIAGONALS AT 45° ANGLE, 75' C-C SPACING
⑤ RAISED REFLECTIVE PAVEMENT MARKER
⑥ 24" WHITE STOP BAR
⑦ WHITE LETTER AND SYMBOLS
⑧ 6" WHITE LANE LINE (2' DASH, 6' SKIP)
⑨ 6" SOLID WHITE LANE LINE
⑩ 4" SOLID WHITE LINE

LANDSCAPING LEGEND

PROP. SODDING, SALT TOLERANT
PROP. TOPSOIL FURNISH AND PLACE, 8"

PROP. SODDING, SALT TOLERANT
PROP. TOPSOIL FURNISH AND PLACE, 4"

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COLLINS ENGINEERS INC

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PLOT DATE = 10/19/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
PAVEMENT MARKING & LANDSCAPING PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	24
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED
CONTROLLER CABINET		
COMMUNICATION CABINET	CC	CC
MASTER CONTROLLER	MC	MC
MASTER MASTER CONTROLLER	MMC	MMC
UNINTERRUPTABLE POWER SUPPLY		
SERVICE INSTALLATION -(P) POLE MOUNTED	P	P
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	G GM	G GM
TELEPHONE CONNECTION	ET	T
STEEL MAST ARM ASSEMBLY AND POLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY		BM
WOOD POLE		
GUY WIRE		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD OPTICALLY PROGRAMMED	P P	P P
FLASHER INSTALLATION -(FS) SOLAR POWERED	F FS F FS	F FS F FS
PEDESTRIAN SIGNAL HEAD		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	APS	APS
RADAR DETECTION SENSOR	R	R
VIDEO DETECTION CAMERA	V	V
RADAR/VIDEO DETECTION ZONE		
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIMATION BEACON		
WIRELESS INTERCONNECT		
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR

ITEM	EXISTING	PROPOSED
HANDHOLE -SQUARE -ROUND		
HEAVY DUTY HANDHOLE -SQUARE -ROUND	H	H
DOUBLE HANDHOLE		
JUNCTION BOX	J	J
RAILROAD CANTILEVER MAST ARM		
RAILROAD FLASHING SIGNAL		
RAILROAD CROSSING GATE		
RAILROAD CROSSBUCK		
RAILROAD CONTROLLER CABINET	RX	RX
UNDERGROUND CONDUIT (UC), GALVANIZED STEEL		
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE		
SYSTEM ITEM	S	SP
INTERSECTION ITEM	I	IP
REMOVE ITEM		R
RELOCATE ITEM		RL
ABANDON ITEM		A
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF
MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF
SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF
DETECTOR LOOP, TYPE I		
PREFORMED DETECTOR LOOP	P	P
SAMPLING (SYSTEM) DETECTOR	S	S
INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS	IS
QUEUE AND SAMPLING (SYSTEM) DETECTOR	QS	QS
WIRELESS DETECTOR SENSOR	W	W
WIRELESS ACCESS POINT		

ITEM	EXISTING	PROPOSED
SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	P	P
SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	P RB	P RB
PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED	5	5
GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	1#6
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C	1	1
COAXIAL CABLE	C	C
VENDOR CABLE	V	V
COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	6#18	6#18
FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	12F 24F 36F	12F 24F 36F
GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE	C M P S	C M P S

TS SHT NO. 1

11\DGN\CADD Sheets\D162F30-sht ts01.dgn

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	25
	TS-05	CONTRACT NO. 62F30		
		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.

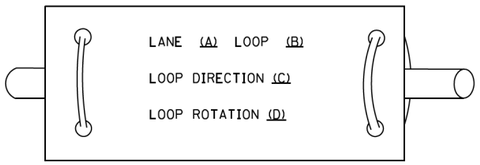
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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.

LOOP LEAD-IN CABLE TAG

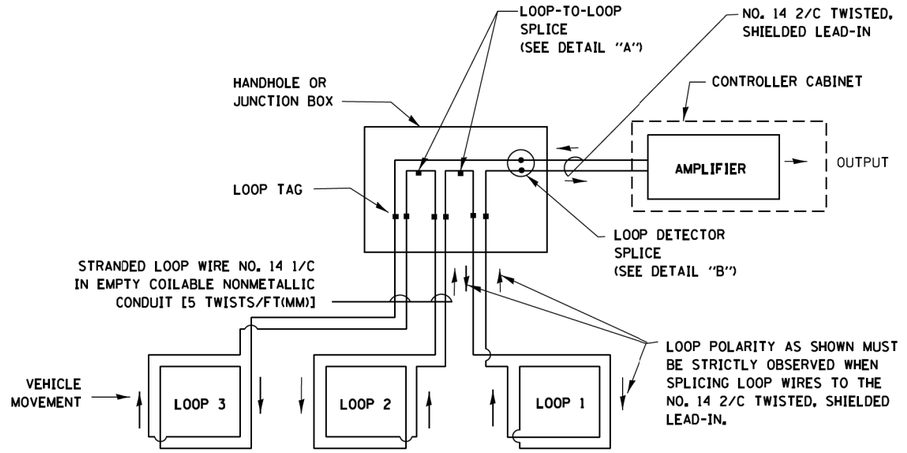


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

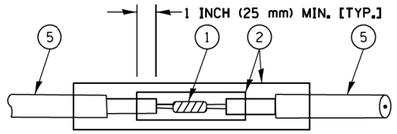
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

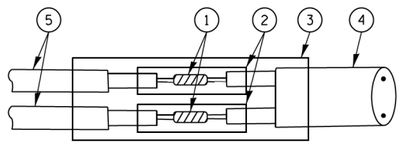


DETECTOR LOOP WIRING SCHEMATIC

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

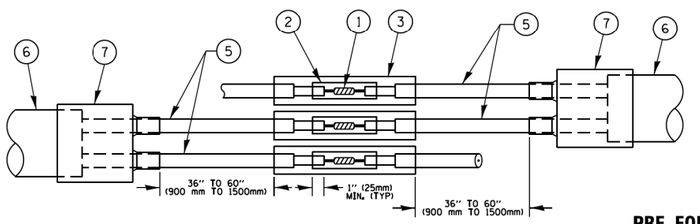


DETAIL "A"
LOOP-TO-LOOP SPLICE



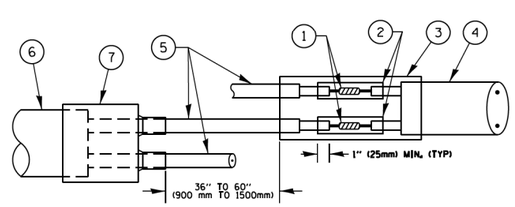
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

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

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

(6) PRE-FORMED LOOP

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

TS SHT NO. 2

FILE NAME = St\WP\Design\Iovan\SamplePlans\DGNFiles\TSExample01-sht-ts.dgn	USER NAME = plascencia	DESIGNED -	REVISED -
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Default	PLOT DATE = 5/17/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

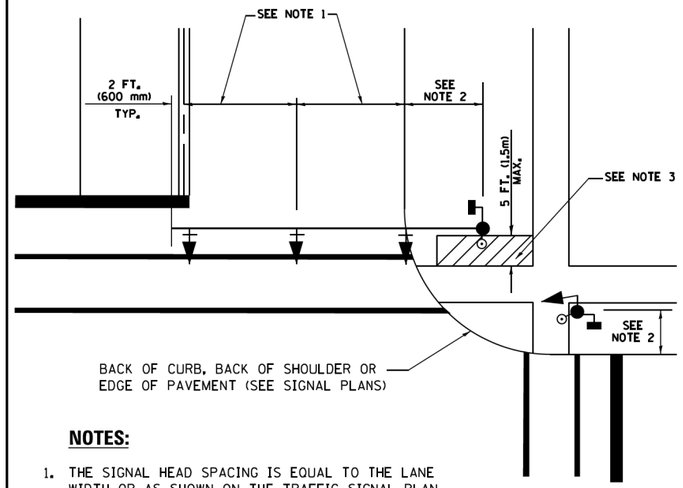
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 2 OF 7 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	26
	TS-05	CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

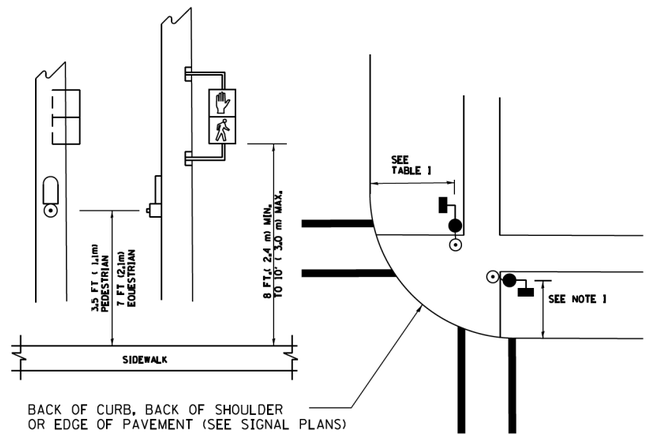
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

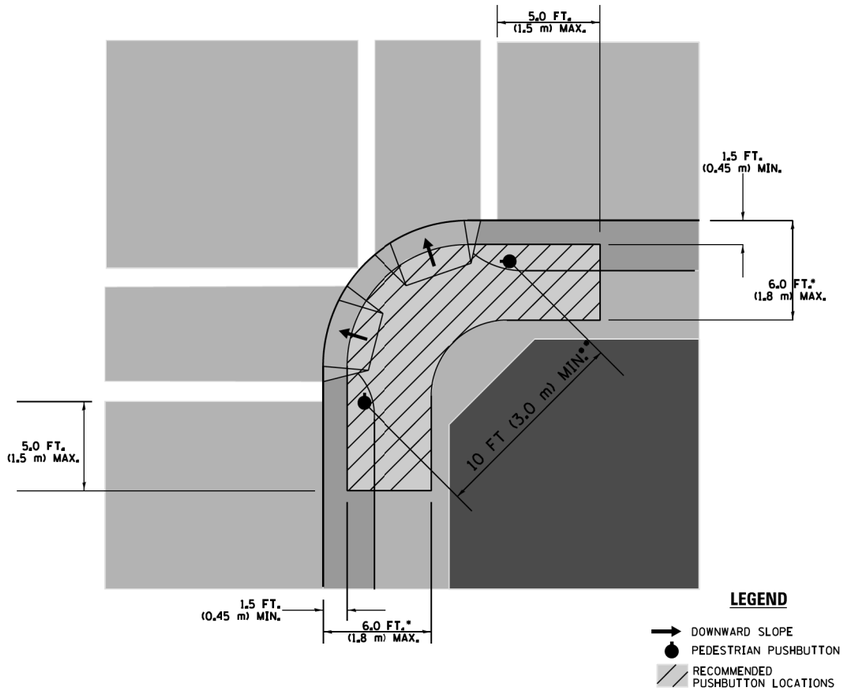
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



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



- 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 TOTHE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

TS SHT NO.3

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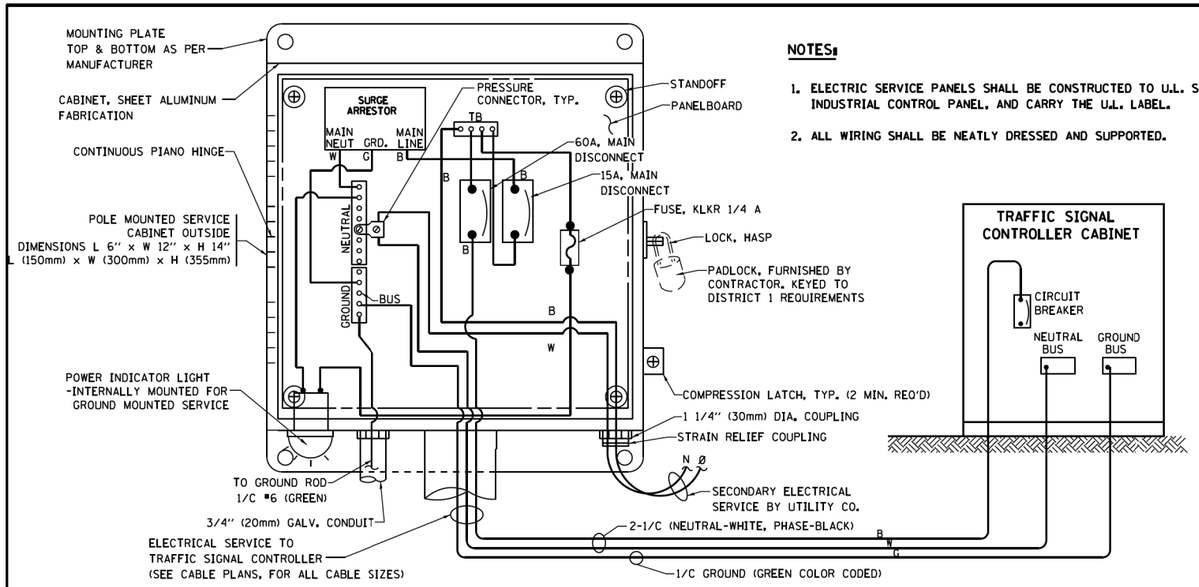
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 3 OF 7 SHEETS | STA. | TO STA.

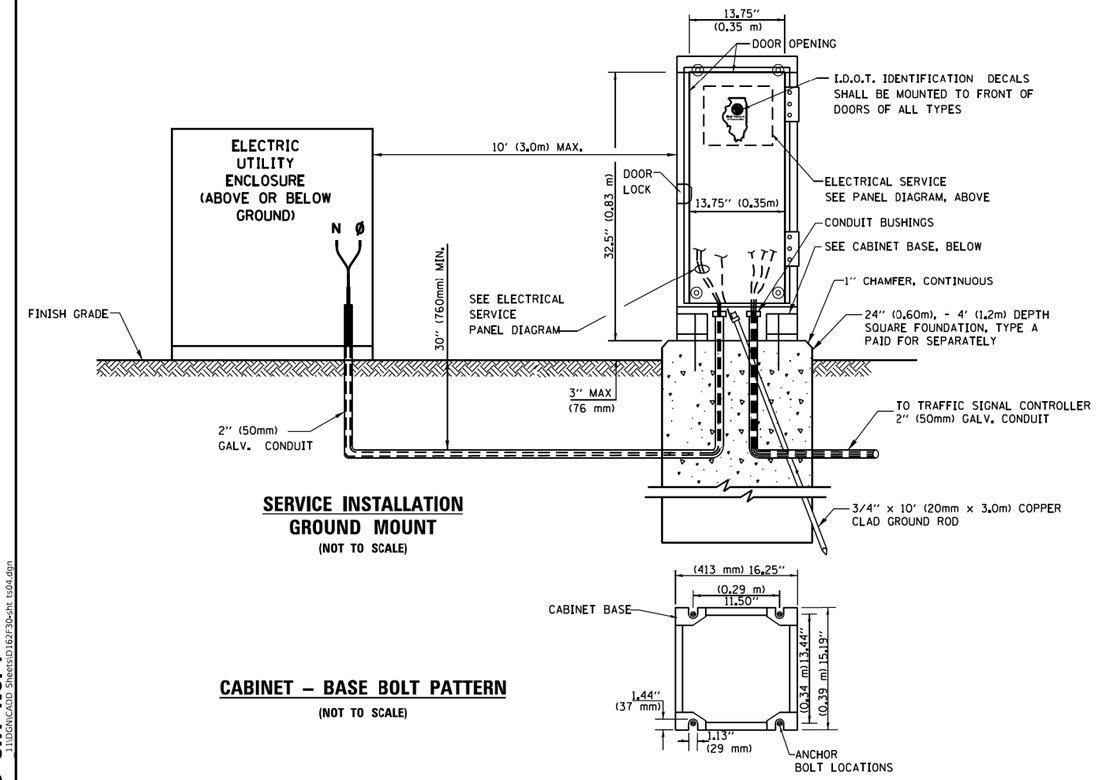
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	27
	TS-05	CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



NOTES:

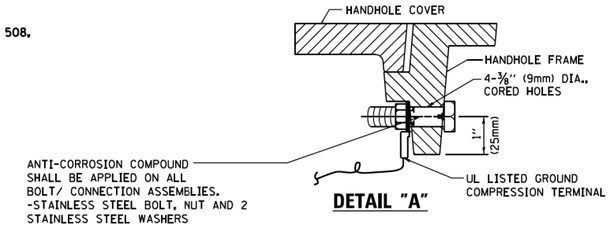
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

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

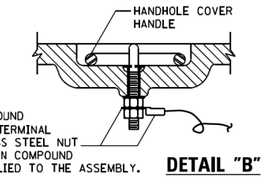


SERVICE INSTALLATION GROUND MOUNT
(NOT TO SCALE)

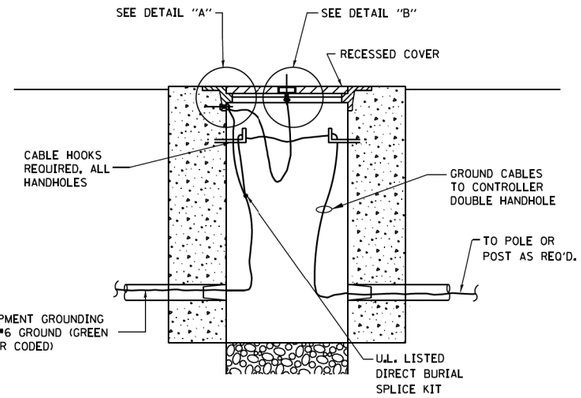
CABINET – BASE BOLT PATTERN
(NOT TO SCALE)



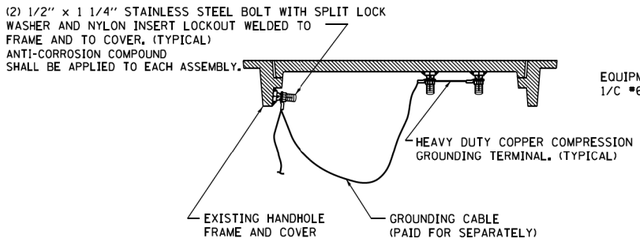
DETAIL "A"



DETAIL "B"



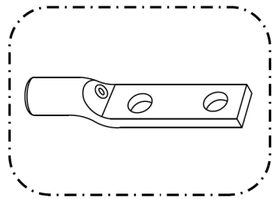
HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)



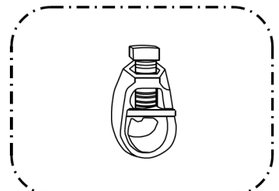
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)

NOTES:
GROUNDING SYSTEM

1. 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.
2. 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.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



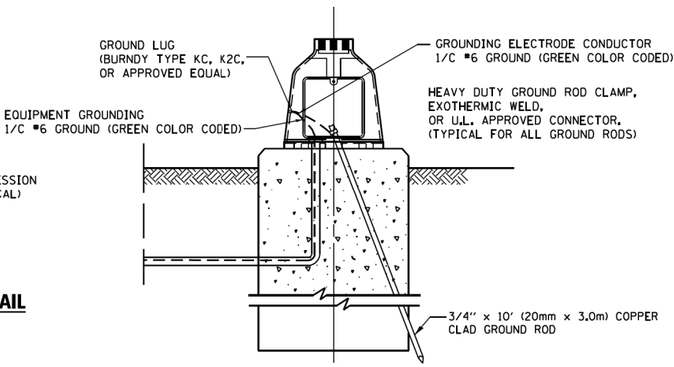
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



¾" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

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.



MAST ARM POLE / POST–GROUNDING DETAIL
(NOT TO SCALE)

TS SHT NO. 4

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 4 OF 7 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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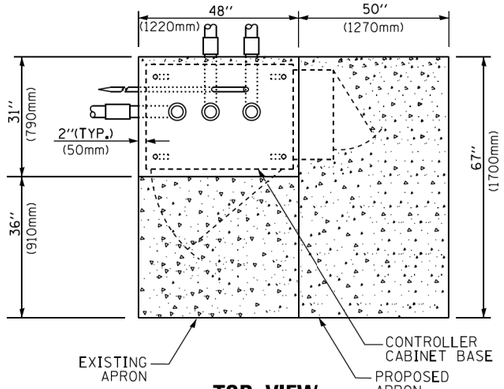
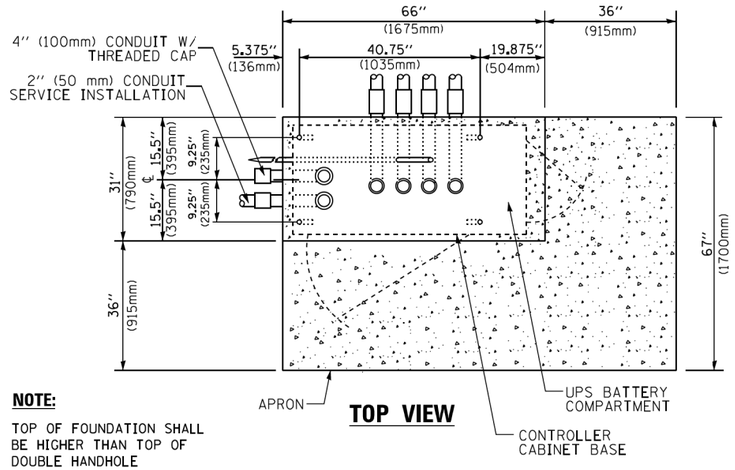
	TS-05	CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



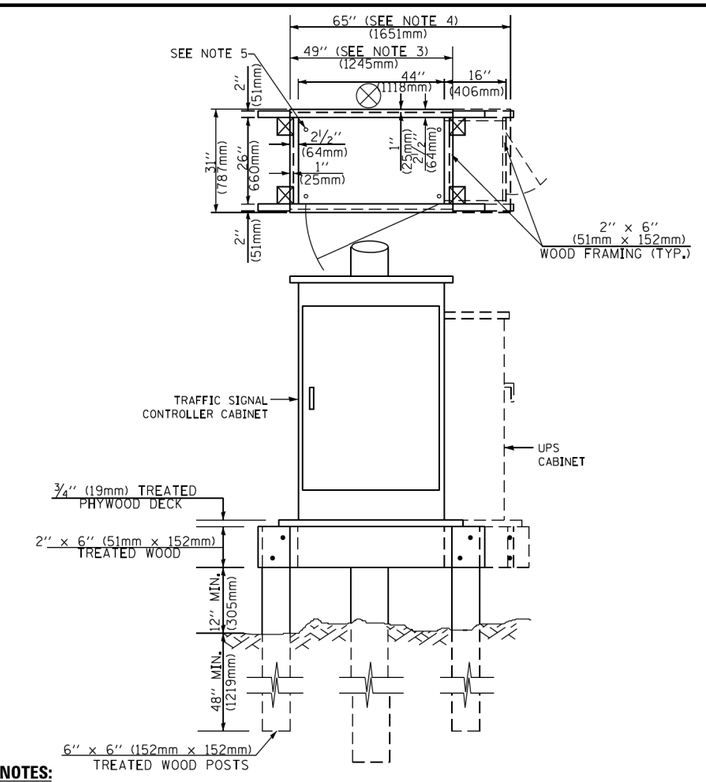
TOP VIEW



NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

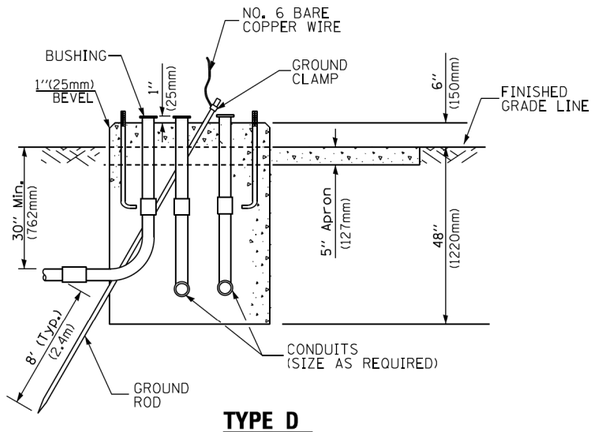
TOP VIEW



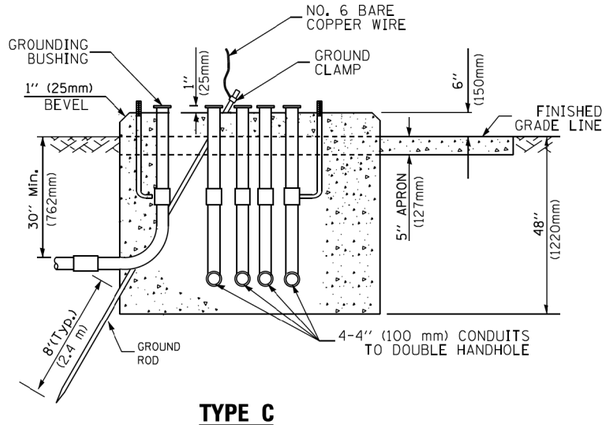
NOTES:

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



TYPE D
FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET



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

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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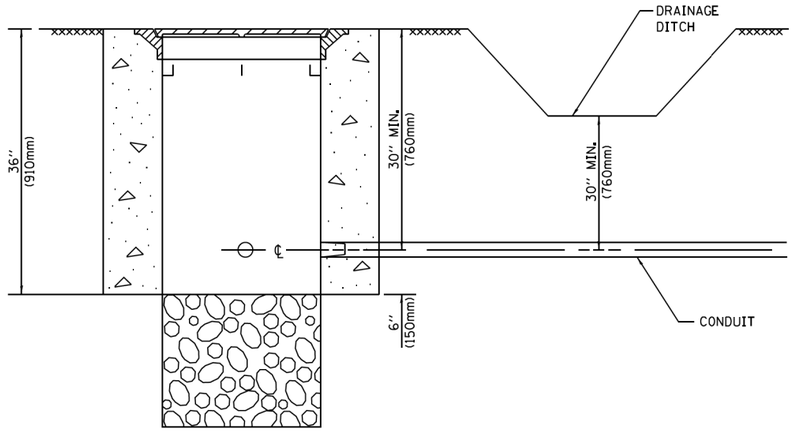
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 5 OF 7 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	29
	TS-05	CONTRACT NO. 62F30		
		ILLINOIS	FED. AID PROJECT	

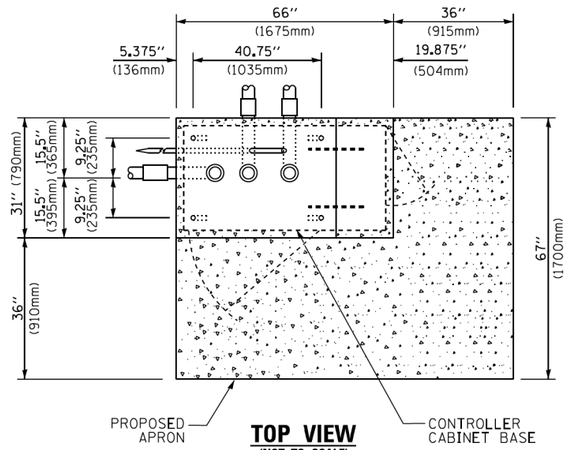


NOTES:

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

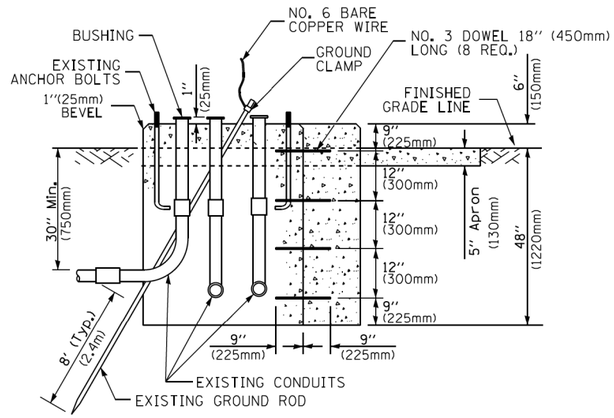
HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



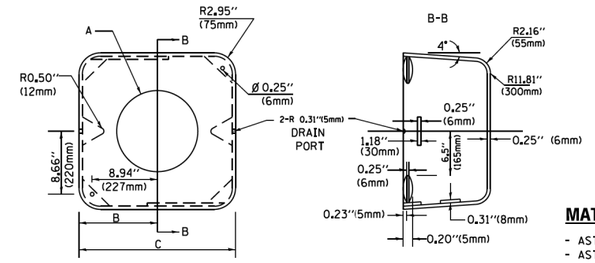
TOP VIEW

(NOT TO SCALE)



MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)



MATERIAL:

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

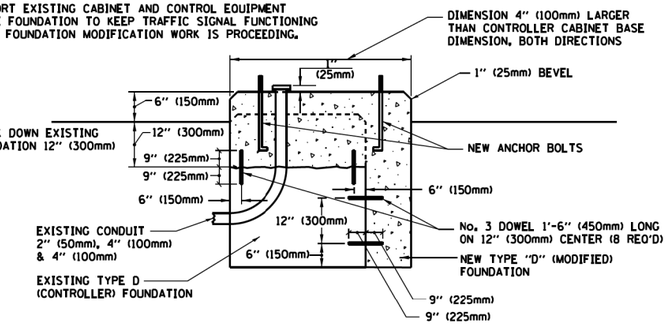
A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57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

SHROUD

NOTES:

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

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

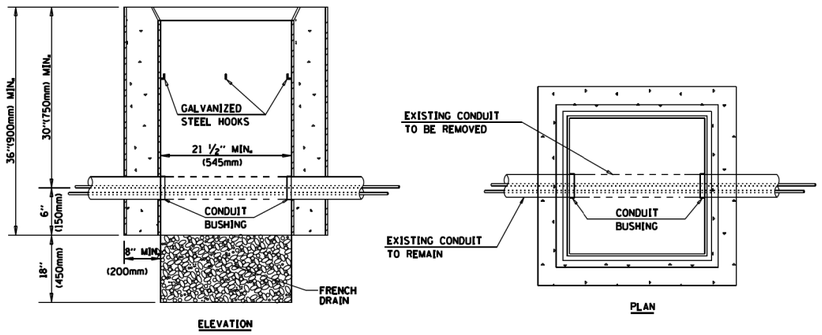
POST CAP MOUNT **MAST ARM MOUNT**

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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

NOTES:

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



NOTES:

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

HANDHOLE TO INTERCEPT EXISTING CONDUIT

TS SHT NO. 6

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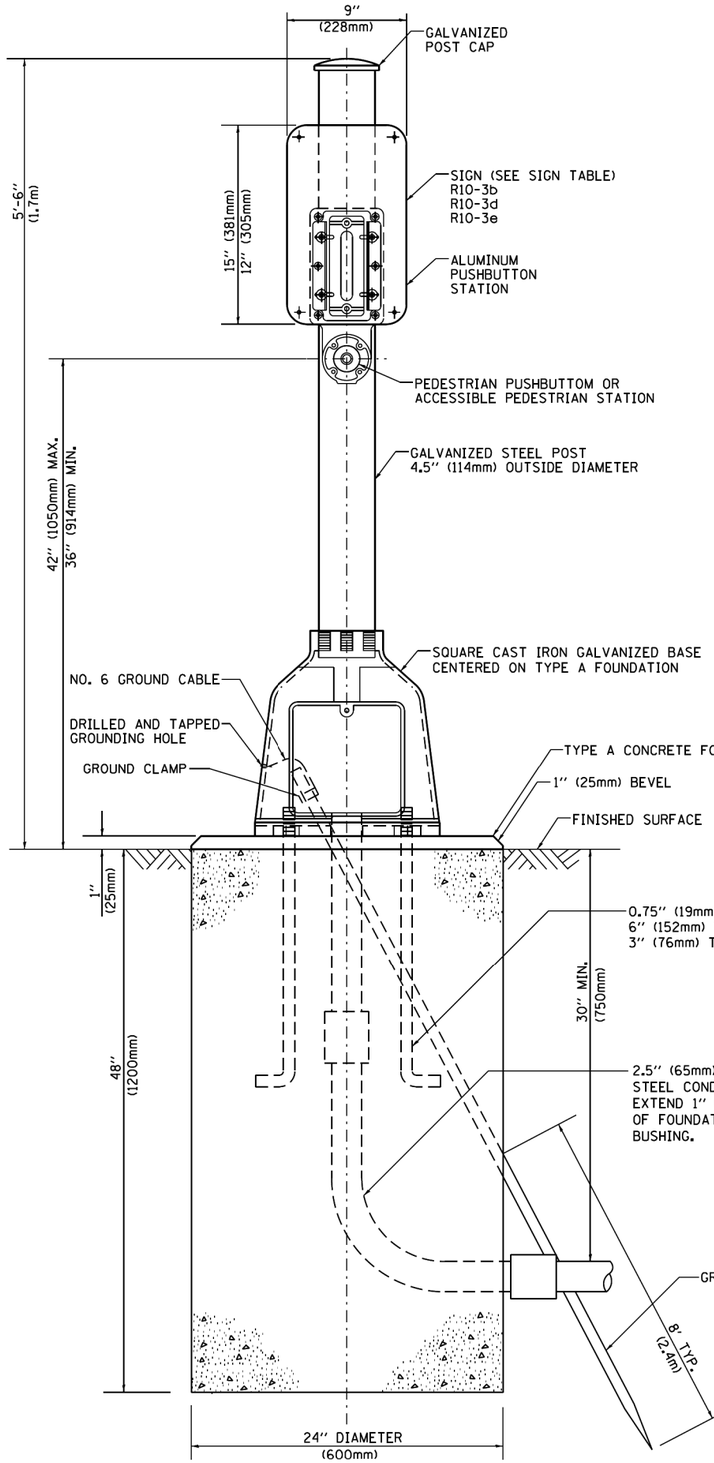
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

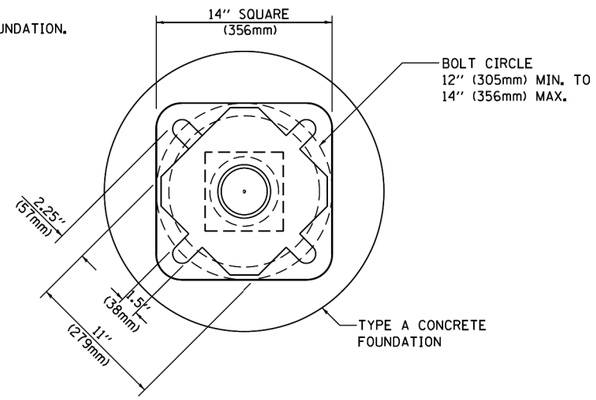
SCALE: NONE | SHEET 6 OF 7 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	30
	TS-05	CONTRACT NO. 62F30		
		ILLINOIS FED. AID PROJECT		



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

TS SHT NO. 7

111\DGN\CADD Sheets\D162F30-sht ts07.dgn

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		DRAWN -	REVISED -
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Default	PLOT DATE = 5/17/2016	DATE -	REVISED -

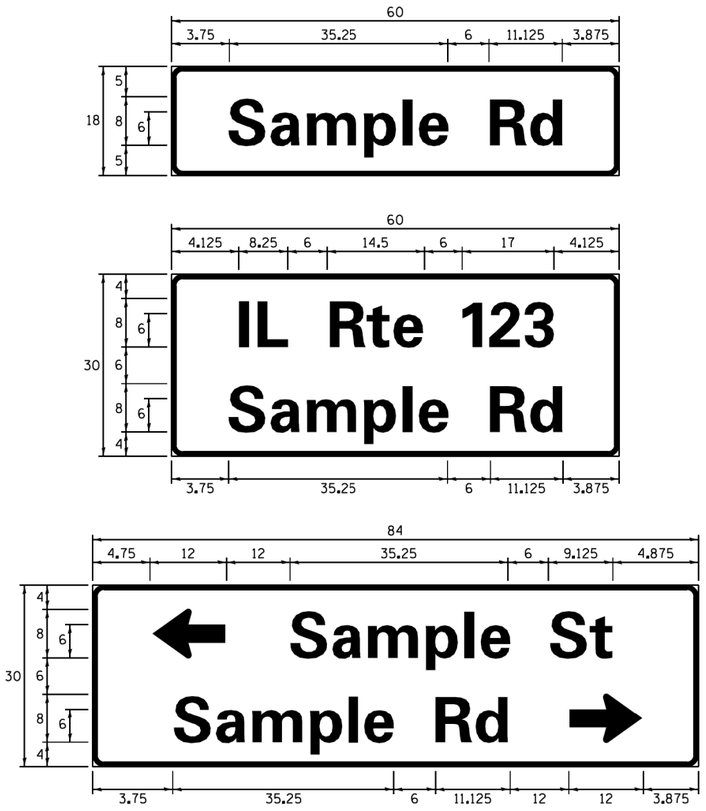
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	31
	TS-05	CONTRACT NO. 62F30		
		ILLINOIS	FED. AID PROJECT	

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.

2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)

3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE ¾" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.

4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.

5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.

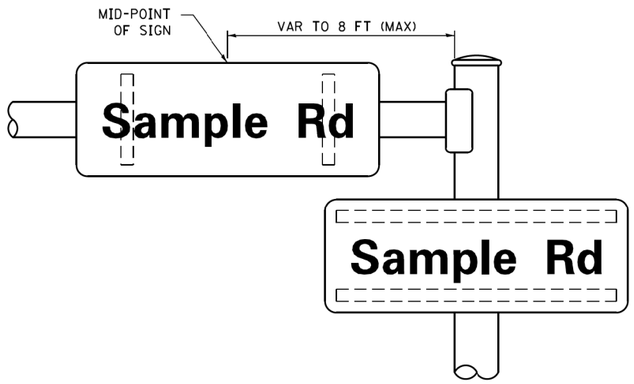
6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:	PARTS LISTING:	
- J.O. HERBERT COMPANY, INC MIDLOTHIAN, VA	SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
	SIGN SCREWS	1/4" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
- WESTERN REMAC, INC. WOODRIDGE, IL	BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

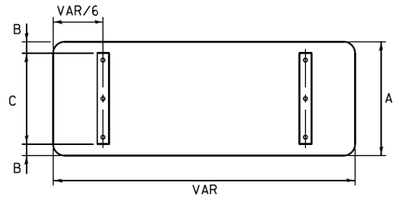
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION

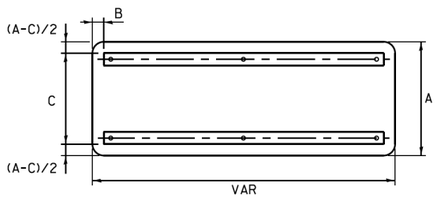
ARM OR POLE MOUNTED



SUPPORTING CHANNELS



A	B	C
18"	2"	14"
30"	2"	24"



A	B	C
18"	2"	12"
30"	2"	22"

STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

TS SHT NO. 8

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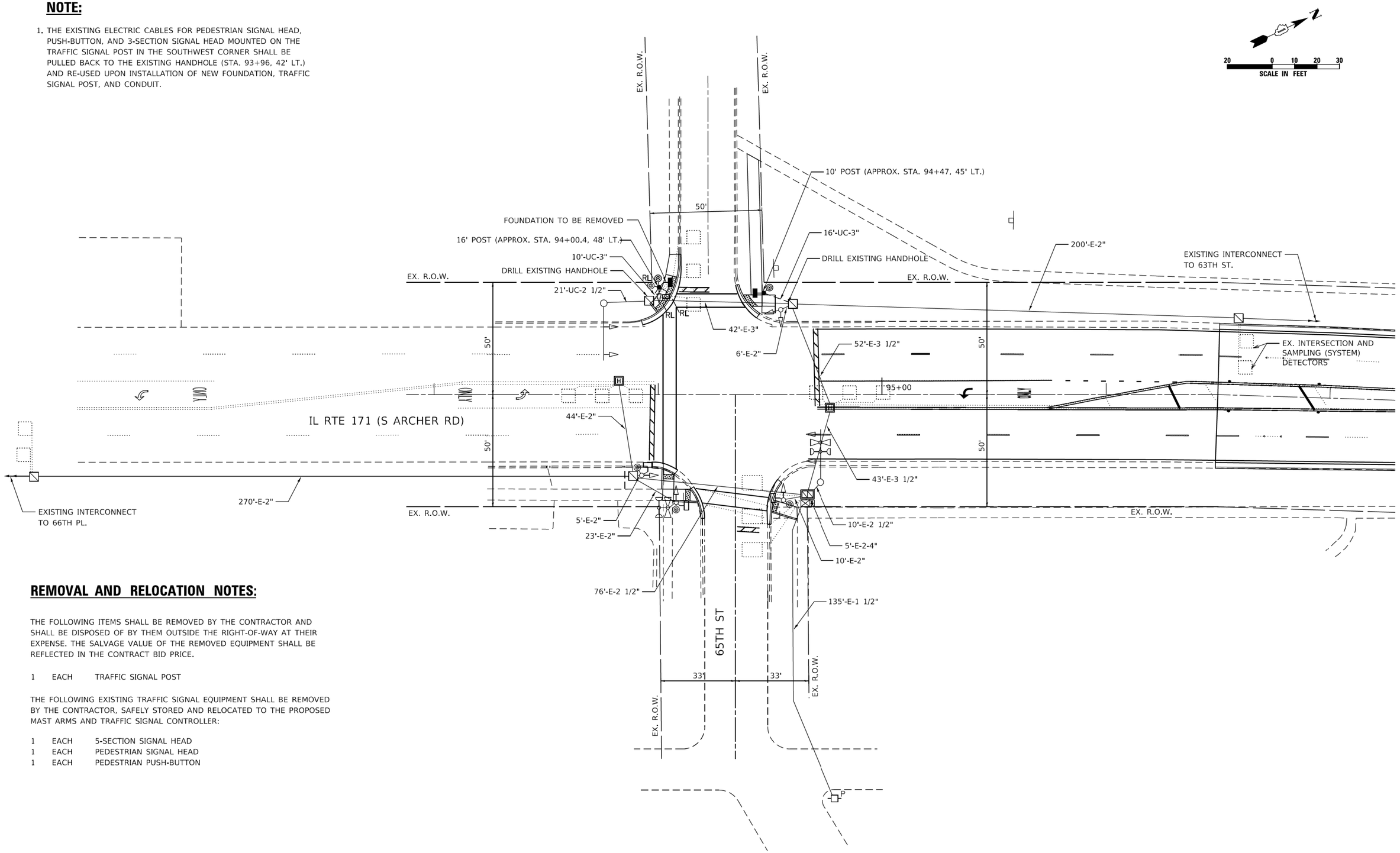
DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	32
	TS-02	CONTRACT NO. 62F30		
	ILLINOIS	FED. AID PROJECT		

NOTE:

1. THE EXISTING ELECTRIC CABLES FOR PEDESTRIAN SIGNAL HEAD, PUSH-BUTTON, AND 3-SECTION SIGNAL HEAD MOUNTED ON THE TRAFFIC SIGNAL POST IN THE SOUTHWEST CORNER SHALL BE PULLED BACK TO THE EXISTING HANDHOLE (STA. 93+96, 42' LT.) AND RE-USED UPON INSTALLATION OF NEW FOUNDATION, TRAFFIC SIGNAL POST, AND CONDUIT.



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.

1 EACH TRAFFIC SIGNAL POST

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

1 EACH 5-SECTION SIGNAL HEAD
1 EACH PEDESTRIAN SIGNAL HEAD
1 EACH PEDESTRIAN PUSH-BUTTON

TS SHT NO. 09

MODEL: Default
FILE NAME: J\15234\WO_11\DGN\CADD Sheets\D162F30-sht ts09-IL 171 at 65th St Modernization Plan.dgn

SINGH
SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

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	DRAWN - MG	REVISED -
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PLOT DATE = 10/18/2018	DATE - 10/18/2018	REVISED -

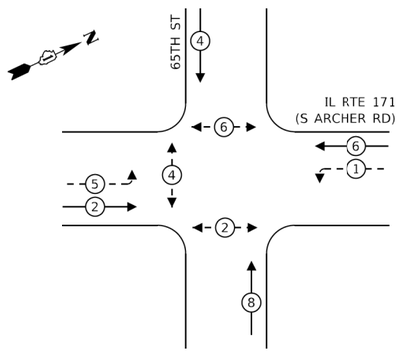
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 171 (S ARCHER ROAD) AND 65TH STREET

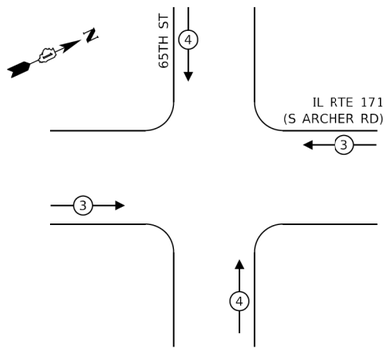
SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	33
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

PROPOSED CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	26
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	358
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	372
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	28
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
DRILL EXISTING HANDHOLE	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
RELOCATE EXISTING SIGNAL HEAD	EACH	1
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	1
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	30
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1

LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL — OVERLAP

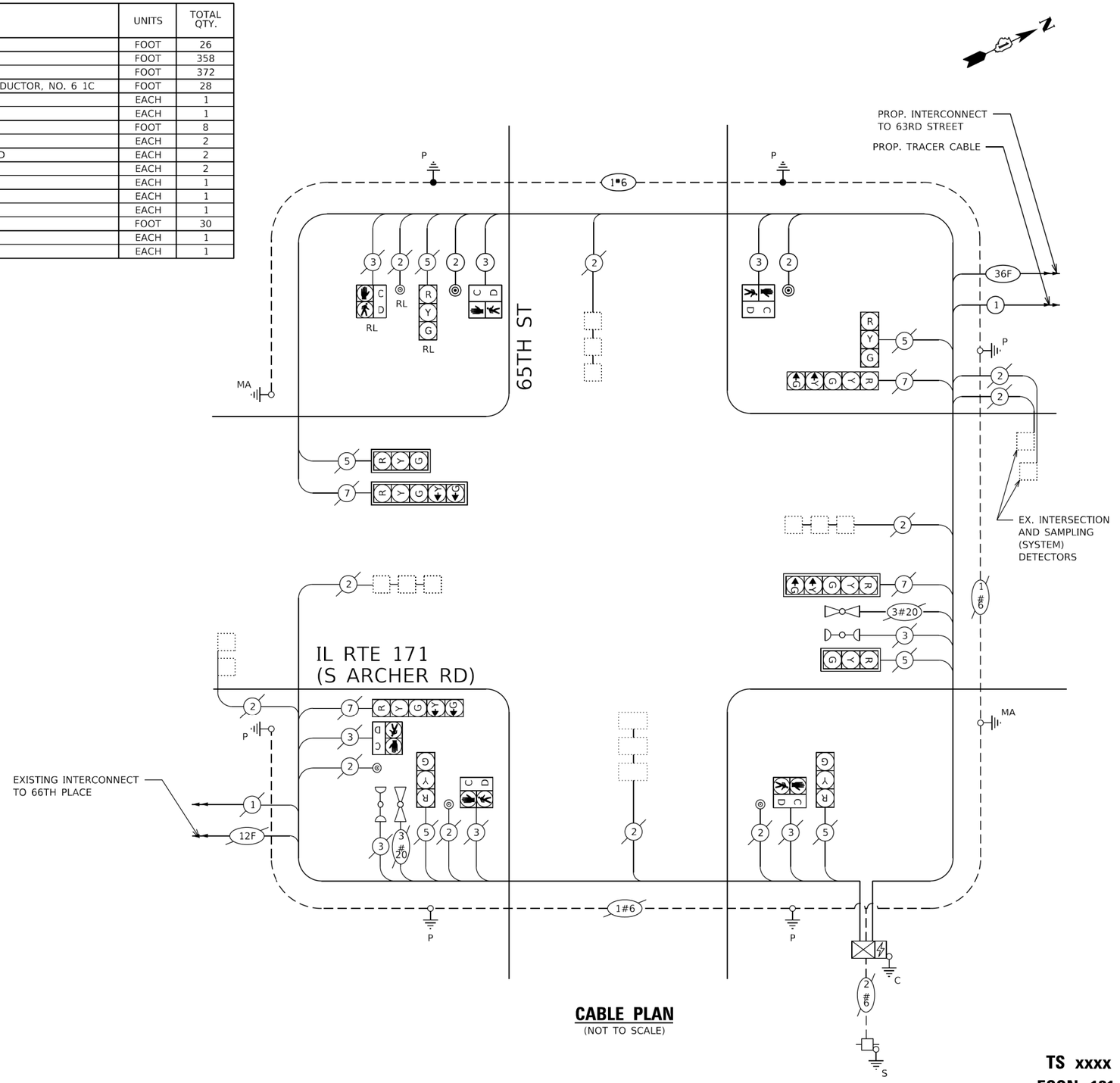
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	11	50	55.0
(YELLOW)	10	20	5	10.0
(GREEN)	10	12	45	54.0
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	372.0

ENERGY COSTS TO:

VILLAGE OF BEDFORD PARK
6701 SOUTH ARCHER ROAD
BEDFORD PARK, IL 60501

ENERGY SUPPLY: CONTACT: ILYAS MOHIUDDIN
PHONE: (708) 235-2692
COMPANY: COMMONWEALTH EDISON
TOWER ACCOUNT NUMBER:



CABLE PLAN
(NOT TO SCALE)

TS xxxx
ECON 131

TS SHT NO. 10

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SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

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	DRAWN - MG	REVISED -	
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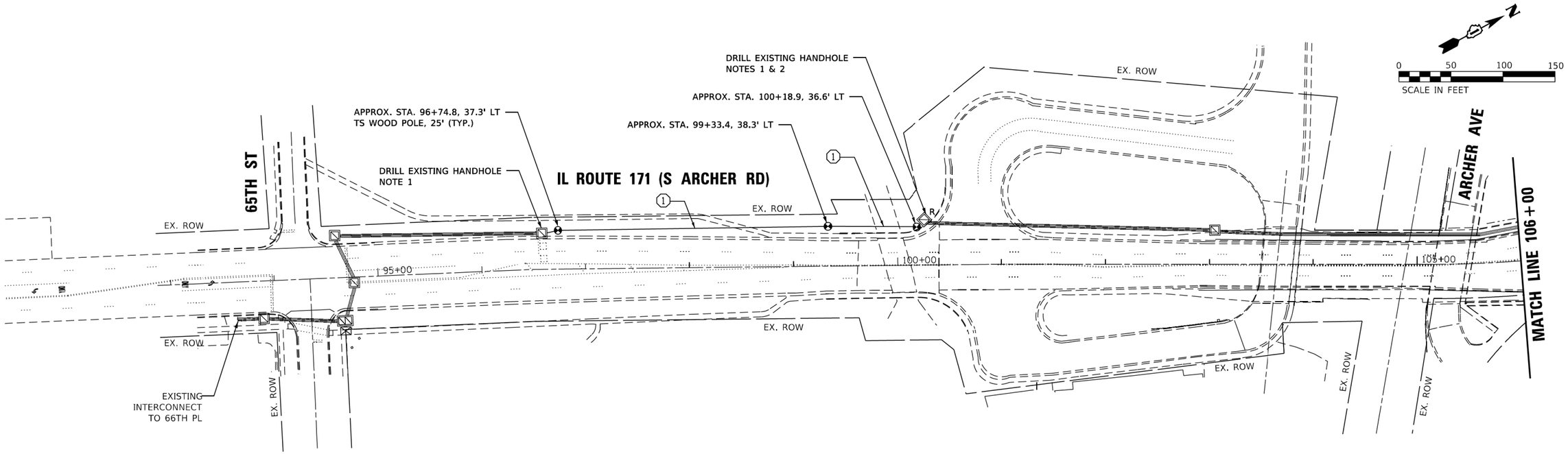
PLOT DATE = 10/18/2018	DATE - 10/18/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 171 (S ARCHER ROAD) AND 65TH STREET

SCALE: N.T.S. | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	34
		CONTRACT NO. 62F30		
	ILLINOIS	FED. AID PROJECT		



NOTES:

1. SPLICE 12 FIBER CABLE TO EXISTING FIBER CABLE TO MAINTAIN EXISTING INTERCONNECT UNTIL PROPOSED INTERCONNECT IS FULLY OPERATIONAL. 1" CNC AND DRILL EXISTING HANDHOLE TO BE INCLUDED IN THE COST OF TEMPORARY TRAFFIC SIGNAL INSTALLATION.
2. EXISTING HANDHOLE SHALL REMAIN IN PLACE UNTIL PROPOSED INTERCONNECT IS FULLY OPERATIONAL.

LEGEND:

(1) 12 FIBER CABLE

TS SHT NO. 11

MODEL: Default
FILE NAME: J:\16234\WO 11\DGN\CADD Sheets\D162F30-sht ts11-Temp Interconnect.dgn

SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

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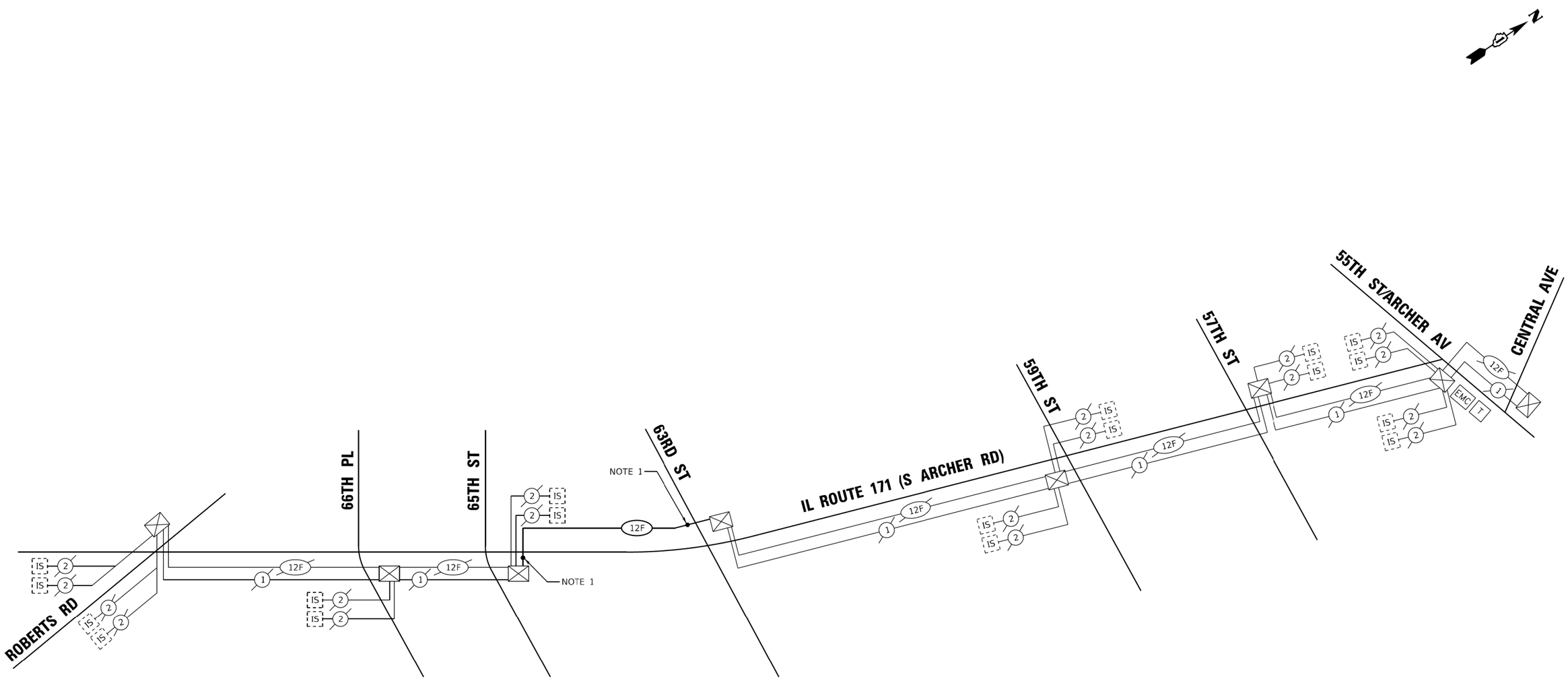
	DRAWN - MG	REVISED -	
PLOT SCALE = 100.0002 ' / in.	CHECKED - EC	REVISED -	
PLOT DATE = 10/18/2018	DATE - 10/18/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT PLAN
IL ROUTE 171 (S ARCHER RD)–
65TH ST TO 63RD ST

SCALE: 1"=50' | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	35
		CONTRACT NO. 62F30		
		ILLINOIS	FED. AID PROJECT	



NOTE:

1. SPLICE 12 FIBER CABLE TO EXISTING FIBER CABLE TO MAINTAIN EXISTING INTERCONNECT UNTIL PROPOSED INTERCONNECT IS FULLY OPERATIONAL. 1" CNC AND DRILL EXISTING HANDHOLE TO BE INCLUDED IN THE COST OF TEMPORARY TRAFFIC SIGNAL INSTALLATION.

TS SHT NO. 12

MODEL: Default
FILE NAME: J:\16234\WO 11\DGN\CADD Sheets\D162F30-Int ts12-Temp Interconnect Schematic.dgn

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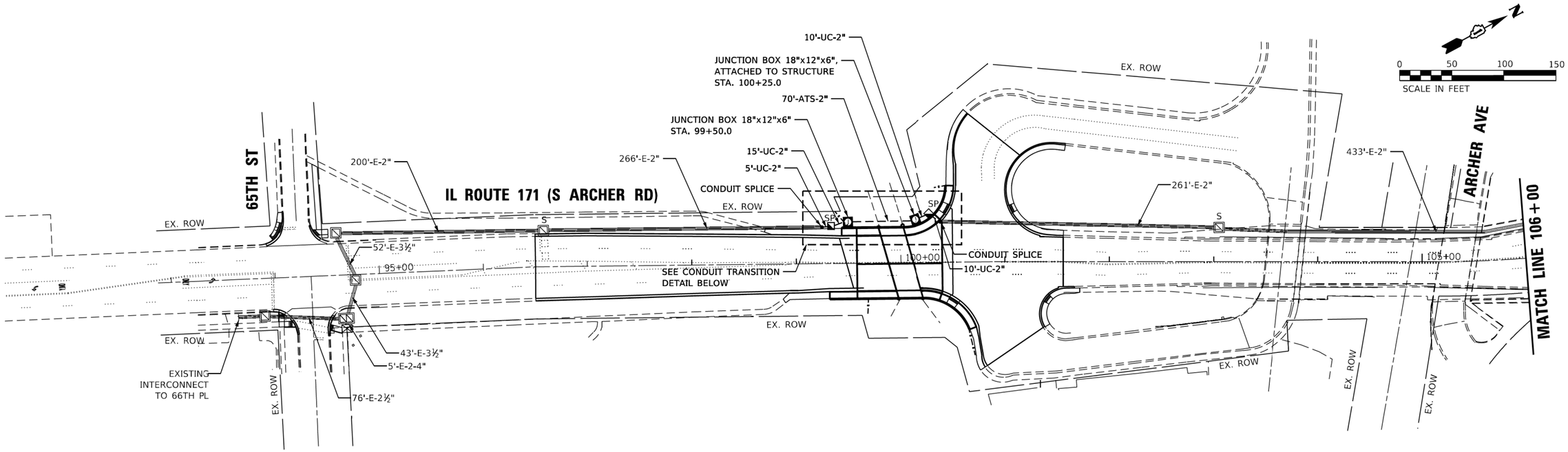
	DRAWN - MG	REVISED -	
PLOT SCALE = 100.0002 ' / in.	CHECKED - EC	REVISED -	
PLOT DATE = 10/18/2018	DATE - 10/18/2018	REVISED -	

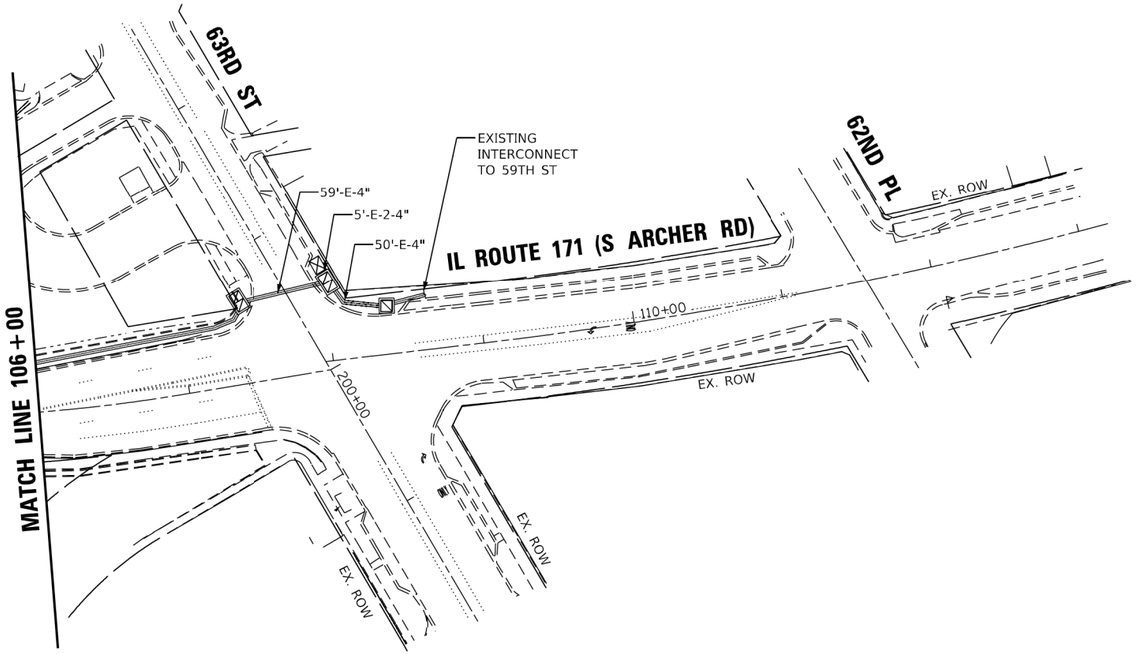
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

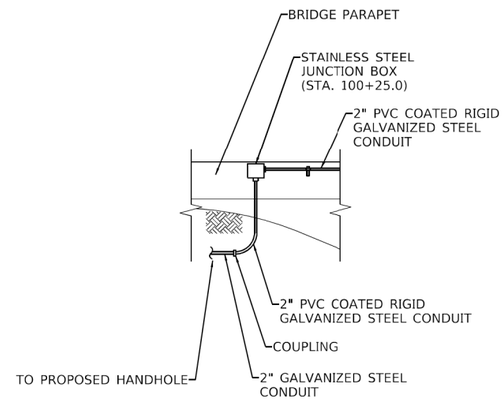
TEMPORARY INTERCONNECT SCHEMATIC
IL ROUTE 171 (S ARCHER RD)–
ROBERTS RD TO 55TH ST /ARCHER AVE

SCALE: N.T.S. | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	36
		CONTRACT NO. 62F30		
		ILLINOIS	FED. AID PROJECT	







CONDUIT TRANSITION DETAIL

TS SHT NO. 13

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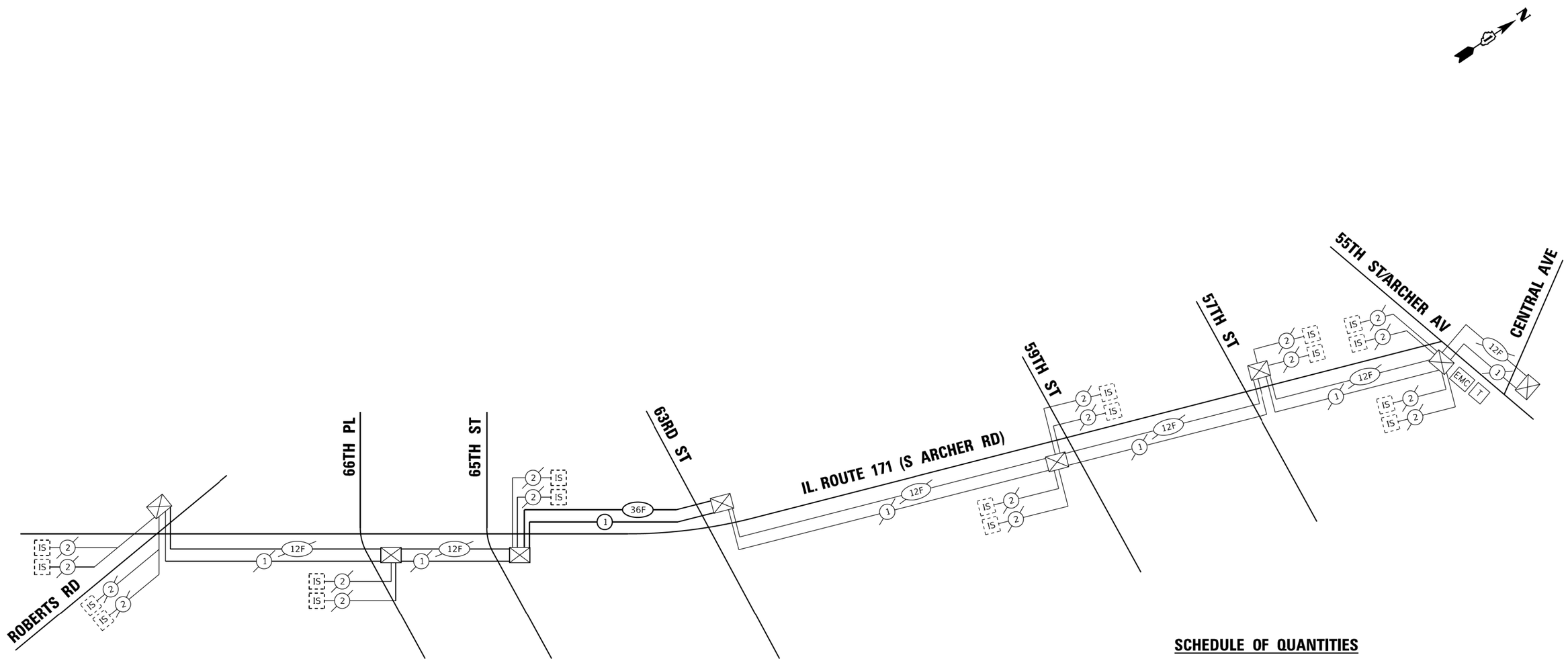
PLOT DATE = 10/18/2018	DATE - 10/18/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCONNECT PLAN
IL ROUTE 171 (S ARCHER RD)–
65TH ST TO 63RD ST

SCALE: 1"=50' | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	37
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNIT	TOTAL QTY
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	100
	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL	FOOT	150
	HANDHOLE	EACH	2
	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 12" X 6"	EACH	2
	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1600
	DRILL EXISTING HANDHOLE	EACH	2
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3174
	REMOVE EXISTING HANDHOLE	EACH	2
*	ROD AND CLEAN EXISTING CONDUIT	FOOT	500
	CONDUIT SPLICE	EACH	2
	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	1574
	TEMPORARY TRAFFIC SIGNAL INTERCONNECT	EACH	1
	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY THE ENGINEER

TS SHT NO. 14

MODEL: Default
FILE NAME: J:\16234\WO 11\DGN\CADD Sheets\D162F30-int ts14-Prop Interconnect Schematic.dgn

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USER NAME = mgarvida	DESIGNED - MG	REVISED -
	DRAWN - MG	REVISED -
PLOT SCALE = 100.0002 ' / in.	CHECKED - EC	REVISED -
PLOT DATE = 10/18/2018	DATE - 10/18/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCONNECT SCHEMATIC
IL ROUTE 171 (S ARCHER RD)–
ROBERTS RD TO 55TH ST /ARCHER AVE

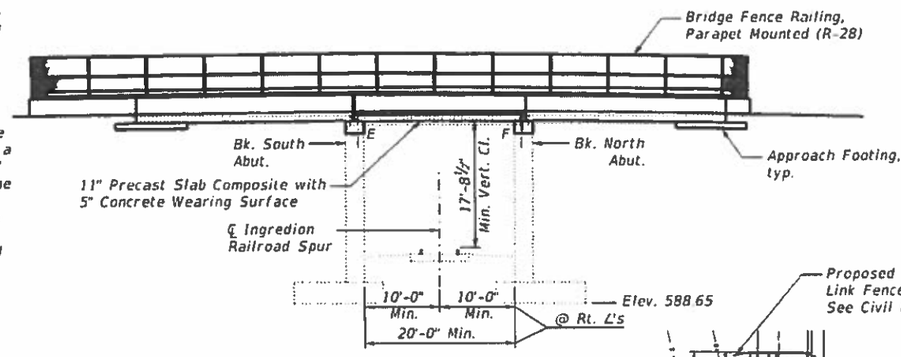
SCALE: N.T.S. | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	38
		CONTRACT NO. 62F30		
		ILLINOIS	FED. AID PROJECT	

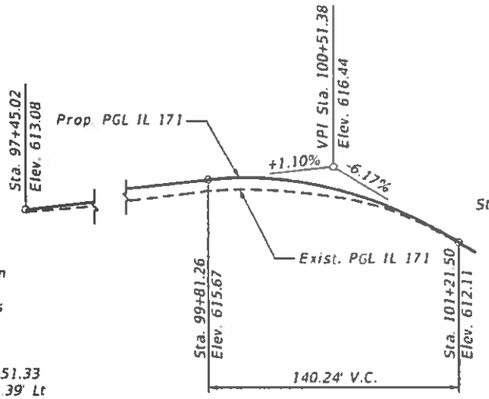
Bench Mark: Survey Disk set in the vertical face of the southwest wing wall of the E&O railroad bridge over IL 171 approximately 350' south of IL 171 and 63rd Street. Approximate Sta. 104+58.47 & Elev. 602.39.

Existing Structure: The existing structure number 016-2544 is a single span bridge with precast prestressed concrete deck beams with a 4" concrete overlay that was built in 1987. The structure is on a horizontal tangent and has a total length of 25'-11" back of the abutments measured along the centerline of Archer Rd. The clear span from the face of the north abutment to the south abutment is 20'-0". The out to out width of the deck is 64'-0". The superstructure shall be reconstructed under staged construction with one lane in each direction maintained.

No salvage

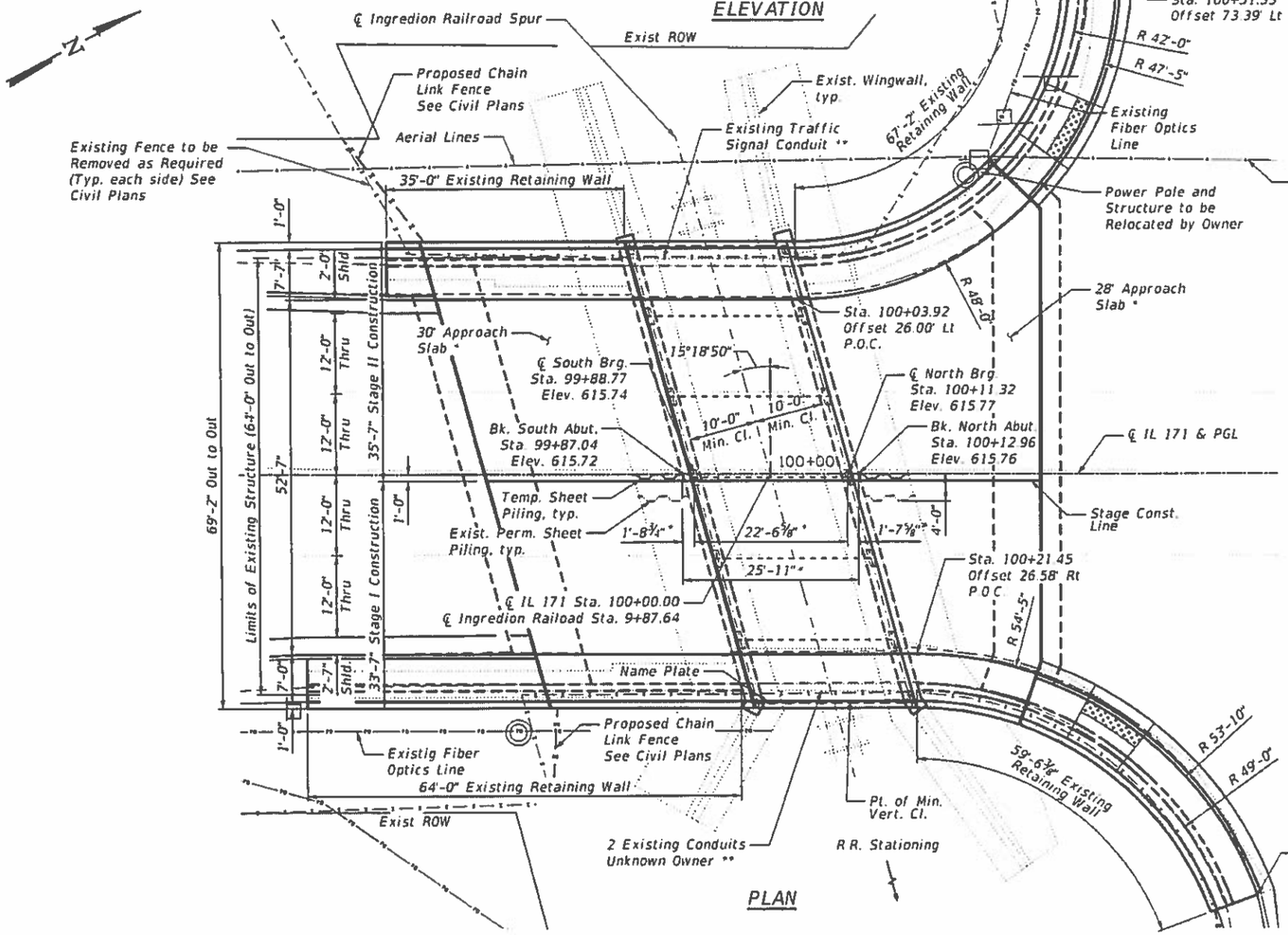


ELEVATION



PROFILE GRADE
(℄ of IL 171 & PGL)

LOCATION SKETCH



PLAN

* Measured along ℄ IL 171
** Conduits attached to structure to be relocated and reattached to structure.

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION)
f'c = 3,500 psi (Substructure Concrete)
f'c = 4,000 psi (Superstructure Concrete)
fy = 60,000 psi (Reinforcement)
PRECAST UNITS (NEW CONSTRUCTION)
f'c = 6,000 psi
f'ci = 5,000 psi
FIELD UNITS (EXISTING CONSTRUCTION)
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.154g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.088g
Soil Site Class = D

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

Notes:
Retaining wall dimensions measured along the back face of the wall.
Stations for railroad are taken from exisitig plans.
P.O.C. denotes Point of Curvature.

COLLINS ENGINEERS, INC.
AMBER SEIBER, P.E., S.E.
NO. 081-007929
EXP.: 11/30/2020

GENERAL PLAN AND ELEVATION
IL ROUTE 171 (ARCHER RD.) OVER INGREDION RAILROAD SPUR
F.A.U. 3565
SECTION 46VB-2-BR
COOK COUNTY
STATION 100+00.00
STRUCTURE NO. 016-2544

COLLINS ENGINEERS
223 N. Jefferson St., Suite 600, Chicago, IL 60606, Phone: (312) 454-0300, Fax: (312) 704-9270, www.collinsengr.com
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USER NAME = aseiber	DESIGNED - JPG	REVISED -	
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PLOT SCALE = 2048 '/ in.	DRAWN - JPG	REVISED -	
PLOT DATE = 11/9/2018	CHECKED - AMS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLANS AND ELEVATION
STRUCTURE NO. 016-2544
SHEET NO. 51 OF 526 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	39
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

INDEX OF SHEETS

STATION 100+00
RE-BUILT 20__ BY
STATE OF ILLINOIS
F.A.U. RT. 3565 SEC. 46VB-2-BR
LOADING HL-93
STR. NO. 016-2544

NAME PLATE

See Std. 515001

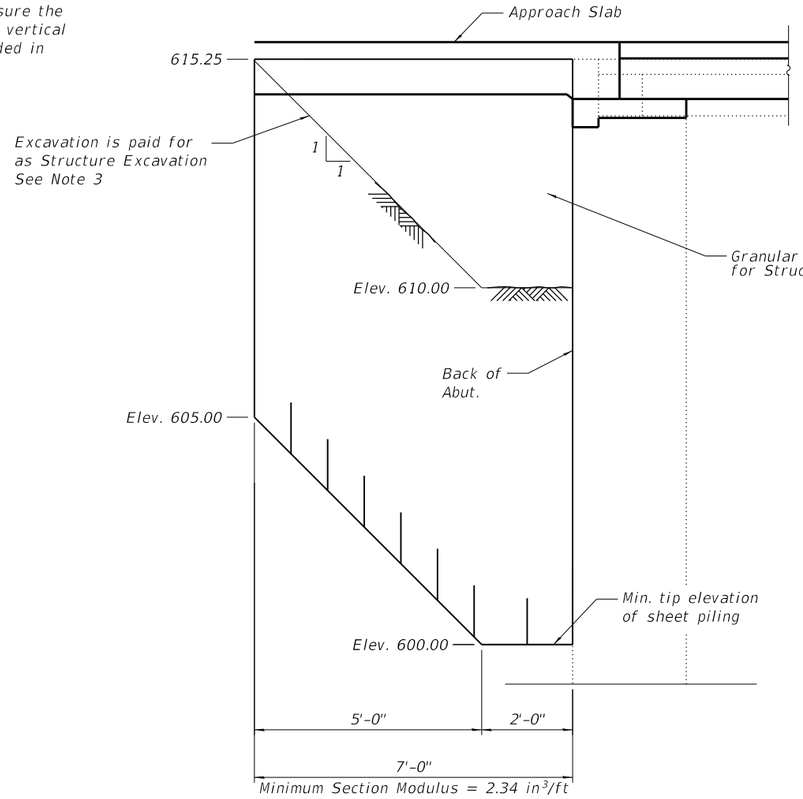
Existing Name Plate shall be cleaned and relocated next to the new Name Plate. Cost included with Name Plates.

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. Excavation behind existing abutment walls shall be performed before removing the existing superstructure.
4. Backfill shall be placed behind the abutment after the superstructure has been poured and falsework removed. See Article 502.10 of the Standard Specifications.
5. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
6. Slipforming of the parapets is not allowed.
7. Cast-in-place substitution of Precast Bridge Slab is not allowed.
8. Prior to the start of construction, the Contractor shall survey the railroad track profile grade up to 100 feet on each side of the bridge to ensure the minimum vertical clearance will be met. Additionally, upon completion of the structure, the Contractor shall survey and measure the minimum vertical clearance and submit the profile grade and the measured minimum vertical clearance to the Engineer for review and inclusion in the As Built plans. Cost included in Construction Layout.

BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		29.9	29.9
Structure Excavation	Cu. Yd.		138	138
Concrete Structures	Cu. Yd.		49.2	49.2
Concrete Superstructure	Cu. Yd.	100.1		100.1
Bridge Deck Grooving	Sq. Yd.	479		479
Protective Coat	Sq. Yd.	912		912
Concrete Superstructure (Approach Slab)	Cu. Yd.	193.9		193.9
Precast Concrete Bridge Slab	Sq. Ft.	1,601		1,601
Reinforcement Bars, Epoxy Coated	Pound	89,630	9,930	99,560
Bar Splicers	Each	227	88	315
Bridge Fence Railing	Foot	264.0		264.0
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	73.0		73.0
Temporary Sheet Piling	Sq. Ft.		185	185
Concrete Wearing Surface, 5"	Sq. Yd.	182		182
Granular Backfill for Structures	Cu. Yd.		137	137
Structural Repair of Concrete (Depth Equal To or Less Than 5")	Sq. Ft.		112	112



TEMPORARY SHEET PILING

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USER NAME = aseiber	DESIGNED - JPG	REVISED -
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PLOT DATE = 11/15/2018	CHECKED - AMS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS & BILL OF MATERIAL
STRUCTURE NO. 016-2544
SHEET NO. S2 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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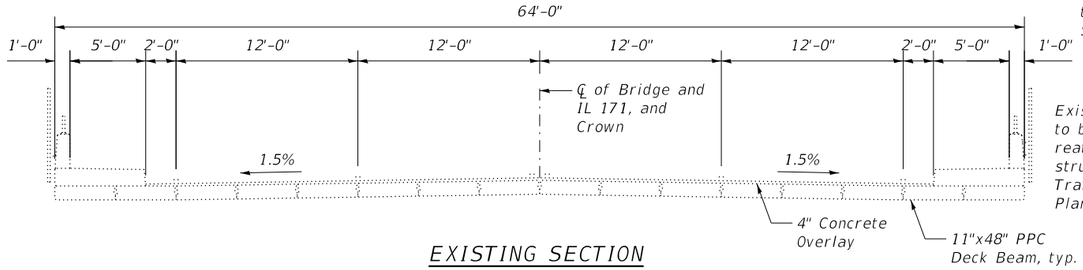
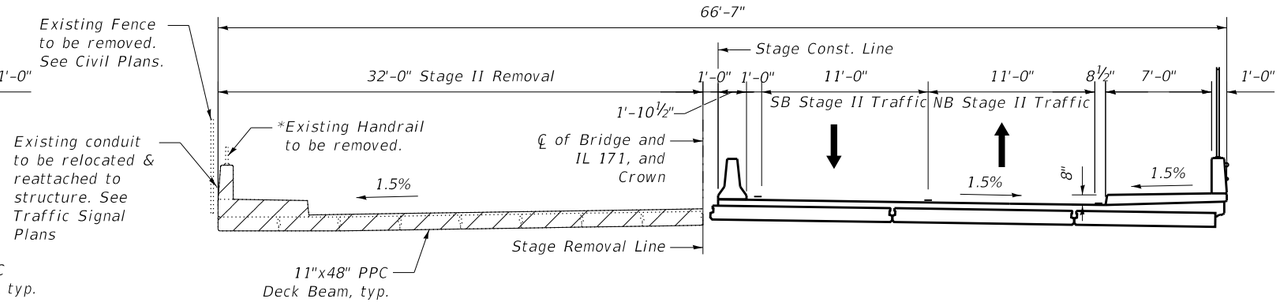
		CONTRACT NO. 62F30		
	ILLINOIS	FED. AID PROJECT		

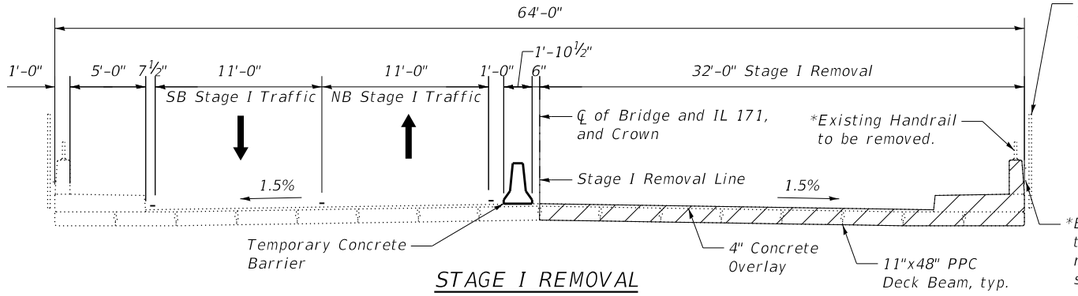


EXISTING SECTION

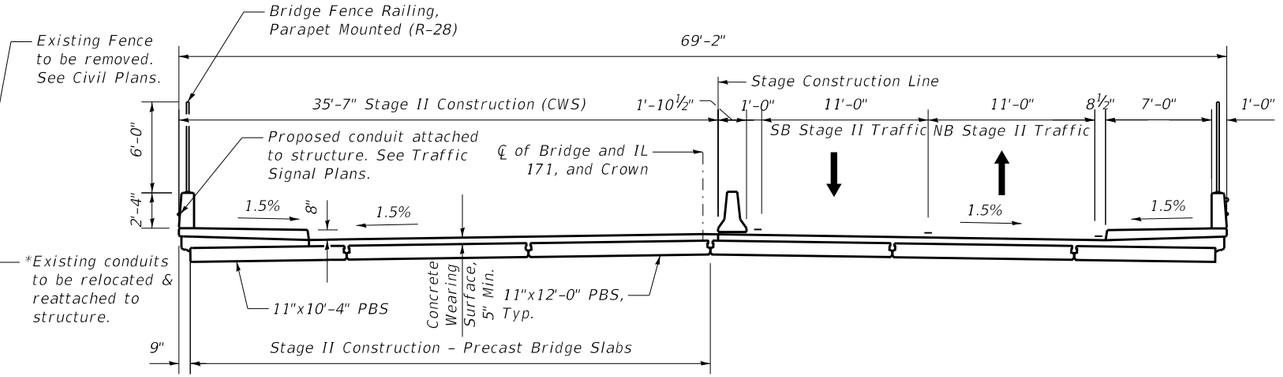


*Cost of removal and relocation during construction included with Removal of Existing Superstructure

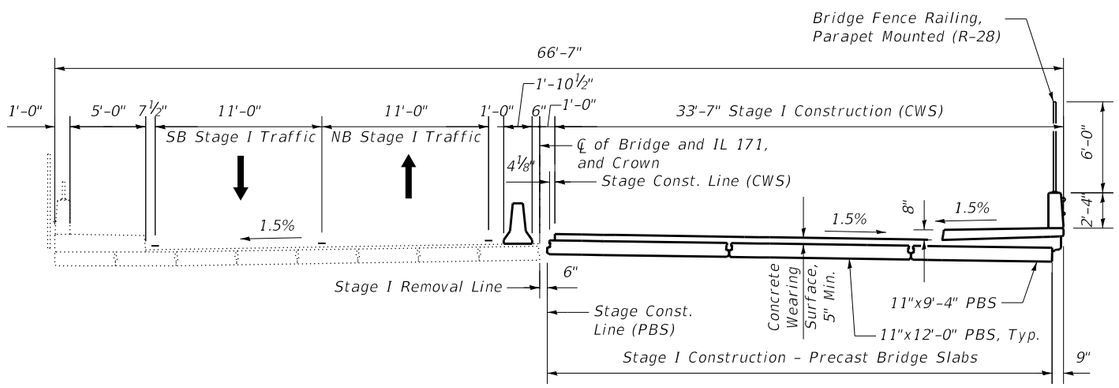
STAGE II REMOVAL



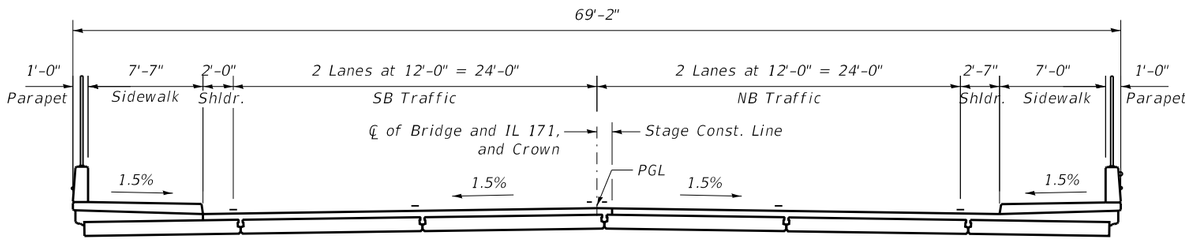
STAGE I REMOVAL



STAGE II CONSTRUCTION



STAGE I CONSTRUCTION



FINAL CROSS SECTION

Notes:
All sections looking North.
PBS denotes Precast Bridge Slab
CWS denotes Concrete Wearing Surface

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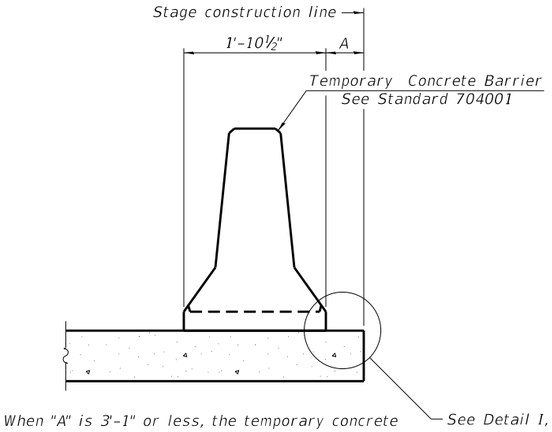
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

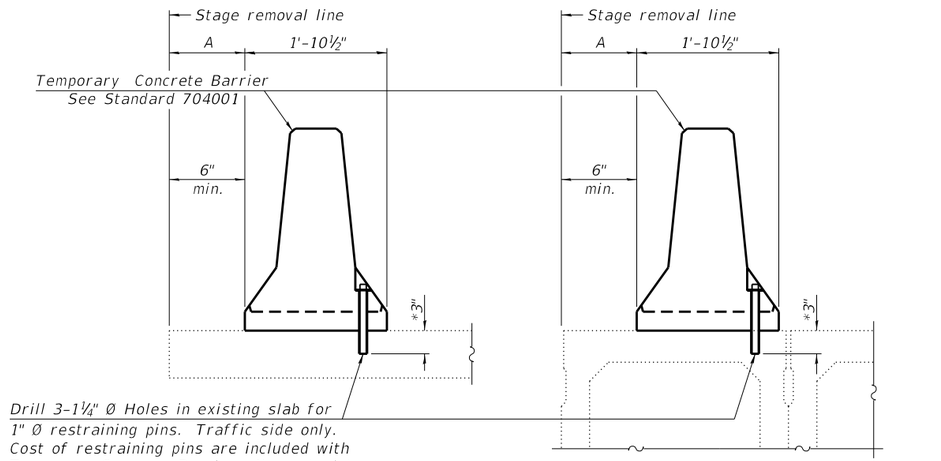
STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 016-2544
SHEET NO. S3 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	41
		CONTRACT NO. 62F30		
	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



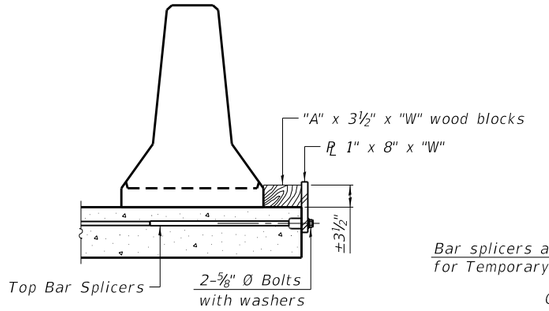
Drill 3-1¼" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

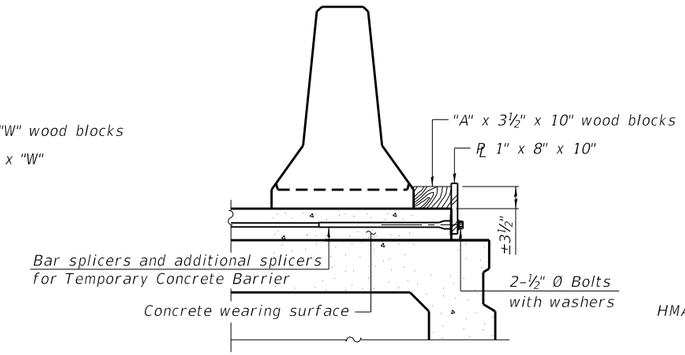
* When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

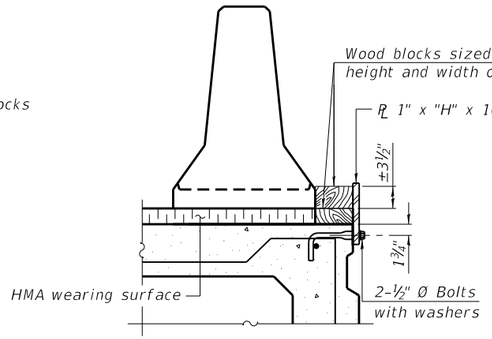
SECTIONS THRU SLAB OR DECK BEAM



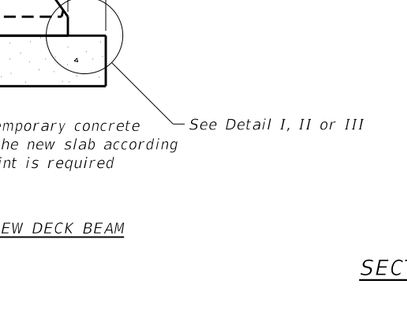
DETAIL I



DETAIL II

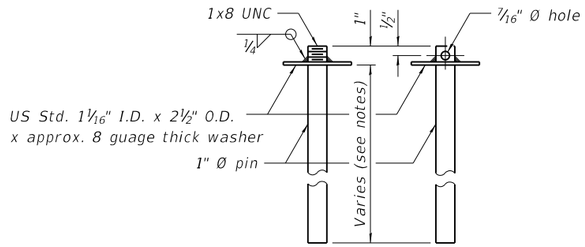


DETAIL III

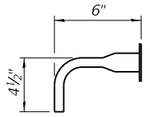


STEEL RETAINER ℄ 1" x 8" x "W"
(Detail I and II)

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



RESTRAINING PIN



BAR SPLICER FOR #4 BAR - DETAIL III

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier.

A retainer assembly shall be located at the approximate ℄ 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 1½", 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.

R-27

8-11-2017

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USER NAME = aseiber	DESIGNED - JPG	REVISED -
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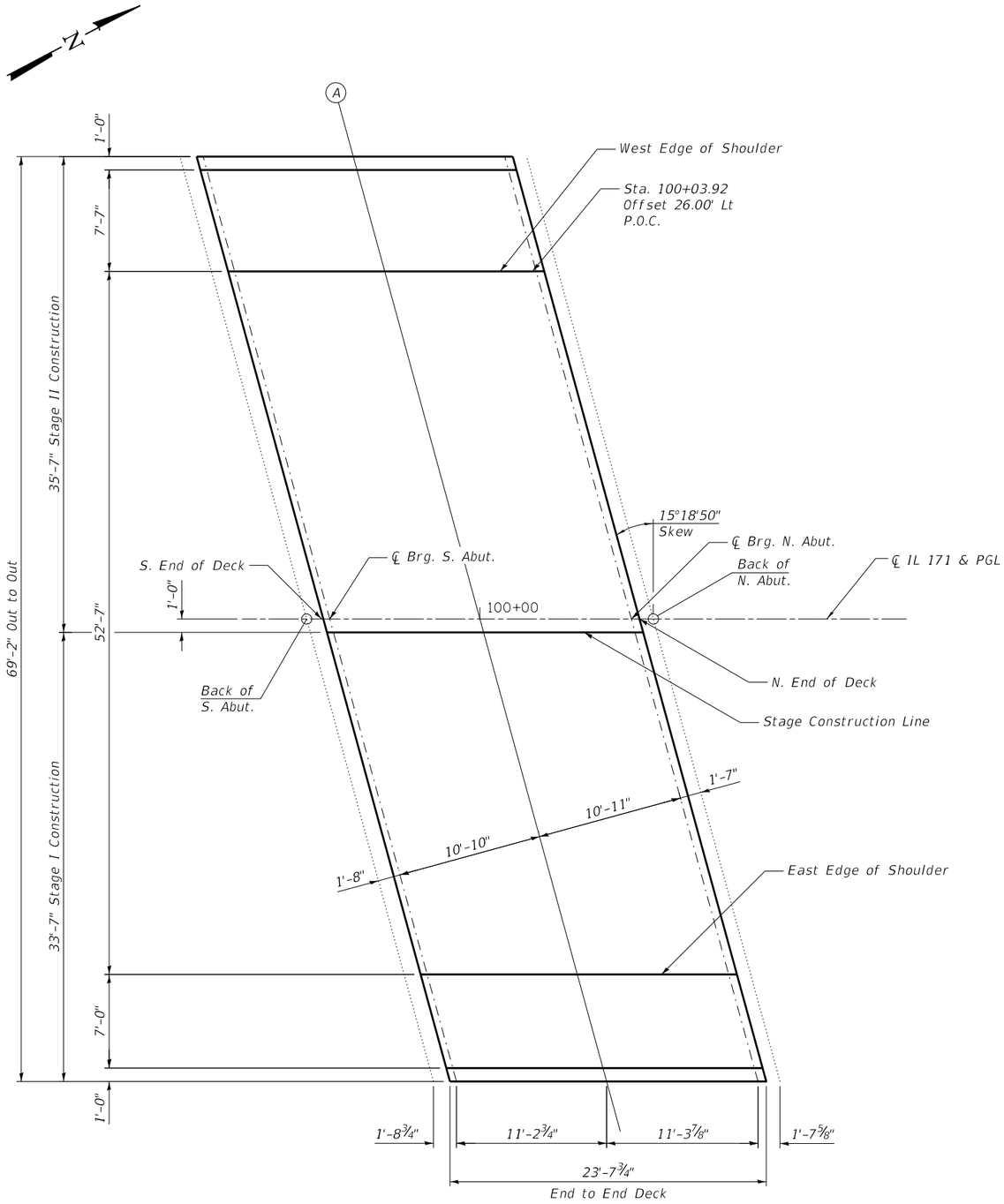
PLOT SCALE = 0.2 ' / in.	DRAWN - DR	REVISED -
PLOT DATE = 10/19/2018	CHECKED - AMS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-2544

SHEET NO. S4 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	42
		CONTRACT NO. 62F30		
	ILLINOIS	FED. AID PROJECT		



PLAN

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Back of South Abutment	99+79.92	-26.00	615.27
South Edge of Deck	99+81.04	-26.00	615.28
℄ Brg. South Abutment	99+81.65	-26.00	615.28
A	99+92.88	-26.00	615.37
℄ Brg. North Abutment	100+04.20	-26.00	615.40
North Edge of Deck	100+04.80	-26.01	615.39
Back of North Abutment	100+05.83	-26.04	615.39

℄ IL 171 & PGL

Location	Station	Offset	Theoretical Grade Elevations
Back of South Abutment	99+87.04	0.00	615.72
South Edge of Deck	99+88.28	0.00	615.73
℄ Brg. South Abutment	99+88.77	0.00	615.74
A	100+00.00	0.00	615.78
℄ Brg. North Abutment	100+11.32	0.00	615.77
North Edge of Deck	100+11.92	0.00	615.76
Back of North Abutment	100+12.96	0.00	615.76

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
Back of South Abutment	99+87.37	1.00	615.71
South Edge of Deck	99+88.56	1.00	615.72
℄ Brg. South Abutment	99+89.04	1.00	615.72
A	100+00.27	1.00	615.77
℄ Brg. North Abutment	100+11.59	1.00	615.75
North Edge of Deck	100+12.20	1.00	615.75
Back of North Abutment	100+13.23	1.00	615.74

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Back of South Abutment	99+94.32	26.58	615.37
South Edge of Deck	99+95.56	26.58	615.38
℄ Brg. South Abutment	99+96.05	26.58	615.38
A	100+07.28	26.58	615.38
℄ Brg. North Abutment	100+18.60	26.58	615.32
North Edge of Deck	100+19.20	26.58	615.31
Back of North Abutment	100+20.24	26.58	615.31

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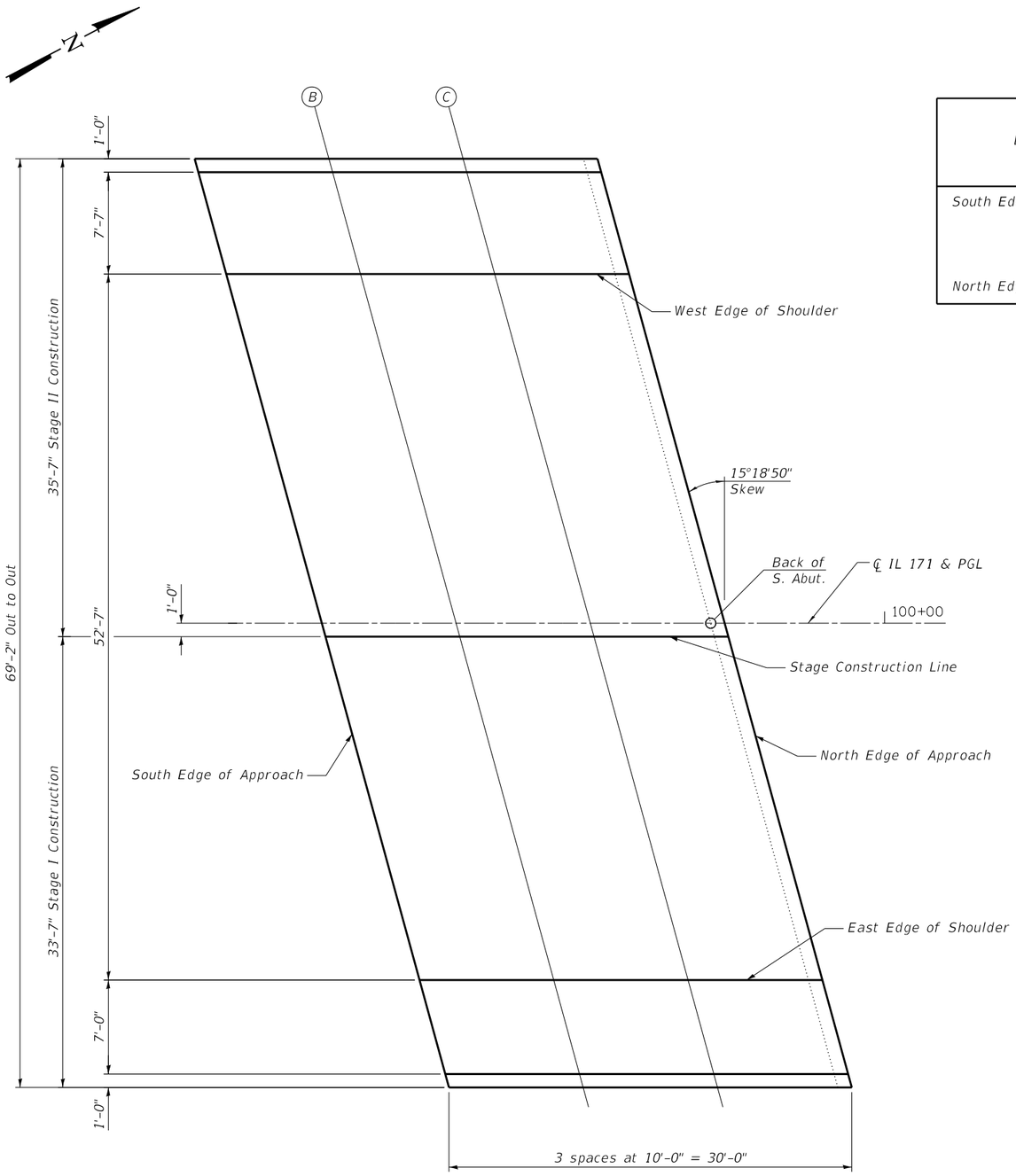
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 016-2544
SHEET NO. S5 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	43
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



PLAN

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
South Edge of Approach	99+50.96	-26.00	614.95
B	99+60.96	-26.00	615.06
C	99+70.96	-26.00	615.17
North Edge of Approach	99+80.96	-26.00	615.28

℄ IL 171 & PGL

Location	Station	Offset	Theoretical Grade Elevations
South Edge of Approach	99+58.08	0.00	615.42
B	99+68.08	0.00	615.53
C	99+78.08	0.00	615.64
North Edge of Approach	99+88.08	0.00	615.73

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
South Edge of Approach	99+58.35	1.00	615.40
B	99+68.35	1.00	615.51
C	99+78.35	1.00	615.62
North Edge of Approach	99+88.35	1.00	615.72

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
South Edge of Approach	99+65.36	26.58	615.10
B	99+75.36	26.58	615.21
C	99+85.36	26.58	615.31
North Edge of Approach	99+95.36	26.58	615.37

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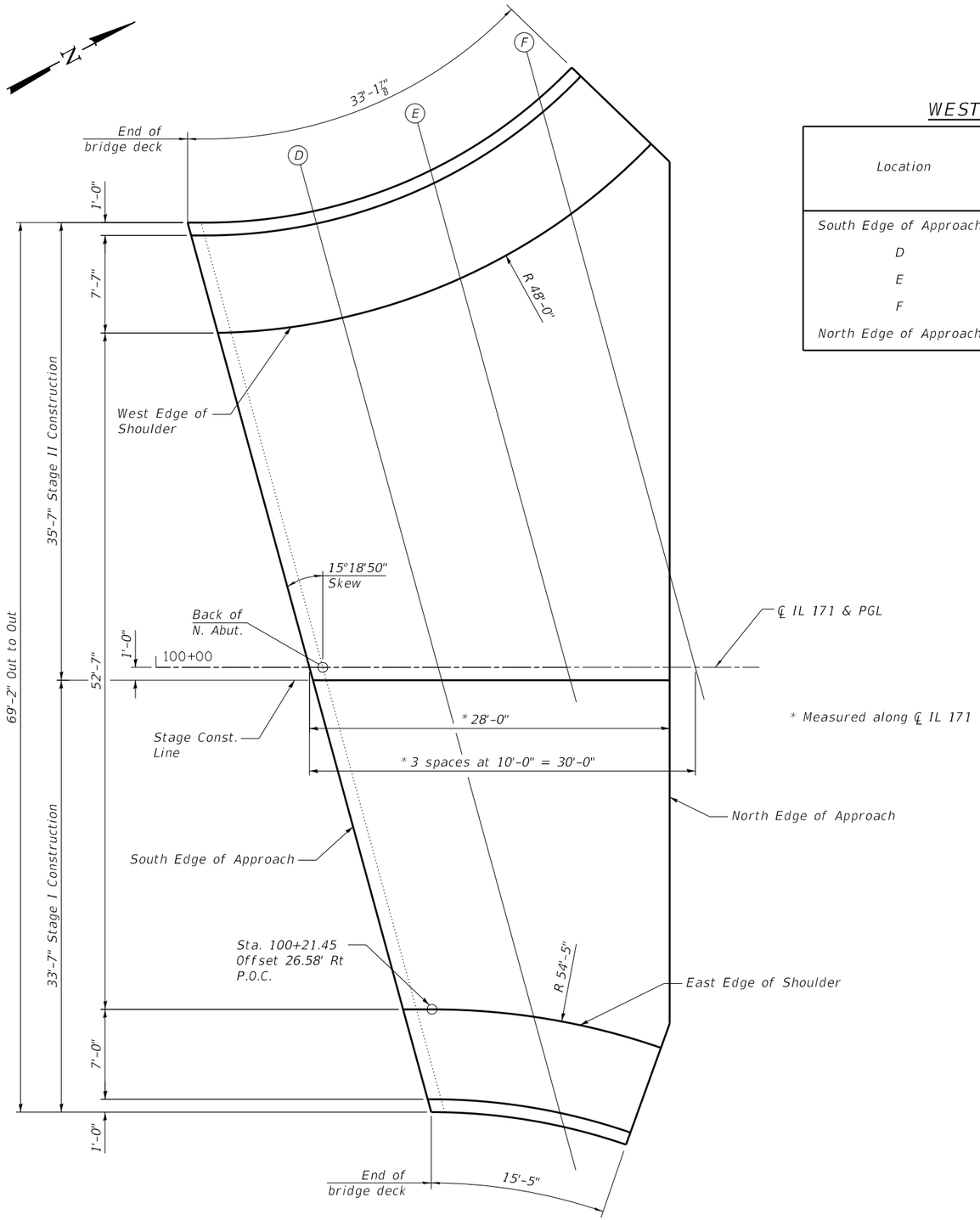
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016-2544

SHEET NO. S6 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	44
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



PLAN

* Measured along ℄ IL 171

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
South Edge of Approach	100+04.80	-26.01	615.39
D	100+14.48	-27.18	615.33
E	100+23.64	-30.24	615.15
F	100+32.27	-35.26	614.90
North Edge of Approach	100+38.48	-40.69	614.64

℄ IL 171 & PGL

Location	Station	Offset	Theoretical Grade Elevations
South Edge of Approach	100+11.92	0.00	615.76
D	100+21.92	0.00	615.69
E	100+31.92	0.00	615.56
North Edge of Approach	100+39.92	0.00	615.42

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
South Edge of Approach	100+12.20	1.00	615.75
D	100+22.20	1.00	615.67
E	100+32.20	1.00	615.54
North Edge of Approach	100+39.92	1.00	615.41

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
South Edge of Approach	100+19.20	26.58	615.31
D	100+29.36	27.16	615.19
North Edge of Approach	100+39.24	29.58	614.99

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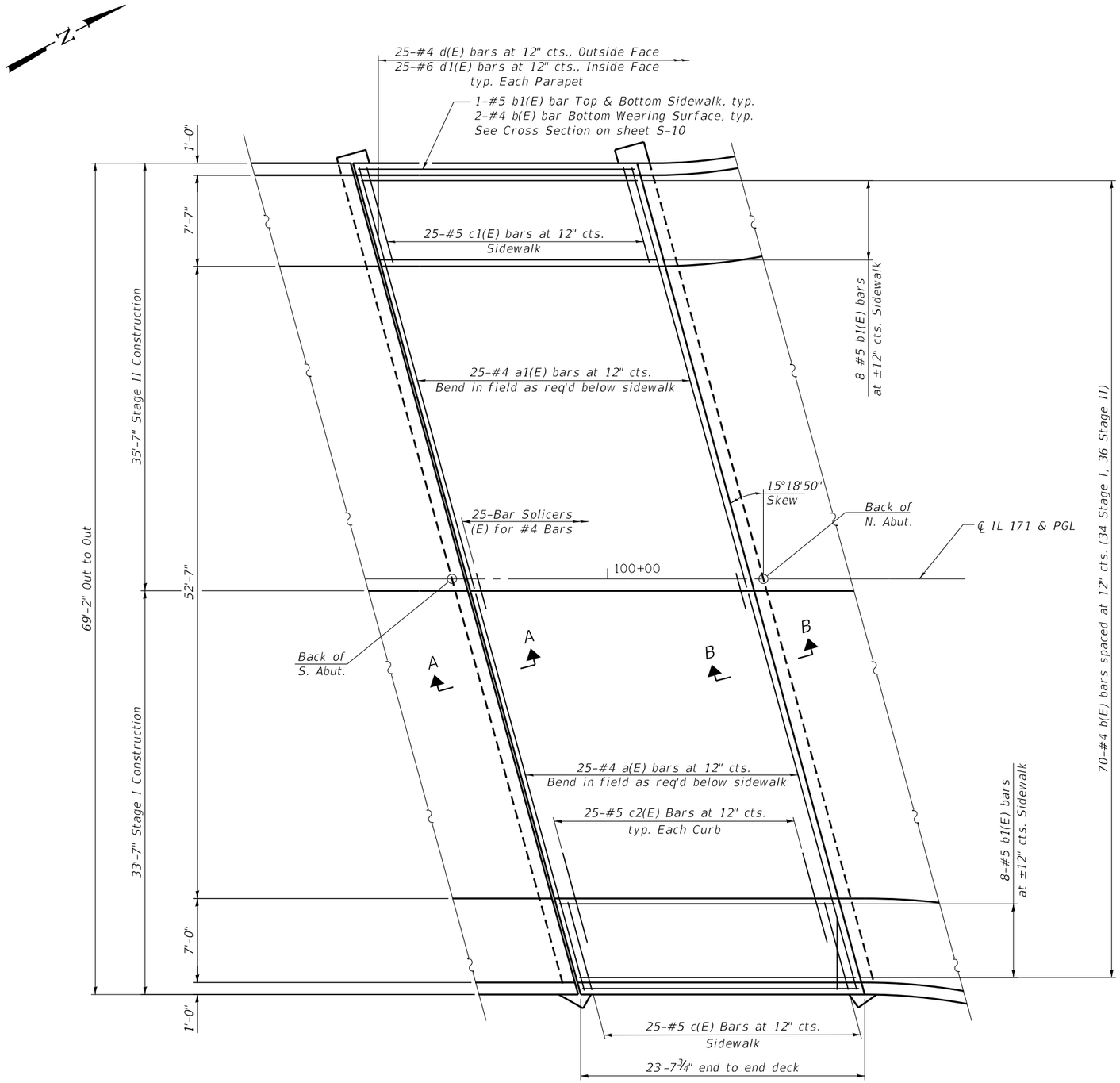
DEPARTMENT OF TRANSPORTATION

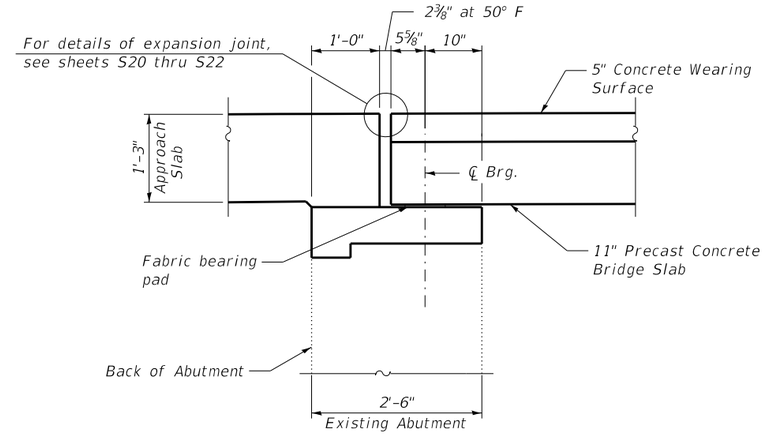
TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016-2544

SHEET NO. S7 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	45
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

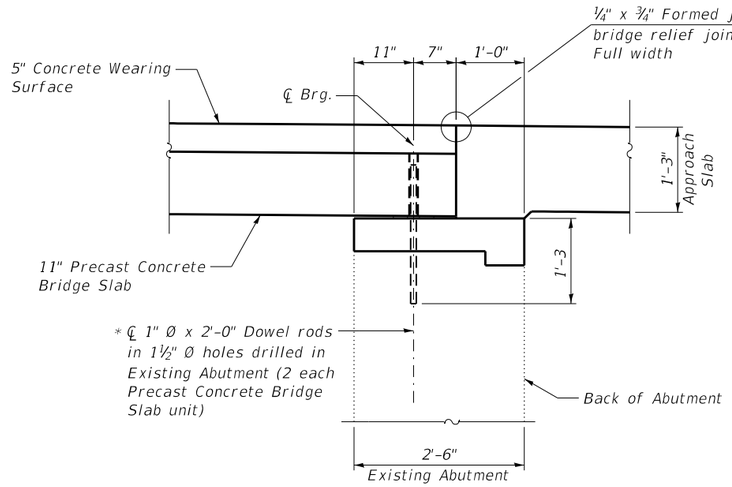


PLAN



SECTION A-A

(Horiz. dim. at Rt. ∠'s)



SECTION B-B

(Horiz. dim. at Rt. ∠'s)

* Drill & Grout rods into existing abutments according to Article 584 of the Standard Specifications. Cost included with Precast Concrete Bridge Slab.

Notes:

All concrete wearing surfaces shall be placed prior to casting the approach slab.

For Precast Beam details see sheet S9.

See sheet S10 for bar details, fabric bearing pad details and Bill of Material.

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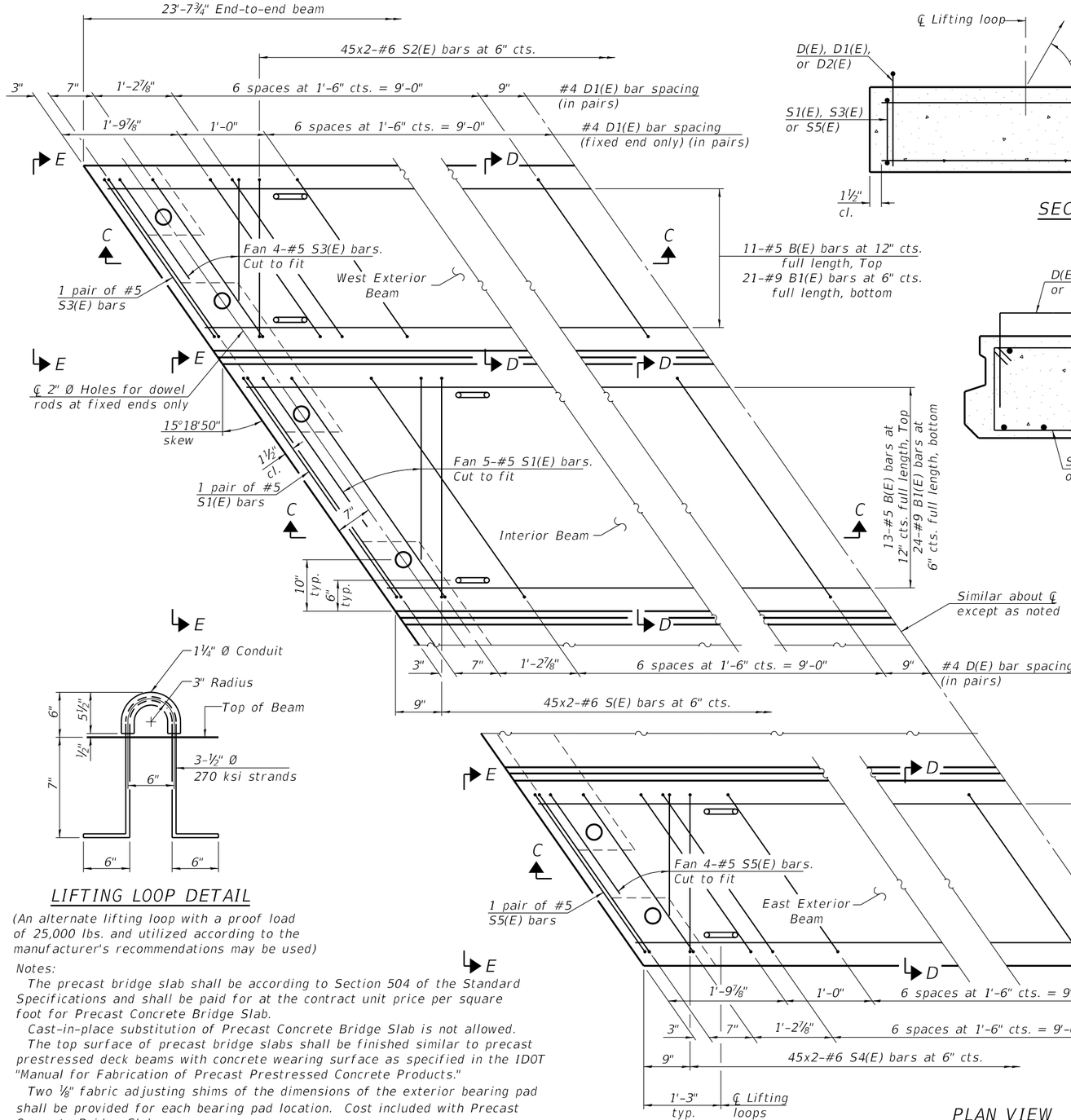
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST BRIDGE SLAB
STRUCTURE NO. 016-2544
SHEET NO. S8 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	46
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



LIFTING LOOP DETAIL

(An alternate lifting loop with a proof load of 25,000 lbs. and utilized according to the manufacturer's recommendations may be used)

Notes:

The precast bridge slab shall be according to Section 504 of the Standard Specifications and shall be paid for at the contract unit price per square foot for Precast Concrete Bridge Slab.

Cast-in-place substitution of Precast Concrete Bridge Slab is not allowed.

The top surface of precast bridge slabs shall be finished similar to precast prestressed deck beams with concrete wearing surface as specified in the IDOT "Manual for Fabrication of Precast Prestressed Concrete Products."

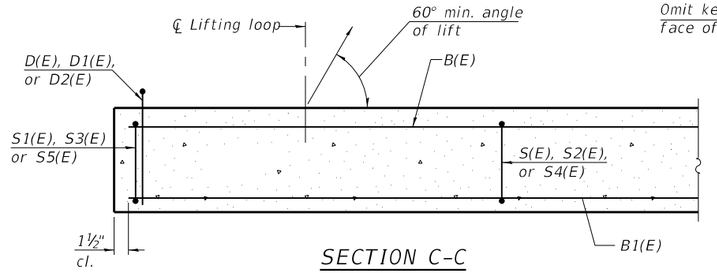
Two ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. Cost included with Precast Concrete Bridge Slab.

A minimum 2 ½" Ø lifting pins shall be used to engage the lifting loops during handling.

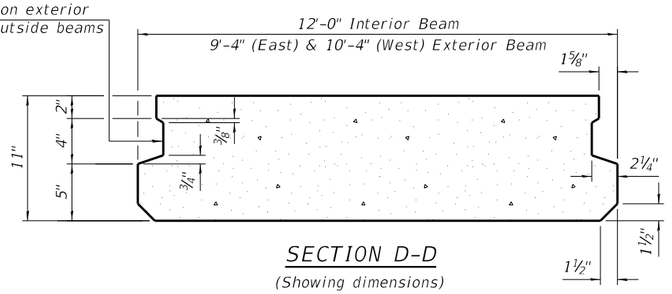
Compressive strength of precast concrete, f'c shall be 6,000 psi.

Compressive strength of precast concrete during initial lifting, f'ci shall be 5,000 psi.

Bars indicated thus 45x2-#6 etc. indicates 20 lines of bars with 2 lengths per line.

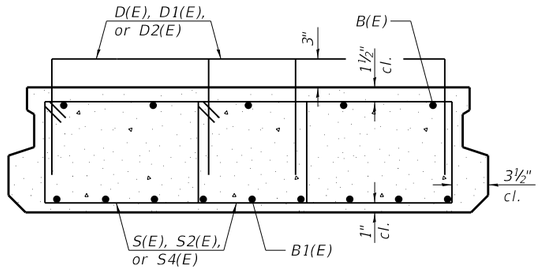


SECTION C-C



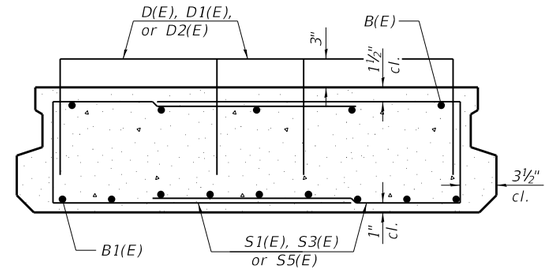
SECTION D-D

(Showing dimensions)



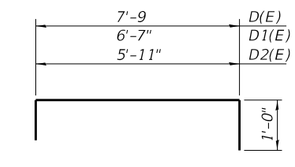
SECTION D-D

(Showing reinforcement)

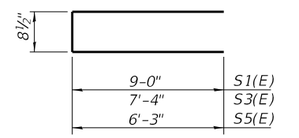


VIEW E-E

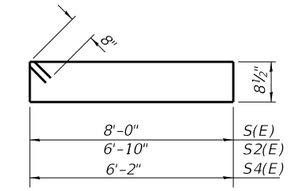
(Showing reinforcement)



BARS D(E), D1(E) & D2(E)



BARS S1(E) S3(E) & S5(E)



BARS S(E), S2(E) & S4(E)

BAR LIST
EACH INTERIOR BEAM

(For information only)

Bar	No.	Size	Length	Shape
B(E)	13	#5	23'-5"	—
B1(E)	25	#9	23'-5"	—
D(E)	36	#4	9'-9"	⌐
S(E)	90	#6	18'-9"	⌐
S1(E)	14	#5	18'-9"	⌐

BAR LIST
WEST EXTERIOR BEAM

(For information only)

Bar	No.	Size	Length	Shape
B(E)	11	#5	23'-5"	—
B1(E)	21	#9	23'-5"	—
D1(E)	32	#4	8'-7"	⌐
S2(E)	90	#6	16'-5"	⌐
S3(E)	12	#5	15'-5"	⌐

BAR LIST
EAST EXTERIOR BEAM

(For information only)

Bar	No.	Size	Length	Shape
B(E)	10	#5	23'-5"	—
B1(E)	19	#9	23'-5"	—
D2(E)	32	#4	7'-11"	⌐
S4(E)	90	#6	15'-1"	⌐
S5(E)	12	#5	13'-3"	⌐

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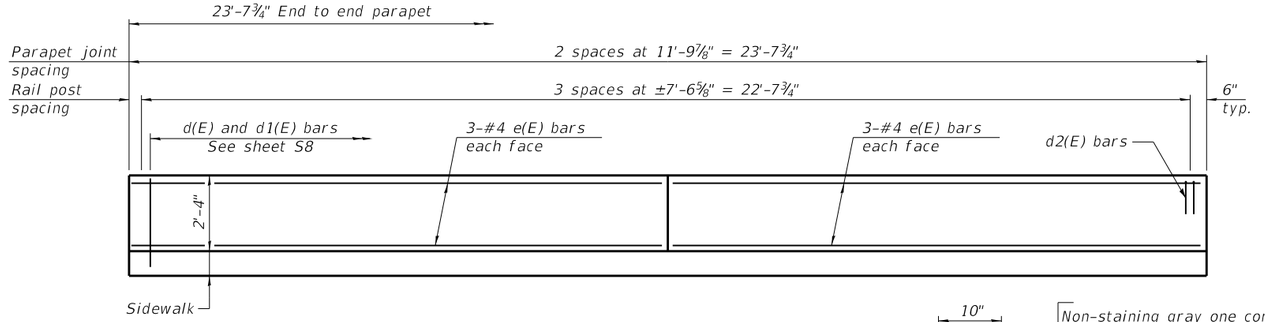
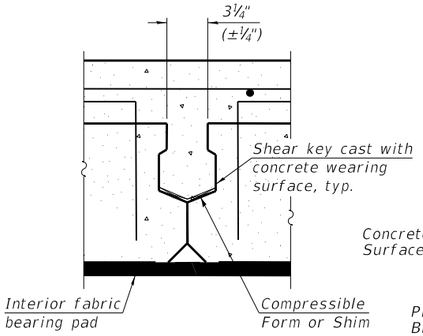
PRECAST BRIDGE SLAB
STRUCTURE NO. 016-2544

SHEET NO. S9 OF S26 SHEETS

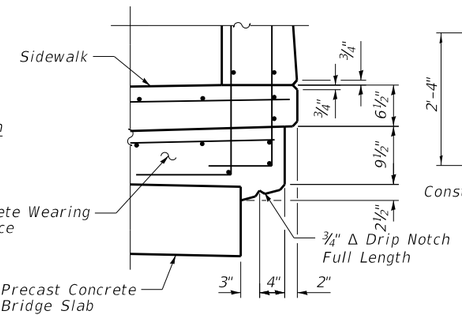
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	47
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



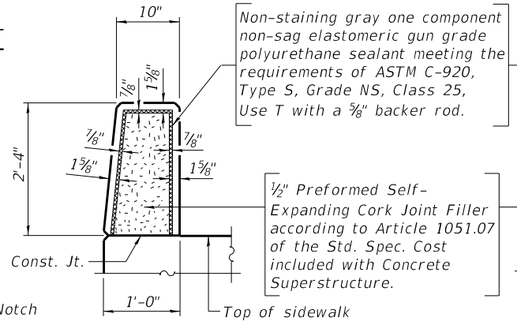
INSIDE ELEVATION OF PARAPET



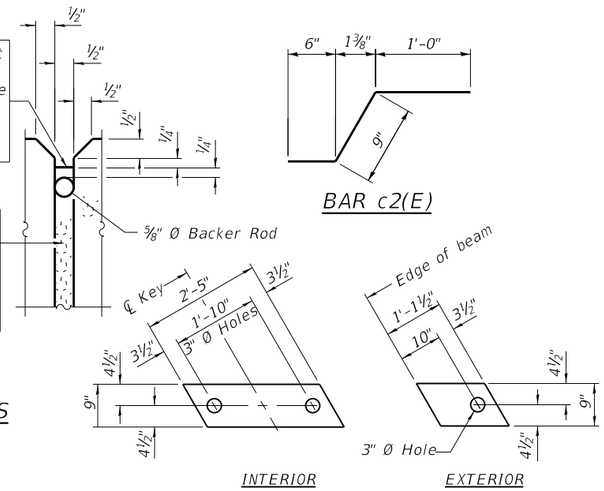
DETAIL 'A'



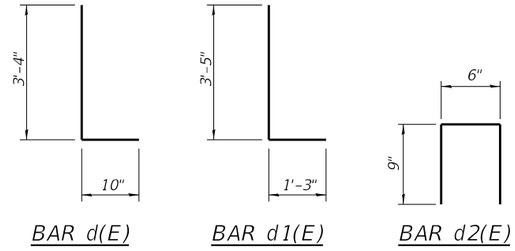
DETAIL 'B'



PARAPET JOINT DETAILS



FABRIC BEARING PAD



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	25	#4	34'-4"	
a1(E)	25	#4	36'-5"	
b(E)	74	#4	23'-4"	
b1(E)	20	#5	23'-4"	
c(E)	25	#5	7'-8"	
c1(E)	25	#5	8'-3"	
c2(E)	50	#5	2'-3"	
d(E)	50	#4	4'-2"	
d1(E)	50	#6	4'-8"	
d2(E)	16	#4	2'-0"	
e(E)	24	#4	11'-6"	
Concrete Superstructure			Cu. Yd.	14.7
Reinforcement Bars, Epoxy Coated			Pound	4,050
Precast Concrete Bridge Slab			Sq. Ft.	1,601
Concrete Wearing Surface, 5"			Sq. Yd.	182
Bridge Deck Grooving			Sq. Yd.	132
Protective Coat			Sq. Yd.	197

Notes:

Bearing pads at fixed end shall be ½" thick and bearing pads at expansion end shall be ¾" thick.

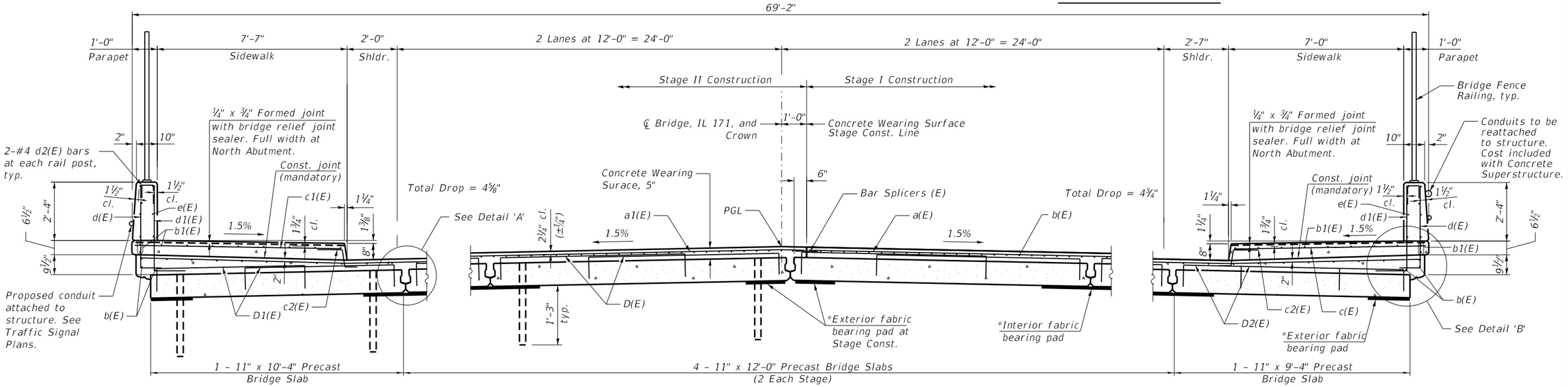
Omit holes for fabric bearing pads at South Abutment end of beams.

For Precast Concrete Beam details, see sheet S9.

For Bridge Fence Railing details, see sheet S21.

CROSS SECTION

(Looking North)



NEAR NORTH ABUTMENT

NEAR SOUTH ABUTMENT

* Fabric bearing pads at the expansion end shall be recessed ¼" into the Abutment and bonded. Adjusting shims, when required, shall be bonded to the top of the fabric bearing pads.

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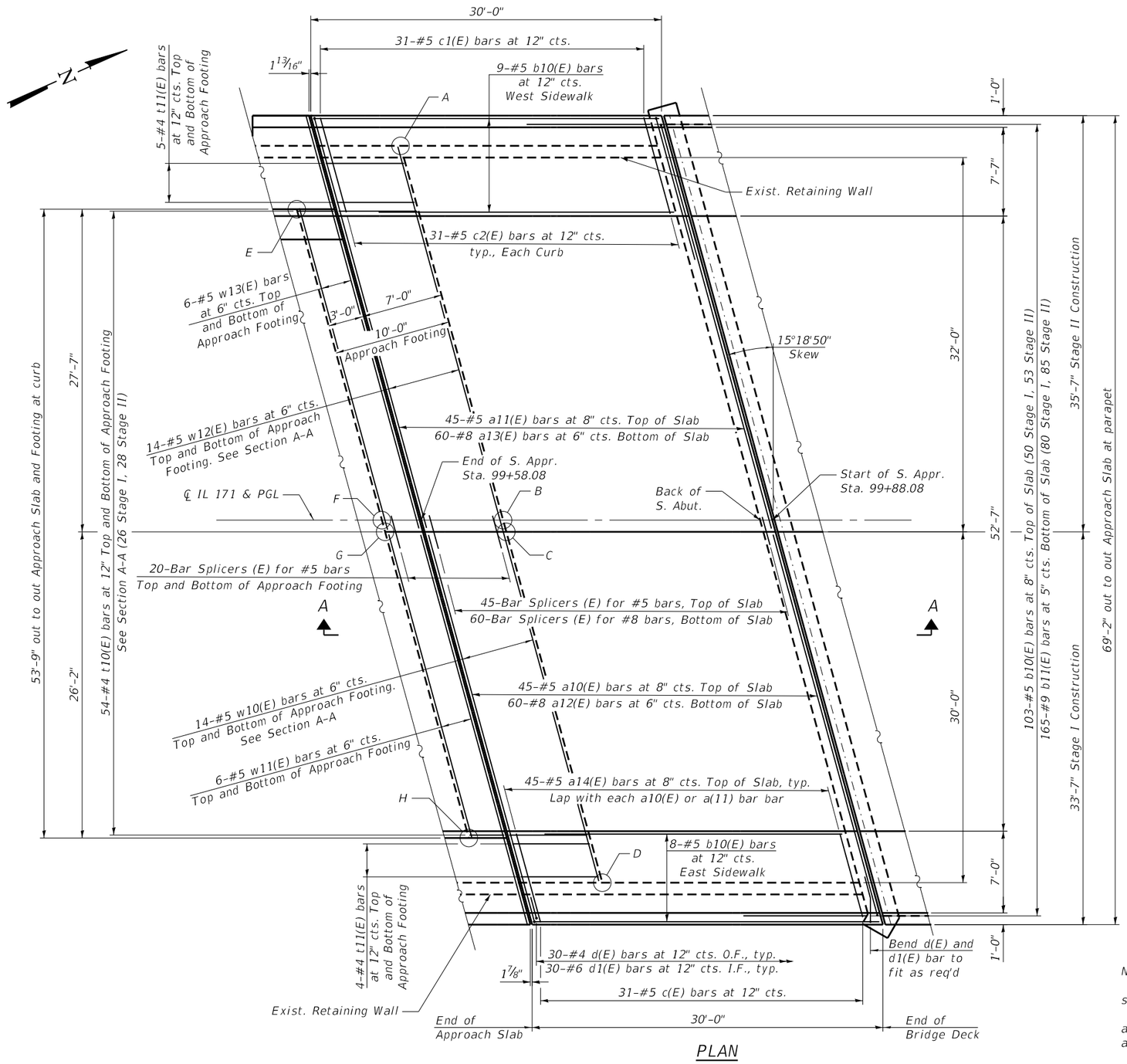
PRECAST BRIDGE SLAB
STRUCTURE NO. 016-2544

SHEET NO. S10 OF S26 SHEETS

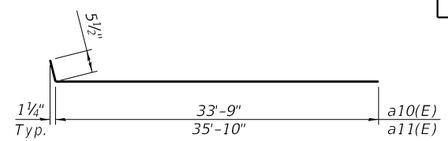
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	48
		CONTRACT NO. 62F30		
		ILLINOIS	FED. AID PROJECT	



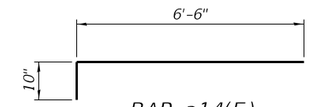
PLAN

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

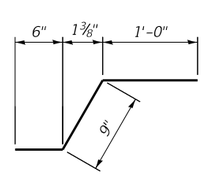
South Approach				
Point	Station	Offset	Top	Bottom
A	99+56.57	31.00' Lt	613.68	612.85
B	99+65.05	0.00'	614.24	613.41
C	99+65.33	1.00' Rt	614.23	613.40
D	99+73.55	31.00' Rt	613.87	613.04
E	99+47.41	26.58' Lt	613.65	612.82
F	99+54.69	0.00'	614.13	613.30
G	99+54.97	1.00' Rt	614.12	613.28
H	99+62.13	21.17' Rt	613.89	613.06



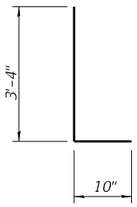
BAR a10(E) & a11(E)



BAR a14(E)



BAR c2(E)



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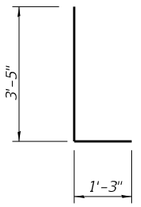

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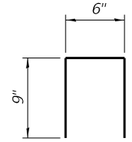

BAR d2(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	45	#5	34'-3"	
a11(E)	45	#5	36'-4"	
a12(E)	60	#8	34'-4"	
a13(E)	60	#8	36'-5"	
a14(E)	90	#5	7'-4"	
b10(E)	120	#5	29'-8"	
b11(E)	165	#9	29'-8"	
c(E)	31	#5	7'-8"	
c1(E)	31	#5	8'-3"	
c2(E)	62	#5	2'-3"	
d(E)	60	#4	4'-2"	
d1(E)	60	#6	4'-8"	
d2(E)	16	#4	2'-0"	
e10(E)	24	#4	14'-8"	
t10(E)	108	#4	10'-0"	
t11(E)	18	#4	6'-8"	
w10(E)	28	#5	30'-9"	
w11(E)	12	#5	26'-10"	
w12(E)	28	#5	32'-10"	
w13(E)	12	#5	28'-3"	
Concrete Structures			Cu. Yd.	19.0
Concrete Superstructure			Cu. Yd.	18.6
Bridge Deck Grooving			Sq. Yd.	168
Protective Coat			Sq. Yd.	250
Concrete Superstructure (Approach Slab)			Cu. Yd.	96.1
Reinforcement Bars, Epoxy Coated			Pound	40,550

Notes:
For Section A-A and Approach Slab Details, see sheet S12.
Existing Retaining wall to be modified to accommodate Approach Slab. See sheets S15 and S16 for details.
For Pavement Connector, see Highway Standard 420401.

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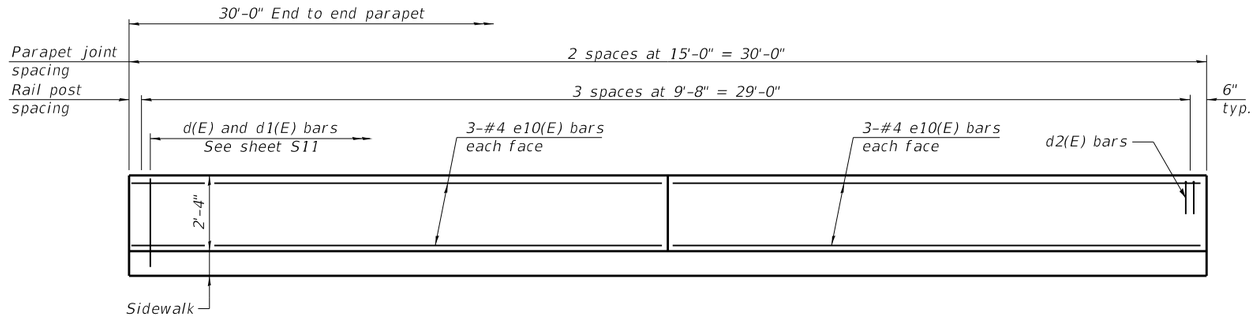
PLOT DATE = 11/9/2018	CHECKED - AMS	REVISED -

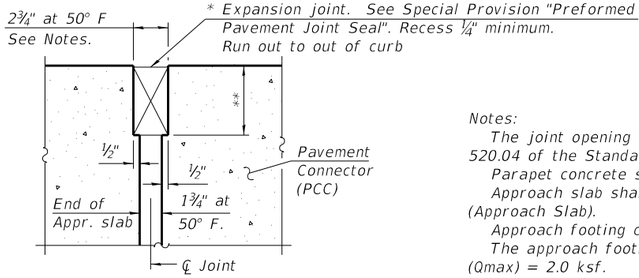
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH APPROACH SLAB
STRUCTURE NO. 016-2544
SHEET NO. S11 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	49
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



INSIDE ELEVATION OF PARAPET

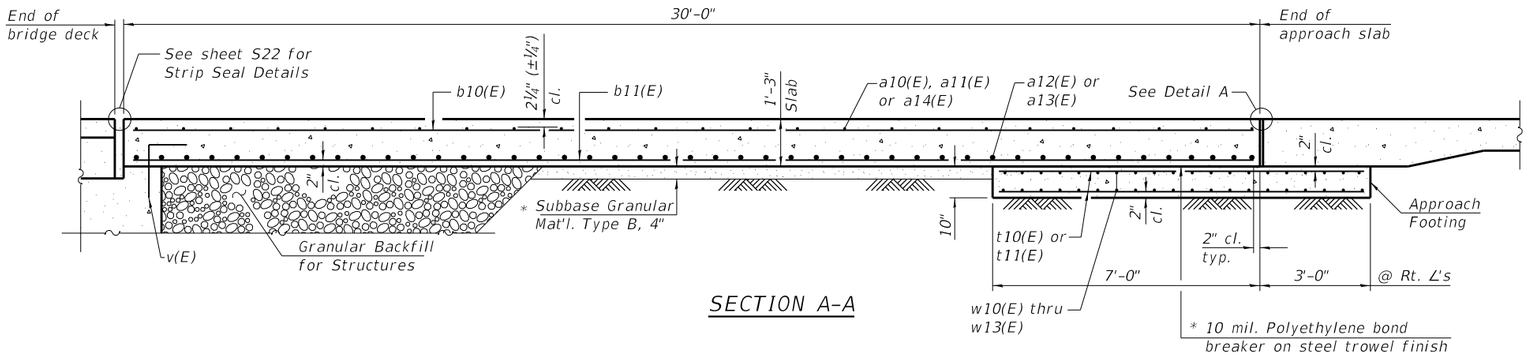


DETAIL A
(@ Rt. ∠'s)

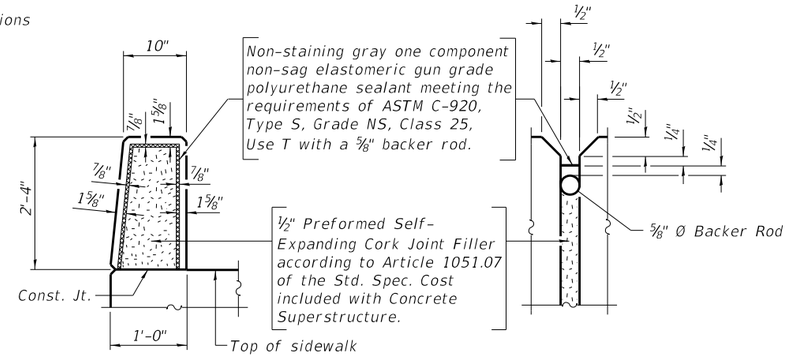
* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

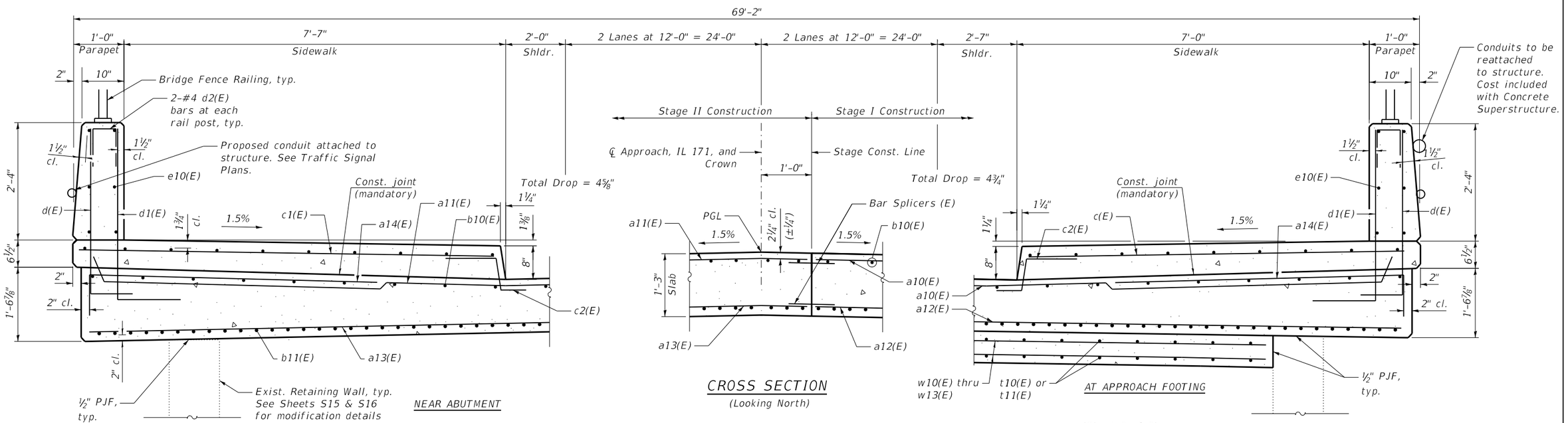
Notes:
The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications.
Parapet concrete shall be paid for as Concrete Superstructure.
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
Approach footing concrete shall be paid for as Concrete Structures.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures, see sheet S2.
For Bridge Fence Railing Details, see sheet S21.



SECTION A-A



PARAPET JOINT DETAILS



(Sheet 2 of 2)

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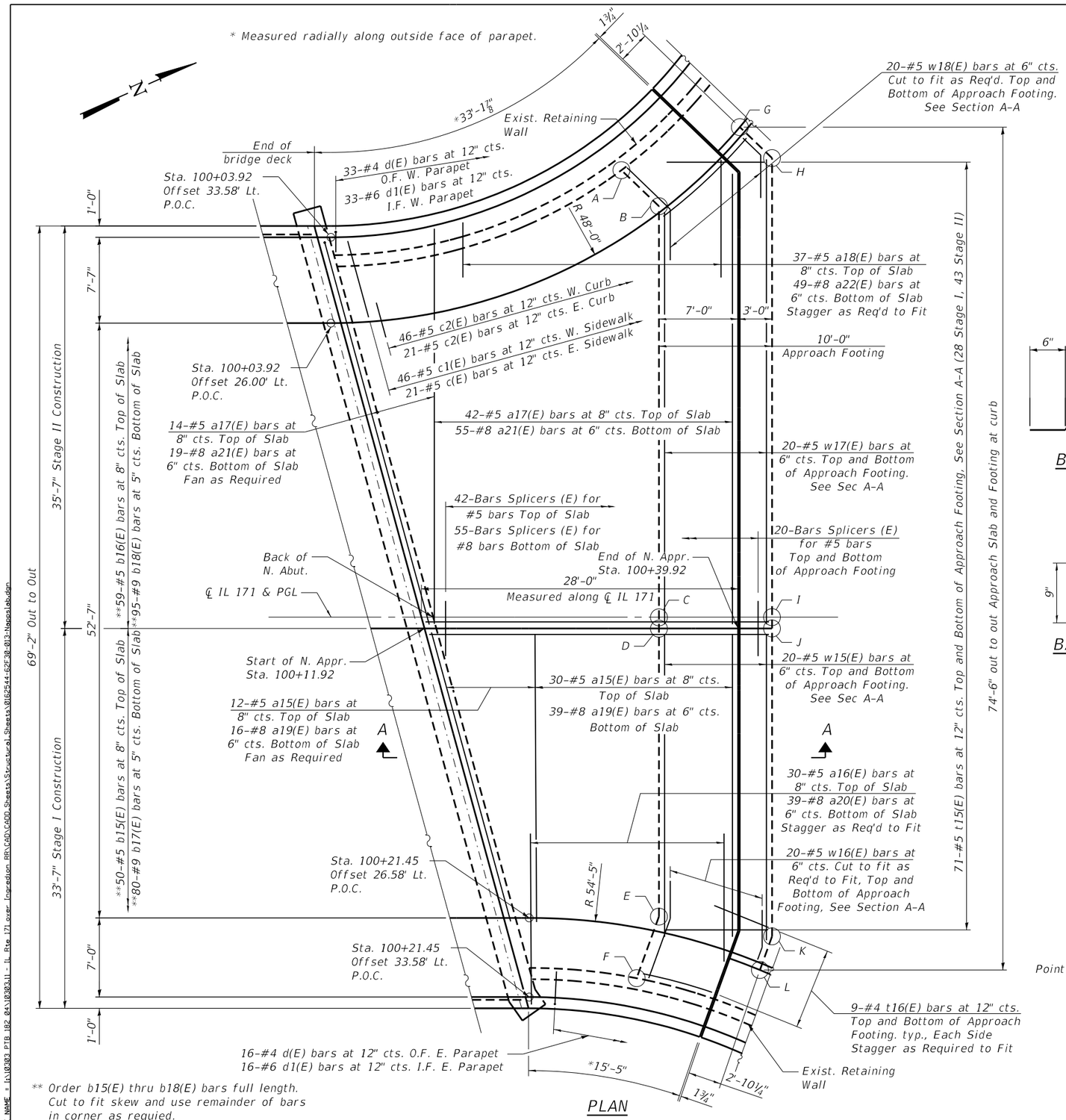
	PLOT DATE = 11/9/2018	CHECKED - AMS	REVISED -	

SOUTH APPROACH SLAB
STRUCTURE NO. 016-2544
SHEET NO. S12 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	50
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

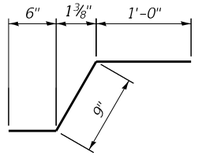


PLAN

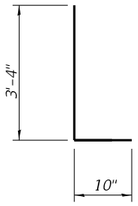
** Order b15(E) thru b18(E) bars full length. Cut to fit skew and use remainder of bars in corner as requied.

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

North Approach				
Point	Station	Offset	Top	Bottom
A	100+29.61	39.52' Lt	613.63	612.79
B	100+32.92	36.33' Lt	613.62	612.78
C	100+32.92	0.00'	614.30	613.46
D	100+32.92	1.00' Rt	614.28	613.45
E	100+32.92	26.47' Rt	613.90	613.06
F	100+30.96	31.91' Rt	613.85	613.01
G	100+40.08	43.32' Lt	613.30	612.47
H	100+42.92	40.58' Lt	613.30	613.47
I	100+42.92	0.00'	614.11	613.28
J	100+42.92	1.00' Rt	614.10	613.26
K	100+42.92	28.22' Rt	613.69	612.85
L	100+41.85	31.18' Rt	613.67	612.83



BAR c2(E)



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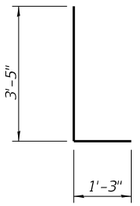

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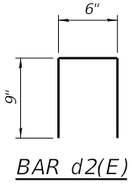

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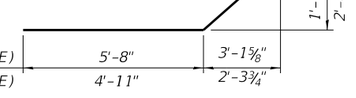


BAR w16(E) or w18(E)

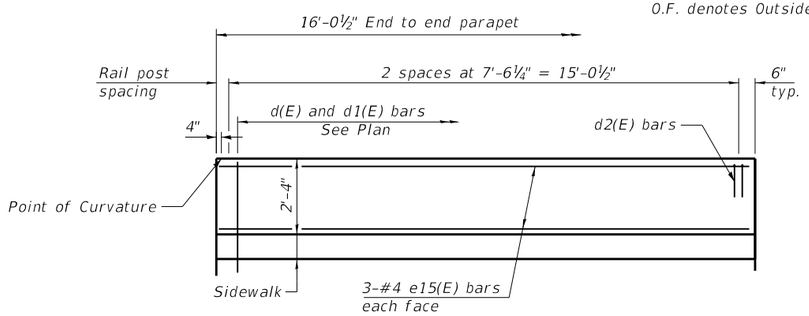
MINIMUM BAR LAP

#5 Bar = 3'-4"
#8 Bar = 5'-11"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a15(E)	42	#5	26'-5"	
a16(E)	30	#5	12'-9"	
a17(E)	56	#5	36'-1"	
a18(E)	37	#5	14'-3"	
a19(E)	55	#8	26'-5"	
a20(E)	39	#8	15'-4"	
a21(E)	74	#8	36'-1"	
a22(E)	49	#8	16'-10"	
b15(E)	50	#5	37'-2"	
b16(E)	59	#5	27'-5"	
b17(E)	80	#9	37'-2"	
b18(E)	95	#9	27'-5"	
c(E)	21	#5	7'-8"	
c1(E)	46	#5	8'-3"	
c2(E)	67	#5	2'-3"	
d(E)	49	#4	4'-2"	
d1(E)	49	#6	4'-8"	
d2(E)	18	#4	2'-0"	
e15(E)	6	#4	15'-9"	
e16(E)	12	#4	16'-6"	
t15(E)	142	#4	9'-8"	
t16(E)	36	#4	6'-8"	
w15(E)	40	#5	26'-11"	
w16(E)	40	#5	9'-0"	
w17(E)	40	#5	41'-3"	
w18(E)	40	#5	8'-3"	
Concrete Structures			Cu. Yd.	23.5
Concrete Superstructure			Cu. Yd.	16.3
Bridge Deck Grooving			Sq. Yd.	179
Protective Coat			Sq. Yd.	331
Concrete Superstructure (Approach Slab)			Cu. Yd.	97.8
Reinforcement Bars, Epoxy Coated			Pound	47,560

Notes:
For Section A-A, Cross Section and West Parapet Elevation, see sheet S14.
Existing Retaining wall to be modified to accommodate Approach Slab. See sheets S15 and S16 for details.
For Pavement Connector, see Highway Standard 420401.
For Bridge Fence Railing Details, see sheet S21.
I.F. denotes Inside Face.
O.F. denotes Outside Face.



INSIDE ELEVATION OF EAST PARAPET

Dimensions measured radially along inside face of parapet.

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PLOT DATE = 11/9/2018	CHECKED - AMS	REVISED -

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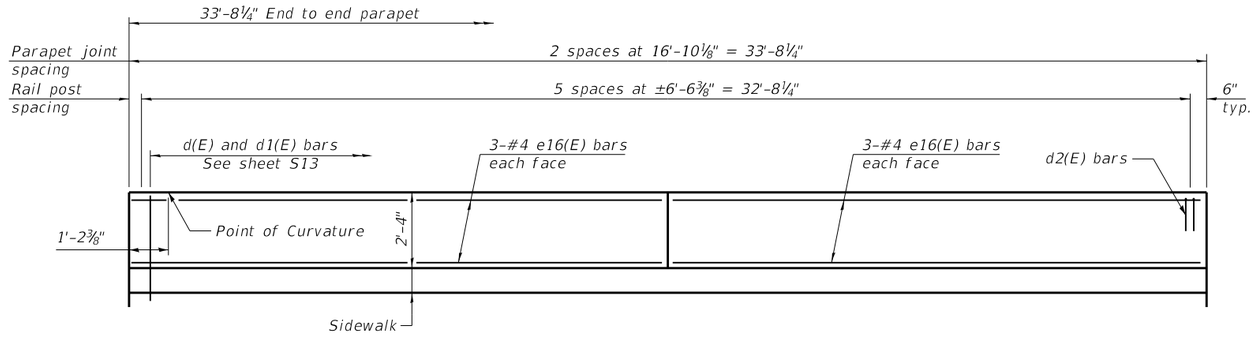
DEPARTMENT OF TRANSPORTATION

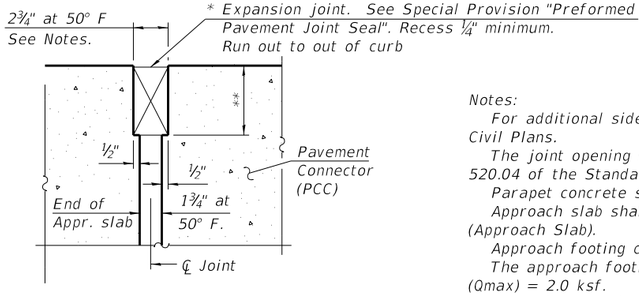
NORTH APPROACH SLAB
STRUCTURE NO. 016-2544
SHEET NO. S13 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	51
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



INSIDE ELEVATION OF WEST PARAPET

Dimensions measured radially along inside face of parapet.



DETAIL A

(@ Rt. ℄'s)

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

Notes:

For additional sidewalk elevations, slopes and ADA details, see Civil Plans.

The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications.

Parapet concrete shall be paid for as Concrete Superstructure.

Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

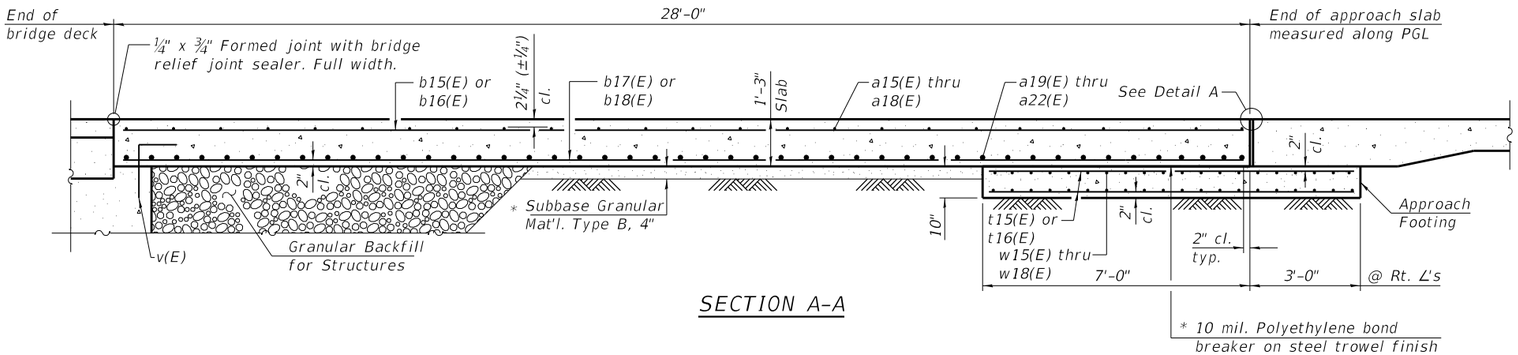
Approach footing concrete shall be paid for as Concrete Structures.

The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.

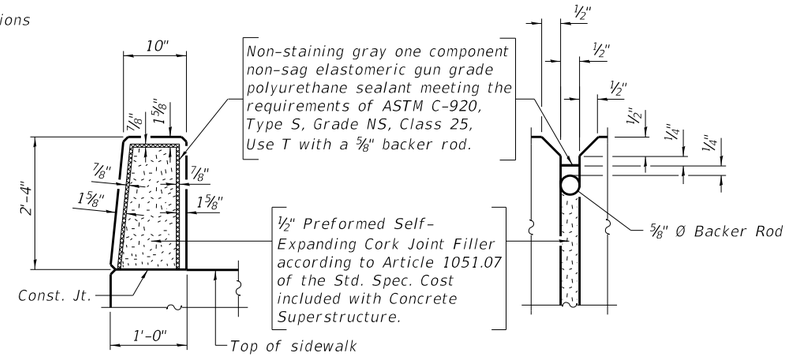
Cost of excavation for approach footing included with Concrete Structures.

For Granular Backfill for Structures, see sheet S2.

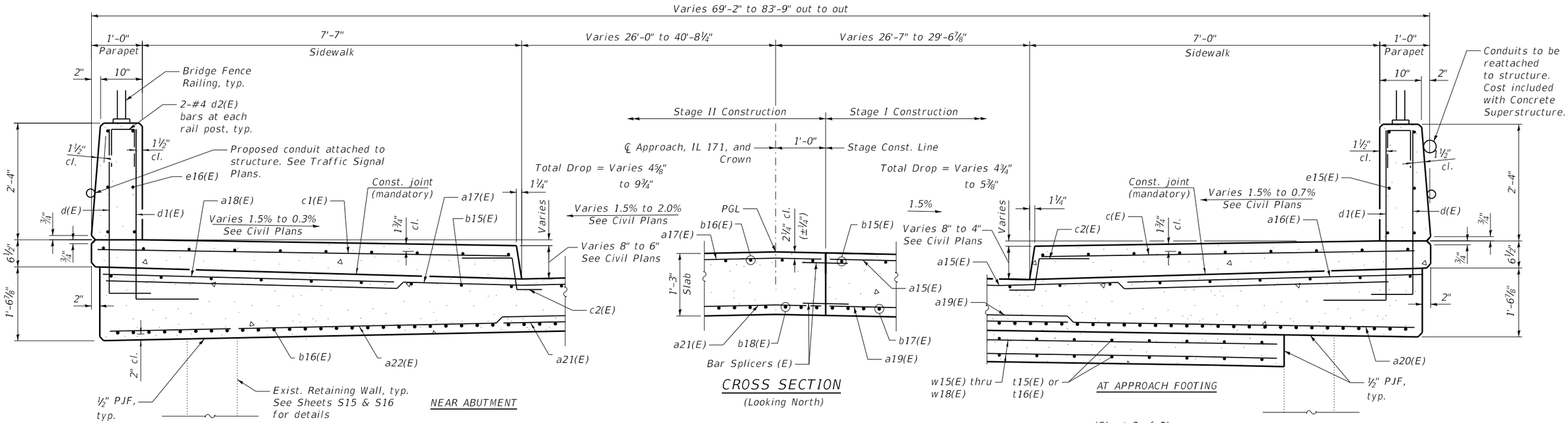
For Bridge Fence Railing details, see sheet S21.



SECTION A-A



PARAPET JOINT DETAILS



(Sheet 2 of 2)

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STATE OF ILLINOIS
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NORTH APPROACH SLAB
STRUCTURE NO. 016-2544

SHEET NO. S14 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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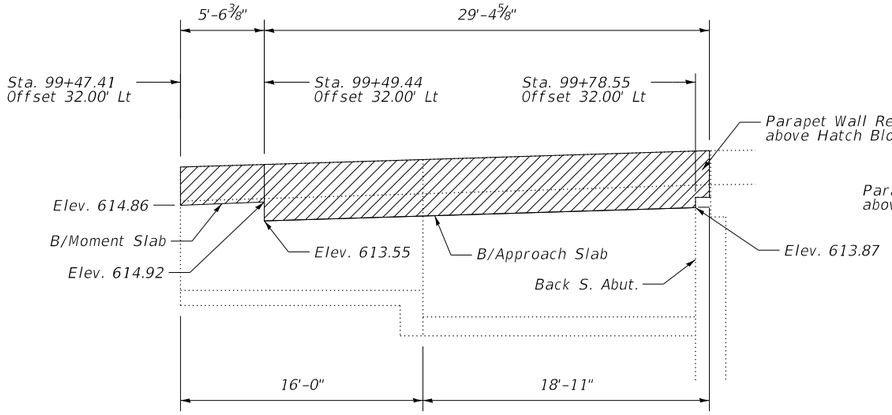
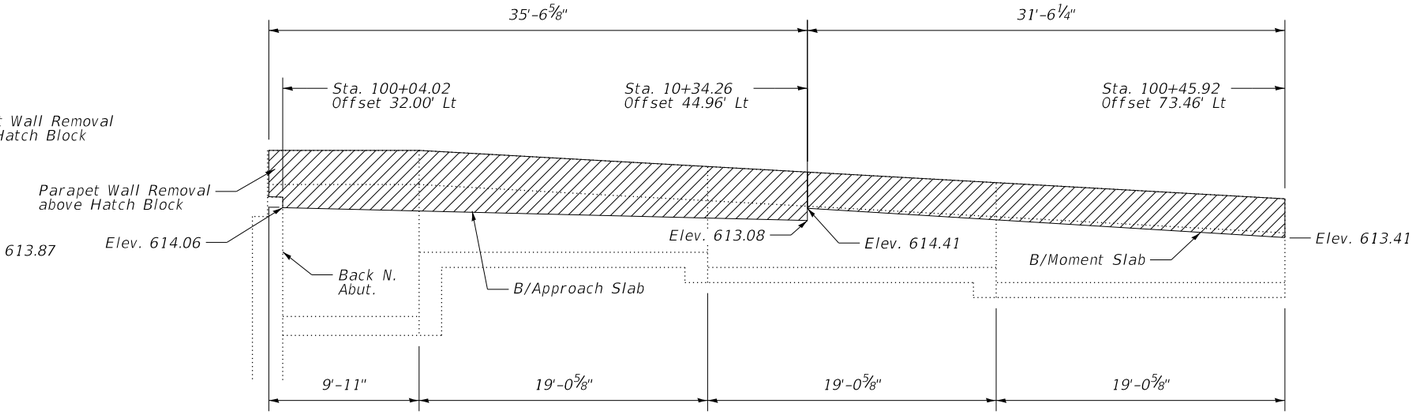
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



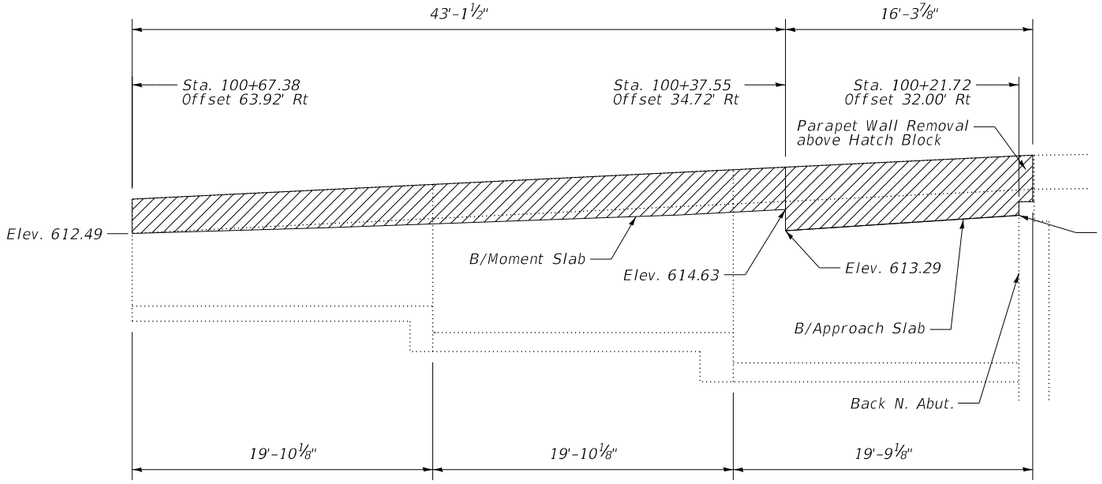
SOUTHWEST RETAINING WALL ELEVATION

(Looking West)



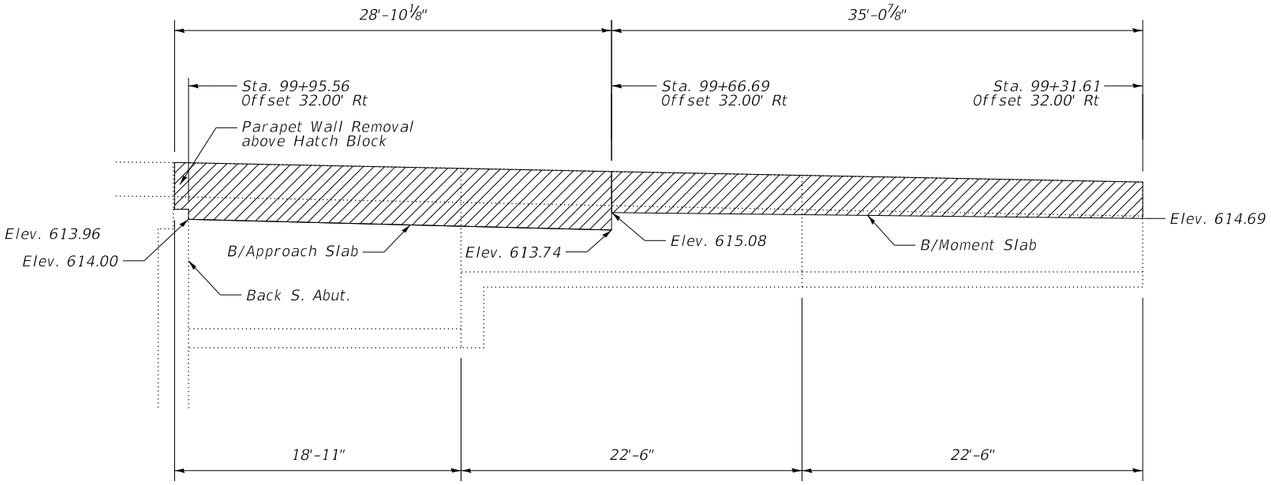
NORTHWEST RETAINING WALL ELEVATION

(Looking West)



NORTHEAST RETAINING WALL ELEVATION

(Looking East)



SOUTHEAST RETAINING WALL ELEVATION

(Looking East)

LEGEND:

Concrete Removal

Notes:

Lengths are measured along back face of existing retaining wall.
For Approach Slab details, see sheets S11 thru S14.
For Moment Slab Details, see sheets S17 thru S20.
For Railing Details, see sheet S21.
For Hatch Block removal see sheets S23 thru S25.
Handrail attached to parapet to be removed and disposed. Cost included with Concrete Removal.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	21.0

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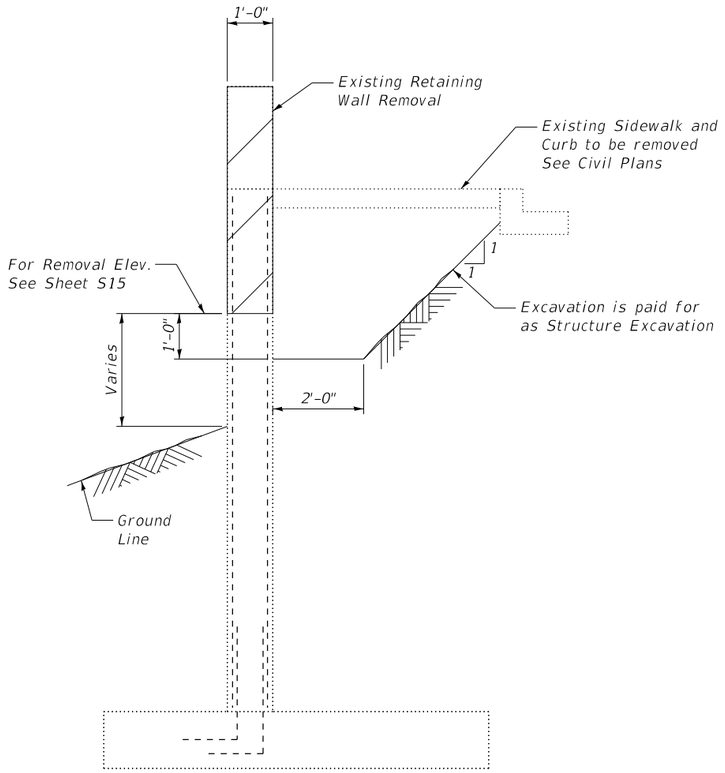
PLOT DATE = 11/9/2018	CHECKED - AMS	REVISED -

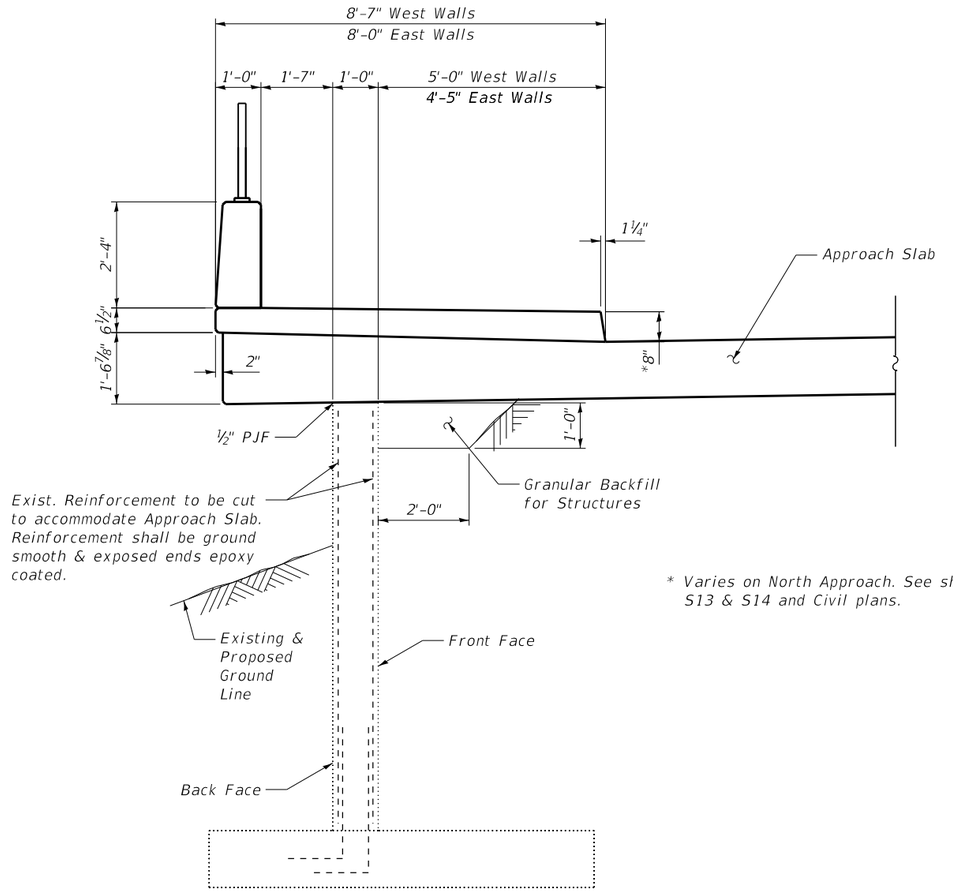
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL MODIFICATIONS
STRUCTURE NO. 016-2544
SHEET NO. S15 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	53
		CONTRACT NO. 62F30		
	ILLINOIS	FED. AID PROJECT		



EXISTING SECTION THRU RETAINING WALL



* Varies on North Approach. See sheets S13 & S14 and Civil plans.

PROPOSED SECTION THRU RETAINING WALL ADJACENT TO APPROACH SLAB

Notes:
For Approach details, see sheets S11 thru S14.
For Retaining Wall Removal, see sheet S15.
For Moment Slab details, see sheets S17 thru S20.
Structure Excavation shown for Approach Slab. For Structure Excavtion for Moment Slabs, see sheets S17 thru S20.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structure Excavation	Cu. Yd.	26
Granular Backfill for Structures	Cu. Yd.	12

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL MODIFICATION DETAILS
STRUCTURE NO. 016-2544
SHEET NO. S16 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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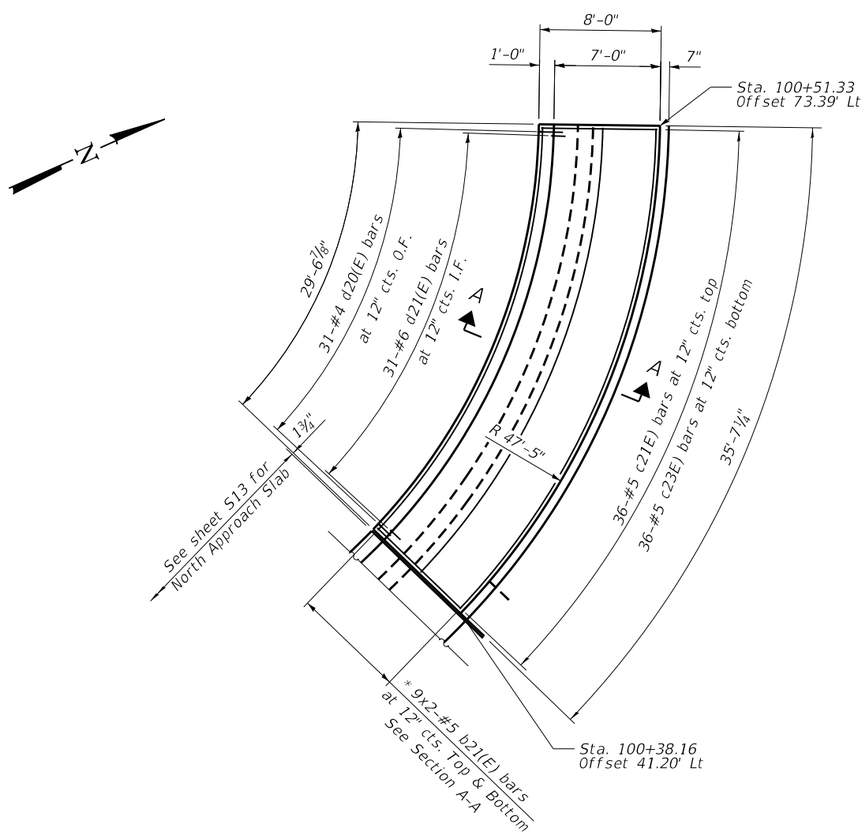
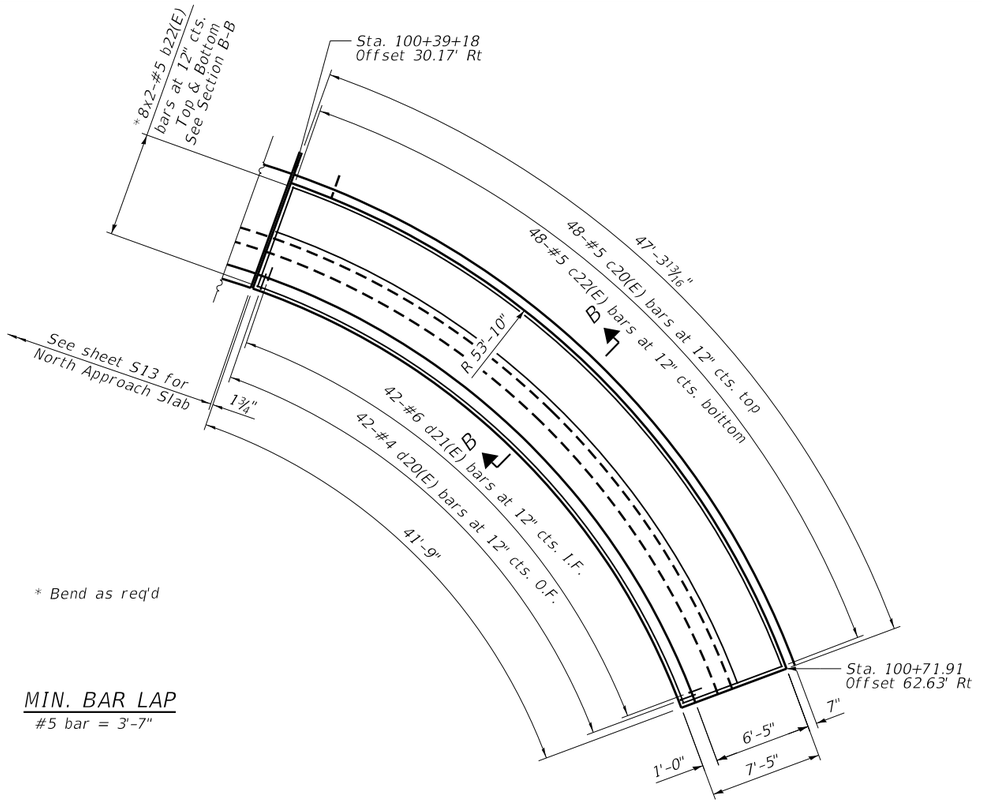
		CONTRACT NO. 62F30		
	ILLINOIS	FED. AID PROJECT		





* Bend as req'd

MIN. BAR LAP

#5 bar = 3'-7"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b20(E)	18	#5	6'-8"	
b21(E)	68	#5	19'-7"	
b22(E)	32	#5	25'-4"	
c20(E)	84	#5	7'-8"	
c21(E)	43	#5	8'-3"	
c22(E)	84	#5	3'-6"	
c23(E)	43	#5	4'-1"	
d20(E)	115	#4	5'-0"	
d21(E)	115	#6	4'-0"	
d22(E)	36	#4	2'-0"	
e20(E)	6	#4	4'-9"	
e21(E)	12	#4	17'-5"	
e22(E)	12	#4	14'-10"	
e23(E)	18	#4	13'-7"	
Concrete Superstructure			Cu. Yd.	50.5
Protective Coat			Sq. Yd.	134
Reinforcement Bars, Epoxy Coated			Pound	5,460
Granular Backfill for Structures			Cu. Yd.	20
Structure Excavation			Cu. Yd.	24

Notes:

Moment slab and parapet concrete shall be paid for as Concrete Superstructure.

Bars indicated thus 1x2-#5 etc. indicates 1 line of bars with 2 lengths per line.

For Approach Slab details, see sheets S11 thru S14.

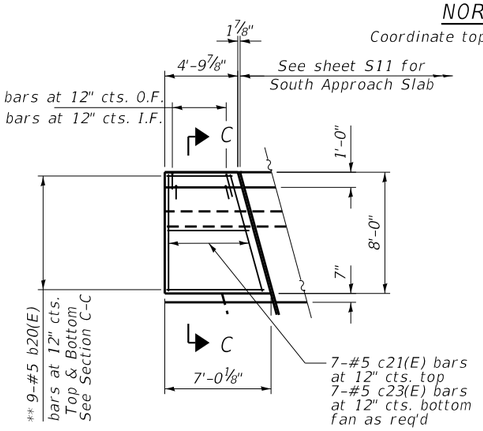
For Retaining Wall Modifications, see sheet S15 and S16.

For Sections A-A thru D-D, see sheets S18 & S19.

For Parapet details, see sheet S20.

NORTHWEST MOMENT SLAB PLAN

Coordinate top of moment slab with ADA details, see Civil Plans.

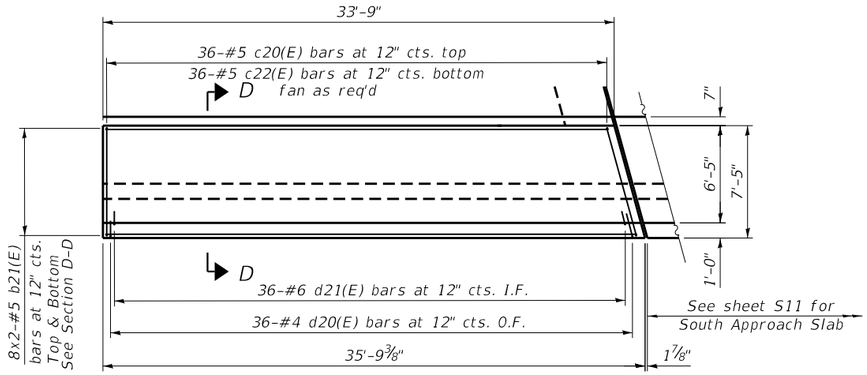


SOUTHWEST MOMENT SLAB PLAN

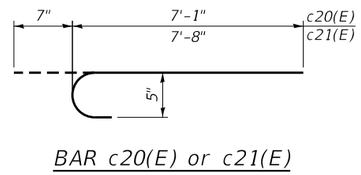
** Cut to fit

NORTHEAST MOMENT SLAB PLAN

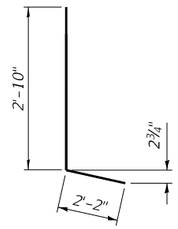
Coordinate top of moment slab with ADA details, see Civil Plans.



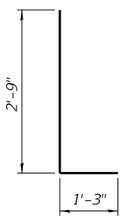
SOUTHEAST MOMENT SLAB PLAN



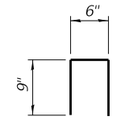
BAR c20(E) or c21(E)



BAR d20(E)



BAR d21(E)



BAR d22(E)

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PLOT DATE = 11/9/2018	CHECKED - AMS	REVISED -

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DEPARTMENT OF TRANSPORTATION

MOMENT SLAB DETAILS
STRUCTURE NO. 016-2544
SHEET NO. S17 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	55
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

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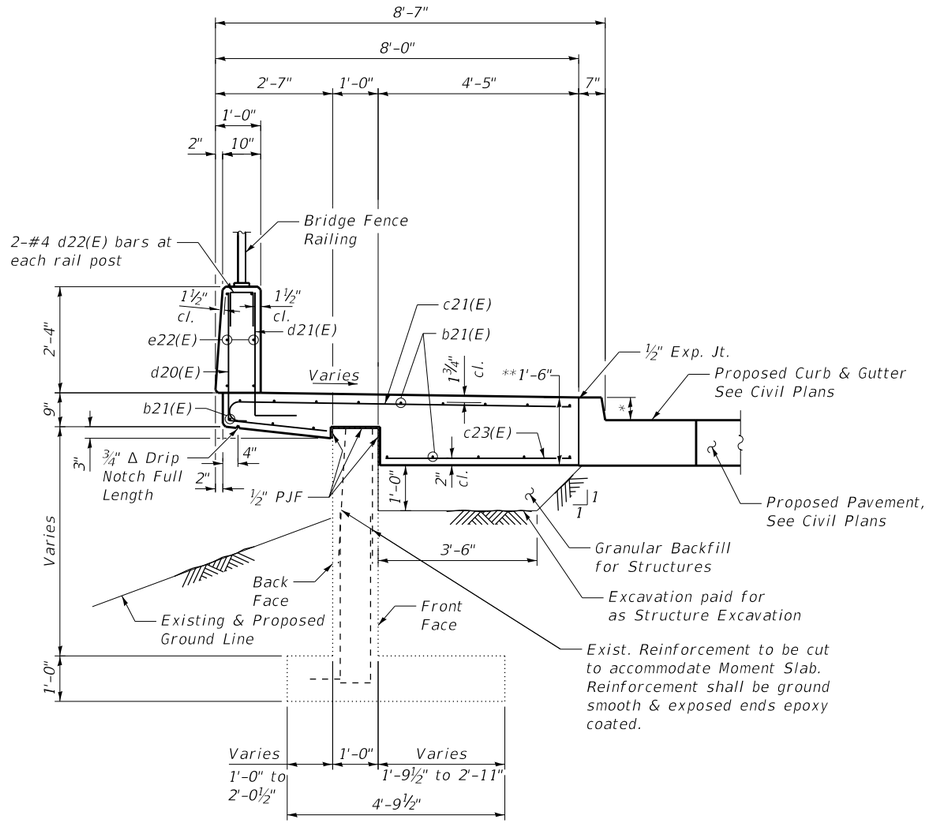
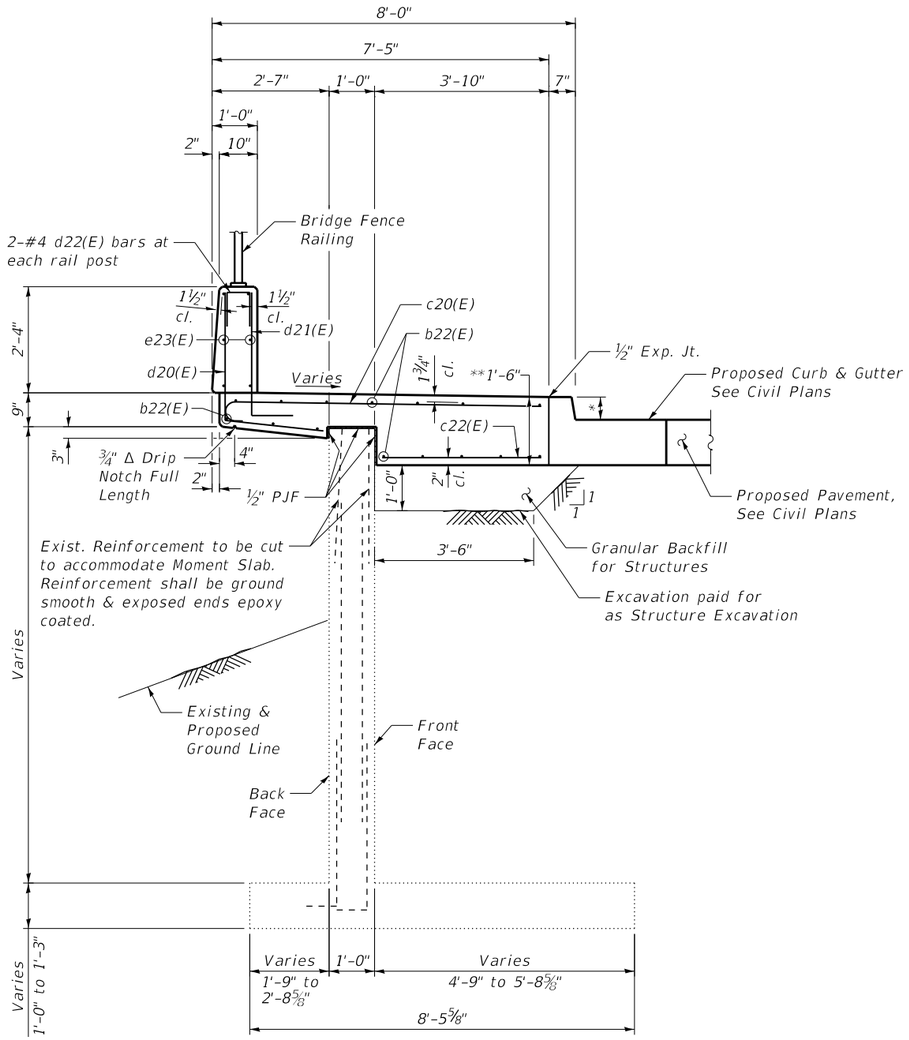


SECTION A-A
(Northwest Moment Slab)

*Varies for ADA ramp. See Civil Plans for details.

**Minimum 1'-6" dimension. Vary slope angle and bend reinforcement as req'd to accomodate ADA ramp. See Civil plans for details.

Notes:
For Bill of Material and bar details, see sheet S17.
For Parapet details and rail post spacing, see sheet S20.
For Bridge Fence Railing details, see sheet S21.



SECTION B-B
(Northeast Moment Slab)

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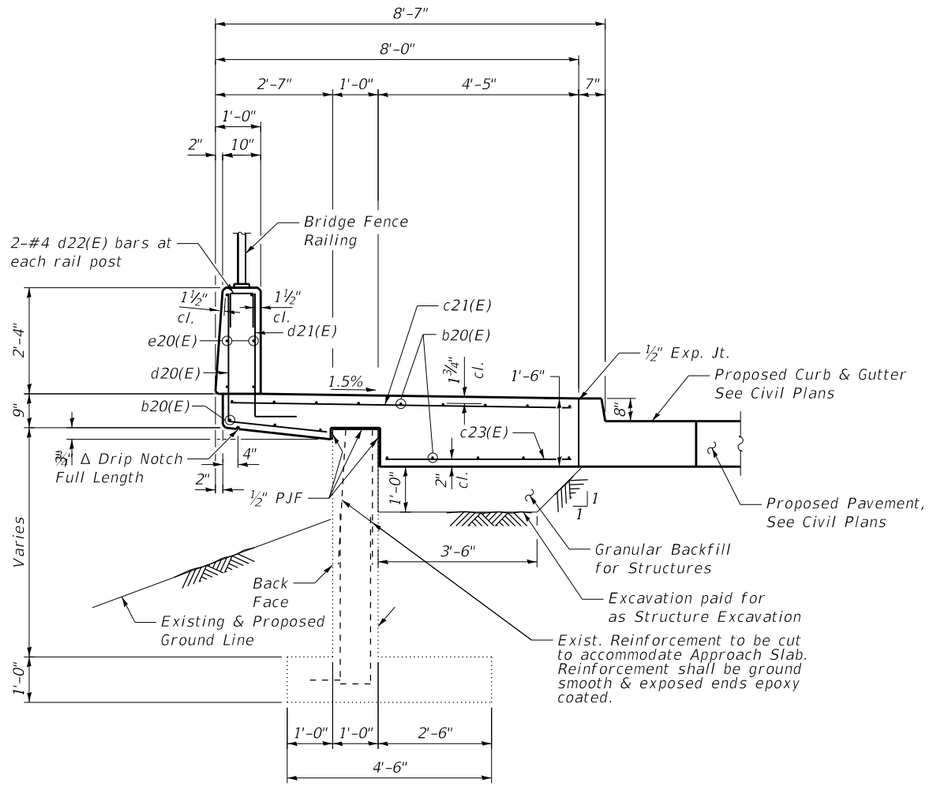
PLOT DATE = 11/9/2018	CHECKED - AMS	REVISED -

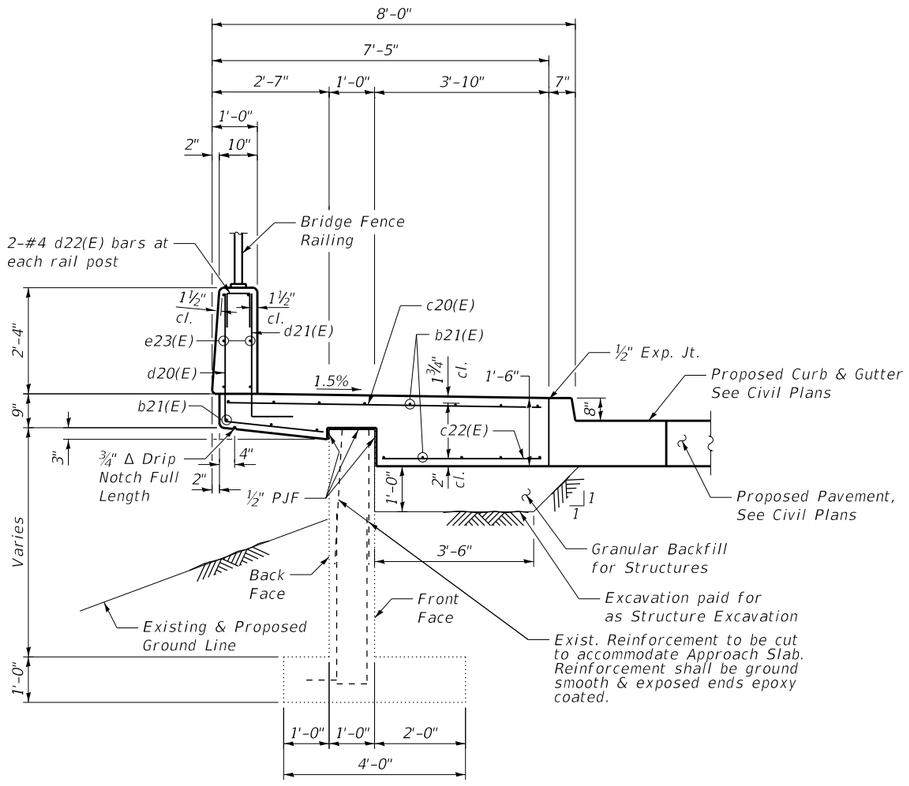
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MOMENT SLAB DETAILS
STRUCTURE NO. 016-2544
SHEET NO. S18 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	56
		CONTRACT NO. 62F30		
		ILLINOIS	FED. AID PROJECT	



SECTION C-C
(Southwest Moment Slab)



SECTION D-D
(Southeast Moment Slab)

Notes:
For Bill of Material and bar details, see sheet S17.
For Parapet details and rail post spacing, see sheet S20.
For Bridge Fence Railing details, see sheet S21.

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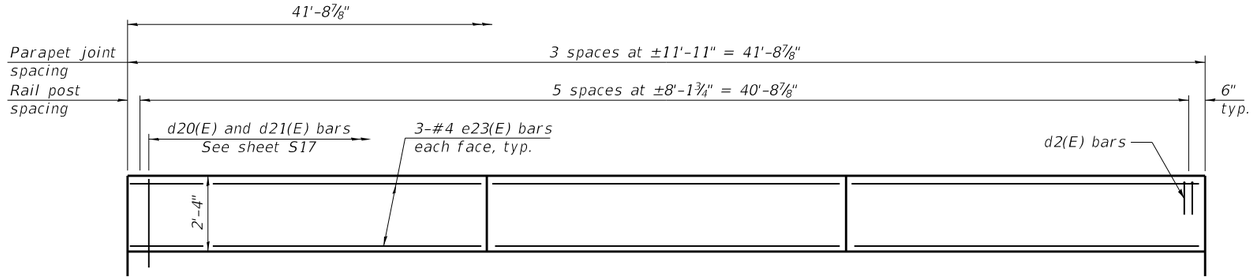
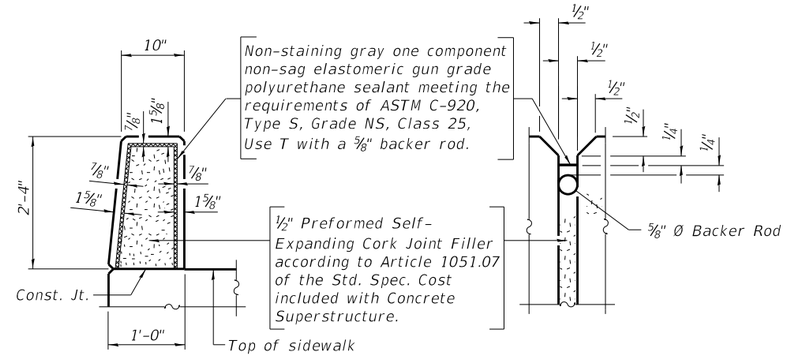
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MOMENT SLAB DETAILS
STRUCTURE NO. 016-2544
SHEET NO. S19 OF S26 SHEETS

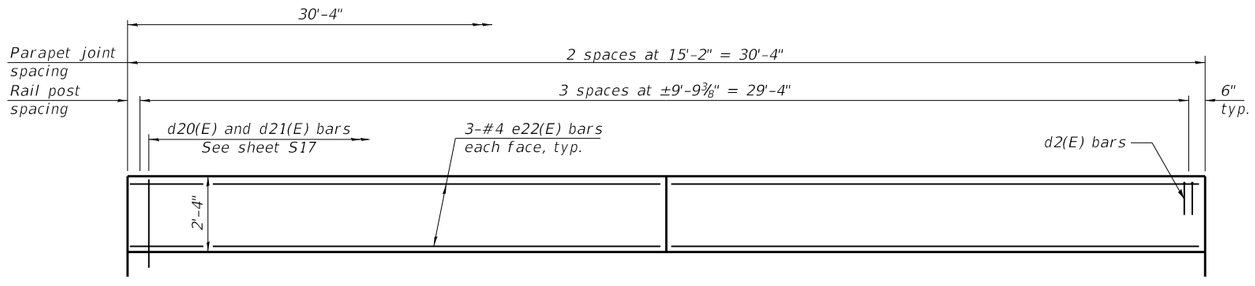
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	57
		CONTRACT NO. 62F30		
	ILLINOIS	FED. AID PROJECT		



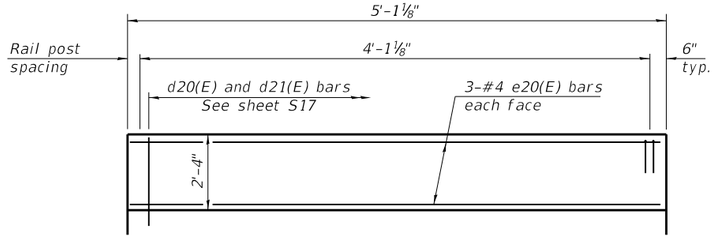
INSIDE ELEVATION OF NORTHEAST PARAPET



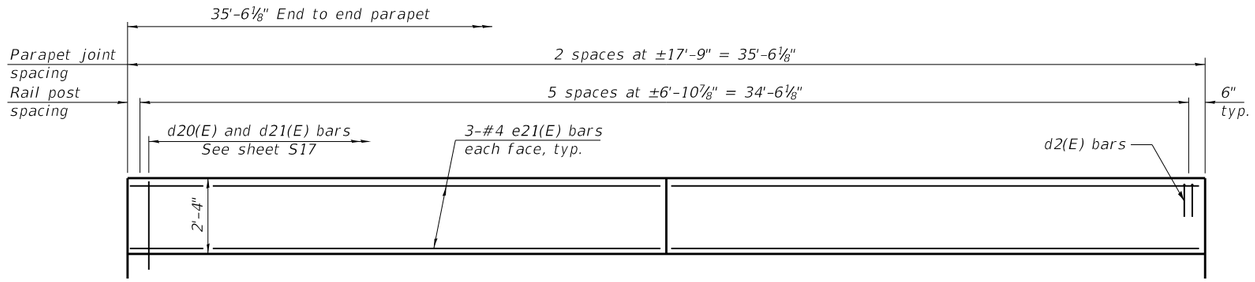
PARAPET JOINT DETAILS



INSIDE ELEVATION OF NORTHWEST PARAPET



INSIDE ELEVATION OF SOUTHWEST PARAPET



INSIDE ELEVATION OF SOUTHEAST PARAPET

Notes:
For Plan, Bill of Material and bar details, see sheet S17.
For Bridge Fence Railing details, see sheet S21.

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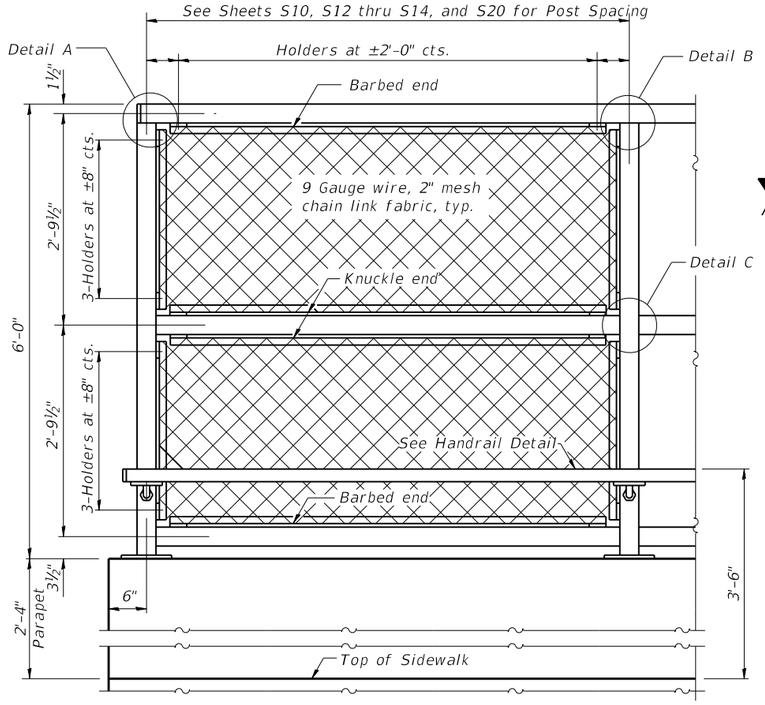
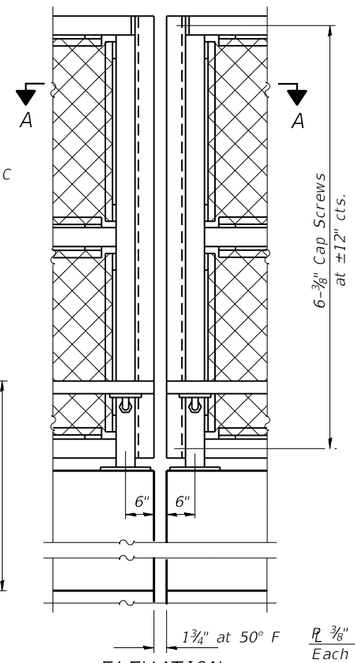
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MOMENT SLAB DETAILS
STRUCTURE NO. 016-2544
SHEET NO. S20 OF S26 SHEETS

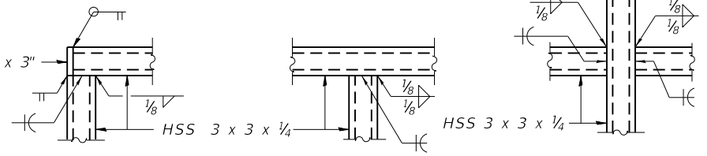
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	58
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



ELEVATION
(Inside Face)



ELEVATION
(At Expansion Joint)

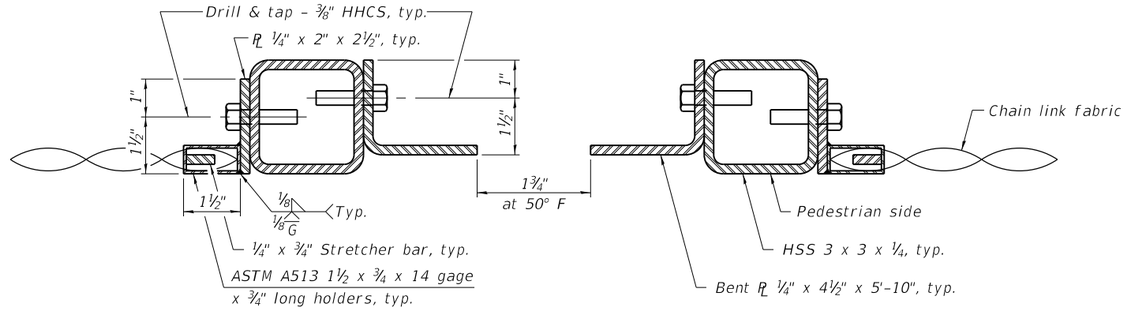


DETAIL A

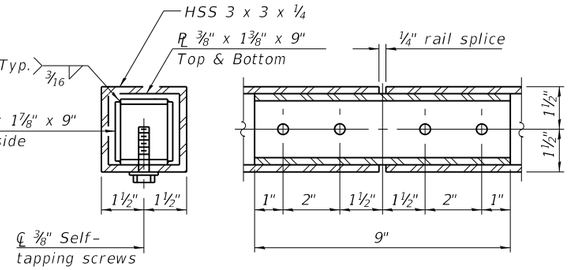
DETAIL B

DETAIL C

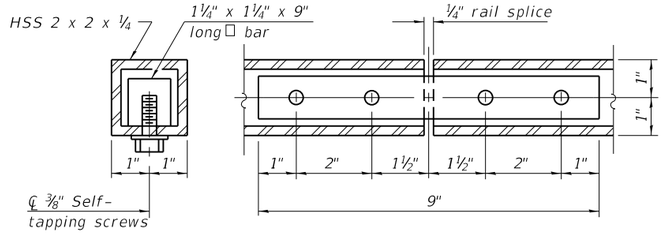
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



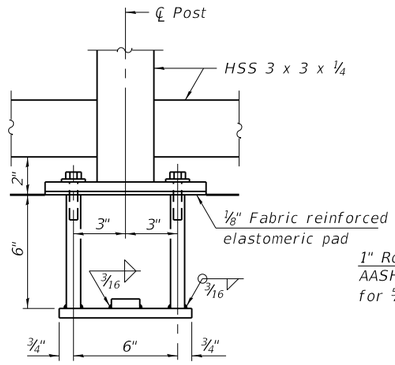
SECTION A-B

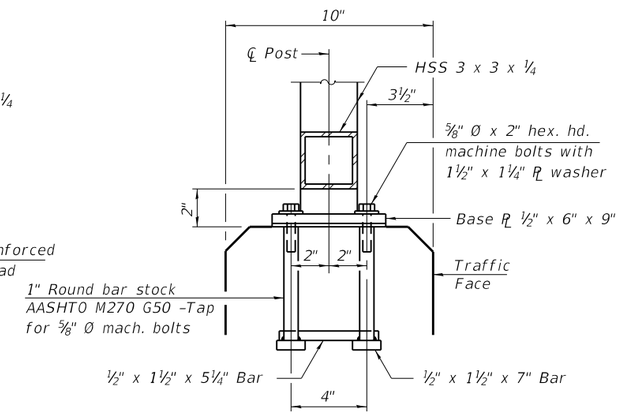


RAIL SPLICE



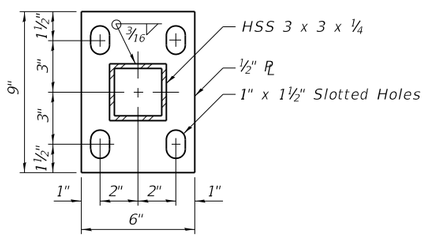
HANDRAIL SPLICE



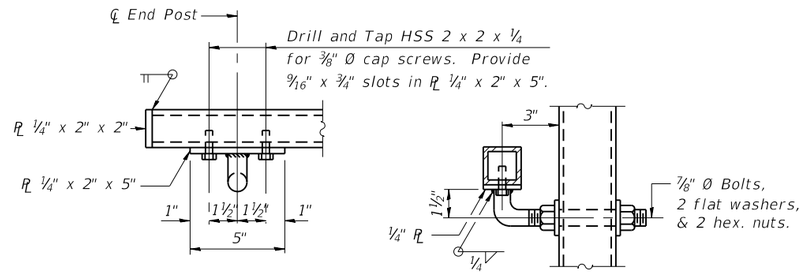


ANCHOR BOLT DETAILS

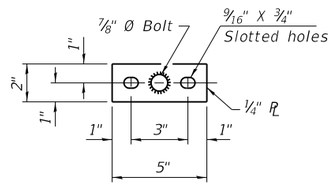
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting ⅝" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



BASE PL



HANDRAIL DETAIL



BASE PL
(Handrail)

Note:
CVN testing may be omitted for the railing.

BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Railing	Foot	264.0

R-28

8-11-2017 (10'-0" Maximum Post Spacing)

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PLOT DATE = 11/9/2018	CHECKED - AMS	REVISED -	

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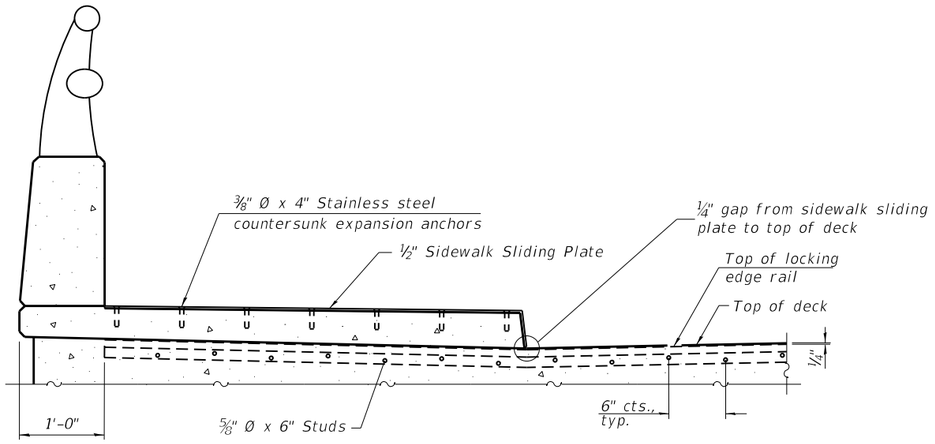
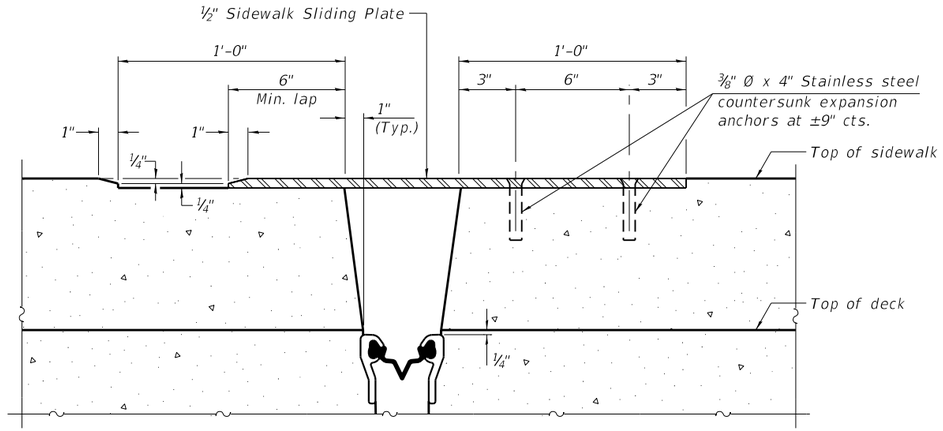
DEPARTMENT OF TRANSPORTATION

BRIDGE FENCE RAILING, PARAPET MOUNTED
STRUCTURE NO. 016-2544
SHEET NO. S21 OF S26 SHEETS

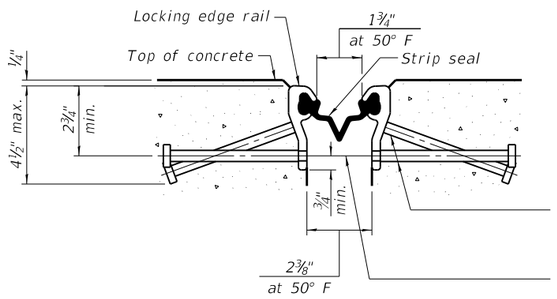
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	59
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



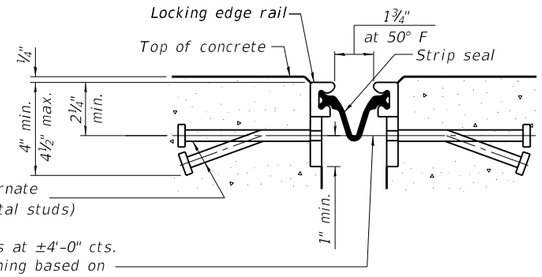
ELEVATION AT RAISED SIDEWALK



SECTION C-C



SHOWING ROLLED RAIL JOINT



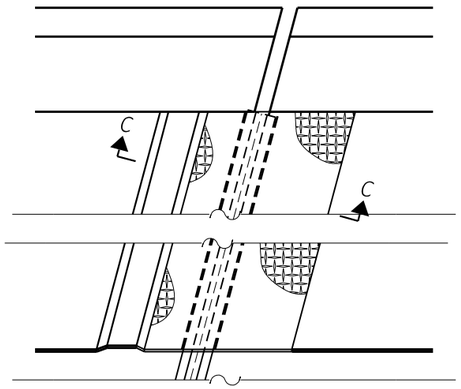
SHOWING WELDED RAIL JOINT

* 5/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

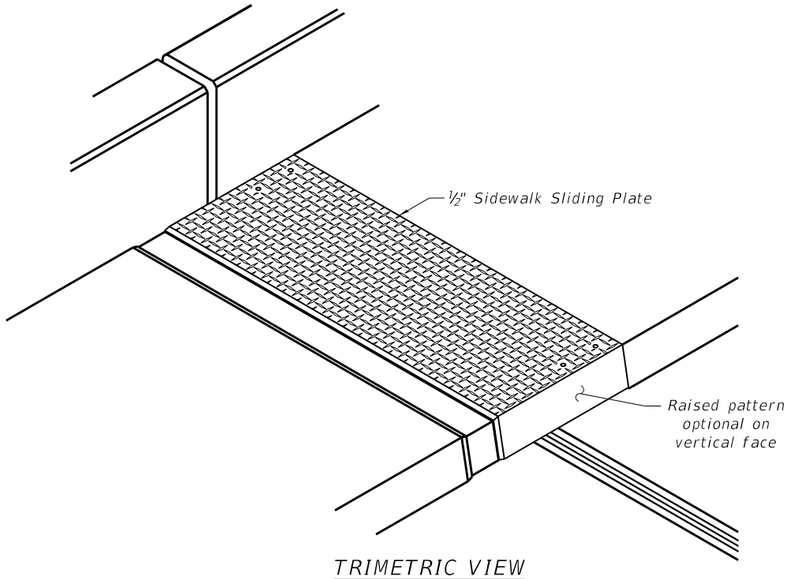
3/8" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



PLAN AT RAISED SIDEWALK



TRIMETRIC VIEW

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.

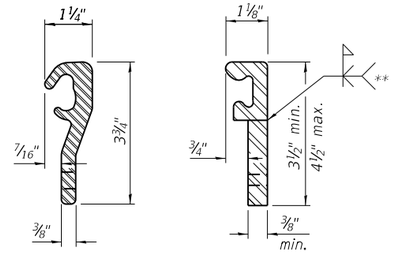
The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.

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 slab. For these cases the approach slab length shall be adjusted, not the length of the bridge slab.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	73.0

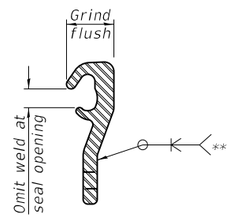


ROLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

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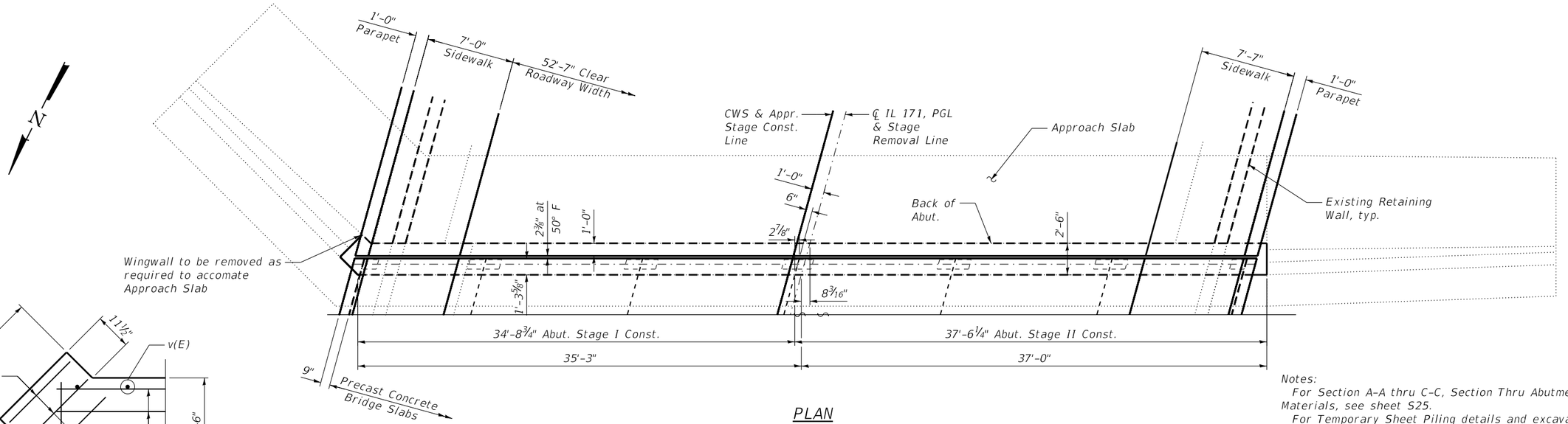
PLOT DATE = 10/19/2018	CHECKED - AMS	REVISED -

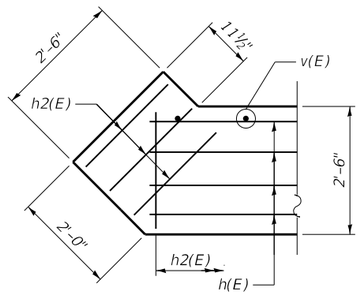
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-2544
SHEET NO. S22 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	60
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



PLAN



CORNER DETAIL

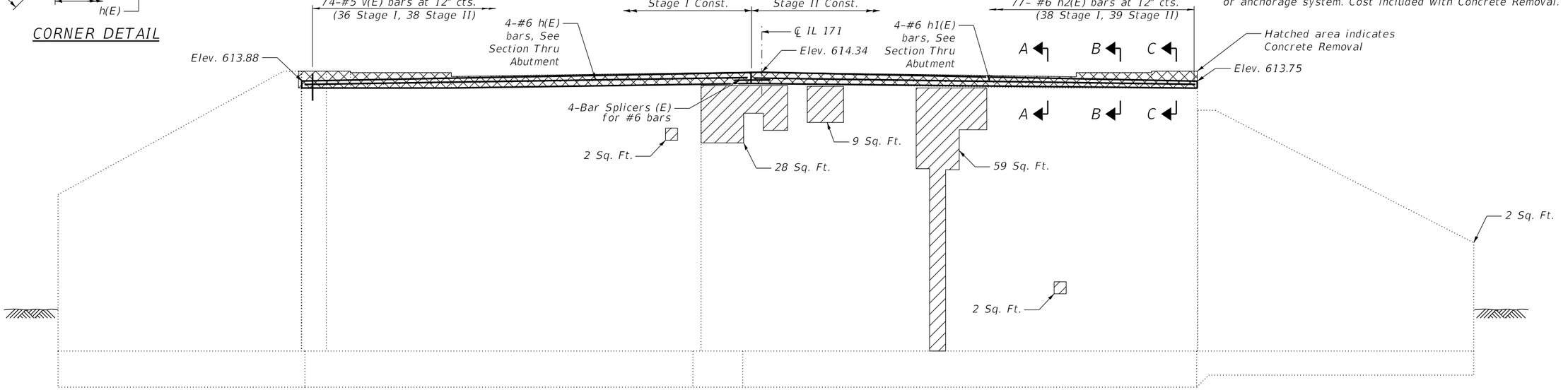
Notes:

For Section A-A thru C-C, Section Thru Abutment and Bill of Materials, see sheet S25.

For Temporary Sheet Piling details and excavation requirements, see sheet S2.

Existing reinforcement shall be cleaned and incorporated into new construction. Cost included in Concrete Removal.

Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using approved bar splicer or anchorage system. Cost included with Concrete Removal.



ELEVATION

LEGEND

Structural Repair of Concrete Depth Equal to or Less Than 5"

Concrete Removal

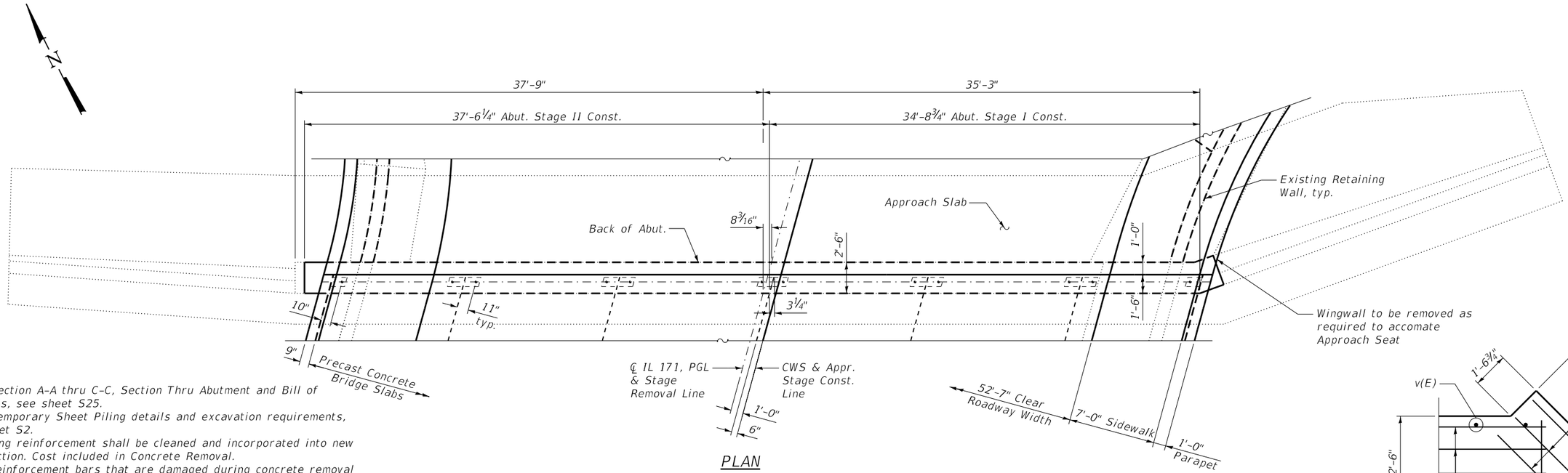
COLLINS ENGINEERS INC
123 N. Wacker Dr. Suite 900
Chicago, IL 60606
Tele. (312) 704-9300
Fax. (312) 704-9320
www.collinsengr.com
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

USER NAME = aseiber	DESIGNED - JPG	REVISED -
	CHECKED - AMS	REVISED -
PLOT SCALE = 13:4.0000 '' / in.	DRAWN - DR	REVISED -
PLOT DATE = 11/9/2018	CHECKED - AMS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT
STRUCTURE NO. 016-2544
SHEET NO. S23 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	61
		CONTRACT NO. 62F30		
		ILLINOIS FED. AID PROJECT		



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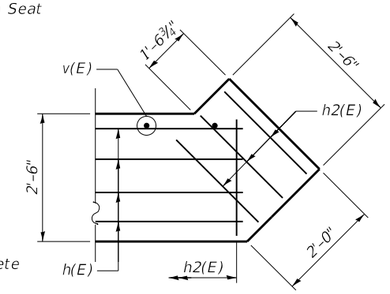


CORNER DETAIL

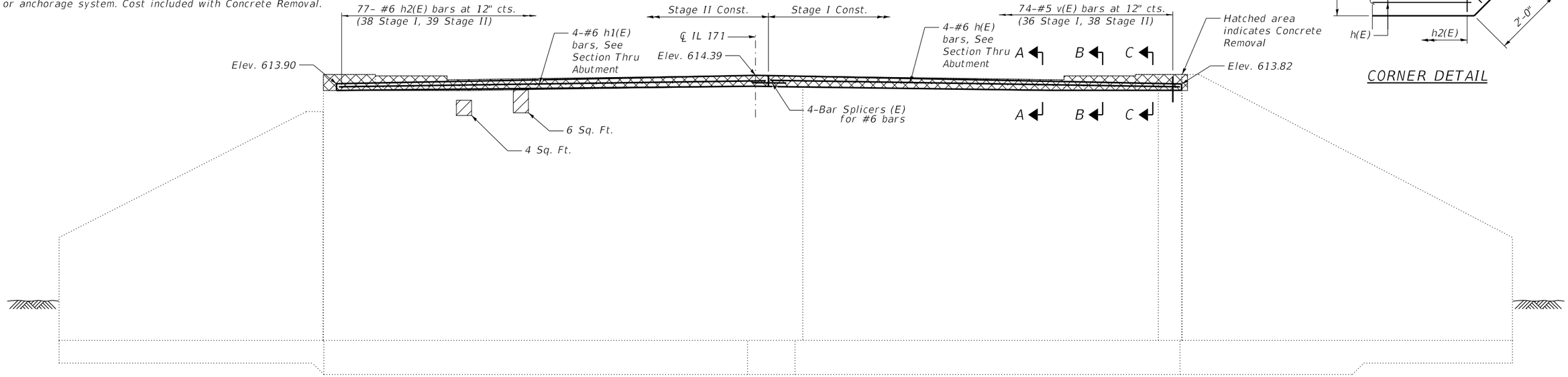
Notes:

For Section A–A thru C–C, Section Thru Abutment and Bill of Materials, see sheet S25.

For Temporary Sheet Piling details and excavation requirements, see sheet S2.

Existing reinforcement shall be cleaned and incorporated into new construction. Cost included in Concrete Removal.

Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using approved bar splicer or anchorage system. Cost included with Concrete Removal.



ELEVATION

LEGEND

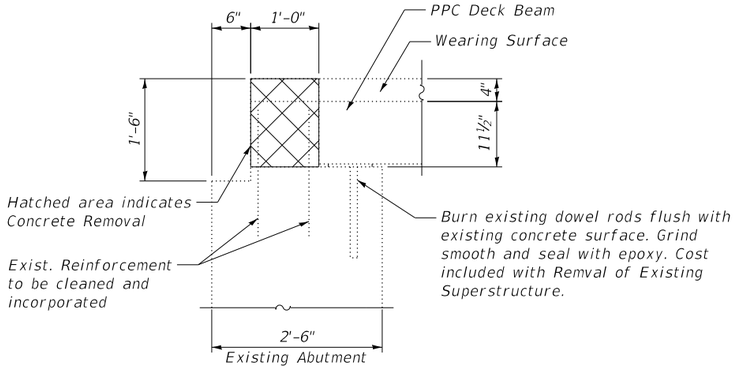
Structural Repair of Concrete Depth Equal to or Less Than 5"

Concrete Removal

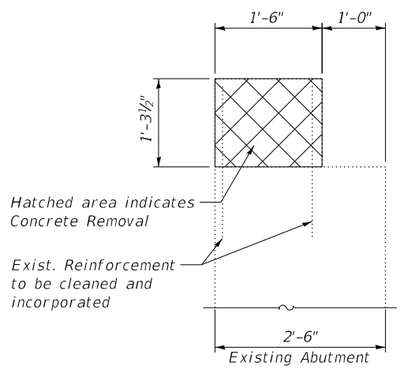
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT
STRUCTURE NO. 016-2544
SHEET NO. S24 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	62
		CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			



SECTION A-A
(Horiz. dim. at Rt. ℄'s)



SECTION B-B
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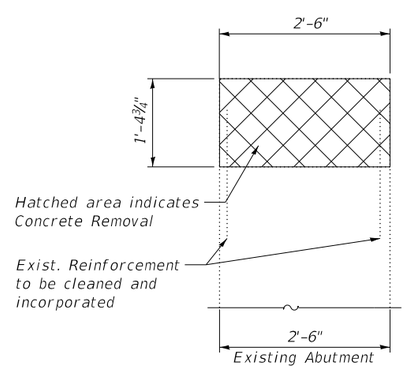

SECTION C-C
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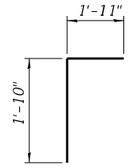
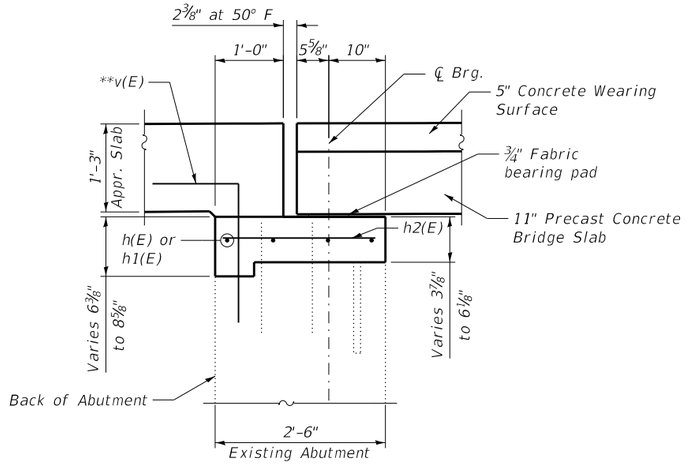
LEGEND

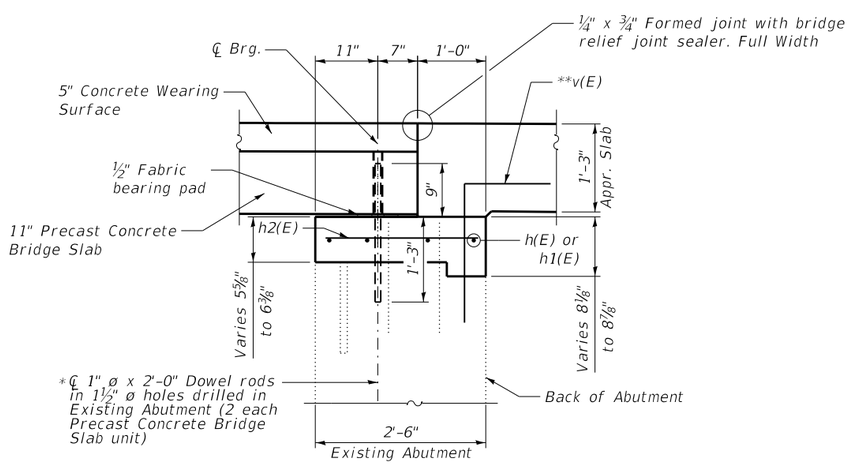
Concrete Removal



BAR v(E)



SECTION THRU SOUTH ABUTMENT
(Horiz. dim. at Rt. ℄'s)



SECTION THRU NORTH ABUTMENT
(Horiz. dim. at Rt. ℄'s)

* Drill & Grout rods into existing abutments according to Article 584 of the Standard Specifications. Cost included with Precast Concrete Bridge Slab.

** Drill & Grout v(E) bars into existing abutments according to Article 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	8	#6	34'-5"	——
h1(E)	8	#6	37'-0"	——
h2(E)	154	#6	2'-2"	——
v(E)	148	#5	3'-9"	⌐
Structure Excavation			Cu. Yd.	88
Concrete Removal			Cu. Yd.	8.9
Concrete Structures			Cu. Yd.	6.7
Reinforcement Bars, Epoxy Coated			Pound	1,940
Structural Repair of Concrete Depth Equal to or Less Than 5"			Sq. Ft.	112
Granular Backfill for Structures			Cu. Yd.	105

Notes:
Dimensions based on existing plans. Removal of entire Hatch Block is required.
See sheet S2 for temporary sheet piling details and excavation and backfill requirements.
Existing reinforcement shall be cleaned and incorporated into new construction. Cost included in Concrete Removal.
Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using approved bar splicer or anchorage system. Cost included with Concrete Removal.

COLLINS ENGINEERS INC
123 N. Wacker Dr. Suite 900 Chicago, IL 60606
Tele. (312) 704-9300 Fax. (312) 704-9320 www.collinsengr.com
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

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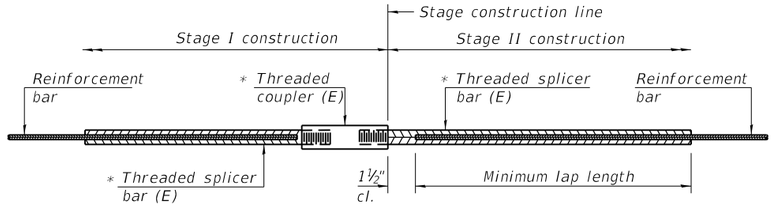
PLOT SCALE = 6±8.0000 '± / in.	DRAWN - JPG	REVISED -
PLOT DATE = 11/9/2018	CHECKED - AMS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS
STRUCTURE NO. 016-2544
SHEET NO. S25 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	63
		CONTRACT NO. 62F30		
		ILLINOIS	FED. AID PROJECT	

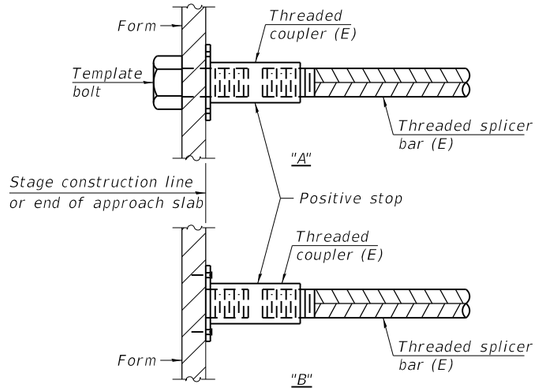


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1½" + thread length

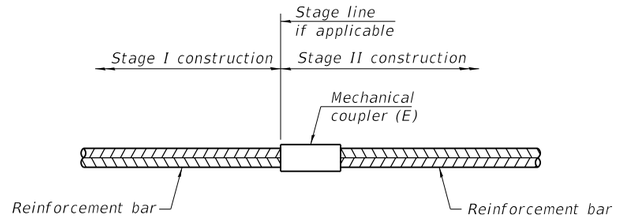
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#4	25	2'-6"
Approaches	#5	87	3'-4"
Approaches	#8	115	4'-9"
Approach Footings	#5	80	3'-0"
Abutments	#6	8	4'-0"



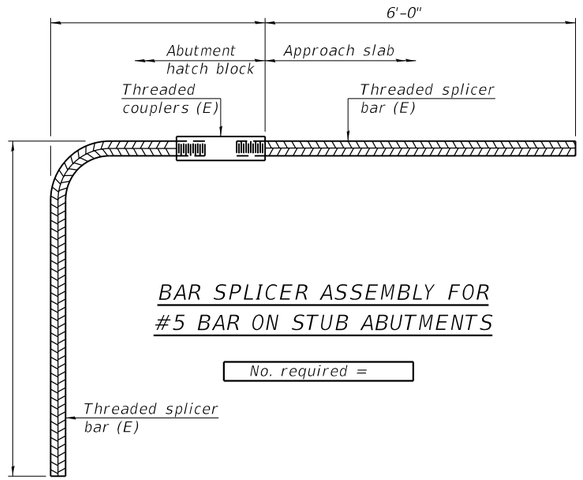
INSTALLATION AND SETTING METHODS

"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



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.

BSD-1

2-17-2017

COLLINS ENGINEERS, INC.
123 N. Wacker Dr. Suite 900 Chicago, IL 60606
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PLOT DATE = 11/9/2018	CHECKED - AMS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-2544
SHEET NO. S26 OF S26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	64
		CONTRACT NO. 62F30		
	ILLINOIS	FED. AID PROJECT		

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	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
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PLOT DATE = 10/19/2018

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
CROSS SECTIONS

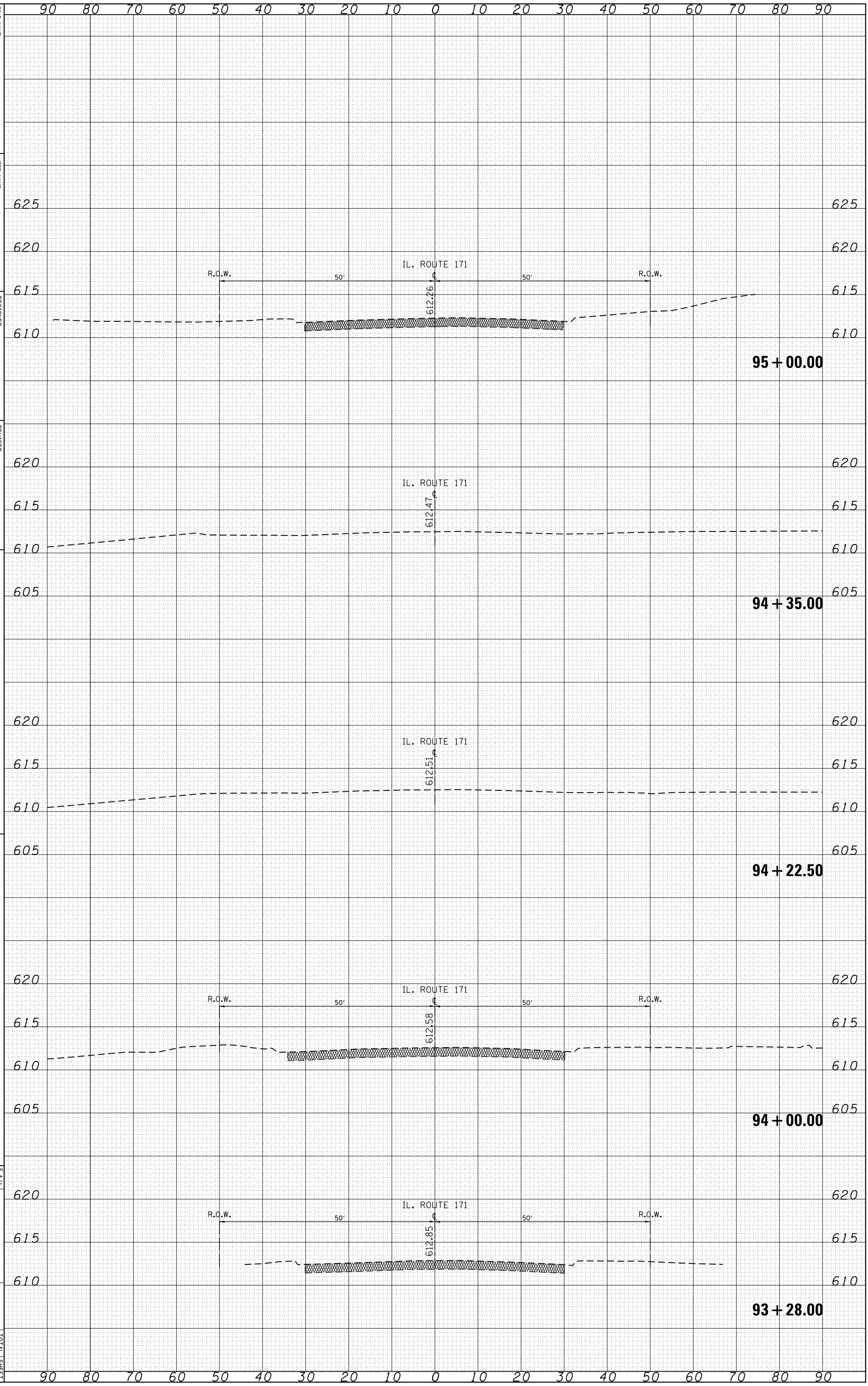
SCALE:

SHEET 0F SHEETS STA. 93+28.00 TO STA. 95+00.00

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	65

ILLINOIS FED. AID PROJECT

CONTRACT NO. 62F30



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NOTE BOOK	SURVEYED		
	PLOTTED		
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NO.	AREAS		
	AREAS CHECKED		

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NOTE BOOK	SURVEYED		
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PLOT DATE = 10/19/2018

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
CROSS SECTIONS

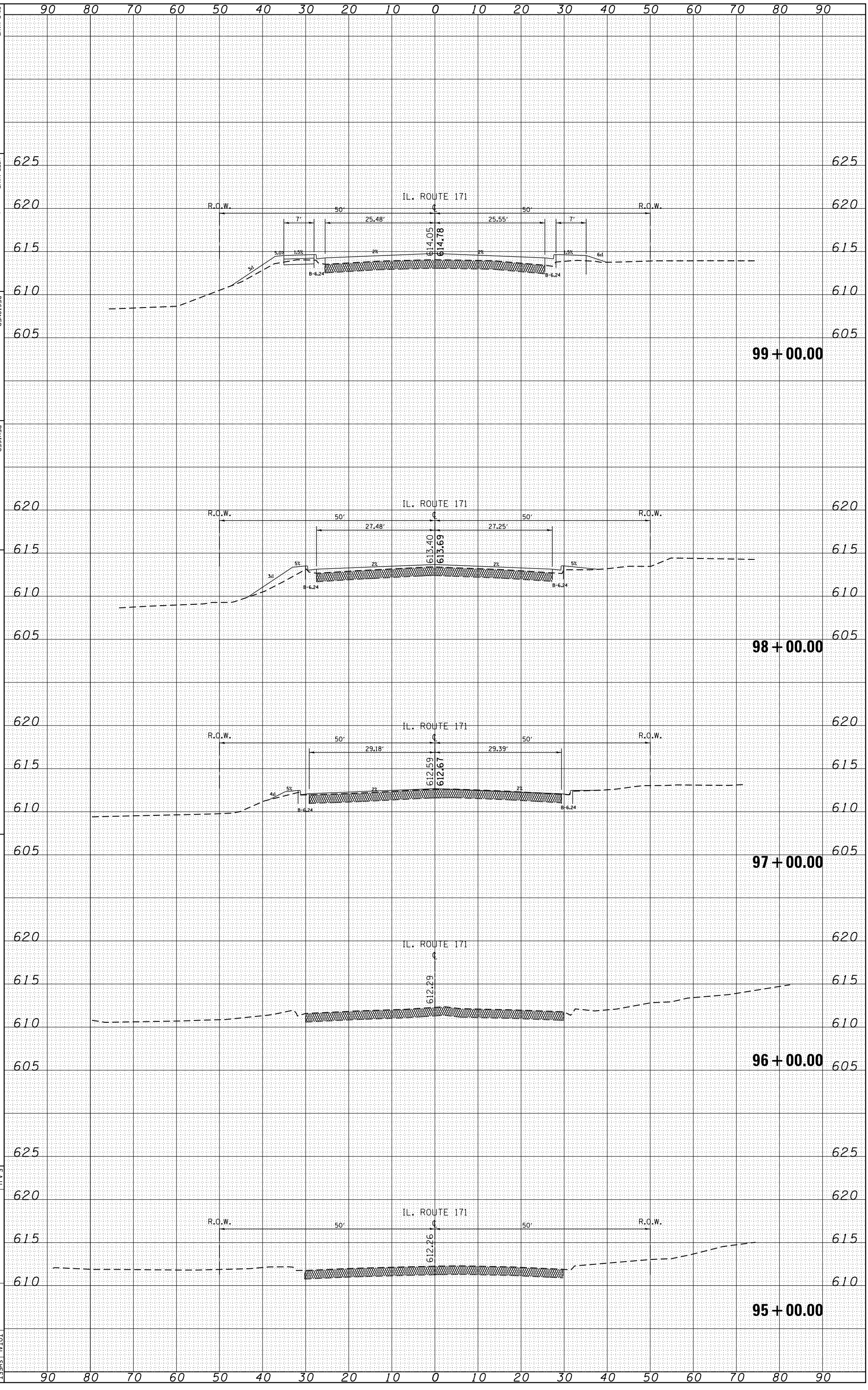
SCALE:

SHEET 0F SHEETS STA. 95+00.00 TO STA. 98+00.00

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	66

ILLINOIS FED. AID PROJECT

CONTRACT NO. 62F30



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DATE	-	

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REVISED	-	
REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 171 OVER INGREDION RAILROAD
CROSS SECTIONS

SCALE: 1" = 20'

SHEET OF SHEETS STA. 99+00.00 TO STA.100+00.00

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	67

ILLINOIS FED. AID PROJECT

CONTRACT NO. 62F30

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90

620 615 610 605 600 595

IL. ROUTE 171 ℄

171.24′ 19.79′ 20.45′ 95′

600.85

103+00.00

625 620 615 610 605

IL. ROUTE 171 ℄

180′ 22.32′ 22.92′ 108′

607.23

102+00.00

620 615 610 605

IL. ROUTE 171 ℄

188′ 6′ 5.2′ 24′ 24′ 5.3′ 6′ 120′

CROSSWALK CROSSWALK

613.22 613.32

RAMP RAMP

5.0% 1.5% 2.3% 1.5% 1.39%

101+00.00

620 615 610 605

IL. ROUTE 171 ℄

186′ 6′ 5.2′ 24′ 24.33′ 5.6′ 6′ 123′

CROSSWALK CROSSWALK

614.09 614.28

RAMP RAMP

3.0% 1.5% 2.5% 2% 2.5% 3.0% 1.5% 4.15%

100+78.74

625 620 615 610 605

R.O.W. R.O.W.

IL. ROUTE 171 ℄

63′ 72′

1′ 7.583′ 2′ 24′ 24′ 2′ 7.583′ 1′

615.14 615.79

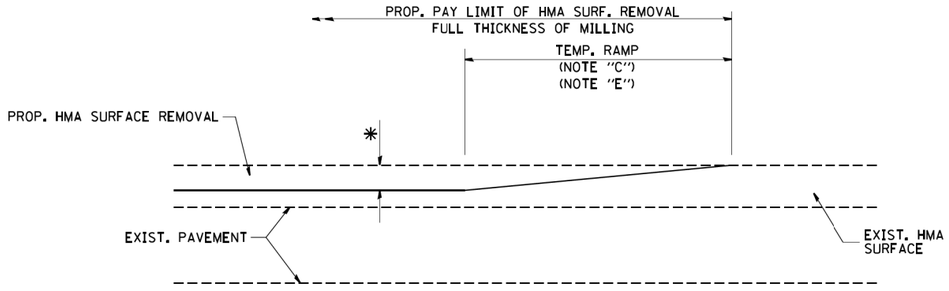
IL 171 over Ingredion Railroad

1.563% 1.563%

100+00.00

605 600 595

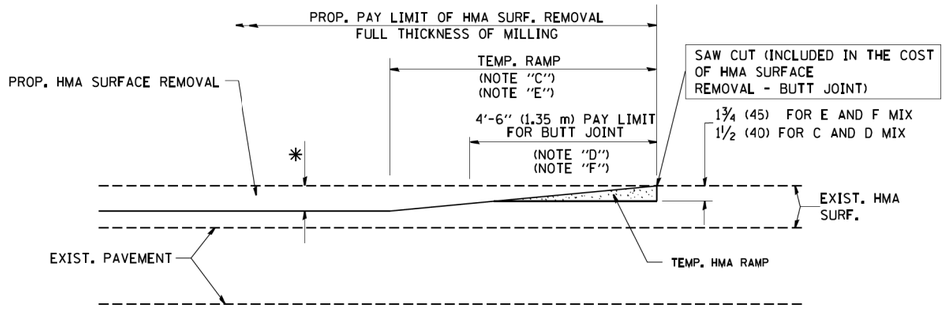
90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

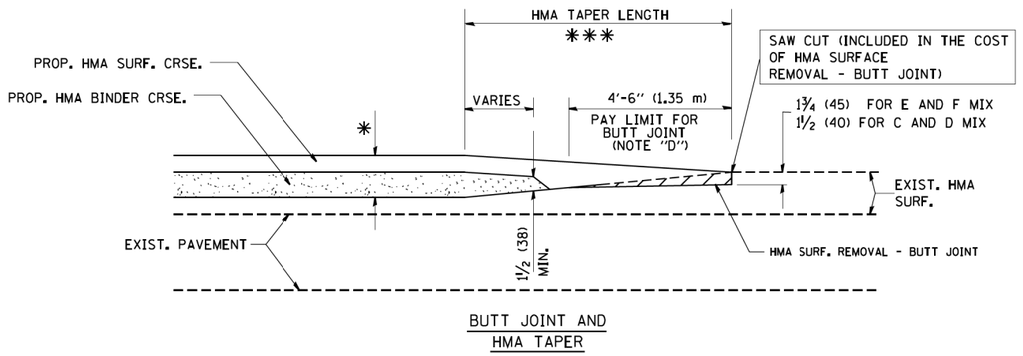


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

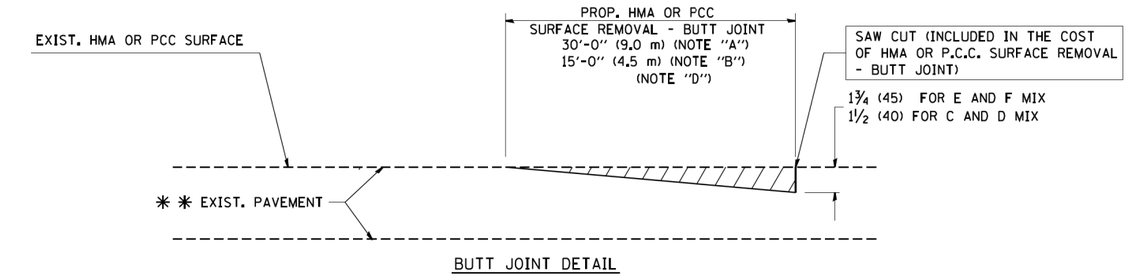
OPTION 2

TYPICAL TEMPORARY RAMP

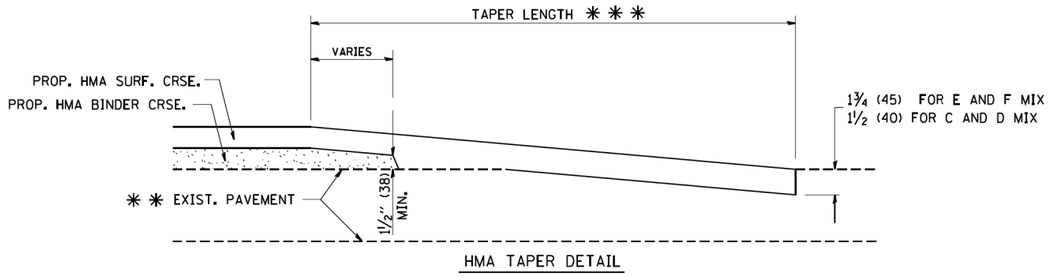


BUTT JOINT AND HMA TAPER

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.

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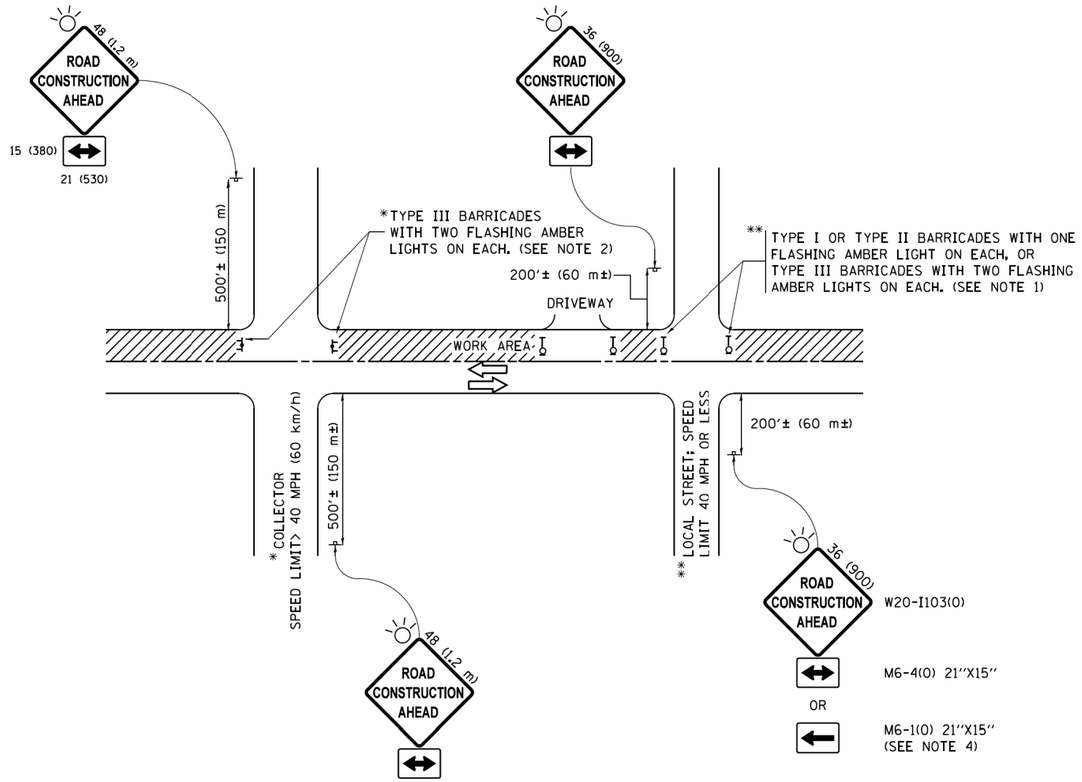
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	68
	BD400-05 BD32	CONTRACT NO. 62F30		
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.

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	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

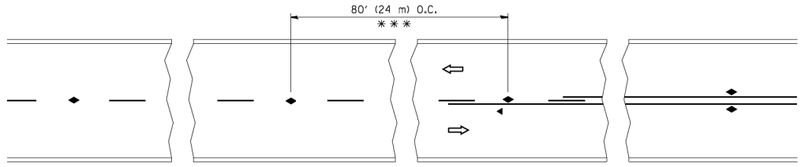
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

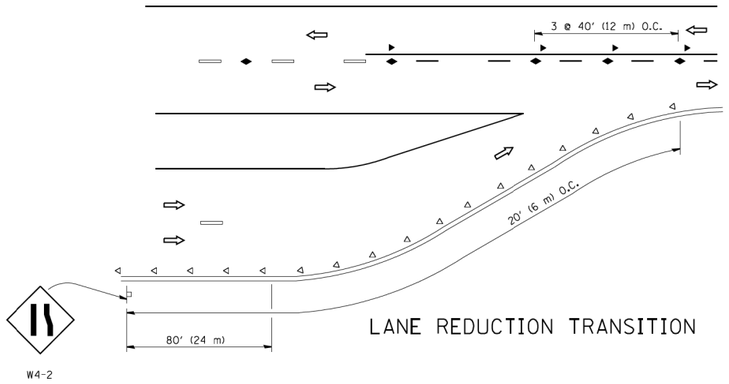
F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	69
	TC-10	CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

tc10.dgn 9/15/2016 12:46:49 PM User:footemj

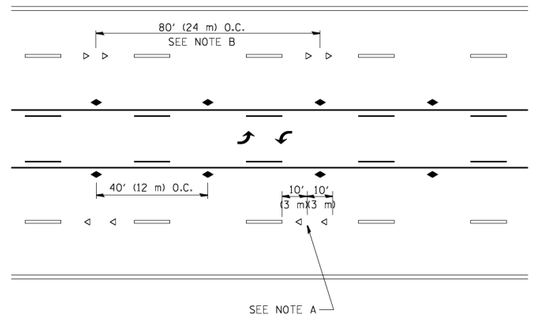


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

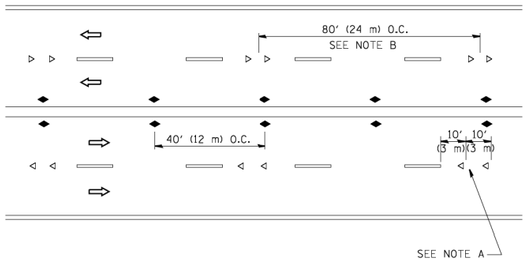
TWO-LANE/TWO-WAY



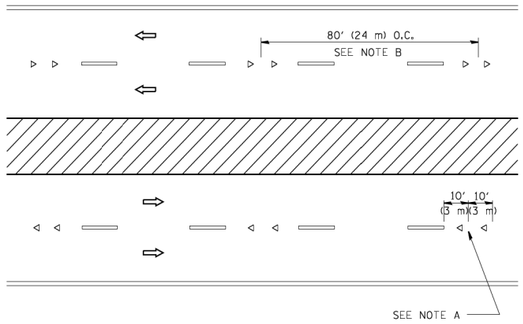
LANE REDUCTION TRANSITION



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

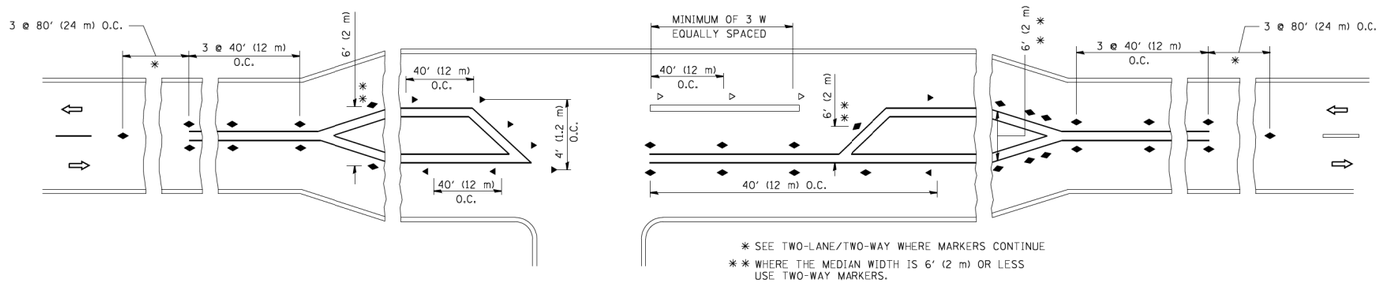
LANE MARKER NOTES

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

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

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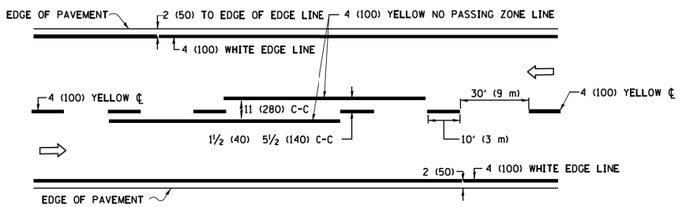
		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

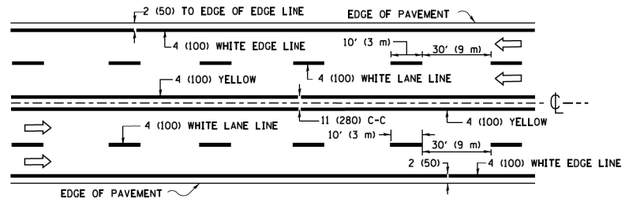
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

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

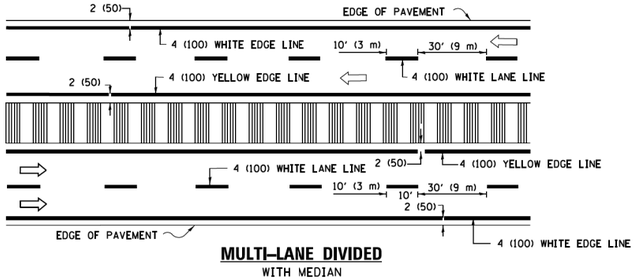
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	70
	TC-11	CONTRACT NO. 62F30		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2–LANE ROADWAY

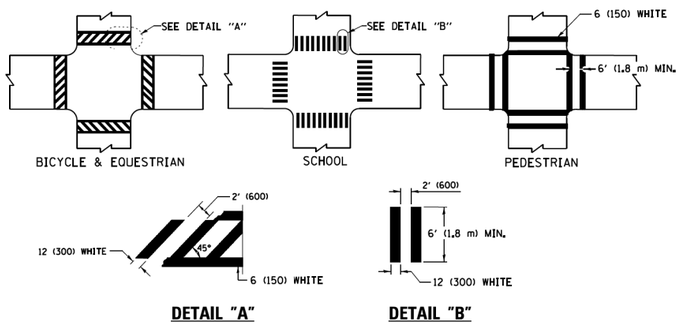


MULTI–LANE UNDIVIDED



MULTI–LANE DIVIDED
WITH MEDIAN

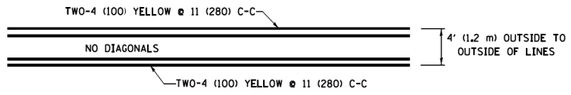
TYPICAL LANE AND EDGE LINE MARKING



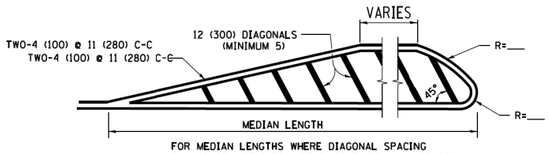
DETAIL "A" **DETAIL "B"**

TYPICAL CROSSWALK MARKING

✳ MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



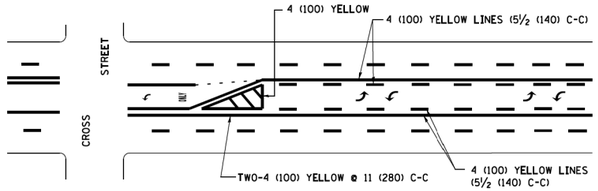
4' (1.2 m) WIDE MEDIANS ONLY



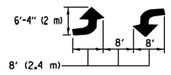
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

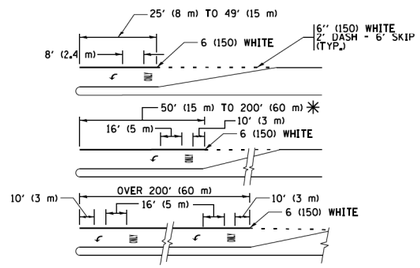


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO–WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

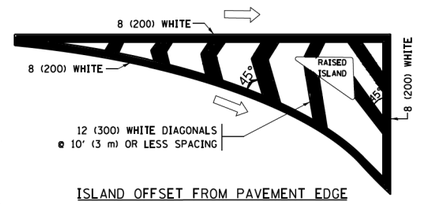


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1.9 m^2)

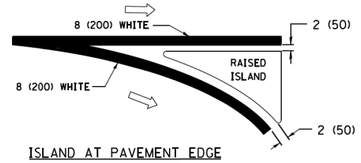
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

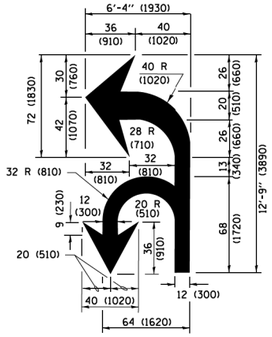


ISLAND OFFSET FROM PAVEMENT EDGE

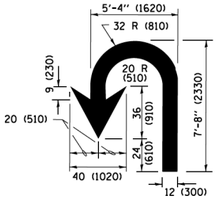


ISLAND AT PAVEMENT EDGE

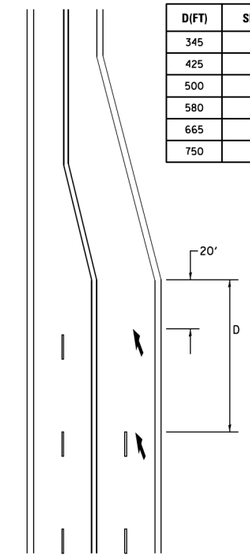
TYPICAL ISLAND MARKING



COMBINATION LEFT AND U–TURN



U–TURN



LANE REDUCTION TRANSITION

✳ LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1,8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1,8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1,2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3,6 SQ. FT. (0,33 m^2) EACH "X"=54,0 SQ. FT. (5,0 m^2)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16,3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30,4 SF

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

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

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Default	PLOT DATE = 6/23/2017	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	71
	TC-13	CONTRACT NO. 62F30		
	ILLINOIS FED. AID PROJECT			

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

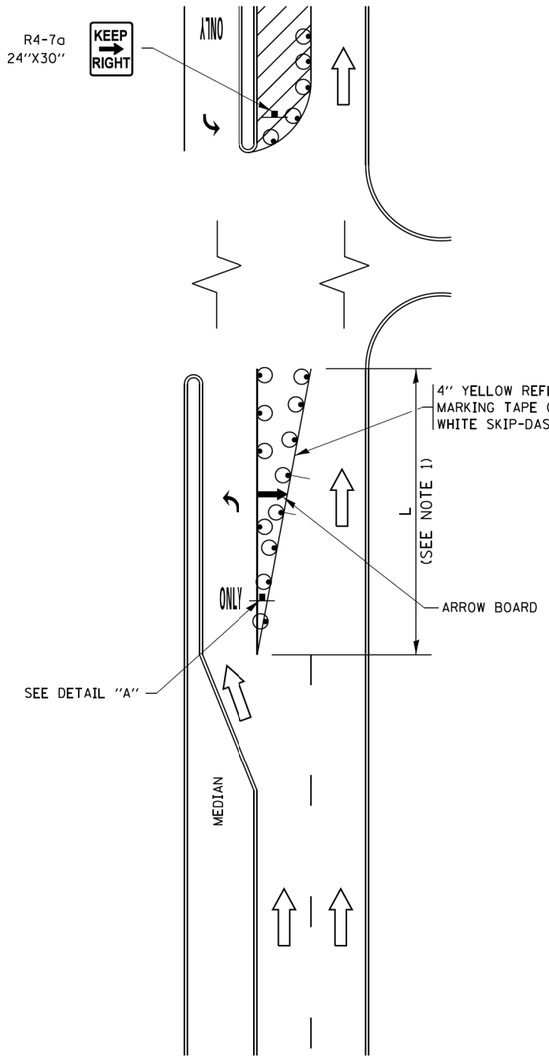


FIGURE 1

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 ≤ 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-I10OR 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.

6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.

7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.

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

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

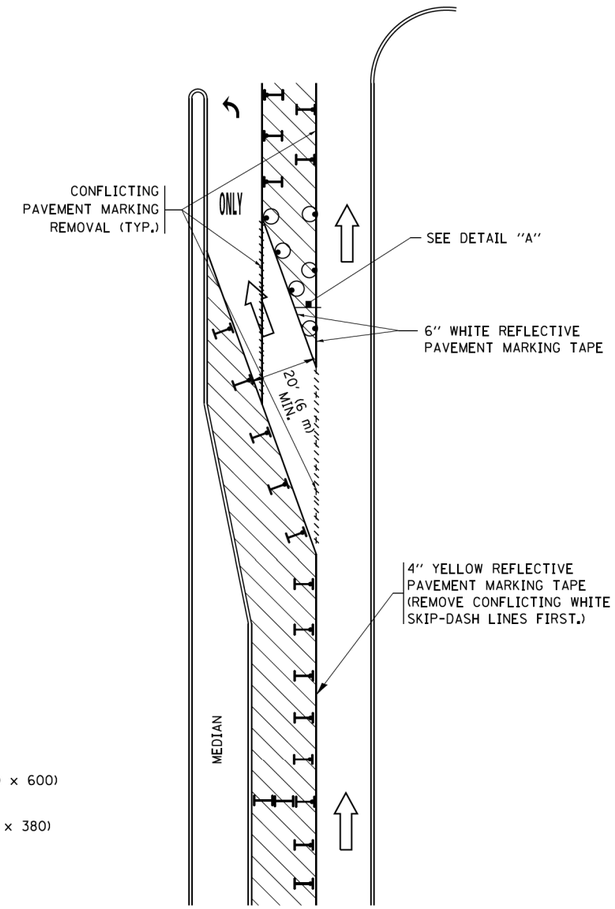
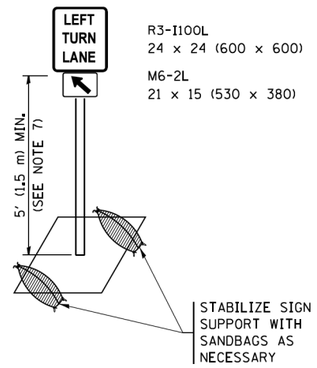


FIGURE 2



DETAIL A

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

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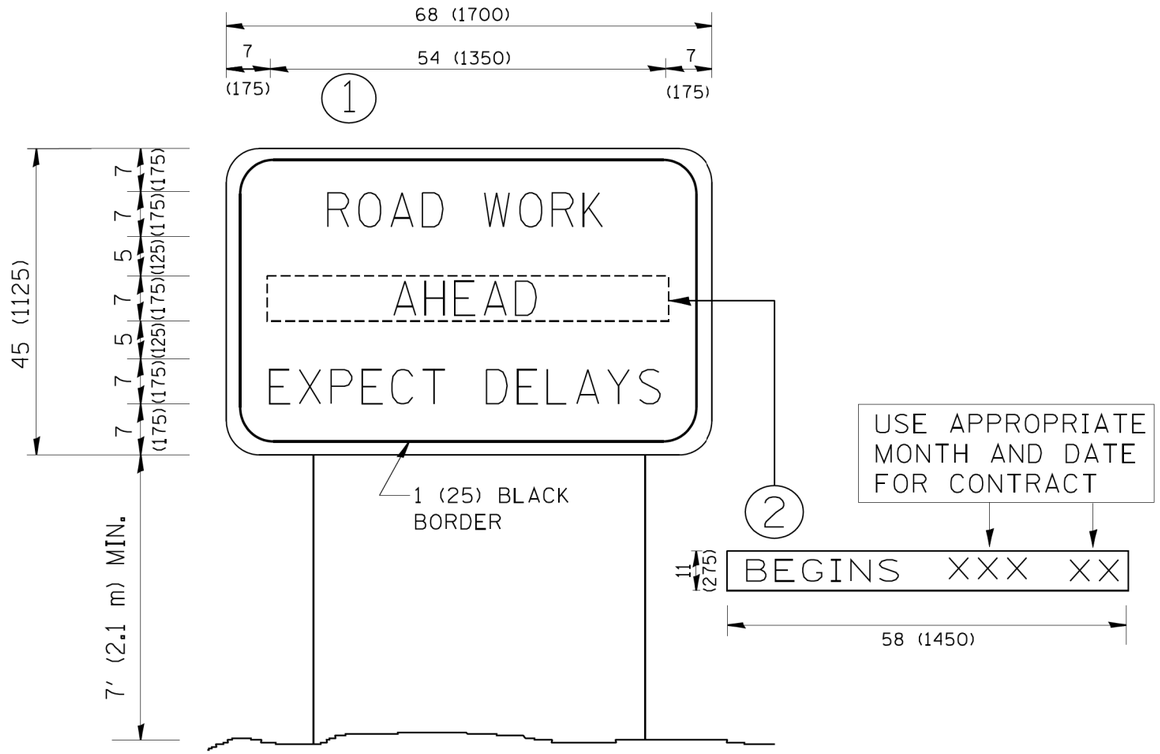
	PLOT SCALE = 50.0000 ' / in.	REVISED - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13		
	PLOT DATE = 9/15/2016	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.
		REVISED -T. RAMMACHER 01-06-00	REVISED -		

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	72
	TC-14	CONTRACT NO. 62F30		
	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.

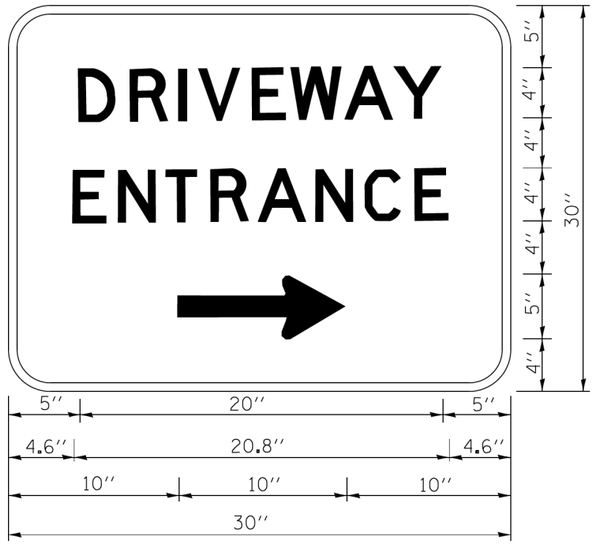
FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	73
	TC-22	CONTRACT NO. 62F30		
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'' × 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''.

FILE NAME = c:\pw_work\pwidot\gaglianobt\d0108315\tc26.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
		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.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3565	46VB-2-BR	COOK	74	74
	TC-26	CONTRACT NO. 62F30		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

tc26.dgn 12/13/2012 2:26:37 PM User:gaglianobt