06-16-2023 LETTING ITEM 119

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	1
	ILLINOIS	CONTRACT NO. 62H52		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

FAP ROUTE 344: IL ROUTE 83 (127TH STREET)
OVER CAL SAG CHANNEL
SECTION 2018-125-B-R
BRIDGE REHABILITATION / NEW DECK
PROJECT: NHPP-YTXJ(168)
COOK COUNTY
C-91-262-19

DESIGN DESIGNATION

IL 83 (127TH): PRINCIPAL ARTERIAL

IL 83 (127TH) ADT 26,500 (2015)

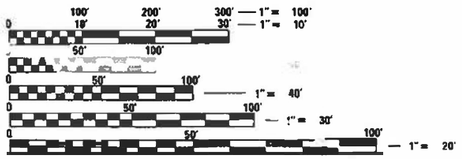
DESIGN SPEED (POSTED SPEED)
IL 83 (127TH) 40 MPH (40 MPH)

IMPROVEMENT LOCATED IN VILLAGES OF ALSIP AND CRESTWOOD

IMPROVEMENT LOCATION
IL 83 (127TH)
OVER CAL SAG CHANNEL
STRUCTURE NO. 016-0570

BEGIN STA. 1274+60 (IL 83)

END STA. 1285+43 (IL 83)



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 EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: MS. ANA ABREU
PROJECT MANAGER: MR. SULEYMAN TULGAR, P.E.

CONTRACT NO. 62H52

GROSS LENGTH = 1056 FT. = 0.20 MILE
NET LENGTH = 1056 FT. = 0.20 MILE

RASHESHKUMAR D. PATEL
062-064617
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

SINGH & ASSOCIATES, INC
RASHESH D. PATEL, P.E.
NO. 062-064617
EXP.: 11/30/2023
SHEETS 30 -41

VYTAS PELEGRIMAS
062-062214
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

SINGH & ASSOCIATES, INC
VYTAS PELEGRIMAS, P.E.
NO. 062-062214
EXP.: 11/30/2023
SHEET 13

DAVID W. BLOCK
062-050966
LICENSED PROFESSIONAL ENGINEER OF
STATE OF ILLINOIS

TRANSYSTEMS
DAVID W. BLOCK, P.E.
NO. 062-050966
EXP.: 11/30/2023
SHEETS 18-28 & 131-137

STATE OF ILLINOIS
EWA K. MROCZEK
081-006067
LICENSED STRUCTURAL ENGINEER

COLLINS ENGINEERS, INC.
EWA MROCZEK, P.E., S.E.
NO. 081-006067
EXP.: 11/30/2024
SHEETS 42-111

ZACHARY J. TANNER
062-068582
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

COLLINS ENGINEERS, INC.
ZACHARY TANNER, P.E.
NO. 062-068582
EXPIRES 11-30-2023
SHEETS 2-12, 14-17 & 29

COLLINS ENGINEERS INC
550 W. JACKSON BLVD., SUITE 1200
CHICAGO, IL 60661
(312) 704-9300
ILLINOIS PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-000993

D-91-068-19

LOCATION OF SECTION INDICATED THUS: —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED February 24 20 23
REGIONAL ENGINEER

May 12, 2023
ENGINEER OF DESIGN AND ENVIRONMENT

May 12, 2023
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
424006-05	DIAGONAL CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
515001-04	NAME PLATE FOR BRIDGES
602001-02	CATCH BASIN, TYPE A
602601-06	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-05	FRAME AND LIDS, TYPE 1
604091-05	FRAME AND GRATE, TYPE 24
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
630001-12	STEEL PLATE BEAM GUARDRAIL
630116	BACK SIDE PROTECTION OF GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-10	TRAFFIC BARRIER TERMINAL, TYPE 2
631031-18	TRAFFIC BARRIER TERMINAL, TYPE 6
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24"" FROM PAVEMENT EDGE
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
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
729001-01	APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS)
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARIER WALL REFLECTOR MOUNTING DETAILS
812001-01	RACEWAYS EMBEDDED IN STRUCTURE

COMMITMENTS

NONE.

GENERAL NOTES:

1 ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2022 HEREIN AFTER REFERRED TO AS THE STANDARD SPECIFICATIONS, THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2023. THE LATEST EDITION OF THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, THE DETAILS IN THE PLANS, AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

2 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).

3 THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT PRIOR WRITTEN PERMISSION FROM THE DEPARTMENT.

4 THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH AFFECTED UTILITY COMPANIES, THE VILLAGE OF ALSIP AND THE VILLAGE OF CRESTWOOD.

5 TEN (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.

6 PRIOR TO EMBANKMENT PLACEMENT, ALL VEGETATION, LOOSE MATERIAL, AND UNSTABLE MATERIAL SHOULD BE REMOVED TO DEPTH ENCOUNTERED AND REPLACED WITH SUITABLE EMBANKMENT MATERIAL. ANY EMBANKMENT WIDENING ON EXISTING SLOPES SHOULD BE BENCHED IN ACCORDANCE WITH ARTICLE 205.04 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

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

8 FOR WORK OUTSIDE THE LIMITS OF THE APPROACH PAVEMENT, 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, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.

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

10 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.

11 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.

12 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.

13 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.

14 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.

15 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.

16 DRAINAGE AND UTILITY ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

GENERAL NOTES (CONT.):

18 DO NOT SCALE PLANS FOR CONSTRUCTION PURPOSES.

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

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

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 BEFORE ORDERING FLOOR DRAINS AND SCUPPERS, THE CONTRACTOR SHALL REVIEW THE EXISTING FIELD CONDITIONS AND THE DRAINAGE SCHEDULES FOUND IN THE PLANS FOR THE LENGTH AND QUANTITY REQUIRED.

23 PHOSPHORUS FERTILIZER HAS BEEN INTENTIONALLY OMITTED FROM THE CONTRACT. A PHOSPHOROUS-FREE FERTILIZER SHALL BE USED (MIDDLE NUMBER SHOULD EQUAL ZERO).

24 THE CONTRACTOR SHALL PROVIDE AT LEAST TWO WEEKS OF NOTICE OF THE CLOSURE, FOR PACE TO PREPARE AND DISTRIBUTE NOTICES TO TRANSIT RIDERS OF THE RESULTING TEMPORARY CHANGE TO THE BUS ROUTE. PLEASE PROVIDE THIS NOTICE BY EMAIL AT TRANSPORTATION.ENGINEER@PACEBUS.COM.

25 THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXLE TRUCK.

26 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION AND/OR AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAVE BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT OF THE ABOVE ITEM WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED, AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

27 ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECT BY THE ENGINEER AT CONTRACTOR EXPENSE.

28 THE AGGREGATE GRADATION FOR THE AGGREGATE SUBGRADE IMPROVEMENT 12" LOWER LIFT SHALL BE CS 1 OR RR 1.

29 FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.

30 STORM SEWER CONSTRUCTED UNDER THE ROADWAY SHALL BE BACKFILLED ACCORDING TO METHOD 1 OF ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS.

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

32 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION OF ALL EMERGENCY SERVICES, SCHOOL DISTRICTS, I.D.O.T.'S COMMUNICATIONS CENTER, SPRINGFIELD TRUCK PERMIT SECTION AND OTHER AGENCIES AFFECTED BY THE CLOSURE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR POSTING SIGNS THAT WILL INDICATE THE DATES THE CLOSURE WILL BE IN PLACE.

33 EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

34 THIS PROJECT REQUIRES A US ARMY CORPS OF ENGINEERS (USACE) 404 PERMIT THAT WILL BE SECURED BY THE DEPARTMENT AS A CONDITION OF THIS PERMIT. THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN TO THE DEPARTMENT FOR APPROVAL. GUIDELINES ON ACCEPTABLE IN-STREAM WORK TECHNIQUES CAN BE FOUND ON THE USACE WEB SITE. THE USACE DEFINES AND DETERMINES IN-STREAM WORK. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE PROVISIONS TO PREPARE AND IMPLEMENT AN IN-STREAM WORK PLAN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

COLLINS ENGINEERS INC

USER NAME = ztanner	DESIGNED - OLR	REVISED -
	DRAWN - OLR	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - ZJT	REVISED -
PLOT DATE = 3/13/2023	DATE - 2/24/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 83 OVER CAL SAG CHANNEL
INDEX OF SHEETS, GENERAL NOTES, AND HIGHWAY STANDARDS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	2
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 80% FEDERAL 20% STATE — BRIDGE 0013 S.N.016-0570	CONSTRUCTION CODE: 100&ALSIP — HIGHWAY LIGHTING 0021 URBAN
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	60	60	
20200100	EARTH EXCAVATION	CU YD	125	125	
20800150	TRENCH BACKFILL	CU YD	251	251	
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	57	57	
25000210	SEEDING, CLASS 2A	ACRE	0.25	0.25	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	23	23	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	23	23	
25100115	MULCH, METHOD 2	ACRE	1	1	
25200110	SODDING, SALT TOLERANT	SQ YD	854	854	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	100	100	
28000400	PERIMETER EROSION BARRIER	FOOT	1336	1336	
28000510	INLET FILTERS	EACH	39	39	
28100105	STONE RIPRAP, CLASS A3	SQ YD	60	60	
28100711	STONE DUMPED RIPRAP, CLASS A6	SQ YD	450	450	

LEGEND:
* - DENOTES SPECIALTY ITEM

COLLINS ENGINEERS INC.

USER NAME = orush	DESIGNED - OLR	REVISED -
	DRAWN - OLR	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - ZJT	REVISED -
PLOT DATE = 3/1/2023	DATE - 2/24/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL RTE 83 (127TH STREET)

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	3
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 80% FEDERAL 20% STATE BRIDGE 0013 S.N.016-0570	CONSTRUCTION CODE: 100&ALSIP HIGHWAY LIGHTING 0021 URBAN
28200200	FILTER FABRIC	SQ YD	60	60	
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	50	50	
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	544	544	
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	12	12	
35102000	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	57	57	
35501324	HOT-MIX ASPHALT BASE COURSE, 10"	SQ YD	27	27	
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	1	1	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	554	554	
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	7	7	
40604172	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70	TON	18	18	
42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	410	410	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	103	103	
44000100	PAVEMENT REMOVAL	SQ YD	245	245	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	669	669	

LEGEND:
* - DENOTES SPECIALTY ITEM

COLLINS ENGINEERS INC.

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	DRAWN - OLR	REVISED -
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PLOT DATE = 3/1/2023	DATE - 2/24/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL RTE 83 (127TH STREET)

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	4
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 80% FEDERAL 20% STATE — BRIDGE 0013 S.N.016-0570	CONSTRUCTION CODE: 100&ALSIP — HIGHWAY LIGHTING 0021 URBAN
44000600	SIDEWALK REMOVAL	SQ FT	224	224	
44003100	MEDIAN REMOVAL	SQ FT	593	593	
44201833	CLASS D PATCHES, TYPE IV, 15 INCH	SQ YD	125	125	
48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	207	207	
50102400	CONCRETE REMOVAL	CU YD	20.4	20.4	
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1	1	
50157300	PROTECTIVE SHIELD	SQ YD	3200	3200	
50300225	CONCRETE STRUCTURES	CU YD	67.7	67.7	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	1475.3	1475.3	
50300260	BRIDGE DECK GROOVING	SQ YD	4171	4171	
50300300	PROTECTIVE COAT	SQ YD	6491	6491	
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	211	211	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	65190	65190	
50500505	STUD SHEAR CONNECTORS	EACH	3780	3780	

LEGEND:
* - DENOTES SPECIALTY ITEM

COLLINS ENGINEERS INC.

USER NAME = orush	DESIGNED - OLR	REVISED -
	DRAWN - OLR	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - ZJT	REVISED -
PLOT DATE = 3/1/2023	DATE - 2/24/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL RTE 83 (127TH STREET)

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	5
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 80% FEDERAL 20% STATE — BRIDGE 0013 S.N.016-0570	CONSTRUCTION CODE: 100&ALSIP — HIGHWAY LIGHTING 0021 URBAN
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	466780	466780	
50901720	BICYCLE RAILING	FOOT	2150	2150	
50901750	PARAPET RAILING	FOOT	1320	1320	
51500100	NAME PLATES	EACH	1	1	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	542	542	
52000208	FINGER PLATE EXPANSION JOINT, 3"	FOOT	78	78	
52000600	FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	85	85	
52100540	ANCHOR BOLTS, 1 1/2"	EACH	2	2	
52318802	DRAINAGE SYSTEM FOR STRUCTURES	L SUM	1	1	
54261315	CONCRETE END SECTION, STANDARD 542001, 15", 1:3	EACH	1	1	
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	180	180	
550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	283	283	
59000200	EPOXY CRACK INJECTION	FOOT	71	71	
60108300	PIPE UNDERDRAINS 8" (SPECIAL)	FOOT	250	250	

LEGEND:
* - DENOTES SPECIALTY ITEM

				CONSTRUCTION CODE	
				80% FEDERAL 20% STATE	100% ALSIP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	HIGHWAY LIGHTING
				0013	0021
				S.N.016-0570	URBAN
60200205	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1	
60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	5	5	
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	575	575	
60619200	CONCRETE MEDIAN, TYPE SB-6.06	SQ FT	193	193	
60619600	CONCRETE MEDIAN, TYPE SB-6.12	SQ FT	224	224	
60920015	PIPE CULVERTS TO BE CLEANED 15"	FOOT	225	225	
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	300	300	
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2	
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2	
63200310	GUARDRAIL REMOVAL	FOOT	596	596	
X6700410	ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	24	24	
67100100	MOBILIZATION	L SUM	1	1	
70307100	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - TYPE IV TAPE	SQ FT	340	340	

LEGEND:
* - DENOTES SPECIALTY ITEM

COLLINS ENGINEERS INC.

USER NAME = ztanner	DESIGNED - OLR	REVISED -
	DRAWN - OLR	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - ZJT	REVISED -
PLOT DATE = 3/24/2023	DATE - 2/24/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL RTE 83 (127TH STREET)

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	7
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 80% FEDERAL 20% STATE BRIDGE 0013 S.N.016-0570	CONSTRUCTION CODE: 100&ALSIP HIGHWAY LIGHTING 0021 URBAN
	70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	5135	5135	
	70307130	TEMPORARY PAVEMENT MARKING - LINE 6" - TYPE IV TAPE	FOOT	5977	5977	
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	875	875	
*	72000100	SIGN PANEL - TYPE 1	SQ FT	4.5	4.5	
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2	
*	72900100	METAL POST - TYPE A	FOOT	21	21	
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	4145	4145	
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	8	8	
*	78112000	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	336	336	
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	5	5	
	78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	4327	4327	
*	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	1	
*	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1	
*	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	150	150	

LEGEND:
* - DENOTES SPECIALTY ITEM

COLLINS ENGINEERS INC.

USER NAME = crush	DESIGNED - OLR	REVISED -
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PLOT DATE = 3/1/2023	DATE - 2/24/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL RTE 83 (127TH STREET)

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	8
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 80% FEDERAL 20% STATE BRIDGE 0013 S.N.016-0570	CONSTRUCTION CODE: 100&ALSIP HIGHWAY LIGHTING 0021 URBAN
*	81100300	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	940	940	
*	81100320	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., PVC COATED GALVANIZED STEEL	FOOT	1095	1095	
*	81104580	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., STAINLESS STEEL	FOOT	20	20	
*	81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	720	720	
*	81300220	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	18	18	
*	81300320	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 8" X 8" X 6"	EACH	2	2	
*	81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	4	4	
*	81603020	UNIT DUCT, 600V, 3-1C NO.10, 1/C NO.10 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE	FOOT	185	185	
*	81603090	UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	250	0	250
*	81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	9243	9243	
*	81702140	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	600	600	
*	82110021	LUMINAIRE, LED, UNDERPASS, WALLMOUNT, OUTPUT DESIGNATION D	EACH	12	12	
*	82200605	WATERWAY OBSTRUCTION WARNING LUMINAIRE, LED	EACH	6	6	
*	82600106	OBSTRUCTION WARNING LIGHTINGCONTROLLER	EACH	1	1	

LEGEND:
* - DENOTES SPECIALTY ITEM

					CONSTRUCTION CODE	
					80% FEDERAL 20% STATE	100&ALSIP
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0013 S.N.016-0570	HIGHWAY LIGHTING 0021 URBAN
*	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	14	0	14
*	84100110	REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	3	3	
*	84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	12	12	
*	84200804	REMOVAL OF POLE FOUNDATION	EACH	2	0	2
*	84301201	REMOVAL OF OBSTRUCTION WARNING LIGHTING SYSTEM	L SUM	1	1	
*	84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	2	0	2
*	84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1	1	
*	84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1	1	
	X0322390	STRAIGHTEN BENT MEMBER	EACH	3	3	
	X0323491	SLOPE WALL CRACK SEALING	FOOT	86	86	
	X0327036	BIKE PATH REMOVAL	SQ YD	92	92	
	X0327408	REINSTALL RUBBER FENDER SYSTEM	L SUM	1	1	
	X1200160	CONNECTION TO EXISTING DRAINAGE STRUCTURE	EACH	2	2	
	X5067500	BRIDGE CLEANING AND PAINTING WARRANTY	L SUM	1	1	

LEGEND:
* - DENOTES SPECIALTY ITEM

COLLINS ENGINEERS INC.

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PLOT DATE = 3/1/2023	DATE - 2/24/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL RTE 83 (127TH STREET)

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	10
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

				CONSTRUCTION CODE	
				80% FEDERAL 20% STATE	100&ALSIP
				BRIDGE	HIGHWAY LIGHTING
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0013 S.N.016-0570	0021 URBAN
X5537600	STORM SEWERS TO BE CLEANED 8"	FOOT	62	62	
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	200	200	
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	1	1	
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	54950	54950	
Z0001905	STRUCTURAL STEEL REPAIR	POUND	112090	112090	
Z0004552	APPROACH SLAB REMOVAL	SQ YD	516	516	
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1	
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	1346	1346	
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	138	138	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
Z0018002	DRAINAGE SCUPPERS, DS-11	EACH	30	30	
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	2	2	

LEGEND:
* - DENOTES SPECIALTY ITEM

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 80% FEDERAL 20% STATE BRIDGE 0013 S.N.016-0570	CONSTRUCTION CODE: 100&ALSIP HIGHWAY LIGHTING 0021 URBAN
	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	68	68	
*	Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	12	12	
	Z0065700	SLOPE WALL REPAIR	SQ YD	95	95	
	Z0065730	SLOPE WALL SLURRY PUMPING	CU YD	6	6	
	Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	3	3	
*	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	3	3	
*	Z0012753	UNDERWATER CONCRETE REPAIR	SQFT	24	24	
Ø	Z0076600	**TRAINEES**	**HOURS**	**1500**	**1500**	
Ø	Z0076604	**TRAINEES - TRAINING PROGRAM GRADUATE**	**HOURS**	**1500**	**1500**	

Ø 0042

COLLINS ENGINEERS INC.

USER NAME = orush	DESIGNED - OLR	REVISED -
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PLOT DATE = 3/1/2023	DATE - 2/24/2023	REVISED -

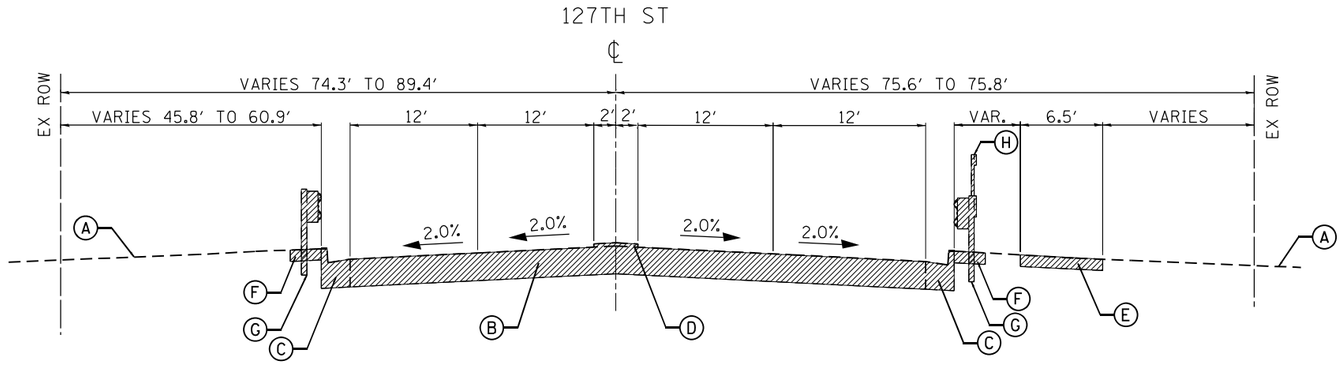
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL RTE 83 (127TH STREET)

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

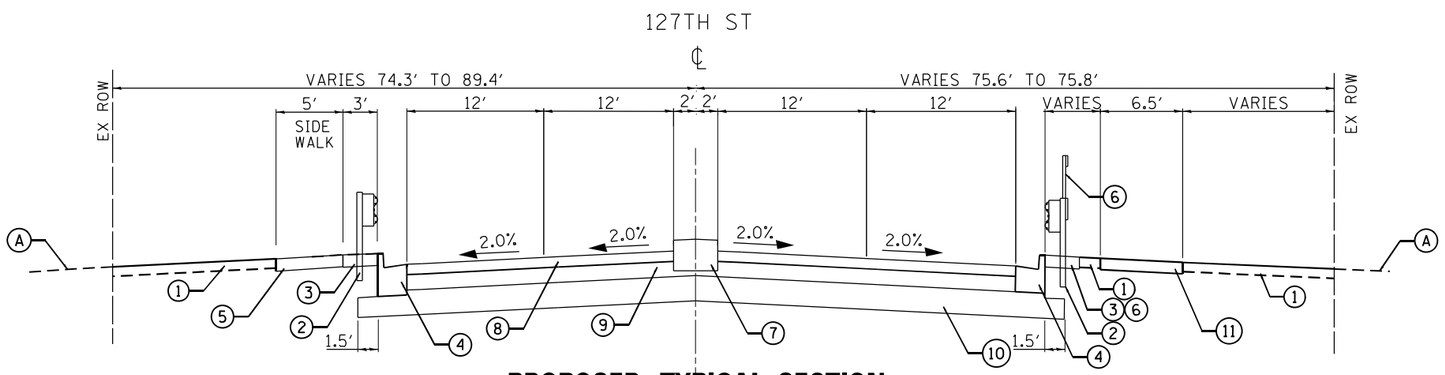
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	12
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

REV-SEP



EXISTING TYPICAL SECTION
IL RTE 83 (127TH STREET)

STA 1274+60.00 TO STA 1285+43.00
(OMIT BRIDGE STA 1276+43.60 TO STA 1282+55.40)



PROPOSED TYPICAL SECTION
IL RTE 83 (127TH STREET)

STA 1274+60.00 TO STA 1285+43.00
(OMIT BRIDGE STA 1275+77.70 TO STA 1283+32.40)

EXISTING LEGEND:

- (A) EXISTING GROUND
- (B) HMA PAVEMENT OR PCC APPROACH PAVEMENT
- (C) PCC CURB & GUTTER, TYPE B-6.24
- (D) PCC MEDIAN
- (E) HMA SHARED-USE PATH
- (F) HMA SHOULDERS
- (G) STEEL PLATE BEAM GUARDRAIL
- (H) BICYCLE RAILING
- REMOVAL ITEMS

PROPOSED LEGEND:

1. TOPSOIL 4''
2. STEEL PLATE BEAM GUARDRAIL
3. HMA SHOULDERS 6''
4. PCC CURB & GUTTER, TYPE B-6.24
5. PCC SIDEWALK, 5''
6. PROPOSED BICYCLE RAILING
7. PROPOSED PCC MEDIAN, TYPE SB-6.06
8. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX ''E'', IL-9.5, N70, 2''
9. HOT-MIX ASPHALT BASE COURSE, 10''
10. AGGREGATE SUBGRADE IMPROVEMENT 12''
11. SHARED-USE PATH
    - HOT-MIX ASPHALT SURFACE COURSE, MIX ''D'', IL-9.5, N50, 2''
    - AGGREGATE BASE COURSE, TYPE B 8''
    - GEOTECHNICAL FABRIC FOR GROUND STABILIZATION

HOT–MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes	QMP
RECONSTRUCTION:		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX ''E'', IL-9.5, N70	4% @ 70 Gyr.	QC/QA
HOT-MIX ASPHALT BASE COURSE, 10'' (HMA BINDER IL-19.0)	4% @ 90 Gyr.	QC/QA
PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB:		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX ''E'', IL-9.5, N70	4% @ 70 Gyr.	QC/QA
HOT-MIX ASPHALT BASE COURSE, IL-19.0, N90	4% @ 90 Gyr.	QC/QA
HMA SHOULDER 6'':		
HOT-MIX ASPHALT BINDER COURSE, N70, 6''	4% @ 70 Gyr.	QC/QA
PATCHING:		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX ''E'', IL-9.5, N70	4% @ 70 Gyr.	QC/QA
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 Gyr.	QC/QA
SHARED-USE PATH:		
HOT-MIX ASPHALT SURFACE COURSE, MIX ''D'', IL-9.5, N50, 2''	4% @ 50 Gyr.	QC/QA

QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA)

HOT–MIX ASPHALT MIXTURE REQUIREMENT NOTES:

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 RECLAIMED MATERIALS SPECIFICATIONS.''

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = vpelegrimas	DESIGNED - SG	REVISED -
	DRAWN - GS	REVISED -
PLOT SCALE = 2 ' / in.	CHECKED - RP	REVISED -
PLOT DATE = 2/27/2023	DATE - 06/01/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	13
		CONTRACT NO. 62H52		
		ILLINOIS FED. AID PROJECT		

20200100					
EARTH EXCAVATION					
LOCATION		EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANK-MENT	EARTHWORK WASTE (+) OR SHORTAGE (-)
STATION	STATION	CU YD	CU YD	CU YD	CU YD
1275+77	1276+00	34.8	26.1	4.6	21.5
1276+00	1276+12	12.7	9.5	1.2	8.4
1282+87	1283+00	15.5	11.6	0.9	10.7
1283+00	1283+22	43.6	32.7	1.2	31.5
1283+22	1283+32	18.5	13.9	0.4	13.5
	TOTAL	125	94	8	86

30300112			
AGGREGATE SUBGRADE IMPROVEMENT 12"			
LOCATION			AREA
ALIGNMENT	FROM STATION	TO STATION	SQ YD
IL 83	1275+77	1276+44	255
IL 83	1282+53	1283+22	253
IL 83	1283+22	1283+32	36
		TOTAL	544

31101200			
SUBBASE GRANULAR MATERIAL, TYPE B 4"			
LOCATION			AREA
ALIGNMENT	FROM STATION	TO STATION	SQ YD
IL 83	1275+64	1275+84	12
		TOTAL	12

35102000			
AGGREGATE BASE COURSE, TYPE B 8"			
LOCATION			AREA
ALIGNMENT	FROM STATION	TO STATION	SQ YD
IL 83	1276+25	1276+54	32
IL 83	1283+15	1283+38	25
		TOTAL	57

35501324			
HMA BASE COURSE, 10"			
LOCATION			AREA
ALIGNMENT	FROM STATION	TO STATION	SQ YD
IL 83	1282+22	1283+32	27
		TOTAL	27

40604060			
HMA SURFACE COURSE, IL-9.5, MIX"D", N50			
LOCATION			WEIGHT
ALIGNMENT	FROM STATION	TO STATION	TON
IL 83	1276+25	1276+54	4
IL 83	1283+15	1283+38	3
		TOTAL	7

40604172			
POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX"E", N70			
LOCATION			WEIGHT
ALIGNMENT	FROM STATION	TO STATION	TON
IL 83	1283+32	1285+19	14
IL 83	1283+22	1283+32	4
		TOTAL	18

42000070				
PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB				
LOCATION				AREA
ALIGNMENT	FROM STATION	TO STATION	LT/RT	SQ YD
IL 83	1275+77	1276+16	RT	142
IL 83	1275+77	1276+16	LT	62
IL 83	1282+84	1283+22	LT	144
IL 83	1282+84	1283+22	RT	62
			TOTAL	410

42400200				
PORTLAND CEMENT CONCRETE SIDEWALK, 5"				
LOCATION				AREA
ALIGNMENT	FROM STATION	TO STATION	LT/RT	SQ YD
IL 83	1275+64	1275+84	LT	103
			TOTAL	103

442018333	
CLASS D PATCHES, TYPE IV, 15"	
LOCATION	AREA
ALIGNMENT	SQ YD
IL 83	125
TOTAL	125

48203021				
HMA SHOULDERS, 6"				
LOCATION				AREA
ALIGNMENT	FROM STATION	TO STATION	LT/RT	SQ YD
IL 83	1275+77	1276+15	RT	54.0
IL 83	1275+77	1276+15	LT	25.0
IL 83	1282+84	1283+22	LT	106.0
IL 83	1282+84	1283+22	RT	22.0
			TOTAL	207

60605000				
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24				
LOCATION				LENGTH
ALIGNMENT	FROM STATION	TO STATION	LT/RT	FOOT
IL 83	1275+77	1276+15	RT	159.0
IL 83	1275+77	1276+15	LT	20.5
IL 83	1282+84	1283+22	LT	191.5
IL 83	1282+84	1283+22	RT	204.0
			TOTAL	575

60619200			
CONCRETE MEDIAN, TYPE SB-6.06			
LOCATION			AREA
ALIGNMENT	FROM STATION	TO STATION	SQ YD
IL 83	1275+69	1276+16	193.0
		TOTAL	193

60619600			
CONCRETE MEDIAN, TYPE SB-6.12			
LOCATION			AREA
ALIGNMENT	FROM STATION	TO STATION	SQ YD
IL 83	1282+84	1283+32	224.0
		TOTAL	224

63000001				
STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS				
LOCATION				LENGTH
ALIGNMENT	FROM STATION	TO STATION	LT/RT	FOOT
IL 83	1274+96	1275+83	LT	37.5
IL 83	1275+20	1276+46	RT	37.5
IL 83	1282+54	1285+25	LT	187.5
IL 83	1283+15	1284+02	RT	37.5
			TOTAL	300

63100045			
TRAFFIC BARRIER TERMINAL, TYPE 2			
LOCATION			EACH
ALIGNMENT	STATION	LT/RT	
IL 83	1275+21	RT	1
IL 83	1285+25	LT	1
		TOTAL	2

63100085			
TRAFFIC BARRIER TERMINAL, TYPE 6			
LOCATION			EACH
ALIGNMENT	STATION	LT/RT	
IL 83	1275+82	RT	1
IL 83	1282+65	LT	1
		TOTAL	2

63100167			
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT			
LOCATION			EACH
ALIGNMENT	STATION	LT/RT	
IL 83	1285+25	LT	1
IL 83	1275+21	RT	1
		TOTAL	2

78009004				
MODIFIED URETHANE PAVEMENT MARKING - LINE 4"				
LOCATION				LENGTH
ALIGNMENT	FROM STATION	TO STATION	TYPE	FOOT
IL 83	1274+75	1285+30	SW	1036
IL 83	1274+75	1285+30	SW	981
IL 83	1275+80	1283+35	SY	744
IL 83	1275+70	1283+35	SY	764
IL 83	1275+10	1285+20	SDW	342
IL 83	1275+75	1283+65	SDW	278
			TOTAL	4145

NOTE:
SW - SOLID WHITE
SY - SOLID YELLOW
SDW - SKIP DASH WHITE

Z0004552				
APPROACH SLAB REMOVAL				
LOCATION				AREA
ALIGNMENT	FROM STATION	TO STATION	LT/RT	SQ YD
IL 83	1275+84	1276+15	LT	100.0
IL 83	1274+87	1276+76	RT	97.0
IL 83	1282+83	1285+18	RT	159.0
IL 83	1282+58	1284+58	LT	160.0
			TOTAL	516

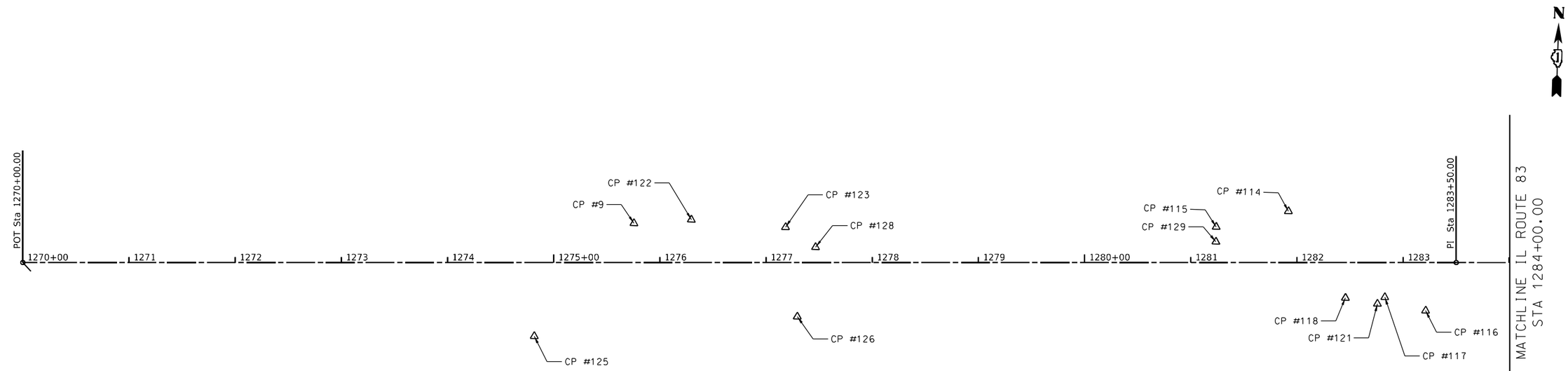
44000100				
PAVEMENT REMOVAL				
LOCATION				AREA
ALIGNMENT	FROM STATION	TO STATION	LT/RT	SQ YD
IL 83	1275+77	1275+92	RT	124.0
IL 83	1275+77	1276+23	LT	42.0
IL 83	1282+98	1283+22	LT	69.0
IL 83	1283+28	1283+32	RT	10.0
			TOTAL	245

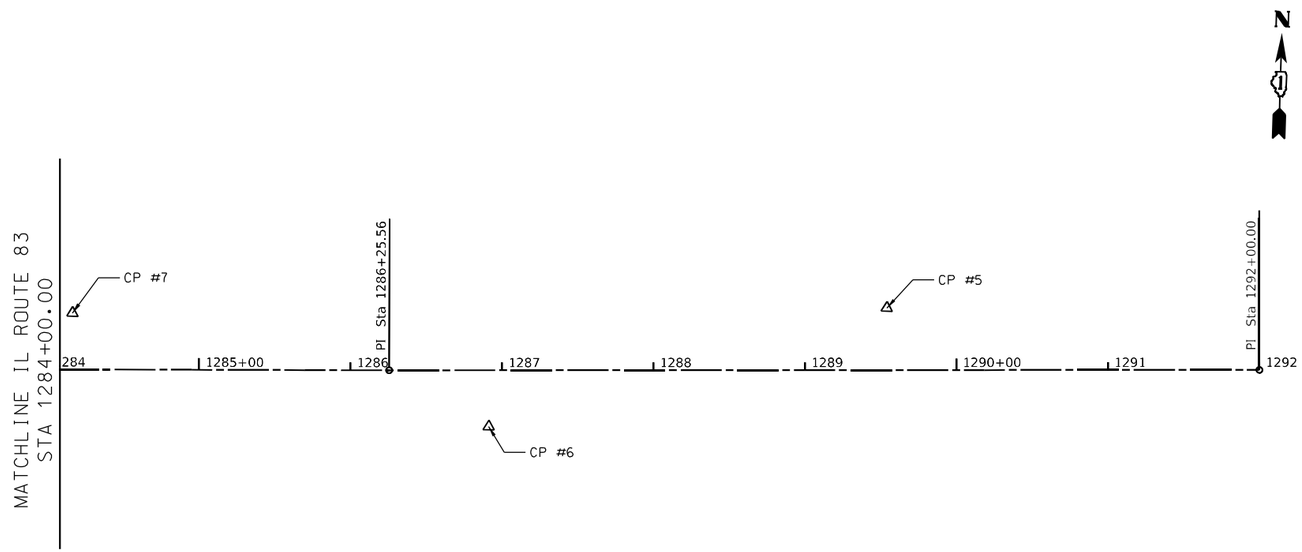
44000500				
COMBINATION CURB AND GUTTER REMOVAL				
LOCATION				LENGTH
ALIGNMENT	FROM STATION	TO STATION	LT/RT	FOOT
IL 83	1274+87	1276+76	RT	189.0
IL 83	1275+63	1276+16	LT	53.0
IL 83	1282+83	1285+18	RT	235.5
IL 83	1282+54	1283+32	LT	78.5
IL 83	1284+30	1285+43	LT	113.0
			TOTAL	669

44000600				
SIDEWALK REMOVAL				
LOCATION				AREA
ALIGNMENT	FROM STATION	TO STATION	LT/RT	SQ FT
IL 83	1275+64	1276+11	LT	224.0
			TOTAL	224

44003100				
MEDIAN REMOVAL				
LOCATION				AREA
ALIGNMENT	FROM STATION	TO STATION	LT/RT	SQ FT
IL 83	1282+84	1283+22	LT&RT	320.0
IL 83	1275+77	1276+16	LT&RT	273.0
			TOTAL	593

63200310				
GUARDRAIL REMOVAL				
LOCATION				LENGTH
ALIGNMENT	FROM STATION	TO STATION	LT/RT	FOOT
IL 83	1274+87	1276+76	RT	178.0
IL 83	1275+84	1276+15	LT	12.5
IL 83	1282+25	1284+58	LT	233.3
IL 83	1282+83	1285+18	RT	172.1
			TOTAL	596





ALIGNMENT COORDINATES

POINT	STATION	NORTHING (FT)	EASTING (FT)	ELEMENT	LENGTH (FT)	BEARING
POI	1270+00.00	1819764.818	1142662.798			
				STRAIGHT	1350.00	N 88°12'36.0220" E
PI	1283+50.00	1819806.986	1144012.139			
				STRAIGHT	275.55	N 88°21'03.6079" E
PI	1286+25.56	1819814.916	1144287.582			
				STRAIGHT	574.44	N 88°11'14.2683" E
PI	1292+00.00	1819833.087	1144861.738			

NOTES

1. FOR CONTROL POINT TIES SEE SHEET 16.
2. VERTICAL DATUM = NAD88 PER DIGITAL DIFFERENTIAL LEVELING AND GPS OBSERVATIONS HOLDING NGS BENCHMARKS DCH07, DCH08 AND DCH09 (2ND ORDER).
3. HORIZONTAL DATUM = ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD83 (2011) PER GPS #16 (NGS CONTROL T-137-RESET) PUBLISHED COORDINATES.

COLLINS ENGINEERS INC.

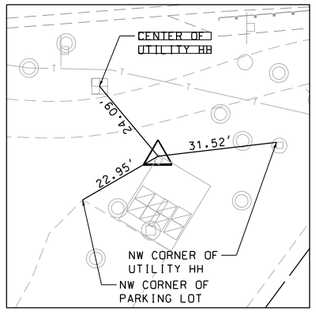
USER NAME = drush	DESIGNED - OLR	REVISED -
	DRAWN - OLR	REVISED -
PLOT SCALE = 100.0 '/ in.	CHECKED - ZJT	REVISED -
PLOT DATE = 3/1/2023	DATE - 2/24/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARKS
IL RTE 83 (127TH STREET)

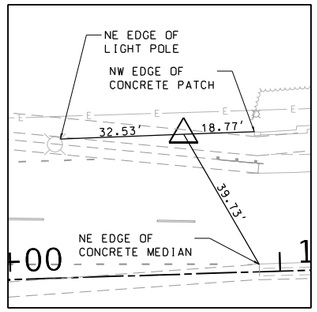
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	15
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



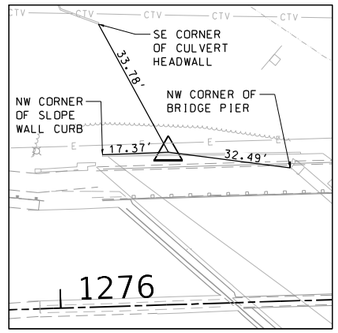
CONTROL POINT #125
CUT CROSS IN CONCRETE

IL83 ℄ STA 1274+81.65, 69.41' RT
N:1,819,710.490
E:1,143,146.378
ELEV:601.793



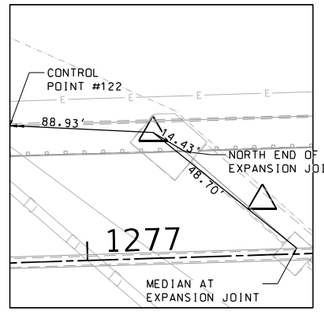
CONTROL POINT #9
SET 5/8" REBAR WITH CAP

IL83 ℄ STA 1275+75.59, 36.93' LT
N:1,819,819.713
E:1,143,236.956
ELEV:604.748



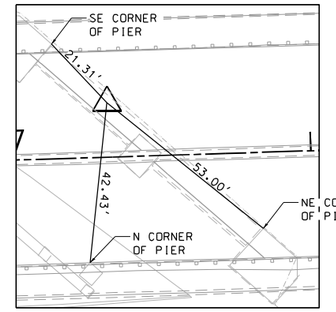
CONTROL POINT #122
SET CROSS ON 12" LONG BOAT SPIKE

IL83 ℄ STA 1276+29.65, 40.26' LT
N:1,819,824.729
E:1,143,290.882
ELEV:596.500



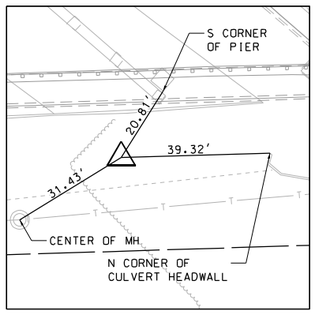
CONTROL POINT #123
SET CUT CROSS ON CONCRETE BRIDGE DECK

IL83 ℄ STA 1277+18.30, 33.23' LT
N:1,819,820.466
E:1,143,379.706
ELEV:608.737



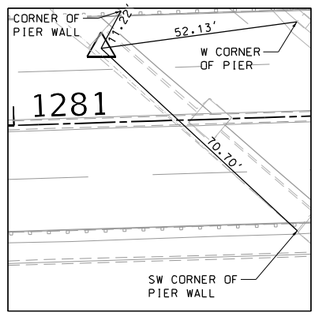
CONTROL POINT #128
SET CROSS ON TOP OF PIERS

IL83 ℄ STA 1277+46.59, 14.39' LT
N:1,819,802.522
E:1,143,408.572
ELEV:584.196



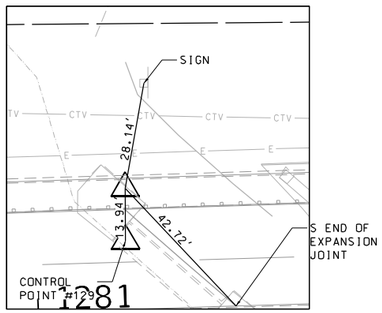
CONTROL POINT #126
SET IN 12" LONG BOAT SPIKE

IL83 ℄ STA 1277+29.40, 50.98' RT
N:1,819,736.646
E:1,143,393.435
ELEV:597.532



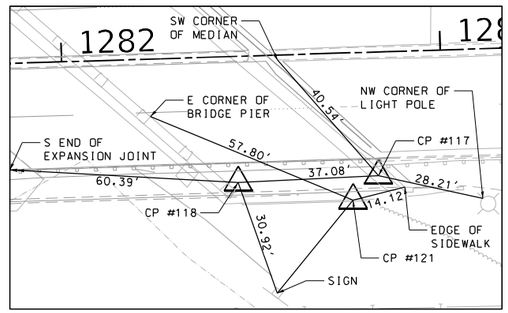
CONTROL POINT #129
SET CUT CROSS ON TOP OF CONRETE PIER WALL

IL83 ℄ STA 1281+23.63, 19.57' LT
N:1,819,819.478
E:1,143,785.267
ELEV:584.258



CONTROL POINT #115
SET CUT IN CROSS ON BRIDGE DECK

IL83 ℄ STA 1281+23.94, 33.51' LT
N:1,819,833.420
E:1,143,785.141
ELEV:609.851



CONTROL POINT #118
2 1/2" BRASS DISC SANITARY DISTRICT CHICAGO
"CRS 502"

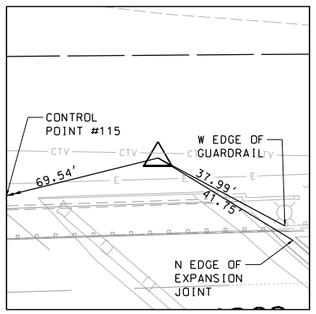
IL83 ℄ STA 1282+45.61, 33.33' RT
N:1,819,770.408
E:1,143,908.842
ELEV:607.550

CONTROL POINT #121
SET CUT CROSS ON S'LY CURB OF CONCRETE SLOPE WALL UNDER BRIDGE DECK

STA 1282+75.77, 38.88' RT, IL83 ℄
N:1,819,765.809
E:1,143,939.163
ELEV:596.094

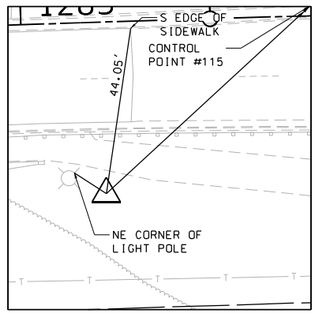
CONTROL POINT #117
FOUND 3" BRASS DISC ARMY CORPS OF ENGINEERS

STA 1282+82.69, 32.67' RT, IL83 ℄
N:1,819,772.226
E:1,143,945.880
ELEV:606.644



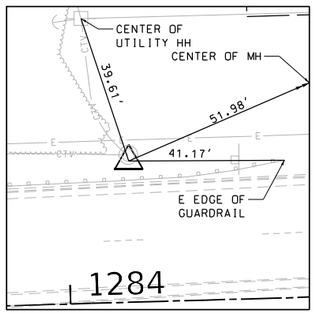
CONTROL POINT #114
SET 5/8" REBAR WITH CAP

IL83 ℄ STA 1281+91.91, 48.21' RT
N:1,819,850.233
E:1,143,852.622
ELEV:598.317



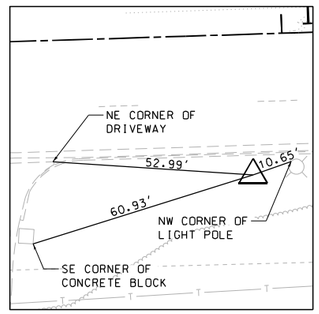
CONTROL POINT #116
SET 5/8" REBAR AT TOP OF BANK

IL83 ℄ STA 1283+21.16, 45.30' LT
N:1,819,760.810
E:1,143,984.733
ELEV:604.865



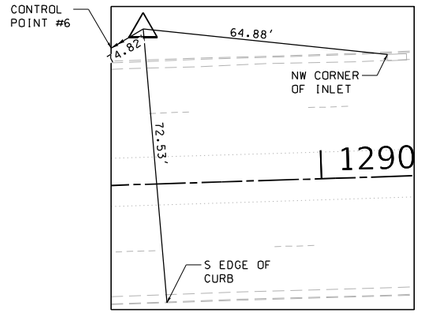
CONTROL POINT #7
SET CUT CROSS ON S RIM OF IL BELL MH

IL83 ℄ STA 1284+16.42, 37.28' LT
N:1,819,846.167
E:1,144,077.461
ELEV:603.044



CONTROL POINT #6
SET 5/8" REBAR WITH CAP

IL83 ℄ STA 1286+91.29, 37.17' RT
N:1,819,779.846
E:1,144,354.454
ELEV:597.014



CONTROL POINT #5
SET 12" LONG BOAT SPIKE

IL83 ℄ STA 1289+54.16, 40.99' LT
N:1,819,866.285
E:1,144,614.724
ELEV:595.055

USER NAME = orush	DESIGNED - OLR	REVISED -	
	DRAWN - OLR	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - ZJT	REVISED -	
PLOT DATE = 3/1/2023	DATE - 2/24/2023	REVISED -	

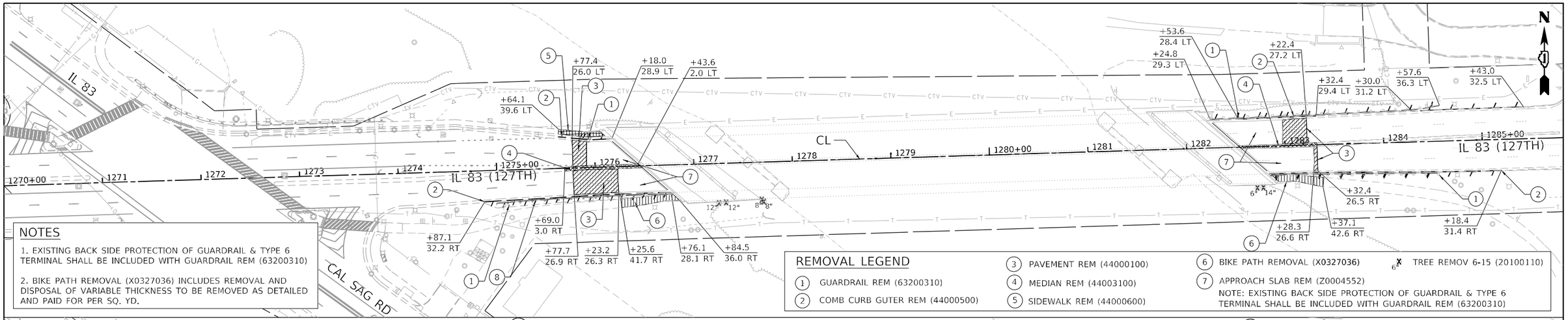
COLLINS ENGINEERS INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARKS
IL RTE 83 (127TH STREET)

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	16
		CONTRACT NO. 62H52		
		ILLINOIS FED. AID PROJECT		



NOTES

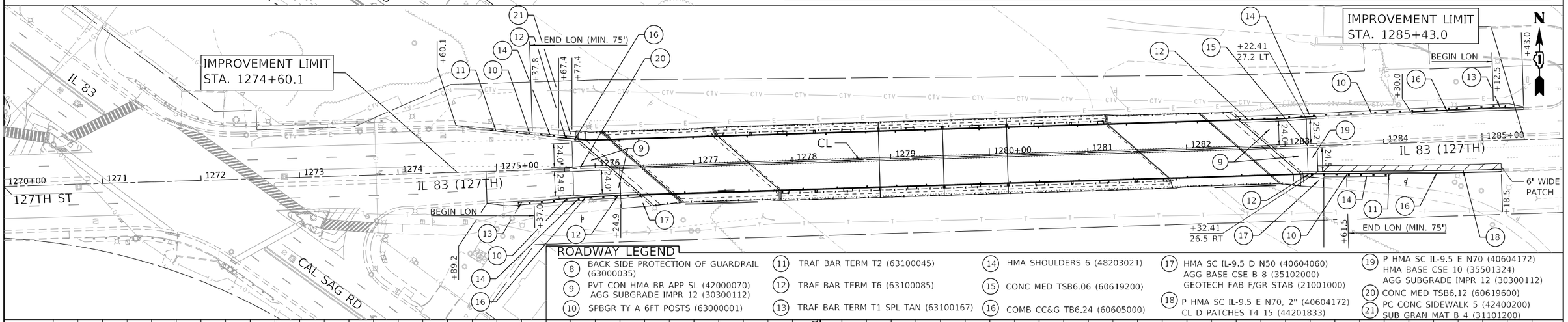
1. EXISTING BACK SIDE PROTECTION OF GUARDRAIL & TYPE 6 TERMINAL SHALL BE INCLUDED WITH GUARDRAIL REM (63200310)

2. BIKE PATH REMOVAL (X0327036) INCLUDES REMOVAL AND DISPOSAL OF VARIABLE THICKNESS TO BE REMOVED AS DETAILED AND PAID FOR PER SQ. YD.

REMOVAL LEGEND

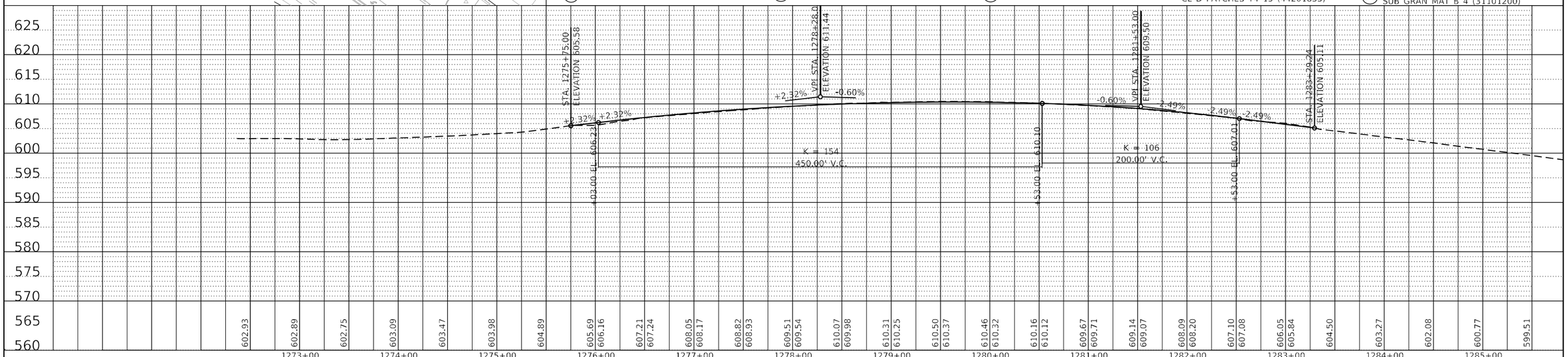
1. GUARDRAIL REM (63200310)
2. COMB CURB GUTER REM (44000500)
3. PAVEMENT REM (44000100)
4. MEDIAN REM (44003100)
5. SIDEWALK REM (44000600)
6. BIKE PATH REMOVAL (X0327036)
7. APPROACH SLAB REM (Z0004552)
   NOTE: EXISTING BACK SIDE PROTECTION OF GUARDRAIL & TYPE 6 TERMINAL SHALL BE INCLUDED WITH GUARDRAIL REM (63200310)

6X TREE REMOV 6-15 (20100110)



ROADWAY LEGEND

8. BACK SIDE PROTECTION OF GUARDRAIL (63000035)
9. PVT CON HMA BR APP SL (42000070) AGG SUBGRADE IMPR 12 (30300112)
10. SPBGR TY A 6FT POSTS (63000001)
11. TRAF BAR TERM T2 (63100045)
12. TRAF BAR TERM T6 (63100085)
13. TRAF BAR TERM T1 SPL TAN (63100167)
14. HMA SHOULDERS 6 (48203021)
15. CONC MED TSB6.06 (60619200)
16. COMB CC&G TB6.24 (60605000)
17. HMA SC IL-9.5 D N50 (40604060) AGG BASE CSE B 8 (35102000) GEOTECH FAB F/GR STAB (21001000)
18. P HMA SC IL-9.5 E N70, 2" (40604172) CL D PATCHES T4 15 (44201833)
19. P HMA SC IL-9.5 E N70 (40604172) HMA BASE CSE 10 (35501324) AGG SUBGRADE IMPR 12 (30300112)
20. CONC MED TSB6.12 (60619600)
21. PC CONC SIDEWALK 5 (42400200) SUB GRAN MAT B 4 (31101200)



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	DRAWN - ZJT	REVISED -	
PLOT SCALE = 100:0 ':' / in.	CHECKED - EMK	REVISED -	
PLOT DATE = 3/1/2023	DATE - 02/17/2023	REVISED -	

COLLINS ENGINEERS INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & ELEVATION
IL RTE 83 (127TH STREET)

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	17
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

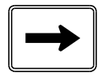
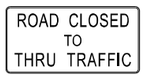
PLAN — DATE | BY | SURVEYED | PLOTTED | ALIGNMENT CHECKED | RT. OF WAY CHECKED | CADD FILE NAME | NOTE BOOK | NO.

PROFILE — DATE | BY | SURVEYED | PLOTTED | DRAWN | CHECKED | BM. NOTED | STRUCTURE NO | TAINS CHKD | NOTE BOOK | NO.

DESIGNED $DESIGN$ $DATE$ | DRAWN $DRAWN$ $DATE$ | REVIEWED CHECKED $DATE$

SIGN LEGEND

SIGN NO.	SIGN	SIGN TYPE	QUANTITY
1		W20-2 (48"x48")	6
2		W20-3 (48"x48")	4
3		W20-3 (48"x48")	3
4		M4-8A (24"x18")	2
5		M4-8A (24"x18")	2
6		M3-3 (24" X 12")	15
7		M3-1 (24" X 12")	25
8		M5-1R (21"x15")	5
9		M5-1L (21"x15")	5
10		M6-3 (21"x15")	18

SIGN NO.	SIGN	SIGN TYPE	QUANTITY
11		M6-1R (21" X 15")	5
12		M6-1L (21" X 15")	6
13		M1-I100 (30" X 24")	29
14		M4-10R (48" X 18")	1
15		M4-10L (48" X 18")	1
16		CUSTOM (48" X 36")	1
17		R11-4 (60" X 30")	1
18		M4-8 (24" X 12")	40

GENERAL NOTES

1. THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN ACCORDANCE WITH THE PLANS, SPECIAL PROVISIONS, STATE STANDARDS, STATE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER
2. THE FURNISHING, INSTALLING AND RELOCATION OF ALL TRAFFIC SIGN SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE STANDARD SPECIFICATIONS. THIS SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL). ALL CONFLICTING TRAFFIC SIGNS SHALL ALSO BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).
3. THE TRAFFIC CONTROL DEPICTED HEREIN IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES AS SPECIFIED BY THE SPECIAL PROVISIONS SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER, ALL THE TRAFFIC CONTROL DEVICES SHALL BE CONSIDERED INCLUDED IN THE COST OF THE PAY ITEM FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL) UNLESS OTHERWISE INDICATED IN THE PLANS OR SPECIAL PROVISIONS.
4. ALL TRAFFIC CONTROL WARNING SIGNS AND ASSOCIATED SIGNING MOUNTED WITH THE WARNING SIGNS SHALL HAVE BLACK LEGENDS AND BORDERS ON FLUORESCENT ORANGE REFLECTIVE SHEETING.
5. ALL CONSTRUCTION SIGNS, BARRICADES AND OTHER DEVICES REQUIRED TO CONTROL TRAFFIC SHALL BE FURNISHED, INSTALLED AND MAINTAINED BY THE CONTRACTOR.
6. THE CONTRACTOR SHALL MAINTAIN EXISTING AND/OR PROPOSED ROADWAY LIGHTING DURING THE DURATION OF THE PROJECT.
7. ALL SIGN SPACING SHALL BE IN ACCORDANCE WITH THE DISTRICT DETAIL TC-21.
8. THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING IS ERECTED IN ACCORDANCE WITH THE DETOUR PLAN AND INSPECTED BY THE ENGINEER.
9. THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST (3) WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ENGINEER SHALL DETERMINE THE HOUR OF CLOSURE. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
10. TRAFFIC SIGNALS DIRECTING THE NORTHBOUND RIGHT TURNING TRAFFIC AND THE SOUTHBOUND LEFT TURNING TRAFFIC AT THE INTERSECTION OF IL 83 AND CAL SAG ROAD TO CLOSED ROADWAYS SHALL BE COVERED DURING CONSTRUCTION UNTIL CLOSED ROADWAY IS REOPENED. PAYMENT FOR THIS WORK WILL BE INCLUDED IN THE TRAFFIC CONTROL AND PROTECTION, SPECIAL (X7010216) PAY ITEM.

MOT SEQUENCE OF CONSTRUCTION

STAGE I

TRAFFIC

1. IL 83 WILL BE CLOSED TO MOTORIZED TRAFFIC AND DETOURED AS SHOWN IN THE PLANS. HOWEVER, BIKE TRAFFIC WILL BE MAINTAINED THROUGH CONSTRUCTION ALONG THE NORTH SIDE OF THE BRIDGE AS SHOWN IN PLANS.

CONSTRUCTION

1. THE BRIDGE REHABILITATION WILL BEGIN INCLUDING THE RECONSTRUCTION OF THE SHARED USE PATH ALONG THE SOUTH SIDE.

STAGE II

TRAFFIC

1. IL 83 WILL REMAIN CLOSED TO MOTORIZED TRAFFIC AND DETOURED AS SHOWN IN THE PLANS. BICYCLE AND PEDESTRIAN TRAFFIC WILL CROSS AT THE PERMANENT LOCATION ON THE SOUTH SIDE OF THE BRIDGE.

CONSTRUCTION

1. THE BRIDGE REHABILITATION WILL CONTINUE AS SHOWN IN THE PLANS.

MODEL: Default
FILE NAME: pw:\\tho-siwin01.ss.transystems.com:tmsyscom-siw11Documents\Projects_2019\CH401 - Chicago\P401190017 - IDOT PTB 190-019 - IL 83 at Cal Sag Channel\303.00 - Road\303.01 - Standard Sheets\Detour Plan and TMP\190017 Detour General Notes

TranSystems

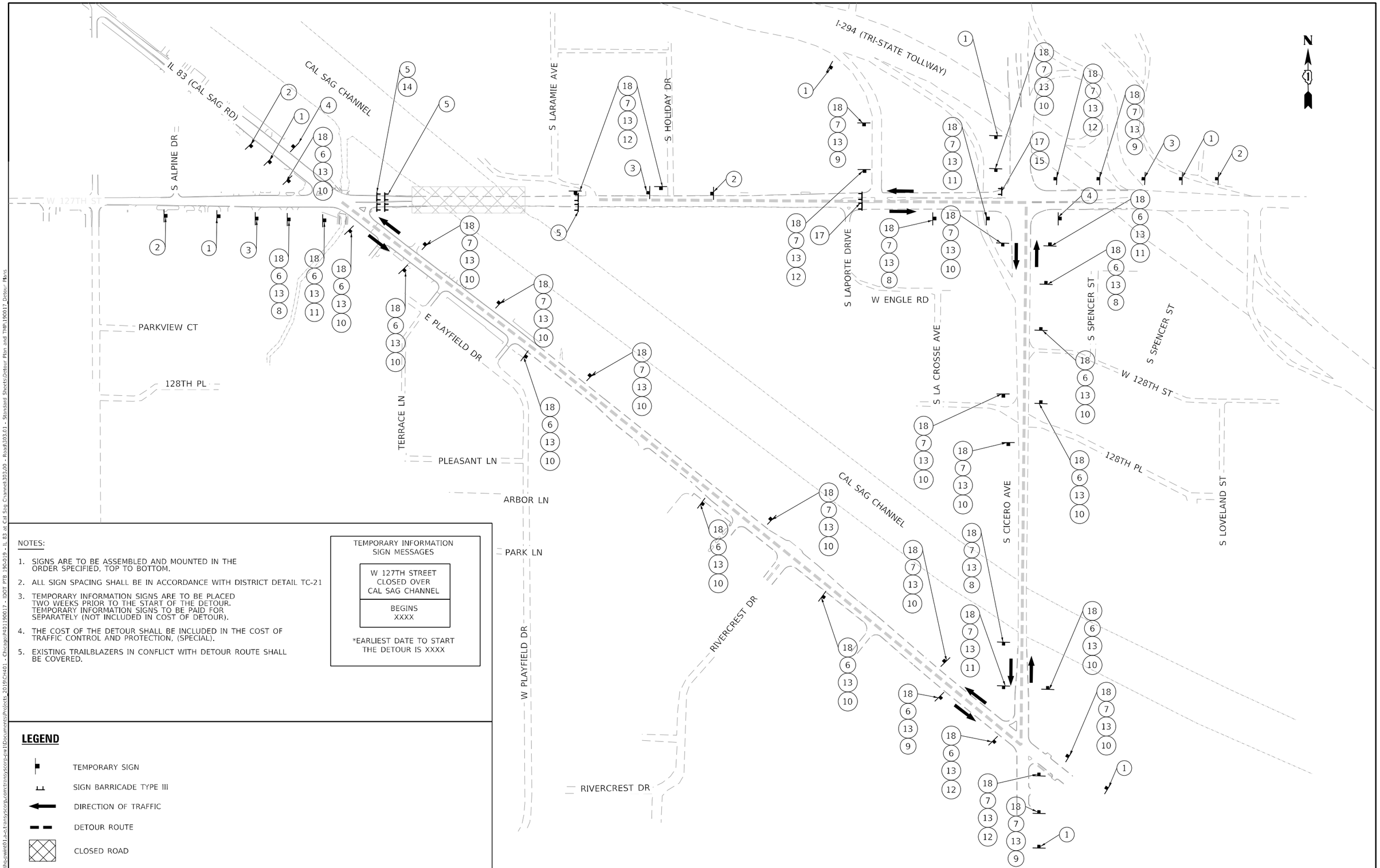
USER NAME = CEComin	DESIGNED - LMN	REVISED -	
	DRAWN - LMN	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - WBL	REVISED -	
PLOT DATE = 5/6/2022	DATE - 12/15/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET)
CAL SAG ROAD TO HOLIDAY ROAD
DETOUR PLAN SIGNS AND NOTES

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	18
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



NOTES:

1. SIGNS ARE TO BE ASSEMBLED AND MOUNTED IN THE ORDER SPECIFIED, TOP TO BOTTOM.
2. ALL SIGN SPACING SHALL BE IN ACCORDANCE WITH DISTRICT DETAIL TC-21
3. TEMPORARY INFORMATION SIGNS ARE TO BE PLACED TWO WEEKS PRIOR TO THE START OF THE DETOUR. TEMPORARY INFORMATION SIGNS TO BE PAID FOR SEPARATELY (NOT INCLUDED IN COST OF DETOUR).
4. THE COST OF THE DETOUR SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL).
5. EXISTING TRAILBLAZERS IN CONFLICT WITH DETOUR ROUTE SHALL BE COVERED.

TEMPORARY INFORMATION SIGN MESSAGES

W 127TH STREET CLOSED OVER CAL SAG CHANNEL
BEGINS XXXX

*EARLIEST DATE TO START THE DETOUR IS XXXX

LEGEND

- TEMPORARY SIGN
- SIGN BARRICADE TYPE III
- DIRECTION OF TRAFFIC
- DETOUR ROUTE
- CLOSED ROAD

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PLOT DATE = 5/6/2022	DATE - 12/15/2020	REVISED -	

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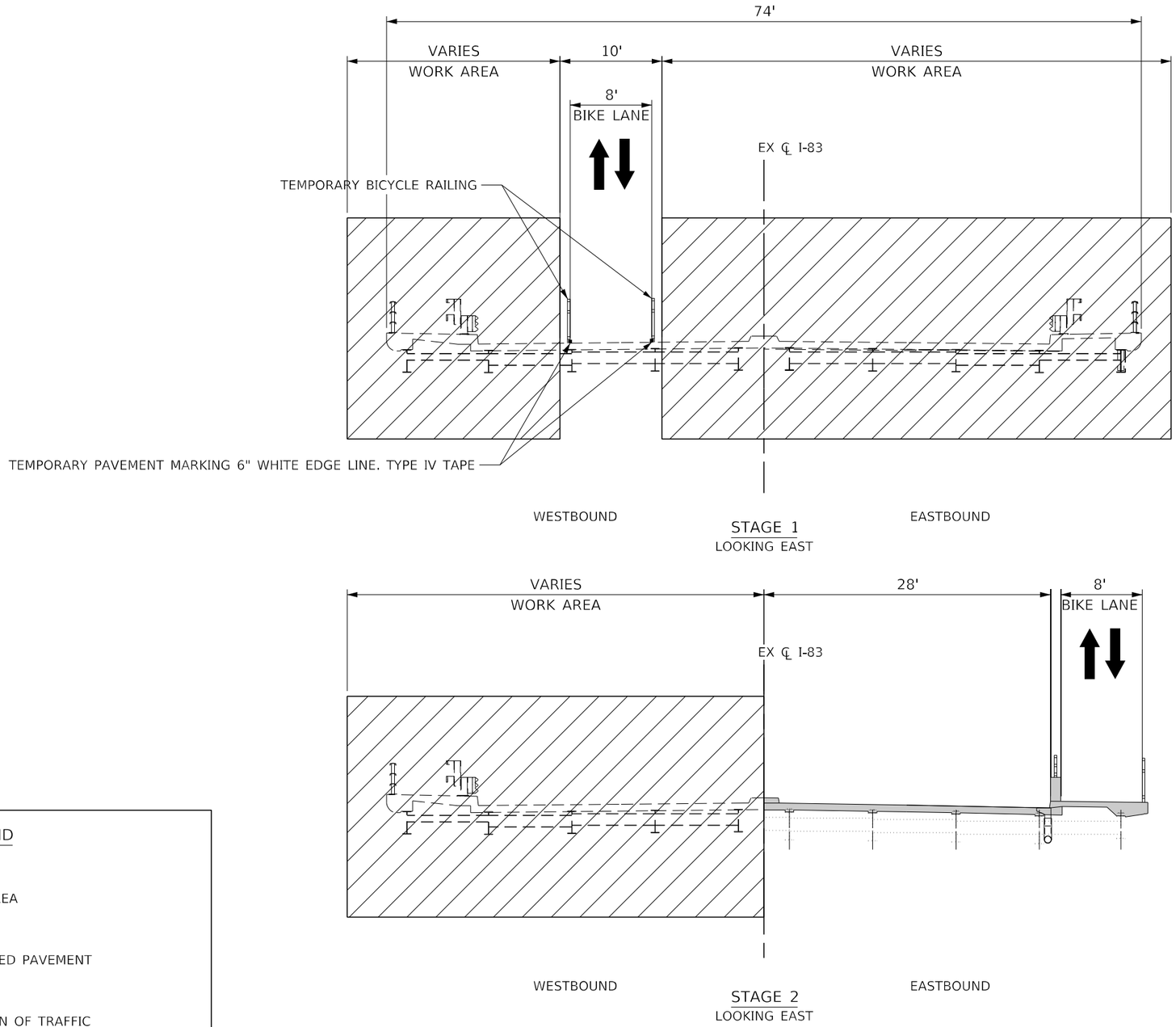
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET)
CAL SAG ROAD TO HOLIDAY ROAD
DETOUR PLAN

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	19
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



LEGEND

WORK AREA

COMPLETED PAVEMENT

DIRECTION OF TRAFFIC

NOTES:

CONTRACTOR MAY REUSE TEMPORARY BICYCLE RAILING FOR THE PERMANENT CONDITION.

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PLOT DATE = 5/6/2022	DATE - 12/15/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET)
CAL SAG ROAD TO HOLIDAY ROAD
BRIDGE MAINTENANCE OF TRAFFIC TYPICAL SECTION

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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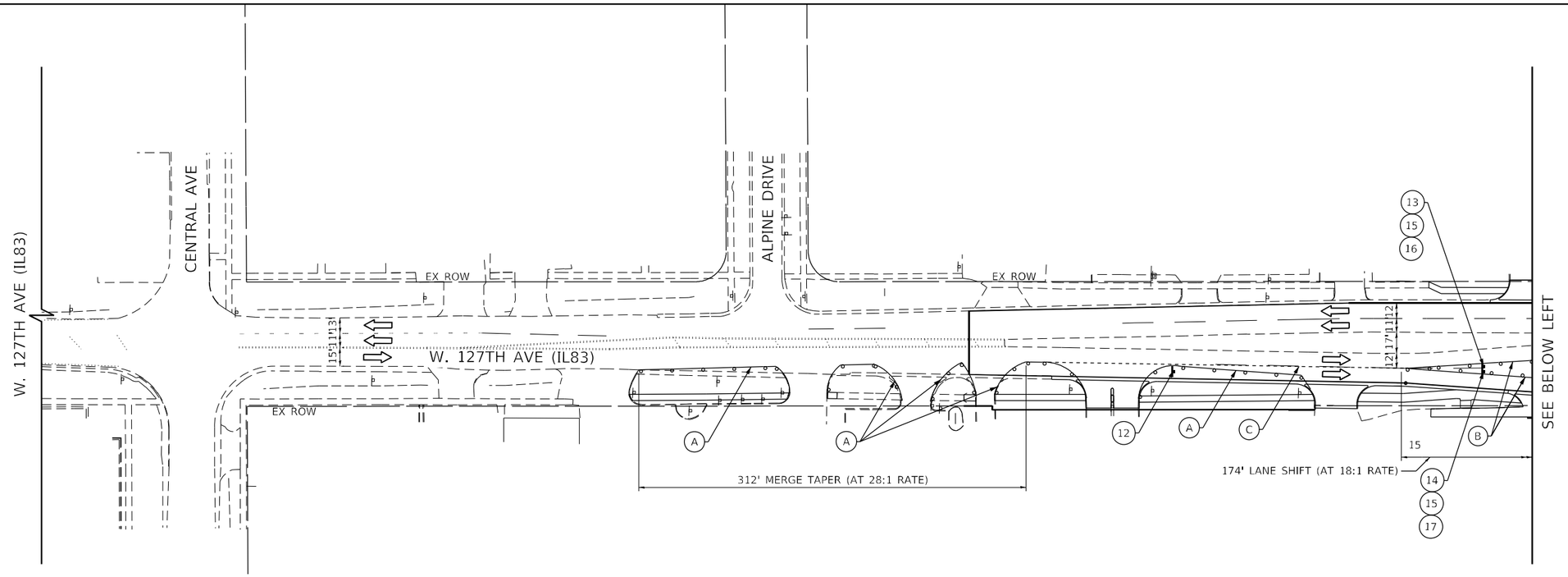
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

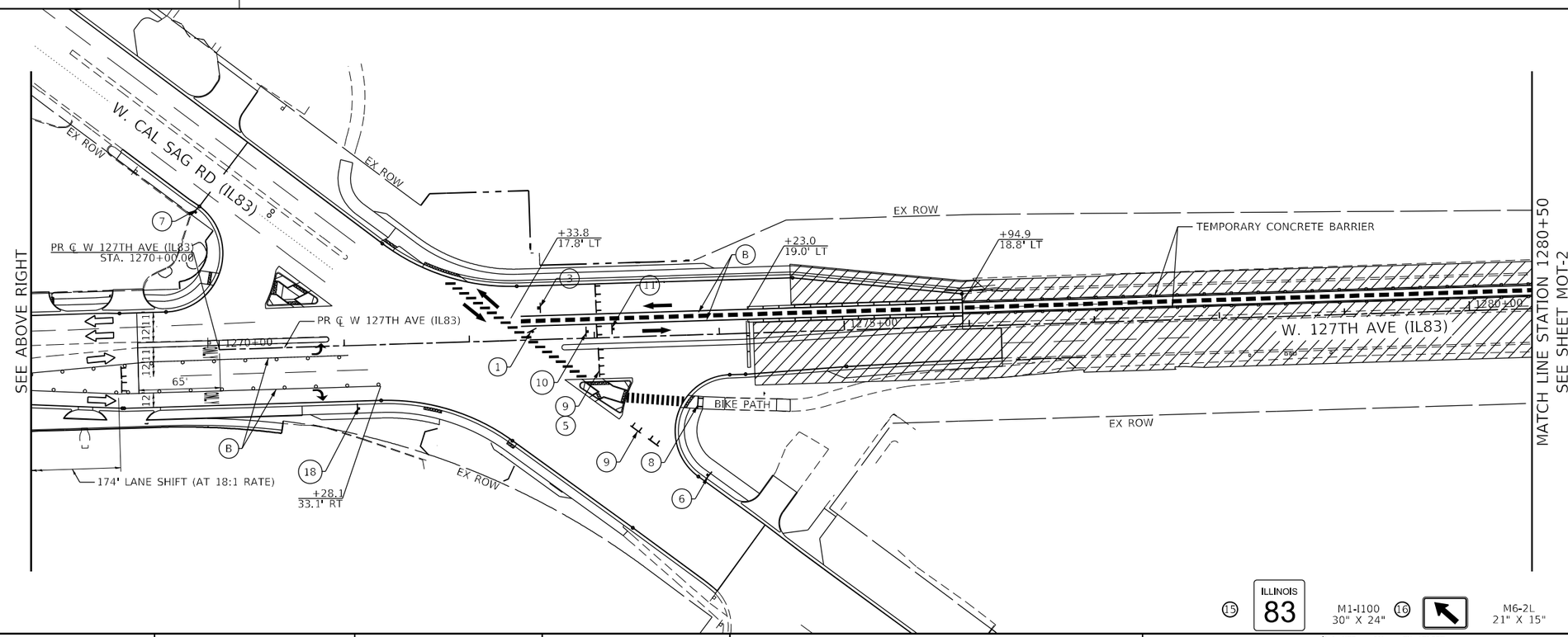


LEGEND

- CONSTRUCTION WORK ZONE
- SIGN TO BE PLACED ON PERMANENT OR PORTABLE SUPPORT
- DRUMS WITH STEADY BURN BI-DIRECTIONAL LIGHT@ 50' C-C (TYP), 25' C-C IN CURVES AND RADII, AND 20' C-C IN TAPERS
- TYPE III BARRICADE WITH TWO (2) FLASHING LIGHTS
- DIRECTION OF TRAFFIC FLOW
- TEMPORARY CONCRETE BARRIER
- DIRECTION OF BICYCLE TRAFFIC FLOW
- BICYCLE DETOUR ROUTE
- TEMPORARY BICYCLE RAILING

N

NOTE:
SEE DETOUR PLAN FOR TEMPORARY ROADWAY SIGNAGE.



PAVEMENT MARKING LEGEND

- (A) TEMPORARY PAVEMENT MARKING 4" WHITE EDGE LINE, TYPE IV TAPE
- (B) TEMPORARY PAVEMENT MARKING 6" WHITE EDGE LINE, TYPE IV TAPE
- (C) TEMPORARY PAVEMENT MARKING 4" DOTTED WHITE (2' LINE, 6' SPACE), TYPE IV TAPE

1	DETOUR	M4-9A (L) 30" X 24"	2	DETOUR	M4-9A (R) 30" X 24"
3	END DETOUR	M4-8A 24"x18"	4	TRAIL X-ING	W11-15P 24" X 18"
5	DETOUR	M4-10R 48" X 18"	6		R3-1 36" X 36"
7		R3-2 36" X 36"	8	SIDEWALK CLOSED	R9-9 24" X 12"
9	ROAD CLOSED	R11-2 48" X 30"	10	PATH NARROWS	W5-4A 18" X 18"
11		W11-1 30" X 30"	12	ONLY ONLY	R3-8 30" X 30"
13	NORTH	M3-1 24" X 12"	14	SOUTH	M3-3 24" X 12"
15	ILLINOIS 83	M1-I100 30" X 24"	16		M6-2L 21" X 15"
17		M6-2R 21" X 15"	18	ONLY	R3-5R 30" X 36"

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PLOT DATE = 5/17/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET)
CAL SAG ROAD TO HOLIDAY ROAD
SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
STAGE 1

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	21
		CONTRACT NO. 62H52		
		ILLINOIS FED. AID PROJECT		

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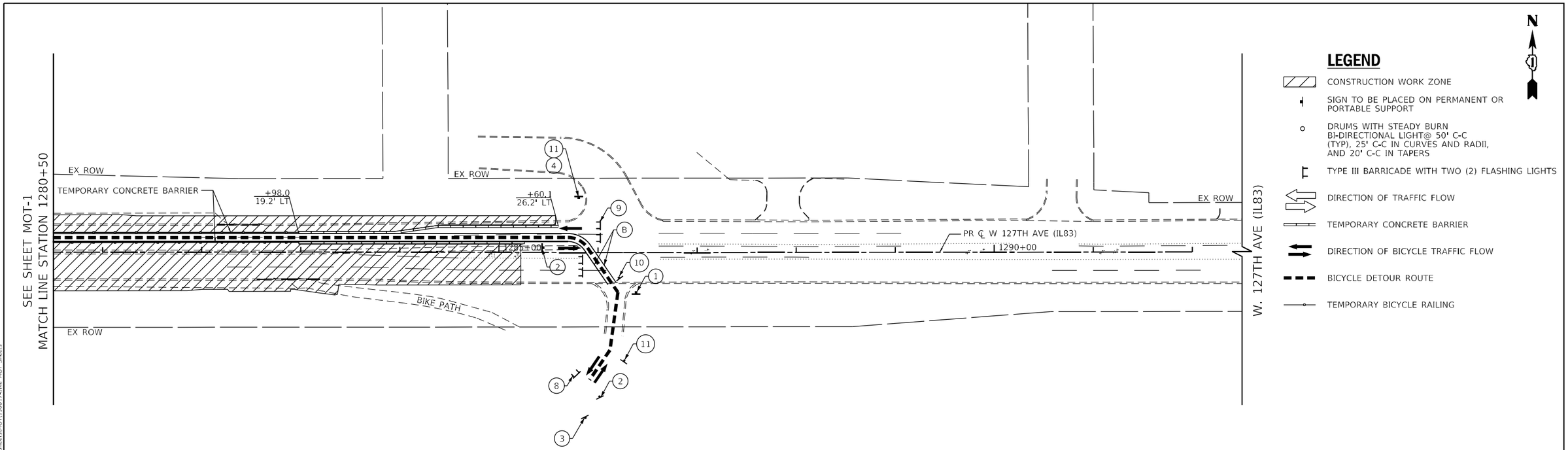

LEGEND

- CONSTRUCTION WORK ZONE
- SIGN TO BE PLACED ON PERMANENT OR PORTABLE SUPPORT
- DRUMS WITH STEADY BURN BI-DIRECTIONAL LIGHT@ 50' C-C (TYP), 25' C-C IN CURVES AND RADII, AND 20' C-C IN TAPERS
- TYPE III BARRICADE WITH TWO (2) FLASHING LIGHTS
- DIRECTION OF TRAFFIC FLOW
- TEMPORARY CONCRETE BARRIER
- DIRECTION OF BICYCLE TRAFFIC FLOW
- BICYCLE DETOUR ROUTE
- TEMPORARY BICYCLE RAILING

N

NOTE:
SEE DETOUR PLAN FOR TEMPORARY ROADWAY SIGNAGE.

PAVEMENT MARKING LEGEND

- (A) TEMPORARY PAVEMENT MARKING 4" WHITE EDGE LINE, TYPE IV TAPE
- (B) TEMPORARY PAVEMENT MARKING 6" WHITE EDGE LINE, TYPE IV TAPE
- (C) TEMPORARY PAVEMENT MARKING 4" DOTTED WHITE (2' LINE, 6' SPACE), TYPE IV TAPE

(1)	DETOUR	M4-9A (L) 30" X 24"	(2)	DETOUR	M4-9A (R) 30" X 24"
(3)	END DETOUR	M4-8A 24"x18"	(4)	TRAIL X-ING	W11-15P 24" X 18"
(5)	DETOUR	M4-10R 48" X 18"	(6)		R3-1 36" X 36"
(7)		R3-2 36" X 36"	(8)	SIDEWALK CLOSED	R9-9 24" X 12"
(9)	ROAD CLOSED	R11-2 48" X 30"	(10)	PATH NARROWS	W5-4A 18" X 18"
(11)		W11-1 30" X 30"	(12)	ONLY ONLY	R3-8 30" X 30"
(13)	NORTH	M3-1 24" X 12"	(14)	SOUTH	M3-3 24" X 12"
(15)	ILLINOIS 83	M1-I100 30" X 24"	(16)		M6-2L 21" X 15"
(17)		M6-2R 21" X 15"	(18)	ONLY	R3-5R 30" X 36"

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET)
CAL SAG ROAD TO HOLIDAY ROAD
SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
STAGE 1

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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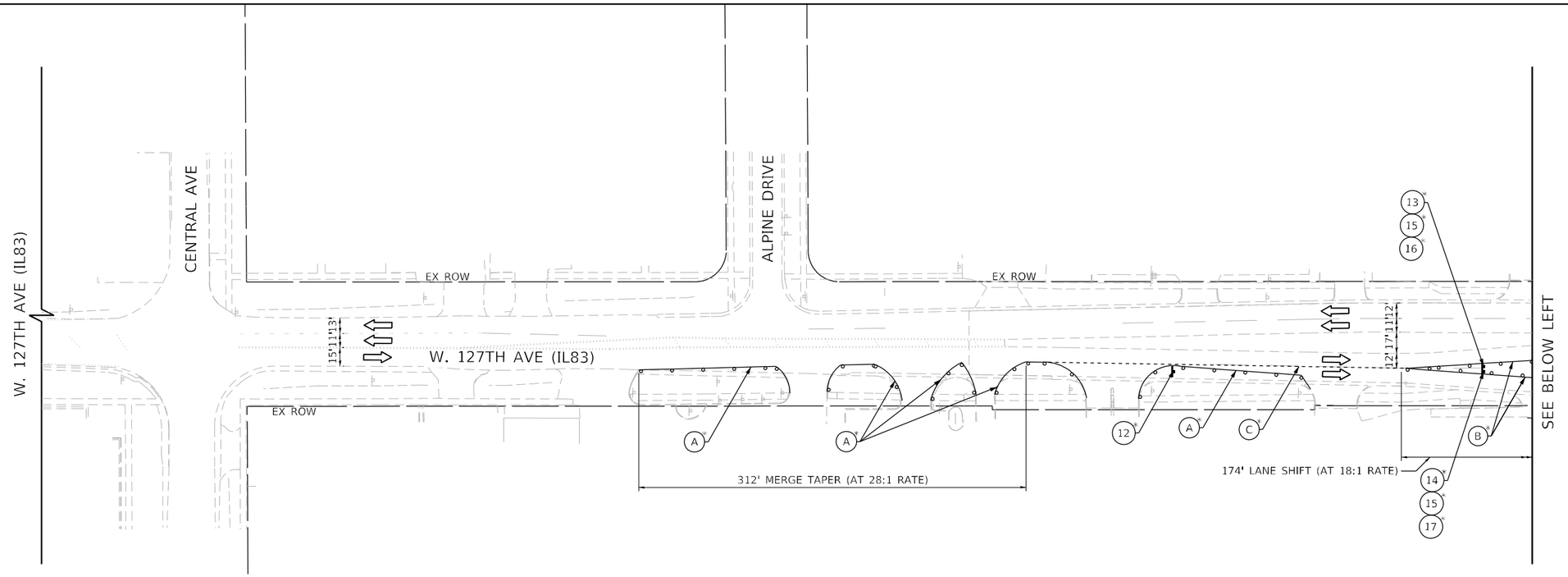
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

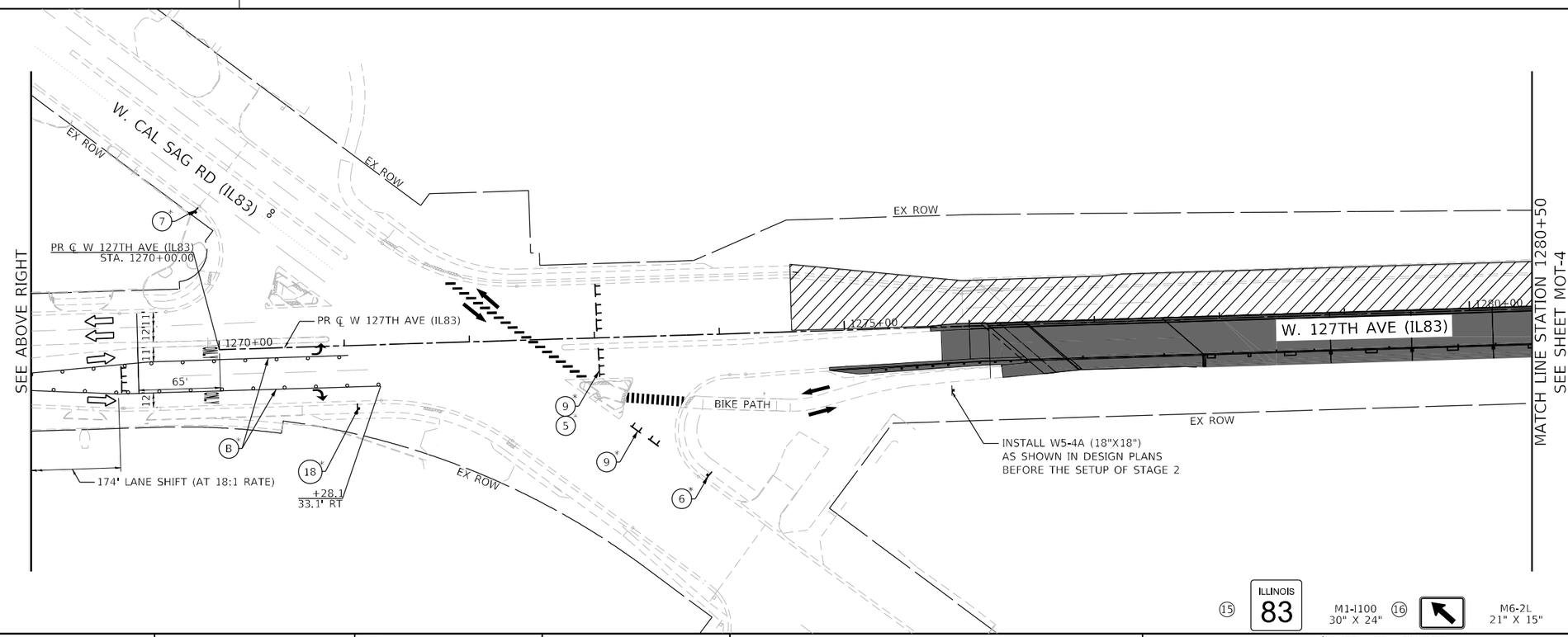


LEGEND

- CONSTRUCTION WORK ZONE
- SIGN TO BE PLACED ON PERMANENT OR PORTABLE SUPPORT
- DRUMS WITH STEADY BURN BI-DIRECTIONAL LIGHT@ 50' C-C (TYP), 25' C-C IN CURVES AND RADII, AND 20' C-C IN TAPERS
- TYPE III BARRICADE WITH TWO (2) FLASHING LIGHTS
- DIRECTION OF TRAFFIC FLOW
- TEMPORARY CONCRETE BARRIER
- DIRECTION OF BICYCLE TRAFFIC FLOW
- * FROM PREVIOUS STAGE TO REMAIN
- COMPLETED PAVEMENT

N

NOTE:
SEE DETOUR PLAN FOR TEMPORARY ROADWAY SIGNAGE.



PAVEMENT MARKING LEGEND

- (A) TEMPORARY PAVEMENT MARKING 4" WHITE EDGE LINE, TYPE IV TAPE
- (B) TEMPORARY PAVEMENT MARKING 6" WHITE EDGE LINE, TYPE IV TAPE
- (C) TEMPORARY PAVEMENT MARKING 4" DOTTED WHITE (2' LINE, 6' SPACE), TYPE IV TAPE

1	DETOUR	M4-9A (L) 30" X 24"	2	DETOUR	M4-9A (R) 30" X 24"
3	END DETOUR	M4-8A 24"x18"	4	TRAIL X-ING	W11-15P 24" X 18"
5	DETOUR	M4-10R 48" X 18"	6		R3-1 36" X 36"
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9	ROAD CLOSED	R11-2 48" X 30"	10	PATH NARROWS	W5-4A 18" X 18"
11		W11-1 30" X 30"	12	ONLY ONLY	R3-8 30" X 30"
13	NORTH	M3-1 24" X 12"	14	SOUTH	M3-3 24" X 12"
15	ILLINOIS 83	M1-I100 30" X 24"	16		M6-2L 21" X 15"
17		M6-2R 21" X 15"	18	ONLY	R3-5R 30" X 36"

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PLOT DATE = 5/17/2022	DATE -	REVISED -	

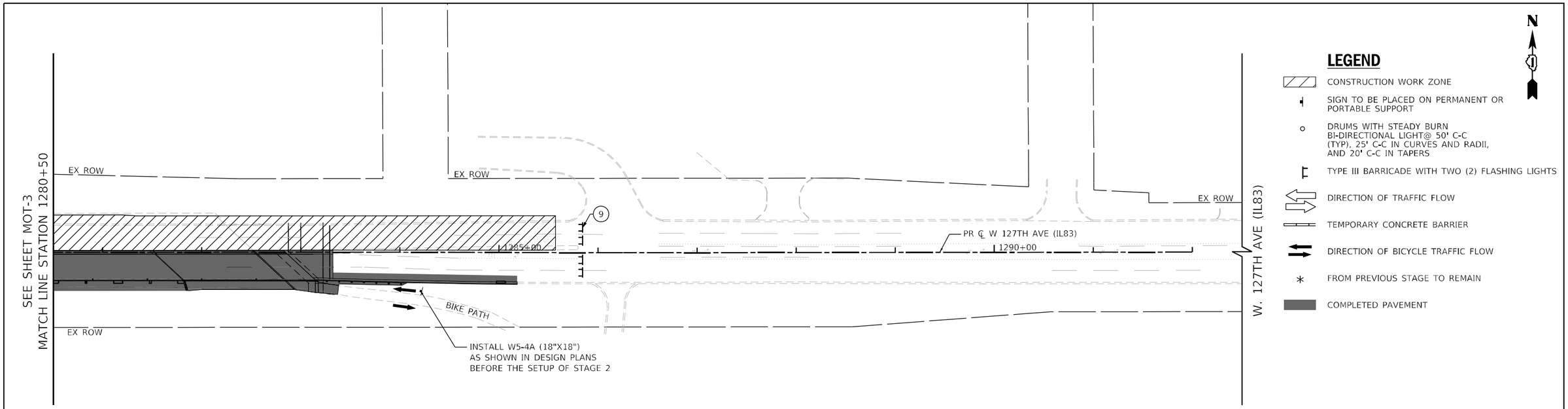
TranSystems

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET)
CAL SAG ROAD TO HOLIDAY ROAD
SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
STAGE 2

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	23
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



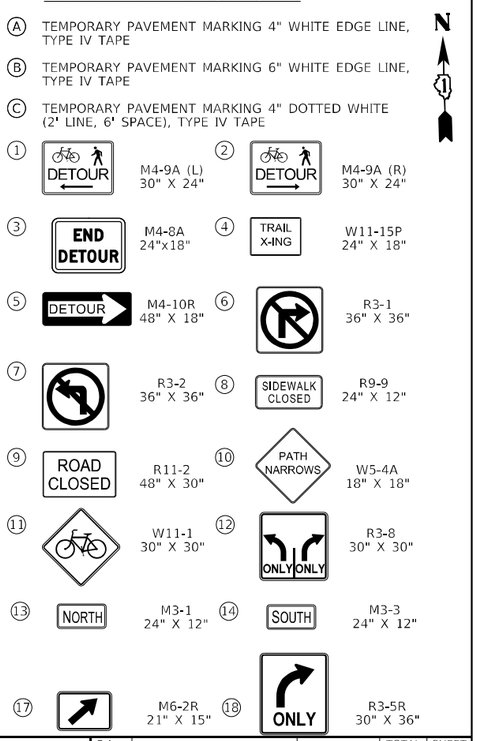
NOTE:
SEE DETOUR PLAN FOR TEMPORARY ROADWAY SIGNAGE.

PAVEMENT MARKING LEGEND

Ⓐ TEMPORARY PAVEMENT MARKING 4" WHITE EDGE LINE, TYPE IV TAPE

Ⓑ TEMPORARY PAVEMENT MARKING 6" WHITE EDGE LINE, TYPE IV TAPE

Ⓒ TEMPORARY PAVEMENT MARKING 4" DOTTED WHITE (2' LINE, 6' SPACE), TYPE IV TAPE



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET)
CAL SAG ROAD TO HOLIDAY ROAD
SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
STAGE 2

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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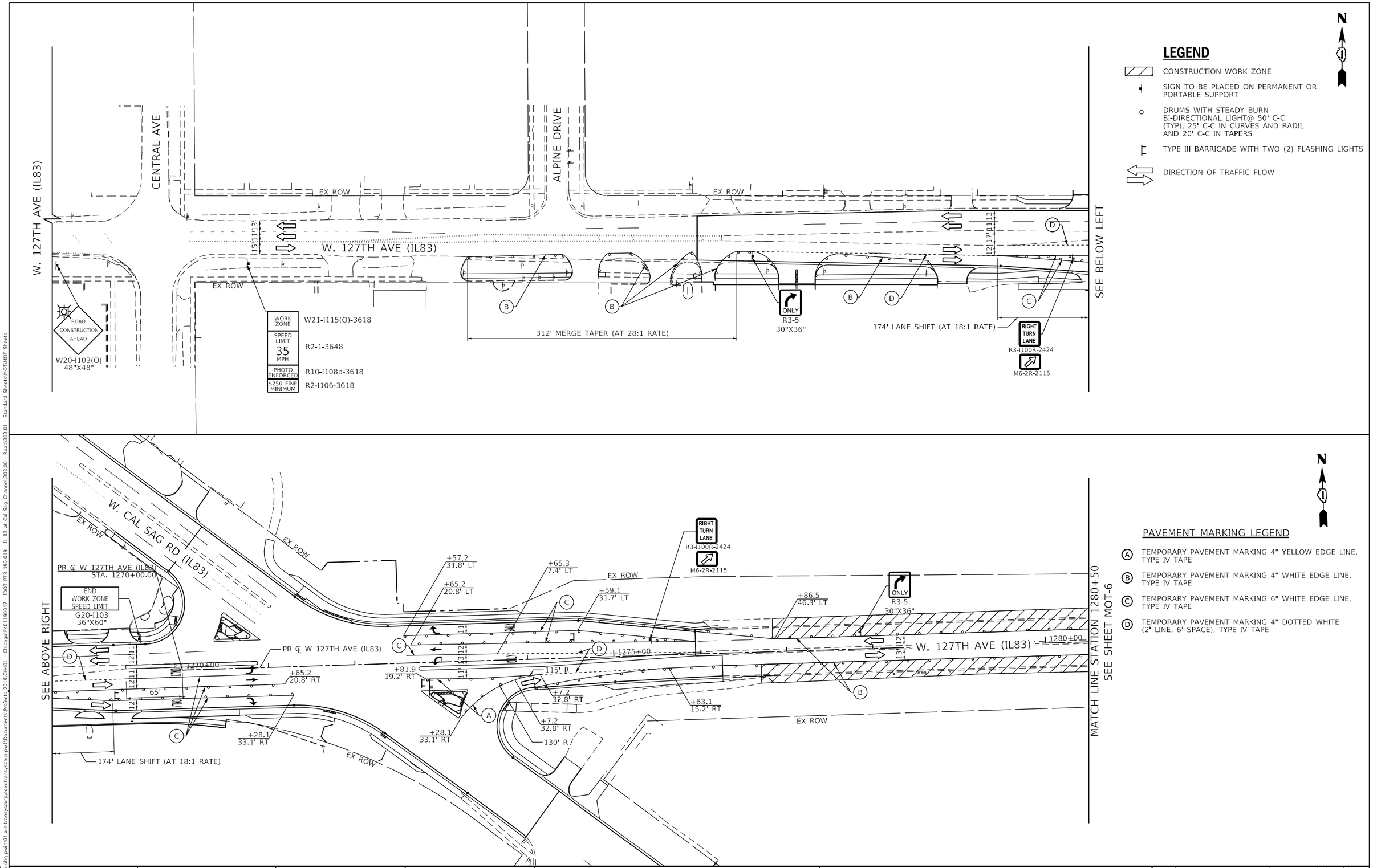
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



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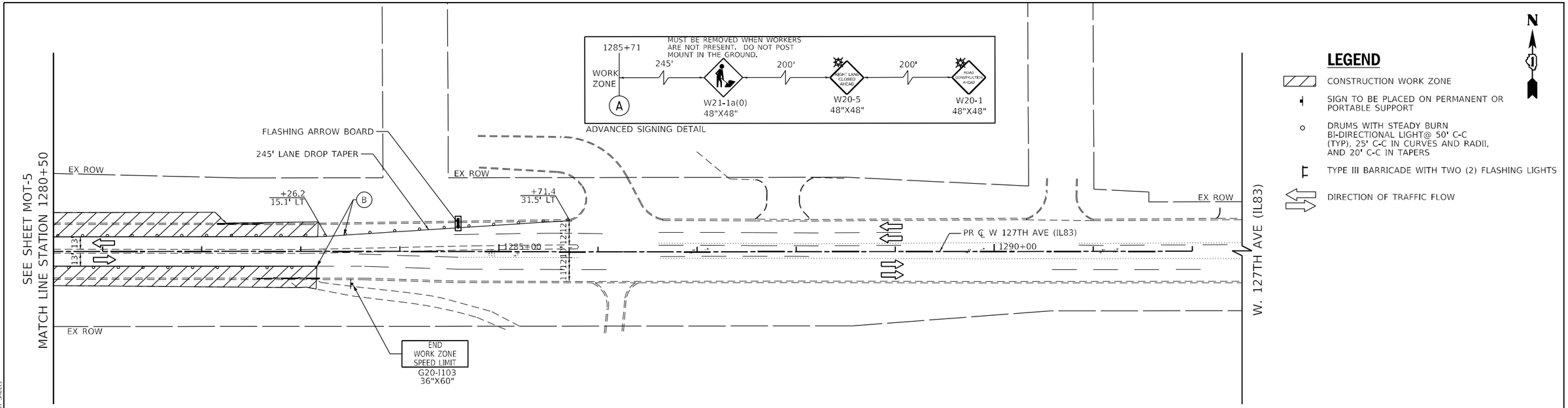
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 5/17/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 83 AT CAL SAG CHANNEL
LOWER STEEL PAINTING
STAGING PLANS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	25
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



PAVEMENT MARKING LEGEND

- (A) TEMPORARY PAVEMENT MARKING 4" YELLOW EDGE LINE, TYPE IV TAPE
- (B) TEMPORARY PAVEMENT MARKING 4" WHITE EDGE LINE, TYPE IV TAPE
- (C) TEMPORARY PAVEMENT MARKING 6" WHITE EDGE LINE, TYPE IV TAPE
- (D) TEMPORARY PAVEMENT MARKING 4" DOTTED WHITE (2' LINE, 6' SPACE), TYPE IV TAPE

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PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/17/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 83 AT CAL SAG CHANNEL
LOWER STEEL PAINTING
STAGING PLANS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	26
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

EROSION AND SEDIMENT CONTROL GENERAL NOTES:

1. THE CONSTRUCTION LIMITS WILL BE STAKED AND APPROVED BY THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION. THE CONSTRUCTION LIMITS MAY BE ADJUSTED BY THE ENGINEER TO PRESERVE TREES AND NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR CHANGES IN CONSTRUCTION LIMITS.

2. EROSION CONTROL ITEMS ARE CONSIDERED HIGH PRIORITY ITEMS IN THIS CONTRACT. THE ENGINEER WILL IMPLEMENT ALL PROVISIONS OF SPECIFICATION NECESSARY TO ASSURE THAT EROSION CONTROL ITEMS ARE CONSTRUCTED AND MAINTAINED IN A TIMELY MANNER. THE CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION OPERATIONS WHICH WILL POTENTIALLY CREATE ERODIBLE CONDITIONS. PLACEMENT AND MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS WILL BE UTILIZED THROUGHOUT THE CONSTRUCTION LIMITS.

3. TEMPORARY EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS, CONTRACT SPECIAL PROVISIONS AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

4. THE CONTRACTOR SHALL UTILIZE THE GENERAL MAINTENANCE GUIDELINES AS OUTLINED IN THE SWPPP TO ENSURE GOOD AND EFFECTIVE OPERATING CONDITION OF THE VEGETATION AND EROSION AND SEDIMENT CONTROL MEASURES.

5. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON SITE. ALL CHANGES TO THE SOIL EROSION AND SEDIMENT CONTROL PLAN SHALL BE NOTED ON THE SITE.

6. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN HIGHWAY STANDARD 280001. STRAW BALES AND SILT FENCE SHOULD NOT BE USED AS INLET AND PIPE PROTECTION.

7. THE EROSION CONTROL MEASURES SHOWN ARE BUT A GRAPHICAL REPRESENTATION OF SUGGESTED MEASURES. DEVIATIONS FROM THIS PLAN ARE TO BE EXPECTED PENDING A JOBSITE INSPECTION BETWEEN THE CONTRACTOR AND THE DEPARTMENT.

8. THE CONTRACTOR WILL BE REQUIRED TO IMPLEMENT AND MAINTAIN SEDIMENT CONTROL MEASURES PRIOR TO STRIPPING EXISTING VEGETATION.

9. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER EACH RAINFALL, 0.5 INCHES OR GREATER IN A 24 HOUR PERIOD, OR EQUIVALENT SNOWFALL. ADDITIONALLY DURING WINTER MONTHS, ALL MEASURES SHOULD BE CHECKED AFTER EACH SIGNIFICANT SNOWMELT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF SAID MEASURES SHALL BE MADE IMMEDIATELY.

10. TEMPORARY EROSION CONTROL SEEDING SHALL BE APPROVED PER SUB-STAGE AS SOON AS ROUGH GRADING IS COMPLETED IN A SECTION. STABILIZATION OF DISTURBED AREAS MUST BE INITIATED WITHIN 1 WORKING DAY OF TEMPORARY OR PERMANENT CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NO LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION OF WORK IN AN AREA.

11. MULCH, METHOD 2 AND SURFACE ROUGHENING SHALL BE USED FOR TEMPORARY STABILIZATION DURING WINTER IN ADDITION TO TEMPORARY EROSION CONTROL SEEDING WHEN GRADING WILL OCCUR WHILE THE GROUND IS SNOW COVERED WHEN TEMPORARY SEED WILL NOT GERMINATE AND PROVIDE EROSION CONTROL PROTECTION UNTIL THE FOLLOWING SPRING. SURFACE ROUGHENING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF MULCH, METHOD 2.

12. ANY AREA WHERE THERE IS NO PROPOSED GRADING THE EXISTING GROUND COVER SHALL REMAIN.

13. TEMPORARY STOCKPILE LOCATIONS SHALL BE APPROVED BY THE ENGINEER AND WILL REQUIRE SILT FENCE AND TEMPORARY SEEDING.

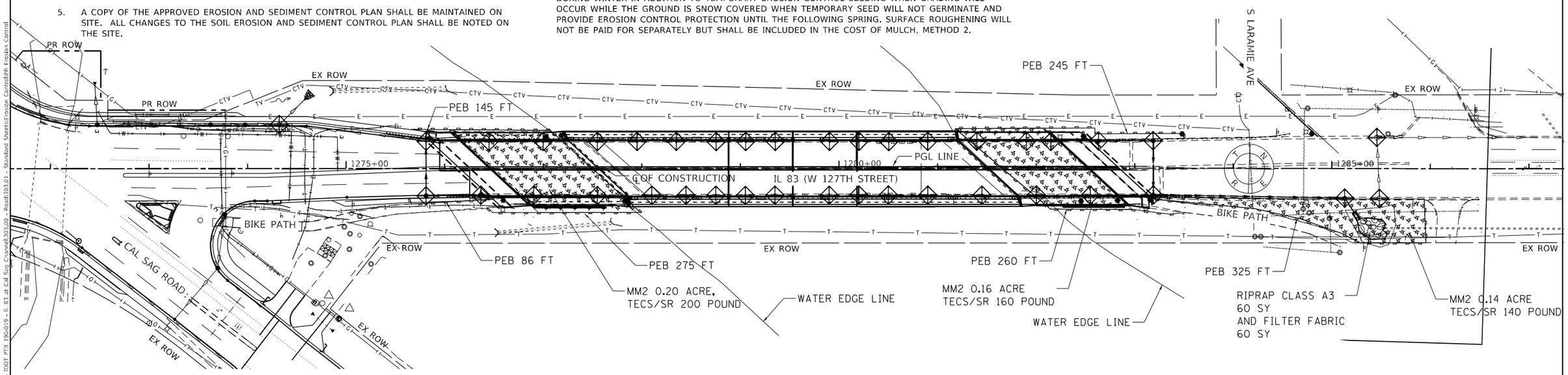
14. THE CONTRACTOR SHALL INSTALL AND MAINTAIN INLET FILTERS AT ALL EXISTING INLETS ADJACENT TO THE EDGE OF PAVEMENT PRIOR TO THE START OF PRE-STAGE WORK. THE INLET FILTERS SHALL BE MAINTAINED AT EACH SUBSEQUENT STAGE UNTIL NO LONGER REQUIRED OR AS DIRECTED BY THE ENGINEER.

15. DURING CONSTRUCTION OPERATIONS, WHEN ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY.

16. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE PROJECT.

17. THE CONTRACTOR SHALL IMMEDIATELY INSTALL AND MAINTAIN INLET FILTERS AT ALL NEW INLETS AND DRAINAGE STRUCTURES. THE INLET FILTERS SHALL BE MAINTAINED AT EACH SUBSEQUENT STAGE UNTIL COMPLETION OF STAGING OR UNTIL NO LONGER REQUIRED.

18. THE CONSTRUCTION OF THE STABILIZED ENTRANCES/EXITS SHALL BE INCLUDED IN THE COST OF THE CONTRACT. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. LOCATIONS OF THE ENTRANCES/EXITS SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE INSTALLATION OF THE ENTRANCE/EXITS SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL OR AS DIRECTED BY THE ENGINEER.



19. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INSTALLED ON ALL AREAS DISTURBED DURING EACH STAGE OF CONSTRUCTION PRIOR TO SWITCHING TRAFFIC TO BEGIN THE SUBSEQUENT STAGE. ALSO, ALL EROSION CONTROL MEASURES PLACED DURING CONSTRUCTION SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL COMPLETION OF CONTRACT OR NO LONGER REQUIRED.

20. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE MAINTAINED IN ACCORDANCE WITH THE IDOT EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONSTRUCTION INSPECTION AND IDOT'S BEST MANAGEMENT PRACTICES MAINTENANCE GUIDE: (HTTP://WWW.IDOT.ILLINOIS.GOV/TRANSPORTATION-SYSTEM/ENVIRONMENT/EROSION-AND-SEDIMENT-CONTROL).

21. THE CONTRACTOR SHOULD PROVIDE TO THE RESIDENT ENGINEER A PLAN TO ENSURE THAT A STABILIZED FLOW LINE WILL BE PROVIDED DURING STORM SEWER CONSTRUCTION. THE USE OF A STABILIZED FLOW LINE BETWEEN INSTALLED STORM SEWER AND OPEN DISTURBANCE WILL REDUCE THE POTENTIAL FOR THE OFFSITE DISCHARGE OF SEDIMENT-BEARING WATERS, ESPECIALLY WHEN RAIN IS FORECASTED, SO THAT FLOW WILL NOT ERODE. LACK OF APPROVED PLAN OR FAILURE TO COMPLY WILL RESULT IN AN EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION.

22. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PROLONG FINAL GRADING AND SHAPING SO THAT THE ENTIRE PROJECT CAN BE PERMANENTLY SEEDED AT ONE TIME.

23. ALL WORK ASSOCIATED WITH INSTALLATION AND MAINTENANCE OF CONCRETE WASHOUTS IS INCIDENTAL TO THE CONTRACT.

LEGEND:

INLET FILTER

PERIMETER EROSION BARRIER (PEB)

MULCH, METHOD 2 (MM2)
TEMPORARY EROSION CONTROL SEEDING /
SURFACE ROUGHENING (TECS/SR)

STONE RIPRAP, CLASS A3
AND FILTER FABRIC

N

50' 0 50'
5' HORIZ. 1"=50' 5'
VERT. 1"=10'

MODEL: Default
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USER NAME = CEComin	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/17/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET)
CAL SAG ROAD TO HOLIDAY ROAD
PROPOSED EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1"=50' | SHEET OF SHEETS | STA. 1275+00 | TO STA. 1285+80

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	27
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

EX HEADWALL, INV 593.20
EX END SECTION - 12"
INV 595.00 (NE)
BY OTHERS (CONTRACT 60X74)
EX STORM SEW 12"
L=20.5', S=1.5 %
BY OTHERS (CONTRACT 60X74)
EX MH DIA. 4'
RIM 602.26
INV 597.40 (E)
INV 595.84 (W)
INV 595.55 (N)
BY OTHERS
(CONTRACT 60X74)
PR ROW
EX STORM SEW 12"
L=145', S=1.5 %
BY OTHERS (CONTRACT 60X74)
CLEAN EX 24" CULVERT
BY OTHERS (CONTRACT 60X74)
UNDERGROUND ELECTRIC, TO BE RELOCATED
EX CB 4' DIA WITH T24F&G
RIM 604.84
INV 599.80 (E)
INV 599.61 (S & W)
BY OTHERS (CONTRACT 60X74)
EX HEADWALL, INV 587.02
PIPE UNDERDRAIN 8 SP
L=62', S=2.2 %
TBF = 39 CY
EX ROW
24" CULVERT
BRIDGE SCUPPER
(SEE STRUCTURAL PLANS)
INV 601.20 (E&W)
CAL SAG CHANNEL
BRIDGE DRAINAGE SYSTEM
(SEE STRUCTURAL PLANS
FOR DETAILS)
CONN EX DRG STRUCTURE
CONN EX DRG STRUCTURE
PGL LINE
1275+00
1280+00
℄ OF CONSTRUCTION
IL 83 (W 127TH STREET)
243' 6" POLY
BIKE PATH
STORM SEW CL A 2 12
L=51', S=0.75 %
TBF = 15 CY
EX ROW
CB TA 4 DIA T24F&G
STA. 1275+81, 27.1' RT
RIM 604.78
INV 600.00 (N & E)
24" CULVERT
EX HEADWALL, INV 587.22
BRIDGE SCUPPER (SEE STRUCTURAL PLANS)
INV 602.55 (E&W)
PIPE UNDERDRAIN 8 SP
L=51', S=2.2 %, TBF = 13 CY
EX HEADWALL, INV 595.94
EX ROW
CB TA 4 DIA T24F&G
STA.1276+36, 26.0'RT
RIM 606.10
INV 601.43 (E)
INV 601.26 (W)
STORM SEW CL A 2 12
L=55', S=2.2 %
TBF = 15 CY
170' 6" POLY
CAL SAG ROAD
EX ROW
EX ROW
CB TA 4 DIA T24F&G
STA. 1283+19, 27.0' LT
RIM 604.73
INV 600.25(W)
INV 600.00(S)
STORM SEW CL A 2 12
L=55', S=2.0%, TBF = 14 CY
CB TA 4 DIA T24F&G
STA. 1282+63, 26.0' LT
RIM 606.10
INV 601.90 (W)
INV 601.35 (E)
PIPE UNDERDRAIN 8 SP
L=47', S=2.0%, TBF = 11 CY
BRIDGE SCUPPER
INV 602.85 (E&W)
(SEE STRUCTURAL PLANS)
EX ROW
S LARAMIE AVE
CB TA 4 DIA T1F CL
STA. 1285+13, 30.3' RT
RIM 600.04
INV 595.00 (SE & W)
DRAINAGE STR CLEANED
STORM SEW CL A 2 15
L=49', S=0.5 %
TBF = 15 CY
SS CLEANED 12,
L=200'
EX ROW
1285+00
SS CLEANED 8, L=62'
DRAINAGE STR CLEANED
EX HEADWALL, INV 591.72
PIPE CULV CLEANED 15, L=225'
12" OR 15" CULVERT (FIELD VERIFY)
BIKE PATH
BRIDGE SCUPPER
(SEE STRUCTURAL PLANS)
INV 601.30 (E&W)
PIPE UNDERDRAIN 8 SP
L=60', S=2.2 %
TBF = 17 CY
EX ROW
CONC ES 542001 15 1:3
STA. 1285+33, 51.0' RT
INV 594.65 (NW)
STORM SEW CL A 2 15
L=190', S=2.2 %
TBF = 65 CY
STONE RIPRAP CL A3
AND FILTER FABRIC
CB TA 4 DIA T24F&G
STA. 1283+19, 26.0' RT
RIM 605.05
INV 600.00 (W)
INV 599.75 (N)
INV 599.25 (E)
STORM SEW CL A 2 15
L=18', S=2.0 %
TBF = 5.0 CY

LEGEND:

- EX CATCH BASIN
- EX INLET
- EX MANHOLE
- EX DITCH
- EX HEADWALL/ENDWALL
- PR BRIDGE SCUPPER
- PR CATCH BASIN
- PR INLET
- PR MANHOLE
- PR END SECTION
- STONE RIPRAP
- 2'x2' BOX — CULVERT SIZE - TYPE
- PR STORM SEWER
- EX STORM SEWER
- PR PIPE UNDERDRAIN (SPECIAL)
- SANITARY SEWER

N

50' 0 50'
5' HORIZ. 1"=50' 5'
VERT. 1"=10'

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
R.O. WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
E.M. NOTED
STRUCTURE NOTATIONS CHKD
NOTE BOOK
NO.
BY
DATE

EXISTING PROFILE GRADE
PROPOSED PROFILE GRADE LINE
EX STR RIM =601.56
597.00
595.55
EX STORM SEW 12"
L=20.5', S=1.5 %
BY OTHERS (CONTRACT 60X74)
EX END SECTION
INV 595.00 (NE)
BY OTHERS (CONTRACT 60X74)
EX STORM SEW 12"
L=145.00', S=1.5 %
BY OTHERS
(CONTRACT 60X74)
WEST ABUTMENT - NORTH SIDE
RIM =604.84
WEST ABUTMENT - SOUTH SIDE
RIM =604.78
599.61
600.00
L=51.00 FT
STORM SEW CL A 2 12
S=0.75%
+2.32%
-0.60%
K = 154
450.00' V.C.
WEST ABUTMENT - SOUTH SIDE
RIM =606.00
601.26
601.43
L=55.00 FT
STORM SEW CL A 2 12
S=2.20%
WEST ABUTMENT - SOUTH SIDE
BRIDGE SCUPPER
RIM =607.29
602.55
L=51.00 FT
PIPE UNDERDRAIN 8 SP
S=2.20%
BRIDGE DRAINAGE SYSTEM
(REFER BRIDGE DRAINAGE PLAN FOR DETAILS)
-0.60%
-2.49%
K = 106
200.00' V.C.
EAST ABUTMENT - NORTH SIDE
BRIDGE SCUPPER
RIM =607.33
602.85
L=47.00 FT
PIPE UNDERDRAIN 8 SP
S=2.00%
L=55.00 FT
STORM SEW CL A 2 12
S=2.00%
EAST ABUTMENT - NORTH SIDE
RIM =606.10
601.90
601.35
-2.49%
EAST ABUTMENT - NORTH SIDE
RIM =604.73
600.25
599.70
L=49.00 FT
STORM SEW CL A 2 15
S=0.50%
EAST ABUTMENT - SOUTH SIDE
RIM =605.05
599.25
L=190.40 FT
STORM SEW CL A 2 15
S=2.20%
EAST ABUTMENT - SOUTH SIDE
RIM =606.04
595.00
L=15.32 FT
STORM SEW CL A 2 15
S=2.00%
594.65
591.72
EX WATERMAIN,
TOP OF PIPE 592.28

640 630 620 610 600 590 580 570 560

602.93 602.89 602.75 603.09 603.47 603.98 604.89 605.69 606.16 607.21 607.24 608.05 608.17 608.82 608.93 609.51 609.54 610.07 609.98 610.31 610.25 610.50 610.37 610.46 610.32 610.16 610.12 609.67 609.71 609.14 609.07 608.09 608.20 607.10 607.08 606.05 605.84 604.50 603.27 602.08 600.77 599.51 598.34 597.15

1272+00 1273+00 1274+00 1275+00 1276+00 1277+00 1278+00 1279+00 1280+00 1281+00 1282+00 1283+00 1284+00 1285+00 1286+00 1287+00

RIM ELEVATION AND OFFSET
SEWER OFFSET
SEWER ℄
CATCH BASIN, T24F&G

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FILE NAME: pw:\\wcpwin101.ae.transystems.com:transystems-pwp1\Documents\Projects_2019\CH401 - Chicago\P401190017 - IDOT PTB 190-019 - IL 83 at Cal Sag Channel\303.00 - Roadway\303.01 - Standard Sheets\Drainage\Pr Drain Plan and Profile

TranSystems

USER NAME = lmainggolan	DESIGNED -	REVISED -	
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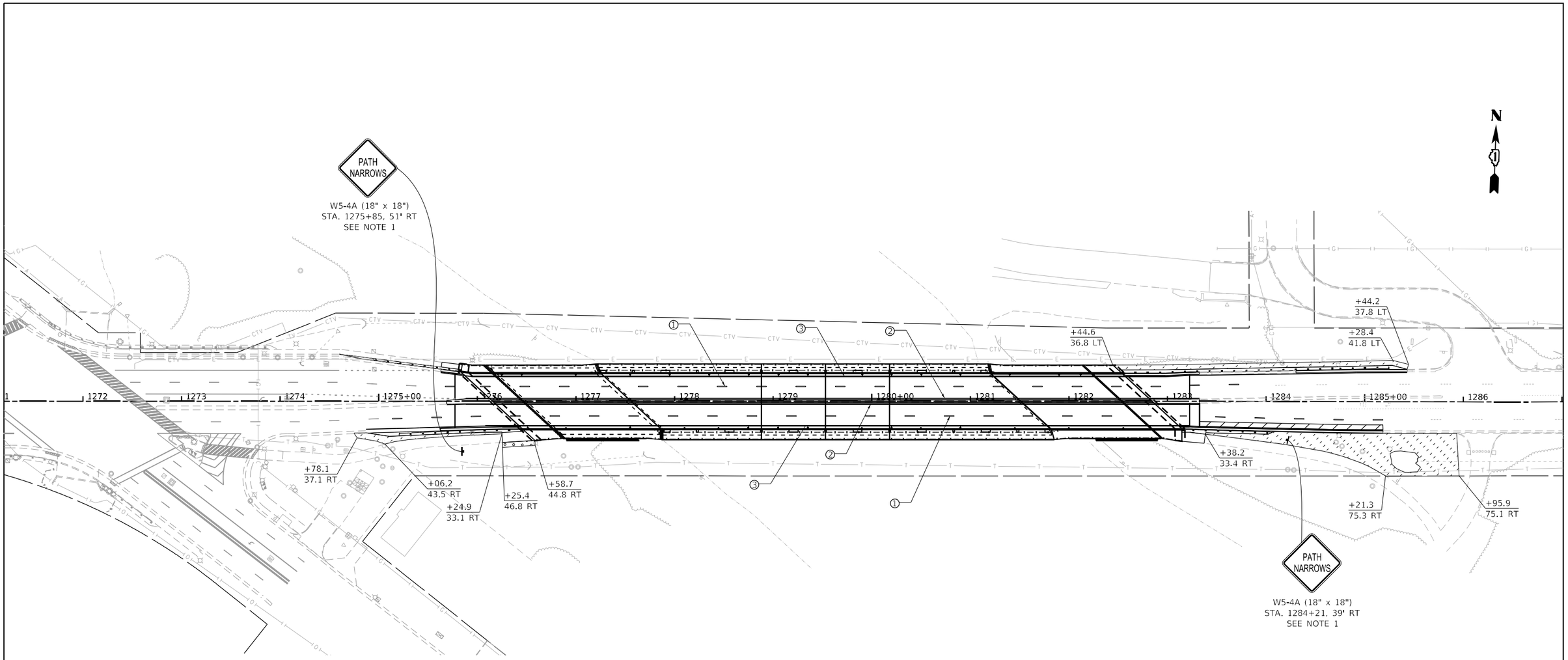
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 2/17/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET)
CAL SAG ROAD TO HOLIDAY ROAD
PROPOSED DRAINAGE PLAN

SCALE: 1"=50' | SHEET OF SHEETS | STA. 1275+00 | TO STA. 1285+80

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	28
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



LANDSCAPING LEGEND

SODDING SALT TOLERANT

SEEDING CLASS 2A
EROSION CONTROL BLANKET

PAVEMENT MARKING LEGEND

① MODIFIED URETHANE PAVEMENT MARKING
4" WHITE LANE LINE (10' DASH, 30' SKIP)

② MODIFIED URETHANE PAVEMENT MARKING
4" SOLID YELLOW LINE

③ MODIFIED URETHANE PAVEMENT MARKING
4" SOLID WHITE LINE

NOTE

1. NEW SIGN SHALL BE INSTALLED ON A TYPE A METAL POST AT A HEIGHT OF 5 FEET.
2. INSTALL RAISED REFLECTIVE PAVEMENT MARKERS PER DISTRICT 1 STANDARD TC-11.

COLLINS ENGINEERS INC.

USER NAME = orush	DESIGNED - OLR	REVISED -
	DRAWN - OLR	REVISED -
PLOT SCALE = 100:0 ':' / in.	CHECKED - ZJT	REVISED -
PLOT DATE = 3/1/2023	DATE - 2/24/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN, PAVEMENT MARKING AND LANDSCAPING PLAN
IL RTE 83 (127TH STREET)

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	29
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

LIGHTING AND ELECTRICAL LEGEND

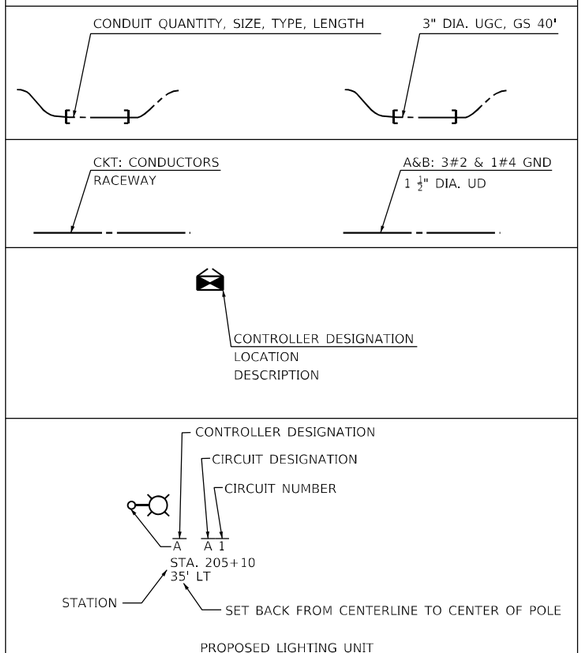
SYMBOL	DESCRIPTION
(E)	EXISTING LIGHTING UNIT TO REMAIN
(E) RR	EXISTING LIGHTING UNIT TO BE RELOCATED
RL	RELOCATED LIGHTING UNIT ON EXISTING TRANSFORMER BASE AS APPLICABLE, CONCRETE FOUNDATION
R/G	EXISTING NAVIGATION LIGHTING UNIT TO BE REMOVED, NO SALVAGE. 180 DEGREE RED (R) OR 360 DEGREE GREEN (G)
R/G	PROPOSED NAVIGATION LIGHTING UNIT 180 DEGREE RED (R) OR 360 DEGREE GREEN (G)
R	EXISTING UNDERPASS LUMINAIRE TO BE REMOVED, NO SALVAGE
	PROPOSED UNDERPASS LED LUMINAIRE, STRUCTURE MOUNTED
R	EXISTING JUNCTION BOX TO BE REMOVED
	PROPOSED JUNCTION BOX, SIZE AND TYPE AS NOTED
	EXISTING LIGHTING CONTROLLER
	PROPOSED IDOT LIGHTING CONTROLLER
	EXISTING ELECTRIC UTILITY SERVICE TO BE REMOVED
	PROPOSED ELECTRIC UTILITY SERVICE
-R-	EXISTING UNDERGROUND UNIT DUCT TO BE ABANDONED IN PLACE
-[-R-]-	EXISTING UNIT DUCT IN EXISTING UNDERGROUND CONDUIT.
	PROPOSED UNIT DUCT, SIZE AND TYPE AS NOTED
	PROPOSED UNIT DUCT IN UNDERGROUND CONDUIT, SIZE AND TYPE AS NOTED
A/C	EXISTING AERIAL CABLE TO BE REMOVED
A/C	PROPOSED AERIAL CABLE, SIZE AND TYPE AS NOTED
	EXISTING UNIT DUCT OR CONDUIT TO REMAIN
	ELECTRIC CABLE IN CONDUIT, SIZE AND TYPE AS NOTED
R	EXISTING WOOD POLE TO BE REMOVED

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AC	ALTERNATING CURRENT
A/C	AERIAL CABLE
ATS	ATTACHED TO STRUCTURE
B.O.C.	BACK OF CURB
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CM	CENTIMETER
COMED	COMMONWEALTH EDISON COMPANY
CP	CONTROL PANEL
CT	CURRENT TRANSFORMER
DA	DAVIT ARM
DC	DIRECT CURRENT
DIA	DIAMETER
DP	DISTRIBUTION PANEL
E	EXISTING UNIT TO REMAIN
EX.	EXISTING
ECA	ELECTRIC CABLE ASSEMBLY
EIS	EMBEDDED IN STRUCTURE
E.O.P.	EDGE OF PAVEMENT
F.O.C.	FACE OF CURB
FT	FEET OR FOOT
FU	FUSE
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
JB	JUNCTION BOX
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
LED	LIGHT EMITTING DIODE
LP	LIGHT POLE
M	METER
MA	MAST ARM
MC	MULTI-CONDUCTOR
MM	MILLIMETER
M.H.	MOUNTING HEIGHT
MW	MESSENGER WIRE
NESC	NATIONAL ELECRIC SAFETY CODE
NO. #	NUMBER
N.T.S.	NOT TO SCALE
P	PROPOSED
PB	PUSH BUTTON
PNL	PANEL
PVC	POLYVINYL CHLORIDE
PVCC RGC	PVC COATED RIGID GALVANIZED CONDUIT
PT	POTENTIAL TRANSFORMER
R	EXISTING UNIT TO BE REMOVED (OWNER SALVAGED U.N.O.)
RL	RELOCATED LIGHTING UNIT
RR	EXISTING UNIT TO BE REMOVED AND REINSTALLED
RECP	RECEPTACLE
RGC	RIGID GALVANIZED CONDUIT
SEL SW	SELECTOR SWITCH
SPARE	SPARE
SPACE	SPACE
SS	STAINLESS STEEL
STA	STATION
T/F	TOP OF FOUNDATION
UD	UNIT DUCT
U.N.O.	UNLESS NOTED OTHERWISE
UGC, GS	UNDERGROUND CONDUCT, GALVANIZED STEEL
VAC	VOLTS, ALTERNATING CURRENT
W	WATTS
WP	WOOD POLE
XFMR	TRANSFORMER
HPS	HIGH PRESSURE SODIUM
LPS	LOW PRESSURE SODIUM
LTFM	LIQUID TIGHT FLEXIBLE METALLIC

CALL–OUT SAMPLE

DEFINITION AND EXAMPLE



GENERAL NOTES

1. THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CODES, STANDARDS AND THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2022, AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL CONTACT MEADE ELECTRIC CO. DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR TO LOCATE IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES 773-287-7672.

IDOT–D1 STANDARDS:

STANDARD NO.	TITLE
BE-220	ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT
BE-301	LIGHT POLE FOUNDATION DETAILS 40' (12.192 M) TO 47½' (14.478 M) M.H. 15" (381 MM) BOLT CIRCLE
BE-702	MISC. ELECTRICAL DETAILS SHEET A

IDOT HIGHWAY STANDARDS:

STANDARD NO.	TITLE
812001-01	RACEWAYS EMBEDDED IN STRUCTURE

INDEX OF DRAWINGS

DRAWING NO.	TITLE
LT-01	LEGEND, ABBREVIATIONS, GENERAL NOTES, AND INDEX OF DRAWINGS
LT-02	SCHEDULE OF QUANTITIES
LT-03	LIGHTING REMOVAL PLAN
LT-04	TEMPORARY NAVIGATION LIGHTING PLAN AND DETAILS
LT-05	PROPOSED LIGHTING PLAN
LT-06 TO LT-07	LIGHTING DETAILS
LT-08	LIGHTING CONTROLLER "CH" WIRING DIAGRAM
LT-09	LIGHTING AS-BUILT
LT-10 TO LT-12	IDOT STANDARD DRAWINGS

LT–01

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = sgruberman	DESIGNED - SG	REVISED -	
	DRAWN - GS	REVISED -	
PLOT SCALE = 100 ' / in.	CHECKED - RP	REVISED -	
PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LEGEND, ABBREVIATIONS, GENERAL NOTES, AND INDEX OF DRAWINGS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	30
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

DESCRIPTION	UNIT	TOTAL QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	150
CONDUIT ATTACHED TO STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	940
CONDUIT ATTACHED TO STRUCTURE, 1" DIA., PVC COATED GALVANIZED STEEL	FOOT	1,095
CONDUIT ATTACHED TO STRUCTURE, 2" DIA., STAINLESS STEEL	FOOT	20
CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	720
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	18
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 8" X 8" X 6"	EACH	2
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	4
UNIT DUCT, 600V, 3-1C NO.10, 1/C NO.10 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE	FOOT	185
UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	250
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	9,243
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	600
LUMINAIRE, LED, UNDERPASS, WALLMOUNT, OUTPUT DESIGNATION D	EACH	12
WATERWAY OBSTRUCTION WARNING LUMINAIRE, LED	EACH	6
OBSTRUCTION WARNINGLIGHTINGCONTROLLER	EACH	1
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	14
REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	3
REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	12
REMOVAL OF POLE FOUNDATION	EACH	2
REMOVAL OF OBSTRUCTION WARNING LIGHTING SYSTEM	L SUM	1
RELOCATE EXISTING LIGHTING UNIT	EACH	2
REMOVAL OF LIGHTING CONTROLLER	EACH	1
REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	12

LT–02

SINGH
SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

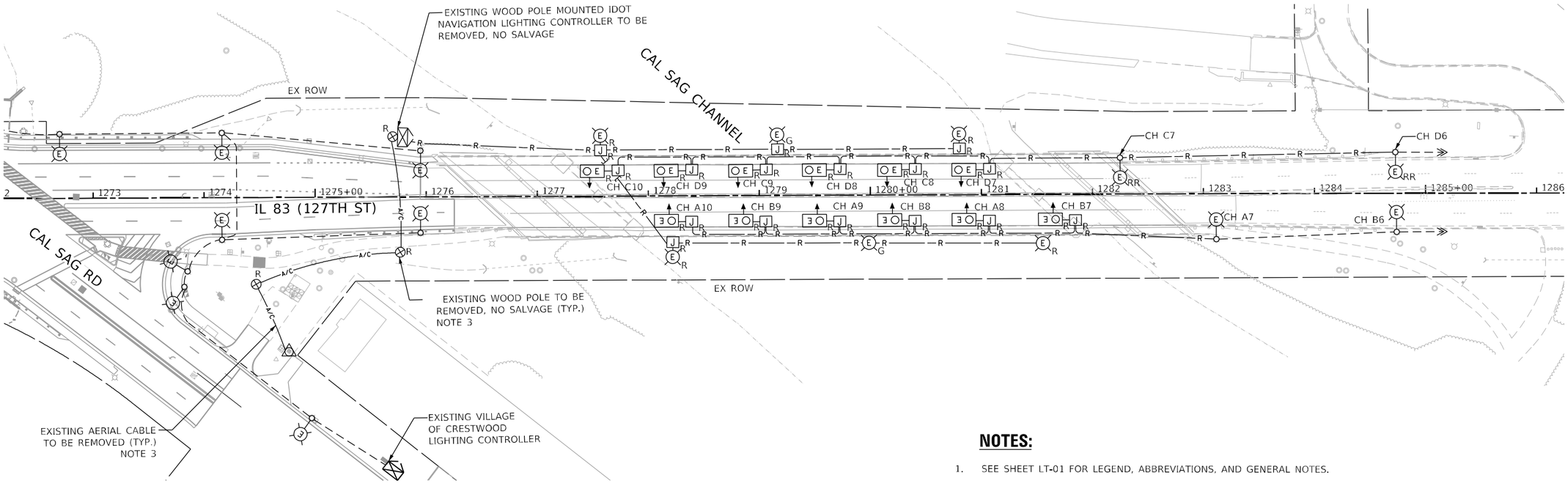
USER NAME = sgruberman	DESIGNED - SG	REVISED -
	DRAWN - GS	REVISED -
PLOT SCALE = 2 ' / in.	CHECKED - RP	REVISED -
PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	31
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. SEE SHEET LT-01 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
2. EXISTING LIGHTING SYSTEM TO REMAIN OPERATIONAL UNTIL PROPOSED LIGHTING SYSTEM IS INSTALLED AND OPERATIONAL.
3. THE COST OF WOOD POLE AND AERIAL CABLE REMOVAL SHALL BE INCLUDED IN THE "REMOVAL OF TEMPORARY LIGHTING UNIT" PAY ITEM.
4. REMOVAL OF EXISTING ROADWAY LIGHTING UNITS AND ALL ASSOCIATED CONDUIT, CABLE, JUNCTION BOXES, HARDWARE AND APPURTENANCES SHALL BE INCLUDED IN THE "REMOVAL OF LIGHTING UNIT, NO SALVAGE" PAY ITEM.

LT-03

SINGH
SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

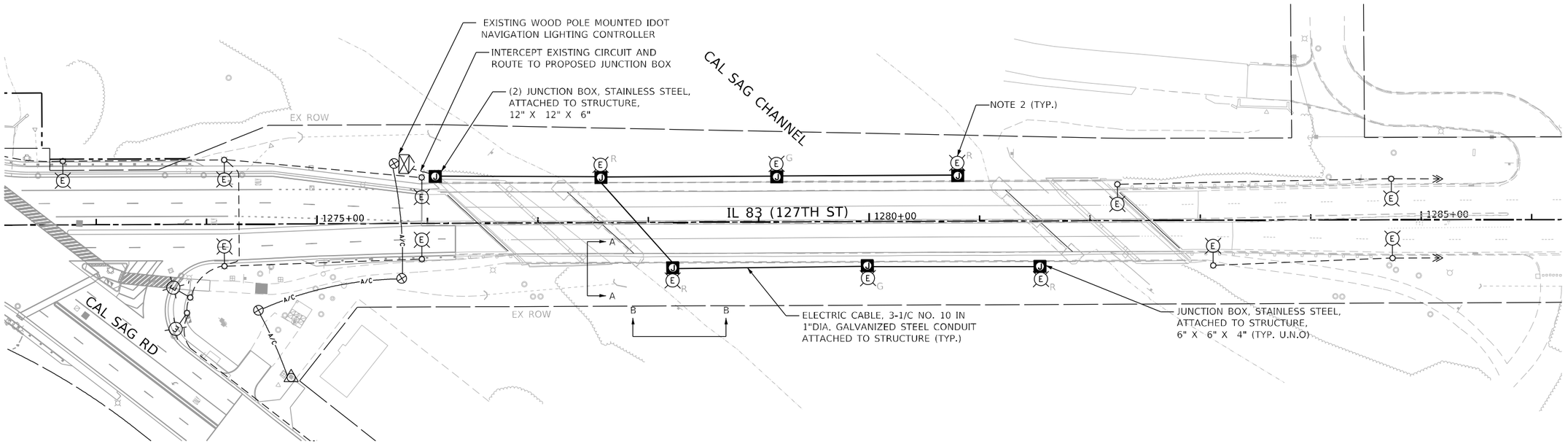
USER NAME = sgruberman	DESIGNED - SG	REVISED -
	DRAWN - GS	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - RP	REVISED -
PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -

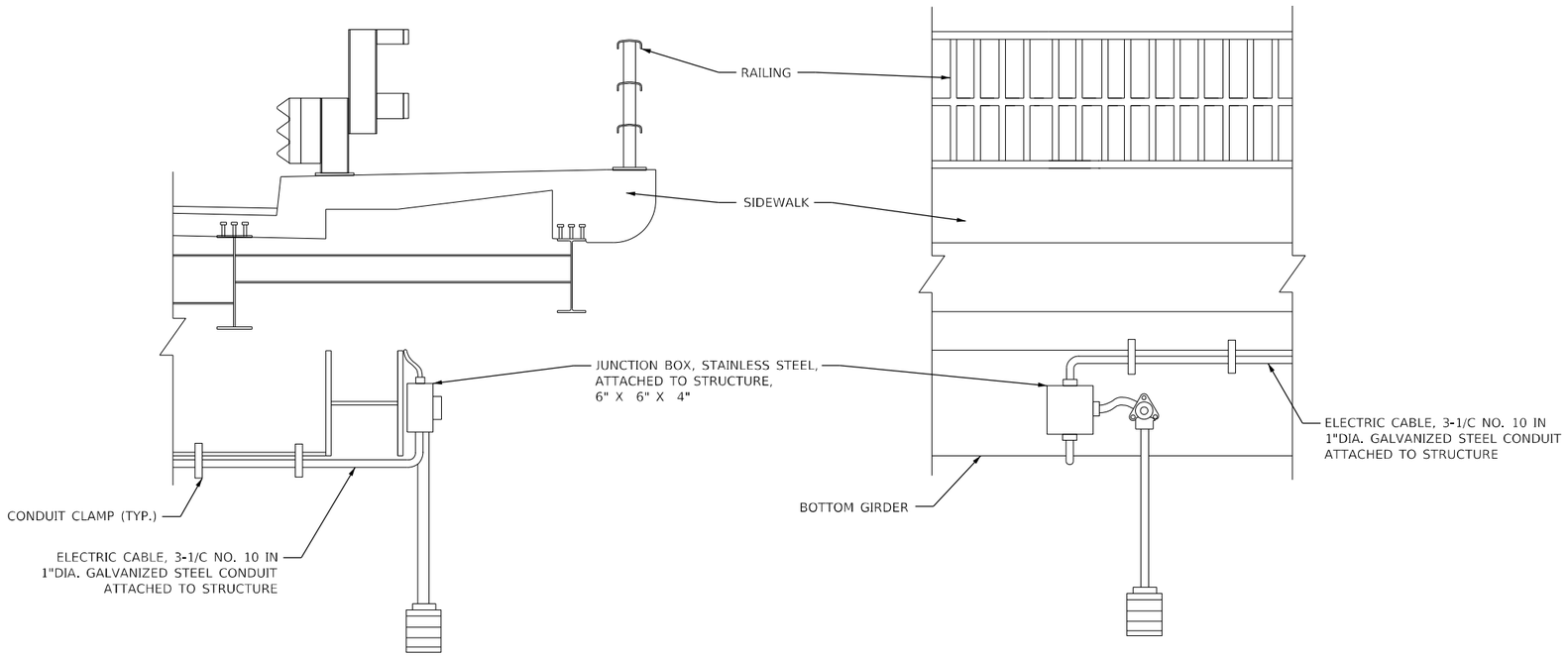
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	32
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			





SECTION A–A – CHANNEL MARKER MOUNTING

SECTION B–B – CHANNEL MARKER NAVIGATION LIGHT

N

0 50 100 150

SCALE IN FEET

NOTES:

1. SEE SHEET LT-01 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
2. EXISTING NAVIGATION LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. ALL NAVIGATION LUMINAIRES FOUND TO BE NON-OPERATIONAL SHALL BE REPLACED WITH NEW LUMINAIRES PRIOR TO CONSTRUCTION. LUMINAIRES SHALL BE ACCORDING TO ARTICLE 1067.07 OF THE STANDARD SPECIFICATIONS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE "MAINTENANCE OF LIGHTING SYSTEM" PAY ITEM.
3. EXISTING NAVIGATION LIGHTING UNIT TO BE RELOCATED TO EXISTING BRIDGE STEEL BELOW THE SIDEWALK STRINGER. SPACING OF THE RELOCATED NAVIGATION LIGHTING UNITS SHALL MATCH EXISTING.
4. JUNCTION BOXES, CONDUIT AND RELOCATED NAVIGATION LIGHTS SHALL BE ATTACHED TO THE BRIDGE STEEL BY CLAMPING WITH GALVANIZED STEEL STRUT CHANNELS. DRILLING INTO THE EXISTING BRIDGE STEEL IS NOT ALLOWED.

LT–04

SINGH
SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

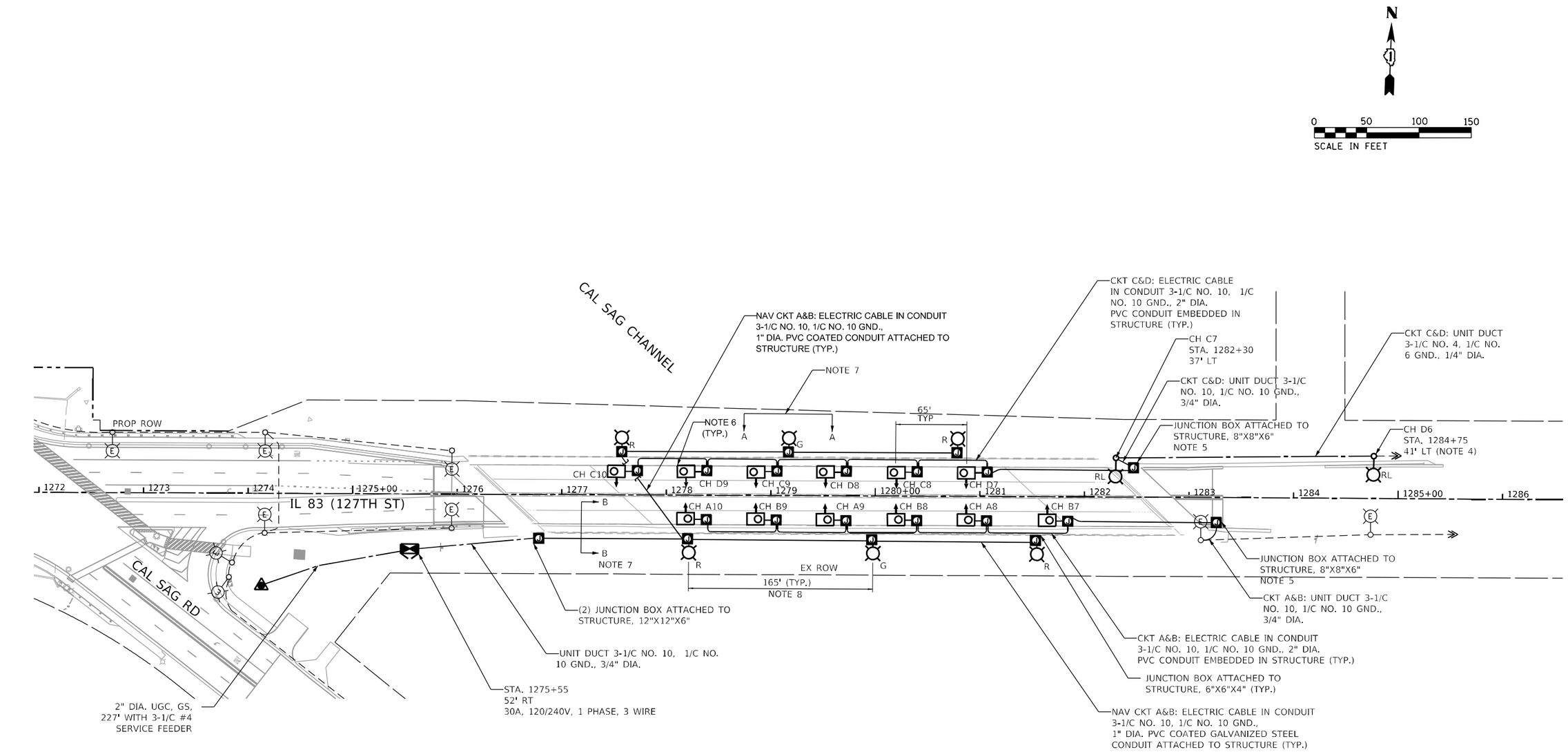
USER NAME = sgruberman	DESIGNED - SG	REVISED -
	DRAWN - GS	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - RP	REVISED -
PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY NAVIGATION LIGHTING PLAN AND DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	33
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. SEE SHEET LT-01 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
2. PROPOSED UNDERPASS LIGHTING UNIT LOCATIONS SHALL MATCH EXISTING. SEE SHEET LT-09 FOR AS-BUILT PLANS.
3. PROPOSED NAVIGATION LIGHTING UNIT LOCATIONS AND SPACINGS SHALL MATCH EXISTING. CONTRACTOR SHALL FIELD VERIFY EXISTING LOCATIONS.
4. UNCOVER AND RE-ROUTE EXISTING UNIT DUCT TO RELOCATED LIGHT POLE LOCATION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE "RELOCATE EXISTING LIGHTING UNIT" PAY ITEM.
5. SEE SHEET LT-06 FOR CONDUIT TRANSITION AT ABUTMENT DETAIL.
6. SEE SHEET LT-06 FOR MOUNTING DETAILS.
7. SEE SHEET LT-06 FOR SECTION VIEWS.
8. NAVIGATION LIGHTING UNIT SPACING SHALL MATCH EXISTING. CONTRACTOR TO FIELD VERIFY.

LT-05

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = sgruberman	DESIGNED - SG	REVISED -
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PLOT SCALE = 100.0000 ' / in.	CHECKED - RP	REVISED -
PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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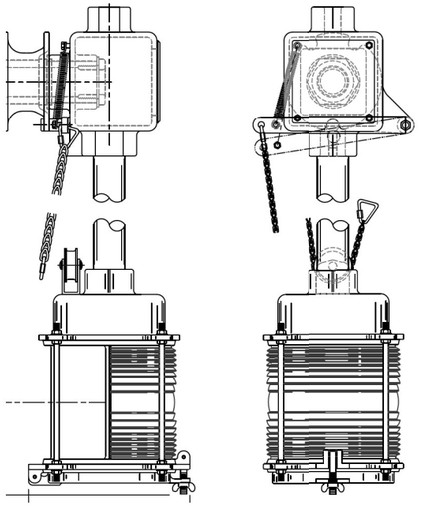
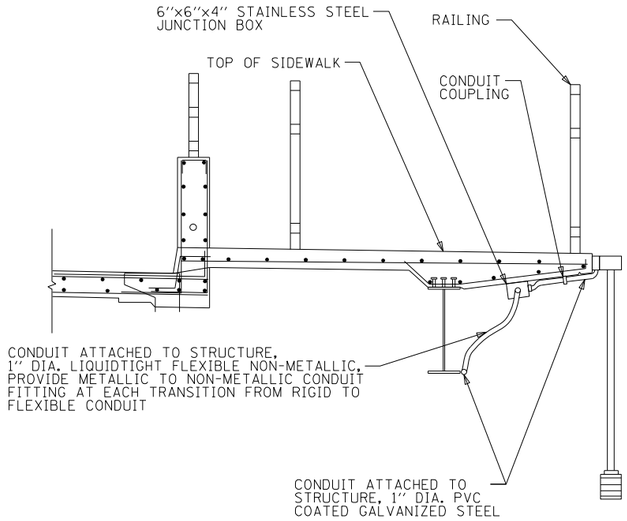
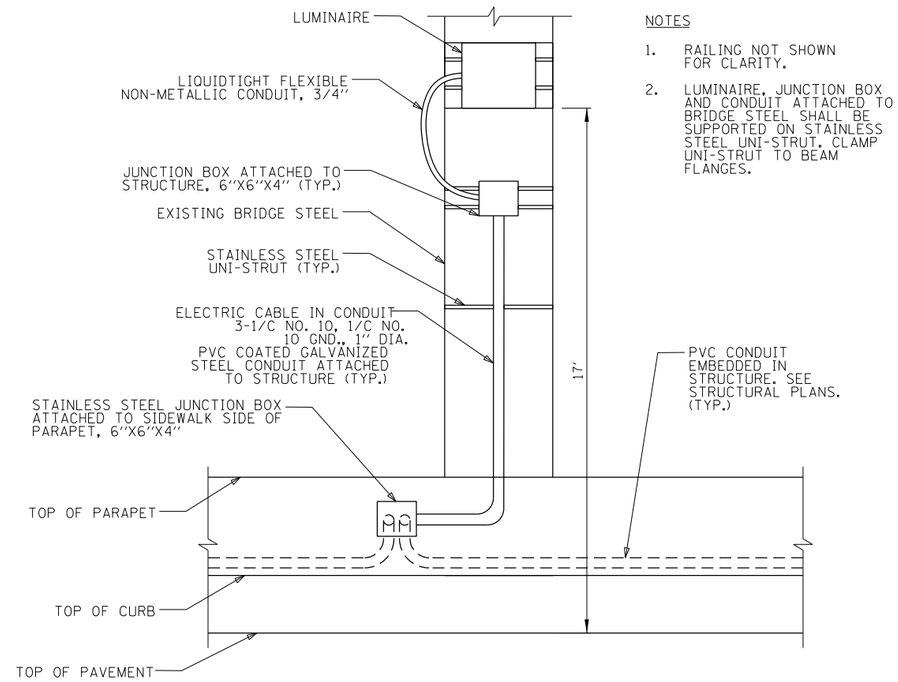
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



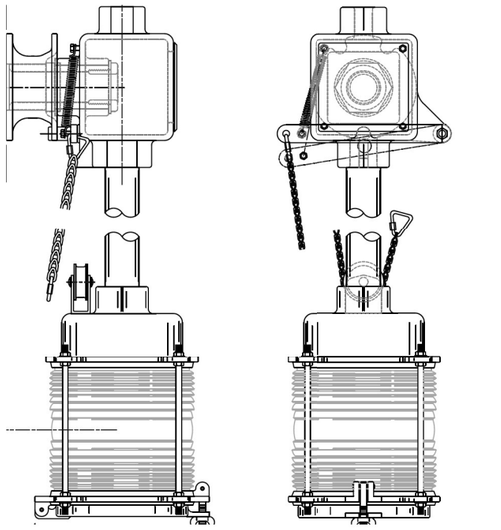
RED CHANNEL MARGIN NAVIGATION LIGHT
NOT TO SCALE



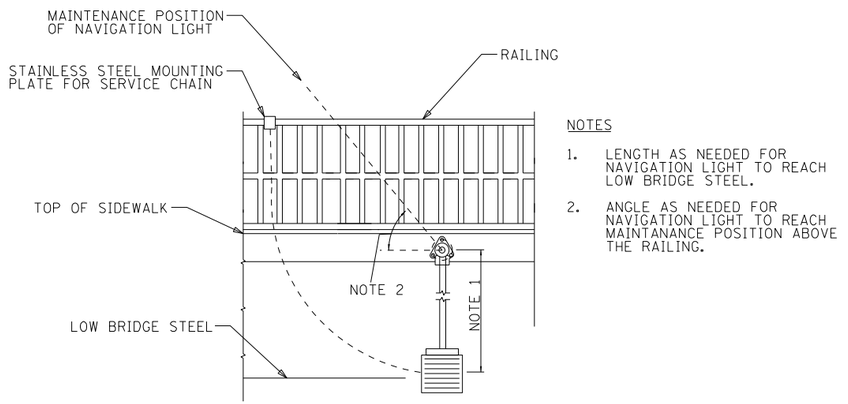
SECTION B-B - CHANNEL MARKER MOUNTING
NOT TO SCALE



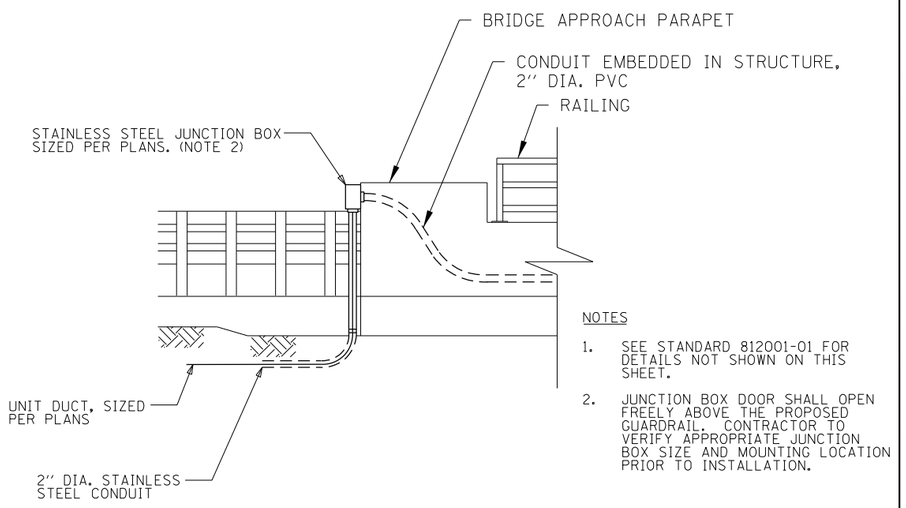
STRUCTURE MOUNTED UNDERPASS LIGHT
NOT TO SCALE



GREEN CHANNEL CENTER NAVIGATION LIGHT
NOT TO SCALE



SECTION A-A - CHANNEL MARKER NAVIGATIONAL LIGHT
NOT TO SCALE



CONDUIT TRANSITION AT BRIDGE ABUTMENT
NOT TO SCALE

LT-06

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = sgruberman	DESIGNED - SG	REVISED -
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PLOT SCALE = 2 ' / in.	CHECKED - RP	REVISED -
PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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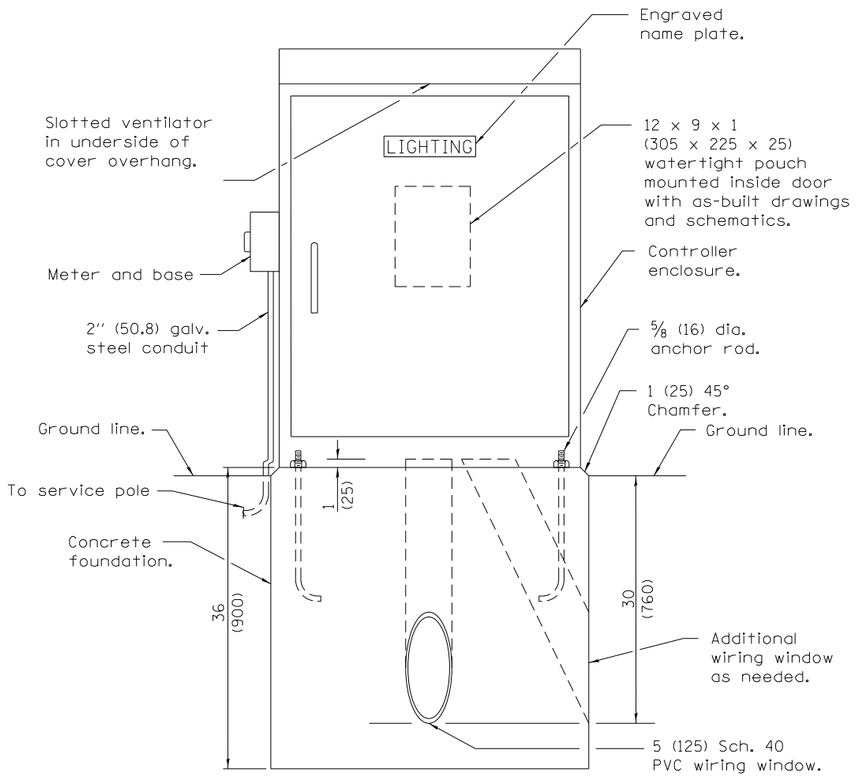
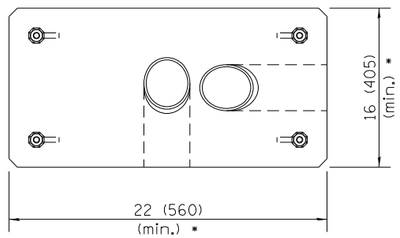
		CONTRACT NO. 62H52		
		ILLINOIS FED. AID PROJECT		

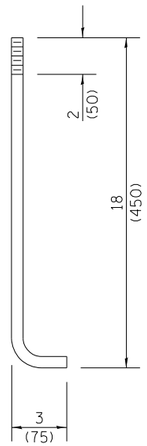


LIGHTING CONTROLLER

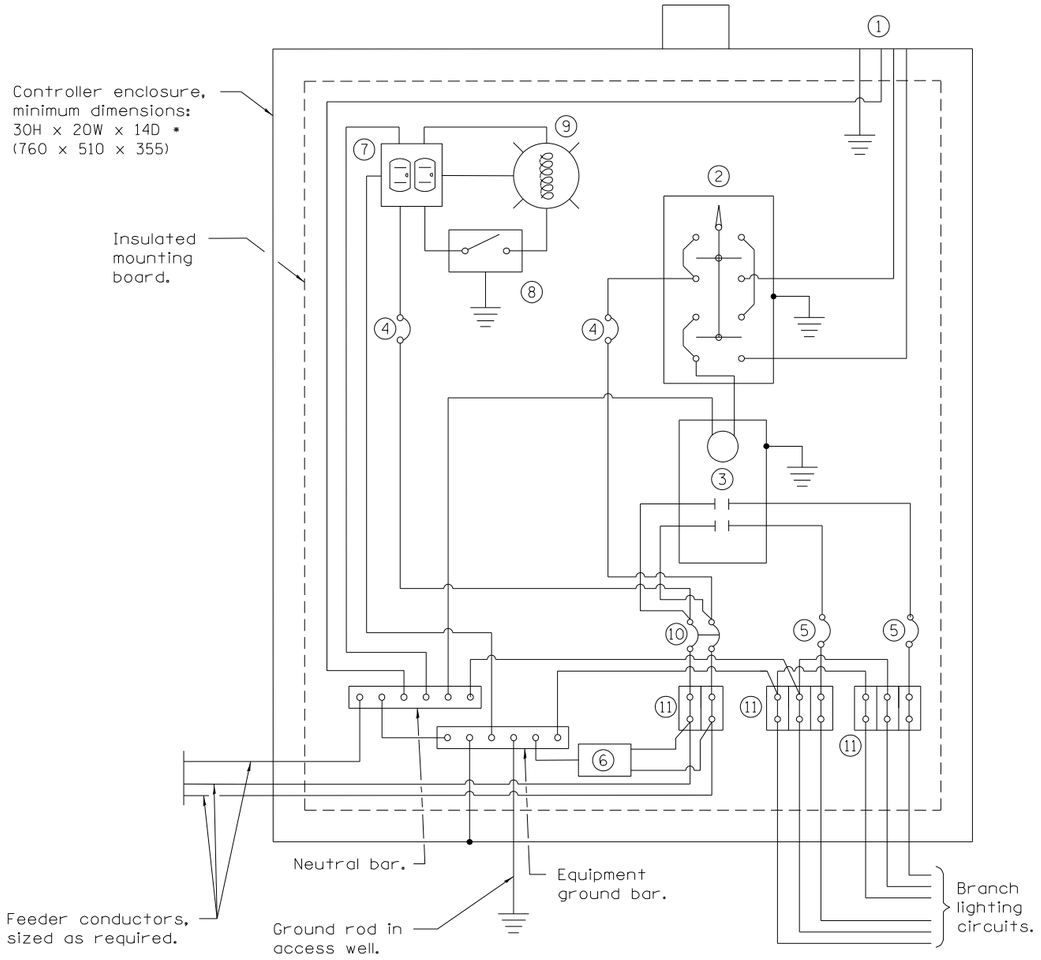


FOUNDATION (PLAN)

(WORK PAD NOT SHOWN)
* SIZE LARGER AS NEEDED



ANCHOR ROD DETAIL



CONTROL SCHEMATIC

1. Photocell with integral surge arrester.
2. HAND-OFF-AUTO selector switch.
3. 60 amp*, electrically held contactor.
4. 15 amp, 1-pole circuit breaker.
5. 20 amp*, single-pole circuit breaker (two shown, quantity as required).
6. Surge arrester.
7. GFCI duplex receptacle.
8. Single-pole, single-throw switch.
9. Incandescent luminaire, enclosed and gasketted with 100 watt lamp.
10. 30 amp*, 2-pole circuit breaker.
11. Terminal block sized for conductors as shown on plans.

* Size larger as needed.

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

LT–07

SINGH + ASSOCIATES INC. CONSULTING ENGINEERS

USER NAME = sgruberman	DESIGNED - SG	REVISED -
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PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

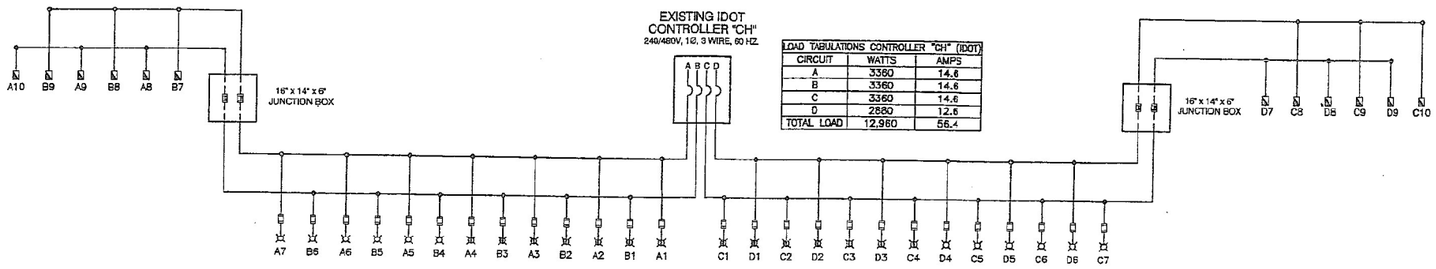
LIGHTING DETAILS

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

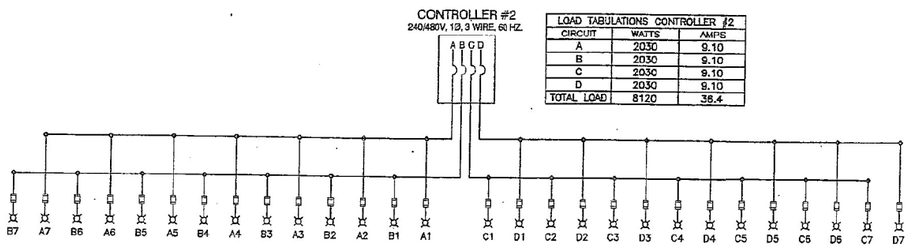
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	36
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

CONTRACT NO. 83769

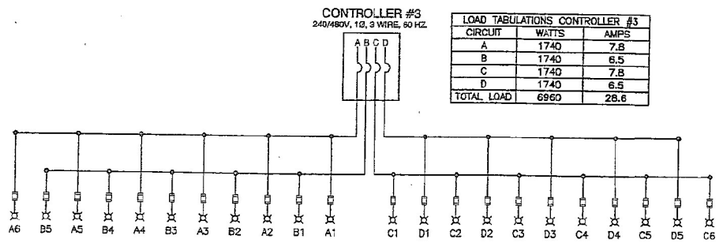
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
344	03-00074-00-LT	COOK	12	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LOAD TABULATIONS CONTROLLER "CH" (IDOT)		
CIRCUIT	WATTS	AMPS
A	3360	14.6
B	3360	14.6
C	3360	14.6
D	2880	12.6
TOTAL LOAD	12,960	56.4



LOAD TABULATIONS CONTROLLER #2		
CIRCUIT	WATTS	AMPS
A	2030	9.10
B	2030	9.10
C	2030	9.10
D	2030	9.10
TOTAL LOAD	8120	36.4



LOAD TABULATIONS CONTROLLER #3		
CIRCUIT	WATTS	AMPS
A	1740	7.8
B	1740	6.5
C	1740	7.8
D	1740	6.5
TOTAL LOAD	6960	28.6

NOTE: SINGLE LINE WIRING DIAGRAM FOR IDOT CONTROLLER "CH" SHOWS CIRUITS A,B,C & D, WHICH ARE THE FOUR CIRUITS THAT ARE AFFECTED BY THE CONTRACT.

SINGLE LINE LEGEND

- LUMINAIRE, 250W HPS, STREET LIGHT
- LUMINAIRE, 400W HPS, STREET LIGHT
- LUMINAIRE, 100W HPS, UNDERPASS LIGHT
- FUSE, 3.5 AMP
- FUSE, 6.0 AMP
- FUSE, 25 AMP, IN-LINE
- CIRCUIT BREAKER
- CONNECTION

RECORD DRAWINGS
LYONS / PINNER ELECTRIC
(708) 588-6800
SUPERVISING ELECTRICIAN
DATE: 6/12/07

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REVISIONS		
No.	Date	Remarks
1	05/24/05	PAP
2	08/05/05	PAP
3	11/01/05	PAP

127TH STREET
STREET LIGHTING
SINGLE LINE WIRING DIAGRAM

ALSIP, ILLINOIS

Drawn by: AG/EDG	Date: 02/07/05
Checked by: RYIII	Scale: NONE
Sheet of	Project No. 99-562.02

99562_02-LGHT-03 (P01)

LT-08

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

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PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER "CH" WIRING DIAGRAM

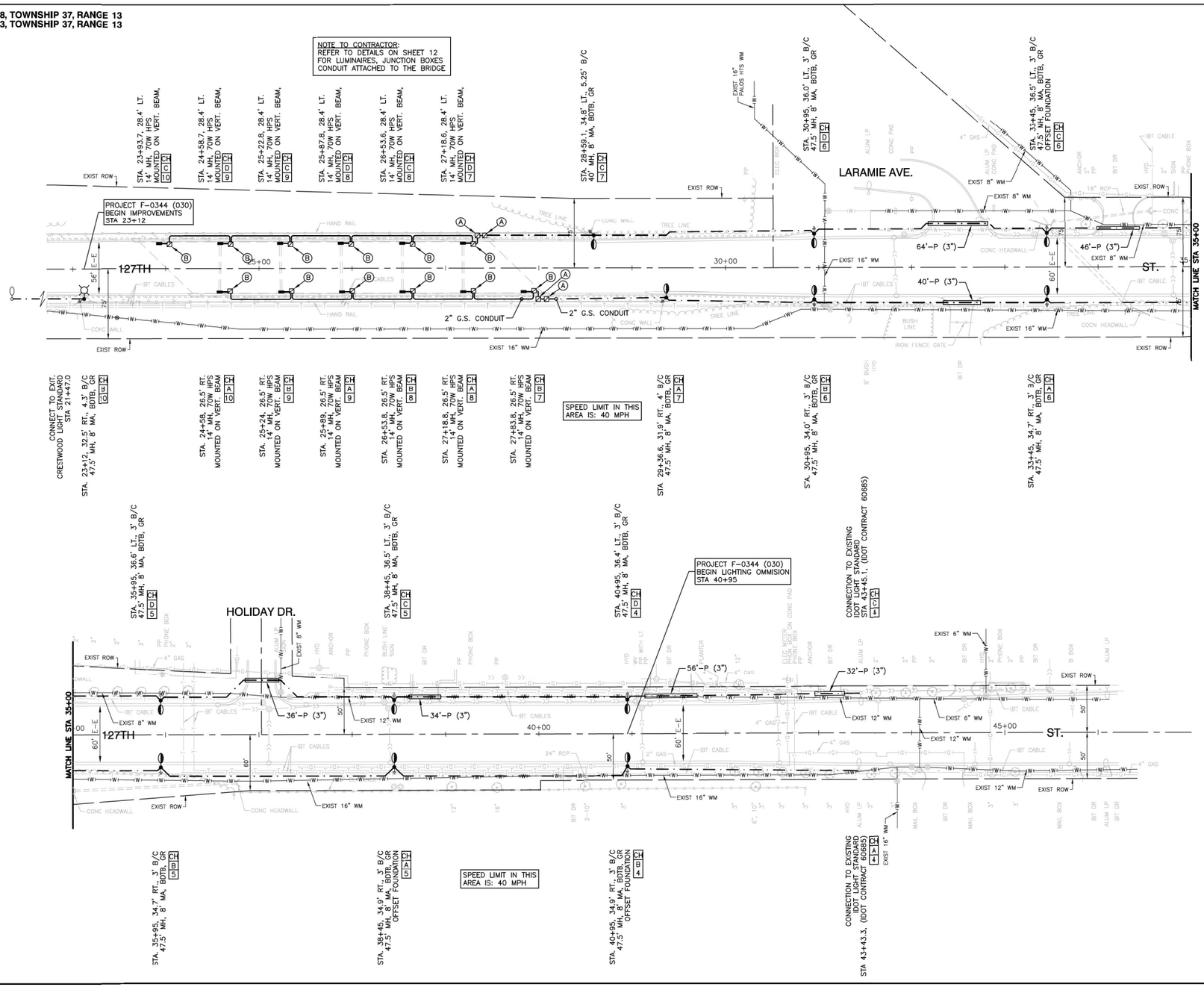
SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	37
		CONTRACT NO. 62H52		
		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 83769

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
344	00-00074-00-LT	COOK	12	3
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SECTION 28, TOWNSHIP 37, RANGE 13
SECTION 33, TOWNSHIP 37, RANGE 13



N

50 0 50

SCALE: 1"= 50'

LEGEND

- EXISTING COM ED LIGHT ON WOOD POLE
- EXISTING POWER POLE
- EXISTING STREET LIGHT
- PROPOSED LIGHT STANDARD, 250W HPS, 240V, 1PH LUMINAIRE, 47.5' MH, 8' MA
- PROPOSED LIGHT STANDARD, 250W HPS, 240V, 1PH LUMINAIRE, 40' MH, 8' MA
- PROPOSED LIGHT STANDARD, 400W HPS, 240V, 1PH LUMINAIRE, 47.5' MH, 8' MA
- PROPOSED 100 WATT HPS UNDERPASS LIGHT, 240V, 1PH
- PROPOSED LIGHTING CONTROLLER
- ☑ or (A) PROPOSED JUNCTION BOX – LARGE (16"x 14"x 6")
- ☑ or (B) PROPOSED JUNCTION BOX – MEDIUM (10"x 12"x 6")
- GROUND ROD, 5/8" DIA. x 10'
- P — CONDUIT, PUSHED, GALVANIZED STEEL, SIZE AS MARKED
- T — CONDUIT, TRENCHED, GALVANIZED STEEL, SIZE AS MARKED
- UNIT DUCT, 3–1/C, NO.6 AWG AND NO.8 GROUND, 600V IN 1–1/4" POLYETHYLENE DUCT FOR ROADWAY LIGHTING.
- UNIT DUCT, 3–1/C, NO.4 AWG AND NO.6 GROUND, 600V IN 1–1/4" POLYETHYLENE DUCT FOR ROADWAY LIGHTING.
- GALVANIZED STEEL CONDUIT, ATTACHED TO STRUCTURE, SIZE AS MARKED
- SERVICE WIRE, 3–1/C NO.2
- (R) REMOVAL OF EXISTING STREET LIGHT
- LT. LEFT
- RT. RIGHT
- MH MOUNTING HEIGHT
- MA MAST ARM
- B/C BACK OF CURB
- B/EP BACK OF EDGE OF PAVEMENT
- BDTB BREAKAWAY DEVICE, TRANSFORMER BASE, LOW PROFILE TYPE
- GR GROUND ROD, 5/8" DIA. x 10'

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127TH STREET
STREET LIGHTING PLAN
CAL SAG CHANNEL TO B.&O.C.T. RR
STA. 23+00 TO STA. 45+00

ALSIP, ILLINOIS

Drawn by:	AG/EDG	Date:	02/07/05
Checked by:	RYIII	Scale:	1"=50'
Sheet	of	Project No.	99-562.02

REVISIONS		
No.	Date	Remarks
1	05/24/05	PAP
2	08/05/05	PAP
3	11/01/05	PAP
4	11/28/05	BEO

99562_02-LGHT-01 (PO1)

LT–09

SINGH
SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

USER NAME = sgruberman	DESIGNED - SG	REVISED -
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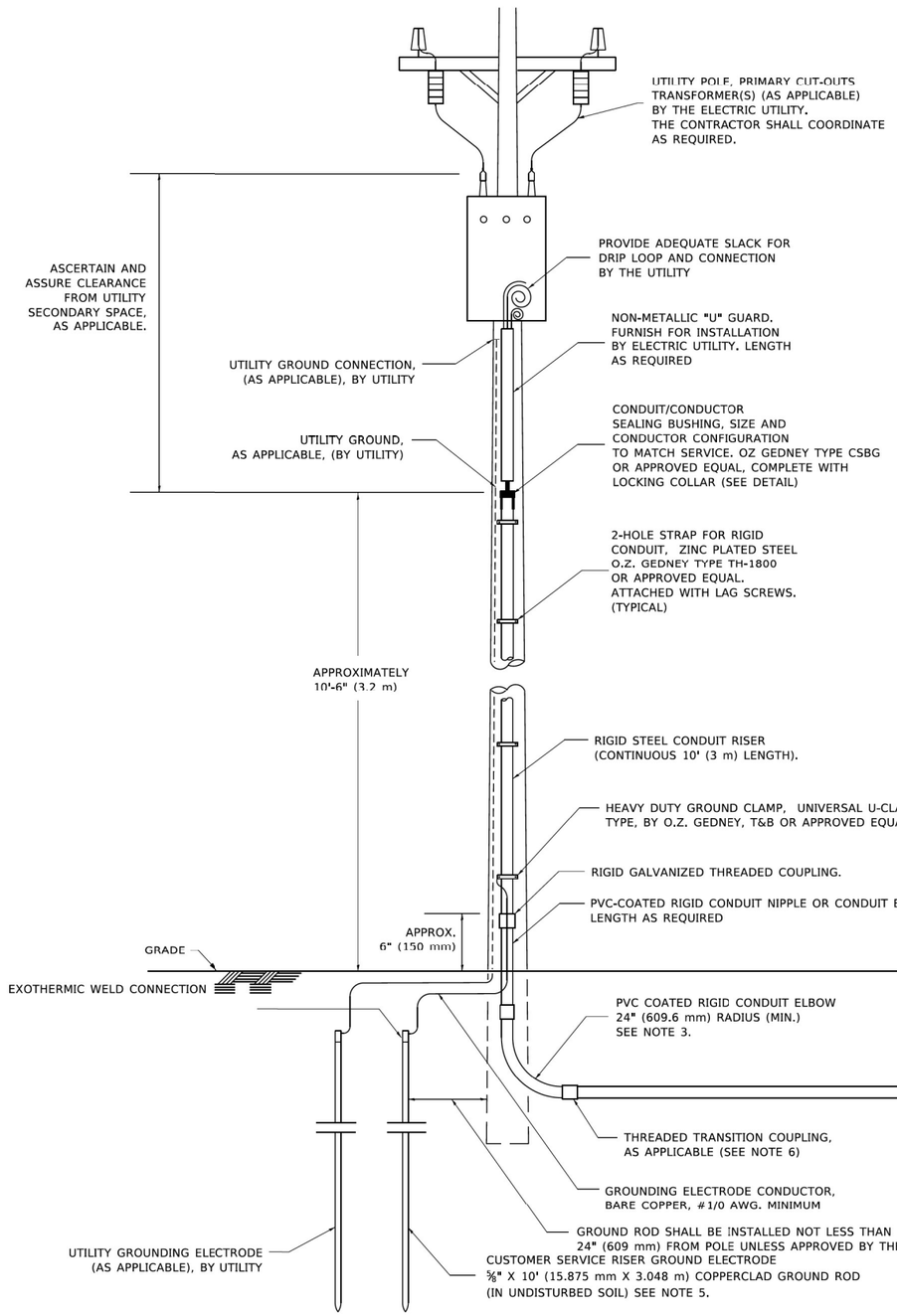
PLOT SCALE = 2 ' / in.	CHECKED - RP	REVISED -
PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING AS–BUILT

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	38
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

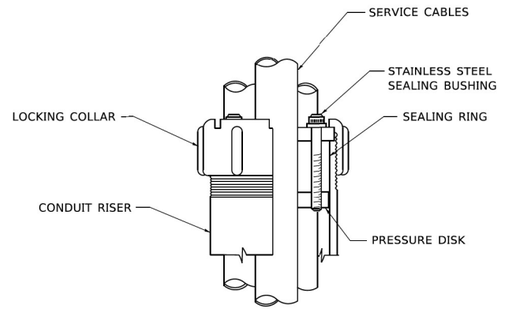


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

NOTES

1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

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	DRAWN -	REVISED -	
PLOT SCALE = 50.0000 ' / In.	CHECKED - MEA	REVISED -	
PLOT DATE = 4/19/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ELECTRIC SERVICE INSTALLATION
AERIAL, REMOTE DISCONNECT

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-220	CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

LT-10

SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

USER NAME = sgruberman	DESIGNED - SG	REVISED -
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PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

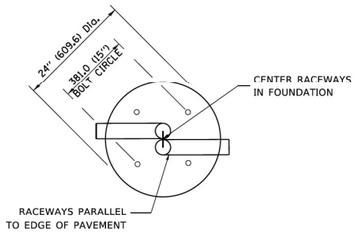
IDOT STANDARD DRAWING

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

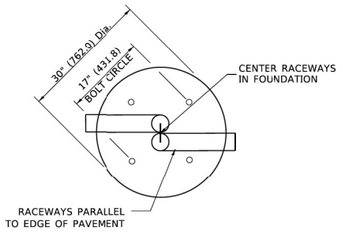
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	39
		CONTRACT NO. 62H52		
		ILLINOIS FED. AID PROJECT		

LIGHT POLE FOUNDATION DEPTH TABLE
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

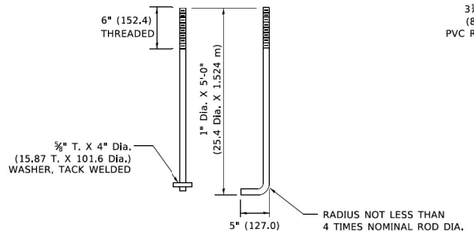
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	9'-6" (2.09 m)	10'-9" (3.23 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND ∅ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND ∅ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND ∅ = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)



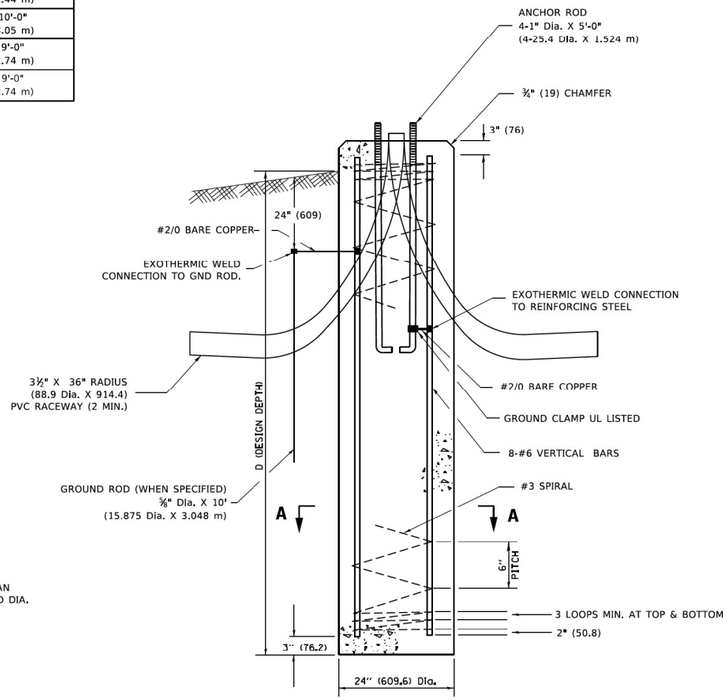
TOP VIEW



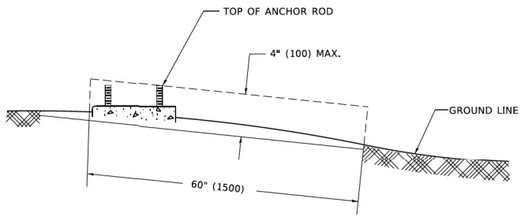
TOP VIEW



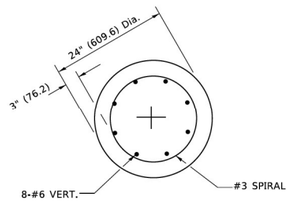
ANCHOR ROD DETAIL



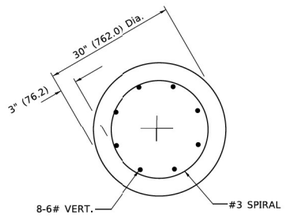
FOUNDATION DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A–A



SECTION A–A

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED. IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3#4-IN. (20 mm).
6. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
11. ANCHOR RODS SHALL PROJECT 23#4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
12. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

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	DRAWN -	REVISED -
PLOT SCALE = 50.0000 ' / In.	CHECKED -	REVISED -
PLOT DATE = 4/19/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION
40' (12.192 m) TO 47 1/2' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-301	CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

LT-11

SINGH
SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

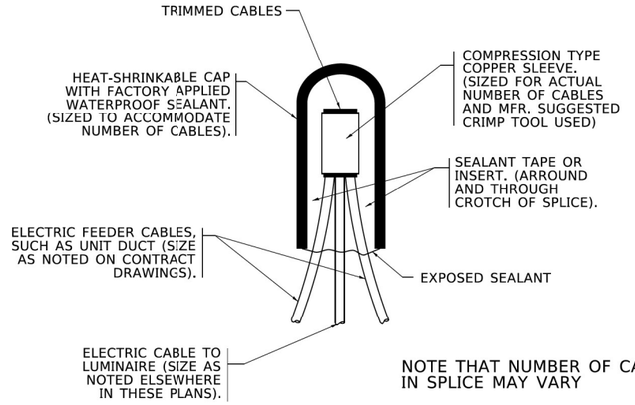
USER NAME = sgruberman	DESIGNED - SG	REVISED -
	DRAWN - GS	REVISED -
PLOT SCALE = 2 ' / in.	CHECKED - RP	REVISED -
PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

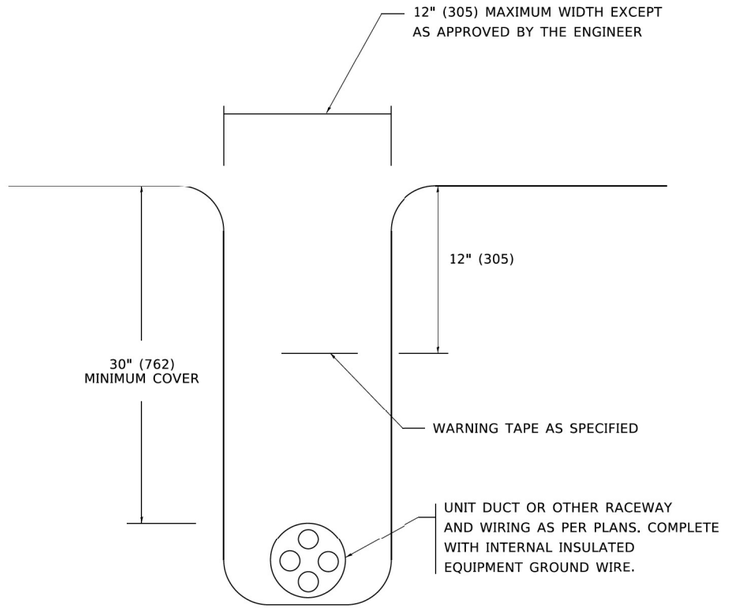
IDOT STANDARD DRAWING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	40
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



TYPICAL SPLICE DETAIL
N.T.S.



TYPICAL WIRING IN TRENCH DETAIL
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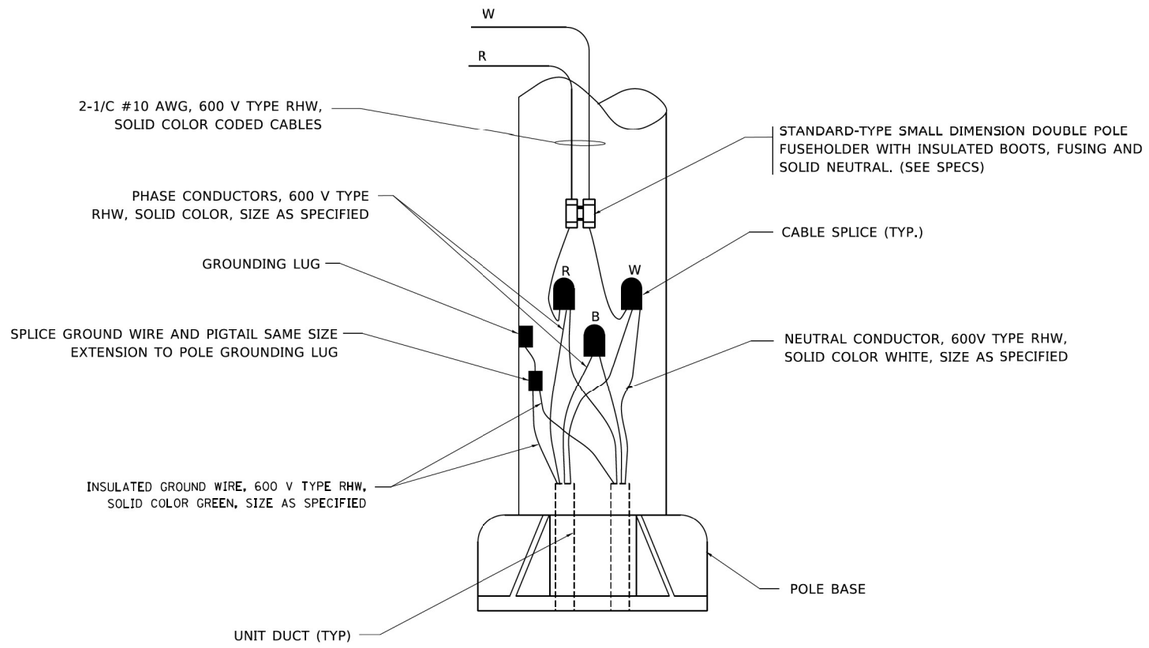

POLE WIRING DETAIL
N.T.S.

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PLOT DATE = 4/19/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISC. ELECTRICAL DETAILS
SHEET A

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-702	CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

LT-12

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = sgruberman	DESIGNED - SG	REVISED -
	DRAWN - GS	REVISED -
PLOT SCALE = 2 ' / in.	CHECKED - RP	REVISED -
PLOT DATE = 5/11/2022	DATE - 06/01/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT STANDARD DRAWING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	41
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

Bench Mark: T137 NGS Monument, 3½"brass disc on top of southeast culvert concrete wingwall located at the intersection of 127th Street and Cal Sag Road, Sta. 1272+12.29, 75.82 Rt. Elevation 603.19.

Existing Structure: S.N. 016-0570 was built in 1968 as Route SA 180, Section 1 80-1414.1 MFT and later renamed in 1991. The structure includes five spans, west approach Spans 1 and 2 (53'-3" and 50'-0") and east approach Spans 4 and 5 (50'-0" and 46'-9") consist of a continuous steel beam superstructure, and Span 3 (390'-0") over the Cal Sag Channel is a steel Warren Through Truss. The concrete deck, in all spans, is 8 ⅝" thick and includes 2"thick concrete overlay. The overall length is 610'-4"from back to back of abutments with a right ahead skew of 42°47'19". The structure is 74'-0" wide (out-to-out). The superstructure is supported by reinforced concrete piers founded on spread footings and stub abutments founded on steel piles.

Bridge will be closed to vehicular traffic in first year of construction, and will have lane closures during second year of construction to finalize bridge painting. Bike path accommodation shall be provided during construction.

No salvage.

DESIGN STRESSES

FIELD UNITS EXISTING CONSTRUCTION

f'c = 3,500 psi
fy = 40,000 psi (Reinforcement)
fy = 36,000 psi (A36) - Stringers & Welded Sections
fy= 50,000 psi (A440 & A441 ¾" thick & under)
fy= 44,000 psi (A440 & A441 ¾" to 1 ½"thick)

FIELD UNITS NEW CONSTRUCTION

f'c = 4,000 psi (Concrete Superstructure)
f'c = 3,500 psi (Approach Footing)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

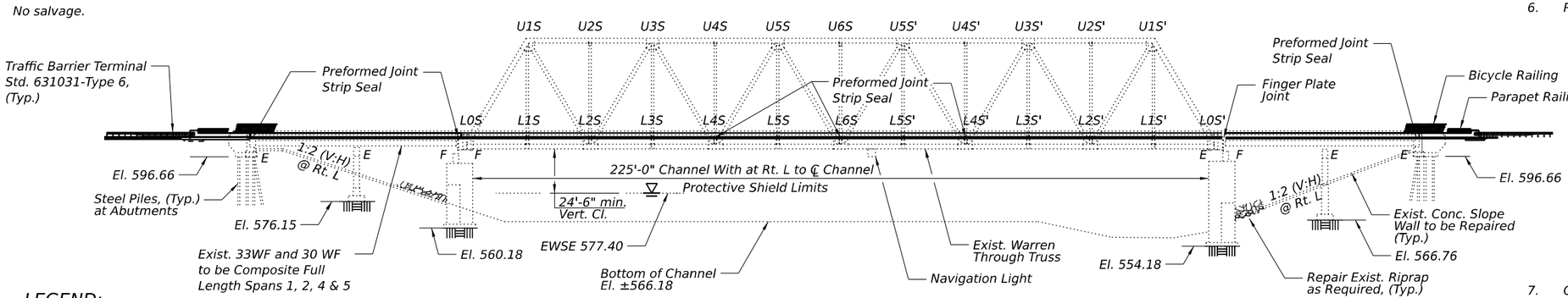
2002 AASHTO Standard Specifications for Highway Bridges-17th Edition

SEISMIC DATA

Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient = 0.038g
Site Coefficient (S) = 1.0

SCOPE OF WORK:

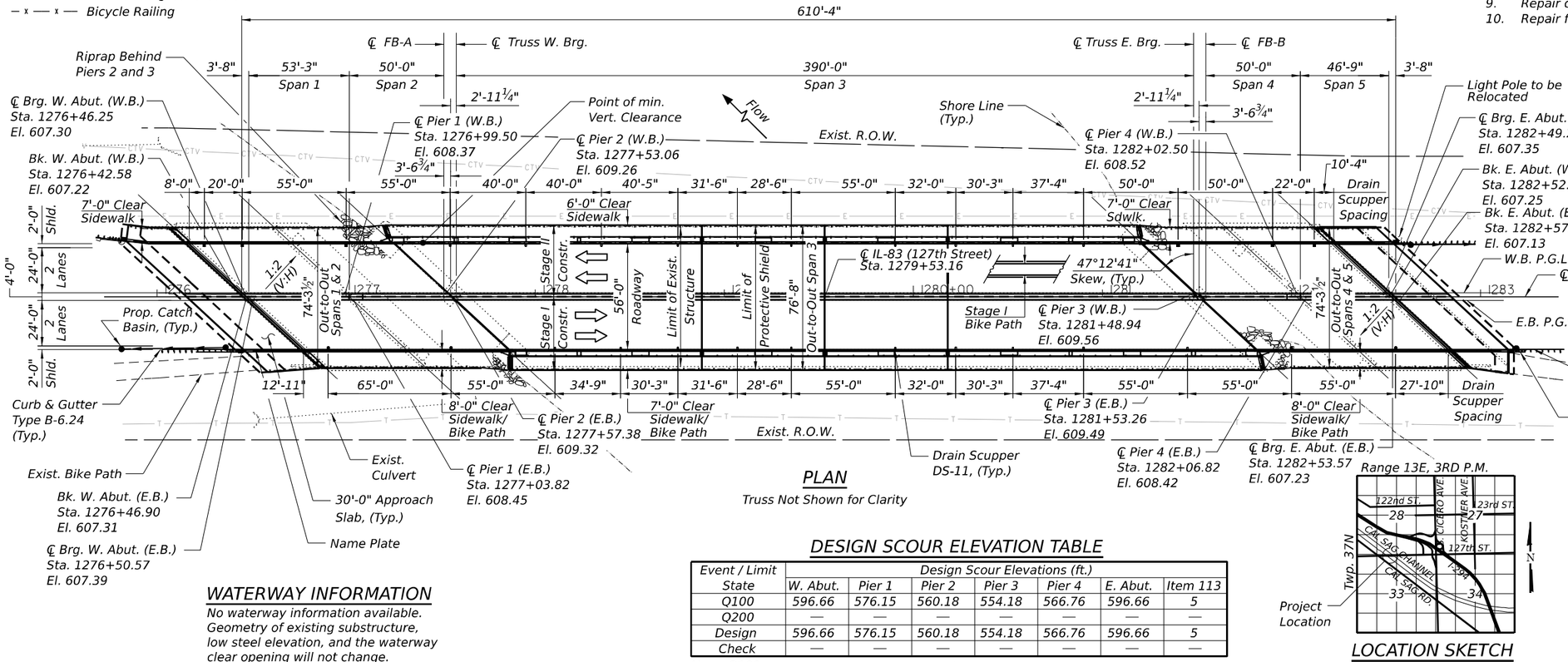
1. Remove and replace concrete deck (composite in positive moment areas), sidewalks, bridge joints and drainage scuppers in Spans 1-5. Install protective shield in Span 3 prior to deck removal.
2. Replace expansion joints with Preformed Joint Strip Seal and Finger Plate expansion Joint.
3. Replace deck drainage in Spans 1, 2, 4 and 5 with closed type with outlet to catch basins located outside of approach slabs.
4. Remove and replace approach slabs. Partially remove existing wingwalls and approach bent cap to accommodate new approach slabs.
5. Add shear studs to existing beams in Spans 1, 2 & 4, 5, in negative moment regions to make deck composite full length.
6. Repair steel superstructure.
   a. Repair Floorbeams FB-A, FB-B, FB-4, FB-6, FB-8, FB-9, and transfer girders TG-A and TG-B.
   b. Repair North Truss bottom chord at L2'N.
   c. Repair web of South Truss Vertical L1-U1 at the sidewalk-truss interface.
   d. Repair truss verticals and diagonals that are encased in concrete sidewalk, as directed by the Engineer.
   e. Repair Beams 2 & 9 in Spans 1, 2, 3 and 4, Beam 1 in Span 4, Stringers 2, 3, 5, 6 and 9 in Span 3.
   f. Repair/replace lower lateral bracing and connection plates in Span 3 as shown on the plans.
   g. Replace diaphragms between Beams 1 & 2 and 9 & 10 in Spans 1 and 2.
   h. Replace bearing at the center of TG-A.
   i. Repair impact damage on Vertical L2-U2 at the South Truss.
   j. Repair buckled out of plane ends of FB-A and FB-B.
   k. Repair sidewalk brackets and tension ties on Span 3.
7. Clean and paint all existing structural steel and bearings. Existing structural steel contains lead. Provide containment and disposal of lead-based paint.
8. Structural repair of concrete and epoxy crack sealing on the substructure units.
9. Repair concrete slope walls and riprap.
10. Repair fender system.



ELEVATION

LEGEND:

- CTV — Comcast Underground Cable
- E — ComEd Underground and attached to bridge
- T — AT&T Underground Cable
- x — x — Bicycle Railing



PLAN

Truss Not Shown for Clarity

DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.)						
	W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	E. Abut.	Item 113
Q100	596.66	576.15	560.18	554.18	566.76	596.66	5
Q200	—	—	—	—	—	—	—
Design	596.66	576.15	560.18	554.18	566.76	596.66	5
Check	—	—	—	—	—	—	—

Note: Q100 scour elevations are conservatively assumed.

WATERWAY INFORMATION

No waterway information available. Geometry of existing substructure, low steel elevation, and the waterway clear opening will not change.

LOCATION SKETCH

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS
EWA K. MROCZEK
081-006067
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

COLLINS ENGINEERS, INC.
EWA MROCZEK, P.E., S.E.
NO. 081–006067
EXP.: 11/30/2024

GENERAL PLAN AND ELEVATION
IL-83 (127th STREET) OVER
CAL-SAG CHANNEL (PUBLIC WATERS)
F.A.P. 344
SECTION 2018-125-B-R
COOK COUNTY
STATION 1279+53.16
STRUCTURE NO. 016-0570

MODEL: General Plan and Elevation
FILE NAME: h:\12504 IDOT-IL83 over Cal\sag\CADD\CADD_Sheets\Structural\016057O-62H52-001-GPE.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 016–0570

SCALE: | SHEET S-1 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	42
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES:

Repairs of stringers 2 and 9 in span3 were not included previously.

1. Fasteners shall be ASTM F3125 Grade Type 1, mechanically galvanized bolts. Bolts ⅞" Ø, holes 15/16" Ø, unless otherwise noted.

2. Calculated weight of Structural Steel = 114,780 Grade 36,
= 61,340 Grade 50

3. No field welding is permitted except as specified in the contract documents.

4. Reinforcement bars designated (E) shall be epoxy coated.

5. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

6. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.
As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.
Any cracks that cannot be removed by grinding ¼-inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

7. 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.

8. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

9. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

10. The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans.

11. The Contractor shall take extreme caution during all phases of construction to prevent the deposition of any material into Cal Sag Channel.

12. The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.

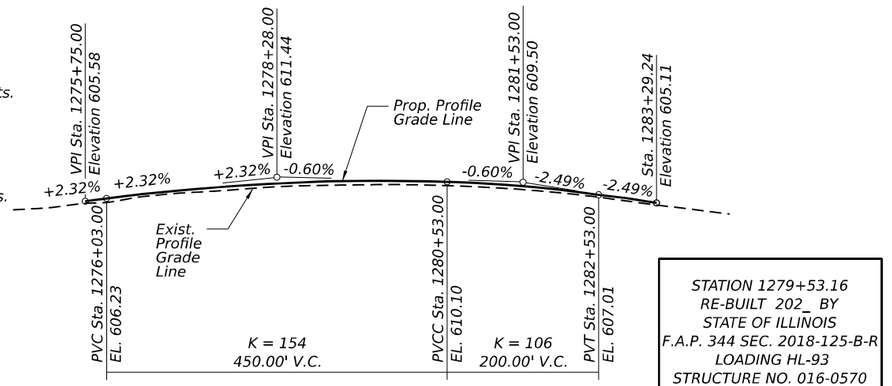
13. All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type 1.

14. Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

15. Cleaning and painting of the existing structural steel shall be as specified in the Special Provision for "Cleaning and Painting Existing Steel Structures."

16. All interior and exterior surfaces of approach spans and built-up truss members, other truss members, beams, bearings and other structural steel (floor beams, stringers, diaphragms, bracing, etc.) shall be cleaned per near white blast cleaning (SSPC-SP10).

17. The designated areas cleaned per near white blast cleaning (SSPC-SP10) shall be painted according to the requirements of the Organic Zinc-Rich / Epoxy / Urethane paint system. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell no 5B 7/1. The color of the final finish coat for the truss members shall be blue, Munsell No. 10B 3/6.



PROFILE

Along W.B. and E.B. PGL

STATION 1279+53.16
RE-BUILT 202_ BY
STATE OF ILLINOIS
F.A.P. 344 SEC. 2018-125-B-R
LOADING HL-93
STRUCTURE NO. 016-0570

NAME PLATE

See Std. 515001

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

18. All items (such as, but not limited to: conduits, brackets and deck drains) attached to the truss or beams should be cleaned and painted.

19. All truss members that pass through the deck shall be painted a minimum length of 2'-0" past the proposed concrete prior to the concrete being placed.

20. The contractor shall submit calculations and details demonstrating the structural integrity of the bridge truss span is maintained under the additional imposed loads of the containment system. See Special Provisions.

21. A minimum of 2 air monitors will be required to monitor abrasive blasting operations at this site. See special provision for "Containment and Disposal of Lead Paint Cleaning Residues."

22. All vertical and diagonal lapping members shall be caulked along the top and sides. The bottom shall remain open for drainage.

23. Joint Sealant shall be installed around all connection plates and at areas of pack rust and between built up members.

24. The joint sealant shall be an approved polyurethane sealant, compatible with the proposed paint system and shall be submitted to the Engineer for approval prior to use.

25. The surfaces of the crevices to receive joint sealant shall be cleaned according to commercial grade power tool cleaning SSPC-SP15 and painted according to the requirements of paint system 2-PS/EM/U. Once the paint system is dry to touch, the sealant shall be installed over the final finish coat. After the sealant has cured in accordance with the manufacturer's written product data sheet, a strip finish coat shall be applied over the sealant. The cost of joint sealant and caulking included in the "Cleaning and Painting Steel Bridge" pay item.

26. Shear studs shall be free of any rust, rust pits, scale oil, or deleterious matter at the time of welding. The surface to receive the stud shall be free from mill scale and heavy rust. Paint, galvanizing and oil are contaminants and shall be removed. This work shall be included with Stud Shear Connectors pay item.

27. It shall be the Contractor's responsibility to protect and preserve the existing bridge lighting at any locations that lighting is encountered adjacent to an area to be cleaned and painted.

28. The Contractor shall obtain Coast Guard approval for any work that may interfere with navigational operations of the navigable waters. A work plan shall be prepared by the Contractor, reviewed and approved by the Engineer and be submitted by the Engineer to the Coast Guard at the address listed below for approval.

Locations upstream (North) of 16th St. Bridge in Lockport, IL:
Bridge Administrator
US Coast Guard
Ninth Coast Guard District
1240 E. Ninth St.
Cleveland, OH 44199-2060
(Scott Striffler (216) 902-6087)

29. Concrete Superstructure shall have a seven day minimum cure.

30. The contractor shall relocate any conduit attached to the flange prior to the installation of the Protective Shield. Under no circumstances shall the Protective Shield rest on top of the conduit.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Dumped Riprap, Class A6	SQ YD		450	450
Concrete Removal	CU YD		20.4	20.4
Removal of Existing Concrete Deck	EACH	1		1
Protective Shield	SQ YD	3,200		3,200
Concrete Structures	CU YD		67.7	67.7
Concrete Superstructure	CU YD	1,475.3		1,475.3
Bridge Deck Grooving	SQ YD	4,171		4,171
Protective Coat	SQ YD	6,491		6,491
Concrete Superstructure (Approach Slab)	CU YD	211		211
Furnishing and Erecting Structural Steel	POUND	65,190		65,190
Stud Shear Connectors	EACH	3,780		3,780
Reinforcement Bars, Epoxy Coated	POUND	445,970	13,810	466,780
Bicycle Railing	FOOT	2,150		2,150
Parapet Railing	FOOT	1,320		1,320
Name Plates	EACH	1		1
Preformed Joint Strip Seal	FOOT	542		542
Finger Plate Expansion Joint, 3"	FOOT	78		78
Fabric Reinforced Elastomeric Trough	FOOT	85		85
Anchor Bolts, 1 1/2"	EACH	2		2
Drainage System for Structures	L SUM	1		1
Epoxy Crack Injection	FOOT		71	71
Straighten Bent Member	EACH	3		3
Slope Wall Crack Sealing	FOOT		86	86
Reinstall Rubber Fender System	L SUM		1	1
Bridge Cleaning and Painting Warranty	L SUM	1		1
Jack and Remove Existing Bearings	EACH	1		1
Structural Steel Removal	POUND	54,950		54,950
Structural Steel Repair	POUND	112,090		112,090
Containment and Disposal of Lead Paint Cleaning Residues No. 1	L SUM	1		1
Cleaning and Painting Steel Bridge No. 1	L SUM	1		1
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	SQ FT		1,346	1,346
Structural Repair of Concrete (Depth Greater Than 5 Inches)	SQ FT		138	138
Drainage Scuppers, DS-11	EACH	30		30
Slope Wall Repair	SQ YD		95	95
Slope Wall Slurry Pumping	CU YD		6	6
Underwater Concrete Repair	SQ FT		24	24
Temporary Shoring and Cribbing	EACH		3	3

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S-4	Construction Staging II	S-43	Finger Plate Expansion Joint Details I
S-5	Temporary Bicycle Railing for Stage Construction	S-44	Finger Plate Expansion Joint Details II
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S9 - S-13	Top of Slab Elevations Span 3	S-46	Drainage System Details
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S-28	Superstructure Details Spans 4 & 5	S-60	Framing Plan Spans 4 & 5
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MODEL: Default
FILE NAME: I:\12504\IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\M016057O-62H52-002-Geodata.dgn

COLLINS ENGINEERS INC

USER NAME = dredzic	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 5/10/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS AND B.O.M.
STRUCTURE NO. 016-0570

SCALE: | SHEET S-2 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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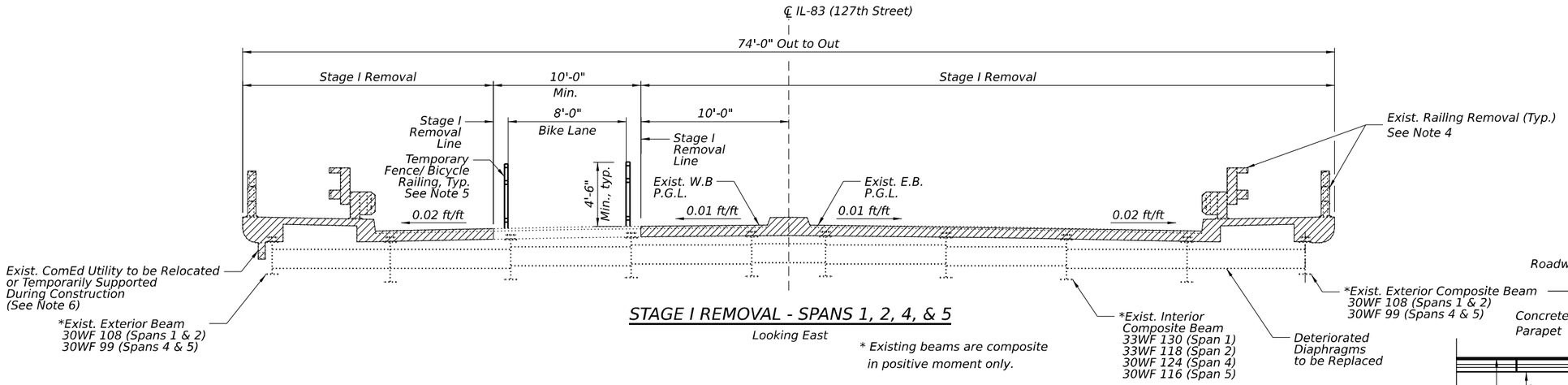
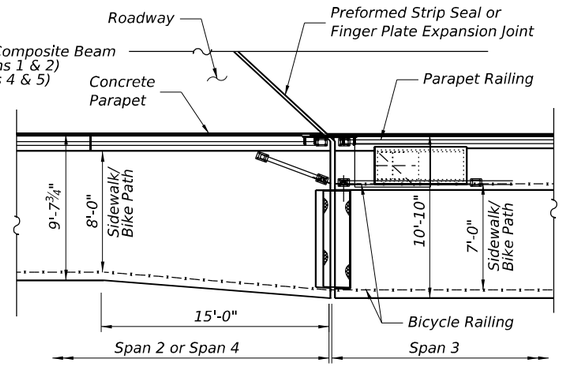
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



STAGE I REMOVAL - SPANS 1, 2, 4, & 5

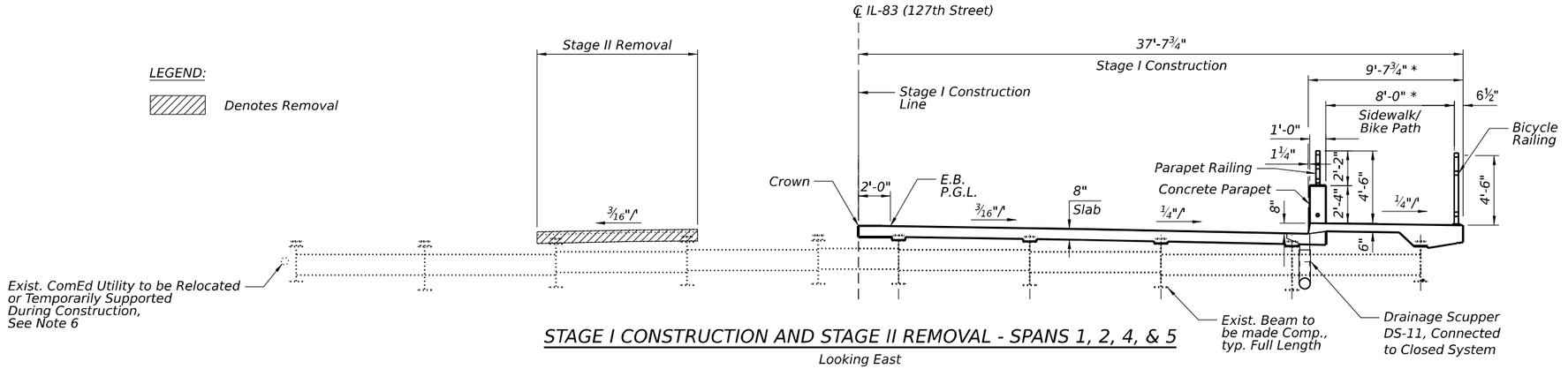
Looking East

* Existing beams are composite in positive moment only.



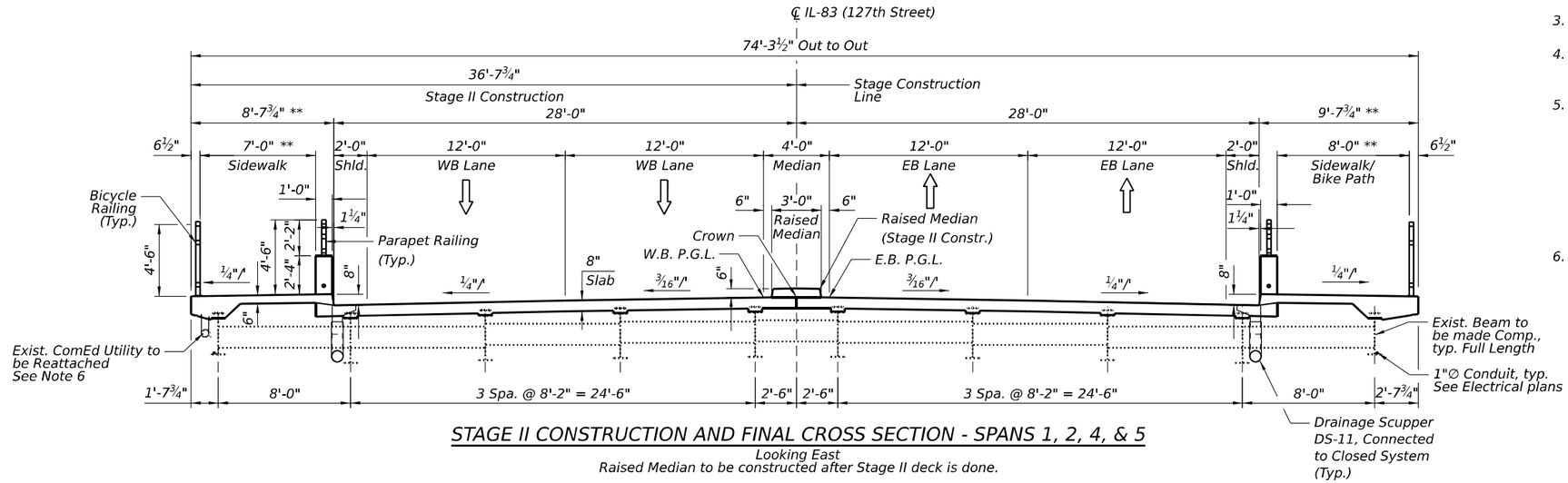
** SIDEWALK TRANSITION PLAN

Southwest End Shown
Other Locations Similar



STAGE I CONSTRUCTION AND STAGE II REMOVAL - SPANS 1, 2, 4, & 5

Looking East



STAGE II CONSTRUCTION AND FINAL CROSS SECTION - SPANS 1, 2, 4, & 5

Looking East
Raised Median to be constructed after Stage II deck is done.

NOTES:

1. All joints seals shall be installed after Stage II concrete deck construction is complete. Joints seals shall be continuous.
2. Contractor shall install temporary measures to allow bike traffic over the joints in the designated bike path area. The cost shall be included with Concrete Superstructure.
3. Drainage scuppers shall be embedded 2" into curb.
4. Existing Railing and Finger Plate removal with all harware is included with Removal of Existing Concrete Deck.
5. Temporary fence/bicycle railing on each side of Stage I bike path shall protect bicyclists during Stage I construction.The Contractor shall use bicycle railing shown on Sheet S-34 or similar, if approved by the Engineer. The temporary bicycle railing, if same as shown on Sheet S-34 can be attached in the permanent location on the sidewalks if in as-new condition after Stage I is finished. The cost of temporary fence/ bicycle railing is included with Removal of Existing Concrete Deck.
6. The utility line that is attached to the existing deck is to be relocated or temporarily supported during construction and reattached to new deck or bridge steel beams. Contractor shall coordinate work with the utility owner. Cost of temporarily supporting or relocating utility line is not included in the contract and shall be paid separately by owner of utility line. Contractor shall coordinate the type and location of inserts to be embedded in concrete deck, if needed. In case the utility is permanently removed and relocated, the conduits at abutments shall be cut flush with abutment wall, filled with grout through at least the entire width of the wall and capped on both ends. The cost of this work will be covered by the utility owner.

MODEL: Typical Cross Sections I
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\016976-62H52-2003-Const_Stag_1.dgn

COLLINS ENGINEERS

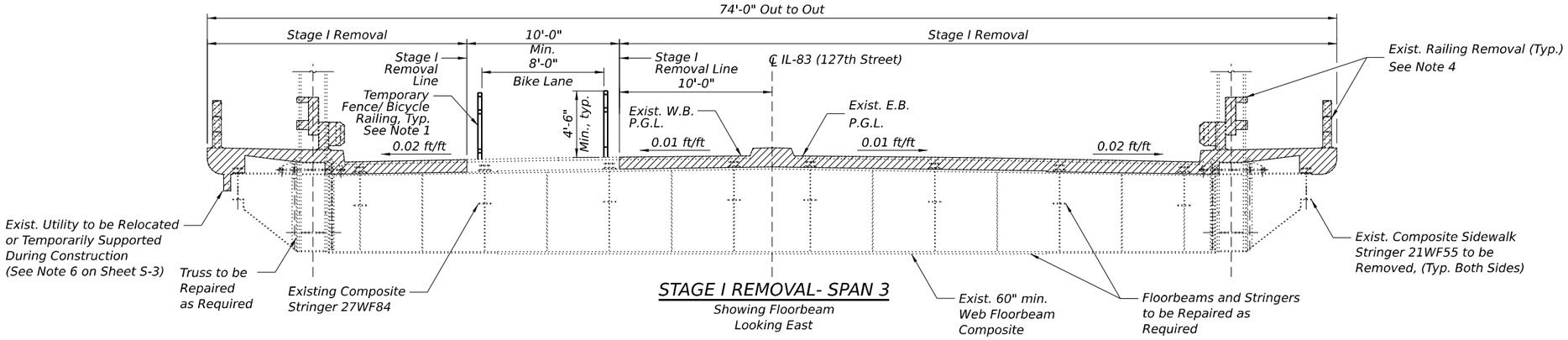
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION STAGING I
STRUCTURE NO. 016–0570

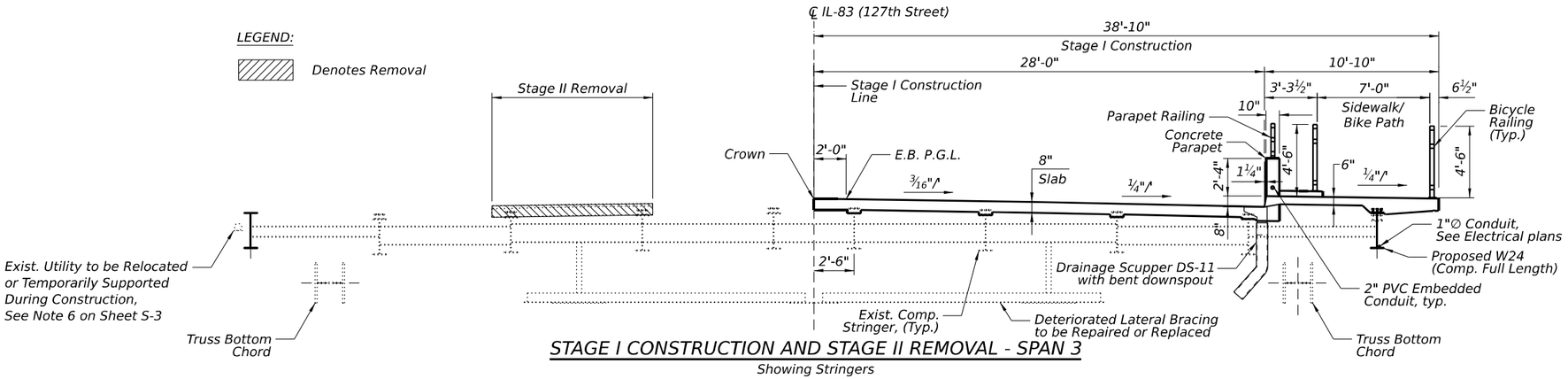
SCALE: | SHEET S-3 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	44
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



STAGE I REMOVAL- SPAN 3

Showing Floorbeam
Looking East

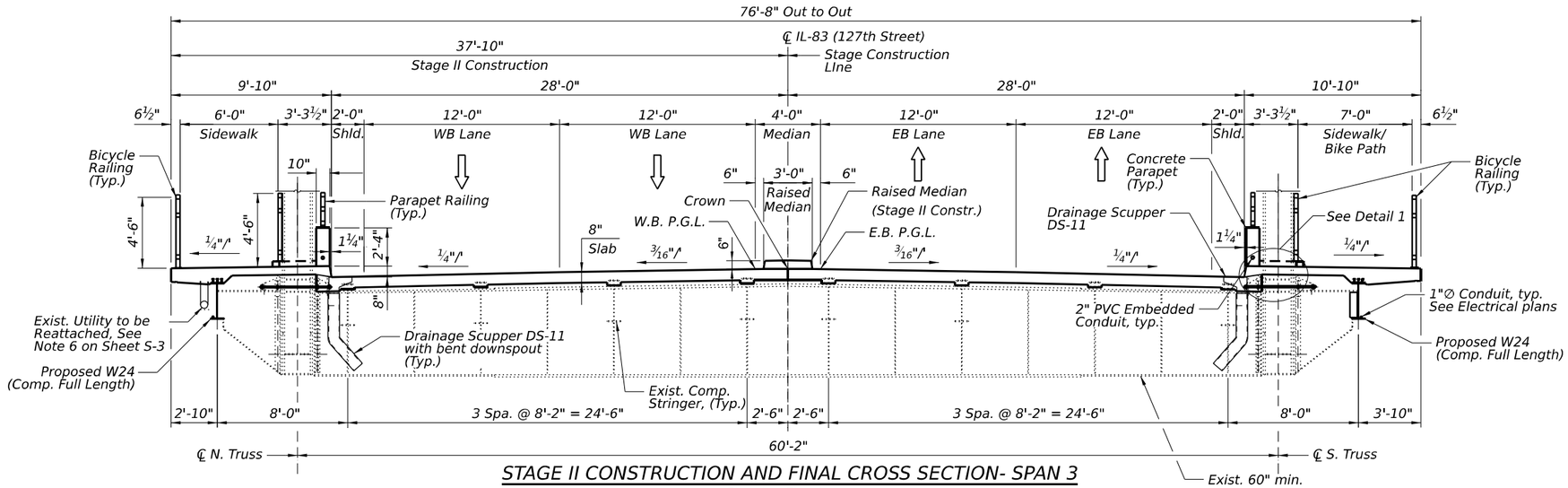


STAGE I CONSTRUCTION AND STAGE II REMOVAL - SPAN 3

Showing Stringers
Looking East

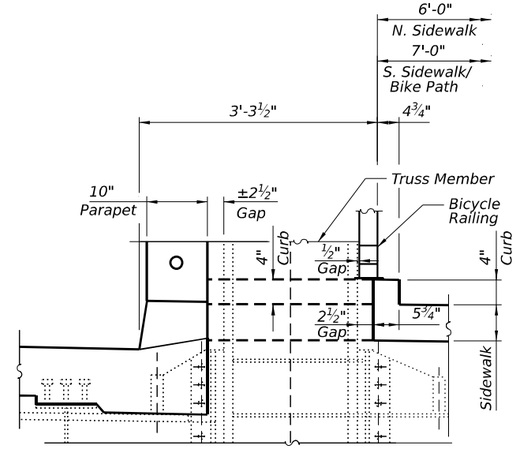
NOTES:

1. *See sheet S-3 for notes.*
2. *The Contractor shall notify the Resident Engineer and District 1 once sidewalk surrounding truss members have been removed in order to measure any section loss encountered in areas currently not accessible due to concrete sidewalk.*
3. *Cleaning and painting of the truss members that pass through the deck shall be done before new concrete is placed.*
4. *Cleaning and painting of the bridge steel and attachments above the deck and surrounded by the deck shall be performed during bridge full closure to traffic in first year of construction.*



STAGE II CONSTRUCTION AND FINAL CROSS SECTION- SPAN 3

Showing Floorbeam
Looking East
Raised Median to be constructed after Stage II deck is done.



DETAIL 1

See Sheet S-24 & S-26 for more details

MODEL: Typical Cross Sections II
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COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION STAGING II
STRUCTURE NO. 016–0570

SCALE: | SHEET S-4 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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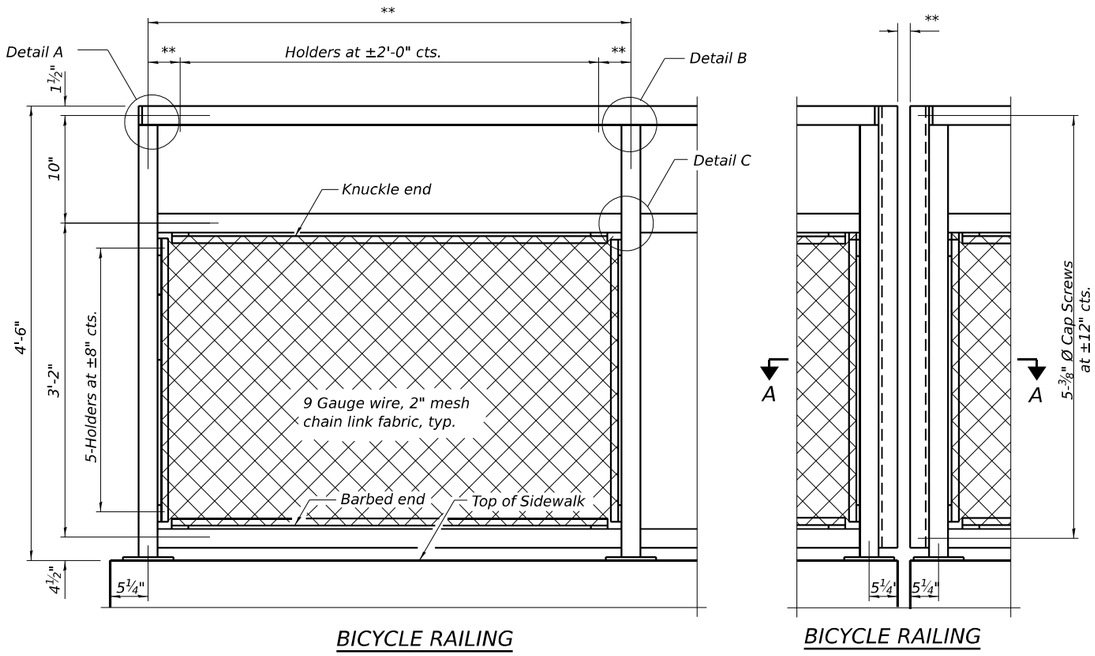
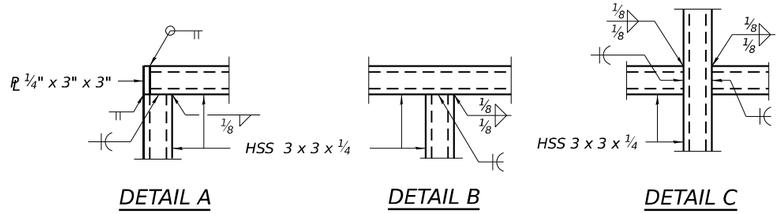
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



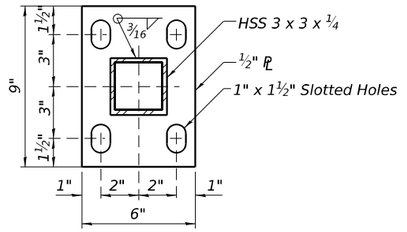
BICYCLE RAILING

BICYCLE RAILING

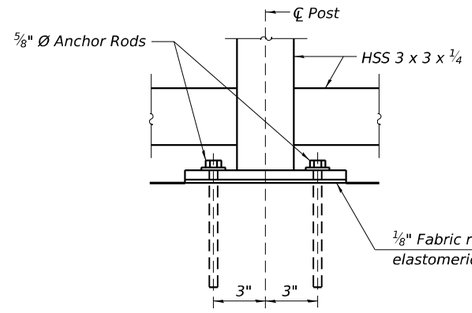
** See notes below.

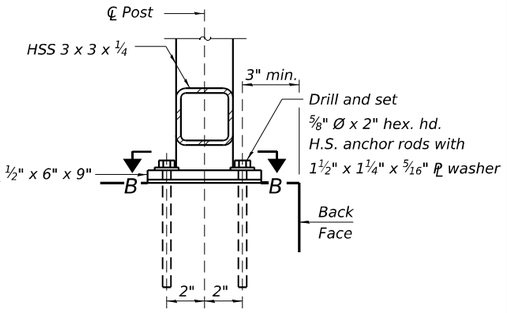


DETAIL A DETAIL B DETAIL C



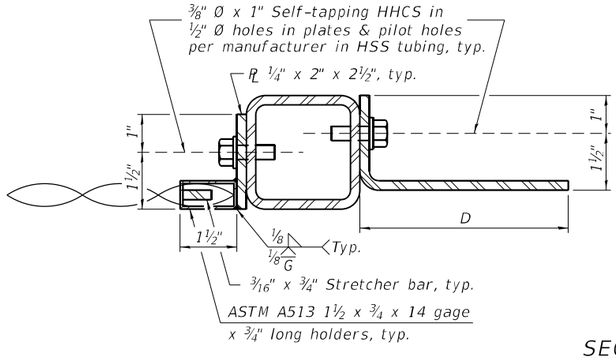
SECTION B-B

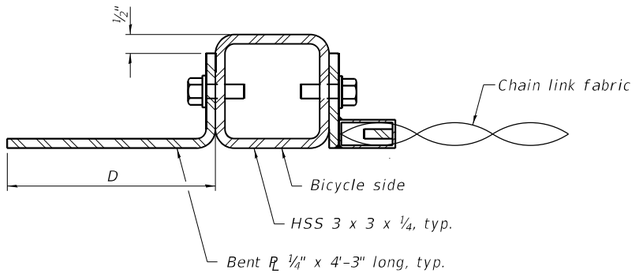




ANCHOR BOLT DETAILS

Drilling and setting ⅝" ∅ fully threaded anchor rods with the plate washers specified above and heavy hex lock nuts according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.





SECTION A-A

NOTES:
1. See note 5 on Sheet S-3.
2. See Sheet S-34 for permanent bicycle railing.

MODEL: Default
FILE NAME: h112504 IDOT-L83 over CalSag\CADD\CADD_Sheets\Structural\016057O-62H52-005-TempBarrier.dgn

COLLINS ENGINEERS INC

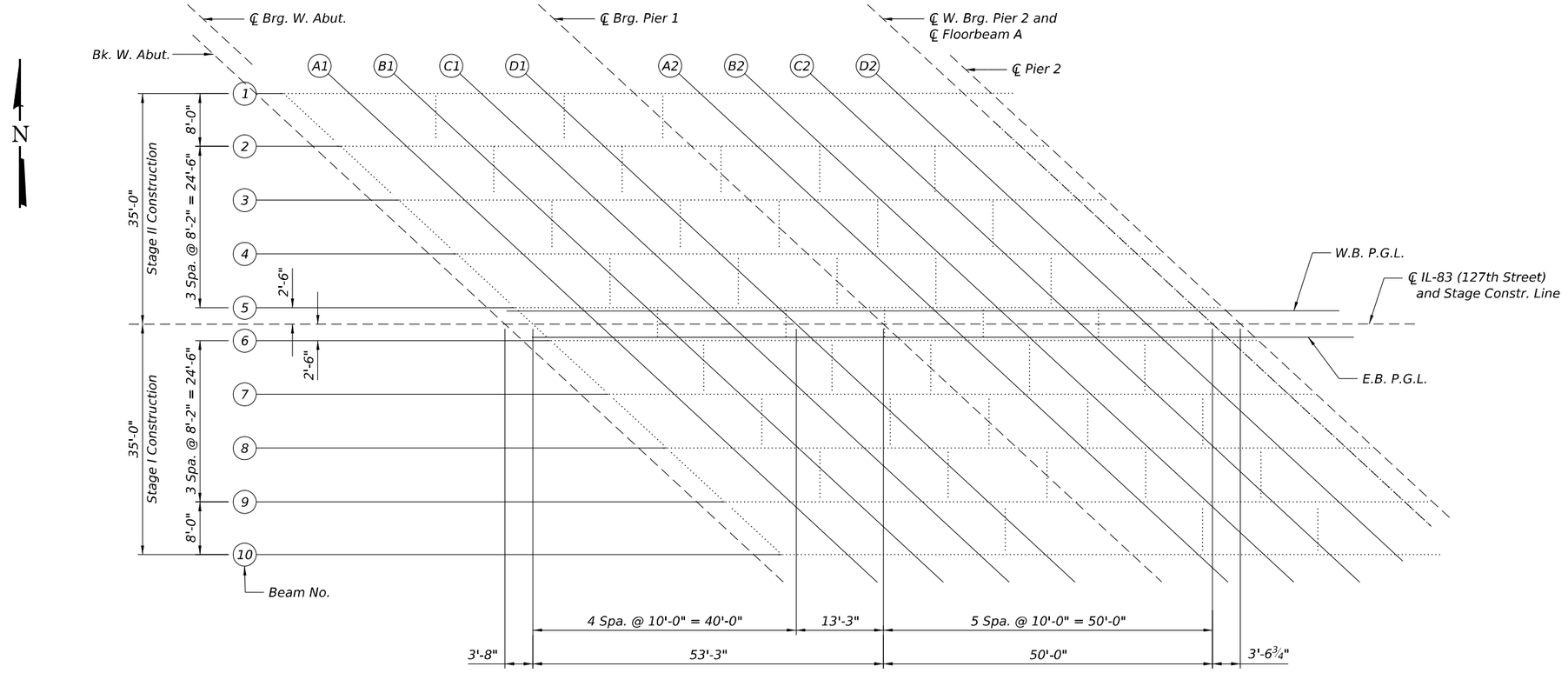
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

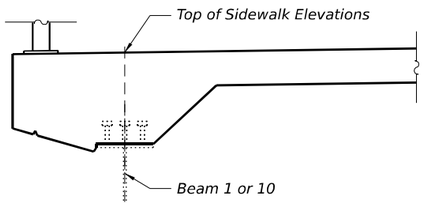
TEMPORARY BICYCLE RAILING FOR STAGE CONSTRUCTION
STRUCTURE NO. 016–0570

SCALE: | SHEET S-5 OF S-70 SHEETS | STA. | TO STA.

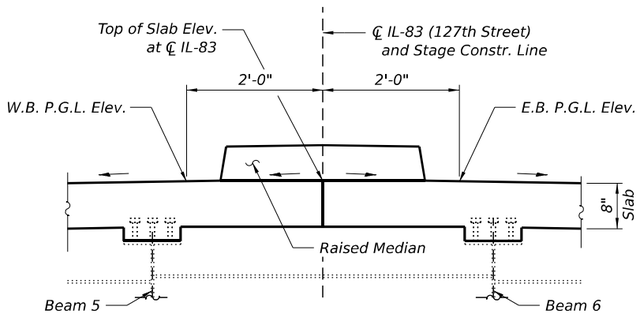
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	46
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



SPANS 1 & 2 PLAN



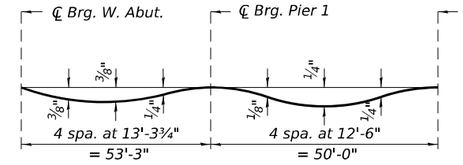
TOP OF SLAB ELEVATIONS ON SIDEWALK



TOP OF SLAB ELEVATIONS AT MEDIAN

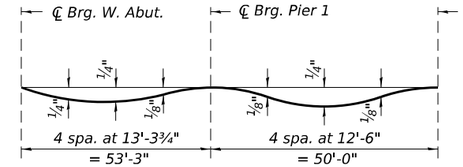
BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+06.93	35.00 LT	606.36	606.36
℄ Brg. W. Abut.	1276+10.60	35.00 LT	606.45	606.45
A1	1276+20.60	35.00 LT	606.67	606.70
B1	1276+30.60	35.00 LT	606.89	606.93
C1	1276+40.60	35.00 LT	607.10	607.13
D1	1276+50.60	35.00 LT	607.30	607.32
℄ Brg. Pier 1	1276+63.85	35.00 LT	607.56	607.56
A2	1276+73.85	35.00 LT	607.75	607.76
B2	1276+83.85	35.00 LT	607.94	607.96
C2	1276+93.85	35.00 LT	608.11	608.14
D2	1277+03.85	35.00 LT	608.28	608.30
℄ W. Brg. Pier 2.	1277+13.85	35.00 LT	608.44	608.44



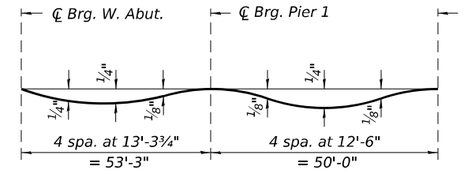
DEAD LOAD DEFLECTION DIAGRAM EXTERIOR BEAM 1 & 10

(Includes weight of concrete only.)



DEAD LOAD DEFLECTION DIAGRAM INTERIOR BEAM 5 & 6

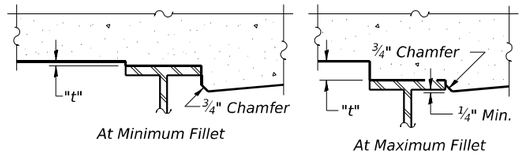
(Includes weight of concrete only.)



DEAD LOAD DEFLECTION DIAGRAM INTERIOR BEAM 2-4 & 7-9

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown in the tables. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown in the tables, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CollSag\CADD\CADD_Sheets\Structural\016057O-42H52-006-Deck4Rev_Spn1&2_1.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS SPANS 1 & 2 (SHEET 1 OF 3)
STRUCTURE NO. 016–0570

SCALE: | SHEET S-6 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	47
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+15.57	27.00 LT	606.06	606.06
℄ Brg. W. Abut.	1276+19.24	27.00 LT	606.14	606.14
A1	1276+29.24	27.00 LT	606.36	606.37
B1	1276+39.24	27.00 LT	606.57	606.60
C1	1276+49.24	27.00 LT	606.78	606.80
D1	1276+59.24	27.00 LT	606.97	606.99
℄ Brg. Pier 1	1276+72.49	27.00 LT	607.23	607.23
A2	1276+82.49	27.00 LT	607.41	607.42
B2	1276+92.49	27.00 LT	607.59	607.60
C2	1277+02.49	27.00 LT	607.76	607.78
D2	1277+12.49	27.00 LT	607.92	607.94
℄ W. Brg. Pier 2.	1277+22.49	27.00 LT	608.08	608.08

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+24.39	18.83 LT	606.42	606.42
℄ Brg. W. Abut.	1276+28.06	18.83 LT	606.50	606.50
A1	1276+38.06	18.83 LT	606.72	606.74
B1	1276+48.06	18.83 LT	606.92	606.95
C1	1276+58.06	18.83 LT	607.12	607.15
D1	1276+68.06	18.83 LT	607.31	607.33
℄ Brg. Pier 1	1276+81.31	18.83 LT	607.56	607.56
A2	1276+91.31	18.83 LT	607.74	607.74
B2	1277+01.31	18.83 LT	607.91	607.93
C2	1277+11.31	18.83 LT	608.07	608.10
D2	1277+21.31	18.83 LT	608.23	608.25
℄ W. Brg. Pier 2.	1277+31.32	18.83 LT	608.38	608.38

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+33.22	10.67 LT	606.77	606.77
℄ Brg. W. Abut.	1276+36.89	10.67 LT	606.84	606.84
A1	1276+46.89	10.67 LT	607.05	607.07
B1	1276+56.89	10.67 LT	607.25	607.27
C1	1276+66.89	10.67 LT	607.44	607.47
D1	1276+76.89	10.67 LT	607.63	607.64
℄ Brg. Pier 1	1276+90.14	10.67 LT	607.87	607.87
A2	1277+00.14	10.67 LT	608.04	608.05
B2	1277+10.14	10.67 LT	608.21	608.22
C2	1277+20.14	10.67 LT	608.37	608.38
D2	1277+30.14	10.67 LT	608.52	608.53
℄ W. Brg. Pier 2.	1277+40.14	10.67 LT	608.67	608.67

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+42.04	2.50 LT	607.08	607.08
℄ Brg. W. Abut.	1276+45.71	2.50 LT	607.15	607.15
A1	1276+55.71	2.50 LT	607.35	607.37
B1	1276+65.71	2.50 LT	607.55	607.57
C1	1276+75.71	2.50 LT	607.74	607.76
D1	1276+85.71	2.50 LT	607.92	607.93
℄ Brg. Pier 1	1276+98.96	2.50 LT	608.15	608.15
A2	1277+08.96	2.50 LT	608.32	608.32
B2	1277+18.96	2.50 LT	608.48	608.49
C2	1277+28.96	2.50 LT	608.63	608.65
D2	1277+38.96	2.50 LT	608.78	608.79
℄ W. Brg. Pier 2.	1277+48.96	2.50 LT	608.92	608.92

WB PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+42.58	2.00 LT	607.10	607.10
℄ Brg. W. Abut.	1276+46.25	2.00 LT	607.17	607.17
A1	1276+56.25	2.00 LT	607.37	607.39
B1	1276+66.25	2.00 LT	607.57	607.59
C1	1276+76.25	2.00 LT	607.76	607.78
D1	1276+86.25	2.00 LT	607.94	607.95
℄ Brg. Pier 1	1276+99.50	2.00 LT	608.17	608.17
A2	1277+09.50	2.00 LT	608.33	608.34
B2	1277+19.50	2.00 LT	608.49	608.51
C2	1277+29.50	2.00 LT	608.65	608.66
D2	1277+39.50	2.00 LT	608.79	608.81
℄ W. Brg. Pier 2.	1277+49.50	2.00 LT	608.93	608.93

℄ IL 83 and STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+44.74	0.00	607.14	607.14
℄ Brg. W. Abut.	1276+48.41	0.00	607.22	607.22
A1	1276+58.41	0.00	607.42	607.43
B1	1276+68.41	0.00	607.61	607.63
C1	1276+78.41	0.00	607.80	607.82
D1	1276+88.41	0.00	607.97	607.99
℄ Brg. Pier 1	1277+01.66	0.00	608.20	608.20
A2	1277+11.66	0.00	608.37	608.37
B2	1277+21.66	0.00	608.53	608.54
C2	1277+31.66	0.00	608.68	608.70
D2	1277+41.66	0.00	608.82	608.84
℄ W. Brg. Pier 2.	1277+51.66	0.00	608.96	608.96

E-S

2-17-2017

COLLINS ENGINEERS INC.

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS SPANS 1 & 2 (SHEET 2 OF 3)
STRUCTURE NO. 016–0570

SCALE: | SHEET S-7 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	48
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\016057O-62H52-007-Deck+Rev_Spn1&2_2.dgn

EB PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+46.90	2.00 RT	607.19	607.19
℄ Brg. W. Abut.	1276+50.57	2.00 RT	607.26	607.26
A1	1276+60.57	2.00 RT	607.46	607.47
B1	1276+70.57	2.00 RT	607.65	607.67
C1	1276+80.57	2.00 RT	607.83	607.86
D1	1276+90.57	2.00 RT	608.01	608.03
℄ Brg. Pier 1	1277+03.82	2.00 RT	608.24	608.24
A2	1277+13.82	2.00 RT	608.40	608.41
B2	1277+23.82	2.00 RT	608.56	608.57
C2	1277+33.82	2.00 RT	608.71	608.73
D2	1277+43.82	2.00 RT	608.85	608.87
℄ W. Brg. Pier 2	1277+54.13	2.00 RT	609.00	609.00

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+47.44	2.50 RT	607.19	607.19
℄ Brg. W. Abut.	1276+51.11	2.50 RT	607.26	607.26
A1	1276+61.11	2.50 RT	607.46	607.48
B1	1276+71.11	2.50 RT	607.65	607.68
C1	1276+81.11	2.50 RT	607.84	607.86
D1	1276+91.11	2.50 RT	608.01	608.03
℄ Brg. Pier 1	1277+04.36	2.50 RT	608.24	608.24
A2	1277+14.36	2.50 RT	608.40	608.41
B2	1277+24.36	2.50 RT	608.56	608.58
C2	1277+34.36	2.50 RT	608.71	608.73
D2	1277+44.36	2.50 RT	608.85	608.87
℄ W. Brg. Pier 2	1277+54.36	2.50 RT	608.99	608.99

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+56.26	10.67 RT	607.24	607.24
℄ Brg. W. Abut.	1276+59.93	10.67 RT	607.31	607.31
A1	1276+69.93	10.67 RT	607.50	607.52
B1	1276+79.93	10.67 RT	607.69	607.71
C1	1276+89.93	10.67 RT	607.87	607.89
D1	1276+99.93	10.67 RT	608.04	608.05
℄ Brg. Pier 1	1277+13.18	10.67 RT	608.26	608.26
A2	1277+23.18	10.67 RT	608.41	608.42
B2	1277+33.18	10.67 RT	608.56	608.58
C2	1277+43.18	10.67 RT	608.71	608.73
D2	1277+53.18	10.67 RT	608.85	608.86
℄ W. Brg. Pier 2	1277+63.19	10.67 RT	608.98	608.98

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+65.09	18.83 RT	607.26	607.26
℄ Brg. W. Abut.	1276+68.76	18.83 RT	607.33	607.33
A1	1276+78.76	18.83 RT	607.51	607.53
B1	1276+88.76	18.83 RT	607.69	607.72
C1	1276+98.76	18.83 RT	607.87	607.89
D1	1277+08.76	18.83 RT	608.03	608.05
℄ Brg. Pier 1	1277+22.01	18.83 RT	608.24	608.24
A2	1277+32.01	18.83 RT	608.39	608.40
B2	1277+42.01	18.83 RT	608.54	608.56
C2	1277+52.01	18.83 RT	608.68	608.70
D2	1277+62.01	18.83 RT	608.81	608.83
℄ W. Brg. Pier 2	1277+72.01	18.83 RT	608.94	608.94

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+73.91	27.00 RT	607.25	607.25
℄ Brg. W. Abut.	1276+77.58	27.00 RT	607.32	607.32
A1	1276+87.58	27.00 RT	607.50	607.52
B1	1276+97.58	27.00 RT	607.68	607.70
C1	1277+07.58	27.00 RT	607.84	607.87
D1	1277+17.58	27.00 RT	608.00	608.02
℄ Brg. Pier 1	1277+30.83	27.00 RT	608.21	608.21
A2	1277+40.83	27.00 RT	608.35	608.36
B2	1277+50.83	27.00 RT	608.49	608.51
C2	1277+60.83	27.00 RT	608.63	608.65
D2	1277+70.83	27.00 RT	608.75	608.77
℄ W. Brg. Pier 2	1277+80.83	27.00 RT	608.87	608.87

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1276+82.55	35.00 RT	607.91	607.91
℄ Brg. W. Abut.	1276+86.22	35.00 RT	607.98	607.98
A1	1276+96.22	35.00 RT	608.15	608.18
B1	1277+06.22	35.00 RT	608.32	608.36
C1	1277+16.22	35.00 RT	608.48	608.52
D1	1277+26.22	35.00 RT	608.64	608.66
℄ Brg. Pier 1	1277+39.47	35.00 RT	608.83	608.83
A2	1277+49.47	35.00 RT	608.97	608.98
B2	1277+59.47	35.00 RT	609.11	609.13
C2	1277+69.47	35.00 RT	609.23	609.26
D2	1277+79.47	35.00 RT	609.36	609.37
℄ W. Brg. Pier 2	1277+89.47	35.00 RT	609.47	609.47

E-S

2-17-2017

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\M016057O-62H52-008-Deck+Rev_Span1&2_3.dgn

COLLINS ENGINEERS INC.

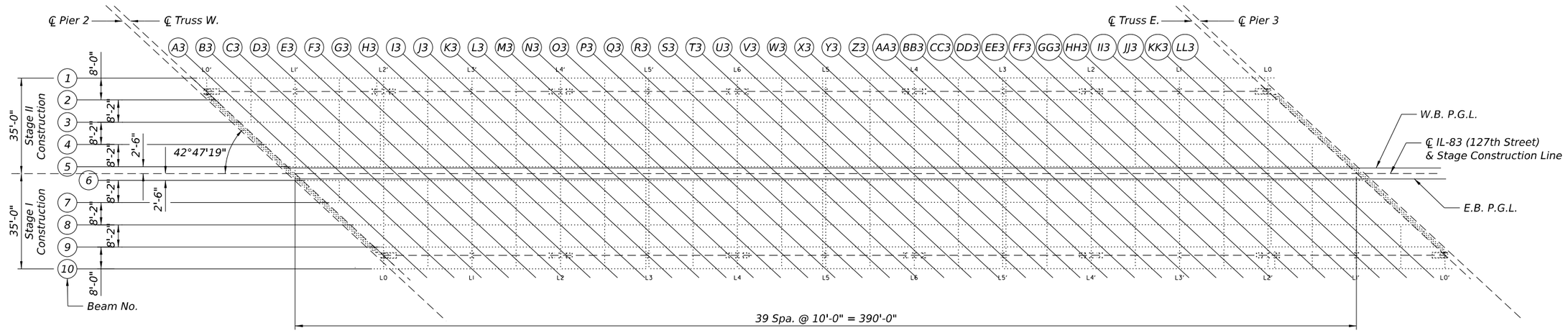
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -
	DRAWN - DR	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS SPANS 1 & 2 (SHEET 3 OF 3)
STRUCTURE NO. 016–0570

SCALE: | SHEET S-8 OF S-70 SHEETS | STA. | TO STA.

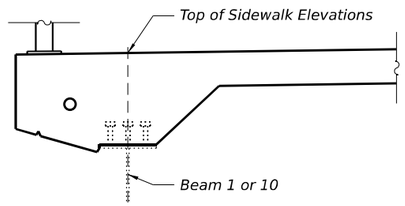
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	49
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



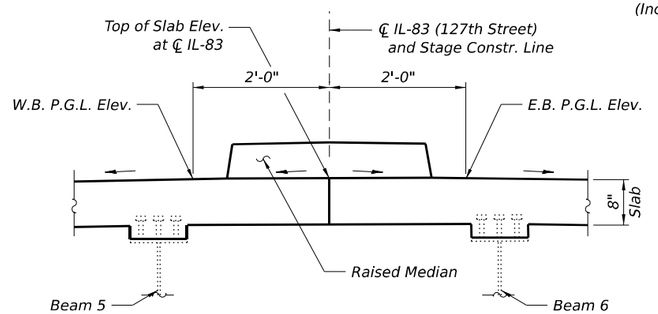
STRINGER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+20.35	35.00 LT	608.55	608.55
A3	1277+30.35	35.00 LT	608.70	608.77
B3	1277+40.35	35.00 LT	608.85	608.97
C3	1277+50.35	35.00 LT	608.99	609.12
D3	1277+60.35	35.00 LT	609.12	609.25
E3	1277+70.35	35.00 LT	609.25	609.46
F3	1277+80.35	35.00 LT	609.37	609.60
G3	1277+90.35	35.00 LT	609.48	609.68
H3	1278+00.35	35.00 LT	609.59	609.88
I3	1278+10.35	35.00 LT	609.69	610.01
J3	1278+20.35	35.00 LT	609.78	610.07
K3	1278+30.35	35.00 LT	609.86	610.21
L3	1278+40.35	35.00 LT	609.94	610.33
M3	1278+50.35	35.00 LT	610.02	610.36
N3	1278+60.35	35.00 LT	610.08	610.46
O3	1278+70.35	35.00 LT	610.15	610.57
P3	1278+80.35	35.00 LT	610.20	610.58
Q3	1278+90.35	35.00 LT	610.25	610.64
R3	1279+00.35	35.00 LT	610.29	610.73
S3	1279+10.35	35.00 LT	610.33	610.77
T3	1279+20.35	35.00 LT	610.36	610.74
U3	1279+30.35	35.00 LT	610.38	610.82
V3	1279+40.35	35.00 LT	610.40	610.83
W3	1279+50.35	35.00 LT	610.41	610.78
X3	1279+60.35	35.00 LT	610.41	610.81
Y3	1279+70.35	35.00 LT	610.41	610.82
Z3	1279+80.35	35.00 LT	610.40	610.74
AA3	1279+90.35	35.00 LT	610.38	610.73
BB3	1280+00.35	35.00 LT	610.36	610.73
CC3	1280+10.35	35.00 LT	610.33	610.63
DD3	1280+20.35	35.00 LT	610.29	610.57
EE3	1280+30.35	35.00 LT	610.25	610.55
FF3	1280+40.35	35.00 LT	610.20	610.47
GG3	1280+50.35	35.00 LT	610.15	610.33
HH3	1280+60.35	35.00 LT	610.09	610.31
II3	1280+70.35	35.00 LT	610.02	610.22
JJ3	1280+80.35	35.00 LT	609.94	610.05
KK3	1280+90.35	35.00 LT	609.85	609.98
LL3	1281+00.35	35.00 LT	609.75	609.86
℄ Truss W. Brg. @ Pier 3	1281+10.35	35.00 LT	609.64	609.64

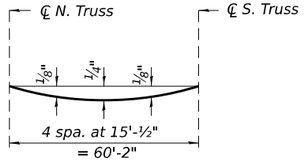
SPAN 3 PLAN



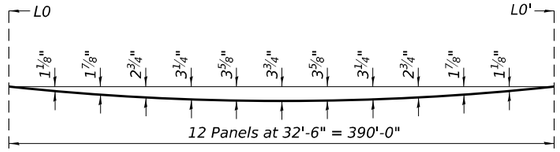
TOP OF SLAB ELEVATIONS ON SIDEWALK



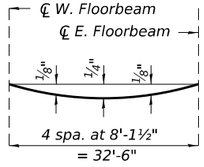
TOP OF SLAB ELEVATIONS AT MEDIAN



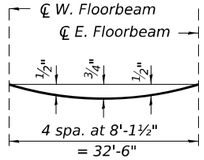
DEAD LOAD DEFLECTION DIAGRAM
TYPICAL FLOORBEAM
(Includes weight of concrete only.)



DEAD LOAD DEFLECTION DIAGRAM
TRUSS
(Includes weight of concrete only.)

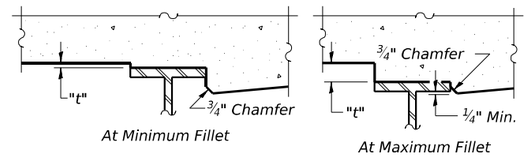


DEAD LOAD DEFLECTION DIAGRAM
INTERIOR STRINGER
(Includes weight of concrete only.)



DEAD LOAD DEFLECTION DIAGRAM
EXTERIOR STRINGER
(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown in the table. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown in the table, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

MODEL: Default
FILE NAME: h12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\0160570-62H52-009-Deck-Elev_Span3_1.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF SLAB ELEVATIONS SPAN 3 (SHEET 1 OF 5) STRUCTURE NO. 016–0570
	DRAWN - DR	REVISED -		
PLOT SCALE =	CHECKED - EKM	REVISED -		SCALE: SHEET S-9 OF S-70 SHEETS STA. TO STA.
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	50
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

STRINGER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+29.00	27.00 LT	608.18	608.18
A3	1277+39.00	27.00 LT	608.33	608.39
B3	1277+49.00	27.00 LT	608.47	608.56
C3	1277+59.00	27.00 LT	608.60	608.72
D3	1277+69.00	27.00 LT	608.73	608.89
E3	1277+79.00	27.00 LT	608.85	609.04
F3	1277+89.00	27.00 LT	608.96	609.16
G3	1277+99.00	27.00 LT	609.07	609.31
H3	1278+09.00	27.00 LT	609.17	609.44
I3	1278+19.00	27.00 LT	609.27	609.55
J3	1278+29.00	27.00 LT	609.35	609.65
K3	1278+39.00	27.00 LT	609.43	609.76
L3	1278+49.00	27.00 LT	609.51	609.84
M3	1278+59.00	27.00 LT	609.57	609.92
N3	1278+69.00	27.00 LT	609.64	610.01
O3	1278+79.00	27.00 LT	609.69	610.08
P3	1278+89.00	27.00 LT	609.74	610.12
Q3	1278+99.00	27.00 LT	609.79	610.19
R3	1279+09.00	27.00 LT	609.82	610.23
S3	1279+19.00	27.00 LT	609.85	610.25
T3	1279+29.00	27.00 LT	609.88	610.28
U3	1279+39.00	27.00 LT	609.89	610.30
V3	1279+49.00	27.00 LT	609.90	610.30
W3	1279+59.00	27.00 LT	609.91	610.30
X3	1279+69.00	27.00 LT	609.91	610.29
Y3	1279+79.00	27.00 LT	609.90	610.27
Z3	1279+89.00	27.00 LT	609.88	610.23
AA3	1279+99.00	27.00 LT	609.86	610.21
BB3	1280+09.00	27.00 LT	609.83	610.16
CC3	1280+19.00	27.00 LT	609.80	610.09
DD3	1280+29.00	27.00 LT	609.76	610.05
EE3	1280+39.00	27.00 LT	609.71	609.97
FF3	1280+49.00	27.00 LT	609.66	609.87
GG3	1280+59.00	27.00 LT	609.60	609.82
HH3	1280+69.00	27.00 LT	609.53	609.73
II3	1280+79.00	27.00 LT	609.45	609.61
JJ3	1280+89.00	27.00 LT	609.36	609.50
KK3	1280+99.00	27.00 LT	609.27	609.37
LL3	1281+09.00	27.00 LT	609.16	609.22
℄ Truss W. Brg. @ Pier 3	1281+18.99	27.00 LT	609.04	609.04

STRINGER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+37.82	18.83 LT	608.48	608.48
A3	1277+47.82	18.83 LT	608.62	608.71
B3	1277+57.82	18.83 LT	608.76	608.85
C3	1277+67.82	18.83 LT	608.88	609.04
D3	1277+77.82	18.83 LT	609.01	609.18
E3	1277+87.82	18.83 LT	609.12	609.30
F3	1277+97.82	18.83 LT	609.23	609.45
G3	1278+07.82	18.83 LT	609.33	609.59
H3	1278+17.82	18.83 LT	609.43	609.70
I3	1278+27.82	18.83 LT	609.52	609.81
J3	1278+37.82	18.83 LT	609.59	609.91
K3	1278+47.82	18.83 LT	609.67	610.00
L3	1278+57.82	18.83 LT	609.74	610.08
M3	1278+67.82	18.83 LT	609.80	610.17
N3	1278+77.82	18.83 LT	609.86	610.24
O3	1278+87.82	18.83 LT	609.91	610.29
P3	1278+97.82	18.83 LT	609.95	610.36
Q3	1279+07.82	18.83 LT	609.99	610.40
R3	1279+17.82	18.83 LT	610.02	610.42
S3	1279+27.82	18.83 LT	610.04	610.46
T3	1279+37.82	18.83 LT	610.06	610.48
U3	1279+47.82	18.83 LT	610.07	610.48
V3	1279+57.82	18.83 LT	610.08	610.48
W3	1279+67.82	18.83 LT	610.08	610.48
X3	1279+77.82	18.83 LT	610.07	610.46
Y3	1279+87.82	18.83 LT	610.06	610.43
Z3	1279+97.82	18.83 LT	610.03	610.41
AA3	1280+07.82	18.83 LT	610.01	610.37
BB3	1280+17.82	18.83 LT	609.97	610.30
CC3	1280+27.82	18.83 LT	609.93	610.25
DD3	1280+37.82	18.83 LT	609.89	610.19
EE3	1280+47.82	18.83 LT	609.83	610.09
FF3	1280+57.82	18.83 LT	609.78	610.03
GG3	1280+67.82	18.83 LT	609.71	609.95
HH3	1280+77.82	18.83 LT	609.63	609.83
II3	1280+87.82	18.83 LT	609.55	609.72
JJ3	1280+97.82	18.83 LT	609.45	609.60
KK3	1281+07.82	18.83 LT	609.34	609.45
LL3	1281+17.82	18.83 LT	609.22	609.28
℄ Truss W. Brg. @ Pier 3	1281+27.82	18.83 LT	609.10	609.10

STRINGER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+46.64	10.67 LT	608.76	608.76
A3	1277+56.64	10.67 LT	608.89	608.98
B3	1277+66.64	10.67 LT	609.02	609.16
C3	1277+76.64	10.67 LT	609.14	609.30
D3	1277+86.64	10.67 LT	609.26	609.42
E3	1277+96.64	10.67 LT	609.37	609.56
F3	1278+06.64	10.67 LT	609.47	609.70
G3	1278+16.64	10.67 LT	609.57	609.82
H3	1278+26.64	10.67 LT	609.66	609.93
I3	1278+36.64	10.67 LT	609.73	610.04
J3	1278+46.64	10.67 LT	609.81	610.13
K3	1278+56.64	10.67 LT	609.88	610.20
L3	1278+66.64	10.67 LT	609.95	610.30
M3	1278+76.64	10.67 LT	610.00	610.38
N3	1278+86.64	10.67 LT	610.05	610.43
O3	1278+96.64	10.67 LT	610.10	610.50
P3	1279+06.64	10.67 LT	610.14	610.55
Q3	1279+16.64	10.67 LT	610.17	610.57
R3	1279+26.64	10.67 LT	610.19	610.61
S3	1279+36.64	10.67 LT	610.21	610.64
T3	1279+46.64	10.67 LT	610.23	610.64
U3	1279+56.64	10.67 LT	610.23	610.64
V3	1279+66.64	10.67 LT	610.23	610.65
W3	1279+76.64	10.67 LT	610.22	610.63
X3	1279+86.64	10.67 LT	610.21	610.59
Y3	1279+96.64	10.67 LT	610.19	610.58
Z3	1280+06.64	10.67 LT	610.16	610.54
AA3	1280+16.64	10.67 LT	610.13	610.48
BB3	1280+26.64	10.67 LT	610.09	610.44
CC3	1280+36.64	10.67 LT	610.04	610.37
DD3	1280+46.64	10.67 LT	609.99	610.28
EE3	1280+56.64	10.67 LT	609.94	610.22
FF3	1280+66.64	10.67 LT	609.87	610.14
GG3	1280+76.64	10.67 LT	609.80	610.03
HH3	1280+86.64	10.67 LT	609.71	609.91
II3	1280+96.64	10.67 LT	609.61	609.80
JJ3	1281+06.64	10.67 LT	609.51	609.66
KK3	1281+16.64	10.67 LT	609.39	609.48
LL3	1281+26.64	10.67 LT	609.27	609.35
℄ Truss W. Brg. @ Pier 3	1281+36.64	10.67 LT	609.13	609.13

MODEL: Default
FILE NAME: I:\125004 IDOT-I-83 over Calsay\CADD\CADD_Sheets\Structural\M160570-62H52-010-Bridge\Elev_Span3_2.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS SPAN 3 (SHEET 2 OF 5)
STRUCTURE NO. 016-0570

SCALE: | SHEET S-10 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	51
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

STRINGER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+55.46	2.50 LT	609.01	609.01
A3	1277+65.46	2.50 LT	609.13	609.26
B3	1277+75.46	2.50 LT	609.26	609.40
C3	1277+85.46	2.50 LT	609.38	609.52
D3	1277+95.46	2.50 LT	609.49	609.65
E3	1278+05.46	2.50 LT	609.59	609.80
F3	1278+15.46	2.50 LT	609.69	609.92
G3	1278+25.46	2.50 LT	609.78	610.02
H3	1278+35.46	2.50 LT	609.85	610.14
I3	1278+45.46	2.50 LT	609.93	610.23
J3	1278+55.46	2.50 LT	610.00	610.30
K3	1278+65.46	2.50 LT	610.07	610.41
L3	1278+75.46	2.50 LT	610.12	610.49
M3	1278+85.46	2.50 LT	610.18	610.54
N3	1278+95.46	2.50 LT	610.22	610.61
O3	1279+05.46	2.50 LT	610.26	610.67
P3	1279+15.46	2.50 LT	610.29	610.70
Q3	1279+25.46	2.50 LT	610.32	610.73
R3	1279+35.46	2.50 LT	610.34	610.77
S3	1279+45.46	2.50 LT	610.35	610.78
T3	1279+55.46	2.50 LT	610.36	610.77
U3	1279+65.46	2.50 LT	610.36	610.78
V3	1279+75.46	2.50 LT	610.35	610.77
W3	1279+85.46	2.50 LT	610.34	610.74
X3	1279+95.46	2.50 LT	610.32	610.73
Y3	1280+05.46	2.50 LT	610.29	610.69
Z3	1280+15.46	2.50 LT	610.26	610.63
AA3	1280+25.46	2.50 LT	610.22	610.59
BB3	1280+35.46	2.50 LT	610.18	610.53
CC3	1280+45.46	2.50 LT	610.13	610.45
DD3	1280+55.46	2.50 LT	610.08	610.38
EE3	1280+65.46	2.50 LT	610.01	610.30
FF3	1280+75.46	2.50 LT	609.93	610.20
GG3	1280+85.46	2.50 LT	609.85	610.08
HH3	1280+95.46	2.50 LT	609.75	609.97
II3	1281+05.46	2.50 LT	609.65	609.83
JJ3	1281+15.46	2.50 LT	609.53	609.67
KK3	1281+25.46	2.50 LT	609.41	609.51
LL3	1281+35.46	2.50 LT	609.28	609.37
℄ Truss W. Brg. @ Pier 3	1281+45.46	2.50 LT	609.13	609.13

WB PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+56.00	2.00 LT	609.02	609.02
A3	1277+63.06	2.00 LT	609.15	609.27
B3	1277+73.06	2.00 LT	609.27	609.42
C3	1277+83.06	2.00 LT	609.39	609.53
D3	1277+93.06	2.00 LT	609.50	609.67
E3	1278+03.06	2.00 LT	609.60	609.81
F3	1278+13.06	2.00 LT	609.70	609.93
G3	1278+23.06	2.00 LT	609.79	610.04
H3	1278+33.06	2.00 LT	609.86	610.15
I3	1278+43.06	2.00 LT	609.94	610.25
J3	1278+53.06	2.00 LT	610.01	610.32
K3	1278+63.06	2.00 LT	610.08	610.42
L3	1278+73.06	2.00 LT	610.14	610.50
M3	1278+83.06	2.00 LT	610.19	610.55
N3	1278+93.06	2.00 LT	610.23	610.62
O3	1279+03.06	2.00 LT	610.27	610.68
P3	1279+13.06	2.00 LT	610.30	610.71
Q3	1279+23.06	2.00 LT	610.33	610.74
R3	1279+33.06	2.00 LT	610.35	610.77
S3	1279+43.06	2.00 LT	610.36	610.78
T3	1279+53.06	2.00 LT	610.37	610.78
U3	1279+63.06	2.00 LT	610.37	610.79
V3	1279+73.06	2.00 LT	610.36	610.78
W3	1279+83.06	2.00 LT	610.35	610.74
X3	1279+93.06	2.00 LT	610.33	610.73
Y3	1280+03.06	2.00 LT	610.30	610.70
Z3	1280+13.06	2.00 LT	610.27	610.64
AA3	1280+23.06	2.00 LT	610.23	610.60
BB3	1280+33.06	2.00 LT	610.18	610.54
CC3	1280+43.06	2.00 LT	610.13	610.45
DD3	1280+53.06	2.00 LT	610.08	610.38
EE3	1280+63.06	2.00 LT	610.01	610.31
FF3	1280+73.06	2.00 LT	609.94	610.20
GG3	1280+83.06	2.00 LT	609.85	610.08
HH3	1280+93.06	2.00 LT	609.75	609.97
II3	1281+03.06	2.00 LT	609.65	609.84
JJ3	1281+13.06	2.00 LT	609.53	609.65
KK3	1281+23.06	2.00 LT	609.41	609.52
LL3	1281+33.06	2.00 LT	609.28	609.37
℄ Truss W. Brg. @ Pier 3	1281+46.00	2.00 LT	609.13	609.13

℄ IL 83 and STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+58.16	00.00	609.05	609.05
A3	1277+68.16	00.00	609.18	609.30
B3	1277+78.16	00.00	609.30	609.44
C3	1277+88.16	00.00	609.41	609.55
D3	1277+98.16	00.00	609.52	609.70
E3	1278+08.16	00.00	609.62	609.84
F3	1278+18.16	00.00	609.72	609.95
G3	1278+28.16	00.00	609.80	610.06
H3	1278+38.16	00.00	609.88	610.17
I3	1278+48.16	00.00	609.96	610.26
J3	1278+58.16	00.00	610.03	610.34
K3	1278+68.16	00.00	610.09	610.44
L3	1278+78.16	00.00	610.15	610.51
M3	1278+88.16	00.00	610.20	610.56
N3	1278+98.16	00.00	610.24	610.64
O3	1279+08.16	00.00	610.28	610.68
P3	1279+18.16	00.00	610.31	610.71
Q3	1279+28.16	00.00	610.33	610.75
R3	1279+38.16	00.00	610.35	610.78
S3	1279+48.16	00.00	610.36	610.78
T3	1279+58.16	00.00	610.37	610.78
U3	1279+68.16	00.00	610.37	610.79
V3	1279+78.16	00.00	610.36	610.77
W3	1279+88.16	00.00	610.34	610.74
X3	1279+98.16	00.00	610.32	610.73
Y3	1280+08.16	00.00	610.29	610.69
Z3	1280+18.16	00.00	610.26	610.62
AA3	1280+28.16	00.00	610.22	610.58
BB3	1280+38.16	00.00	610.17	610.52
CC3	1280+48.16	00.00	610.12	610.43
DD3	1280+58.16	00.00	610.07	610.37
EE3	1280+68.16	00.00	610.00	610.29
FF3	1280+78.16	00.00	609.92	610.17
GG3	1280+88.16	00.00	609.83	610.06
HH3	1280+98.16	00.00	609.73	609.94
II3	1281+08.16	00.00	609.63	609.80
JJ3	1281+18.16	00.00	609.51	609.62
KK3	1281+28.16	00.00	609.38	609.49
LL3	1281+38.16	00.00	609.25	609.34
℄ Truss W. Brg. @ Pier 3	1281+48.16	00.00	609.10	609.10

E-S

2-17-2017

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\M1609570-62H52-011-Deck-Elev_Span3_3.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS SPAN 3 (SHEET 3 OF 5)
STRUCTURE NO. 016-0570

SCALE: | SHEET S-11 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	52
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

EB PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+60.63	2.00 LT	609.08	609.08
A3	1277+67.38	2.00 LT	609.17	609.25
B3	1277+77.38	2.00 LT	609.29	609.39
C3	1277+87.38	2.00 LT	609.40	609.51
D3	1277+97.38	2.00 LT	609.51	609.69
E3	1278+07.38	2.00 LT	609.62	609.83
F3	1278+17.38	2.00 LT	609.71	609.94
G3	1278+27.38	2.00 LT	609.80	610.05
H3	1278+37.38	2.00 LT	609.88	610.16
I3	1278+47.38	2.00 LT	609.95	610.25
J3	1278+57.38	2.00 LT	610.02	610.33
K3	1278+67.38	2.00 LT	610.09	610.43
L3	1278+77.38	2.00 LT	610.14	610.51
M3	1278+87.38	2.00 LT	610.19	610.56
N3	1278+97.38	2.00 LT	610.24	610.63
O3	1279+07.38	2.00 LT	610.28	610.68
P3	1279+17.38	2.00 LT	610.31	610.71
Q3	1279+27.38	2.00 LT	610.33	610.75
R3	1279+37.38	2.00 LT	610.35	610.78
S3	1279+47.38	2.00 LT	610.36	610.78
T3	1279+57.38	2.00 LT	610.37	610.78
U3	1279+67.38	2.00 LT	610.37	610.79
V3	1279+77.38	2.00 LT	610.36	610.78
W3	1279+87.38	2.00 LT	610.34	610.74
X3	1279+97.38	2.00 LT	610.32	610.73
Y3	1280+07.38	2.00 LT	610.30	610.69
Z3	1280+17.38	2.00 LT	610.26	610.63
AA3	1280+27.38	2.00 LT	610.22	610.59
BB3	1280+37.38	2.00 LT	610.18	610.53
CC3	1280+47.38	2.00 LT	610.12	610.44
DD3	1280+57.38	2.00 LT	610.07	610.38
EE3	1280+67.38	2.00 LT	610.00	610.30
FF3	1280+77.38	2.00 LT	609.93	610.19
GG3	1280+87.38	2.00 LT	609.84	610.07
HH3	1280+97.38	2.00 LT	609.74	609.96
II3	1281+07.38	2.00 LT	609.63	609.82
JJ3	1281+17.38	2.00 LT	609.52	609.66
KK3	1281+27.38	2.00 LT	609.39	609.54
LL3	1281+37.38	2.00 LT	609.26	609.39
℄ Truss W. Brg. @ Pier 3	1281+50.32	2.00 LT	609.07	609.07

STRINGER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+60.86	2.50 RT	609.08	609.08
A3	1277+70.86	2.50 RT	609.20	609.30
B3	1277+80.86	2.50 RT	609.32	609.43
C3	1277+90.86	2.50 RT	609.44	609.57
D3	1278+00.86	2.50 RT	609.54	609.73
E3	1278+10.86	2.50 RT	609.64	609.86
F3	1278+20.86	2.50 RT	609.74	609.97
G3	1278+30.86	2.50 RT	609.81	610.08
H3	1278+40.86	2.50 RT	609.89	610.19
I3	1278+50.86	2.50 RT	609.97	610.27
J3	1278+60.86	2.50 RT	610.04	610.36
K3	1278+70.86	2.50 RT	610.10	610.45
L3	1278+80.86	2.50 RT	610.15	610.52
M3	1278+90.86	2.50 RT	610.20	610.57
N3	1279+00.86	2.50 RT	610.24	610.64
O3	1279+10.86	2.50 RT	610.28	610.69
P3	1279+20.86	2.50 RT	610.31	610.70
Q3	1279+30.86	2.50 RT	610.33	610.75
R3	1279+40.86	2.50 RT	610.35	610.77
S3	1279+50.86	2.50 RT	610.36	610.77
T3	1279+60.86	2.50 RT	610.36	610.78
U3	1279+70.86	2.50 RT	610.36	610.78
V3	1279+80.86	2.50 RT	610.35	610.76
W3	1279+90.86	2.50 RT	610.33	610.73
X3	1280+00.86	2.50 RT	610.31	610.71
Y3	1280+10.86	2.50 RT	610.28	610.67
Z3	1280+20.86	2.50 RT	610.24	610.61
AA3	1280+30.86	2.50 RT	610.20	610.56
BB3	1280+40.86	2.50 RT	610.15	610.49
CC3	1280+50.86	2.50 RT	610.09	610.40
DD3	1280+60.86	2.50 RT	610.04	610.34
EE3	1280+70.86	2.50 RT	609.97	610.25
FF3	1280+80.86	2.50 RT	609.89	610.14
GG3	1280+90.86	2.50 RT	609.80	610.03
HH3	1281+00.86	2.50 RT	609.70	609.90
II3	1281+10.86	2.50 RT	609.59	609.75
JJ3	1281+20.86	2.50 RT	609.47	609.61
KK3	1281+30.86	2.50 RT	609.34	609.48
LL3	1281+40.86	2.50 RT	609.20	609.32
℄ Truss W. Brg. @ Pier 3	1281+50.86	2.50 RT	609.05	609.05

STRINGER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+69.69	10.67 RT	609.06	609.06
A3	1277+79.69	10.67 RT	609.18	609.27
B3	1277+89.69	10.67 RT	609.29	609.38
C3	1277+99.69	10.67 RT	609.40	609.55
D3	1278+09.69	10.67 RT	609.50	609.69
E3	1278+19.69	10.67 RT	609.60	609.80
F3	1278+29.69	10.67 RT	609.68	609.91
G3	1278+39.69	10.67 RT	609.76	610.02
H3	1278+49.69	10.67 RT	609.83	610.11
I3	1278+59.69	10.67 RT	609.90	610.19
J3	1278+69.69	10.67 RT	609.96	610.29
K3	1278+79.69	10.67 RT	610.02	610.37
L3	1278+89.69	10.67 RT	610.07	610.42
M3	1278+99.69	10.67 RT	610.11	610.49
N3	1279+09.69	10.67 RT	610.15	610.54
O3	1279+19.69	10.67 RT	610.18	610.56
P3	1279+29.69	10.67 RT	610.20	610.61
Q3	1279+39.69	10.67 RT	610.22	610.63
R3	1279+49.69	10.67 RT	610.23	610.64
S3	1279+59.69	10.67 RT	610.23	610.65
T3	1279+69.69	10.67 RT	610.23	610.65
U3	1279+79.69	10.67 RT	610.22	610.63
V3	1279+89.69	10.67 RT	610.20	610.61
W3	1279+99.69	10.67 RT	610.18	610.59
X3	1280+09.69	10.67 RT	610.15	610.55
Y3	1280+19.69	10.67 RT	610.12	610.49
Z3	1280+29.69	10.67 RT	610.08	610.45
AA3	1280+39.69	10.67 RT	610.03	610.39
BB3	1280+49.69	10.67 RT	609.97	610.29
CC3	1280+59.69	10.67 RT	609.92	610.24
DD3	1280+69.69	10.67 RT	609.85	610.15
EE3	1280+79.69	10.67 RT	609.77	610.04
FF3	1280+89.69	10.67 RT	609.68	609.93
GG3	1280+99.69	10.67 RT	609.58	609.81
HH3	1281+09.69	10.67 RT	609.47	609.66
II3	1281+19.69	10.67 RT	609.35	609.52
JJ3	1281+29.69	10.67 RT	609.23	609.39
KK3	1281+39.69	10.67 RT	609.09	609.23
LL3	1281+49.69	10.67 RT	608.94	609.02
℄ Truss W. Brg. @ Pier 3	1281+59.69	10.67 RT	608.79	608.79

MODEL: Default
FILE NAME: I:\125094 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\M0160570-62H52-012-Precast_Spn3_4.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS SPAN 3 (SHEET 4 OF 5)
STRUCTURE NO. 016-0570

SCALE: | SHEET S-12 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	53
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

STRINGER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+78.51	18.83 RT	609.01	609.01
A3	1277+88.51	18.83 RT	609.13	609.19
B3	1277+98.51	18.83 RT	609.24	609.35
C3	1278+08.51	18.83 RT	609.34	609.49
D3	1278+18.51	18.83 RT	609.43	609.61
E3	1278+28.51	18.83 RT	609.51	609.71
F3	1278+38.51	18.83 RT	609.60	609.83
G3	1278+48.51	18.83 RT	609.67	609.92
H3	1278+58.51	18.83 RT	609.74	610.00
I3	1278+68.51	18.83 RT	609.80	610.10
J3	1278+78.51	18.83 RT	609.86	610.18
K3	1278+88.51	18.83 RT	609.91	610.24
L3	1278+98.51	18.83 RT	609.95	610.31
M3	1279+08.51	18.83 RT	609.99	610.37
N3	1279+18.51	18.83 RT	610.02	610.39
O3	1279+28.51	18.83 RT	610.05	610.44
P3	1279+38.51	18.83 RT	610.06	610.47
Q3	1279+48.51	18.83 RT	610.07	610.48
R3	1279+58.51	18.83 RT	610.08	610.49
S3	1279+68.51	18.83 RT	610.08	610.50
T3	1279+78.51	18.83 RT	610.07	610.48
U3	1279+88.51	18.83 RT	610.05	610.46
V3	1279+98.51	18.83 RT	610.03	610.45
W3	1280+08.51	18.83 RT	610.00	610.41
X3	1280+18.51	18.83 RT	609.97	610.35
Y3	1280+28.51	18.83 RT	609.93	610.31
Z3	1280+38.51	18.83 RT	609.88	610.25
AA3	1280+48.51	18.83 RT	609.83	610.17
BB3	1280+58.51	18.83 RT	609.78	610.11
CC3	1280+68.51	18.83 RT	609.71	610.03
DD3	1280+78.51	18.83 RT	609.63	609.92
EE3	1280+88.51	18.83 RT	609.54	609.81
FF3	1280+98.51	18.83 RT	609.44	609.69
GG3	1281+08.51	18.83 RT	609.33	609.55
HH3	1281+18.51	18.83 RT	609.22	609.40
II3	1281+28.51	18.83 RT	609.09	609.27
JJ3	1281+38.51	18.83 RT	608.95	609.11
KK3	1281+48.51	18.83 RT	608.81	608.91
LL3	1281+58.51	18.83 RT	608.65	608.72
℄ Truss W. Brg. @ Pier 3	1281+68.51	18.83 RT	608.49	608.49

STRINGER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+87.33	27.00 RT	608.95	608.95
A3	1277+97.33	27.00 RT	609.05	609.12
B3	1278+07.33	27.00 RT	609.16	609.27
C3	1278+17.33	27.00 RT	609.25	609.38
D3	1278+27.33	27.00 RT	609.34	609.50
E3	1278+37.33	27.00 RT	609.42	609.61
F3	1278+47.33	27.00 RT	609.49	609.70
G3	1278+57.33	27.00 RT	609.56	609.78
H3	1278+67.33	27.00 RT	609.63	609.89
I3	1278+77.33	27.00 RT	609.68	609.97
J3	1278+87.33	27.00 RT	609.74	610.03
K3	1278+97.33	27.00 RT	609.78	610.11
L3	1279+07.33	27.00 RT	609.82	610.17
M3	1279+17.33	27.00 RT	609.85	610.20
N3	1279+27.33	27.00 RT	609.87	610.24
O3	1279+37.33	27.00 RT	609.89	610.28
P3	1279+47.33	27.00 RT	609.90	610.29
Q3	1279+57.33	27.00 RT	609.91	610.30
R3	1279+67.33	27.00 RT	609.91	610.32
S3	1279+77.33	27.00 RT	609.90	610.31
T3	1279+87.33	27.00 RT	609.89	610.28
U3	1279+97.33	27.00 RT	609.87	610.27
V3	1280+07.33	27.00 RT	609.84	610.24
W3	1280+17.33	27.00 RT	609.80	610.18
X3	1280+27.33	27.00 RT	609.76	610.15
Y3	1280+37.33	27.00 RT	609.72	610.09
Z3	1280+47.33	27.00 RT	609.66	610.01
AA3	1280+57.33	27.00 RT	609.61	609.95
BB3	1280+67.33	27.00 RT	609.55	609.88
CC3	1280+77.33	27.00 RT	609.47	609.77
DD3	1280+87.33	27.00 RT	609.38	609.66
EE3	1280+97.33	27.00 RT	609.28	609.55
FF3	1281+07.33	27.00 RT	609.18	609.41
GG3	1281+17.33	27.00 RT	609.06	609.25
HH3	1281+27.33	27.00 RT	608.93	609.12
II3	1281+37.33	27.00 RT	608.80	608.96
JJ3	1281+47.33	27.00 RT	608.66	608.77
KK3	1281+57.33	27.00 RT	608.50	608.59
LL3	1281+67.33	27.00 RT	608.34	608.39
℄ Truss W. Brg. @ Pier 3	1281+77.33	27.00 RT	608.17	608.17

STRINGER 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Truss E. Brg. @ Pier 2	1277+95.97	35.00 RT	609.54	609.54
A3	1278+05.97	35.00 RT	609.64	609.76
B3	1278+15.97	35.00 RT	609.74	609.86
C3	1278+25.97	35.00 RT	609.83	609.96
D3	1278+35.97	35.00 RT	609.91	610.10
E3	1278+45.97	35.00 RT	609.98	610.20
F3	1278+55.97	35.00 RT	610.05	610.23
G3	1278+65.97	35.00 RT	610.12	610.39
H3	1278+75.97	35.00 RT	610.18	610.48
I3	1278+85.97	35.00 RT	610.23	610.51
J3	1278+95.97	35.00 RT	610.27	610.61
K3	1279+05.97	35.00 RT	610.31	610.68
L3	1279+15.97	35.00 RT	610.34	610.69
M3	1279+25.97	35.00 RT	610.37	610.74
N3	1279+35.97	35.00 RT	610.39	610.81
O3	1279+45.97	35.00 RT	610.40	610.81
P3	1279+55.97	35.00 RT	610.41	610.79
Q3	1279+65.97	35.00 RT	610.41	610.85
R3	1279+75.97	35.00 RT	610.40	610.84
S3	1279+85.97	35.00 RT	610.39	610.77
T3	1279+95.97	35.00 RT	610.37	610.81
U3	1280+05.97	35.00 RT	610.34	610.78
V3	1280+15.97	35.00 RT	610.31	610.70
W3	1280+25.97	35.00 RT	610.27	610.69
X3	1280+35.97	35.00 RT	610.22	610.65
Y3	1280+45.97	35.00 RT	610.17	610.55
Z3	1280+55.97	35.00 RT	610.12	610.49
AA3	1280+65.97	35.00 RT	610.06	610.44
BB3	1280+75.97	35.00 RT	609.98	610.33
CC3	1280+85.97	35.00 RT	609.89	610.19
DD3	1280+95.97	35.00 RT	609.80	610.12
EE3	1281+05.97	35.00 RT	609.69	609.98
FF3	1281+15.97	35.00 RT	609.58	609.78
GG3	1281+25.97	35.00 RT	609.45	609.69
HH3	1281+35.97	35.00 RT	609.32	609.53
II3	1281+45.97	35.00 RT	609.18	609.31
JJ3	1281+55.97	35.00 RT	609.02	609.16
KK3	1281+65.97	35.00 RT	608.86	608.99
LL3	1281+75.97	35.00 RT	608.69	608.78
℄ Truss W. Brg. @ Pier 3	1281+85.97	35.00 RT	608.51	608.51

MODEL: Default
FILE NAME: I:\125004 IDOT-I-83 over Calsay\CADD\CADD_Sheets\Structural\M160570-62H52-013-Deck-Elev_Span3_5.dgn

COLLINS ENGINEERS INC

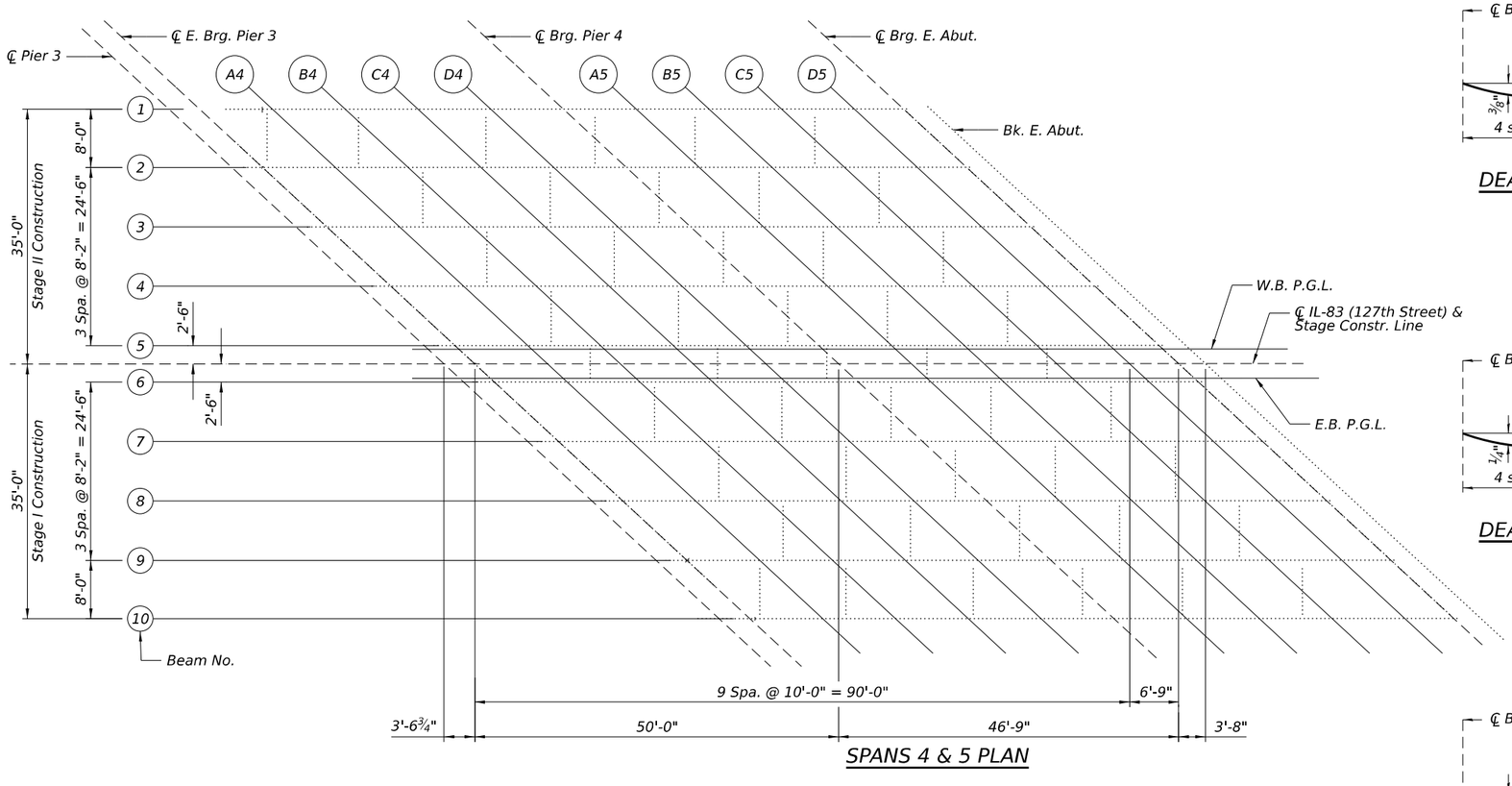
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

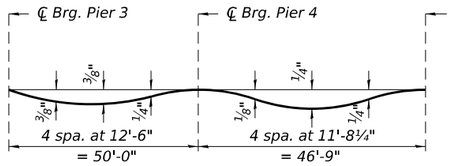
TOP OF SLAB ELEVATIONS SPAN 3 (SHEET 5 OF 5)
STRUCTURE NO. 016-0570

SCALE: | SHEET S-13 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	54
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

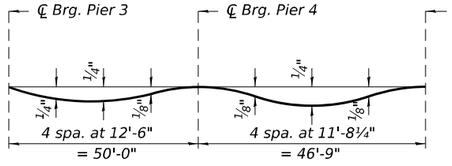


SPANS 4 & 5 PLAN



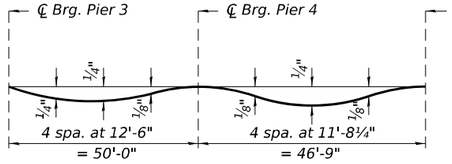
DEAD LOAD DEFLECTION DIAGRAM EXTERIOR BEAM 1 & 10

(Includes weight of concrete only.)



DEAD LOAD DEFLECTION DIAGRAM INTERIOR BEAM 5 & 6

(Includes weight of concrete only.)



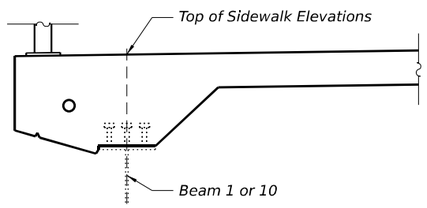
DEAD LOAD DEFLECTION DIAGRAM INTERIOR BEAM 2-4 & 7-9

(Includes weight of concrete only.)

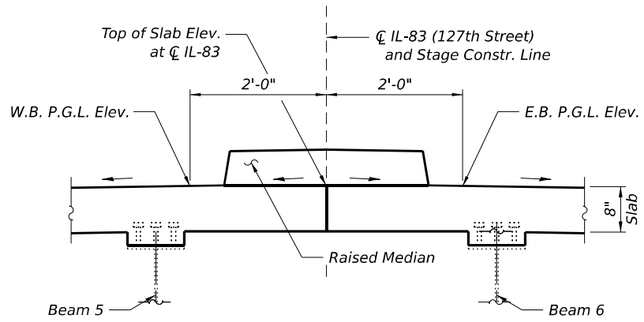
Note:
The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown below.

BEAM 1

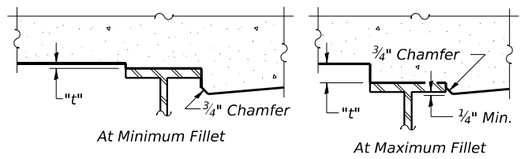
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+16.85	35.00 LT	609.57	609.57
A4	1281+26.85	35.00 LT	609.44	609.47
B4	1281+36.85	35.00 LT	609.31	609.34
C4	1281+46.85	35.00 LT	609.16	609.19
D4	1281+56.85	35.00 LT	609.01	609.02
℄ Brg. Pier 4	1281+66.85	35.00 LT	608.85	608.85
A5	1281+76.85	35.00 LT	608.67	608.68
B5	1281+86.85	35.00 LT	608.49	608.51
C5	1281+96.85	35.00 LT	608.30	608.32
D5	1282+06.85	35.00 LT	608.10	608.11
℄ Brg. E. Abut.	1282+13.60	35.00 LT	607.96	607.96
Bk. E. Abut.	1282+17.27	35.00 LT	607.88	607.88



TOP OF SLAB ELEVATIONS ON SIDEWALK



TOP OF SLAB ELEVATIONS AT MEDIAN



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown in the tables. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown in the tables, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CollSag\CADD\CADD_Sheets\Structural\016057062H52-014-DeckElev_Span465_1.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF SLAB ELEVATIONS SPANS 4 & 5 (SHEET 1 OF 3) STRUCTURE NO. 016–0570
	DRAWN - DR	REVISED -		
PLOT SCALE =	CHECKED - EKM	REVISED -		SCALE: SHEET S-14 OF S-70 SHEETS STA. TO STA.
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	55
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+25.50	27.00 LT	608.96	608.96
A4	1281+35.50	27.00 LT	608.83	608.84
B4	1281+45.50	27.00 LT	608.68	608.71
C4	1281+55.50	27.00 LT	608.53	608.55
D4	1281+65.50	27.00 LT	608.37	608.38
℄ Brg. Pier 4	1281+75.50	27.00 LT	608.20	608.20
A5	1281+85.50	27.00 LT	608.02	608.02
B5	1281+95.50	27.00 LT	607.83	607.84
C5	1282+05.50	27.00 LT	607.63	607.65
D5	1282+15.50	27.00 LT	607.42	607.43
℄ Brg. E. Abut.	1282+22.25	27.00 LT	607.27	607.27
Bk. E. Abut.	1282+25.92	27.00 LT	607.19	607.19

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+34.32	18.83 LT	609.01	609.01
A4	1281+44.32	18.83 LT	608.87	608.89
B4	1281+54.32	18.83 LT	608.72	608.75
C4	1281+64.32	18.83 LT	608.56	608.58
D4	1281+74.32	18.83 LT	608.39	608.40
℄ Brg. Pier 4	1281+84.32	18.83 LT	608.21	608.21
A5	1281+94.32	18.83 LT	608.02	608.03
B5	1282+04.32	18.83 LT	607.82	607.84
C5	1282+14.32	18.83 LT	607.61	607.64
D5	1282+24.32	18.83 LT	607.40	607.41
℄ Brg. E. Abut.	1282+31.07	18.83 LT	607.25	607.25
Bk. E. Abut.	1282+34.74	18.83 LT	607.16	607.16

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+43.14	10.67 LT	609.04	609.04
A4	1281+53.14	10.67 LT	608.89	608.91
B4	1281+63.14	10.67 LT	608.73	608.75
C4	1281+73.14	10.67 LT	608.56	608.58
D4	1281+83.14	10.67 LT	608.38	608.39
℄ Brg. Pier 4	1281+93.14	10.67 LT	608.20	608.20
A5	1282+03.14	10.67 LT	608.00	608.00
B5	1282+13.14	10.67 LT	607.79	607.81
C5	1282+23.14	10.67 LT	607.58	607.59
D5	1282+33.14	10.67 LT	607.35	607.36
℄ Brg. E. Abut.	1282+39.89	10.67 LT	607.19	607.19
Bk. E. Abut.	1282+43.56	10.67 LT	607.11	607.11

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+51.96	2.50 LT	609.04	609.04
A4	1281+61.96	2.50 LT	608.88	608.89
B4	1281+71.96	2.50 LT	608.71	608.73
C4	1281+81.96	2.50 LT	608.53	608.55
D4	1281+91.96	2.50 LT	608.35	608.36
℄ Brg. Pier 4	1282+01.96	2.50 LT	608.15	608.15
A5	1282+11.96	2.50 LT	607.94	607.95
B5	1282+21.96	2.50 LT	607.73	607.74
C5	1282+31.96	2.50 LT	607.51	607.52
D5	1282+41.96	2.50 LT	607.27	607.28
℄ Brg. E. Abut.	1282+48.71	2.50 LT	607.11	607.11
Bk. E. Abut.	1282+52.38	2.50 LT	607.02	607.02

WB PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+52.50	2.00 LT	609.04	609.04
A4	1281+62.50	2.00 LT	608.88	608.89
B4	1281+72.50	2.00 LT	608.71	608.73
C4	1281+82.50	2.00 LT	608.53	608.55
D4	1281+92.50	2.00 LT	608.34	608.35
℄ Brg. Pier 4	1282+02.50	2.00 LT	608.15	608.15
A5	1282+12.50	2.00 LT	607.94	607.95
B5	1282+22.50	2.00 LT	607.73	607.74
C5	1282+32.50	2.00 LT	607.50	607.52
D5	1282+42.50	2.00 LT	607.27	607.28
℄ Brg. E. Abut.	1282+49.25	2.00 LT	607.10	607.10
Bk. E. Abut.	1282+52.92	2.00 LT	607.01	607.01

℄ IL 83 and STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+54.66	00.00	609.00	609.00
A4	1281+64.66	00.00	608.84	608.86
B4	1281+74.66	00.00	608.67	608.70
C4	1281+84.66	00.00	608.49	608.51
D4	1281+94.66	00.00	608.30	608.31
℄ Brg. Pier 4	1282+04.66	00.00	608.10	608.10
A5	1282+14.66	00.00	607.90	607.90
B5	1282+24.66	00.00	607.68	607.69
C5	1282+34.66	00.00	607.45	607.47
D5	1282+44.66	00.00	607.21	607.22
℄ Brg. E. Abut.	1282+51.41	00.00	607.05	607.05
Bk. E. Abut.	1282+55.08	00.00	606.96	606.96

E-S

2-17-2017

COLLINS ENGINEERS INC.

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS SPANS 4 & 5 (SHEET 2 OF 3)
STRUCTURE NO. 016–0570

SCALE: | SHEET S-15 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	56
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\016057O-62H52-015-Deck+Rev_Spn4&5_2.dgn

EB PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+56.83	2.00 RT	608.97	608.97
A4	1281+66.83	2.00 RT	608.80	608.82
B4	1281+76.83	2.00 RT	608.63	608.66
C4	1281+86.83	2.00 RT	608.45	608.47
D4	1281+96.83	2.00 RT	608.26	608.27
℄ Brg. Pier 4	1282+06.83	2.00 RT	608.06	608.06
A5	1282+16.83	2.00 RT	607.85	607.85
B5	1282+26.83	2.00 RT	607.63	607.64
C5	1282+36.83	2.00 RT	607.40	607.42
D5	1282+46.83	2.00 RT	607.16	607.17
℄ Brg. E. Abut.	1282+53.58	2.00 RT	607.00	607.00
Bk. E. Abut.	1282+57.25	2.00 RT	606.90	606.90

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+57.37	2.50 RT	608.95	608.95
A4	1281+67.37	2.50 RT	608.79	608.81
B4	1281+77.37	2.50 RT	608.62	608.64
C4	1281+87.37	2.50 RT	608.43	608.45
D4	1281+97.37	2.50 RT	608.24	608.25
℄ Brg. Pier 4	1282+07.37	2.50 RT	608.04	608.04
A5	1282+17.37	2.50 RT	607.83	607.84
B5	1282+27.37	2.50 RT	607.61	607.62
C5	1282+37.37	2.50 RT	607.38	607.40
D5	1282+47.37	2.50 RT	607.14	607.15
℄ Brg. E. Abut.	1282+54.12	2.50 RT	606.97	606.97
Bk. E. Abut.	1282+57.79	2.50 RT	606.88	606.88

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+66.19	10.67 RT	608.68	608.68
A4	1281+76.19	10.67 RT	608.51	608.53
B4	1281+86.19	10.67 RT	608.33	608.35
C4	1281+96.19	10.67 RT	608.14	608.16
D4	1282+06.19	10.67 RT	607.94	607.94
℄ Brg. Pier 4	1282+16.19	10.67 RT	607.73	607.73
A5	1282+26.19	10.67 RT	607.51	607.51
B5	1282+36.19	10.67 RT	607.28	607.29
C5	1282+46.19	10.67 RT	607.04	607.06
D5	1282+56.19	10.67 RT	606.79	606.80
℄ Brg. E. Abut.	1282+62.94	10.67 RT	606.62	606.62
Bk. E. Abut.	1282+66.61	10.67 RT	606.53	606.53

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+75.01	18.83 RT	608.38	608.38
A4	1281+85.01	18.83 RT	608.20	608.22
B4	1281+95.01	18.83 RT	608.01	608.04
C4	1282+05.01	18.83 RT	607.81	607.83
D4	1282+15.01	18.83 RT	607.60	607.61
℄ Brg. Pier 4	1282+25.01	18.83 RT	607.38	607.38
A5	1282+35.01	18.83 RT	607.15	607.16
B5	1282+45.01	18.83 RT	606.92	606.94
C5	1282+55.01	18.83 RT	606.67	606.69
D5	1282+65.01	18.83 RT	606.42	606.43
℄ Brg. E. Abut.	1282+71.76	18.83 RT	606.24	606.24
Bk. E. Abut.	1282+75.43	18.83 RT	606.14	606.14

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+83.83	27.00 RT	608.05	608.05
A4	1281+93.83	27.00 RT	607.86	607.88
B4	1282+03.83	27.00 RT	607.66	607.69
C4	1282+13.83	27.00 RT	607.45	607.48
D4	1282+23.83	27.00 RT	607.24	607.25
℄ Brg. Pier 4	1282+33.83	27.00 RT	607.01	607.01
A5	1282+43.83	27.00 RT	606.78	606.78
B5	1282+53.83	27.00 RT	606.53	606.55
C5	1282+63.83	27.00 RT	606.28	606.29
D5	1282+73.83	27.00 RT	606.01	606.02
℄ Brg. E. Abut.	1282+80.58	27.00 RT	605.83	605.83
Bk. E. Abut.	1282+84.25	27.00 RT	605.73	605.73

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ E. Brg. Pier 3	1281+92.48	35.00 RT	608.39	608.39
A4	1282+02.48	35.00 RT	608.19	608.21
B4	1282+12.48	35.00 RT	607.98	608.02
C4	1282+22.48	35.00 RT	607.77	607.80
D4	1282+32.48	35.00 RT	607.54	607.56
℄ Brg. Pier 4	1282+42.48	35.00 RT	607.31	607.31
A5	1282+52.48	35.00 RT	607.06	607.07
B5	1282+62.48	35.00 RT	606.81	606.83
C5	1282+72.48	35.00 RT	606.55	606.57
D5	1282+82.48	35.00 RT	606.28	606.29
℄ Brg. E. Abut.	1282+89.23	35.00 RT	606.09	606.09
Bk. E. Abut.	1282+92.90	35.00 RT	605.98	605.98

2-17-2017

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\016057O-62H52-016-DeckRev_Spn465_3.dgn

COLLINS ENGINEERS INC.

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -
	DRAWN - DR	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS SPANS 4 & 5 (SHEET 3 OF 3)
STRUCTURE NO. 016–0570

SCALE: | SHEET S-16 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	57
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

NORTH EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
West End W. Approach Slab Pvmt.	1275+75.28	36.65 LT	604.93
AS1	1275+85.28	36.65 LT	605.16
AS2	1275+95.28	36.65 LT	605.39
East End W. Approach Slab Pvmt.	1276+05.28	36.65 LT	605.62

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End W. Approach Slab Pvmt.	1275+84.62	28.00 LT	605.32
AS1	1275+94.62	28.00 LT	605.56
AS2	1276+04.62	28.00 LT	605.79
East End W. Approach Slab Pvmt.	1276+14.62	28.00 LT	606.02

W.B. P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
West End W. Approach Slab Pvmt.	1276+12.71	2.00 LT	606.45
AS1	1276+22.71	2.00 LT	606.67
AS2	1276+32.71	2.00 LT	606.89
East End W. Approach Slab Pvmt.	1276+42.71	2.00 LT	607.10

NORTH EDGE OF CONCRETE MEDIAN

Location	Station	Offset	Theoretical Grade Elevations
West End W. Approach Slab Pvmt.	1276+13.25	1.50 LT	606.46
AS1	1276+23.25	1.50 LT	606.69
AS2	1276+33.25	1.50 LT	606.89
East End W. Approach Slab Pvmt.	1276+43.25	1.50 LT	607.10

℄ IL-83 and STAGE CONSTRUCTION LINE

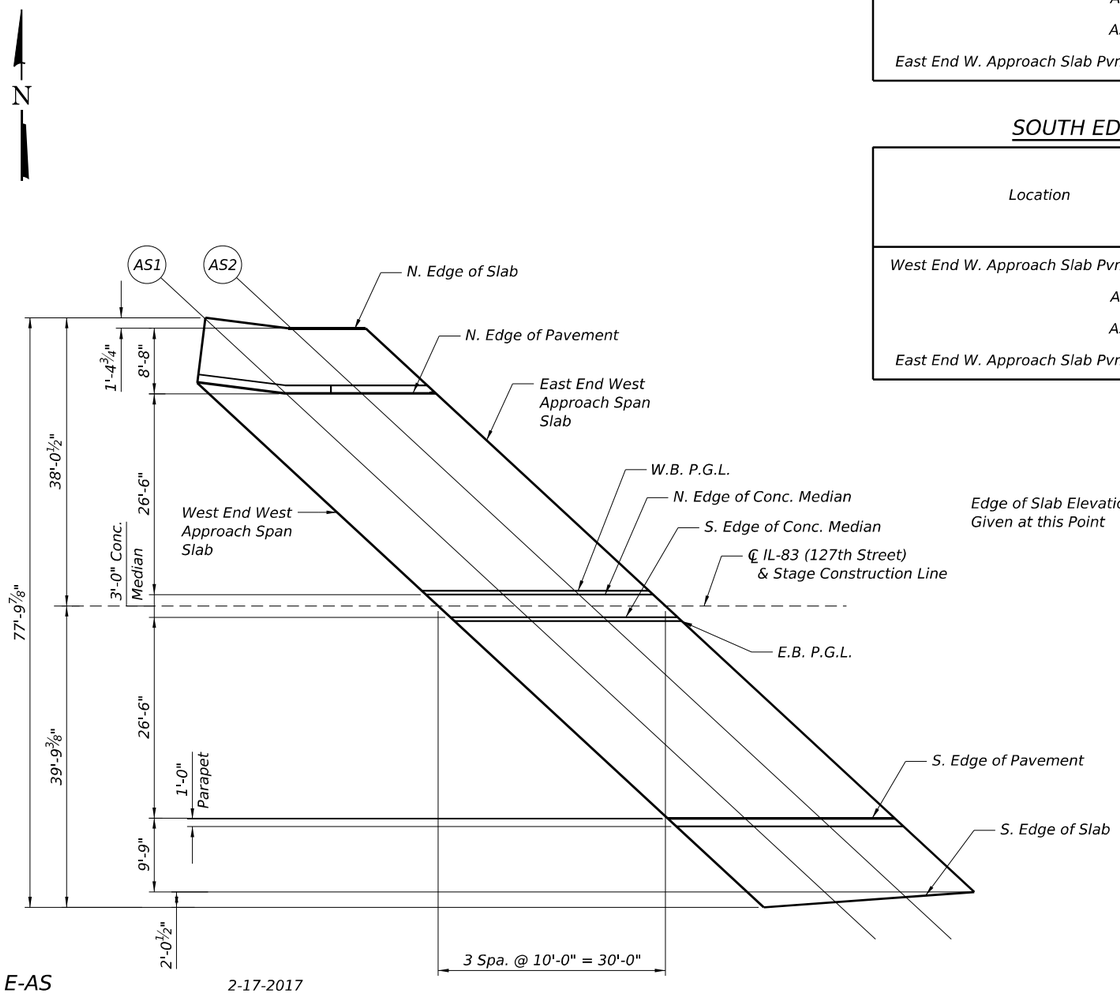
Location	Station	Offset	Theoretical Grade Elevations
West End W. Approach Slab Pvmt.	1276+14.87	00.00	606.50
AS1	1276+24.87	00.00	606.72
AS2	1276+34.87	00.00	606.94
East End W. Approach Slab Pvmt.	1276+44.87	00.00	607.14

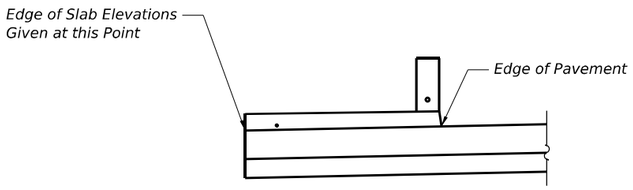
SOUTH EDGE OF CONCRETE MEDIAN

Location	Station	Offset	Theoretical Grade Elevations
West End W. Approach Slab Pvmt.	1276+16.48	1.50 LT	606.53
AS1	1276+26.48	1.50 LT	606.76
AS2	1276+36.48	1.50 LT	606.96
East End W. Approach Slab Pvmt.	1276+46.48	1.50 LT	607.17

E.B. P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
West End W. Approach Slab Pvmt.	1276+17.03	2.00 RT	606.55
AS1	1276+27.03	2.00 RT	606.77
AS2	1276+37.03	2.00 RT	606.98
East End W. Approach Slab Pvmt.	1276+47.03	2.00 RT	607.19





TOP OF APPROACH SLAB ELEVATIONS UNDER SIDEWALK

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End W. Approach Slab Pvmt.	1276+45.11	28.00 RT	606.73
AS1	1276+55.11	28.00 RT	606.96
AS2	1276+65.11	28.00 RT	607.07
East End W. Approach Slab Pvmt.	1276+75.11	28.00 RT	607.26

SOUTH EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
West End W. Approach Slab Pvmt.	1276+59.97	41.75 RT	606.68
AS1	1276+69.97	40.38 RT	606.90
AS2	1276+79.97	39.01 RT	607.11
East End W. Approach Slab Pvmt.	1276+89.97	37.65 RT	607.32

E-AS 2-17-2017

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\60570-62H52-017-WestApr_SlabElev.dgn

COLLINS ENGINEERS INC.

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016–0570

SCALE: | SHEET S-17 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	58
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

NORTH EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
West End E. Approach Slab Pvmt.	1282+15.37	36.65 LT	606.56
AS3	1282+25.37	36.65 LT	606.34
AS4	1282+35.37	36.65 LT	606.12
East End E. Approach Slab Pvmt.	1282+45.37	36.65 LT	605.88

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End E. Approach Slab Pvmt.	1282+24.71	28.00 LT	606.72
AS3	1282+34.71	28.00 LT	606.49
AS4	1282+44.71	28.00 LT	606.25
East End E. Approach Slab Pvmt.	1282+54.71	28.00 LT	606.01

NORTH EDGE OF CONCRETE MEDIAN

Location	Station	Offset	Theoretical Grade Elevations
West End E. Approach Slab Pvmt.	1282+53.34	1.50 LT	607.02
AS3	1282+63.34	1.50 LT	606.77
AS4	1282+73.34	1.50 LT	606.50
East End E. Approach Slab Pvmt.	1282+83.34	1.50 LT	606.23

SOUTH EDGE OF CONCRETE MEDIAN

Location	Station	Offset	Theoretical Grade Elevations
West End E. Approach Slab Pvmt.	1282+56.57	1.50 RT	606.94
AS3	1282+66.57	1.50 RT	606.68
AS4	1282+76.57	1.50 RT	606.42
East End E. Approach Slab Pvmt.	1282+86.57	1.50 RT	606.14

W.B. P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
West End E. Approach Slab Pvmt.	1282+52.80	2.00 LT	607.02
AS3	1282+62.80	2.00 LT	606.76
AS4	1282+72.80	2.00 LT	606.50
East End E. Approach Slab Pvmt.	1282+82.80	2.00 LT	606.23

℄ IL-83 (127TH STREET) & STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
West End E. Approach Slab Pvmt.	1282+54.96	00.00	607.04
AS3	1282+64.96	00.00	606.79
AS4	1282+74.96	00.00	606.52
East End E. Approach Slab Pvmt.	1282+84.96	00.00	606.25

E.B. P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
West End E. Approach Slab Pvmt.	1282+57.12	2.00 RT	606.91
AS3	1282+67.12	2.00 RT	606.65
AS4	1282+77.12	2.00 RT	606.38
East End E. Approach Slab Pvmt.	1282+87.12	2.00 RT	606.11

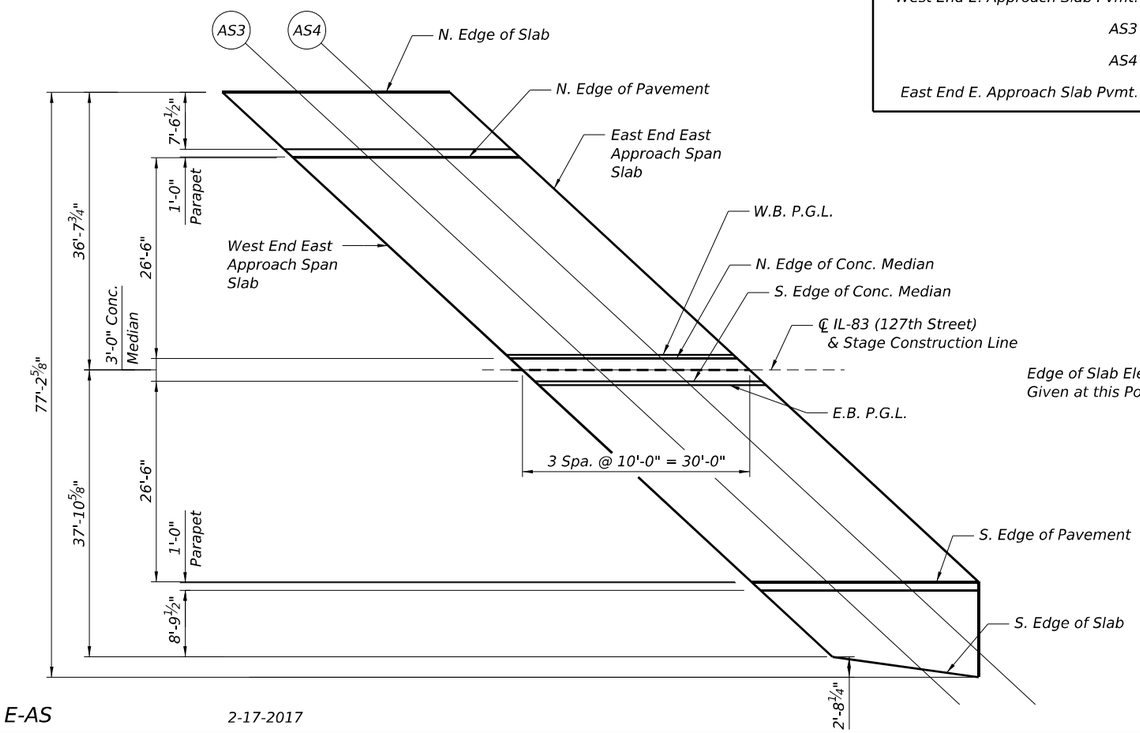
SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End E. Approach Slab Pvmt.	1282+85.20	28.00 RT	605.20
AS3	1282+95.20	28.00 RT	604.92
AS4	1283+05.20	28.00 RT	604.62
East End E. Approach Slab Pvmt.	1283+15.20	28.00 RT	604.32

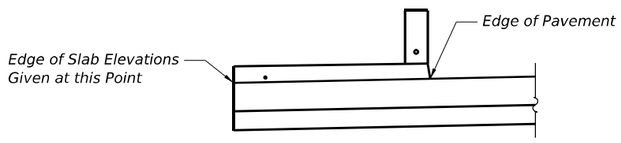
SOUTH EDGE OF SLAB

Location	Station	Offset	Theoretical Grade Elevations
West End E. Approach Slab Pvmt.	1282+95.62	37.65 RT	604.50
AS3	1283+05.62	39.36 RT	604.14
AS4	1283+15.62	41.08 RT	603.76
East End E. Approach Slab Pvmt.	1283+25.62	42.79 RT	603.38

N



E-AS 2-17-2017



TOP OF APPROACH SLAB ELEVATIONS UNDER SIDEWALK

MODEL: Default
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COLLINS ENGINEERS INC.

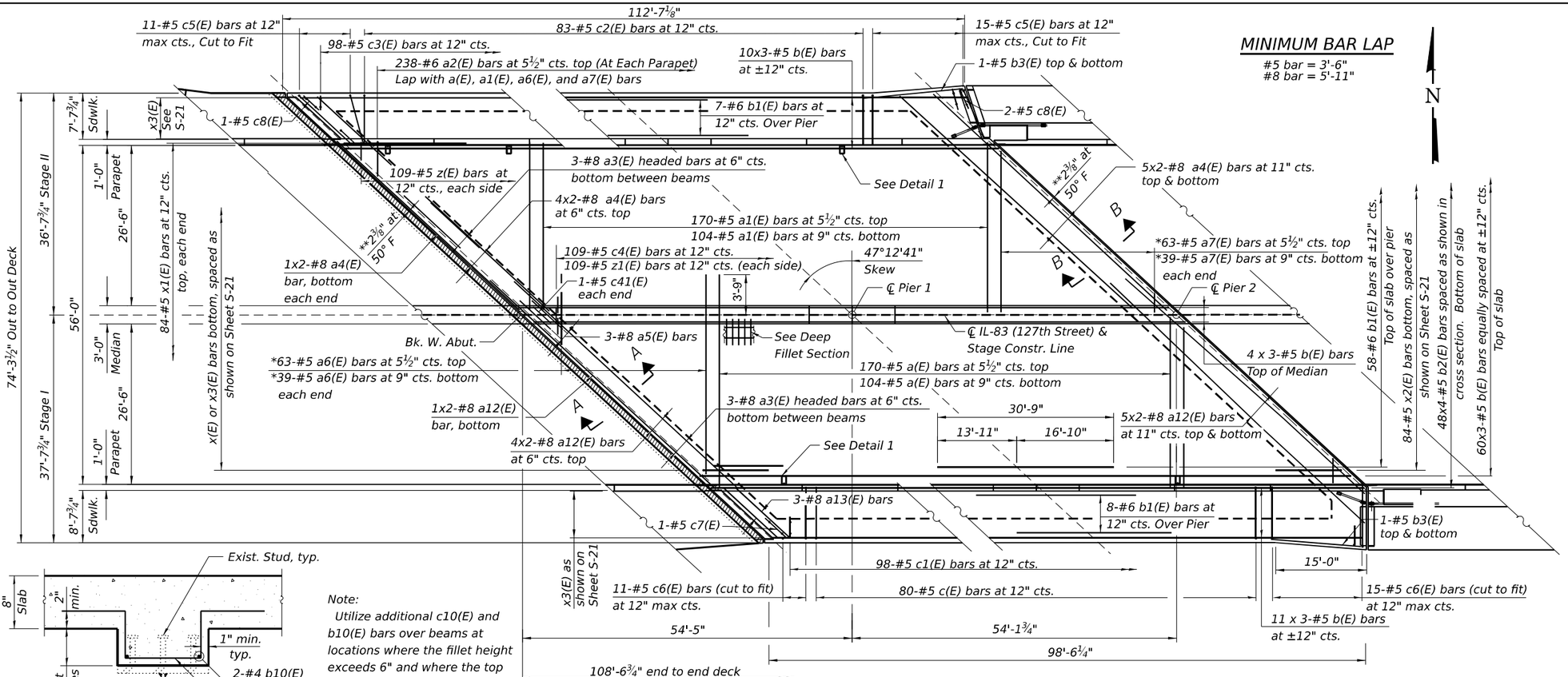
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016–0570

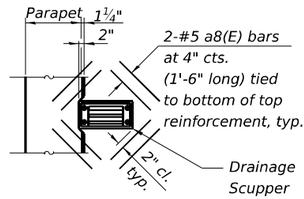
SCALE: | SHEET S-18 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	59
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



FIELD CUTTING DIAGRAM

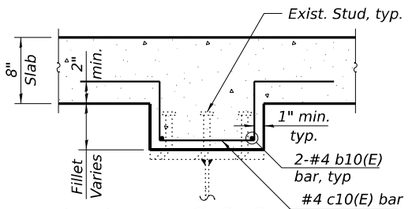
Order a6(E) and a7(E) bars full length.
Cut as shown and use remainder of bars in opposite end of deck, same stage.



DETAIL 1

Cut longitudinal reinforcement to clear drainage scuppers.
Shift transverse bars as required.

Notes:
1. See next Sheet for superstructure details and Bill of Material.
2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. See Sheet S-1 for drainage scupper spacing.
4. See Sheet S-46 for closed drainage system details.
5. See Sheet S-21 for Section A-A and B-B and diaphragm details.

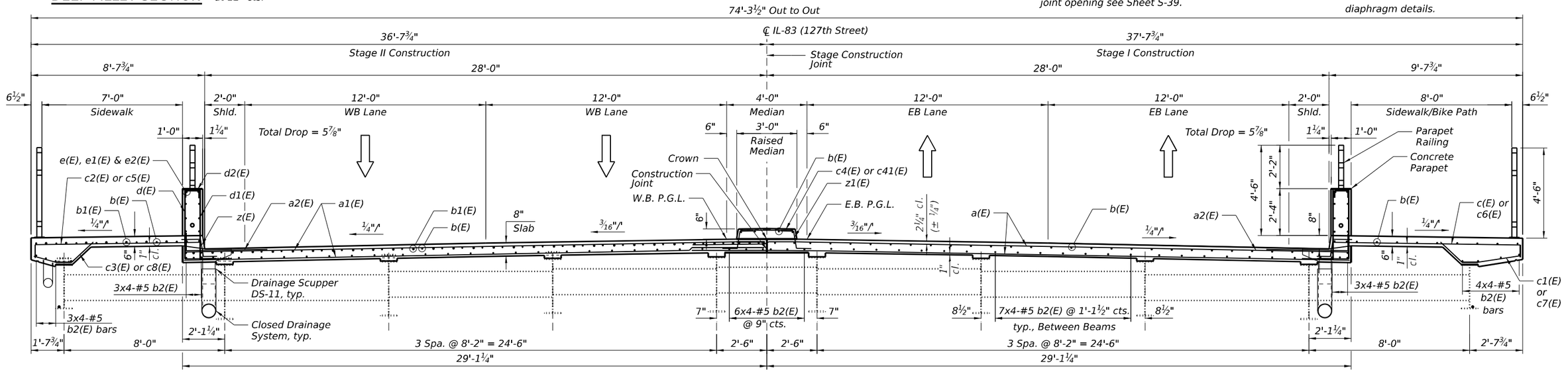


DEEP FILLET SECTION

Note:
Utilize additional c10(E) and b10(E) bars over beams at locations where the fillet height exceeds 6" and where the top of existing stud is less than 2" above the bottom of the deck.
See table on Sheet S-20.

PLAN SPANS 1 & 2

* See Field Cutting Diagram on this Sheet.
** Dimension showing concrete opening. For joint opening see Sheet S-39.



NEAR PIER — NEAR MIDSPAN

CROSS SECTION SPANS 1 & 2

(Looking East)

COLLINS ENGINEERS INC.

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE SPANS 1 & 2 STRUCTURE NO. 016–0570	
	DRAWN - DR	REVISED -			
PLOT SCALE =	CHECKED - EKM	REVISED -			
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -		SCALE: SHEET S-19 OF S-70 SHEETS STA. TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	60
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
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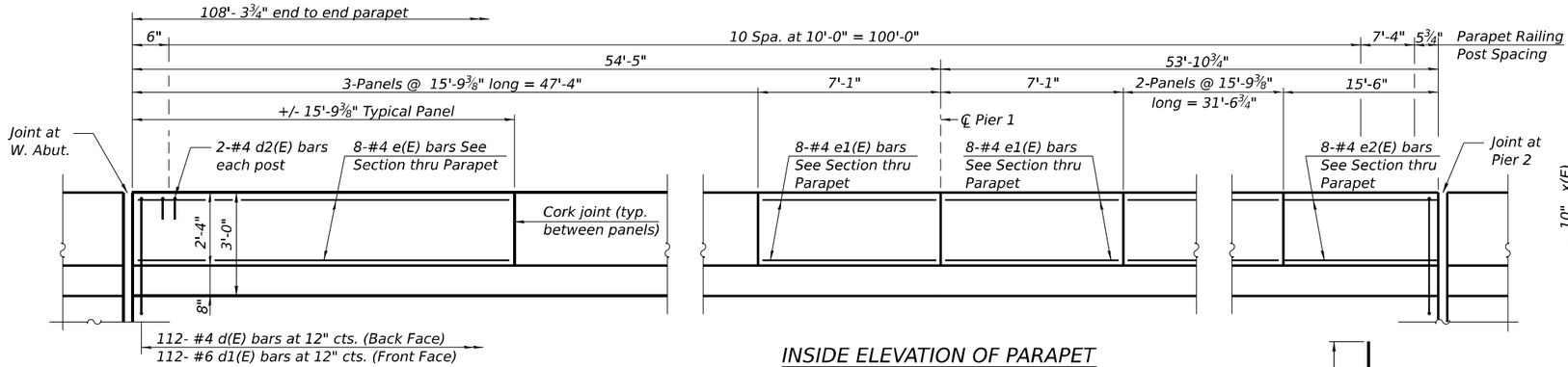
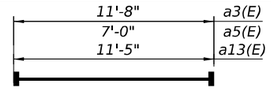
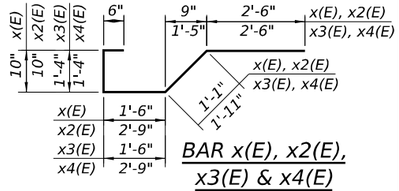


INSIDE ELEVATION OF PARAPET

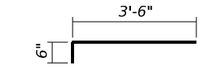


BAR a3(E) a5(E) & a13(E)

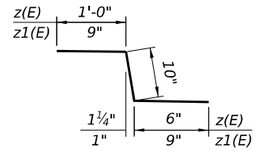
(Headed)



BAR x(E), x2(E), x3(E) & x4(E)



BAR x1(E)



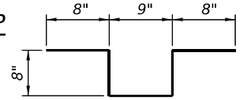
BAR z(E) & z1(E)

SUPERSTRUCTURE BILL OF MATERIAL

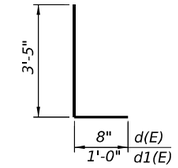
Bar	No.	Size	Length	Shape
a(E)	274	#5	32'-2"	
a1(E)	274	#5	28'-8"	
a2(E)	474	#6	8'-0"	
a3(E)	18	#8	11'-8"	
a4(E)	30	#8	29'-10"	
a5(E)	3	#8	7'-0"	
a6(E)	102	#5	35'-3"	
a7(E)	102	#5	31'-6"	
a8(E)	40	#5	1'-6"	
a12(E)	30	#8	30'-7"	
a13(E)	6	#8	11'-5"	
b(E)	255	#5	38'-5"	
b1(E)	73	#6	30'-9"	
b2(E)	244	#5	29'-9"	
b3(E)	4	#5	16'-10"	
b10(E)	22	#5	22'-7"	
c(E)	80	#5	10'-4"	
c1(E)	98	#5	4'-5"	
c2(E)	83	#5	9'-2"	
c3(E)	98	#5	3'-5"	
c4(E)	109	#5	2'-6"	
c5(E)	15	#5	10'-4"	
c6(E)	11	#5	11'-6"	
c7(E)	1	#5	6'-4"	
c8(E)	3	#5	4'-9"	
c10(E)	220	#5	3'-5"	
c41(E)	2	#5	4'-1"	
d(E)	224	#4	4'-1"	
d1(E)	224	#6	4'-5"	
d2(E)	48	#4	2'-2"	
e(E)	80	#4	15'-5"	
e1(E)	32	#4	6'-9"	
e2(E)	16	#4	15'-2"	
x(E)	68	#5	6'-5"	
x1(E)	84	#5	4'-0"	
x2(E)	84	#5	7'-8"	
x3(E)	36	#5	7'-9"	
x4(E)	22	#5	9'-0"	
z(E)	218	#5	2'-4"	
z1(E)	218	#5	2'-4"	
Reinforcement Bars, Epoxy Coated			Lbs.	67,800
Concrete Superstructure			Cu. Yds.	272.5
Bridge Deck Grooving			Sq. Yd.	676
Protective Coat			Sq. Yd.	1,032

MINIMUM BAR LAP

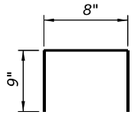
(Parapet)
#4 bar = 2'-5"



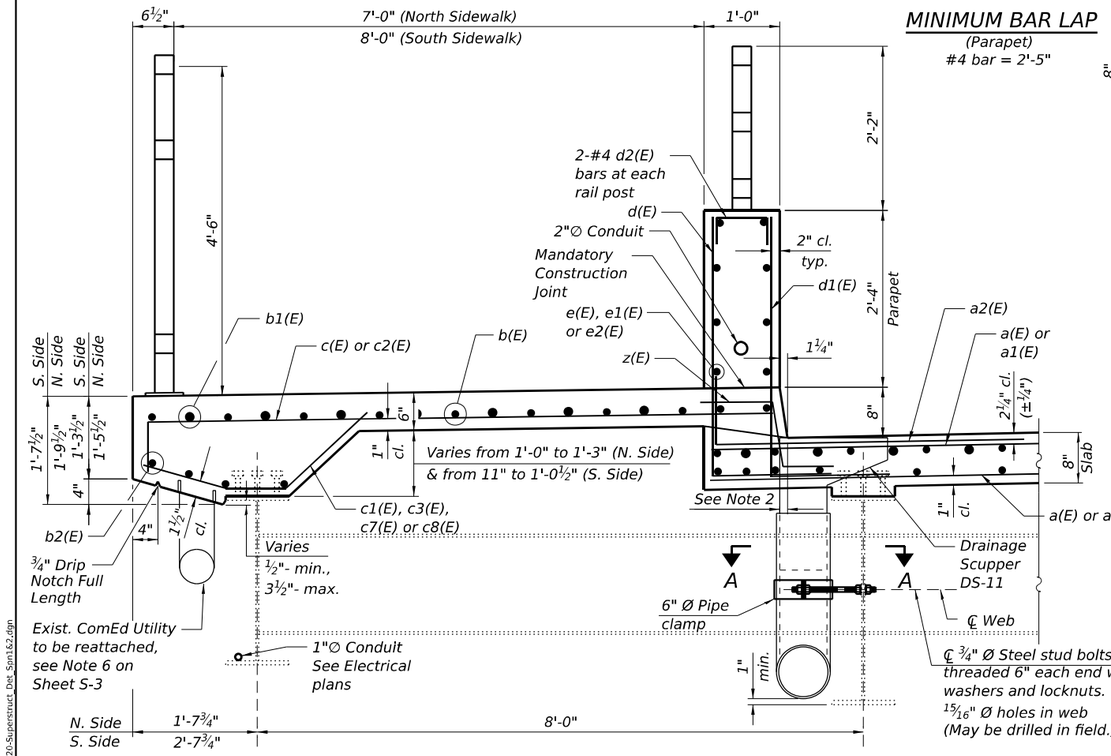
BAR c10(E)



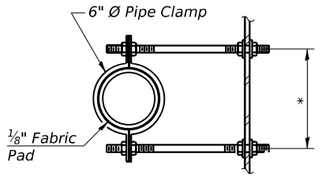
BAR d(E) & d1(E)



BAR d2(E)



SECTION THRU PARAPET AND SIDEWALK



SECTION A-A

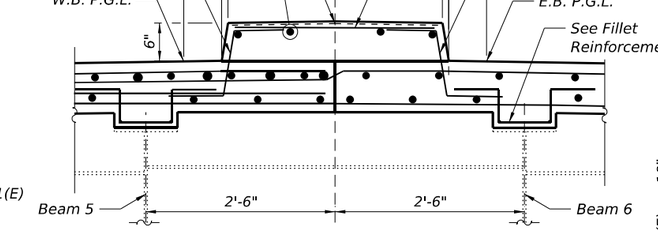
* Dimension as required by Pipe Clamp

FILLET REINFORCEMENT

See Deep Fillet Section on Sheet S-19

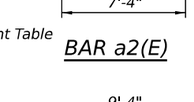
Beam	Reinf. Start	Reinf. End	#c10(E) Bars	#b10(E) Bars
2	0	40'	40	4
3	0	40'	40	4
4	0	40'	40	4
5	0	40'	40	4
6	0	40'	40	4
7	0	20'	20	2

Existing studs height is unknown, the contractor to verify in the field number of rebars needed.

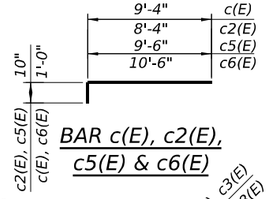


NEAR PIER NEAR MIDSPAN

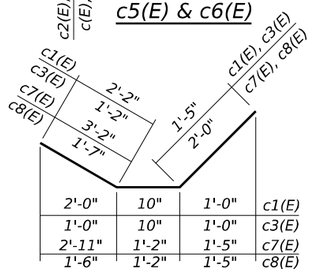
SECTION THRU MEDIAN



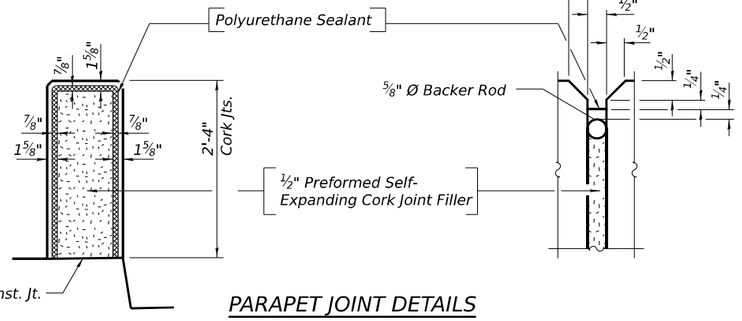
BAR a2(E)



BAR c(E), c2(E), c5(E) & c6(E)



BAR c1(E), c3(E), c7(E) & c8(E)



PARAPET JOINT DETAILS

Notes:
1. Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.
2. Drainage scuppers shall be embedded 2" into curb.
3. The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
4. Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\N160570-42H52-020-Superstruct_Det_Sprn1&2.dgn

COLLINS ENGINEERS INC

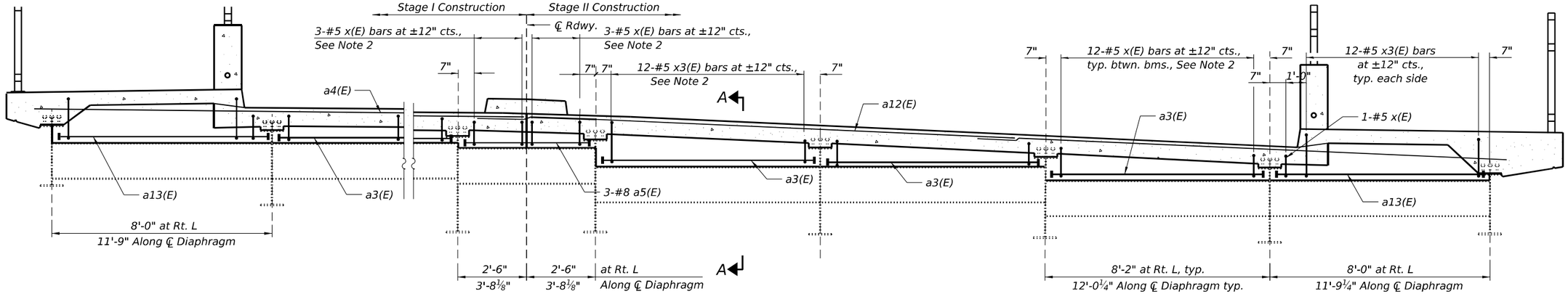
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS SPANS 1 & 2
STRUCTURE NO. 016–0570

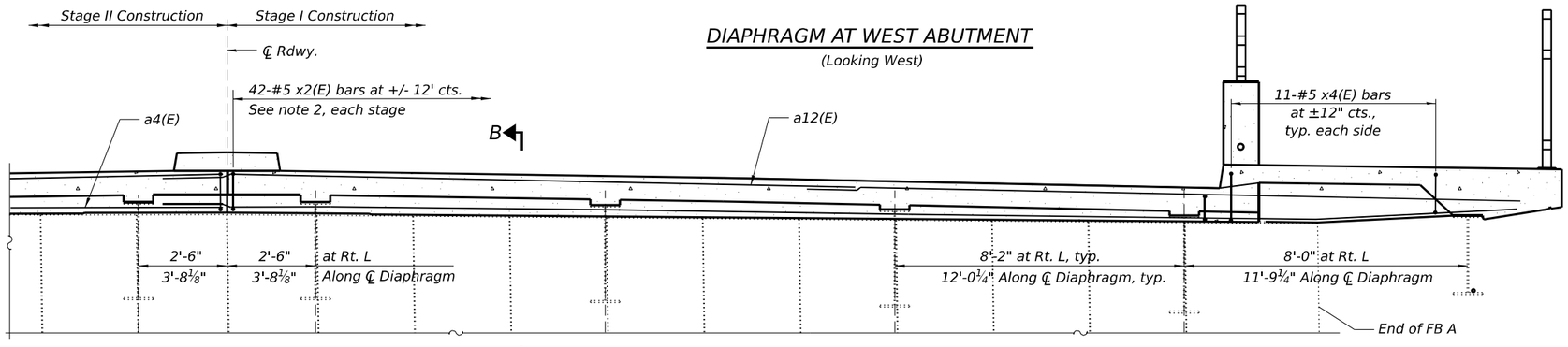
SCALE: | SHEET S-20 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	61
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



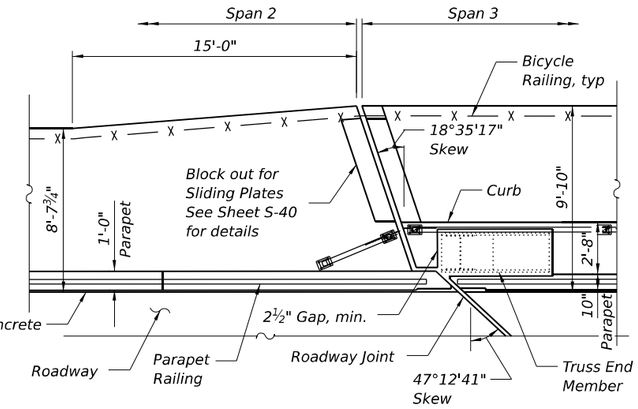
DIAPHRAGM AT WEST ABUTMENT

(Looking West)



Notes:

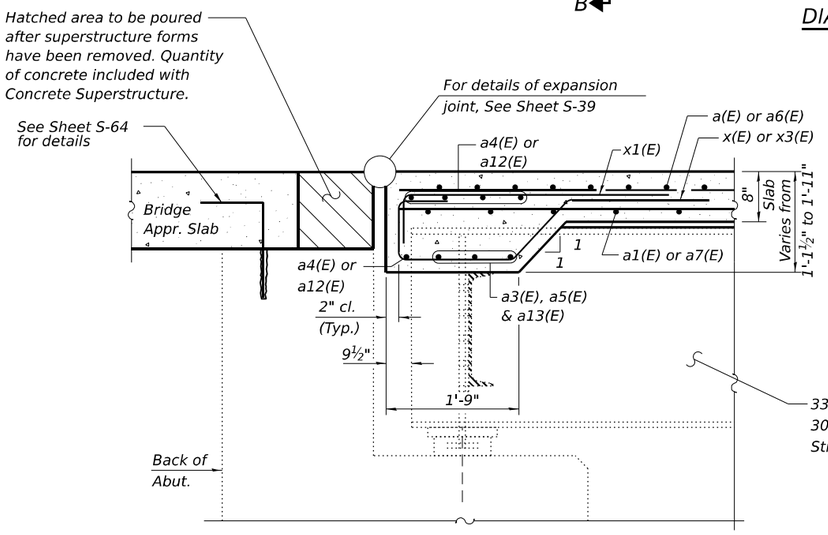
1. See Sheet S-20 for superstructure details and Bill of Material.
2. The x(E), x1(E), x2(E) and x3(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.



SIDEWALK TRANSITION AT PIER 2 PLAN

North End Shown

Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.

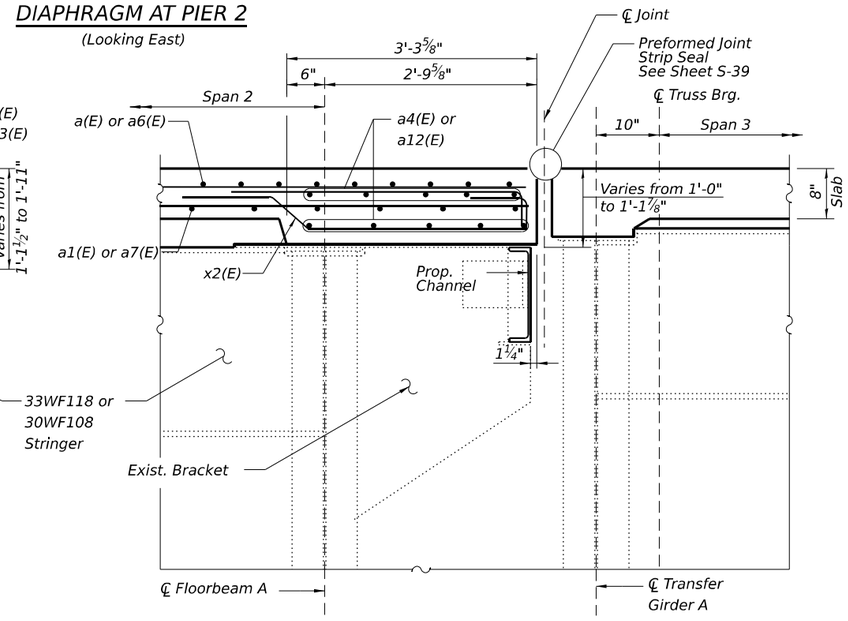


SECTION A-A

At W. Abut.
(at Right Angle)

DIAPHRAGM AT PIER 2

(Looking East)



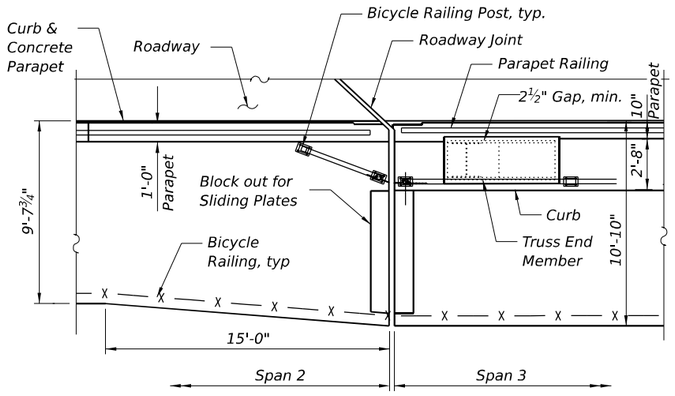
SECTION B-B

At Pier 2

Horizontal Dimensions are at Right Angles

MINIMUM BAR LAP

#8 Bar = 7'-10"



SIDEWALK TRANSITION AT PIER 2 PLAN

South End Shown

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\M016057042H52-021-Diaphragm_Det_Spn1&2.dgn

COLLINS ENGINEERS INC

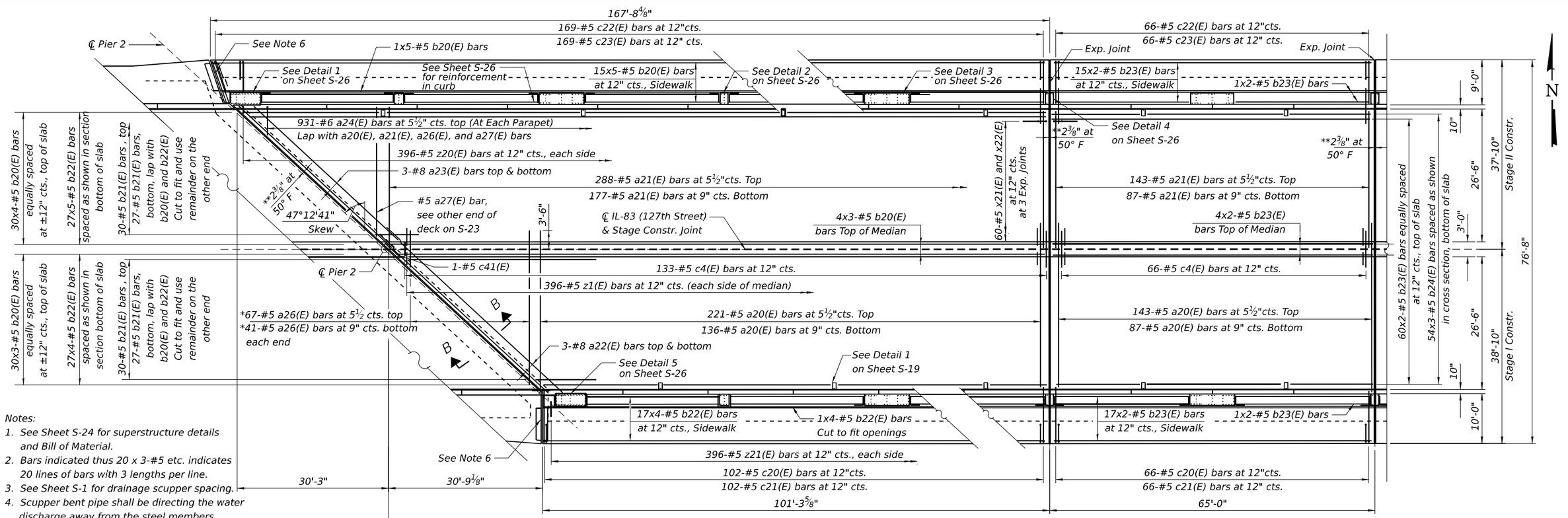
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS SPANS 1 AND 2
STRUCTURE NO. 016–0570

SCALE: | SHEET S-21 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	62
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



SPAN 3 PLAN

Notes:

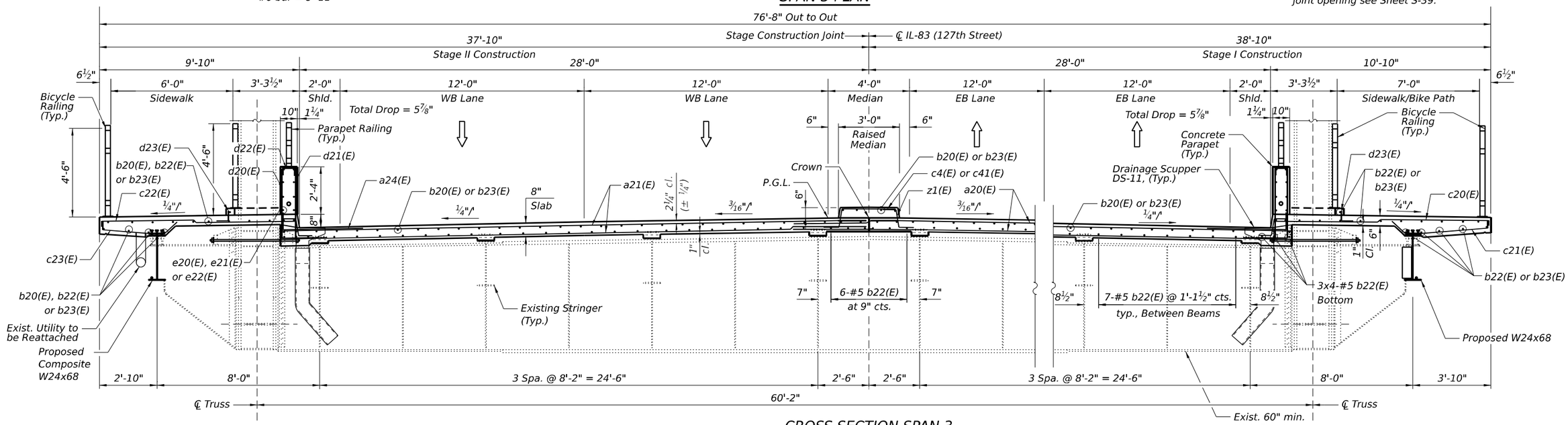
1. See Sheet S-24 for superstructure details and Bill of Material.
2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. See Sheet S-1 for drainage scupper spacing.
4. Scupper bent pipe shall be directing the water discharge away from the steel members.
5. See Sheet S-25 for Section B-B.
6. See Sheet S-40 for joint opening at sidewalks.

MINIMUM BAR LAP

#5 bar = 3'-6"
#8 bar = 5'-11"

* See Field Cutting Diagram on Sheet S-19.

** Dimension showing concrete opening. For joint opening see Sheet S-39.



CROSS SECTION SPAN 3

(Looking East)

MODEL: Default
FILE NAME: h12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\016057O-62H52-022-Superstruct_Span3_1of2.dgn

COLLINS ENGINEERS INC

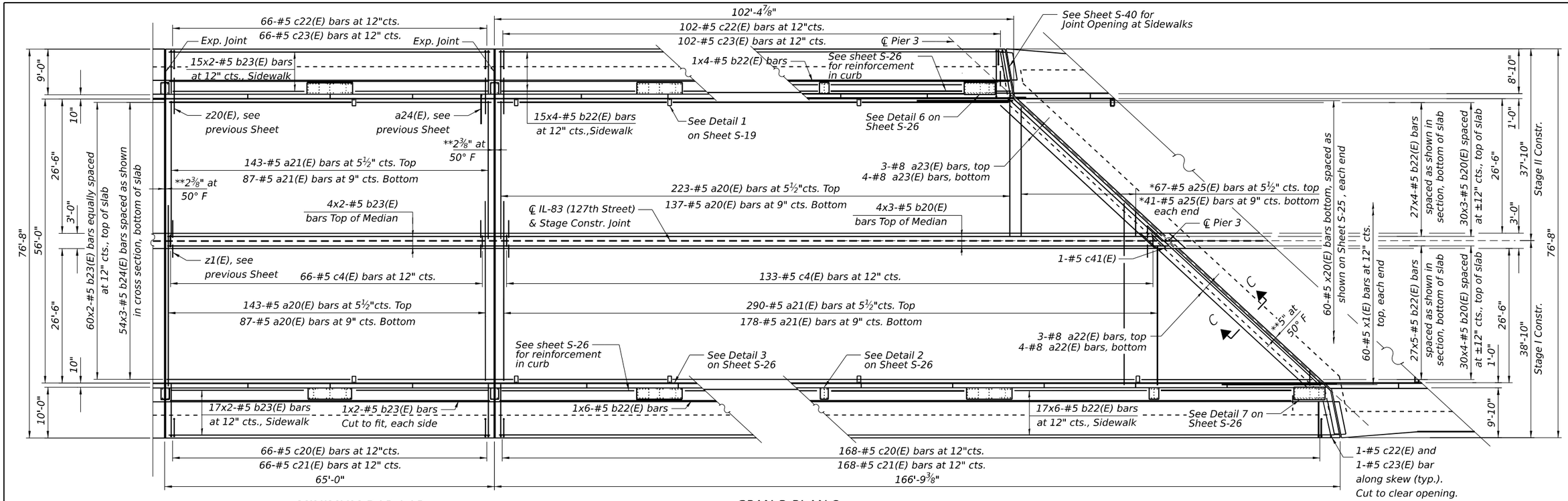
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE SPAN 3 (1 OF 2)
STRUCTURE NO. 016–0570

SCALE: | SHEET S-22 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	63
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



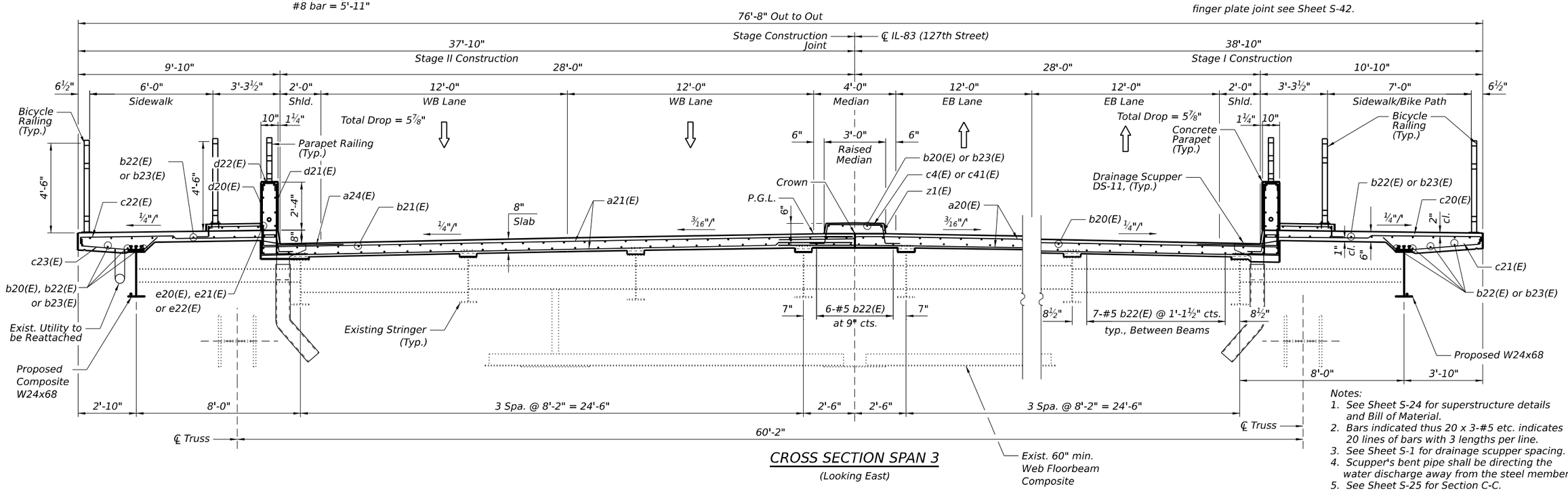
MINIMUM BAR LAP

#5 bar = 3'-6"
#8 bar = 5'-11"

SPAN 3 PLAN 2

* See Field Cutting Diagram on Sheet S-24

** Dimension showing concrete opening. For finger plate joint see Sheet S-42.



CROSS SECTION SPAN 3

(Looking East)

Notes:
1. See Sheet S-24 for superstructure details and Bill of Material.
2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. See Sheet S-1 for drainage scupper spacing.
4. Scupper's bent pipe shall be directing the water discharge away from the steel members.
5. See Sheet S-25 for Section C-C.

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\N160970-42H52-023-Superstruct_Span3_2of2.dgn

COLLINS ENGINEERS INC

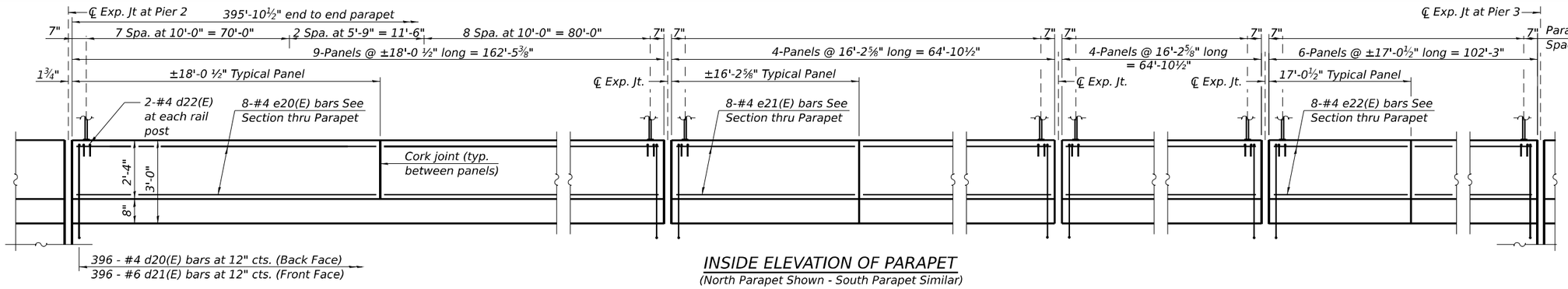
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE SPAN 3 (2 OF 2)
STRUCTURE NO. 016–0570

SCALE: | SHEET S-23 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	64
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



INSIDE ELEVATION OF PARAPET

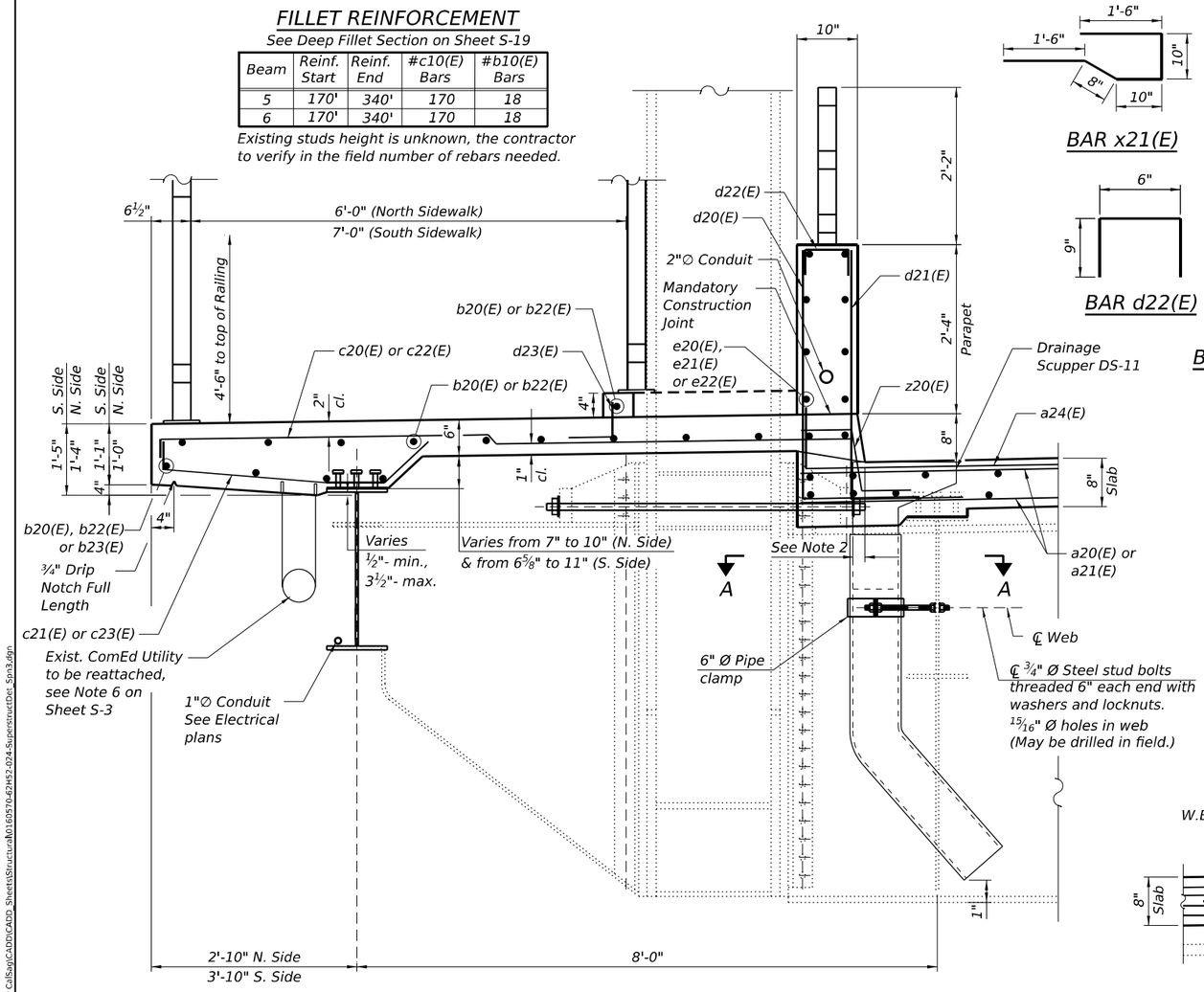
(North Parapet Shown - South Parapet Similar)

FILLET REINFORCEMENT

See Deep Fillet Section on Sheet S-19

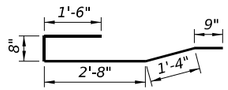
Beam	Reinf. Start	Reinf. End	#c10(E) Bars	#b10(E) Bars
5	170'	340'	170	18
6	170'	340'	170	18

Existing studs height is unknown, the contractor to verify in the field number of rebars needed.

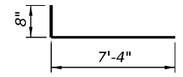


SECTION THRU PARAPET AND SIDEWALK

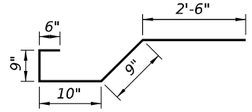
BAR x21(E)



BAR x22(E)

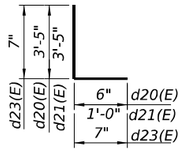


BAR a24(E)

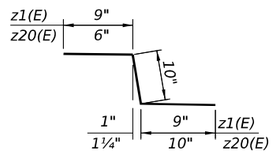


BAR x20(E)

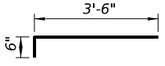
BAR d22(E)



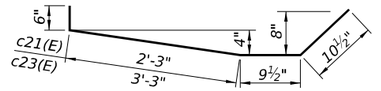
BARS d20(E), d21(E) & d23(E)



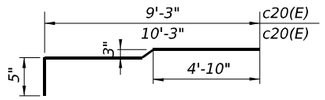
BARS z1(E) & z20(E)



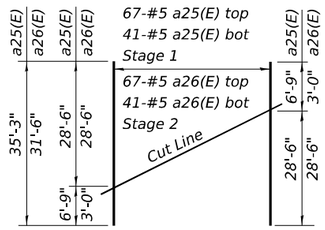
BAR x1(E)



BARS c21(E) & c23(E)

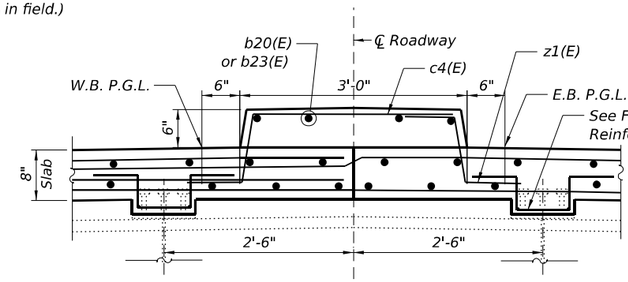


BAR c20(E) & c22(E)



FIELD CUTTING DIAGRAM

Order bars full length.
Cut as shown and use remainder of bars in opposite end of deck, each stage



SECTION THRU MEDIAN

SUPERSTRUCTURE - SPAN 3
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a8(E)	160	#5	1'-6"	
a20(E)	1285	#5	32'-0"	
a21(E)	1285	#5	28'-6"	
a22(E)	26	#8	30'-0"	
a23(E)	26	#8	24'-1"	
a24(E)	1728	#6	8'-0"	
a25(E)	108	#5	35'-3"	
a26(E)	108	#5	31'-6"	
b10(E)	36	#5	21'-7"	
b20(E)	525	#5	36'-4"	
b21(E)	114	#5	34'-8"	
b22(E)	724	#5	31'-0"	
b23(E)	272	#5	34'-1"	
b24(E)	324	#5	23'-11"	
b25(E)	144	#4	14'-10"	
c4(E)	398	#5	2'-6"	
c10(E)	340	#5	3'-5"	
c20(E)	402	#5	10'-8"	
c21(E)	402	#5	4'-5"	
c22(E)	403	#5	9'-8"	
c23(E)	403	#5	5'-5"	
c24(E)	685	#4	2'-6"	
c25(E)	3	#4	1'-5"	
c26(E)	12	#4	2'-4"	
c27(E)	3	#4	3'-3"	
c41(E)	2	#5	4'-1"	
d20(E)	792	#4	4'-1"	
d21(E)	792	#6	4'-5"	
d22(E)	160	#4	2'-0"	
d23(E)	800	#4	1'-2"	
e20(E)	144	#4	17'-8"	
e21(E)	128	#4	15'-11"	
e22(E)	96	#4	16'-3"	
x1(E)	120	#5	4'-0"	
x20(E)	120	#5	5'-6"	
x21(E)	180	#5	5'-4"	
x22(E)	180	#5	6'-11"	
z1(E)	792	#5	2'-4"	
z20(E)	792	#5	2'-2"	
Reinforcement Bars, Epoxy Coated		Lbs.	216,450	
Concrete Superstructure		Cu. Yds.	892.9	
Bridge Deck Grooving		Sq. Yd.	2,493	
Protective Coat		Sq. Yd.	3,904	

Notes:

1. *Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.*
2. *Drainage scuppers shall be embedded 2" into curb.*
3. *For Section A-A see Sheet S-20.*
4. *The clamping device shall be galvanized according to AASHTO M232. Cost of clamping devise included with Drainage System for Structures.*
5. *For Parapet Joint details see Sheet S-20.*

MODEL: Default
FILE NAME: I:\12304 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\R016057O-42H52-024-SuperstructDet_Span3.dgn

COLLINS ENGINEERS INC.

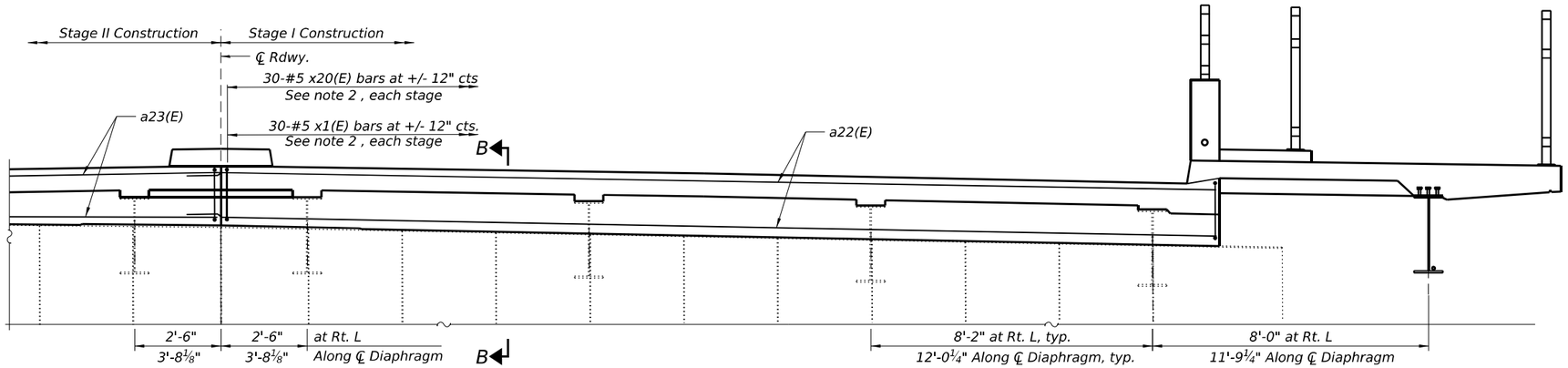
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS SPAN 3
STRUCTURE NO. 016–0570

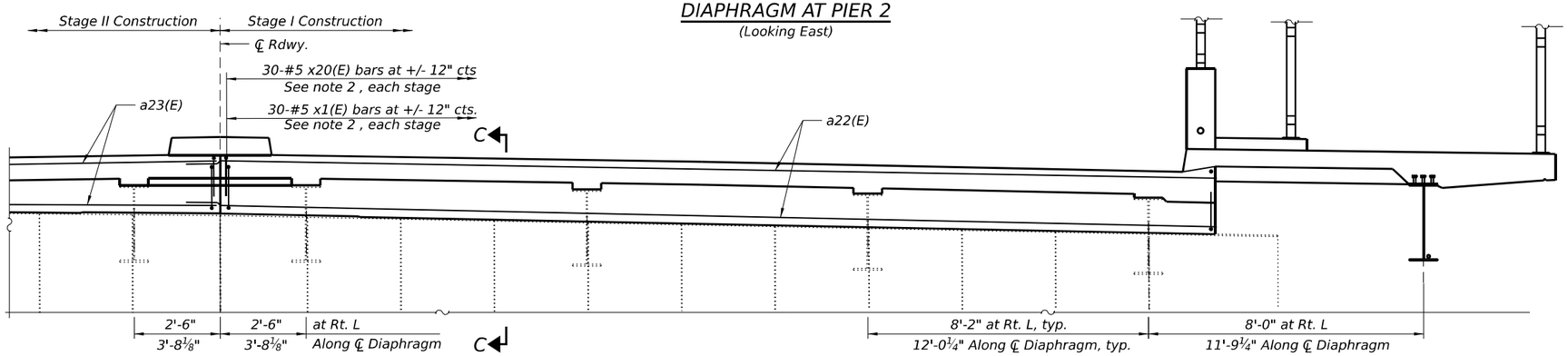
SCALE: | SHEET S-24 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	65
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



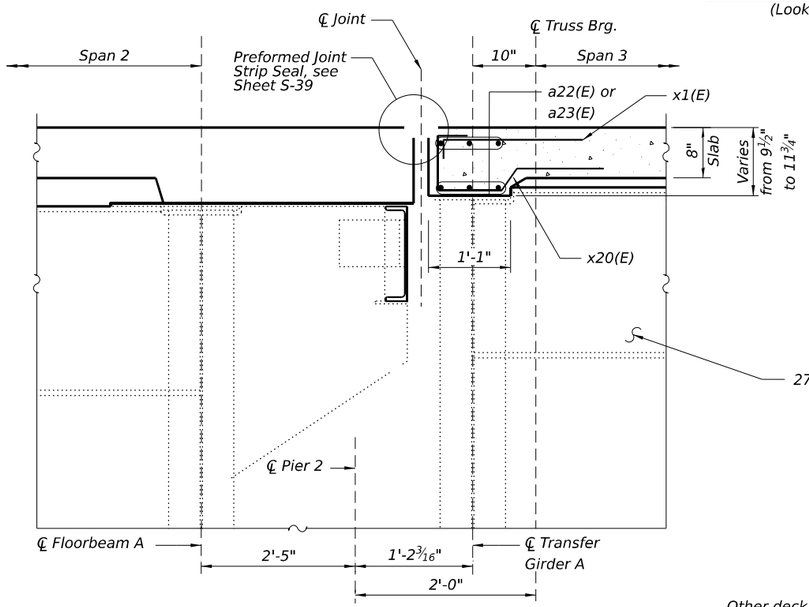
DIAPHRAGM AT PIER 2

(Looking East)



DIAPHRAGM AT PIER 3

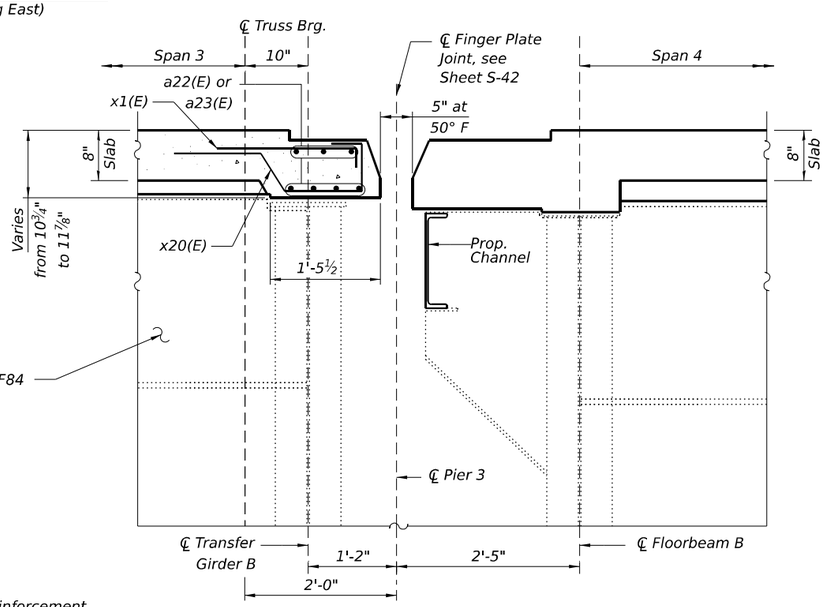
(Looking East)



SECTION B-B AT PIER 2

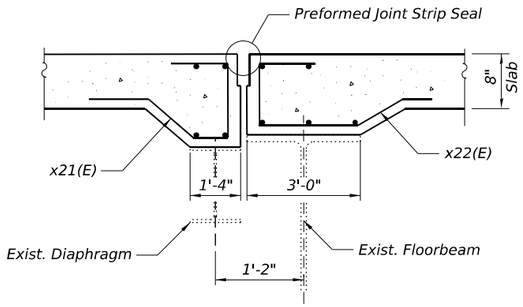
Horizontal Dimensions are at Right Angles

Other deck reinforcement
not shown for clarity



SECTION C-C AT PIER 3

Horizontal Dimensions are at Right Angles



TRUSS (SPAN 3) EXPANSION JOINT AT L3S-L5N', L5S-L5N, & L5S'-L3N

Notes:

1. See Sheet S-24 for superstructure details and Bill of Material.
2. The x20(E) and x1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
3. See Sheet S-39 for Preformed Joint Strip Seal details.

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\A0160570-42H52-025-Diaphragm_Det_Span 3.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -
	DRAWN - DR	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS AT PIERS 2 AND 3 – SPAN 3
STRUCTURE NO. 016–0570

SCALE: | SHEET S-25 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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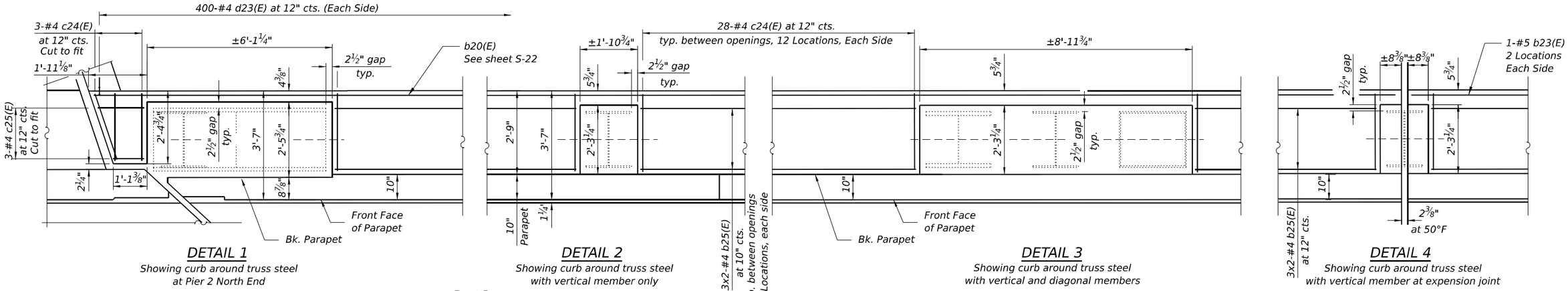
		ILLINOIS	FED. AID PROJECT	

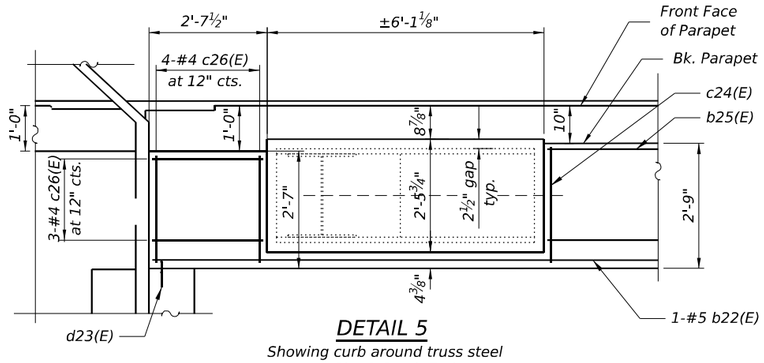


DETAIL 1
Showing curb around truss steel at Pier 2 North End

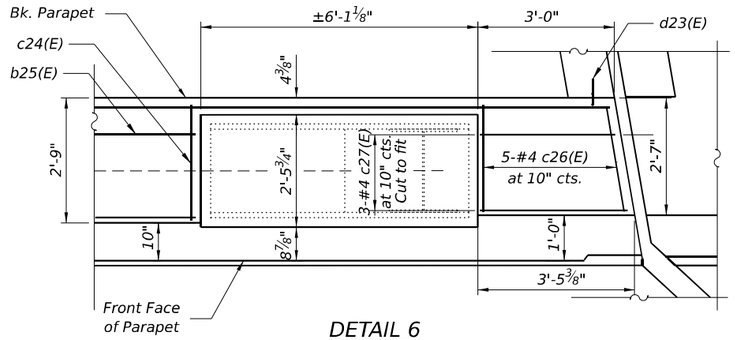
DETAIL 2
Showing curb around truss steel with vertical member only

DETAIL 3
Showing curb around truss steel with vertical and diagonal members

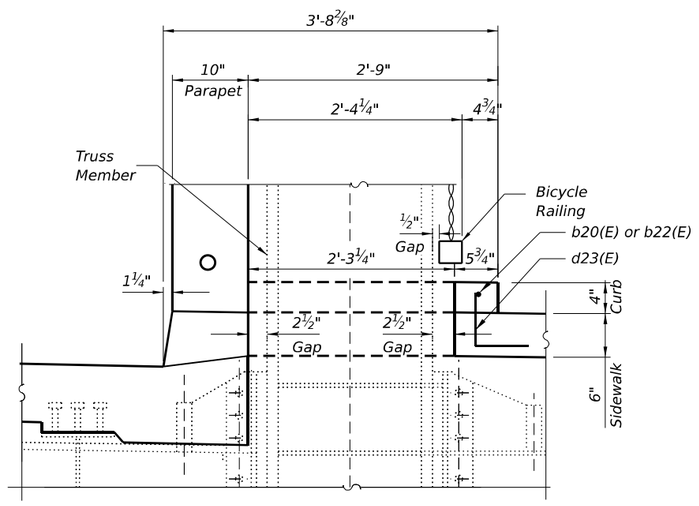
DETAIL 4
Showing curb around truss steel with vertical member at expension joint



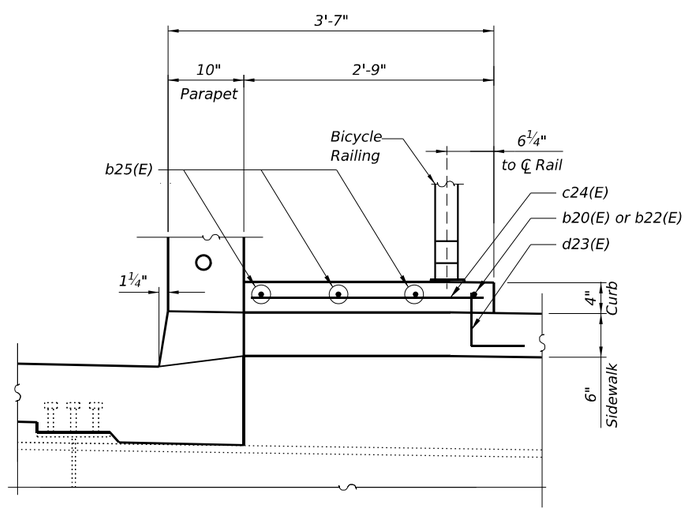
DETAIL 5
Showing curb around truss steel at Pier 2 South End



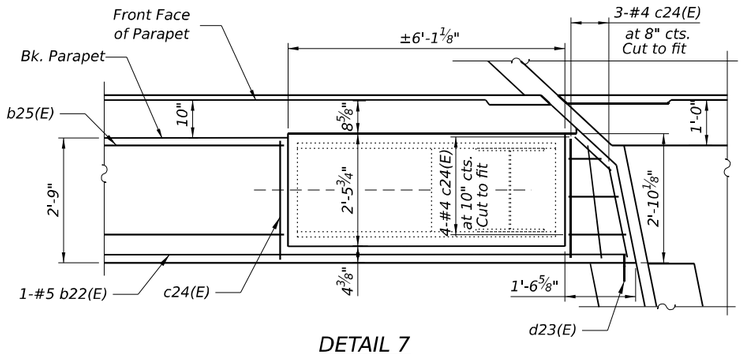
DETAIL 6
Showing curb around truss steel at Pier 3 North End



TYPICAL SECTION AT TRUSS STEEL OPENING
Sidewalk reinforcement not shown



TYPICAL SECTION BETWEEN TRUSS STEEL
Sidewalk reinforcement not shown



DETAIL 7
Showing curb around truss steel at Pier 3 South End

MODEL: Default
FILE NAME: h:\12504 IDOT-I.83 over Cal Sag\CADD\CADD_Sheets\Structural\N0160570-62H52-023a-SuperstructDet_Spn3.dgn

COLLINS ENGINEERS INC

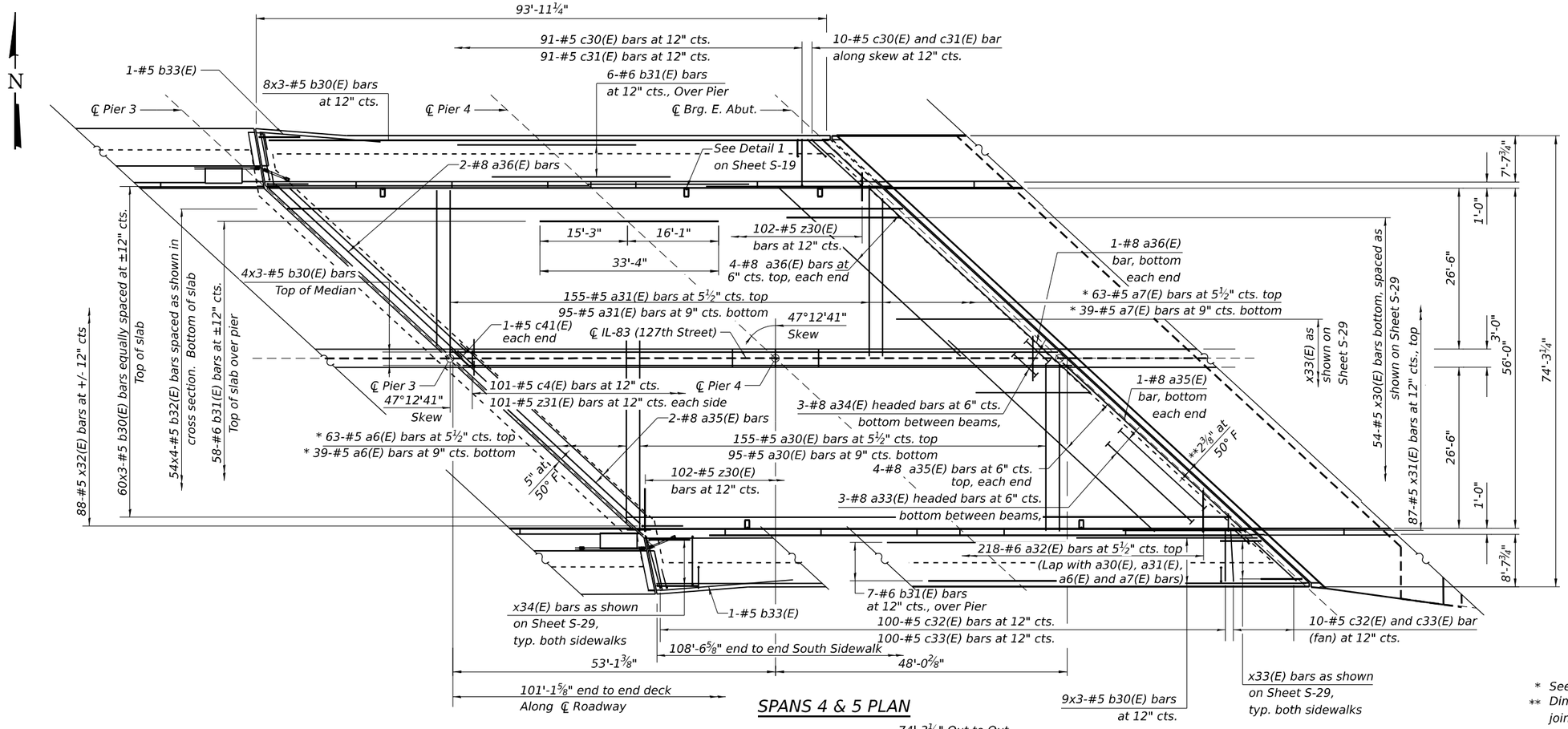
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS AT TRUSS STEEL SPAN 3
STRUCTURE NO. 016–0570

SCALE: | SHEET S-26 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	67
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



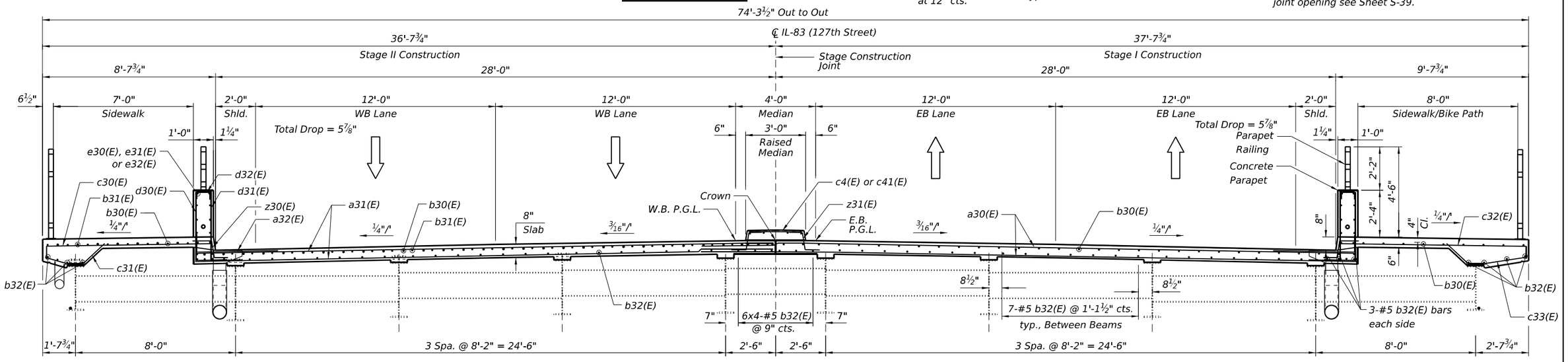
SPANS 4 & 5 PLAN

Notes:

1. See Sheet S-28 for superstructure details and Bill of Material.
2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. See Sheet S-1 for drainage scupper spacing.
4. See Sheet S-46 for closed drainage system details.
5. See Sheet S-29 for Section C-C and D-D.

* See Field Cutting Diagram on Sheet S-19

** Dimension showing concrete opening. For joint opening see Sheet S-39.



NEAR PIER

CROSS SECTION SPANS 4 & 5

(Looking East)

NEAR MIDSPAN

COLLINS ENGINEERS INC.

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE SPANS 4 & 5
STRUCTURE NO. 016–0570

SCALE: | SHEET S-27 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	68
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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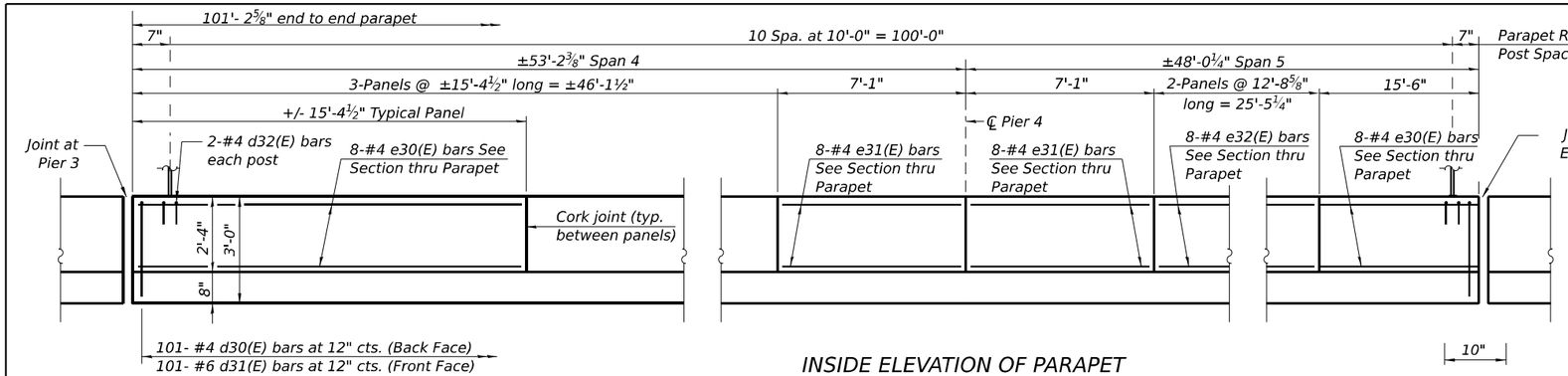
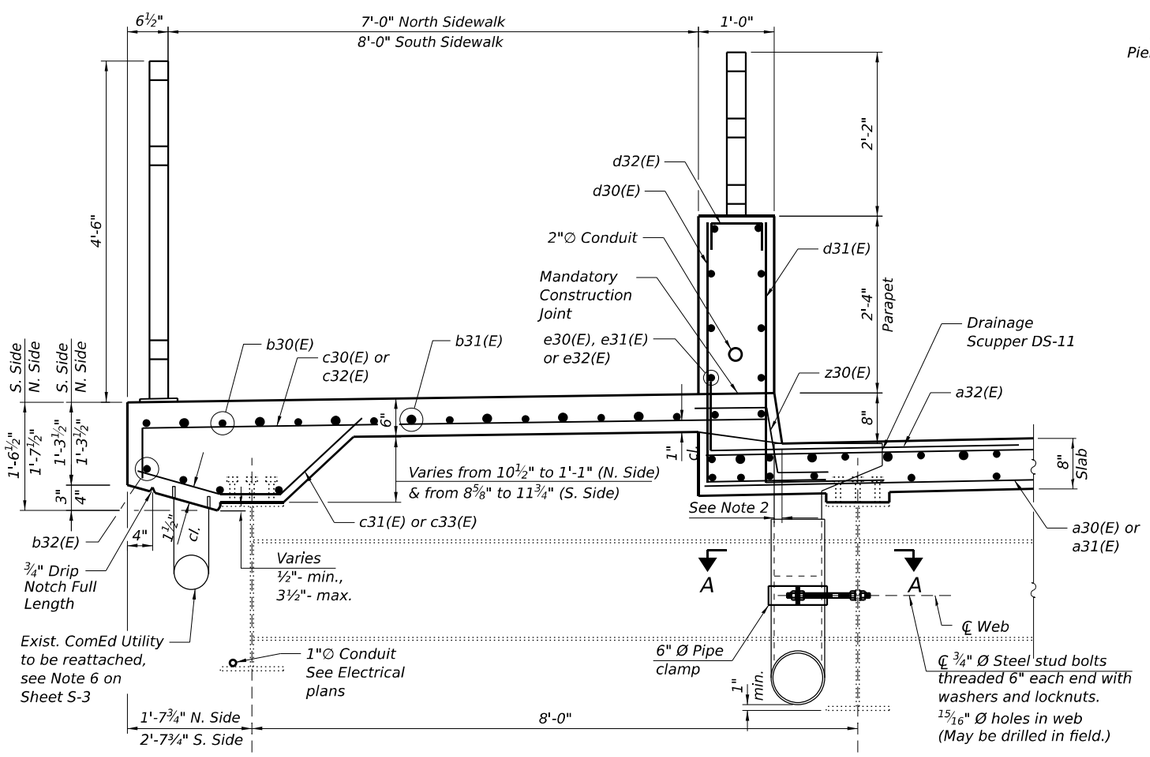
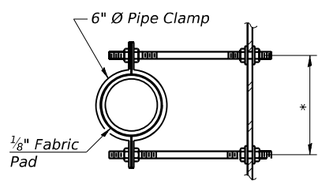


INSIDE ELEVATION OF PARAPET

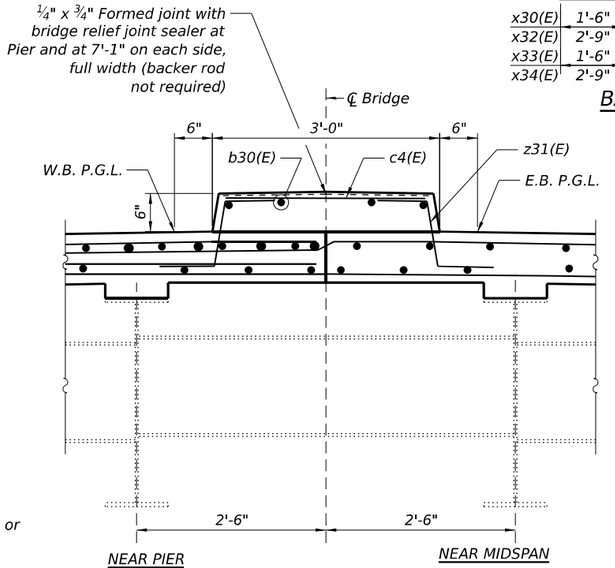


SECTION THRU PARAPET

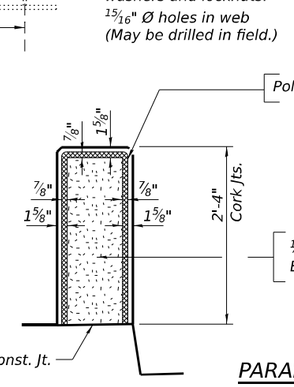


SECTION A-A

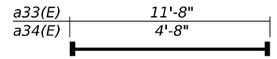
* Dimension as required by Pipe Clamp



SECTION THRU MEDIAN

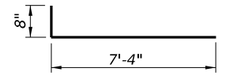


PARAPET JOINT DETAILS

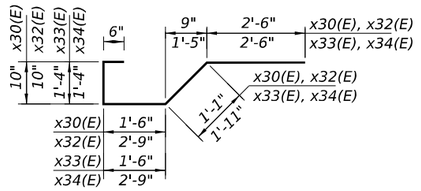


BAR a33(E) & a34(E)

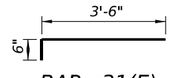
(Headed)



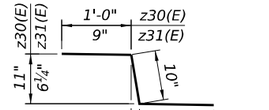
BAR a32(E)



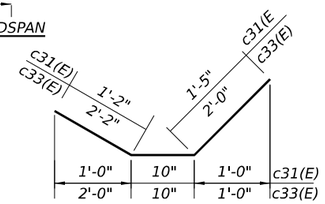
BAR x30(E), x32(E), x33(E) & x34(E)



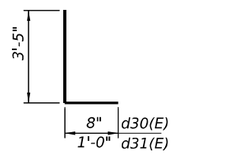
BAR x31(E)



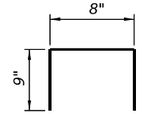
BAR z30(E) & z31(E)



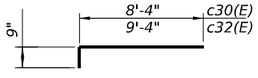
BAR c31(E), c33(E)



BAR d30(E) & d31(E)



BAR d32(E)



BAR c30(E), c32(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a6(E)	102	#5	35'-3"	
a7(E)	102	#5	31'-6"	
a8(E)	40	#5	1'-6"	
a30(E)	250	#5	32'-4"	
a31(E)	250	#5	28'-10"	
a32(E)	436	#6	8'-0"	
a33(E)	24	#8	11'-8"	
a34(E)	3	#8	4'-8"	
a35(E)	26	#8	27'-2"	
a36(E)	26	#8	24'-2"	
b30(E)	243	#5	36'-0"	
b31(E)	71	#6	33'-3"	
b32(E)	244	#5	27'-10"	
b33(E)	2	#5	16'-10"	
c4(E)	101	#5	2'-6"	
c30(E)	101	#5	9'-1"	
c31(E)	101	#5	3'-5"	
c32(E)	110	#5	10'-1"	
c33(E)	110	#5	4'-5"	
c41(E)	2	#5	4'-1"	
d30(E)	204	#4	4'-1"	
d31(E)	204	#6	4'-5"	
d32(E)	44	#4	2'-4"	
e30(E)	64	#4	15'-0"	
e31(E)	32	#4	6'-9"	
e32(E)	32	#4	12'-4"	
x30(E)	54	#5	6'-5"	
x31(E)	174	#5	4'-0"	
x32(E)	88	#5	7'-8"	
x33(E)	48	#5	7'-9"	
x34(E)	22	#5	9'-0"	
z30(E)	204	#5	2'-10"	
z31(E)	204	#5	2'-6"	
Reinforcement Bars, Epoxy Coated		Lbs.	62,300	
Concrete Superstructure		Cu. Yds.	256.4	
Bridge Deck Grooving		Sq. Yd.	629	
Protective Coat		Sq. Yd.	972	

Notes:

1. Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.
2. Drainage scuppers shall be embedded 2" into curb.
3. The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
4. Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
5. The clamping device shall be galvanized according to AASHTO M232. Cost of clamping devise included with Drainage System for Structures.

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\M0160570-62H52-027-SuperstructDet_Sps465.dgn

COLLINS ENGINEERS INC

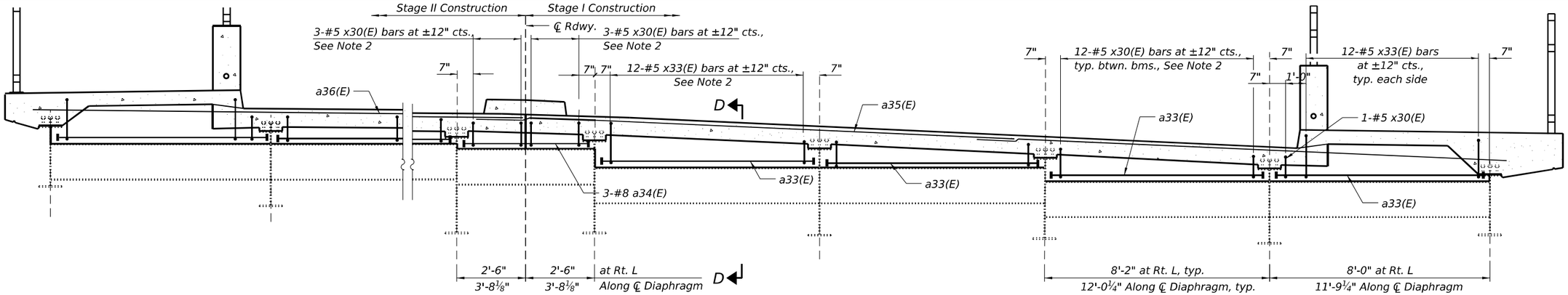
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS SPANS 4 & 5
STRUCTURE NO. 016–0570

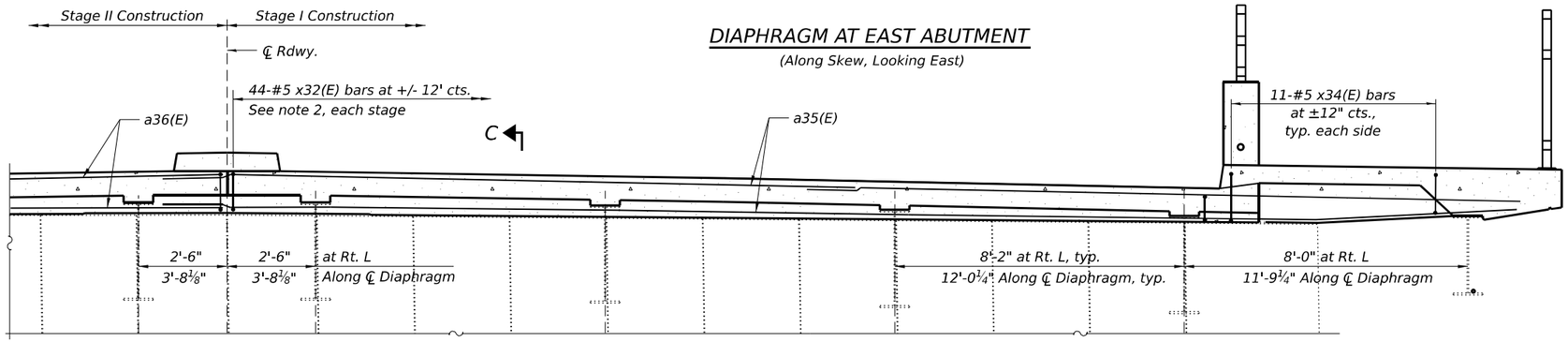
SCALE: | SHEET S-28 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	69
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



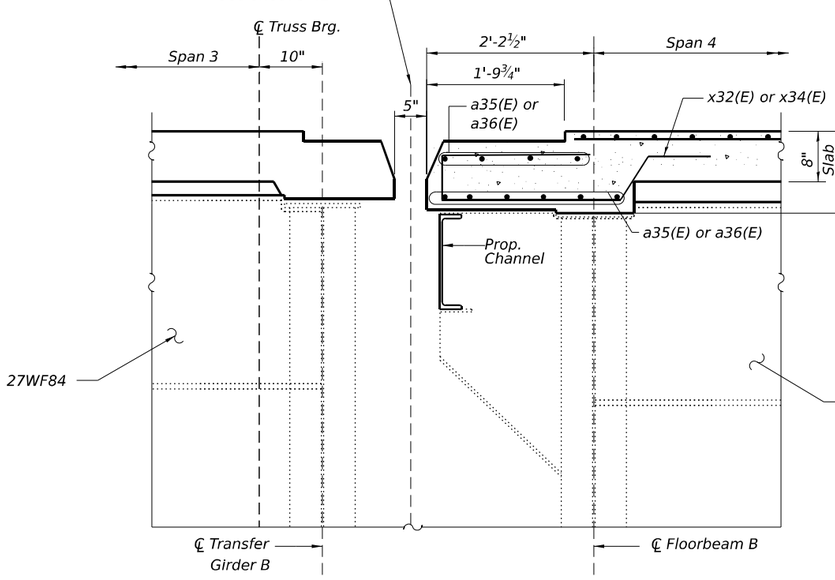
DIAPHRAGM AT EAST ABUTMENT

(Along Skew, Looking East)



DIAPHRAGM AT PIER 3

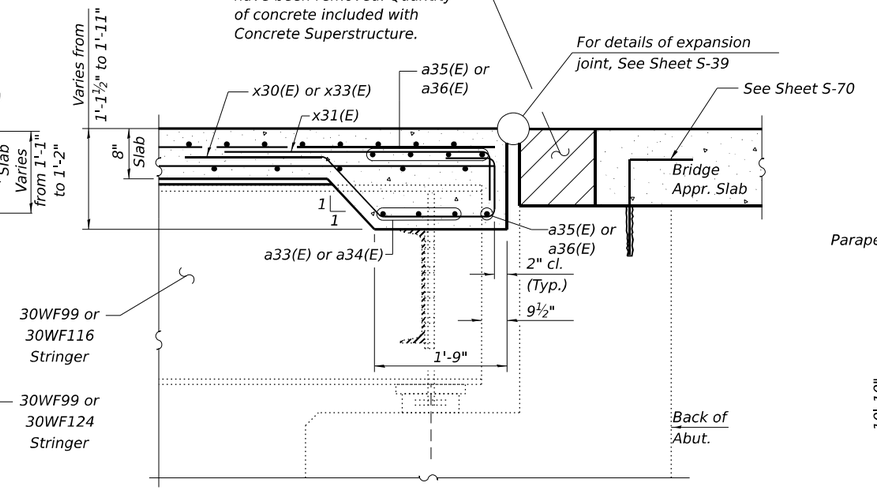
(at Right Angles, Looking East)



SECTION C-C

Horizontal Dimensions are at Right Angles

Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.

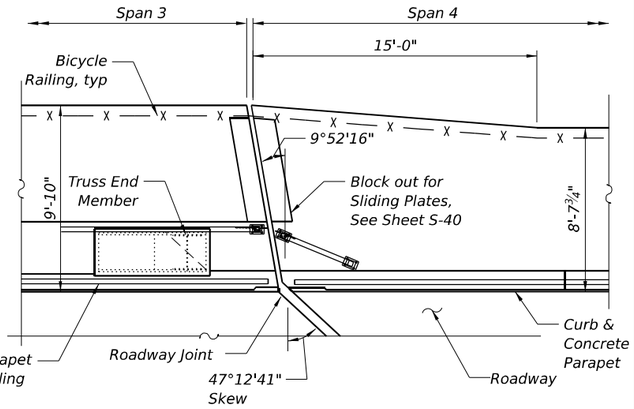


SECTION D-D

(at Right Angles)

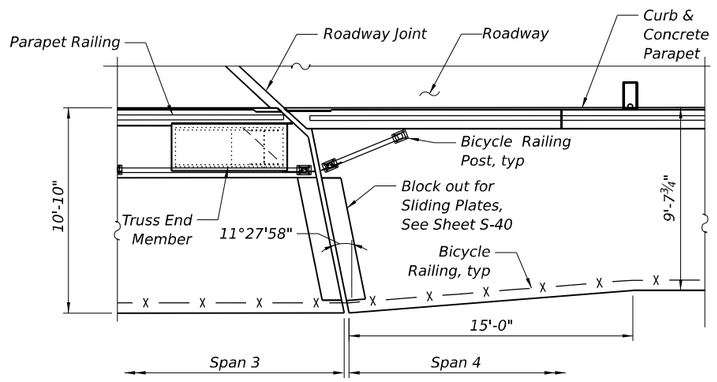
Notes:

1. See Sheet S-28 for superstructure details and Bill of Material.
2. The x(E), x1(E), x2(E), x3(E), and x4(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.



SIDEWALK TRANSITION AT PIER 3 PLAN

Northeast End Shown



MINIMUM BAR LAP

#8 Bar = 7'-10"

SIDEWALK TRANSITION AT PIER 3 PLAN

Southeast End Shown

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over Collsay\CADD\CADD_Sheets\Structural\016057O-62H52-028-Diaphragm_Det_Span4&5.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS SPANS 4 AND 5
STRUCTURE NO. 016–0570

SCALE: | SHEET S-29 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	70
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

N

See Hwy. Std. 420406 for pavement connector

10'-11¾"

12'-4⅜"

20-#5 w12(E) bars at 6" cts. Top and Bottom of Approach Footing, See Section A-A Cut to fit

2-#5 b44(E) at 12" Top and Bottom of Slab

9-#5 b42(E) at 12" Top of Sidewalk Cut to fit

℄ Brg. West Abut.

A

D

9-#4 t20(E) bars at 12" cts. Top and Bottom of Approach Footing, See Section A-A, Cut to fit

7'-2"

3'-0¼"

1'-5½"

24-#5 c41(E) bars at 12" cts. Top of Sidewalk

8-#5 c41(E) bars at 12" cts. (fan) Cut to fit

11'-6¼"

20'-0⅝"

46x2-#5 a52(E) bars at 8" cts. Top of Slab

60x2-#8 a53(E) bars at 6" cts. Bottom of Slab

See Detail 2

20x2-#5 w11(E) bars at 6" cts. Top and Bottom of Approach Footing, See Section A-A

47°12'41" Skew

30'-0" End to End Approach

31-#5 c4(E) bars at 12" cts.

℄ IL-83

41'-8"

℄ IL-83

B

4- #5 b40(E) bars

1276

E

31-#5 z1(E) bars at 12" cts. Each side

Back of W. Abut.

7'-0"

3'-0"

10'-0"

Approach Footing

20x2-#5 w10(E) bars at 6" cts. Top and Bottom of Approach Footing, See Section A-A

A

A

46x2-#5 a50(E) bars at 8" cts. Top of Slab

60x2-#8 a51(E) bars at 6" cts. Bottom of Slab

46-#5 a2(E) bars at 8" cts. Each side. Lap with each a50(E) or a52(E) bars

31-#5 z(E) bars at 12" cts. Each Sidewalk

See Detail 1

31-#5 c40(E) bars at 12" cts. Top of Sidewalk Cut to fit

58'-10½"

11'-11⅛"

10'-8⅛"

F

C

12-#5 b40(E) at 12" cts. Top of Sidewalk

Ex. Wingwall See Sheet S-64 for Wingwall Removal Details

7'-6½"

1'-1¼"

28'-0"

3'-0" Raised Median

57-#5 b40(E) bars at 8" cts. Top of Slab

91-#9 b41(E) bars at 5" cts. Bottom of Slab

36'-7¾" Stage II Approach Slab

38'-0½" Stage II Approach Slab

77'-9⅞" Out to Out Approach Slab

30-#4 t20(E) bars at 12" cts. Top and Bottom of Approach Footing, See Section A-A

39'-9¾" Stage I Approach Slab

42-#4 t20(E) bars at 12" cts. Top and Bottom of Approach Footing, See Section A-A

60-#5 b40(E) bars at 8" cts. Top of Slab

96-#9 b41(E) bars at 5" cts. Bottom of Slab

28'-0"

8'-7¾"

1'-1¼"

37'-9" Stage 1 Approach Slab

74'-4¾" Out to Out Approach Slab

Approach Slab

Approach Footing

3'-11

1'-2"

2'-6"

2¼"

4-#5 b43(E) bars top & bot.

DETAIL 1

Gap for Railing Posts
(Other reinforcement not shown for clarity)

PLAN

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

	West Approach		East Approach	
Point	Top	Bottom	Top	Bottom
A	603.79	602.96	604.89	604.05
B	605.21	604.37	605.30	604.47
C	605.31	604.48	602.82	601.98
D	604.00	603.17	603.49	602.66
E	605.53	604.70	604.93	604.10
F	605.60	604.77	602.45	601.62

Approach Slab

Approach Footing

2'-8¾"

1'-10¼"

1'-2"

4-#5 b43(E) bars top & bot.

t20(E) bars top and bottom cut to fit

DETAIL 2

Gap for Railing Posts
(Other reinforcement not shown for clarity)

MINIMUM BAR LAP

#5 bar = 3'-6"
#8 bar = 4'-9"

Note:
See sheet S-33 for Section A-A.

MODEL: Default
FILE NAME: i:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structure\N0160570-62H52-029-WestApproSlabDet.dgn

COLLINS ENGINEERS INC.

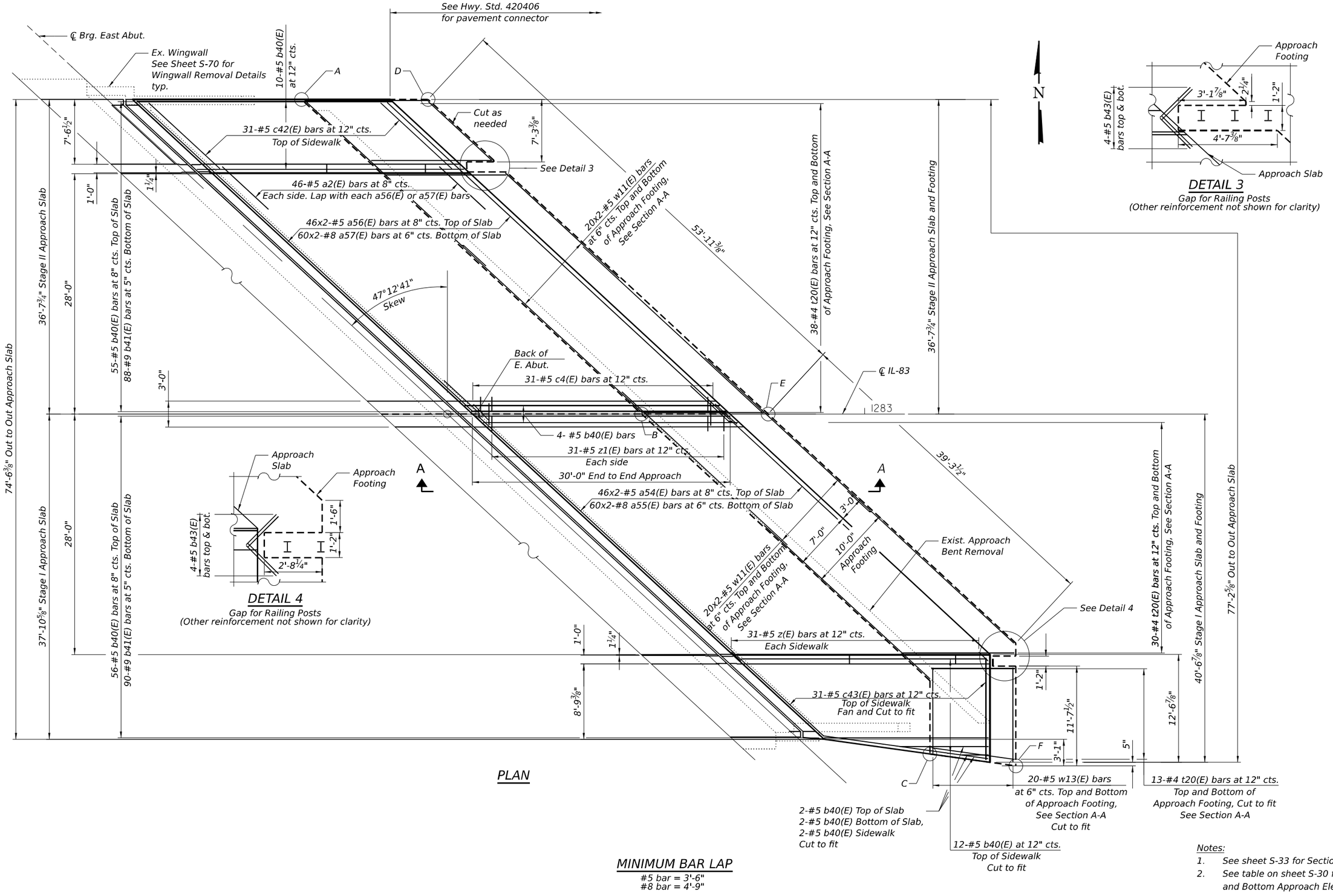
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST APPROACH SLAB
STRUCTURE NO. 016–0570

SCALE: | SHEET S-30 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	71
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



DETAIL 3

Gap for Railing Posts
(Other reinforcement not shown for clarity)

DETAIL 4

Gap for Railing Posts
(Other reinforcement not shown for clarity)

PLAN

MINIMUM BAR LAP

#5 bar = 3'-6"
#8 bar = 4'-9"

Notes:

1. See sheet S-33 for Section A-A.
2. See table on sheet S-30 for Top and Bottom Approach Elevations.

MODEL: Default
FILE NAME: I:\125041\DOT-I-83 over Cal\Sag\CADD\CADD_Sheets\Structural\016057O-62H52-030-EastApprSlabDet.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST APPROACH SLAB
STRUCTURE NO. 016–0570

SCALE: | SHEET S-31 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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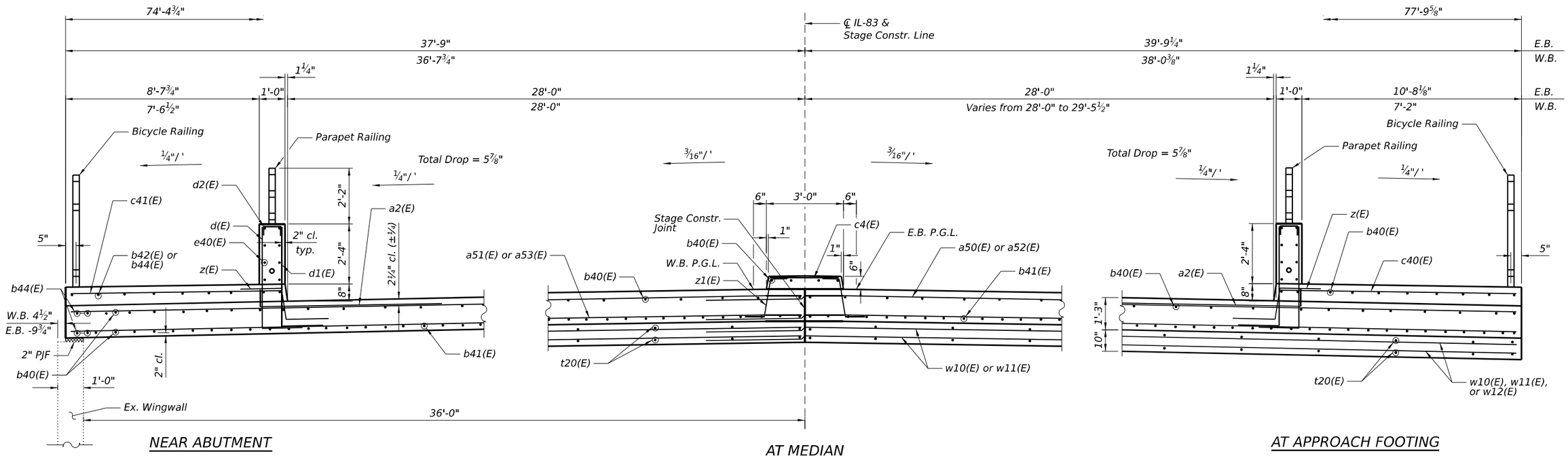
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



NEAR ABUTMENT

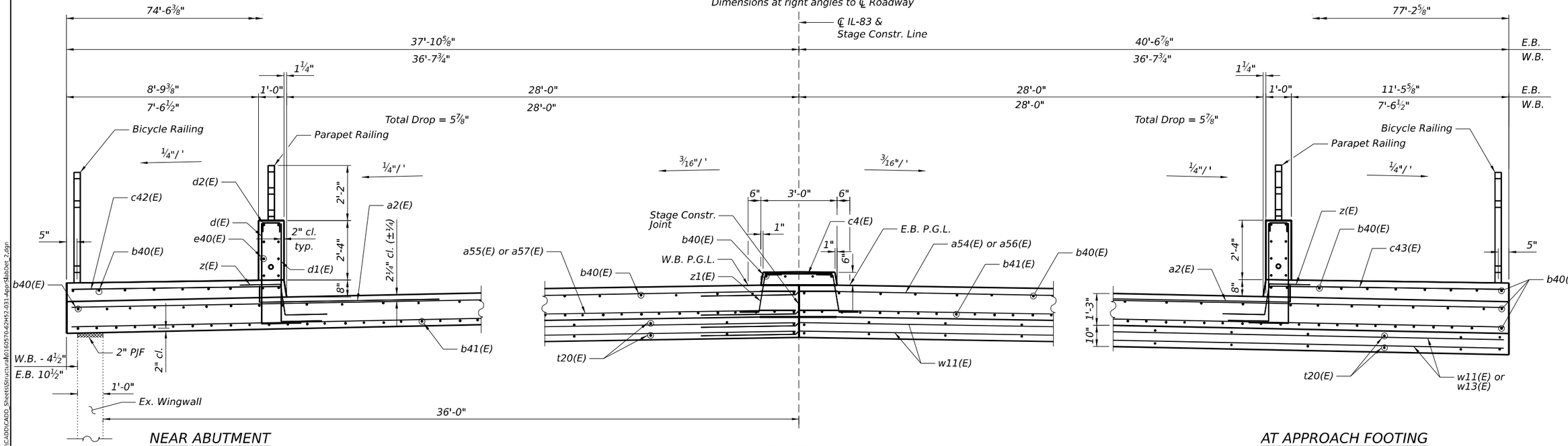
AT MEDIAN

WEST APPROACH SLAB CROSS SECTION

(Looking East)

Dimensions at right angles to ℄ Roadway

AT APPROACH FOOTING



NEAR ABUTMENT

AT MEDIAN

EAST APPROACH SLAB CROSS SECTION

(Looking East)

Dimensions at right angles to ℄ Roadway

AT APPROACH FOOTING

Note:
All dimensions are at right angle to the ℄ of Roadway.

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\0160570-62H52-031-ApprSlabSet_2.dgn

COLLINS ENGINEERS INC

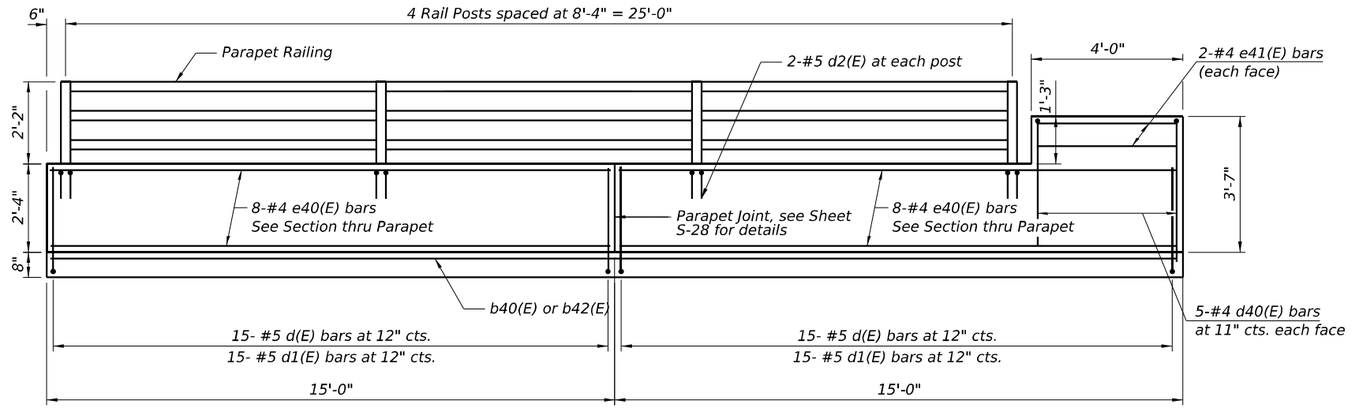
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

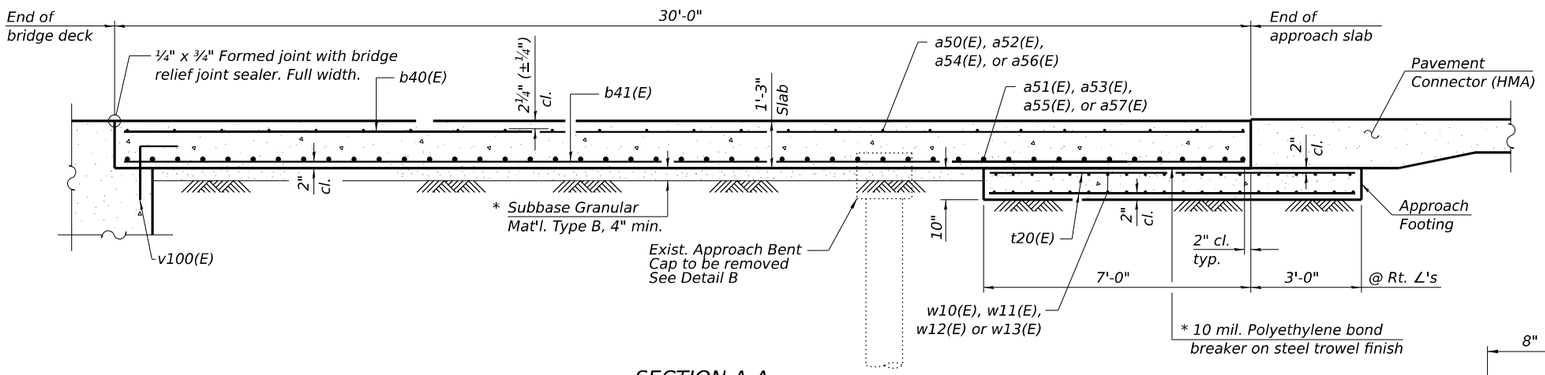
APPROACH SLAB DETAILS I
STRUCTURE NO. 016–0570

SCALE: | SHEET S-32 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	73
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

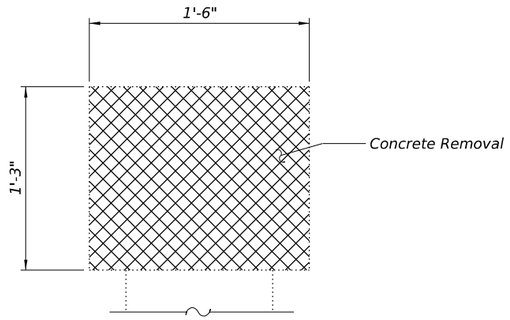


INSIDE ELEVATION OF PARAPET



SECTION A-A

* Cost included with Concrete Superstructure (Approach Slab).



DETAIL B

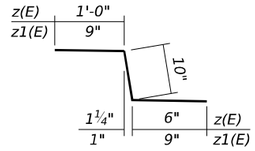
(East Approach Only)

LEGEND

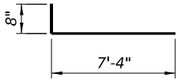
Concrete Removal

Notes:

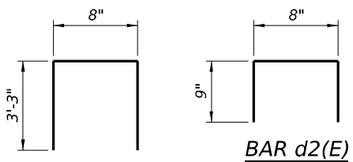
1. Parapet concrete shall be paid for as Concrete Superstructure.
2. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
3. Approach footing concrete shall be paid for as Concrete Structures.
4. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
5. Cost of excavation for approach footing included with Concrete Structures.
6. For type 6 terminal connections see Highway Standard 631031.



BAR z(E) & z1(E)

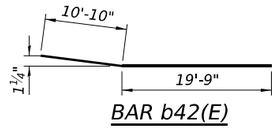


BAR a2(E)

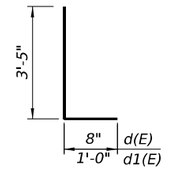


BAR d40(E)

BAR d2(E)



BAR b42(E)



BAR d(E) & d1(E)

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	184	#5	8'-0"	
a50(E)	92	#5	32'-8"	
a51(E)	120	#8	33'-11"	
a52(E)	92	#5	29'-7"	
a53(E)	120	#8	30'-3"	
a54(E)	92	#5	31'-1"	
a55(E)	120	#8	32'-4"	
a56(E)	92	#5	28'-7"	
a57(E)	120	#8	29'-3"	
b40(E)	276	#5	29'-8"	
b41(E)	366	#9	29'-8"	
b42(E)	9	#5	30'-7"	
b43(E)	32	#5	4'-0"	
b44(E)	4	#5	14'-7"	
c4(E)	62	#5	2'-6"	
c40(E)	31	#5	17'-3"	
c41(E)	32	#5	8'-3"	
c42(E)	31	#5	12'-3"	
c43(E)	31	#5	14'-1"	
d(E)	120	#4	4'-1"	
d1(E)	120	#6	4'-5"	
d2(E)	32	#4	2'-2"	
d40(E)	20	#4	7'-2"	
e40(E)	64	#4	14'-8"	
e41(E)	16	#4	3'-8"	
t20(E)	328	#4	14'-5"	
w10(E)	80	#5	32'-10"	
w11(E)	240	#5	28'-7"	
w12(E)	40	#5	6'-10"	
w13(E)	40	#5	11'-4"	
z(E)	124	#5	2'-7"	
z1(E)	124	#5	2'-6"	
Concrete Removal		Cu. Yd.	5.2	
Concrete Superstructure		Cu. Yd.	42.6	
Concrete Superstructure (Approach Slab)		Cu. Yd.	211	
Concrete Structures		Cu. Yd.	67.7	
Bridge Deck Grooving		Sq. Yd.	373	
Protective Coat		Sq. Yd.	583	
Reinforcement Bars, Epoxy Coated		Pound	117,690	

MODEL: Default
FILE NAME: I:\125041\DOT-I-83 over Collsgi\CADD\CADD_Sheets\Structural\0160570-62H52-032-ApprSlabDet_3.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS II
STRUCTURE NO. 016–0570

SCALE: | SHEET S-33 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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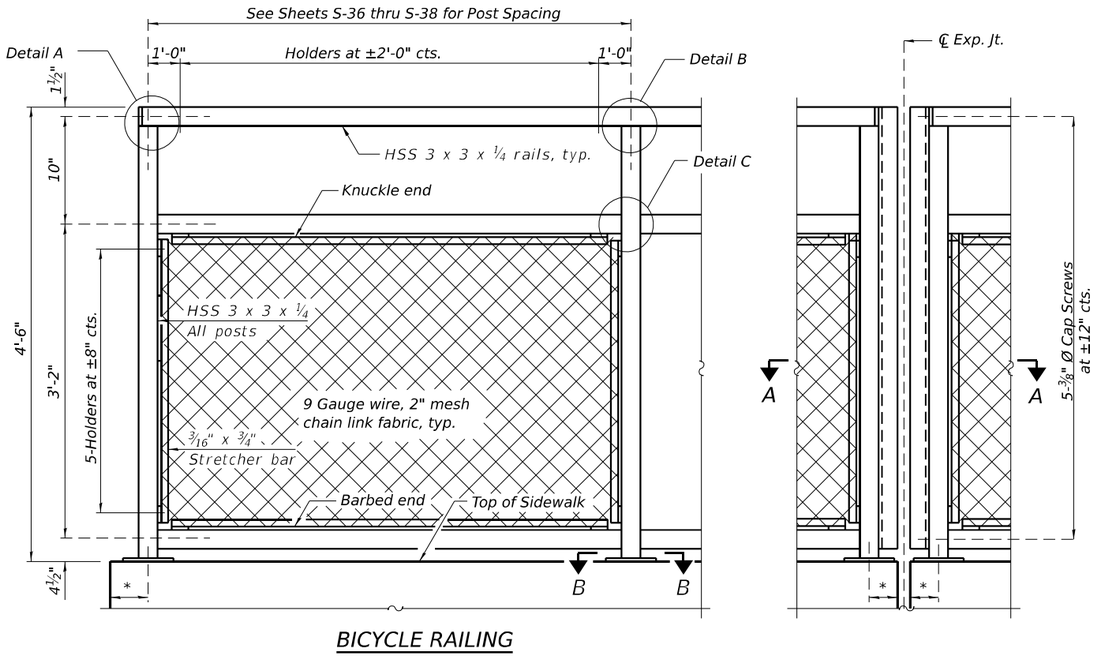
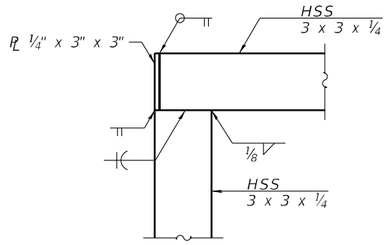
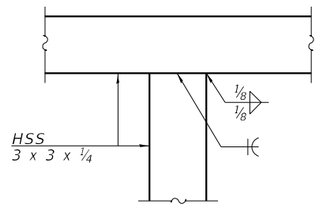
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



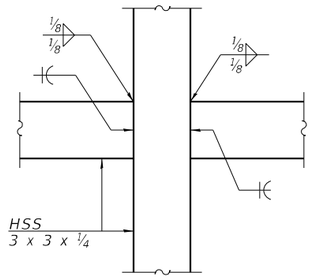
BICYCLE RAILING



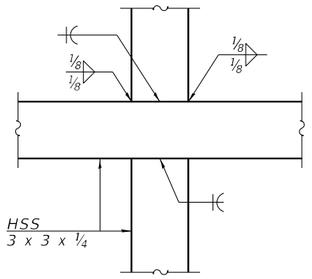
DETAIL A



DETAIL B



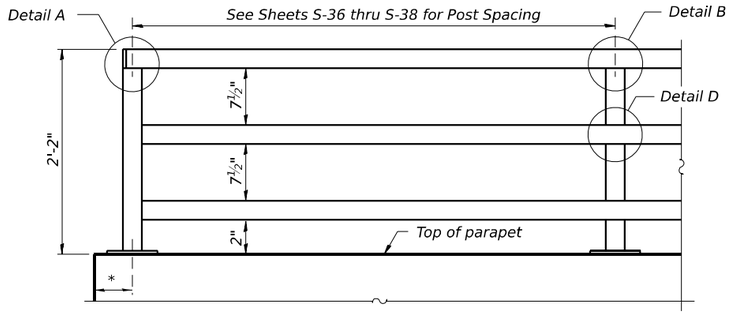
DETAIL C



DETAIL D

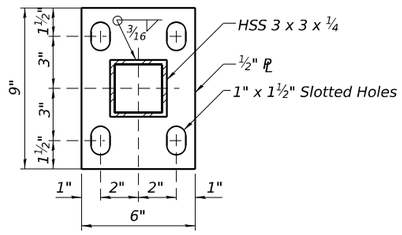
Note:

1. All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
2. Bicycle and Parapet Railing (hot dip galvanized) do not require painting.

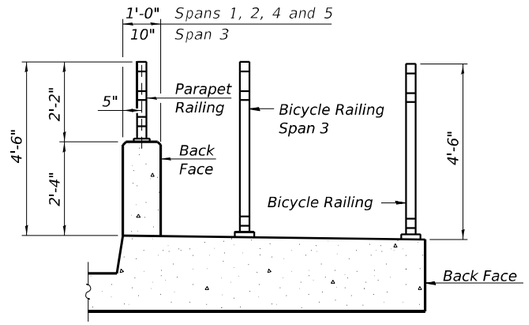


PARAPET RAILING ELEVATION

* See Sheets S-36 thru S-38 for Post Spacing



SECTION B-B



SECTION THRU SIDEWALK

RAILING CRITERIA

NCHRP 350 Test Level	4
Railing Weight (plf)	25
Bicycle Railing Weight (plf)	50
Max Post Spacing	10'-0"

BILL OF MATERIAL

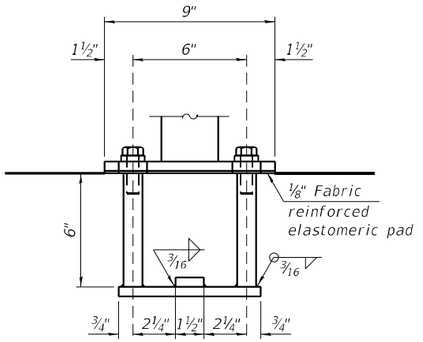
Item	Unit	Quantity
Bicycle Railing	Foot	2150
Parapet Railing	Foot	1320

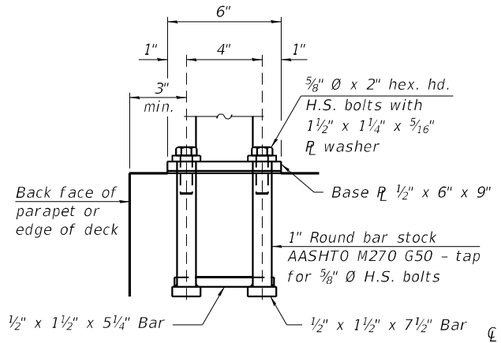
MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\016057O-62H52-033-Bicycle_Railing.dgn

COLLINS ENGINEERS INC.

USER NAME = dredzic	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BICYCLE RAILING AND PARAPET RAILING STRUCTURE NO. 016–0570	
	DRAWN - DR	REVISED -			
PLOT SCALE =	CHECKED - EKM	REVISED -			
PLOT DATE = 5/10/2023	DATE - 04/25/2023	REVISED -		SCALE:	SHEET S-34 OF S-70 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	75
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

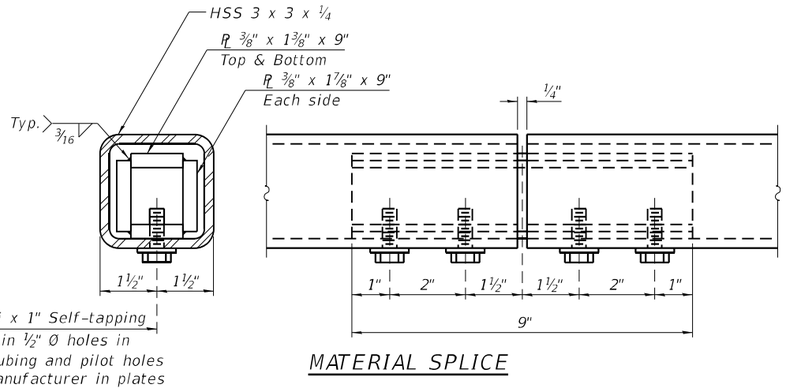




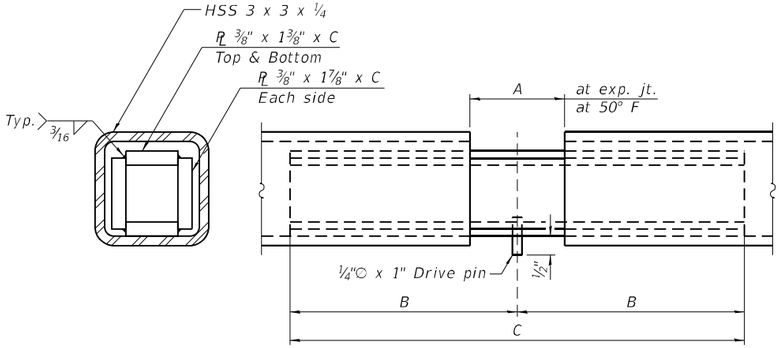
ANCHORAGE ASSEMBLY

The Bicycle Railing fasteners for end posts near expansion joints may need to be installed prior to installing the bent plates.

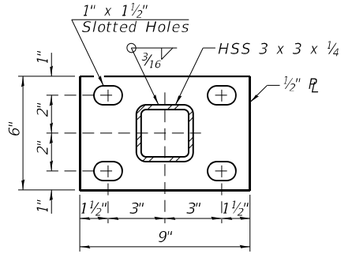
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting ⅝" Ø fully threaded anchor rods with the same plate washers as specified above and heavy hex lock nuts according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



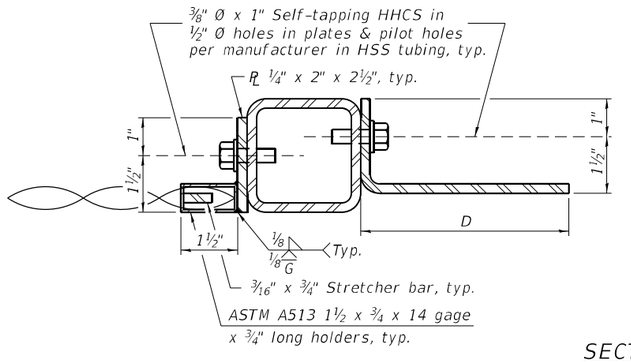
MATERIAL SPLICE

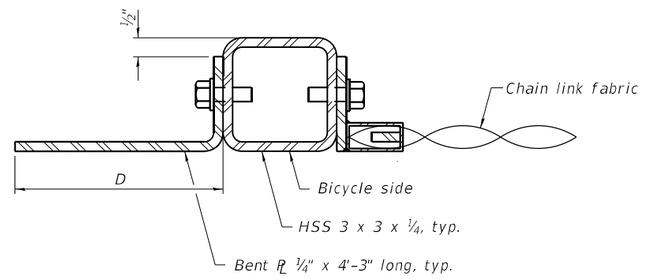


EXPANSION SPLICE



SECTION B-B





SECTION A-A

TABLE OF DIMENSIONS

Location	T	A	B	C	D	E
Over Strip Seal Jt.	≤4"	2½"	1'-2"	2'-4"	7¼"	7"
Over Finger or Modular Jt.	≤9½"	5½"	1'-7¾"	3'-3½"		

T= ; total movement based on total temperature range from -20°F to 120°F along centerline of roadway at expansion joint.

Notes:

Place reinforcement bars to miss anchor rod locations.

CVN testing is not required for the HSS tubing used in the Bicycle Railing.

All HSS tubing used for the Parapet Railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.

All HSS tubing used for the Parapet Railing shall be ASTM A500 grade C.

All base plates used for the Parapet Railing shall be AASHTO M270 grade 50.

All heavy hex nuts shall be according to ASTM A 563 grade DH.

All fully threaded anchor rods shall be ASTM F1554 grade 105.

The post base plate shall be fastened to the curb snug tight and given an additional ⅛" turn.

Rail splice inserts may be built out of bent plates of the same thicknesses and outside geometry limits as the 4 plate rail splice inserts shown.

When the contract speci es a galvanized railing, all steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications. When the contract specifies a painted railing, all posts, rail, splices, anchor devices and plates of the railing shall be painted according to the paint system for railings as specified in the General Notes.

See sheet S-39, S-40 and S-43 for dimensions of concrete openings at expansion joints.

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\016057O-62H52-0333A-Bicycle_Railing2Details.dgn

COLLINS ENGINEERS INC

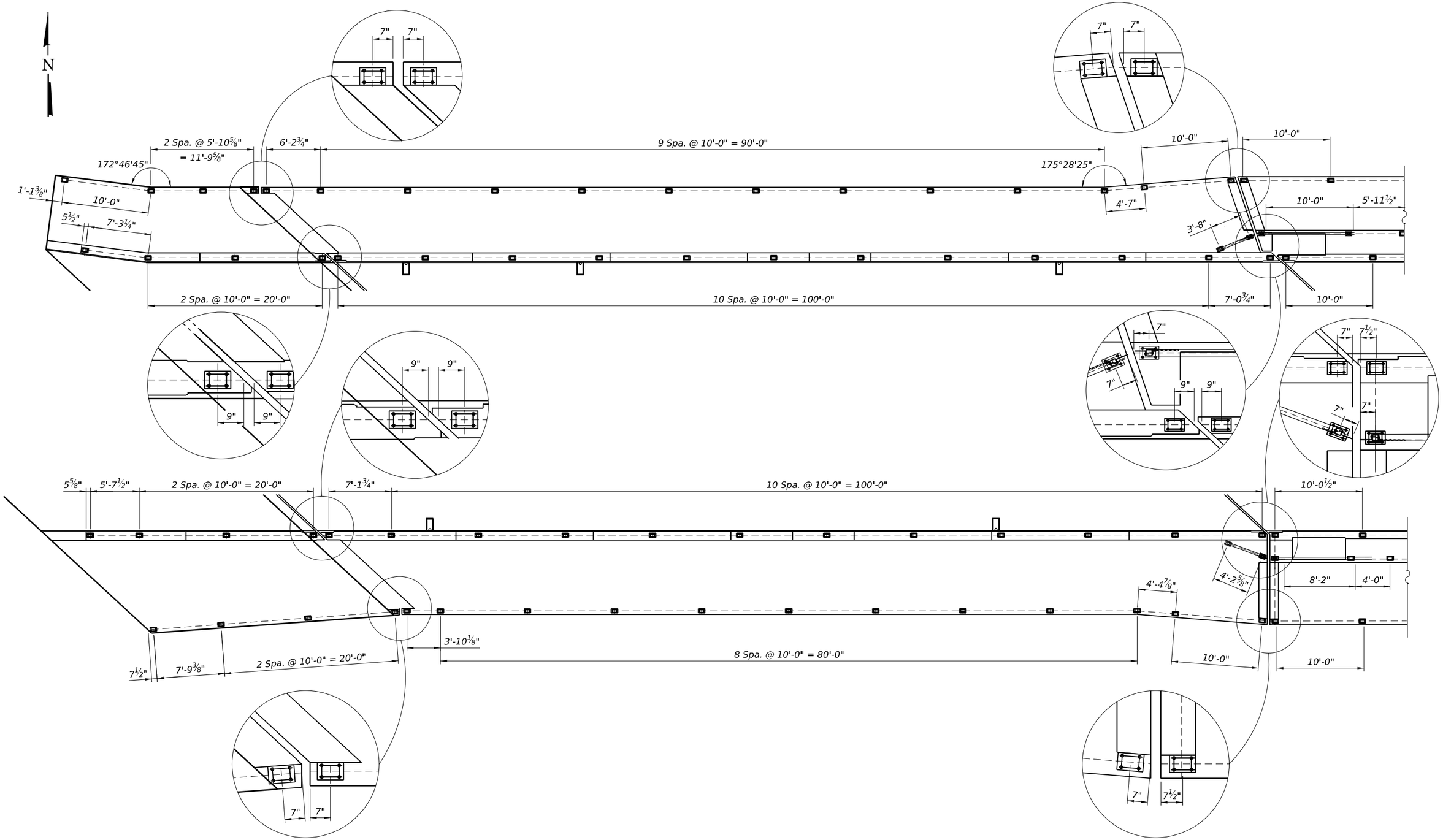
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING AND PARAPET RAILING
STRUCTURE NO. 016-0570

SCALE: | SHEET S-35 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	76
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



WEST APPROACH

PLAN SPANS 1, 2 AND WEST APPROACH

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\N0160570-62H52-033B-Bicycle_Railing_Spans1_2.dgn

COLLINS ENGINEERS INC.

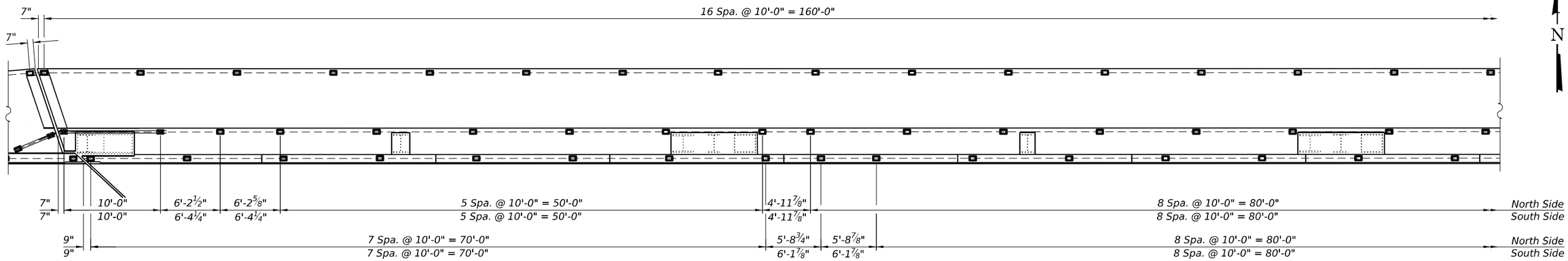
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING PLAN SPANS 1 AND 2
STRUCTURE NO. 016–0570

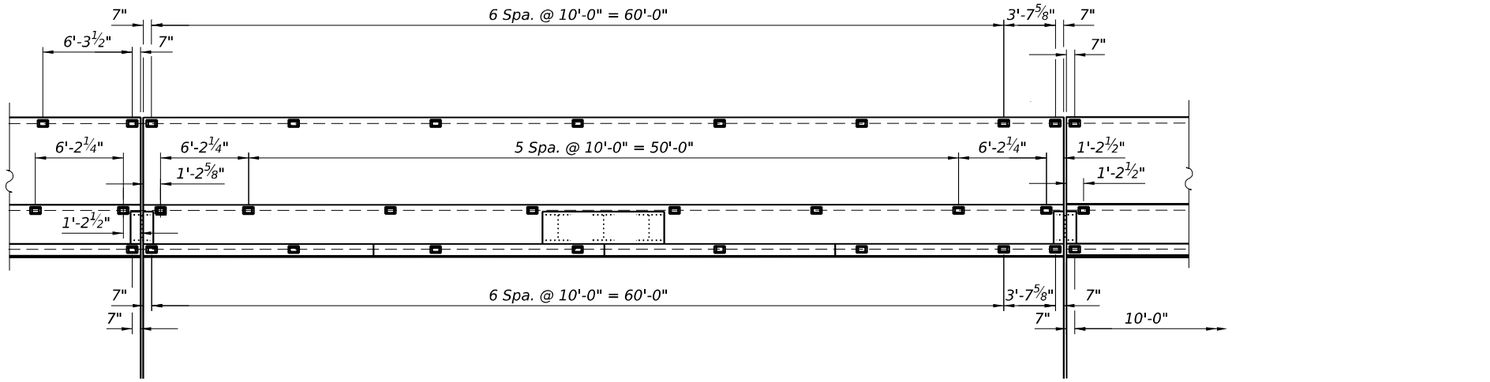
SCALE: | SHEET S-36 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	77
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



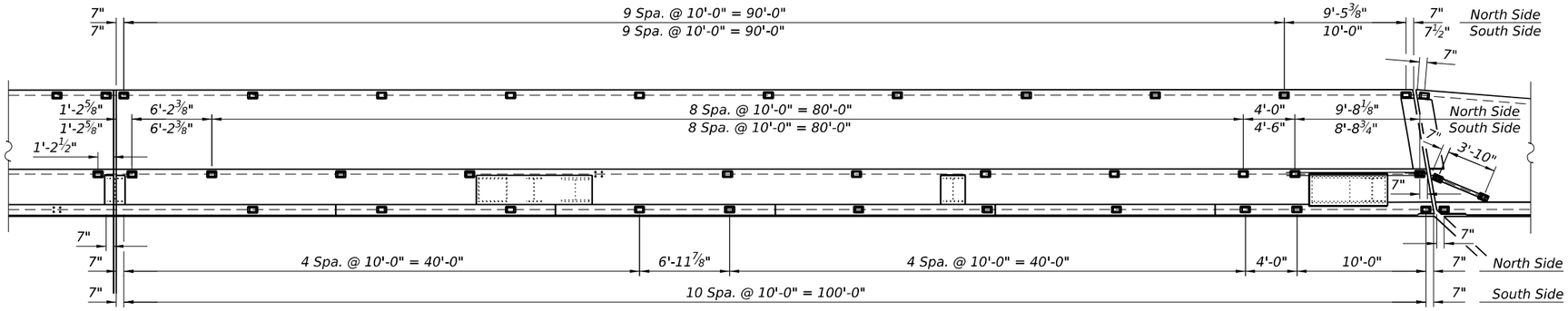
PARTIAL PLAN 3 - SPAN 3

North sidewalk shown,
South sidewalk similar by 180 degree rotation, except as noted



PARTIAL PLAN 3 - SPAN 3

North sidewalk shown,
South sidewalk similar by 180 degree rotation, except as noted
2 segments on each side.



PARTIAL PLAN 3 - SPAN 3

North sidewalk shown,
South sidewalk similar by 180 degree rotation, except as noted

MODEL: Default
FILE NAME: I:\12504 IDOT-I.83 over Cal\Sag\CADD\CADD_Sheets\Structure\M0160570-62H52-033C-Bicycle Railing_Span3.dgn

COLLINS ENGINEERS INC.

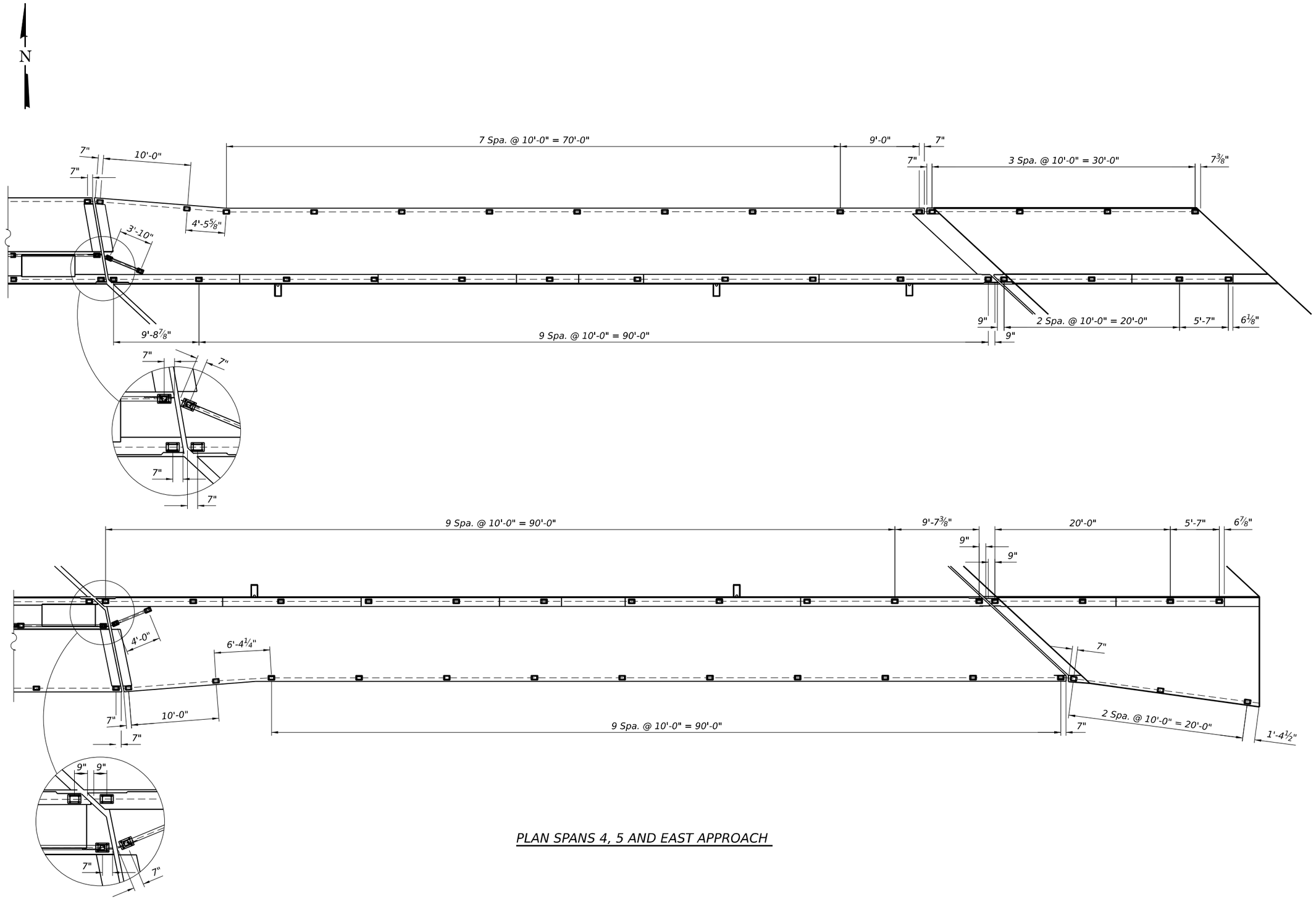
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING LAYOUT SPAN 3
STRUCTURE NO. 016–0570

SCALE: | SHEET S-37 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	78
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



PLAN SPANS 4, 5 AND EAST APPROACH

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\StructuralN0160570-42H52-D330-Bicycle Railing_Spans4 5.dgn

COLLINS ENGINEERS INC

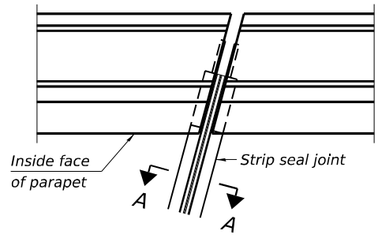
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

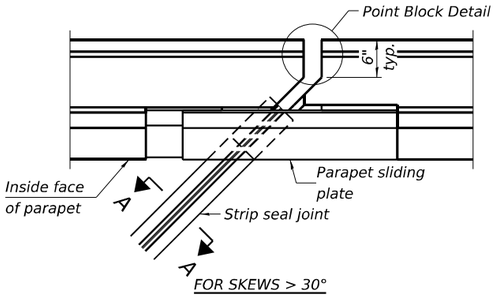
BICYCLE RAILING LAYOUT SPANS 4 AND 5
STRUCTURE NO. 016–0570

SCALE: | SHEET S-38 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	79
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

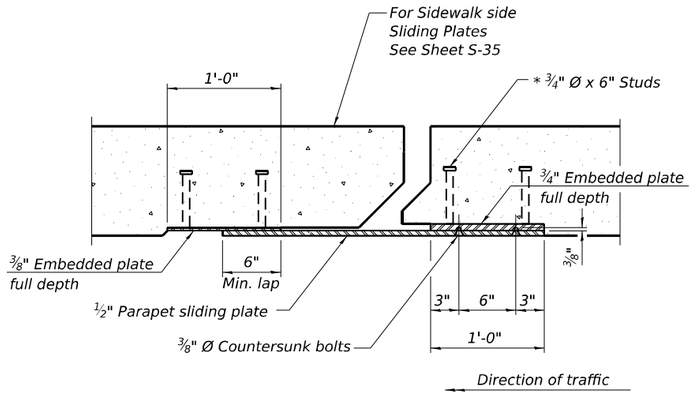


FOR SKEWS ≤ 30°

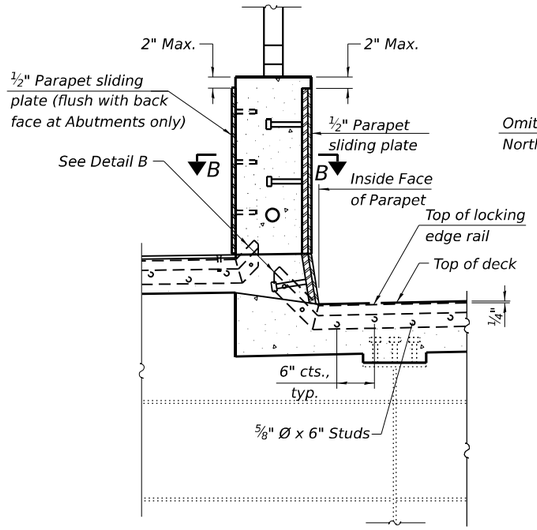


FOR SKEWS > 30°

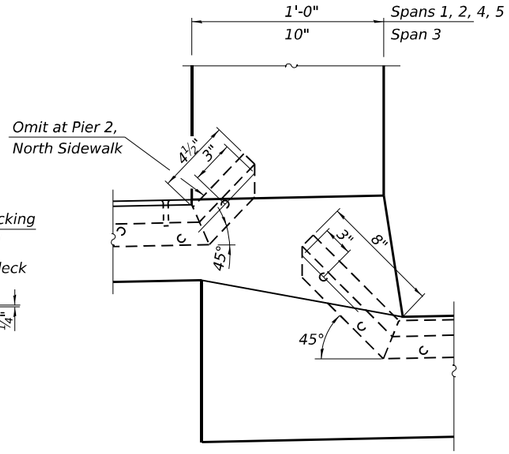
PLAN AT PARAPET



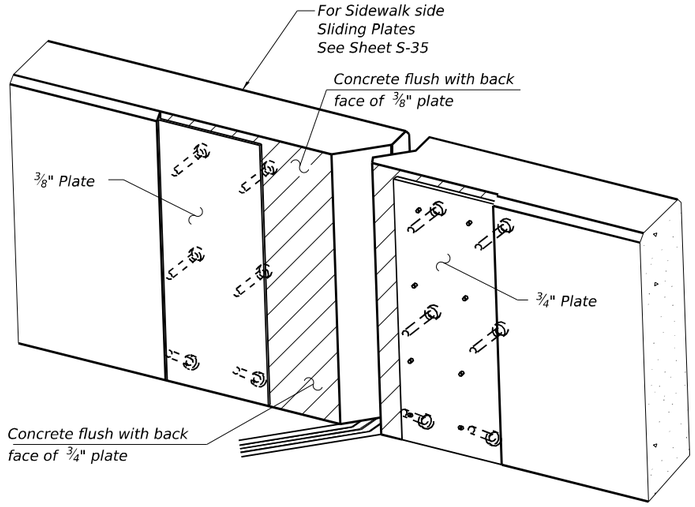
SECTION B-B



SECTION AT PARAPET



DETAIL B



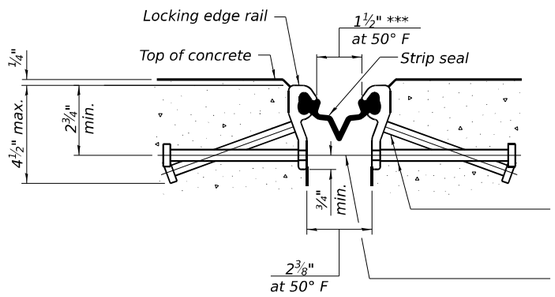
TRIMETRIC VIEW

(Showing embedded plates only)

Notes:

1. The strip seal shall be made continuous and shall have a minimum thickness of ¼". 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.
2. 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 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.
3. The manufacturer's recommended installation methods shall be followed.
4. All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
5. 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.
6. The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.
7. Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.
8. The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

Location	Strip Seal Length (ft)		
	Roadway	N. Sidewalk	S. Sidewalk
W. Abut.	83.8	10.5	12.1
Pier 2	83.8	8.9	9.6
Span 3 L3S-L5N'	57.3	8.6	9.6
Span 3 L5S-L5N	57.3	8.6	9.6
Span 3 L5S'-L3N	57.3	8.6	9.6
E. Abut.	83.8	10.5	12.1



*** At all locations.

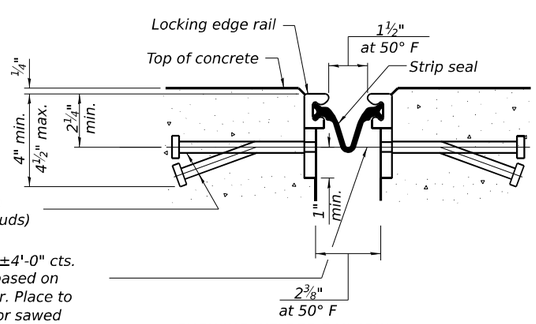
SHOWING ROLLED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

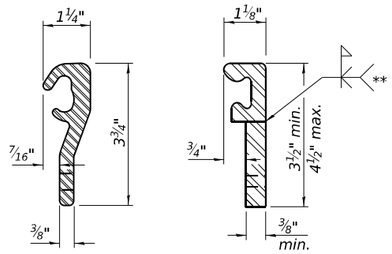
⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



SHOWING WELDED RAIL JOINT

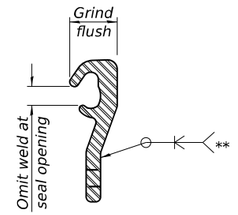


ROLLED (EXTRUDED) RAIL

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.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	542

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\016057O-62H52-0344-Preformed_Jt_Strip_Seal_1.dgn

COLLINS ENGINEERS INC

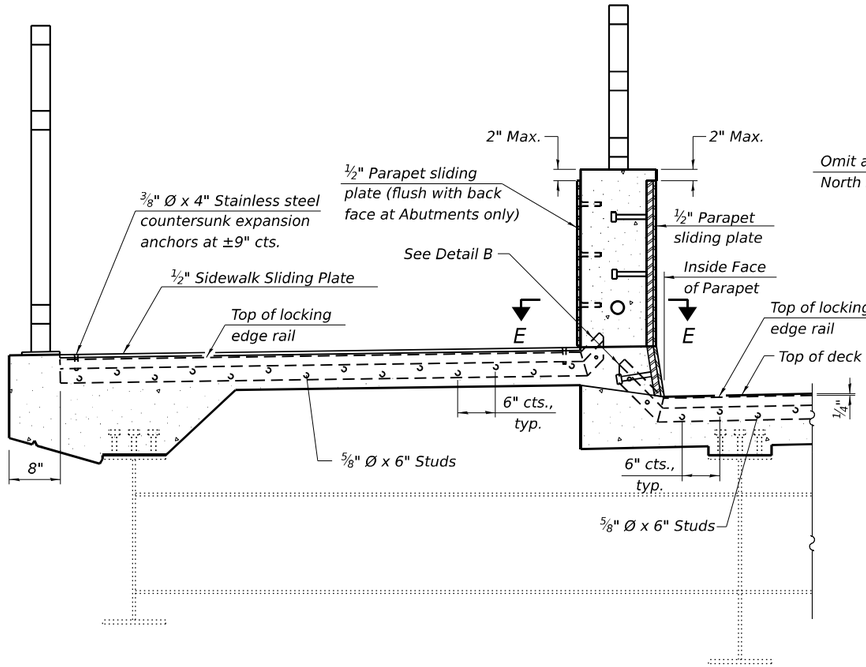
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL – ROADWAY
STRUCTURE NO. 016–0570

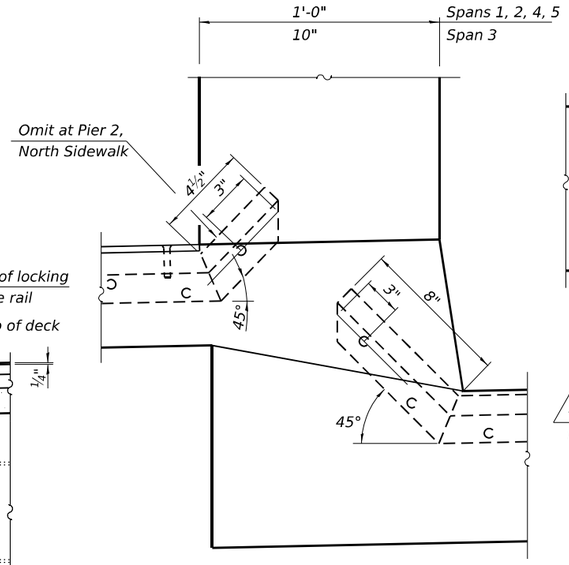
SCALE: | SHEET S-39 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	80
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

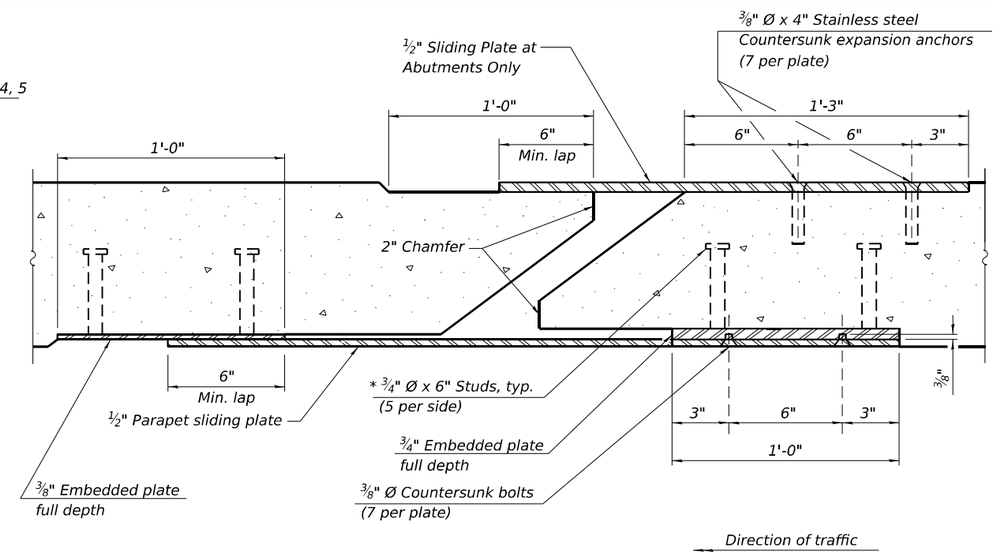


SECTION THROUGH SIDEWALK

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

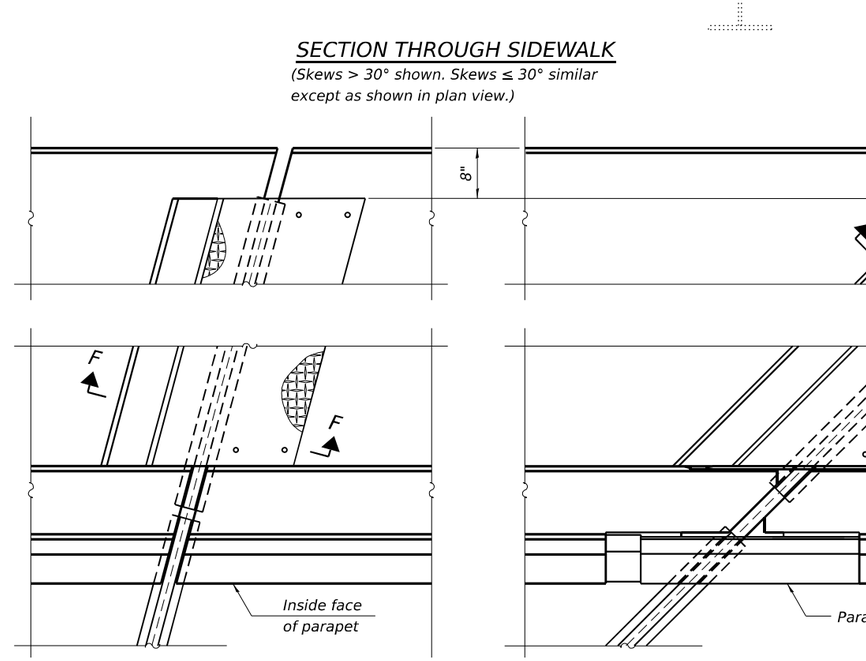


DETAIL B



SECTION E-E

General View



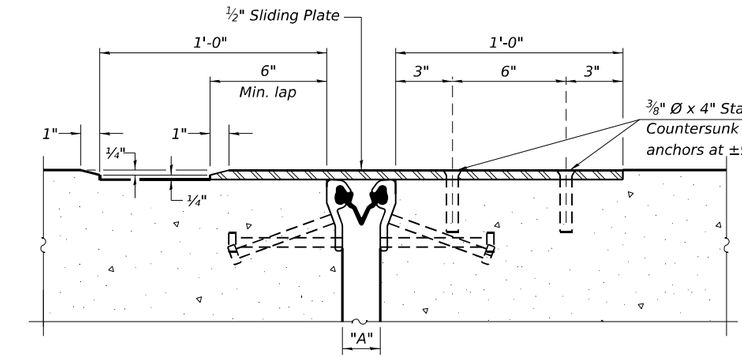
(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

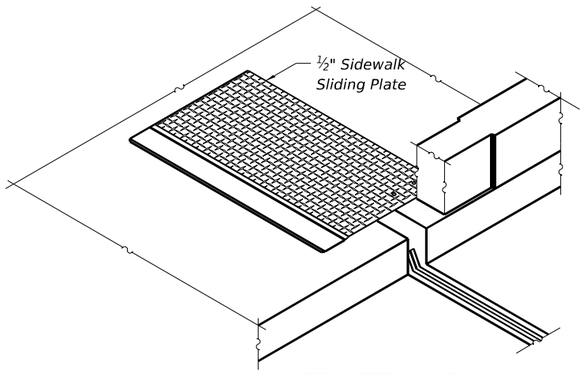
PLAN AT SIDEWALK

General View

For specific locations see Sheet S-21 and S-29



SECTION F-F



TRIMETRIC VIEW

Vertical Sliding Plates not shown for clarity

Partial Parapet shown on one side only for clarity

"A"

Location	Dim. "A"
West Abutment North Sidewalk	$2\frac{3}{8}$"
West Abutment South Sidewalk	$2\frac{3}{8}$"
Pier 2 North Sidewalk	$3\frac{3}{8}$"
Pier 2 South Sidewalk	$3\frac{1}{2}$"
Pier 3 North Sidewalk	3"
Pier 3 South Sidewalk	3"
East Abutment North Sidewalk	$2\frac{3}{8}$"
East Abutment South Sidewalk	$2\frac{3}{8}$"

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over Cal\Sag\CADD\CADD_Sheets\Structural\M016\0570-62H52-035-Preformed_Jt_Strp_Seal_2.dgn

COLLINS ENGINEERS INC.

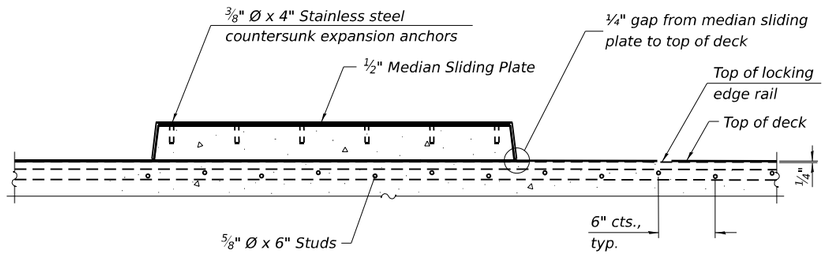
USER NAME = emroczek		DESIGNED - JFS / NA		REVISED -	
		DRAWN - DR		REVISED -	
PLOT SCALE =		CHECKED - EKM		REVISED -	
PLOT DATE = 4/25/2023		DATE - 04/25/2023		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

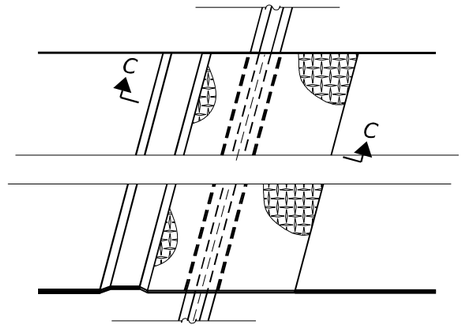
PREFORMED JOINT STRIP SEAL – SIDEWALK
STRUCTURE NO. 016–0570

SCALE: | SHEET S-40 OF S-70 SHEETS | STA. | TO STA.

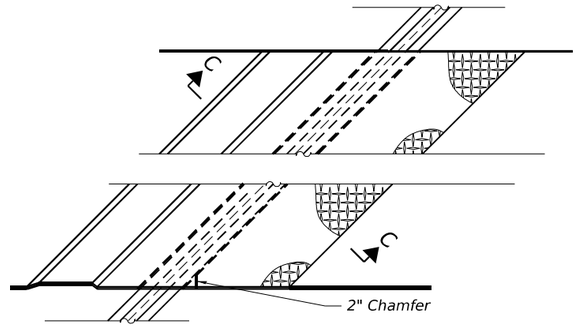
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	81
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



SECTION AT RAISED MEDIAN

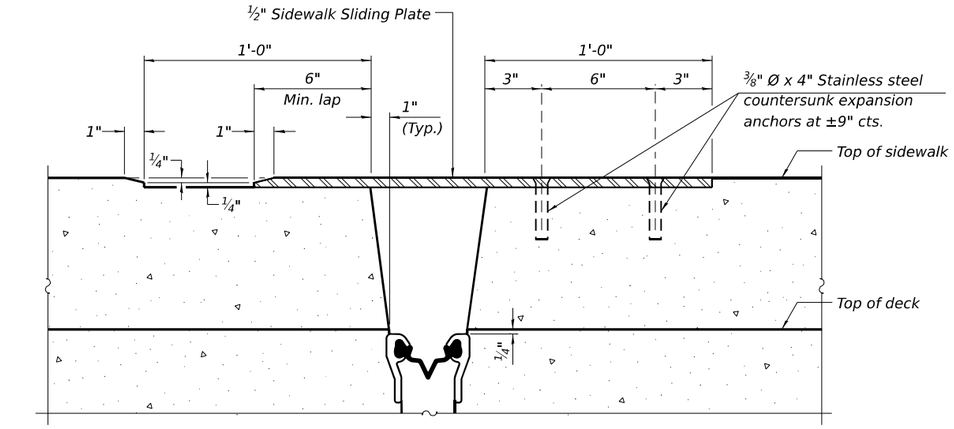


(FOR SKEWS ≤ 30°)

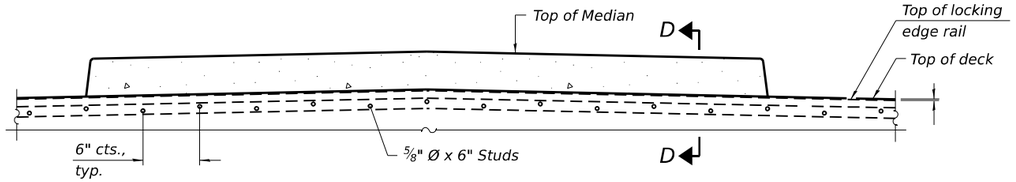


(FOR SKEWS > 30°)

PLAN AT RAISED MEDIAN

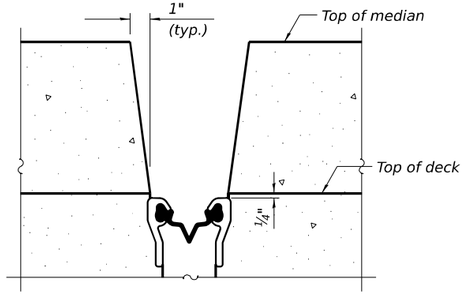


SECTION C-C



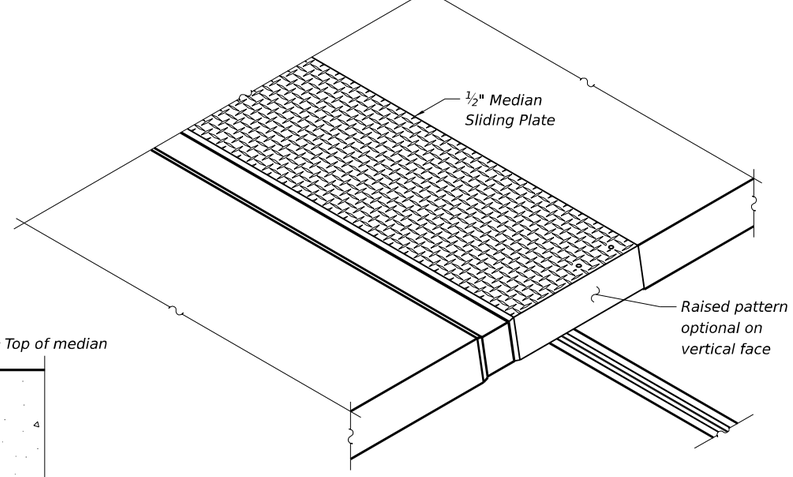
ELEVATION AT MEDIAN

For skews > 30°, chamfer acute corners 2" similar to sidewalk.



SECTION D-D

(at Rt. ∠'s)



TRIMETRIC VIEW

MODEL: Default
FILE NAME: I:\12504 IDOT-I-88 over CalSag\CADD\CADD_Sheets\Structural\0160570-62H52-036-Preformed_JT_Strip_Seal_3.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL – MEDIAN
STRUCTURE NO. 016–0570

SCALE: | SHEET S-41 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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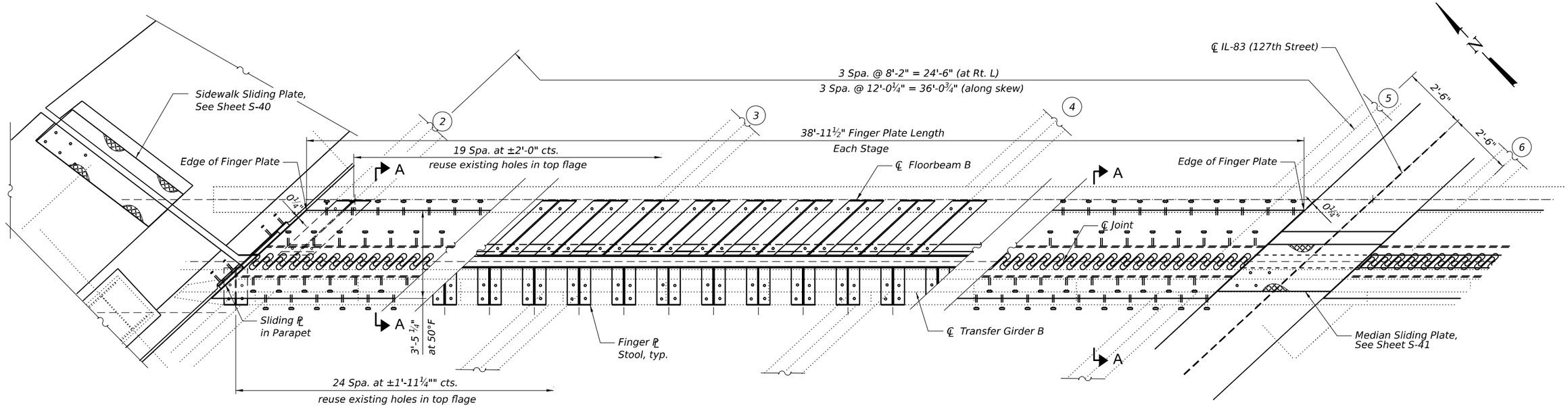
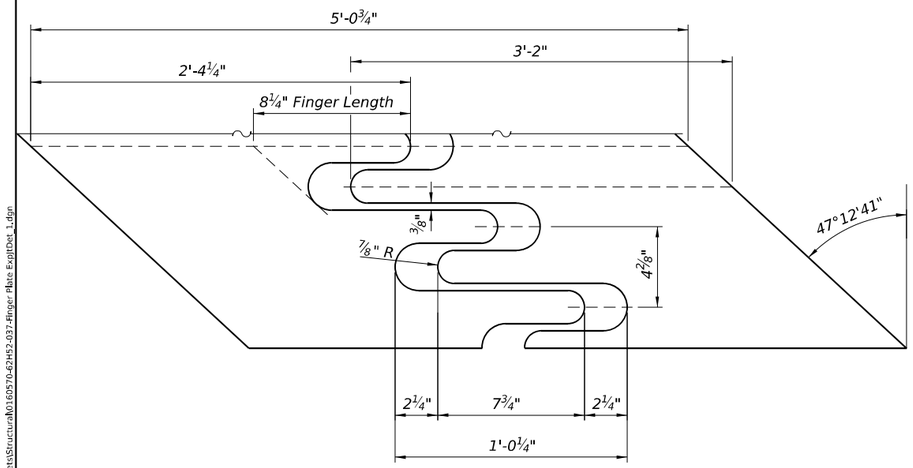
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



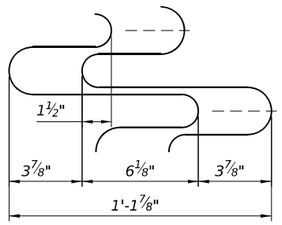
FINGER PLATE PLAN

North side shown
South side similar



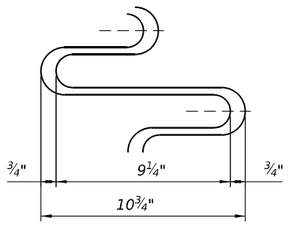
FINGER PLATE DETAILS

At 50°F



FINGER PLATE DETAILS

At -30°F



FINGER PLATE DETAILS

At 130°F

BILL OF MATERIAL

Item	Unit	Total
Finger Plate Expansion Joint, 3"	Foot	78
Fabric Reinforced Elastomeric Trough	Foot	85

NOTE:

1. Finger Plate expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.
2. All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
3. The top surface of sidewalk and median sliding plates shall have a raised pattern according to ASTM A786.
4. Cost of parapet sliding plates, median and sidewalk sliding plates, embedded plates, anchorage studs, stools, and other miscellaneous stel shapes and hardware, as shown on the sections and details are included with Finger Plate Expansion Joint, 3".

MODEL: Default
FILE NAME: k\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\M0160570-62H52-037-Finger Plate ExpJtDet_1.dgn

COLLINS ENGINEERS INC

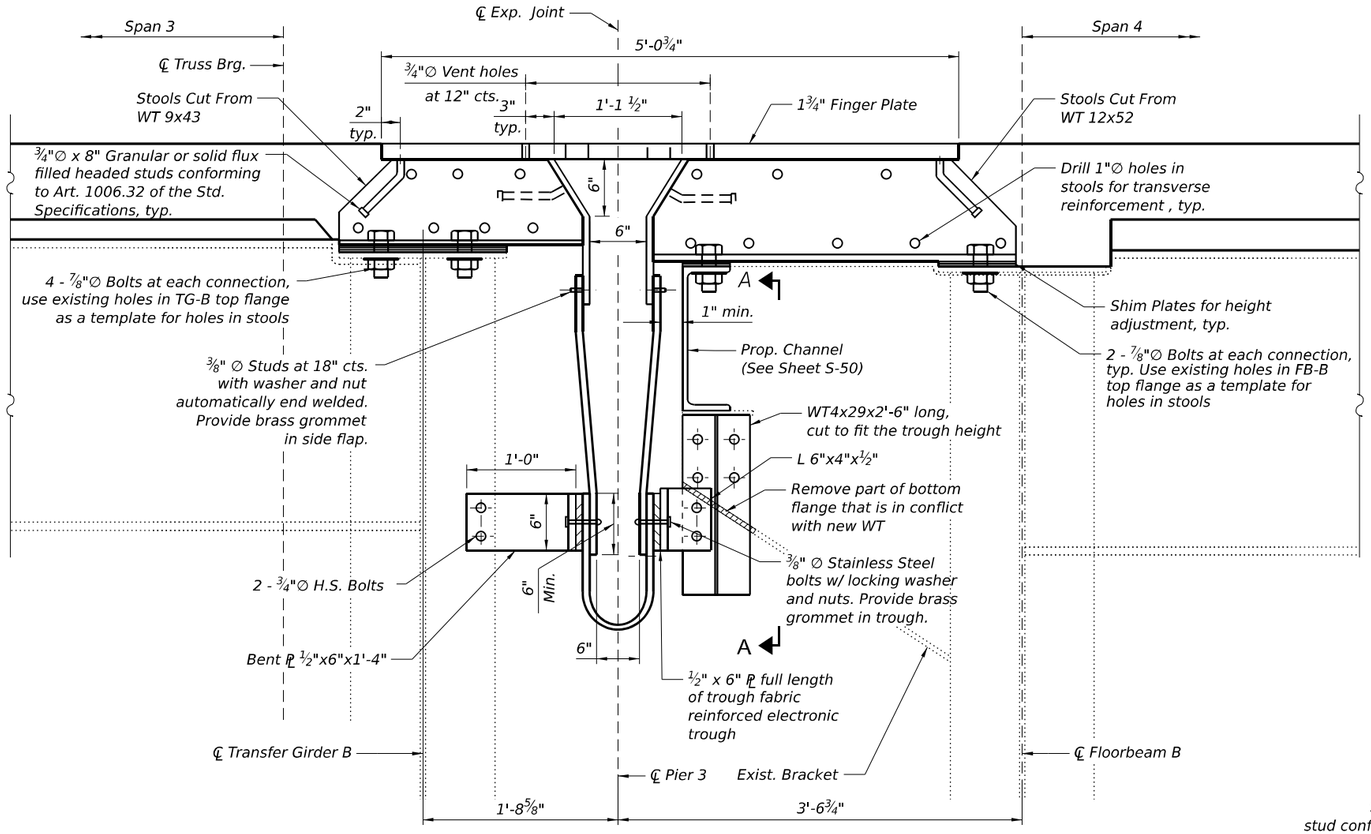
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINGER PLATE EXPANSION JOINT PLAN
STRUCTURE NO. 016–0570

SCALE: | SHEET S-42 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	83
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



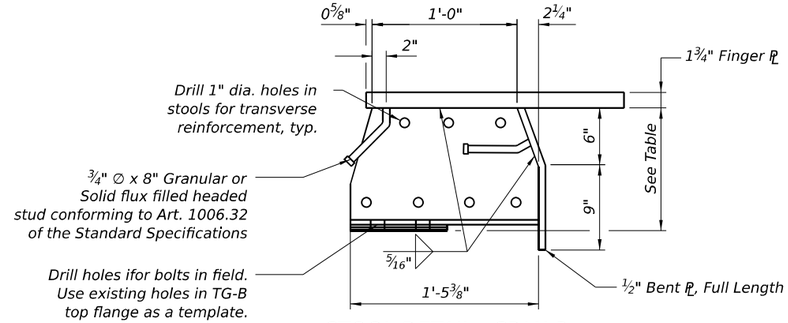
PROPOSED SECTION THROUGH PIER 3

Horizontal Dimensions are at 50°F along ℄ Roadway

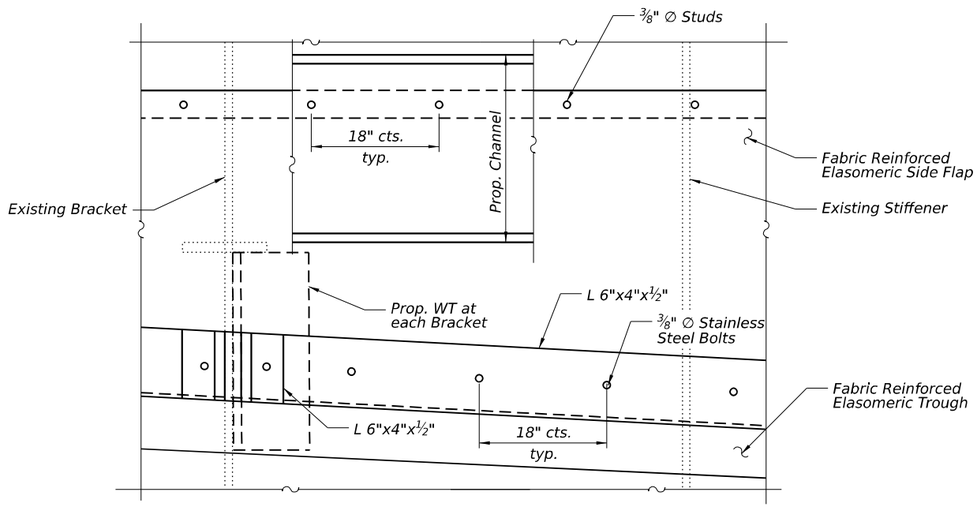
FINGER PLATE STOOL HEIGHT

Height with Shim Plates

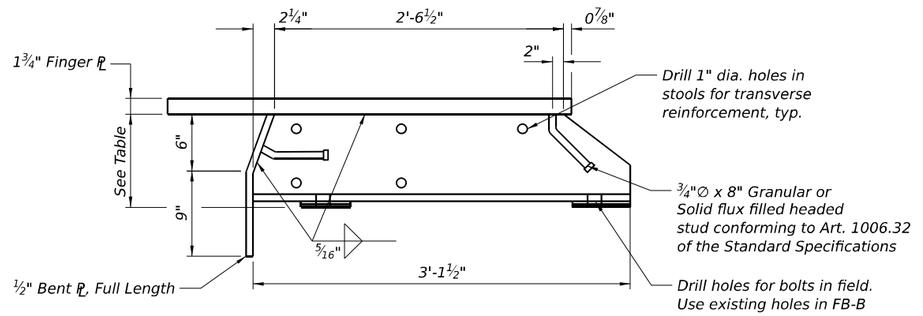
	TG - B	FB - B
at Stringer 2	9	11⅜"
at Stringer 3	9¾"	12
at Stringer 4	10⅛"	12⅜"
at Stringer 5	9⅜"	12
at Stringer 6	9½"	11⅞"
at Stringer 7	10¼"	11⅜"
at Stringer 8	10	12
at Stringer 9	9⅜"	11⅜"



STOOL DETAIL - SPAN 3



SECTION A-A



STOOL DETAIL - SPAN 4

Notes:

Cost of bottom flange removal and WT installation at existing brackets shall be included with Finger Plate Expansion Joint, 3"

See sheets S-42 and S-44 for other notes.

MODEL: Default
FILE NAME: I:\125041\DOT-I-83 over Callsig\CADD\CADD_Sheets\Structural\I0160570-62H52-038-Finger_Plate_Expansion_Joint_Details.dgn

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USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
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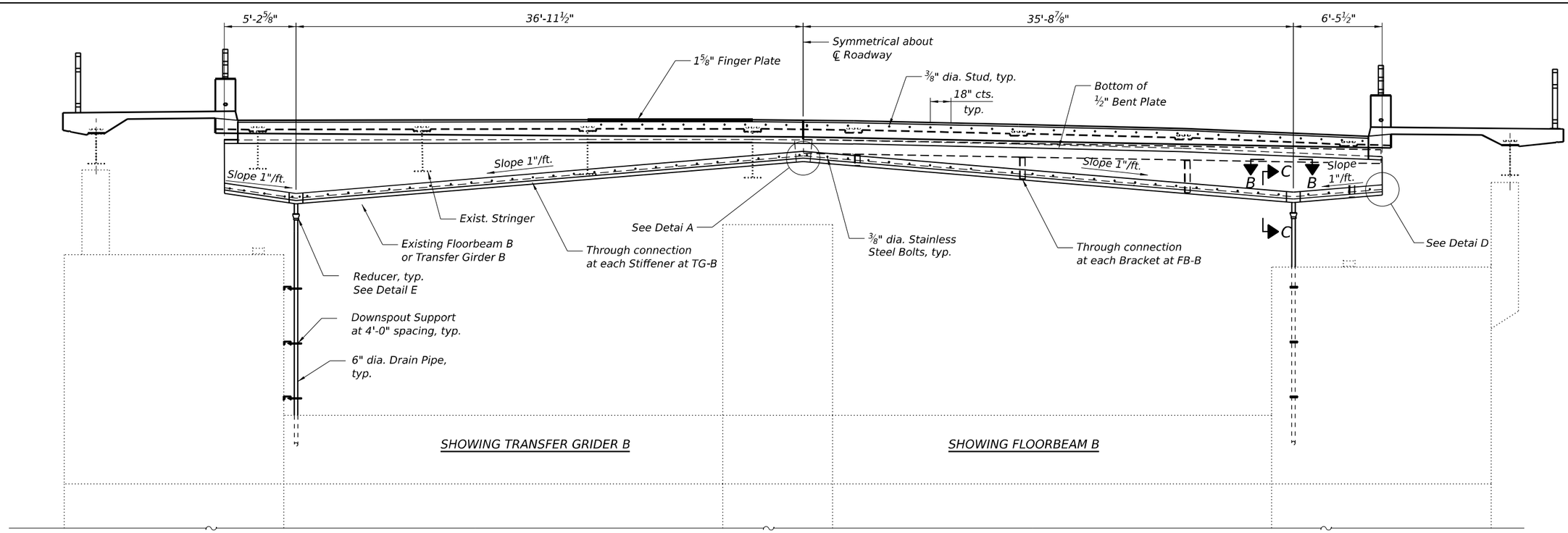
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINGER PLATE EXPANSION JOINT DETAILS I
STRUCTURE NO. 016–0570

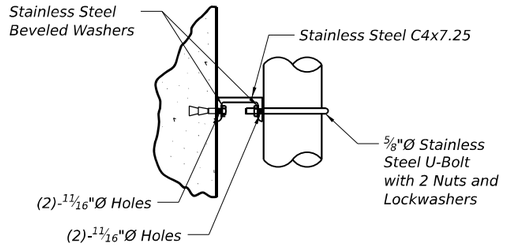
SCALE: | SHEET S-43 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	84
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

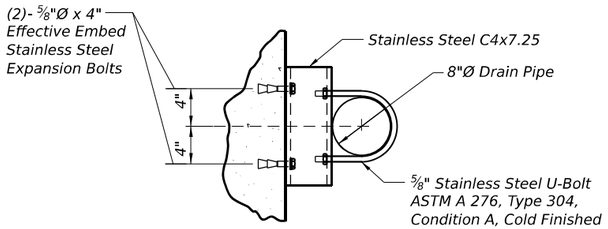


FABRIC TROUGH AND DRAIN SYSTEM AT PIER 3

Looking East

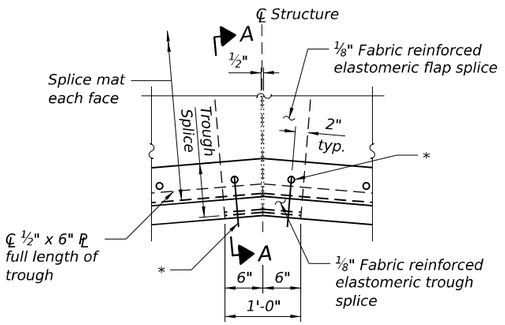


ELEVATION

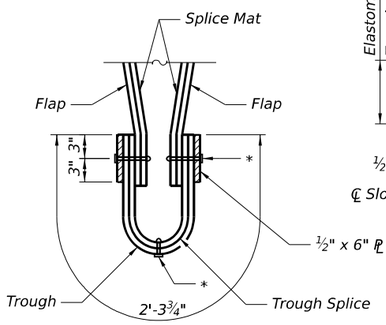


PLAN

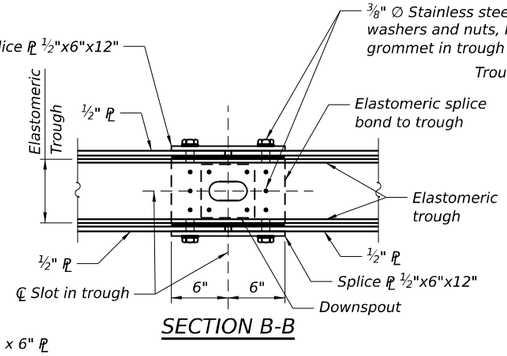
DOWNSPOUT SUPPORT DETAIL



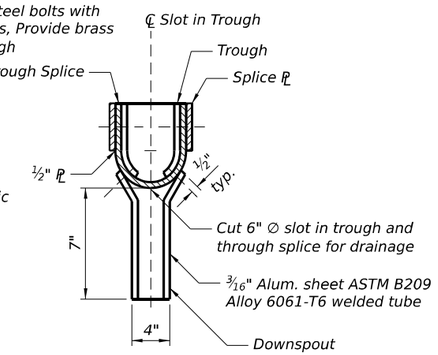
TROUGH SPLICE DETAIL A



SECTION A-A

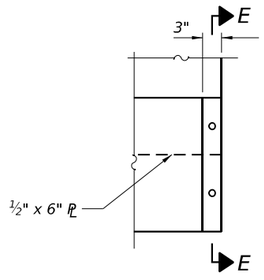


SECTION B-B



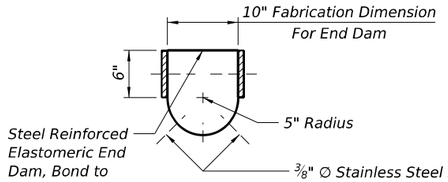
SECTION C-C

Drainage components not shown for clarity.

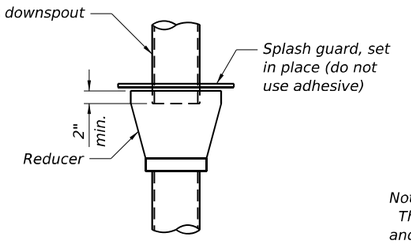


DETAIL D

* 3/8" ∅ Stainless steel bolts with washers and nuts, Provide brass grommet in trough.



SECTION E-E



FRP REDUCER DETAIL E

Notes:
The cost to furnish and install the end dam, downspouts, and associated hardware including drilling and setting expansion bolts shall be included with Fabric Reinforced Elastomeric Trough.

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structure\M016057O-62H52-039-Finger Plate Exp1Det_3.dgn

COLLINS ENGINEERS INC.

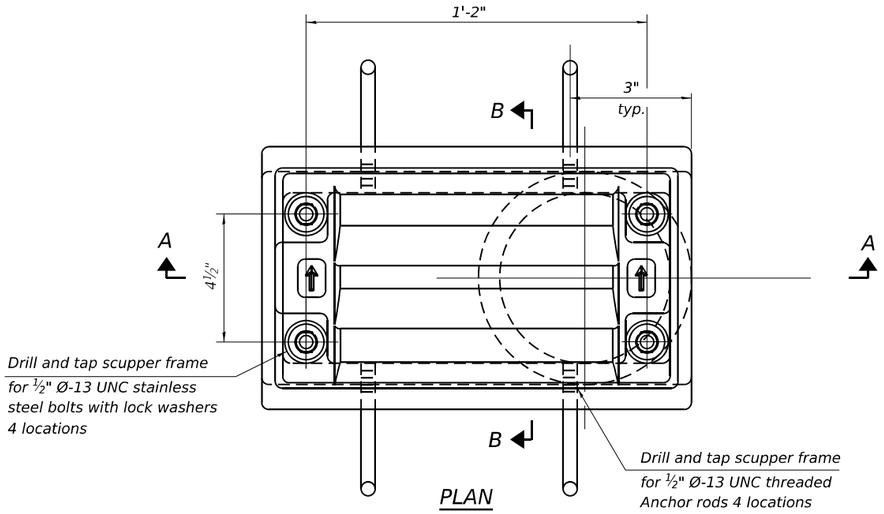
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

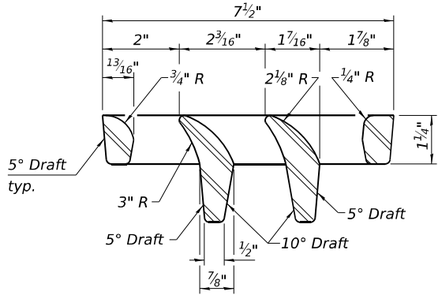
FINGER PLATE EXPANSION JOINT DETAILS II
STRUCTURE NO. 016–0570

SCALE: | SHEET S-44 OF S-70 SHEETS | STA. | TO STA.

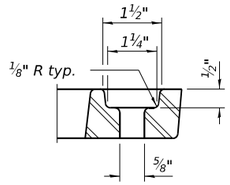
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	85
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



PLAN



VANE GRATE DETAIL



GRATE BOLT HOLE DETAIL

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 35B and AASHTO M306.

Bolts, anchor rods, nuts and washers shall be according to ASTM A307 and shall be galvanized according to AASHTO M232. As an alternate stainless steel may be used.

Stainless steel hardware shall be according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frames and downspouts; however, the scupper grates shall remain cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.

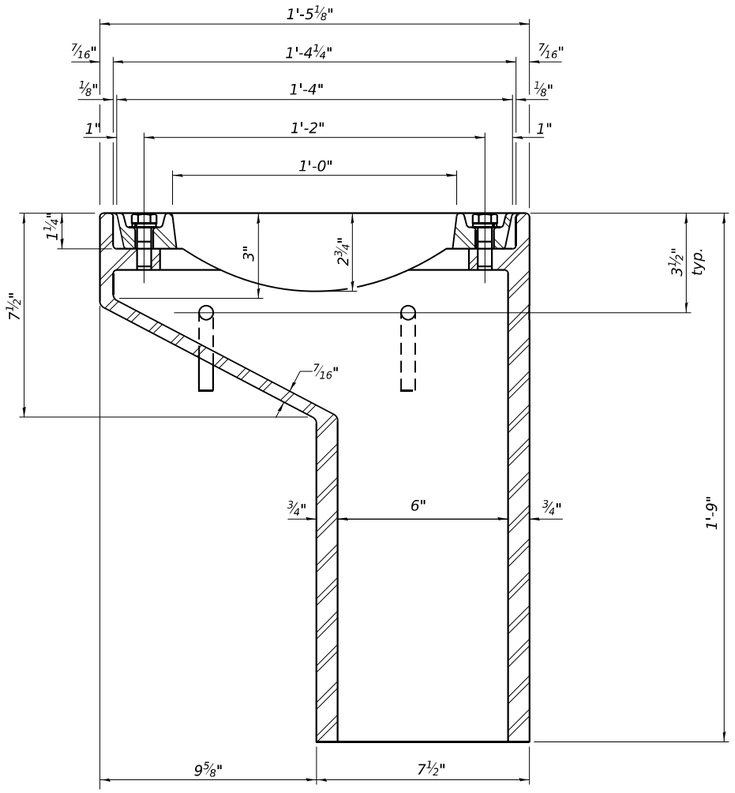
Structural steel scupper frames and downspouts, when utilized, shall be galvanized according to AASHTO M111.

As an alternate, fiberglass may be used for downspouts according to ASTM D2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. in lieu of the cast iron or structural steel.

Exterior surfaces of downspouts and exterior exposed surfaces of the scupper frame below deck shall be pigmented or painted to match the color of the adjacent beam.

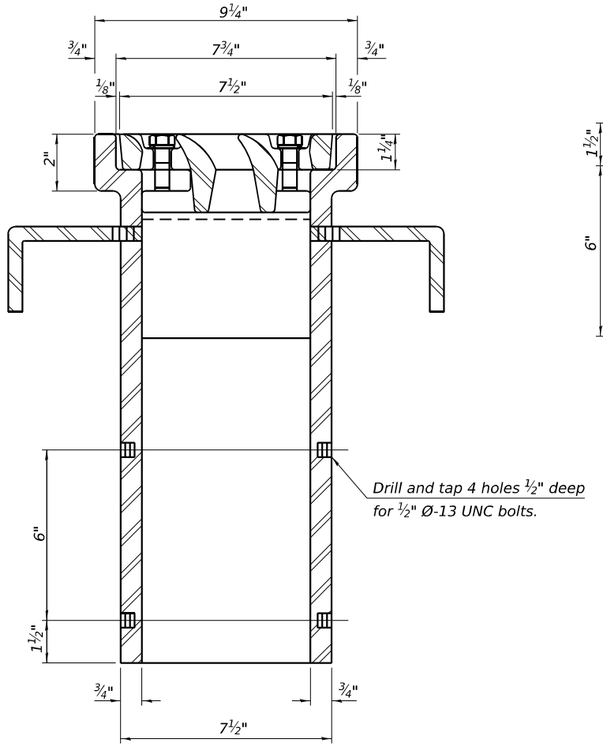
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the grate, frame, downspout, anchor rods, nuts and washers including complete installation of the scupper shall be paid for at the contract unit price for Drainage Scupper, DS-11.

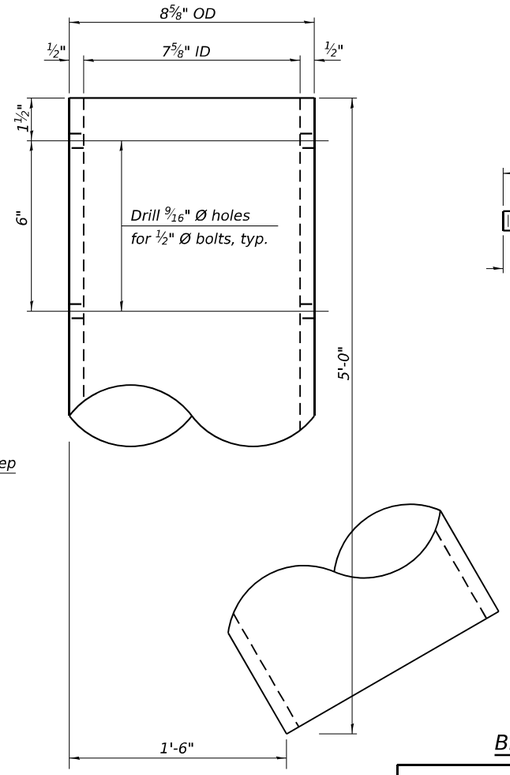


SECTION A-A

See sheets S-20, S-24, & S-28 for scupper location relative to parapet.

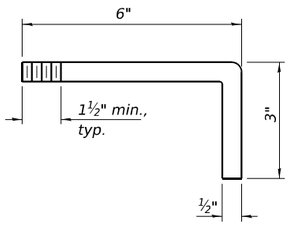


SECTION B-B



DOWNSPOUT

In Span 3 only
Bent to direct water away from steel members



ANCHOR ROD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	30

DS-11 1-1-2020

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

COLLINS ENGINEERS INC

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS–11
STRUCTURE NO. 016–0570

SCALE: | SHEET S-45 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	86
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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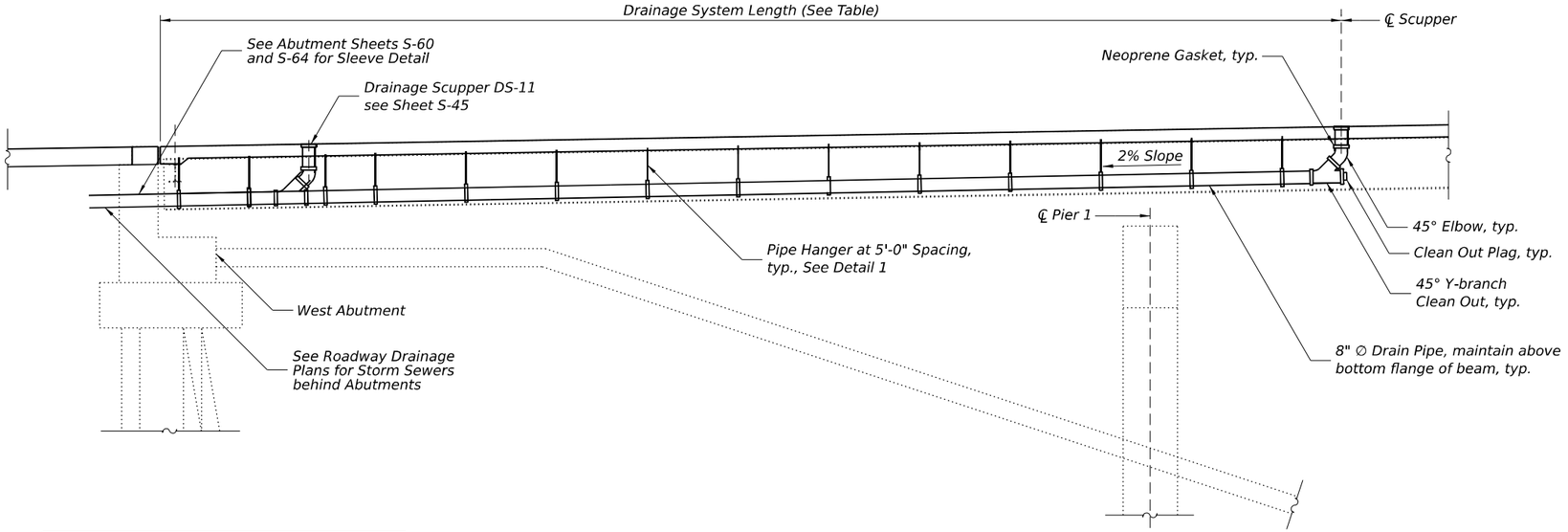
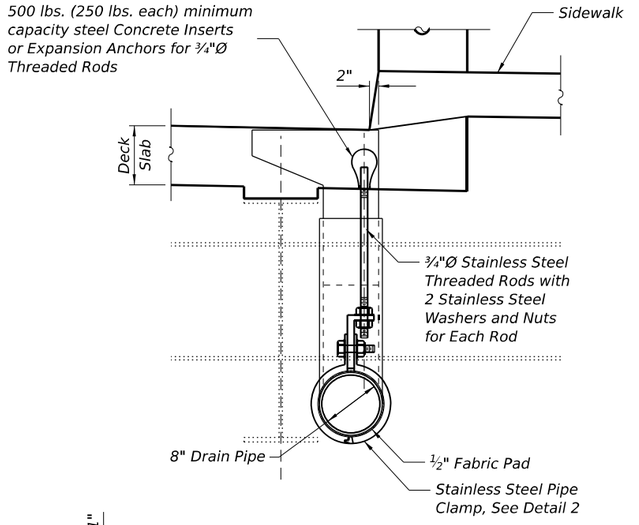


Location	# Scuppers	Length
Spans 1 and 2 South	2	80'-0"
Spans 1 and 2 North	3	85'-6"
Spans 4 and 5 South	2	75'-2"
Spans 4 and 5 North	3	84'-8"

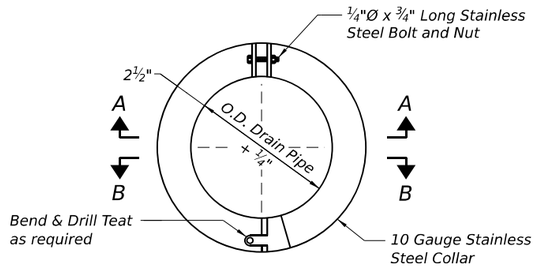
DRAINAGE SYSTEM ELEVATION

South side, Spans 1 and 2 shown
Other locations similar. See table for
Number of Scuppers and Drainage System lengths



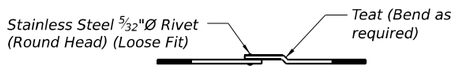
DETAIL 1

SECTION A-A



PLAN

Looking Down



SECTION B-B

DETAIL 2

BILL OF MATERIAL

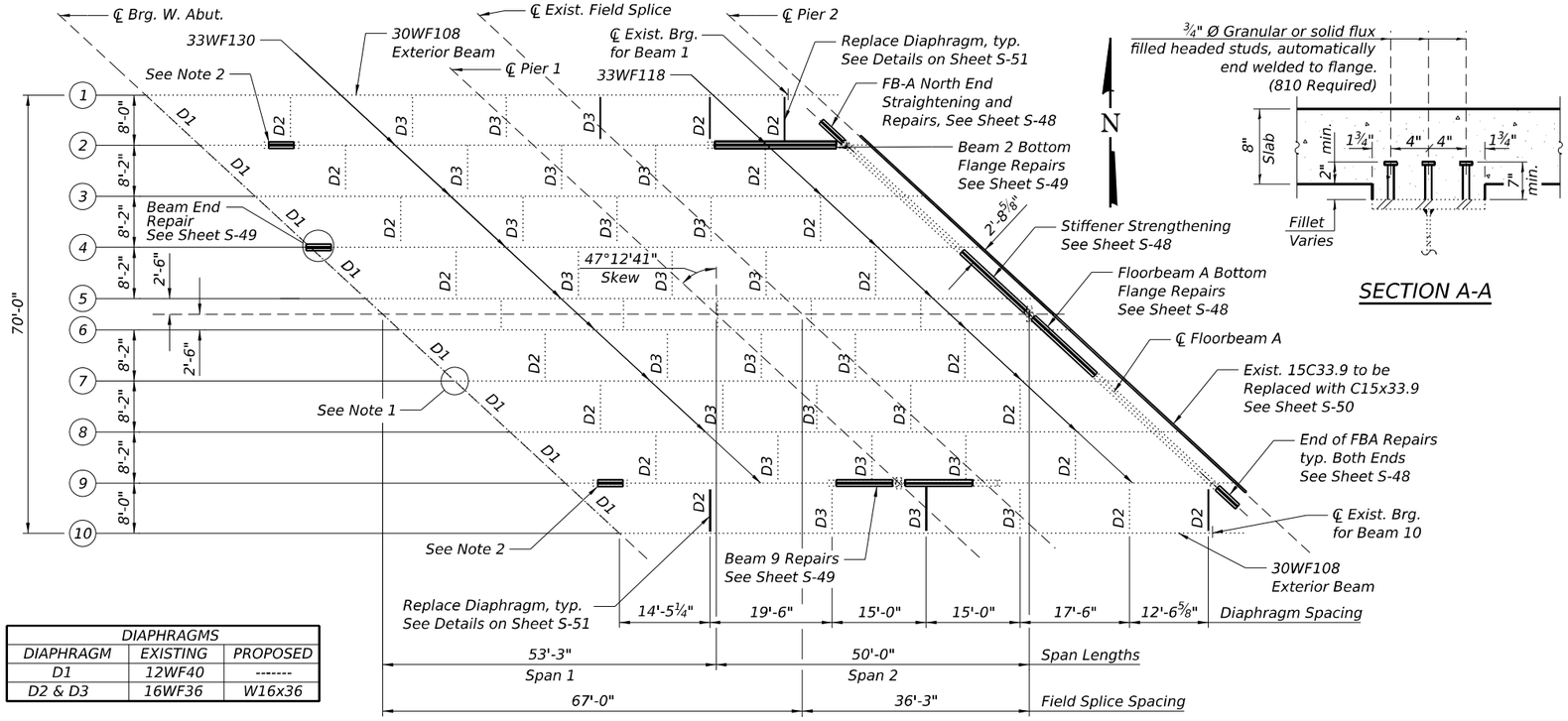
Item	Unit	Total
Drainage System for Structures	L Sum	1

MODEL: Default
FILE NAME: I:\1\2504\IDOT\4.83 over Calsag\CADD\CADD_Sheets\Structural\N016057O-62H52-041-DrainSysDet_1.dgn

COLLINS ENGINEERS INC.

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE SYSTEM DETAILS I STRUCTURE NO. 016–0570
	DRAWN - DR	REVISED -		
PLOT SCALE =	CHECKED - EKM	REVISED -		
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -		SCALE: SHEET S-46 OF S-70 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	87
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



SPANS 1 & 2 FRAMING PLAN

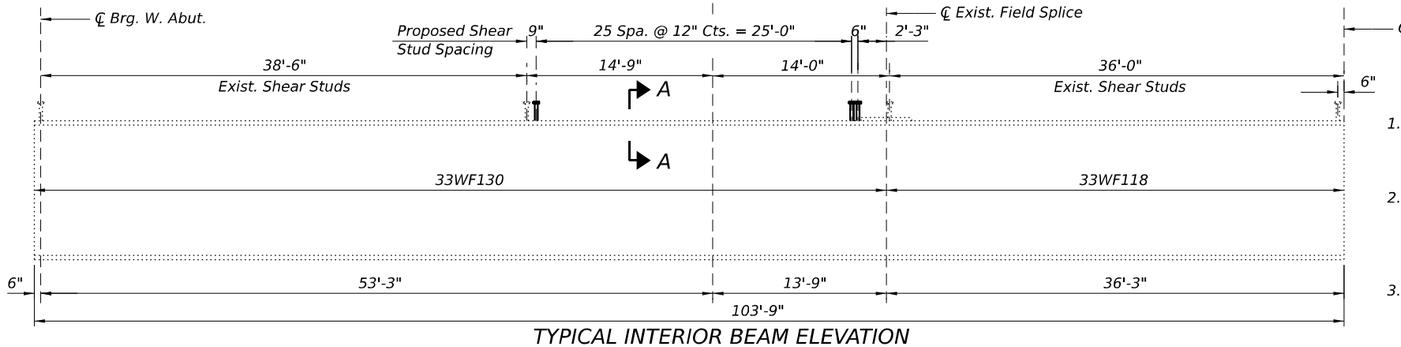
SECTION A-A

DIAPHRAGMS		
DIAPHRAGM	EXISTING	PROPOSED
D1	12WF40	-------
D2 & D3	16WF36	W16x36

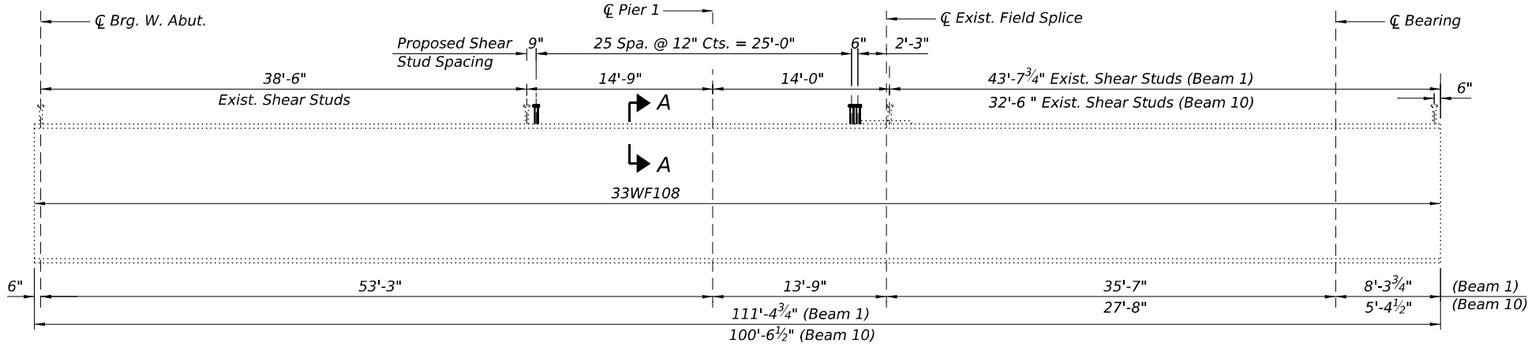
BEAM MOMENT TABLE							
		0.4 Sp. 1		Pier 1		0.6 Sp. 2	
		30WF108 EXTERIOR	33WF130 INTERIOR	30WF108 EXTERIOR	33WF130 INTERIOR	30WF108 EXTERIOR	33WF118 INTERIOR
Is	(in^4)	4,461	6,699	4,461	6,699	4,461	5,887
Ic(n)	(in^4)	27,566	18,925	27,924	19,111	27,566	17,179
Ic(3n)	(in^4)	19,878	14,805	20,936	15,313	19,878	13,527
Ic(cr)	(in^4)	-	-	10,666	9,900	-	-
Ss	(in^3)	299	405	299	405	299	358
Sc(n)	(in^3)	732	602	736	604	733	543
Sc(3n)	(in^3)	658	556	672	563	658	502
Sc(cr)	(in^3)	-	-	510	485	-	-
℘	(k/')	1.05	1.04	1.05	1.04	1.05	1.04
M℘	('k)	218	215	-353	-356	176	170
s℘	(k/")	0.12	0.36	0.12	0.36	0.12	0.36
Ms℘	('k)	23	73	-38	-120	19	59
M℄	('k)	152	405	-188	-295	136	371
MI	('k)	-	114	-	-83.0	-	106
⅝ [M℄ + I]	('k)	253	865	-313	-629	226	794
* Ma	('k)	644	1,499	-916	-1,437	548	1,330
Mu	('k)	-	2,603	-	-2,209	-	2,371
fs℘ non-comp	(ksi)	8.75	6.37	-14.18	-10.55	7.08	5.70
fs℘ (comp)	(ksi)	0.43	1.57	-0.89	-2.98	0.34	1.40
** fs ⅝ [M℄+ MI]	(ksi)	4.15	17.25	-7.37	-15.57	3.70	17.55
fs (Overload)	(ksi)	13.33	25.19	-22.45	-29.10	11.13	24.65
fs (Total)	(ksi)	17.33	-	-29.19	-	14.47	-
VR	(k)	4.06	23.7	18.56	60.0	4.81	19.6

BEAM REACTION TABLE							
		West Abut.		Pier 1		Pier 2	
		30WF108 EXTERIOR	33WF130 INTERIOR	30WF108 EXTERIOR	33WF130 INTERIOR	30WF108 EXTERIOR	33WF118 INTERIOR
R℘	(k)	26.5	27.3	82.1	85.9	23.9	23.8
R℄	(k)	13.1	47.4	36.4	51.4	12.4	46.6
RI	(k)	-	13.3	-	14.4	-	13.1
R Total	(k)	39.6	88.0	118.5	151.7	36.3	83.5

* Compact section
** Braced non-compact and partially braced section



TYPICAL INTERIOR BEAM ELEVATION



TYPICAL EXTERIOR BEAM ELEVATION

NOTES:

1. Remove soot covering beam ends at West Abutment from fire. Cost is included with Cleaning and Painting.
2. Repair bottom flange of Beams 2 and 9 at existing floor drain locations spaced approximately at 8'-1" center to center. See Sheet S-49 for details.
3. For Floorbeam A Moment and Reaction tables see Sheet S-51.

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing fs (Total and Overload) due to non-composite dead loads ($in.^4$ and $in.^3$).

Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs (Total and Overload) due to short-term composite live loads ($in.^4$ and $in.^3$).

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs (Total and Overload) due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).

Ic(cr), Sc(cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing fs (Total and Overload) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).

℘: Un-factored non-composite dead load (kips/ft.).

M℘: Un-factored moment due to non-composite dead load (kip-ft.).

s℘: Un-factored long-term composite (superimposed) dead load (kips/ft.)

Ms℘: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

M℄: Un-factored live load moment (kip-ft.).

MI: Un-factored moment due to impact (kip-ft.).

Ma: Factored design moment (kip-ft.).
$1.3\ [M℘ + Ms℘ + \frac{5}{3}(M℄ + MI)]$

Mu: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

fs (Overload): Sum of stresses as computed from the moments below (ksi).
$M℘ + Ms℘ + \frac{5}{3}(M℄ + MI)$

fs (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\ [M℘ + Ms℘ + \frac{5}{3}(M℄ + MI)]$

VR: Maximum ℄ + impact shear range within the composite portion of the span for stud shear connector design (kips).

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\016057062H52-043-Framing_Spans 1 & 2.dgn

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USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 1 & 2 AND DETAILS STRUCTURE NO. 016–0570
	DRAWN - DR	REVISED -		
PLOT SCALE =	CHECKED - EKM	REVISED -		SCALE: SHEET S-47 OF S-70 SHEETS STA. TO STA.
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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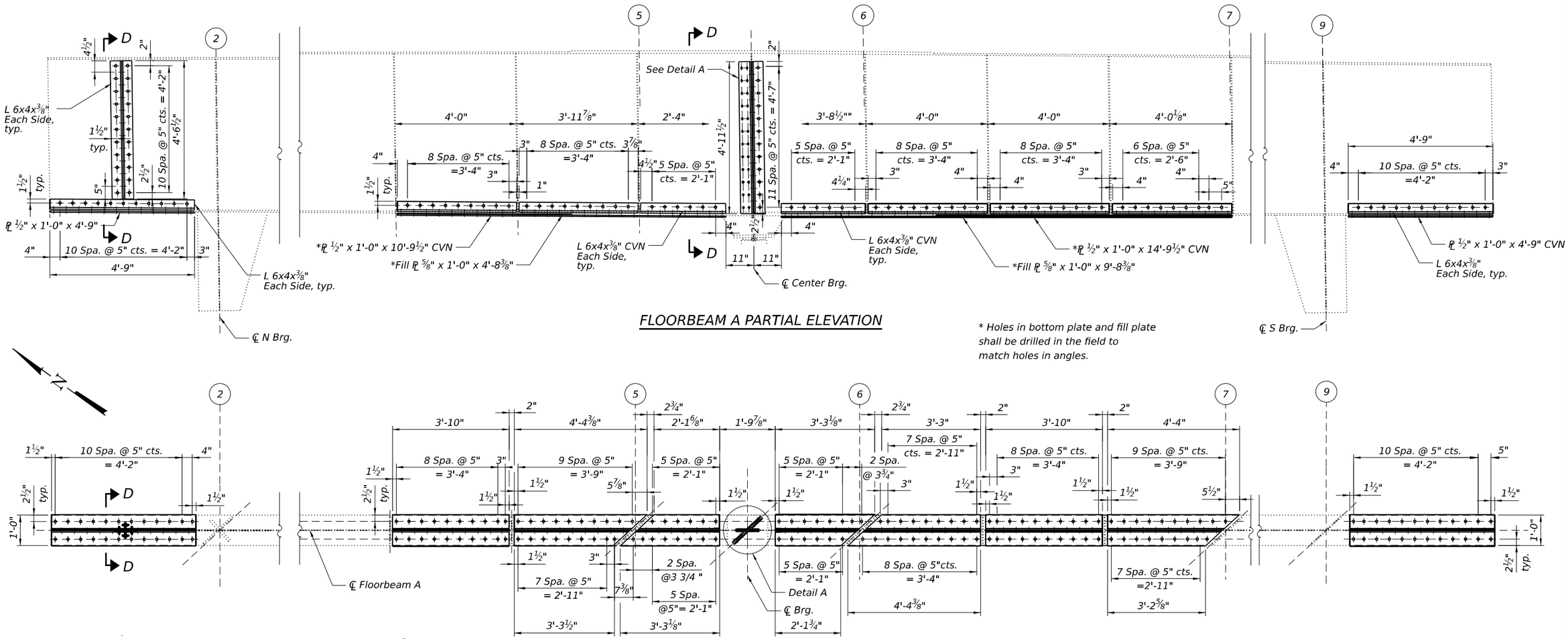
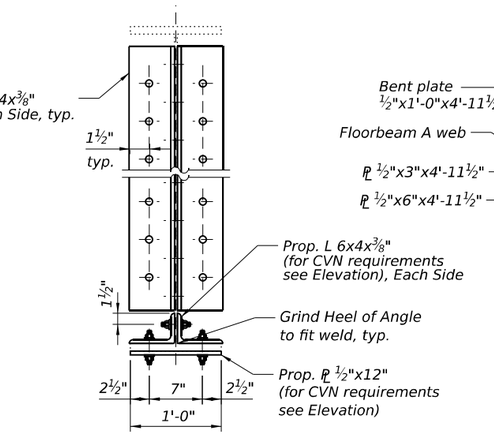
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



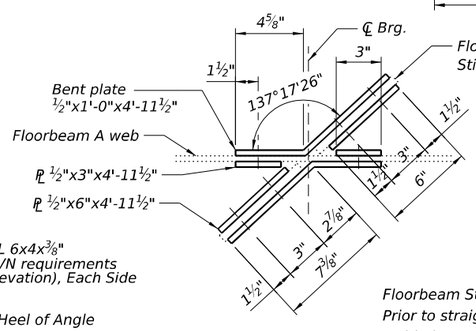
FLOORBEAM A PARTIAL ELEVATION

* Holes in bottom plate and fill plate shall be drilled in the field to match holes in angles.

FLOORBEAM A PLAN



SECTION D-D



DETAIL A

Contractor to use end of truss to support jacks and winches to push the web to plumb position. Use timber bracing as required to protect existing steel.

Floorbeam Straightening Note:
Prior to straightening, Contractor shall inspect welded connections between web and flanges. After straightening operation is completed, welded connections between web and flanges shall be inspected and welds should be nondestructively tested using magnetic particle or dye penetration testing at locations where visible evidence of damage exists. If cracks are found caused by the straightening method, further retrofitting of the member will be as directed by the Engineer at the Contractor's expense.

Floorbeam A to be straightened using mechanical methods only. After straightening operation is completed, install vertical angles as shown on the Plan and Elevation

FLOORBEAM A NORTH END STAIGHTENING

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	2,860
Straighten Bent Member	Each	1

Notes:

1. *All dimensions shall be field verified prior to ordering any material.*
2. *Cost of removing existing structural steel elements for repairs shall be included in in Structural Steel Repairs.*
3. *Cost of furnishing and erecting structural steel elements for repairs shall be included in in Structural Steel Repairs.*
4. *Cost of removing rivets or welds and replacing with HS bolts for repairs shall be included in Structural Steel Repairs.*
5. *Holes in existing steel shall be field reamed to obtain diameter required for bolt installation, using holes in new elements as a template. Cost included with Structural Steel Repair.*
6. *Load carrying components designated "CVN" shall confirm to the Impact Testing Requirement, Zone 2.*
7. *All connections shown on this sheet are primary connections for cleaning and painting.*

MODEL: Default
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL REPAIRS SPANS 1 & 2
STRUCTURE NO. 016–0570

SCALE: | SHEET S-48 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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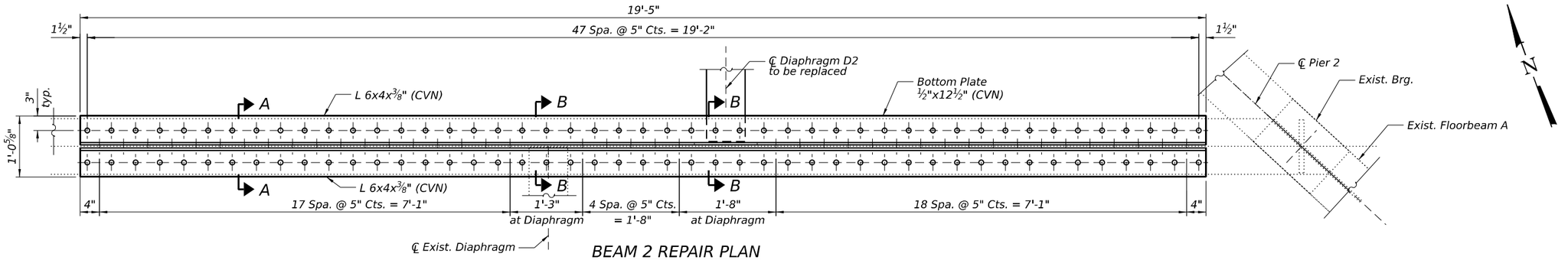
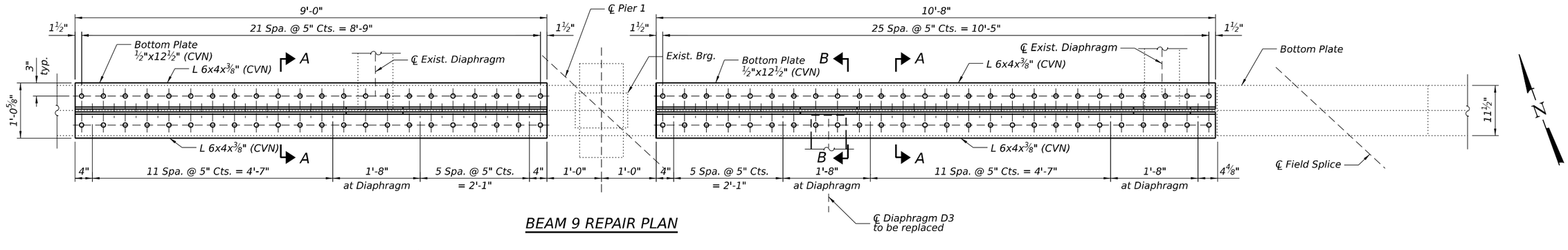
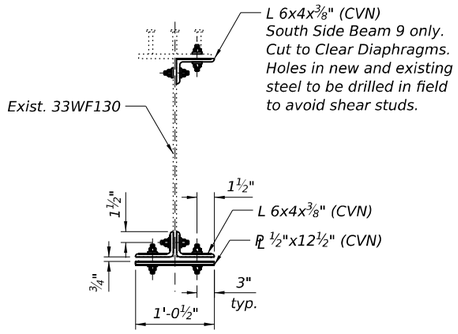
	ILLINOIS FED. AID PROJECT			



BEAM 2 REPAIR PLAN

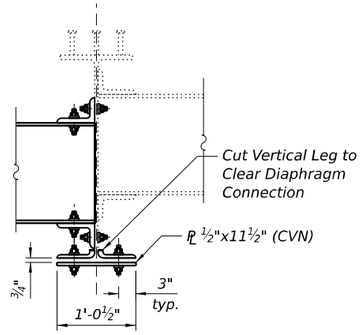


BEAM 9 REPAIR PLAN



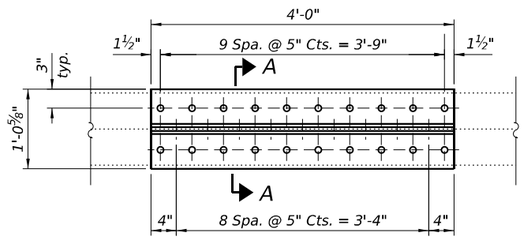
SECTION A-A

Grind heel of angle to fit radius, typ.



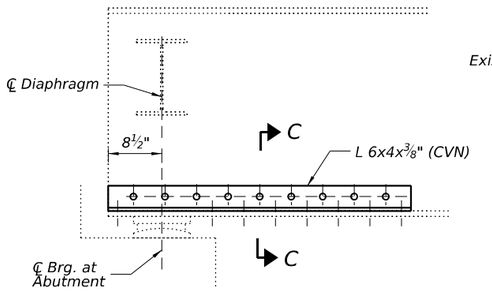
SECTION B-B

At Diaphragm

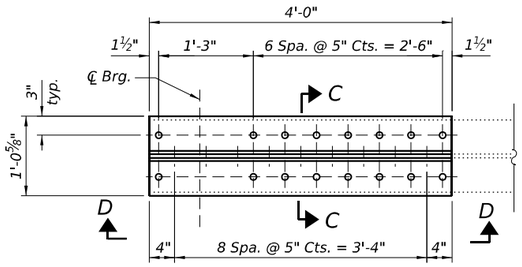


TYPICAL REPAIR AT EXISTING FLOOR DRAIN

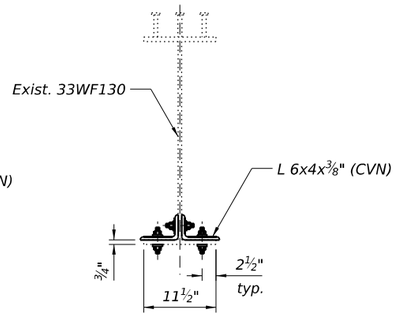
Spans 1 & 2 - 20 Locations
Span 3 - 89 Locations
Spans 4 & 5 - 18 Locations
Excluding Locations of Stringer Repairs



BEAM 4 END REPAIR ELEVATION



BEAM 4 END REPAIR PLAN



SECTION C-C

Grind heel of angle to fit radius, typ.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	29,530

Includes repairs at existing floor drains in all spans.

Notes:

1. *All dimensions shall be field verified prior to ordering any material.*
2. *Cost of removing existing structural steel elements for repairs shall be included in in Structural Steel Repairs.*
3. *Cost of furnishing and erecting structural steel elements for repairs shall be included in in Structural Steel Repairs.*
4. *Cost of removing rivets or welds and replacing with HS bolts for repairs shall be included in in Structural Steel Repairs.*
5. *Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min. and 5½" max. Edge distance shall be 1½" min.*
6. *Load carrying components designated "CVN" shall confirm to the Impact Testing Requirement, Zone 2.*
7. *All connections shown on this sheet are primary connections for cleaning and painting.*

MODEL: Default
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL REPAIRS SPANS 1 & 2
STRUCTURE NO. 016–0570

SCALE: | SHEET S-49 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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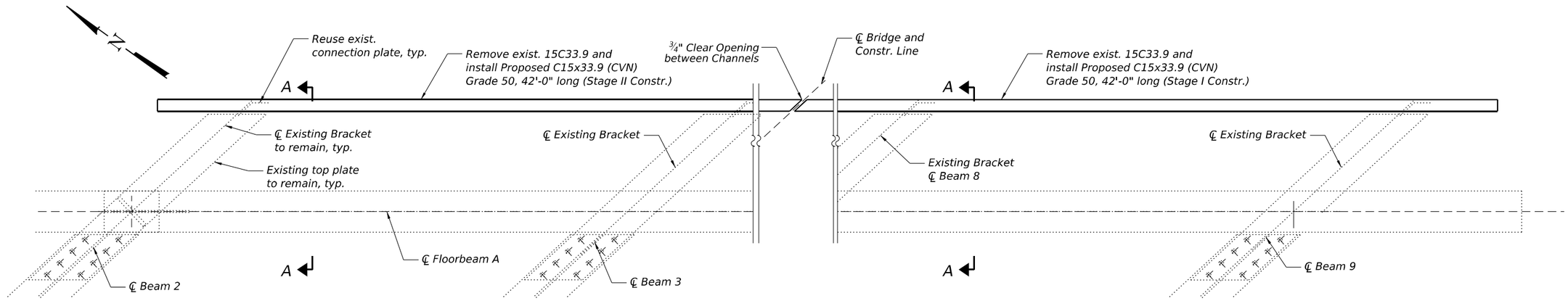
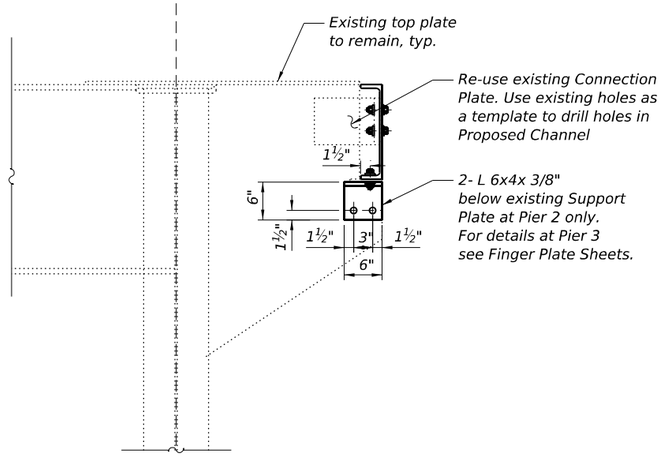
	ILLINOIS FED. AID PROJECT			



CHANNEL C15x33.9 PLAN

At Pier 2 shown
At Pier 3 similar, except as noted on Section A-A



SECTION A-A

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	6,020
Structural Steel Removal	Pound	5,870

Quantities represent total for Channel replacement at Pier 2 and at Pier 3

Notes:

1. *All dimensions shall be field verified prior to ordering any material.*
2. *Cost of removing existing structural steel elements shall be included in Structural Steel Removal.*
3. *Cost of removing rivets or welds and replacing with HS bolts shall be included in in Structural Steel Removal.*
4. *Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min. and 5½" max. Edge distance shall be 1½" min.*
5. *Holes in new channel will be field drilled to match locations of existing bolts and holes in new angles. Cost included with Furnishing and Erecting Structural Steel.*
6. *Load carrying components designated "CVN" shall confirm to the Impact Testing Requirement, Zone 2.*
7. *Proposed Channels shall be Grade 50.*
8. *All connections shown on this sheet are primary connections for cleaning and painting.*

MODEL: Default
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PLOT SCALE =	CHECKED - EKM	REVISED -			
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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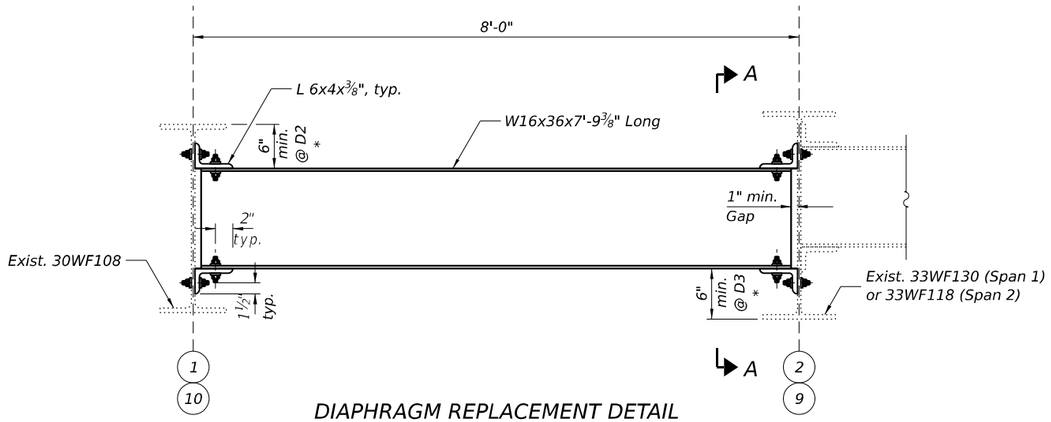
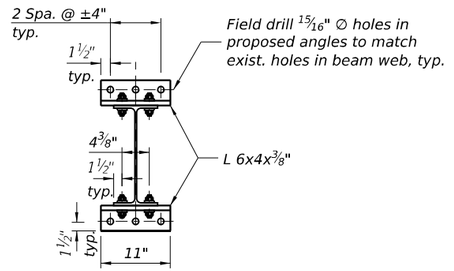
	ILLINOIS	FED. AID PROJECT		

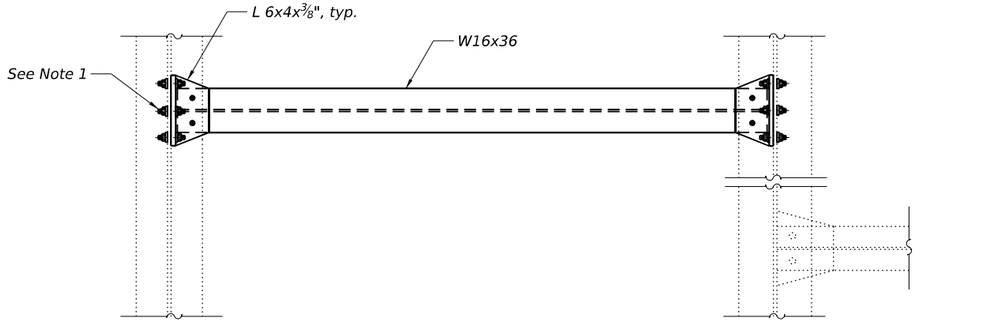


DIAPHRAGM REPLACEMENT DETAIL

* Match existing dimensions.



SECTION A-A



DIAPHRAGM REPLACEMENT PLAN

6 Locations, see plan on Sheet S-47

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	2,170
Structural Steel Removal	Pound	2,170

Notes:

1. *All dimensions shall be field verified prior to ordering any material.*
2. *Cost of removing existing structural steel elements shall be included in Structural Steel Removal.*
3. *Cost of removing rivets or welds and replacing with HS bolts shall be included in Structural Steel Removal.*
5. *Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min. and 5½" max. Edge distance shall be 1½" min.*
6. *Diaphragm connection holes shall be 15/16"∅ for ¾"∅ bolts. Two hardened washers shall be required at diaphragm connections. Cost included with Furnishing and Erecting Structural Steel.*
7. *All connections shown on this sheet are primary connections for cleaning and painting.*

FLOORBEAM A MOMENT TABLE				
		0.4 Sp. 1	Center Bearing	0.6 Sp. 2
Is	(in⁴)	21,510	34,073	21,588
Ic(n)	(in⁴)	-	-	
Ic(3n)	(in⁴)	-	-	
Ss	(in³)	689	1,025	690
Sc(n)	(in³)	-	-	-
Sc(3n)	(in³)	-	-	-
Z	(in³)	-	-	-
ℓ_D	(k/')	-	-	-
M_{ℓ_D}	('k)	238	-548	249
s_{ℓ_D}	(k/')	-	-	-
$M_{s_{\ell_D}}$	('k)	-	-	-
M_{ℓ_L}	('k)	460	-531	461
MI/M	('k)	138	-159	138
$\frac{5}{3}$ [M_{ℓ_L} + I]	('k)	996	-1,151	999
Ma	('k)	1,605	-2,207	1,622
* Mu	('k)	-	-	-
$f_{s_{\ell_D}}$ non–comp	(ksi)	4.15	-6.42	4.33
$f_{s_{\ell_D}}$ (comp)	(ksi)	-	-	-
$f_{s_{\frac{5}{3}}}$ [M_{ℓ_L} + M I]	(ksi)	17.4	-13.5	17.4
fs (Overload)	(ksi)	21.5	-19.9	21.7
** fs (Total)	(ksi)	28.0	-25.8	28.2
VR	(k)	25.2	97.2	25.3

FLOORBEAM A REACTION TABLE				
		North Bearing	Center Bearing	South Bearing
R_{ℓ_D}	(k)	64.5	131.6	64.9
R_{ℓ_L}	(k)	63.0	126.8	63.1
R_I	(k)	18.9	38.0	18.9
R_{Total}	(k)	146.4	296.4	146.9

* *Compact section*
** *Braced non-compact and partially braced section*

Is, Ss: *Non-composite moment of inertia and section modulus of the steel section used for computing fs(Total and Overload) due to non-composite dead loads (in.⁴ and in.³).*
Ic(n), Sc(n): *Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs(Total and Overload) due to short-term composite live loads (in.⁴ and in.³).*
Ic(3n), Sc(3n): *Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total and Overload) due to long-term composite (superimposed) dead loads (in.⁴ and in.³).*
Z: *Plastic Section Modulus of the steel section in non-composite areas (in.³).*
ℓ_D: *Un-factored non-composite dead load (kips/ft.).*
M_{ℓ_D}: *Un-factored moment due to non-composite dead load (kip-ft.).*
s_{ℓ_D}: *Un-factored long-term composite (superimposed) dead load (kips/ft.)*
$M_{s_{\ell_D}}$: *Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).*
M_{ℓ_L}: *Un-factored live load moment (kip-ft.).*
MI: *Un-factored moment due to impact (kip-ft.).*
Ma: *Factored design moment (kip-ft.).*
1.3 [M_{ℓ_D} + Ms_{ℓ_D} + $\frac{5}{3}$(M_{ℓ_L} + MI)]
Mu: *Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).*
fs (Overload): *Sum of stresses as computed from the moments below (ksi).*
M_{ℓ_D} + Ms_{ℓ_D} + $\frac{5}{3}$(M_{ℓ_L} + MI)
fs (Total): *Sum of stresses as computed from the moments below on non-compact section (ksi).*
1.3 [M_{ℓ_D} + Ms_{ℓ_D} + $\frac{5}{3}$(M_{ℓ_L} + MI)]
VR: *Maximum ℓ_L + impact shear range within the composite portion of the span for stud shear connector design (kips).*

MODEL: Default
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PLOT DATE = 4/25/2023 | DATE - 04/25/2023 | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL REPAIRS SPANS 1 & 2
STRUCTURE NO. 016–0570

SCALE: | SHEET S-51 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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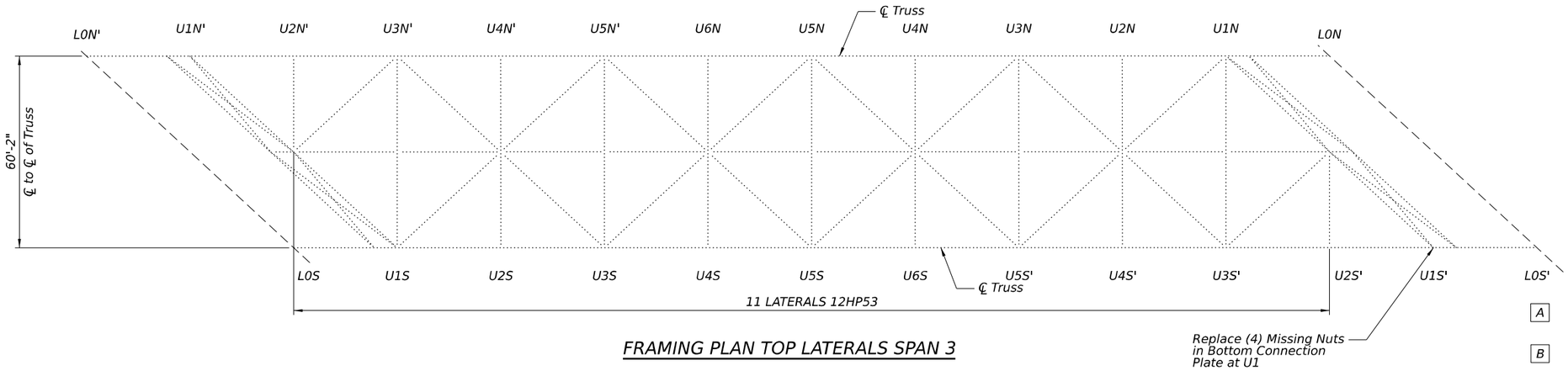
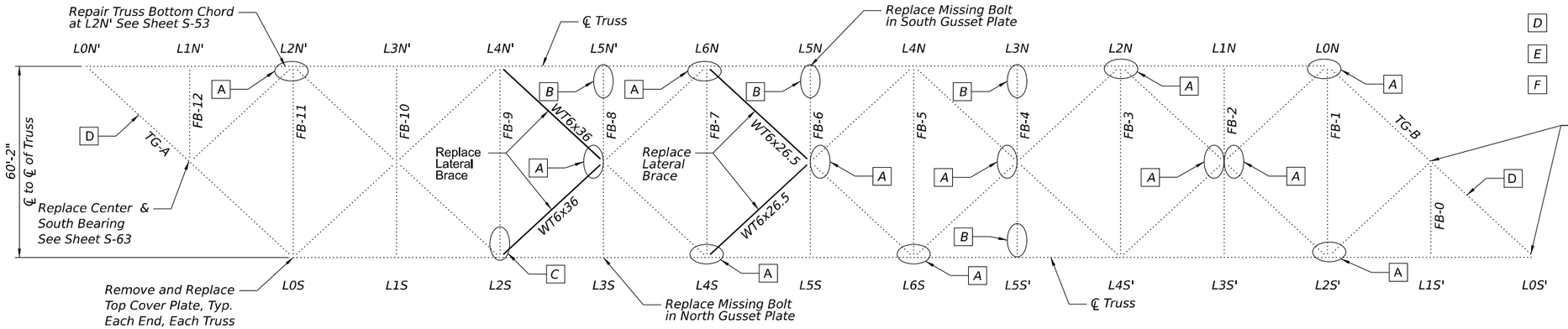
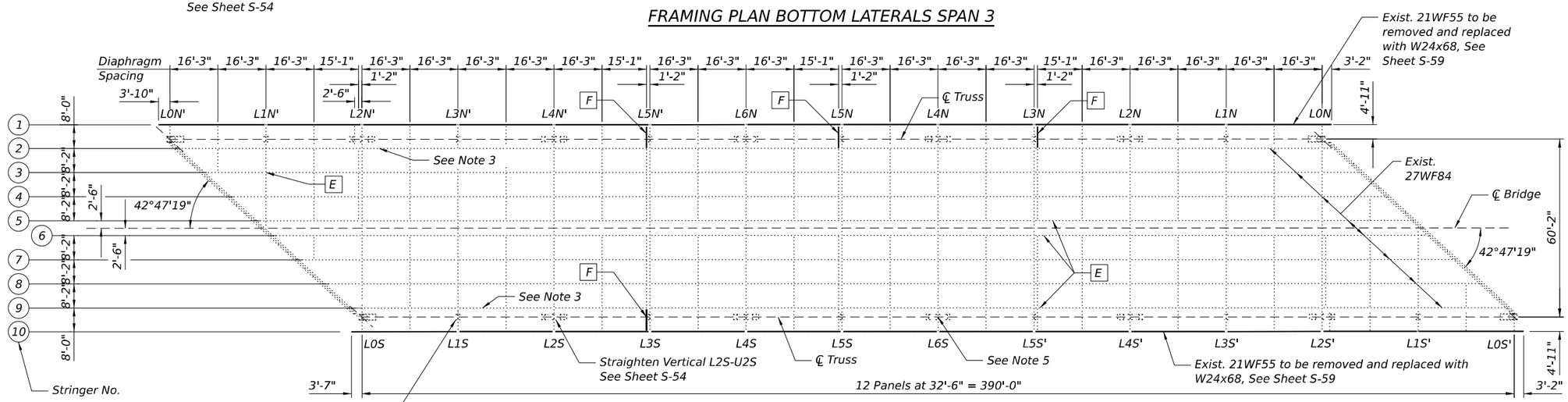
		ILLINOIS	FED. AID PROJECT	



FRAMING PLAN TOP LATERALS SPAN 3



FRAMING PLAN BOTTOM LATERALS SPAN 3



FRAMING PLAN SPAN 3

- A — Lateral bracing connection replacement. See Sheet S-53.
- B — Floorbeam repair. See Sheets S-54 and S-55.
- C — Floorbeam repair with lateral bracing connection replacement. See Sheet S-55.
- D — Transfer Girder repair. See Sheets S-56 and S-57.
- E — Stringer repair. See Sheet S-58.
- F — Diaphragm replacement. See Sheet S-59.

Notes:

1. The Contractor shall notify the Resident Engineer and District 1 once sidewalk surrounding truss members have been removed in order to measure any section loss encountered in areas currently not accessible due to concrete sidewalk.
2. The truss members that were embedded in concrete shall be cleaned and painted prior to new concrete deck placement.
3. Repair bottom flange of Beams 2 and 9 at existing drain floor drain locations spaced approximately at 8'-1" center to center. See Sheet S-49 for details.
4. Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Structural Steel Repair.
5. The tie rods at each Floorbeam and Sidewalk Bracket Connection shall be removed and replaced. See Sheet S-58.
6. Only one (1) lateral brace connection plate shall be replace on a floorbeam at a time.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPAN 3
STRUCTURE NO. 016–0570

SCALE: | SHEET S-52 OF S-70 SHEETS | STA. | TO STA.

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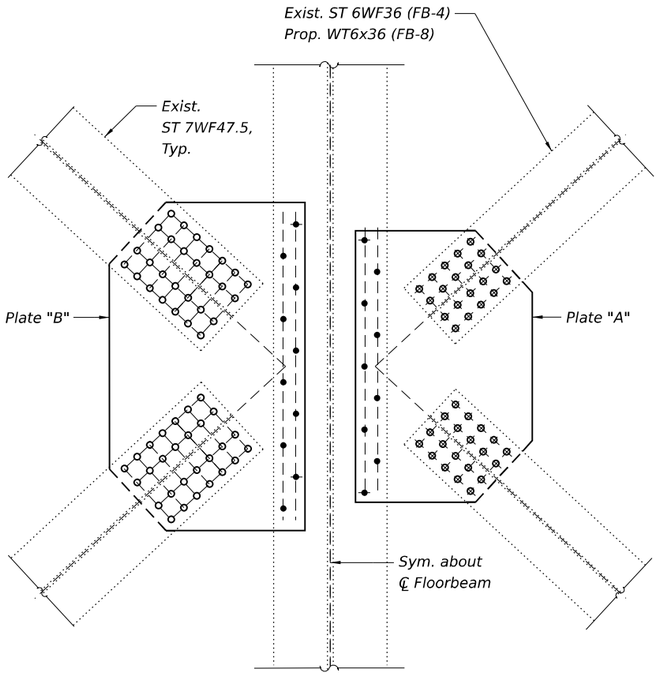
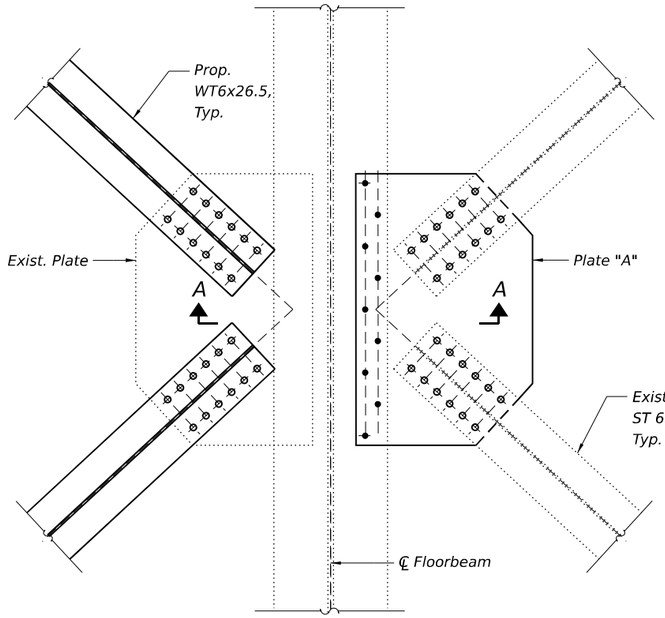


FB-2 REPAIRS FB-4 & FB-8 REPAIRS



FB-6 REPAIRS

LEGEND

- ● Use Holes in New Steel as Template
- ○ Use Holes in Existing Steel as Template
- ⁘ Existing Bolts to Remain

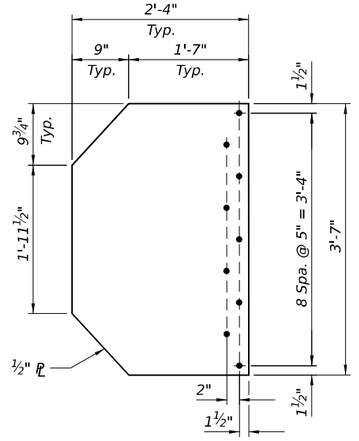


PLATE "A"
(3 Required)

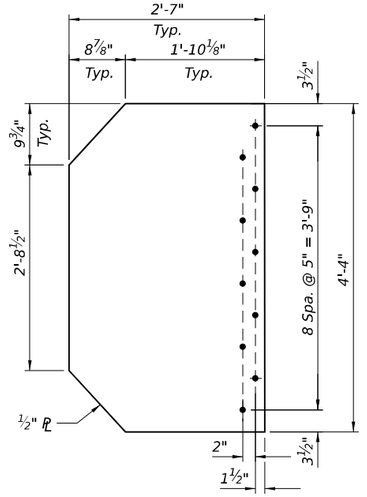
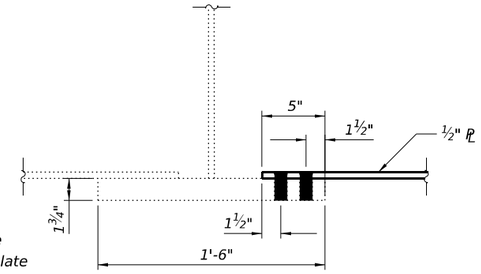


PLATE "B"
(2 Required)



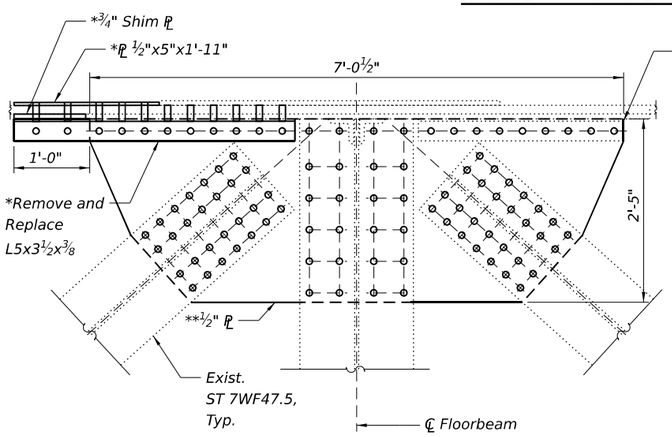
SECTION A-A
FB-6 Shown, FB-2, FB-4 &
FB-8 Connection Similar

Notes:

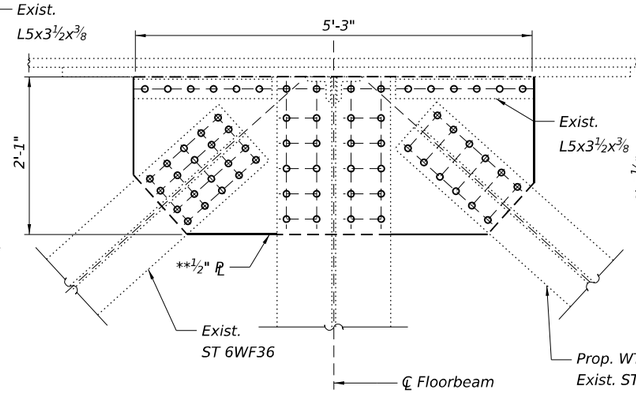
1. Fasteners shall be high strength bolts. Bolts ⅞"∅, open hole ¹⁵⁄₁₆"∅ unless otherwise noted.
2. All dimensions shall be field verified prior to ordering any material.
3. Cost of removing existing structural steel elements shall be included in Structural Steel Removal.
4. Cost of removing rivets or welds and replacing with HS bolts shall be included in in Structural Steel Removal.
5. Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min.and 5 ½" max. Edge distance shall be 1½" min.
6. Load carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.
7. All connections shown on this sheet are primary connections for cleaning and painting.

CONNECTION OF BOTTOM LATERAL TO FLOORBEAM REPAIRS

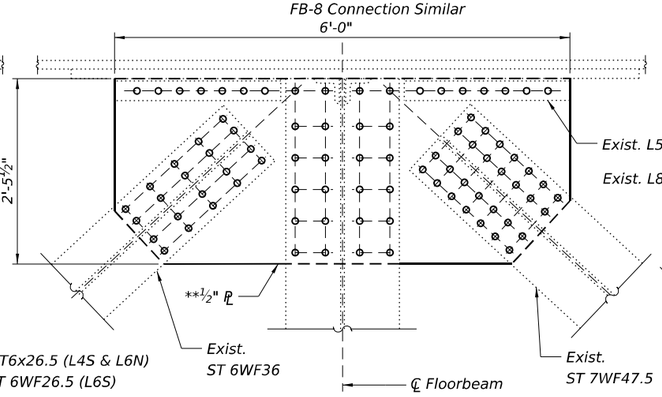
(Looking Down)



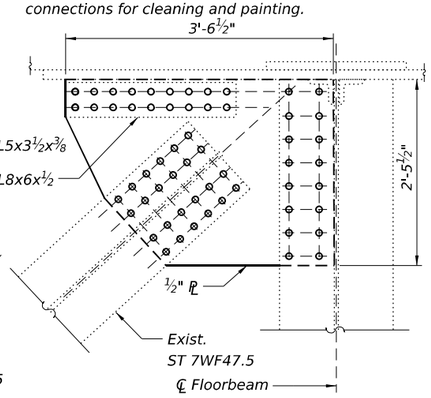
L2N' REPAIRS
L2S' Repairs Similar



L6N REPAIRS
L4S and L6S Repairs Similar



L2N REPAIRS
See Sheet S-55 for L2S Repairs



L0N REPAIRS

* Angle Replacement with extension and plates are only required on one side at Floorbeam 11 (L2N') to repair the bottom chord of the truss

**Match existing plate dimensions.

CONNECTION OF BOTTOM LATERAL TO TRUSS REPAIRS

(Looking Down)

BILL OF MATERIAL

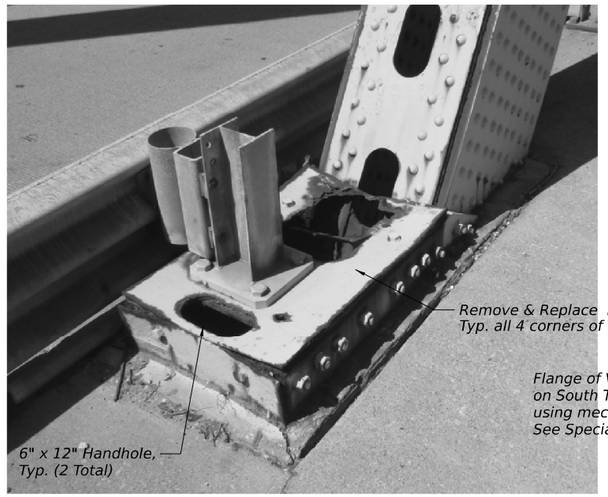
ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	8,560

MODEL: Default
FILE NAME: h12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\0160570-62H52-049-Steel_Repair_Span3_Lat_Brace.dgn

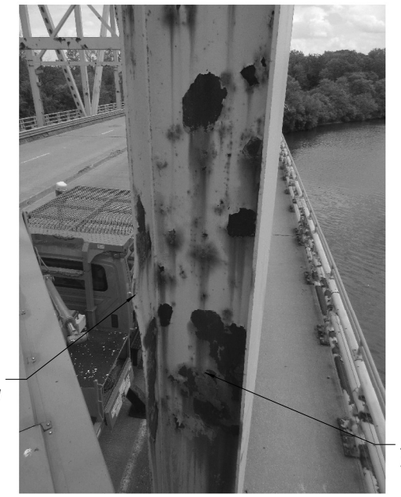
COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STEEL REPAIRS SPAN 3 LATERAL BRACING STRUCTURE NO. 016–0570
	DRAWN - DR	REVISED -		
PLOT SCALE =	CHECKED - EKM	REVISED -		SCALE: SHEET S-53 OF S-70 SHEETS STA. TO STA.
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	94
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

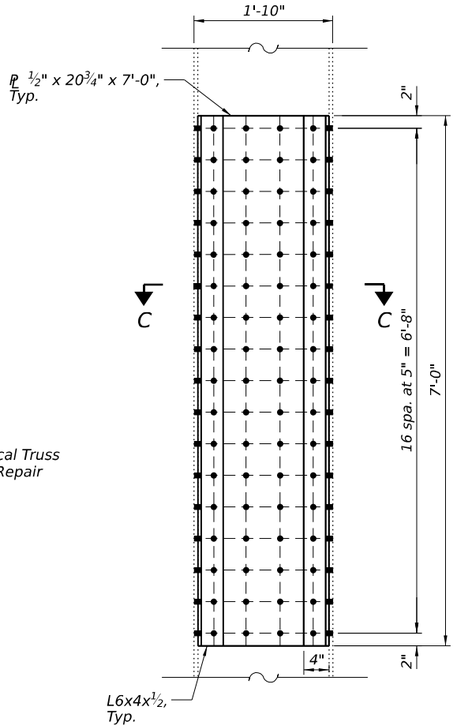


TRUSS REPAIR - PANEL POINT L0/L0'
(4 Total)



TRUSS REPAIR - MEMBER L2S-U2S

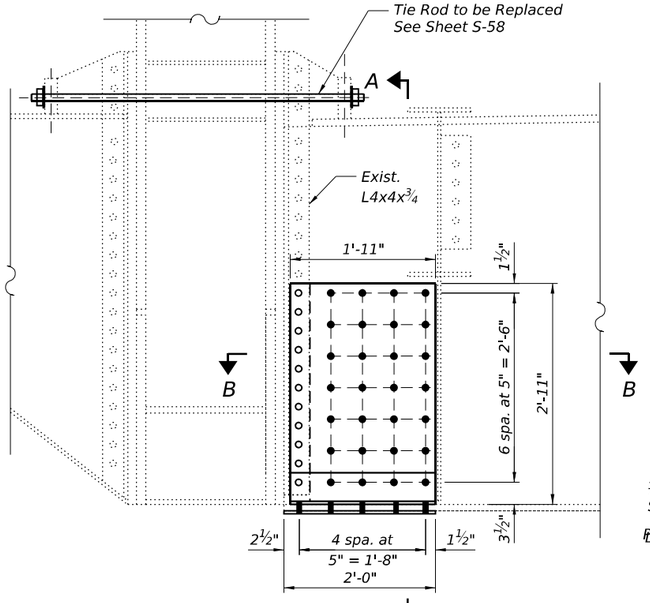
TRUSS REPAIR - MEMBER L1S-U1S



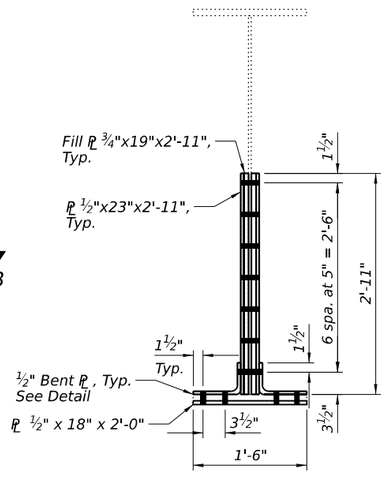
VERTICAL TRUSS REPAIR
(2 Locations)

LEGEND

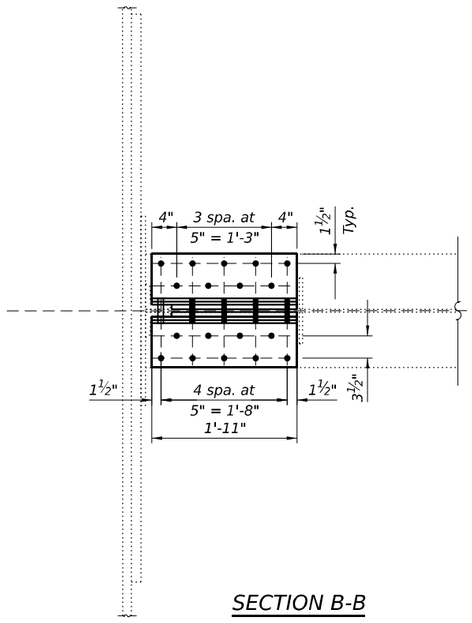
- Use Holes in New Steel as Template
- Use Holes in Existing Steel as Template
- Existing Bolts to Remain



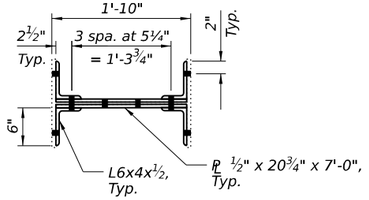
ELEVATION
North Truss Shown, Looking East
South Truss Similar



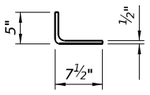
SECTION A-A



SECTION B-B



SECTION C-C



BENT PL

FLOORBEAM 4 REPAIRS

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	3,800
Straighten Bent Member	Each	1

Notes:

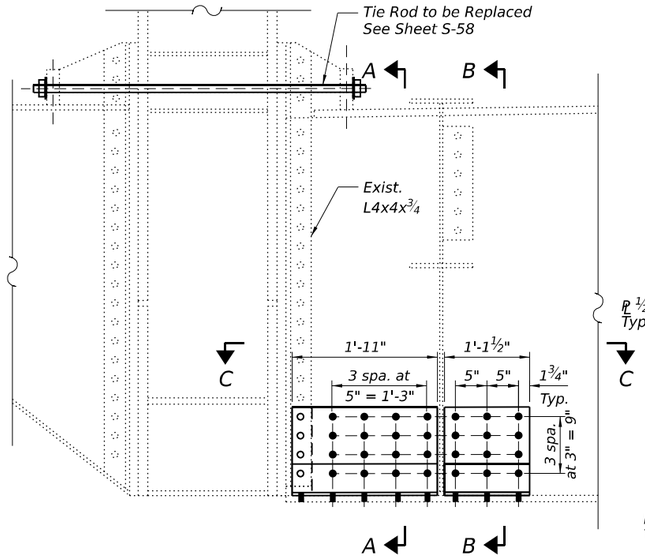
1. Fasteners shall be high strength bolts. Bolts 7/8"∅, open hole 15/16"∅ unless otherwise noted.
2. All dimensions shall be field verified prior to ordering any material.
3. Cost of removing existing structural steel elements shall be included in Structural Steel Removal.
4. Cost of removing rivets or welds and replacing with HS bolts shall be included in in Structural Steel Removal.
5. Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min.and 5 1/2" max. Edge distance shall be 1 1/2" min.
6. Load carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.
7. All connections shown on this sheet are primary connections for cleaning and painting.

MODEL: Default
FILE NAME: I:\12504 IDOT\L83 over CalSag\CADD\CADD_Sheets\Structural\R016057O-62H52-050-Steel_Repair_Span3_#B_W.dgn

COLLINS ENGINEERS INC.

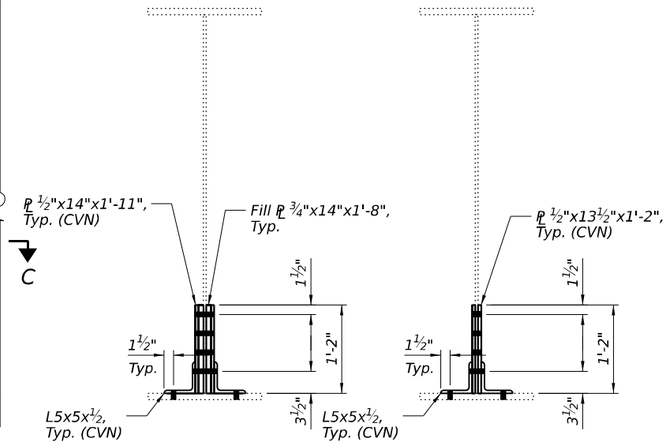
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STEEL REPAIRS SPAN 3 FB4 STRUCTURE NO. 016–0570	
	DRAWN - DR	REVISED -			
PLOT SCALE =	CHECKED - EKM	REVISED -			
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -		SCALE:	SHEET S-54 OF S-70 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	95
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



Elevation - FB 6 & FB 8

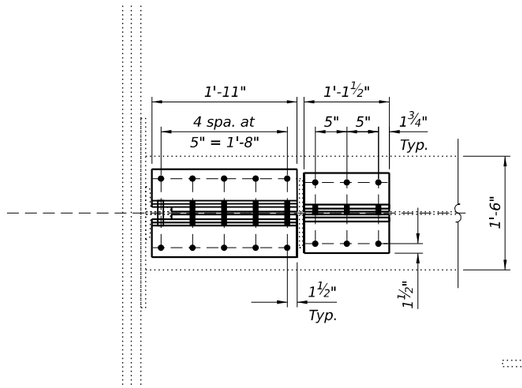
Looking East



SECTION A-A

SECTION B-B

Grind heel of angle as req'd, Typ.



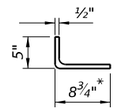
SECTION C-C

Notes:

1. Fasteners shall be high strength bolts. Bolts ⅞"∅, open hole 15⁄16"∅ unless otherwise noted.
2. All dimensions shall be field verified prior to ordering any material.
3. Cost of removing existing structural steel elements shall be included in Structural Steel Removal.
4. Cost of removing rivets or welds and replacing with HS bolts shall be included in in Structural Steel Removal.
5. Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min.and 5½" max. Edge distance shall be 1½" min.
6. Load carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.
7. All connections shown on this sheet are primary connections for cleaning and painting.

BILL OF MATERIAL

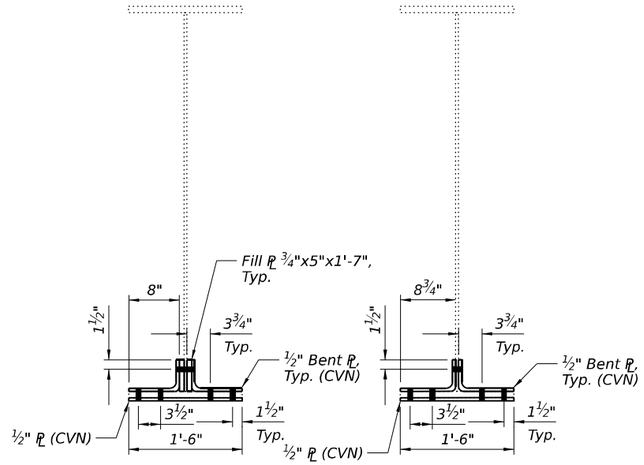
ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	2,370



BENT ℄

(4 req'd)

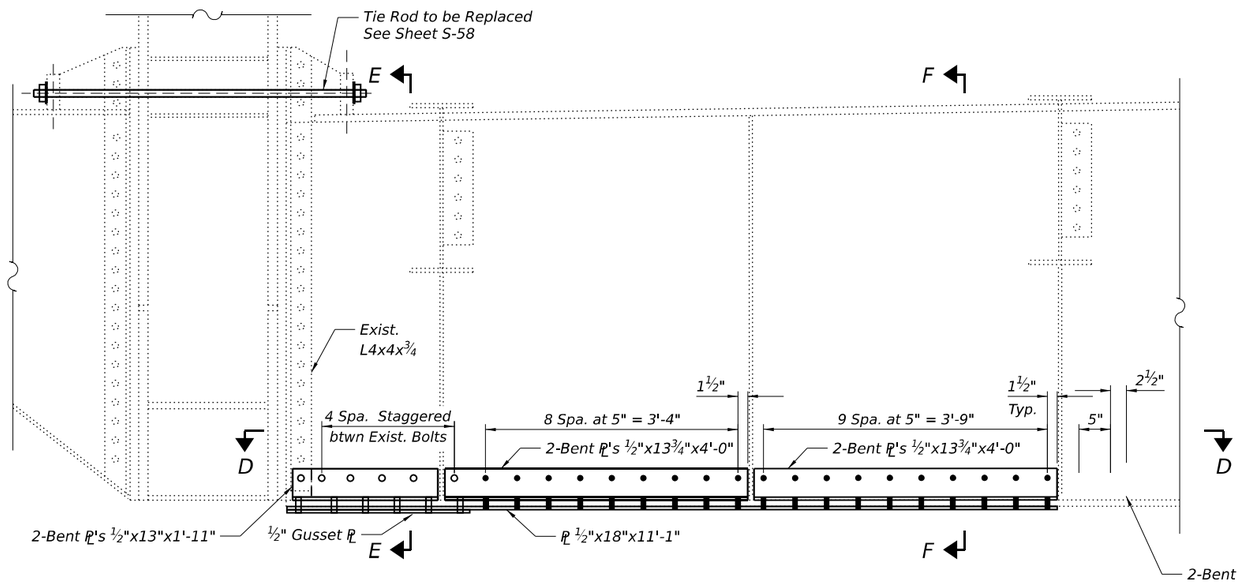
*8" for end Bent Plate with shims (2 req'd)



SECTION E-E

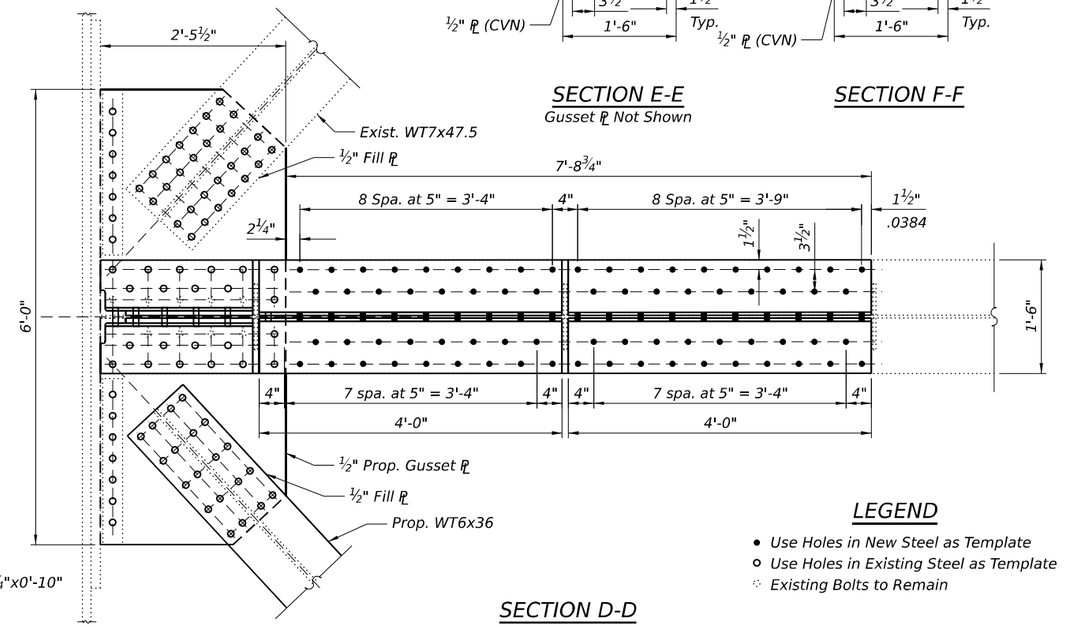
Gusset ℄ Not Shown

SECTION F-F



Elevation - FB 9

Looking West



SECTION D-D

LEGEND

- Use Holes in New Steel as Template
- Use Holes in Existing Steel as Template
- Existing Bolts to Remain

MODEL: Default
FILE NAME: i:\12504 IDOT-IL83 over Cal\Sag\C4DD\CADD_Sheets\Structure\B016059O-62H52-051-Steel_Repair_Span3_FB_VI_VIII_IX.dgn

COLLINS ENGINEERS INC

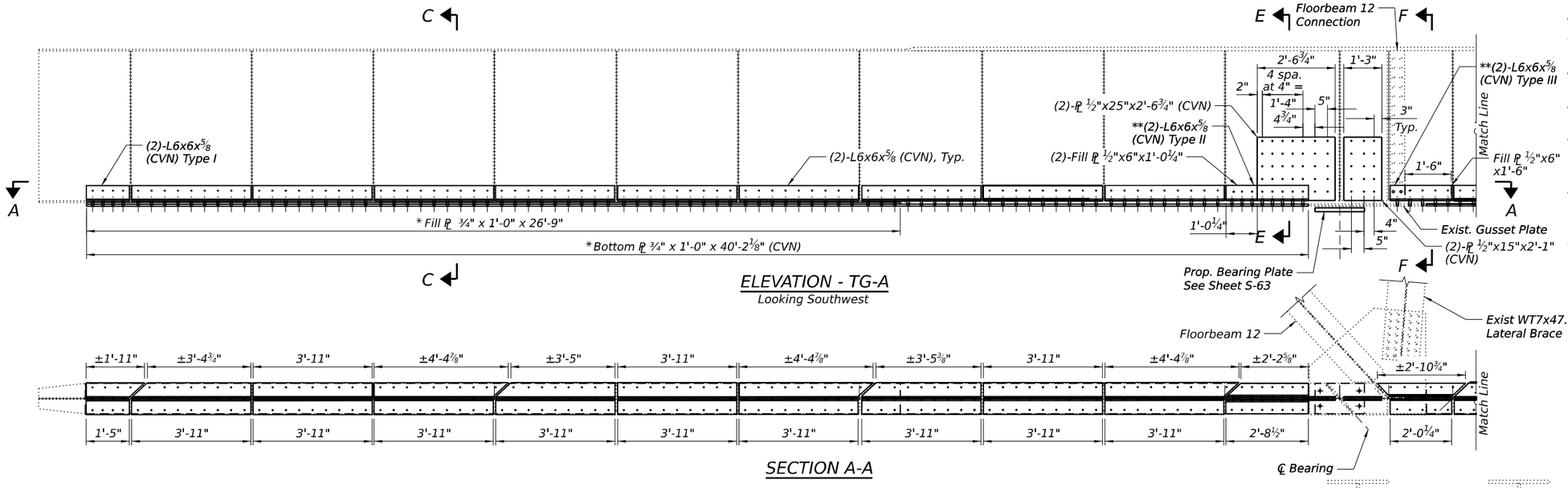
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -
	DRAWN - DR	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL REPAIRS SPAN 3 FB6, FB8 & FB9
STRUCTURE NO. 016–0570

SCALE: | SHEET S-55 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	96
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



Notes:

1. *Fasteners shall be high strength bolts. Bolts ⅞"∅, open hole 15⁄16"∅ unless otherwise noted.*
2. *All dimensions shall be field verified prior to ordering any material.*
3. *Cost of removing existing structural steel elements shall be included in Structural Steel Removal.*
4. *Cost of removing rivets or welds and replacing with HS bolts shall be included in in Structural Steel Removal.*
5. *Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min. and 5½" max. Edge distance shall be 1½" min.*
6. *Load carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.*
7. *All connections shown on this sheet are primary connections for cleaning and painting.*

* *Holes in Bottom Plate should be drilled in the field to match holes in angles.*

***Type II and Type III Angles shall be cut flush with Flange or use an equivalent Bent PL. Cut to fit skewed girder stiffener.*

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	10,190

LEGEND

- *Use Holes in New Steel as Template*
- *Use Holes in Existing Steel as Template*
- *Existing Bolts to Remain*

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\60570-42H52-092-Steel Repair Span 3 TG-A.dgn

COLLINS ENGINEERS INC

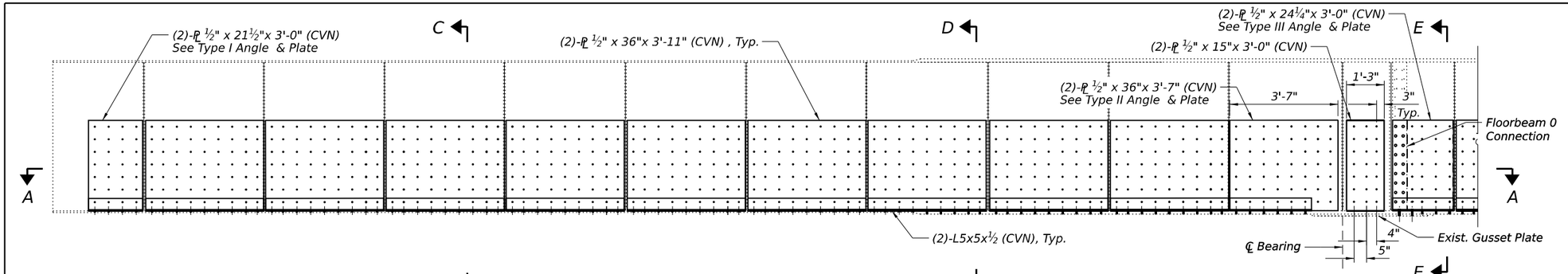
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

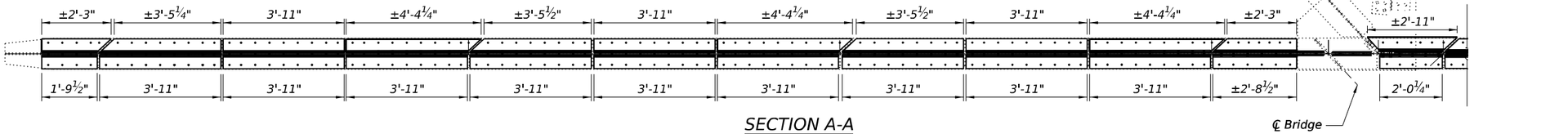
STEEL REPAIRS SPAN 3 TG–A
STRUCTURE NO. 016–0570

SCALE: | SHEET S-56 OF S-70 SHEETS | STA. | TO STA.

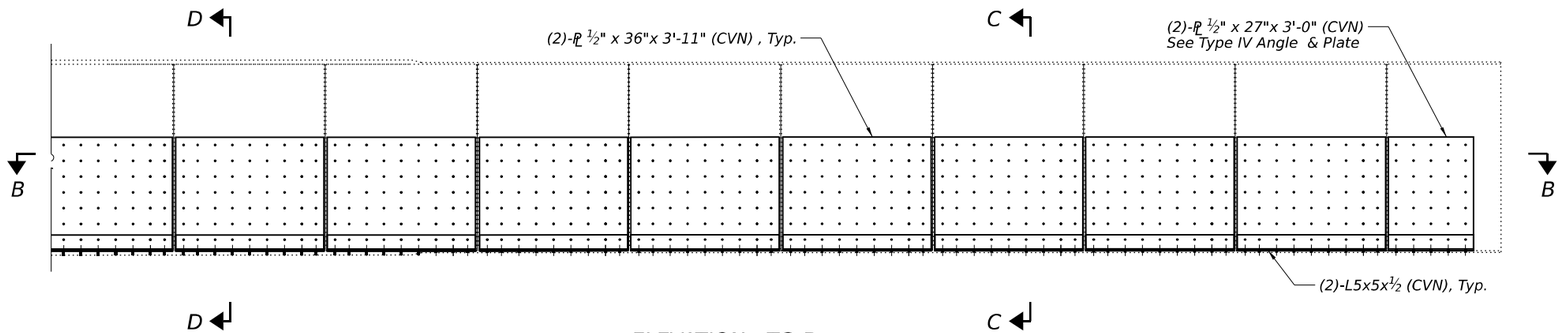
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	97
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



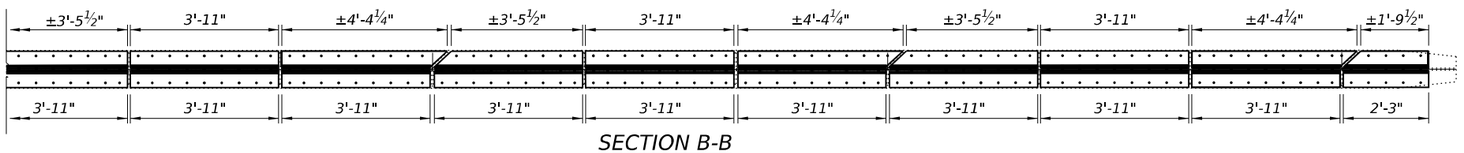
ELEVATION - TG-B
Looking Southwest



SECTION A-A

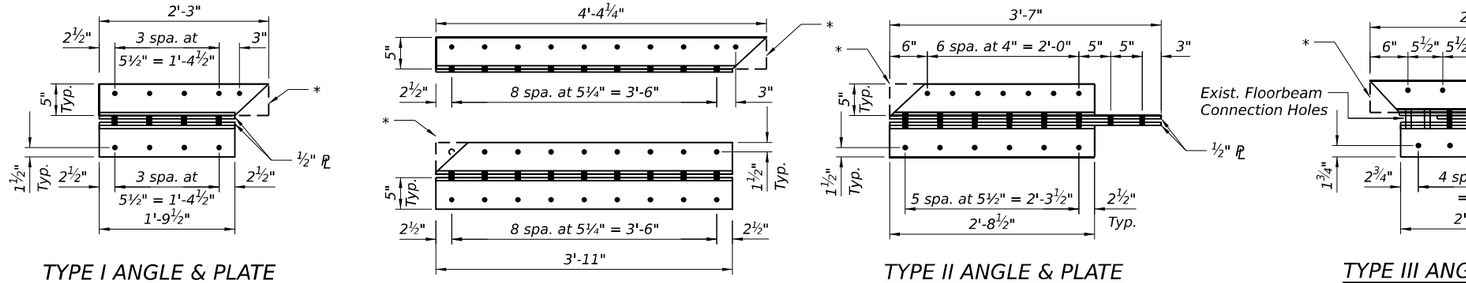


ELEVATION - TG-B
Looking Southwest



SECTION B-B

SECTION C-C
SECTION D-D
SECTION E-E



TYPE I ANGLE & PLATE
TYPICAL ANGLES & PLATES
TYPE II ANGLE & PLATE
TYPE III ANGLE & PLATE
(1 Fill Plate Required)
TYPE IV ANGLE & PLATE

*Cut to fit skewed girder stiffener

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	14,430

LEGEND
- Use Holes in New Steel as Template
- Use Holes in Existing Steel as Template
- Existing Bolts to Remain

Notes:
1. Fasteners shall be high strength bolts. Bolts ¾"∅, open hole 13/16"∅ unless otherwise noted.
2. All dimensions shall be field verified prior to ordering any material.
3. Cost of removing existing structural steel elements shall be included in Structural Steel Removal.
4. Cost of removing rivets or welds and replacing with HS bolts shall be included in in Structural Steel Removal.
5. Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min.and 5½" max. Edge distance shall be 1½" min.
6. Load carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.
7. All connections shown on this sheet are primary connections for cleaning and painting.

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structural\016070-62H52-2053-Steel_Repair_Span3_TG-B.dgn

COLLINS ENGINEERS, INC.

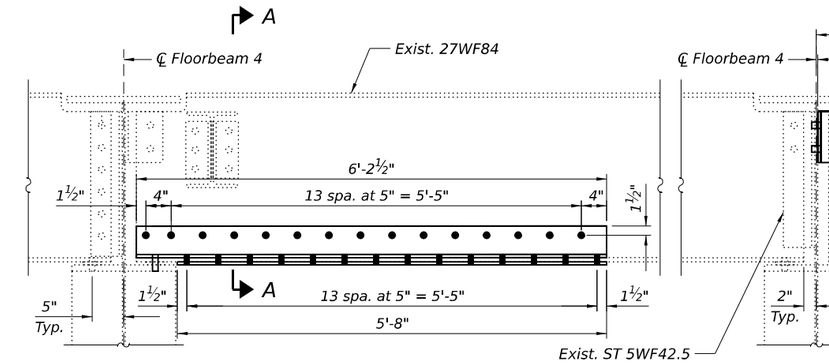
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL REPAIRS SPAN 3 TG–B
STRUCTURE NO. 016–0570

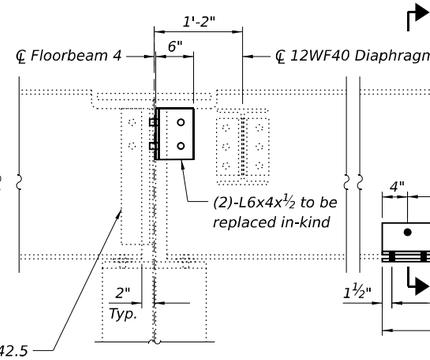
SCALE: | SHEET S-57 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	98
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



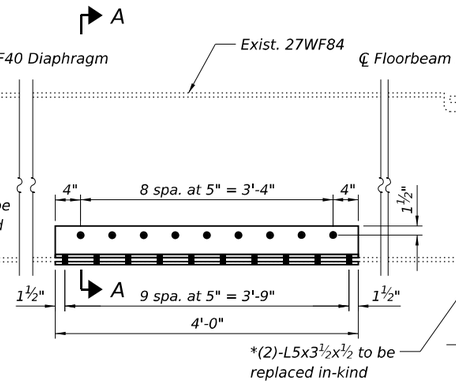
STRINGER 5 & 6 REPAIRS

(At Floorbeam 4)



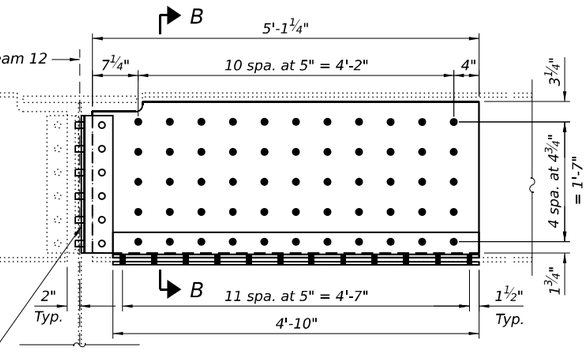
STRINGER 9 REPAIR

(At Floorbeam 4)



TYPICAL REPAIR AT EXISTING FLOOR DRAIN

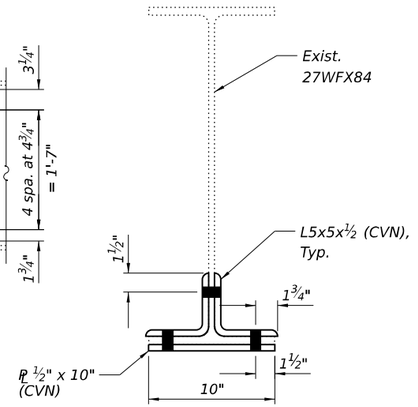
(Stringers 2 & 9 - 89 Location)



STRINGER 3 REPAIR

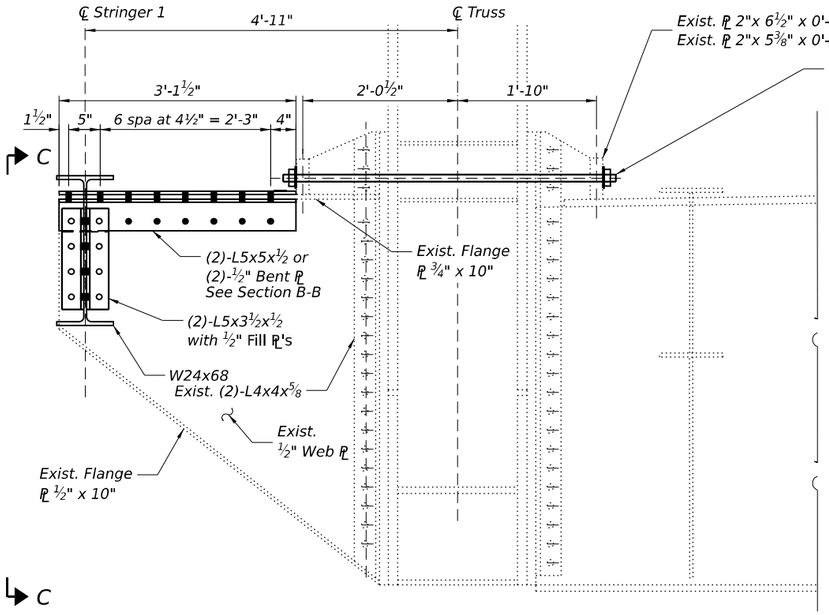
(At Floorbeam 12)

*Repair shall be performed after deck has been removed. Contractor to provide temporary support of stringer during replacement of connection to floorbeam. Cost included with Structural Steel Repair.



SECTION A-A

Grind heel of angle as req'd, Typ.



TYPICAL FLOORBEAM AND SIDEWALK BRACKET CONNECTION

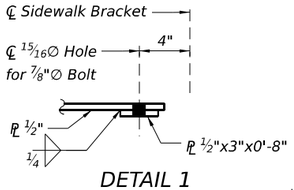
(Stringer 1 shown, Looking East, Stringer 10 similar)

SECTION C-C

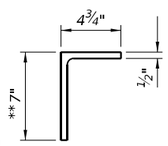
SECTION C-C AT SLIP JOINT

SECTION B-B

Grind heel of angle as req'd, Typ.

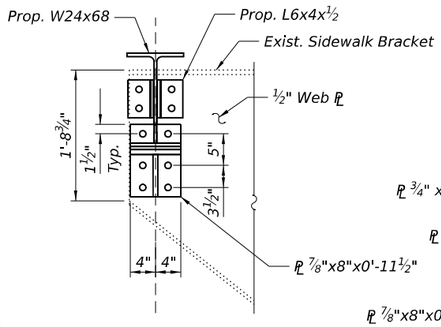


DETAIL 1

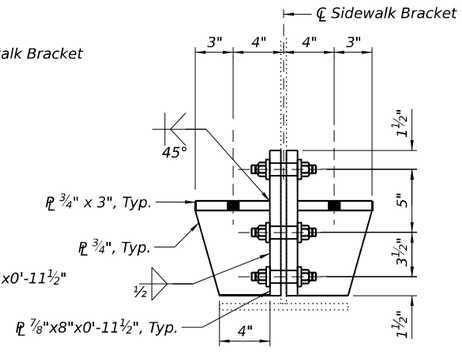


DETAIL 2

** Verify Length with Angle Connection Plate



SECTION D-D



BRACKET DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	36,650

LEGEND

- Use Holes in New Steel as Template
- Use Holes in Existing Steel as Template
- Existing Bolts to Remain

Notes:

1. Fasteners shall be high strength bolts. Bolts ⅞"∅, open hole 15/16"∅ unless otherwise noted.
2. All dimensions shall be field verified prior to ordering any material.
3. Cost of all other stringer repairs is included with Structural Steel Repairs. Cost includes removal of existing structural steel elements, rivets and/or welds.
4. Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min.and 5½" max. Edge distance shall be 1½" min.
5. Load carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.
6. All connections shown on this sheet are primary connections for cleaning and painting.

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over Cal\Sag\CADD\CADD_Sheets\Structural\M016057O-62H52-054-Steel_Repair_Spn3_Stringer.dgn

COLLINS ENGINEERS, INC.

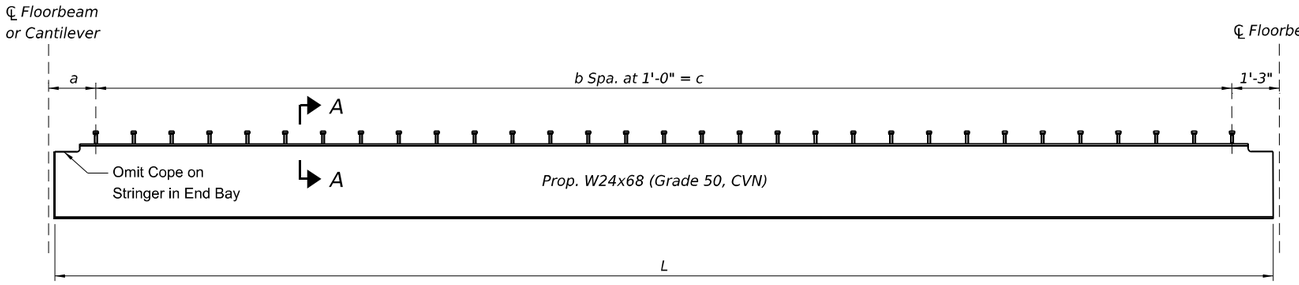
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL REPAIRS SPAN 3 STRINGERS
STRUCTURE NO. 016–0570

SCALE: | SHEET S-58 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	99
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



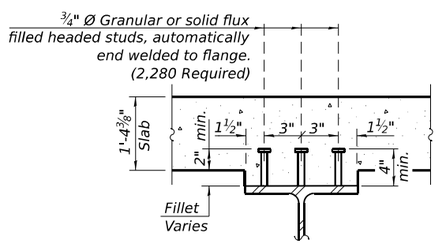
STRINGER 1 & 10 REPLACEMENT

(24 Required, See Table)

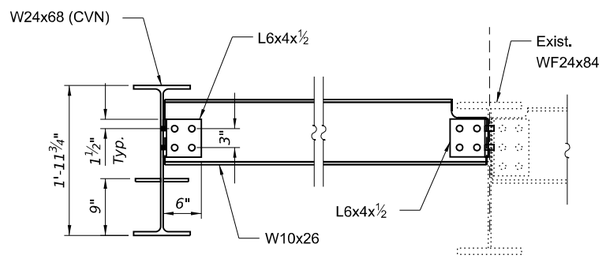
a	1'-3"	1'-1"	10"	5"
b	30	34	34	34
c	30'-0"	34'-0"	34'-0"	34'-0"
L	32'-2"	36'-2"	35'-11"	35'-6"
#	20	1	1	2

STRINGER MOMENT TABLE			
		0.5 L	
		W24x68 EXTERIOR	27WF84 INTERIOR
I_s	(in^4)	1,830	2,825
$I_{c(n)}$	(in^4)	9,879	9,318
$I_{c(3n)}$	(in^4)	7,579	7,460
S_s	(in^3)	154	212
$S_{c(n)}$	(in^3)	336	342
$S_{c(3n)}$	(in^3)	305	314
w_{D}	(k/')	1.05	0.93
M_{D}	('k)	138	122
s_{D}	(k/')	0.29	0.33
M_{sD}	('k)	38	44
M_{L}	('k)	203	226
MIM	('k)	-	68
$\frac{5}{3}$ [M_L+ I]	('k)	338	491
Ma	('k)	668	853
* Mu	('k)	-	-
f_{s_D} non-comp	(ksi)	10.75	6.93
f_{s_D} (comp)	(ksi)	1.49	1.67
fs $\frac{5}{3}$ [M_L+ I]	(ksi)	12.08	17.18
fs (Overload)	(ksi)	24.32	25.79
** fs (Total)	(ksi)	31.62	33.52
VR	(k)	15.79	17.6

FLOORBEAM 2 MOMENT TABLE		
		0.5 L
I_s	(in^4)	80,364
$I_{c(n)}$	(in^4)	-
$I_{c(3n)}$	(in^4)	-
S_s	(in^3)	2,344
$S_{c(n)}$	(in^3)	-
$S_{c(3n)}$	(in^3)	-
w_{D}	(k/')	-
M_{D}	('k)	2,906
s_{D}	(k/')	-
M_{sD}	('k)	-
M_{L}	('k)	1,565
MIM	('k)	470
$\frac{5}{3}$ [M_L+ I]	('k)	3,392
Ma	('k)	8,187
* Mu	('k)	-
f_{s_D} non-comp	(ksi)	14.9
f_{s_D} (comp)	(ksi)	-
fs $\frac{5}{3}$ [M_L+ I]	(ksi)	17.4
fs (Overload)	(ksi)	32.3
** fs (Total)	(ksi)	42.0
VR	(k)	42.8



SECTION A-A



DIAPHRAGM REPLACEMENT

(4 Required)

STRINGER REACTION TABLE			
		W24x68 EXTERIOR	27WF84 INTERIOR
R_{D}	(k)	17.5	20.3
R_{L}	(k)	9.7	42.9
R_{I}	(k)	-	12.9
R_{Total}	(k)	27.2	76.1

FLOORBEAM 2 REACTION TABLE		
R_{D}	(k)	189
R_{L}	(k)	99
R_{I}	(k)	30
R_{Total}	(k)	318

* *Compact section*

** *Braced non-compact and partially braced section*

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing fs(Total and Overload) due to non-composite dead loads ($in.^4$ and $in.^3$).

Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs(Total and Overload) due to short-term composite live loads ($in.^4$ and $in.^3$).

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total and Overload) due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).

w_D: Un-factored non-composite dead load (kips/ft.).

M_D: Un-factored moment due to non-composite dead load (kip-ft.).

s_D: Un-factored long-term composite (superimposed) dead load (kips/ft.)

M_{sD}: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

M_L: Un-factored live load moment (kip-ft.).

MI: Un-factored moment due to impact (kip-ft.).

Ma: Factored design moment (kip-ft.).
$1.3\,[M_D + M_{sD} + \frac{5}{3}(M_L + MI)]$

Mu: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

fs (Overload): Sum of stresses as computed from the moments below (ksi).
$M_D + M_{sD} + \frac{5}{3}(M_L + MI)$

fs (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\,[M_D + M_{sD} + \frac{5}{3}(M_L + MI)]$

VR: Maximum M_L + impact shear range within the composite portion of the span for stud shear connector design (kips).

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	56,440
Structural Steel Removal	Pound	46,910

Notes:

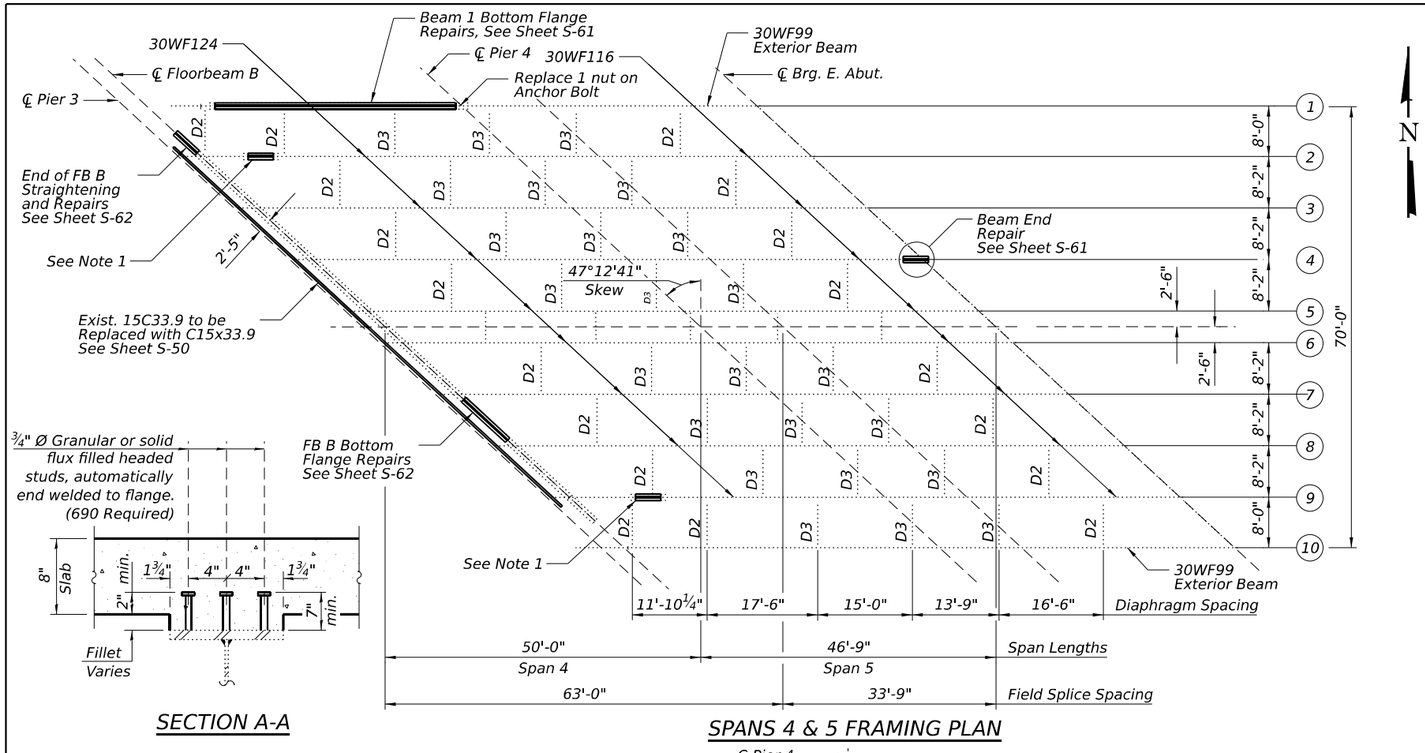
1. *Fasteners shall be high strength bolts. Bolts ⅞"∅, open hole $^{15}/_{16}$"∅ unless otherwise noted.*
2. *All dimensions shall be field verified prior to ordering any material.*
3. *Cost of removing existing stringers (Stringers 1 & 10), brackets and four (4) diaphragms indicated to be replaced is included with Structural Steel Removal. All other diaphragms, not indicated for replacement shall be removed, stored and reinstalled.*
4. *Cost of furnishing proposed Stringers 1 & 10 and four (4) diaphragms is included with Furnishing and Erecting Structural Steel.*
5. *Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min. and 5½" max. Edge distance shall be 1½" min.*
7. *Load carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.*
8. *All connections shown on this sheet are primary connections for cleaning and painting.*

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\N160570-42H52-055-Stringer_Table_Spn3.dgn

COLLINS ENGINEERS INC

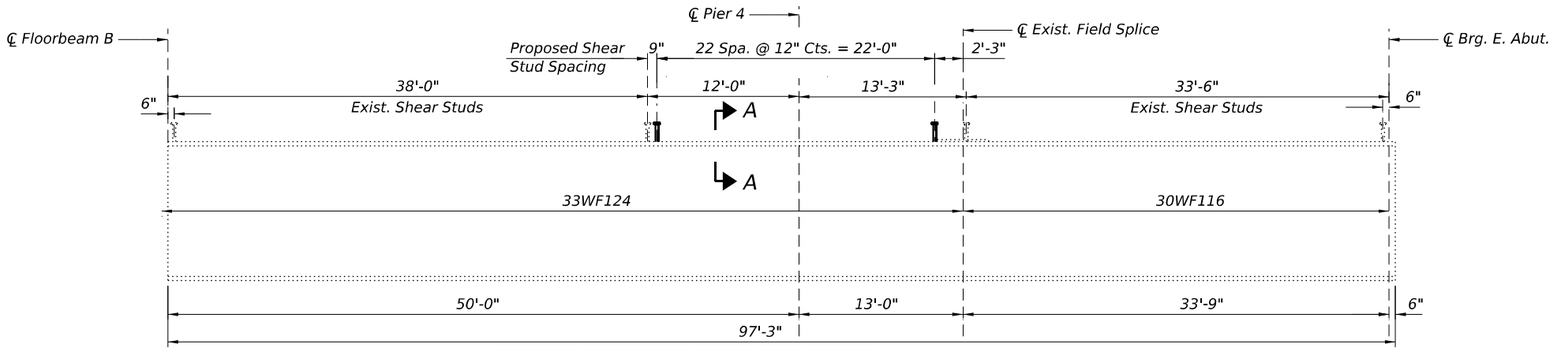
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SPAN 3 STRINGER REPLACEMENT AND MOMENT & REACTION TABLES STRUCTURE NO. 016–0570
	DRAWN - DR	REVISED -		
PLOT SCALE =	CHECKED - EKM	REVISED -		SCALE: SHEET S-59 OF S-70 SHEETS STA. TO STA.
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	100
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

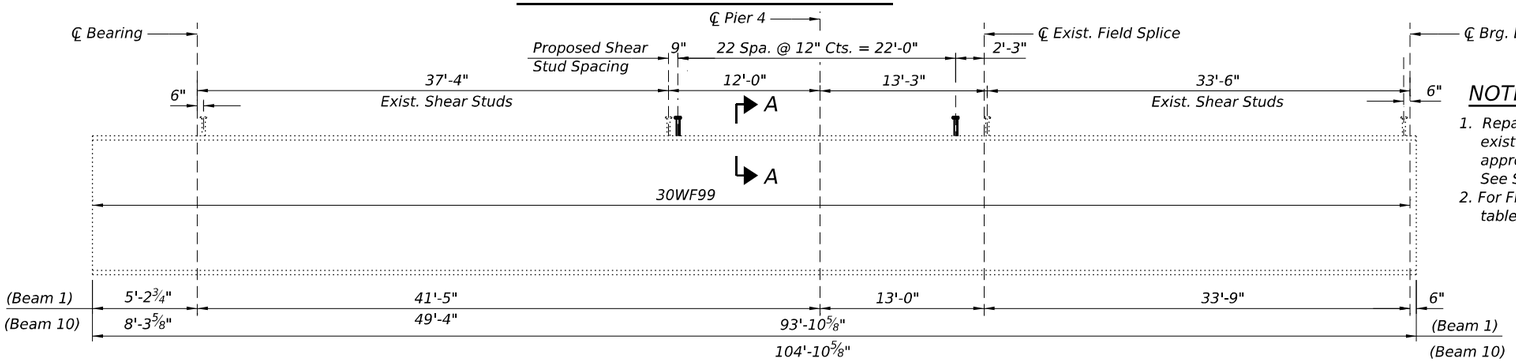


SECTION A-A

SPANS 4 & 5 FRAMING PLAN



TYPICAL INTERIOR BEAM ELEVATION



TYPICAL EXTERIOR BEAM ELEVATION

STRINGER MOMENT TABLE		0.4 Sp. 4		Pier 4		0.6 Sp. 5	
		30WF99 EXTERIOR	33WF124 INTERIOR	30WF99 EXTERIOR	33WF124 INTERIOR	30WF99 EXTERIOR	33WF116 INTERIOR
Is	(in^4)	3,989	5,347	3,989	5,347	3,989	4,919
Ic(n)	(in^4)	24,502	15,609	23,003	15,768	24,502	14,641
Ic(3n)	(in^4)	21,870	12,199	17,493	12,630	21,870	11,497
Ic(cr)	(in^4)	-	-	8,993	8,102	-	-
Ss	(in^3)	269	355	269	355	269	328
Sc(n)	(in^3)	640	537	627	539	640	502
Sc(3n)	(in^3)	616	495	574	501	616	463
Sc(cr)	(in^3)	-	-	438	430	-	-
$\mathcal{D}$	(k/')	1.01	1.03	1.01	1.03	1.01	1.00
$M_{\mathcal{D}}$	('k)	183	187	-294	-305	145	146
$s_{\mathcal{D}}$	(k/')	0.12	0.36	0.12	0.36	0.12	0.36
$M_{s_{\mathcal{D}}}$	('k)	22	60	-36	-98	18	47
$M_{\mathcal{L}}$	('k)	134	370	-164	-265	119	339
M_I	('k)	-	106	-	-76.0	-	97.0
$\frac{5}{3}$ [$M_{\mathcal{L}} + I$]	('k)	223	793	-274	-569	198	726
Ma	('k)	556	1,352	-784	-1,263	470	1,195
* Mu	('k)	-	2,335	-	-1,797	-	2,193
$f_{s_{\mathcal{D}}}$ non-comp	(ksi)	8.15	6.32	-13.12	-10.3	6.47	5.34
$f_{s_{\mathcal{D}}}$ (comp)	(ksi)	0.43	1.45	-0.99	-2.72	0.35	1.23
$f_{s_{\frac{5}{3}}}$ [$M + M$]	(ksi)	4.17	17.72	-7.49	-15.88	3.72	17.36
fs (Overload)	(ksi)	12.76	25.49	-21.59	-28.91	10.54	23.93
** fs (Total)	(ksi)	16.58	-	-28.07	-	13.7	-
VR	(k)	3.81	23.1	-17.41	59.5	4.52	22.5

STRINGER REACTION TABLE		Pier 3		Pier 4		E. Abut.	
		30WF99 EXTERIOR	33WF124 INTERIOR	30WF99 EXTERIOR	33WF124 INTERIOR	30WF99 EXTERIOR	33WF116 INTERIOR
R $\mathcal{D}$	(k)	23.8	24.2	75.4	77.3	21.3	22.0
R $\mathcal{L}$	(k)	12.3	46.6	34.1	51.0	11.6	45.9
R_I	(k)	-	13.3	-	14.6	-	13.1
R_{Total}	(k)	36.1	84.1	109.5	142.9	32.9	81.0

* Compact section
** Braced non-compact and partially braced section

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing fs (Total and Overload) due to non-composite dead loads ($in.^4$ and $in.^3$).
Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs (Total and Overload) due to short-term composite live loads ($in.^4$ and $in.^3$).
Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs (Total and Overload) due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).
Ic(cr), Sc(cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing fs (Total and Overload) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).
$\mathcal{D}$: Un-factored non-composite dead load (kips/ft.).
$M_{\mathcal{D}}$: Un-factored moment due to non-composite dead load (kip-ft.).
$s_{\mathcal{D}}$: Un-factored long-term composite (superimposed) dead load (kips/ft.)
$M_{s_{\mathcal{D}}}$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
$M_{\mathcal{L}}$: Un-factored live load moment (kip-ft.).
MI: Un-factored moment due to impact (kip-ft.).
Ma: Factored design moment (kip-ft.).
$1.3\ [M_{\mathcal{D}} + M_{s_{\mathcal{D}}} + \frac{5}{3}(M_{\mathcal{L}} + MI)]$
Mu: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
fs (Overload): Sum of stresses as computed from the moments below (ksi).
$M_{\mathcal{D}} + M_{s_{\mathcal{D}}} + \frac{5}{3}(M_{\mathcal{L}} + MI)$
fs (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\ [M_{\mathcal{D}} + M_{s_{\mathcal{D}}} + \frac{5}{3}(M_{\mathcal{L}} + MI)]$
VR: Maximum $_{\mathcal{L}}$ + impact shear range within the composite portion of the span for stud shear connector design (kips).

NOTE:

1. Repair bottom flange of Beams 2 and 9 at existing floor drain locations spaced approximately at 8'-1" center to center. See Sheet S-49 for details.
2. For Floorbeam B Moment and Reaction tables see Sheet S-61.

MODEL: Default
FILE NAME: I:\1250\4 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structura\M016070-62H52-056-Framing_Plan_Spn465.dgn

COLLINS ENGINEERS INC.

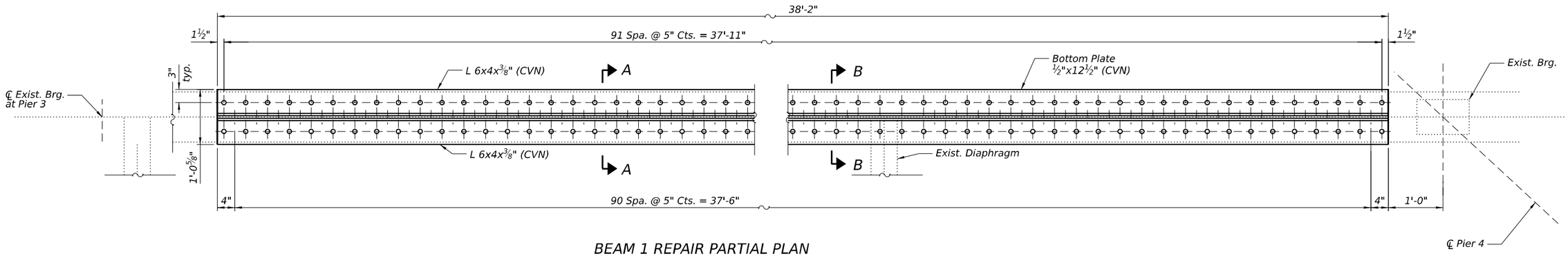
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -
	DRAWN - DR	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

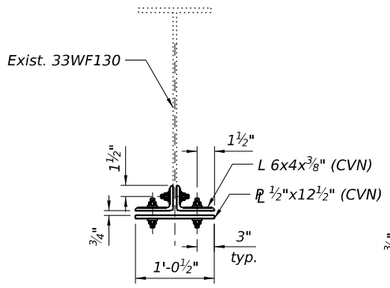
FRAMING PLAN SPANS 4 & 5
STRUCTURE NO. 016–0570

SCALE: | SHEET S-60 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	101
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

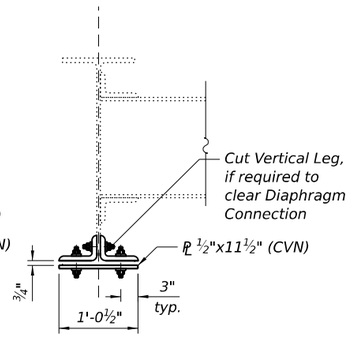


BEAM 1 REPAIR PARTIAL PLAN



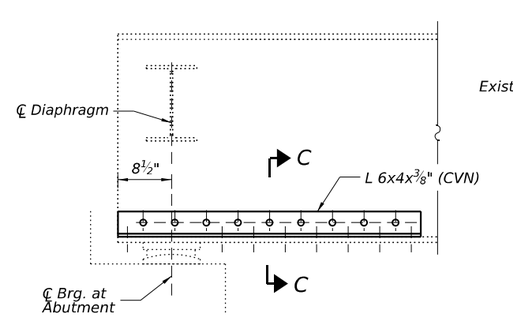
SECTION A-A

Grind heel of angle to fit radius, typ.



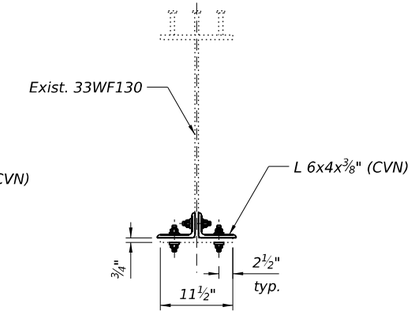
SECTION B-B

At Diaphragm



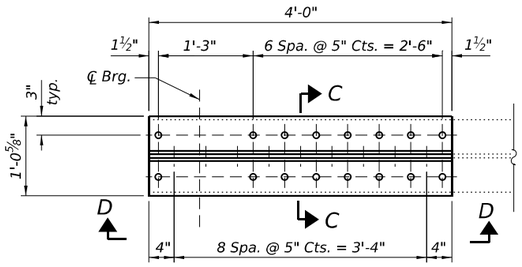
SECTION D-D

Beam End Repair Elevation



SECTION C-C

Grind heel of angle to fit radius, typ.



BEAM END REPAIR PLAN

Assumed 4 Locations at East Abutment based on the inspection notes. Locations to be determined in the field by the Engineer.

FLOORBEAM B MOMENT TABLE			
		0.4 Sp. 1 or 0.6 Sp 2	Center Bearing
I_s	(in^4)	22,426	34,129
$I_{c(n)}$	(in^4)	-	-
$I_{c(3n)}$	(in^4)	-	-
S_s	(in^3)	706	1,026
$S_{c(n)}$	(in^3)	-	-
$S_{c(3n)}$	(in^3)	-	-
Z	(in^3)	-	-
M_{ℓ}	('k)	-	-
M_{ℓ}	('k)	272	-623
s_{ℓ}	(k/')	-	-
$M_{s\ell}$	('k)	-	-
M_{ℓ}	('k)	459	-530
MIM	('k)	138	-159
$\frac{5}{3}[M_{\ell}+I]$	('k)	994	-1,148
Ma	('k)	1,647	-2,303
* Mu	('k)	-	-
$f_{s\ell}$ non-comp	(ksi)	4.6	-7.3
$f_{s\ell}$ (comp)	(ksi)	-	-
$f_{\frac{5}{3}}$ $[M_{\ell}+M]$	(ksi)	16.9	-13.4
fs (Overload)	(ksi)	21.5	-20.7
** fs (Total)	(ksi)	28.0	-26.9
VR	(k)	25.2	96.8

FLOORBEAM B REACTION TABLE			
		North or South Bearing	Center Bearing
R_{ℓ}	(k)	73.7	148
R_{ℓ}	(k)	62.9	126.4
R_I	(k)	18.9	37.9
R_{Total}	(k)	155.5	312.3

* Compact section
** Braced non-compact and partially braced section

Note: See Sheet 51 for Moment and Reaction Table notes

Notes:

1. *All dimensions shall be field verified prior to ordering any material.*
2. *Cost of removing existing structural steel elements for repairs shall be included in in Structural Steel Repairs.*
3. *Cost of furnishing and erecting structural steel elements for repairs shall be included in in Structural Steel Repairs.*
4. *Cost of removing rivets or welds and replacing with HS bolts for repairs shall be included in in Structural Steel Repairs.*
5. *Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min. and 5½" max. Edge distance shall be 1½" min.*
6. *Load carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.*
7. *Typical repair at existing floor drain is shown on Sheet S-49.*
8. *All connections shown on this sheet are primary connections for cleaning and painting.*

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	2,540

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structure\N0160570-62H52-057-Steel_Repair_Spn465.dgn

COLLINS ENGINEERS, INC.

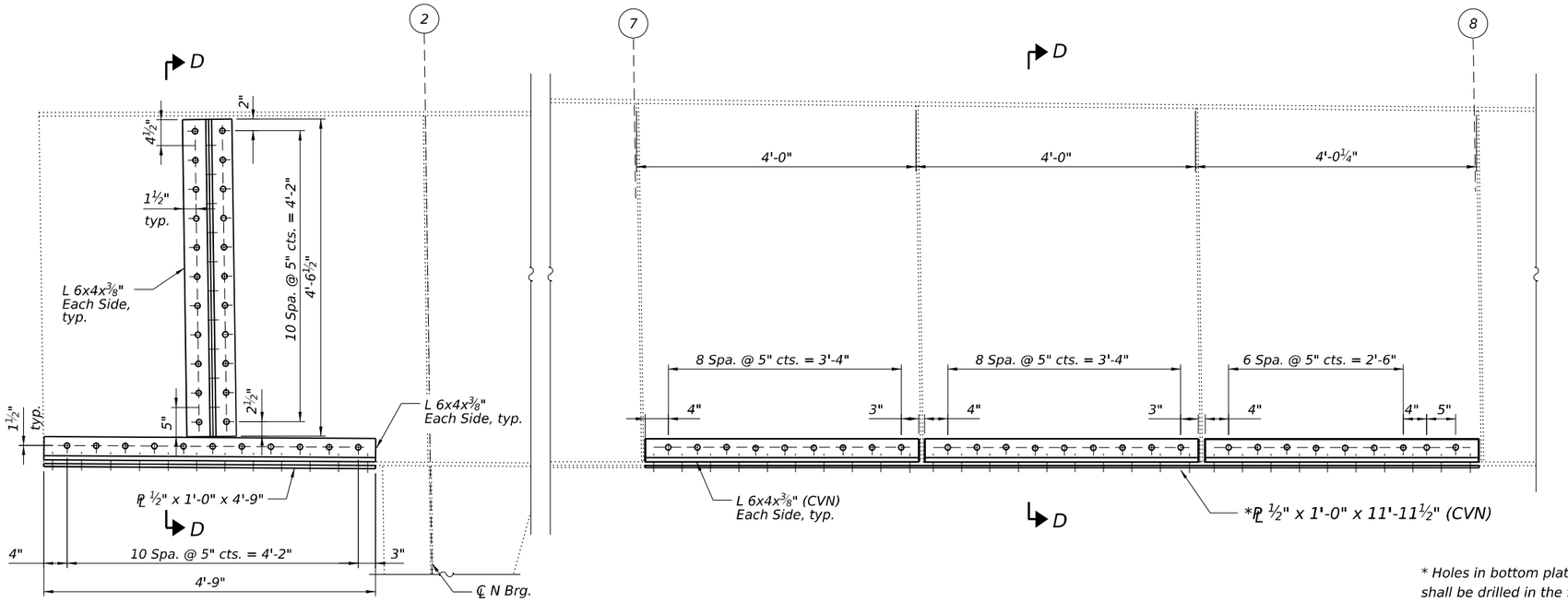
USER NAME = emroczek | DESIGNED - JFS / NA | REVISED -
DRAWN - DR | REVISED -
PLOT SCALE = | CHECKED - EKM | REVISED -
PLOT DATE = 4/25/2023 | DATE - 04/25/2023 | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

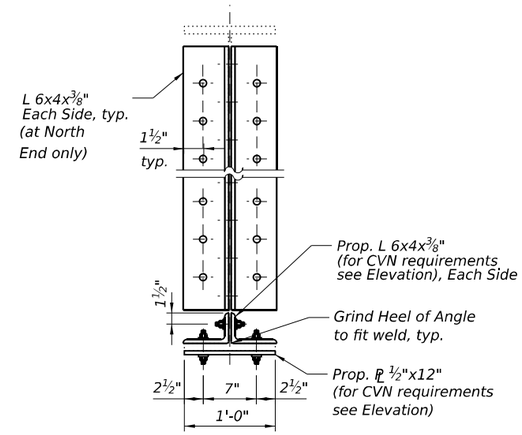
STEEL REPAIRS SPANS 4 & 5
STRUCTURE NO. 016–0570

SCALE: | SHEET S-61 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	102
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

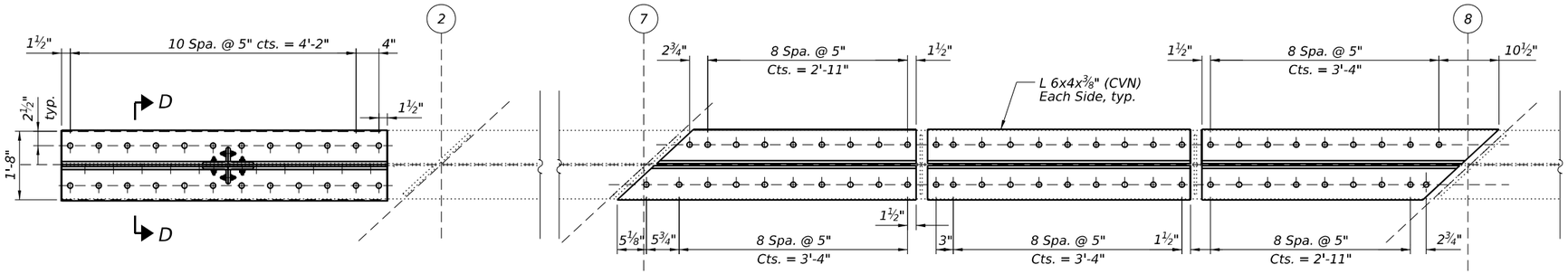


FLOORBEAM B PARTIAL ELEVATION



SECTION D-D

* *Holes in bottom plate and fill plate shall be drilled in the field to match holes in angles.*



FLOORBEAM B PLAN

Notes:

1. *All dimensions shall be field verified prior to ordering any material.*
2. *Cost of removing existing structural steel elements for repairs shall be included in in Structural Steel Repairs.*
3. *Cost of furnishing and erecting structural steel elements for repairs shall be included in in Structural Steel Repairs.*
4. *Cost of removing rivets or welds and replacing with HS bolts for repairs shall be included in Structural Steel Repairs.*
5. *Holes in existing steel shall be field reamed to obtain diameter required for bolt installation, using holes in new elements as a template. Cost included with Structural Steel Repair.*
6. *Load carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.*
7. *All connections shown on this sheet are primary connections for cleaning and painting.*

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	1,160
Straighten Bent Member	Each	1

Floorbeam B to be straightened using mechanical methods only. After straightening operation is completed, install vertical angles as shown on the Plan and Elevation

Floorbeam Straightening Note:
Prior to straightening, Contractor shall inspect welded connections between web and flanges. After straightening operation is completed, welded connections between web and flanges shall be inspected and welds should be nondestructively tested using magnetic particle or dye penetration testing at locations where visible evidence of damage exists. If cracks are found caused by the straightening method, further retrofitting of the member will be as directed by the Engineer at the Contractor's expense.

Contractor to use end of truss to support jacks and winches to push the web to plumb position. Use timber bracing to protect existing steel as required.

FLOORBEAM B NORTH END STAIGHTENING

MODEL: Default
FILE NAME: I:\12504 IDOT-I-83 over CalSag\CADD\CADD Sheets\Structural\R01607O-62H52-058-Steel Repair Span4&5.dgn

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USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL REPAIRS SPANS 4 & 5
STRUCTURE NO. 016–0570

SCALE: | SHEET S-62 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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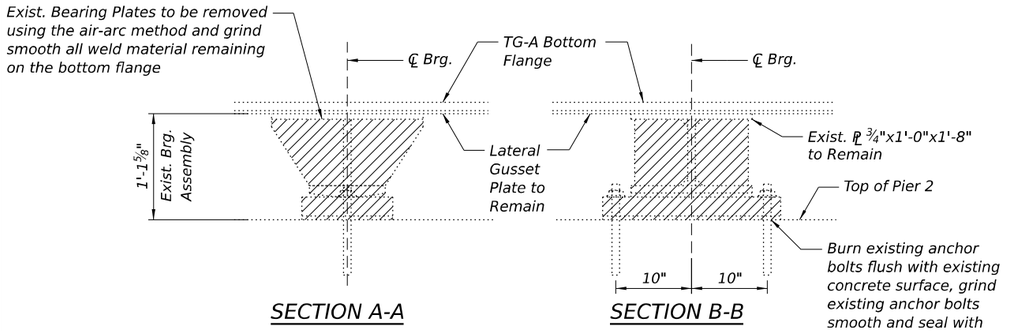
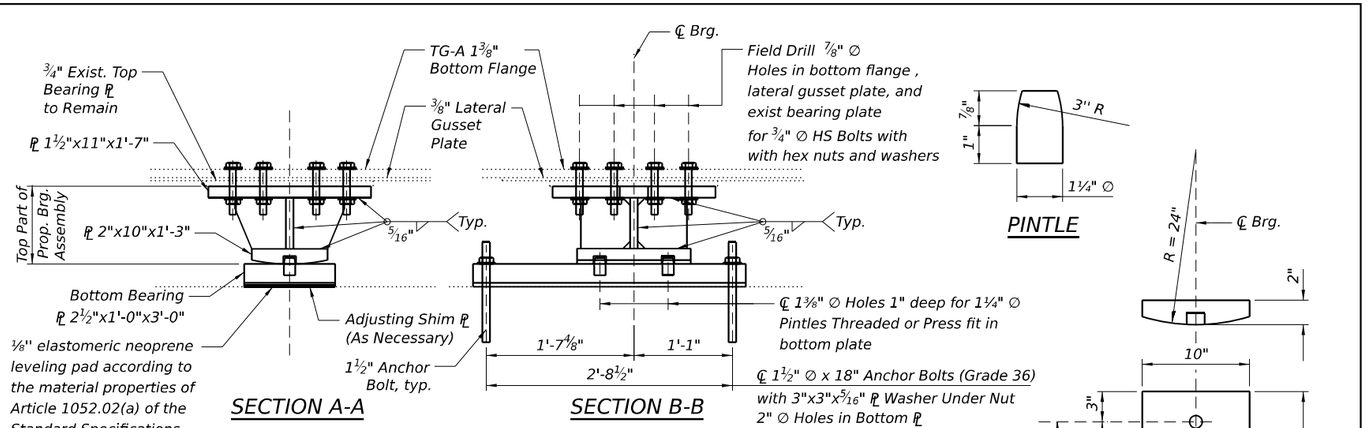
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

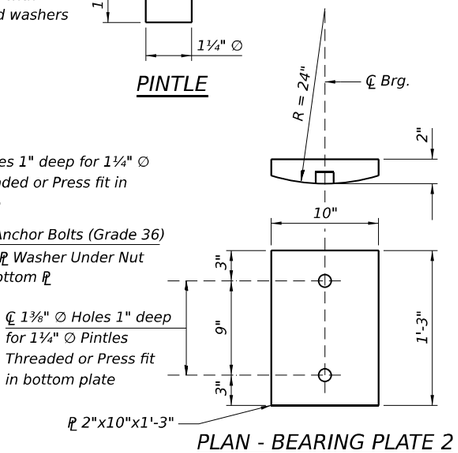


EXISTING CENTER BEARING AT PIER 2 REMOVAL TRANSFER GIRDER - A

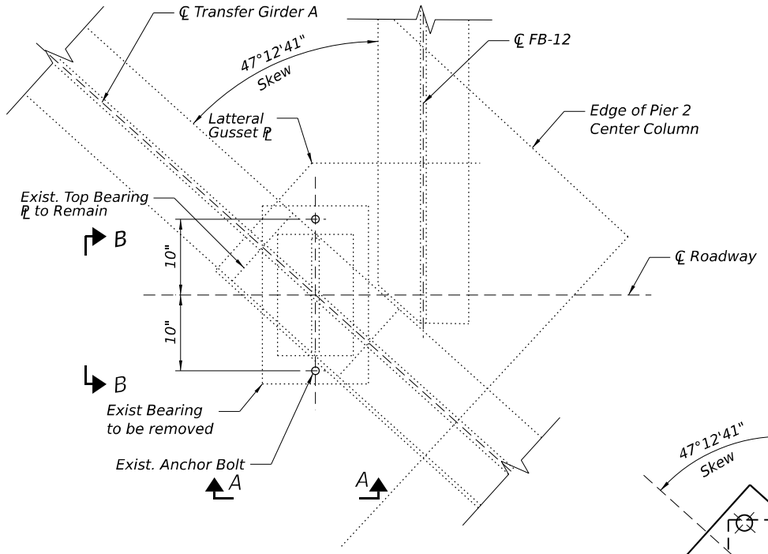


PROPOSED CENTER BEARING AT PIER 2 REMOVAL TRANSFER GIRDER - A

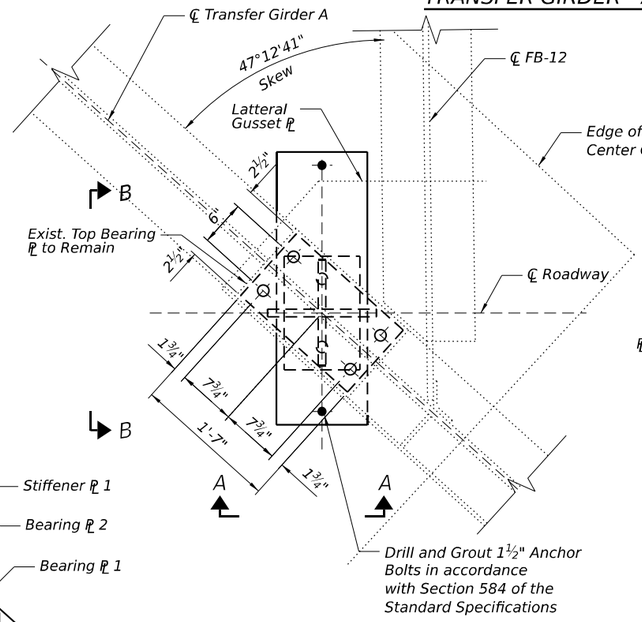
PINTLE



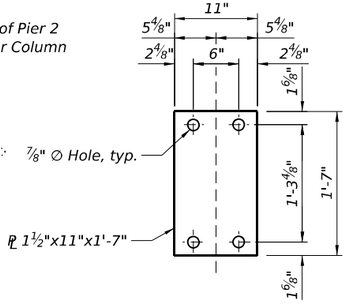
PLAN - BEARING PLATE 2



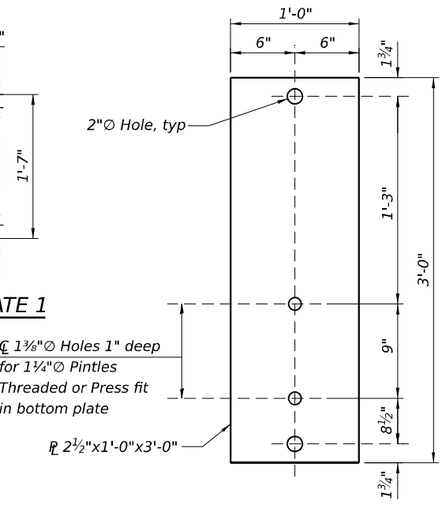
EXISTING CENTER BEARING AT PIER 2 PLAN TRANSFER GIRDER - A



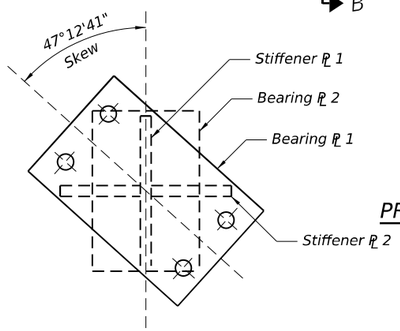
PROPOSED CENTER BEARING AT PIER 2 PLAN TRANSFER GIRDER - A



PLAN - BEARING PLATE 1



PLAN - BOTTOM PLATE



TOP PART OF PROPOSED BEARING ASSEMBLY

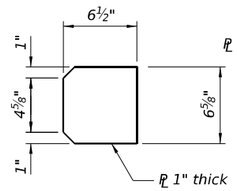
JACKING LOADS

	Steel DL (k)	Total DL (k)
R_{DL} (Service)	20	120
Min. Jack Capacity (k)	40	200

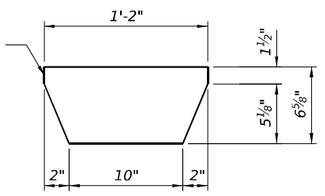
Note:
Bearing shall be replaced with no traffic above the Floorbeam, and before the new deck is poured.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Anchor Bolts, 1½"	Each	2
Furnishing and Erecting Structural Steel	Pound	560
Jack and Remove Existing Bearings	Each	1



2 - STIFFENER PLATES 1



STIFFENER PLATE 2

Notes:
1. Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
2. Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
3. Cost of field drilling is included with Furnishing and Erecting Structural Steel.
4. The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
5. Prior to ordering any material, the Contractor shall verify in the field all existing dimensions.

MODEL: Default
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\StructuralM016057O-62H52-059-Brng_RepBacement.dgn

COLLINS ENGINEERS INC.

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -
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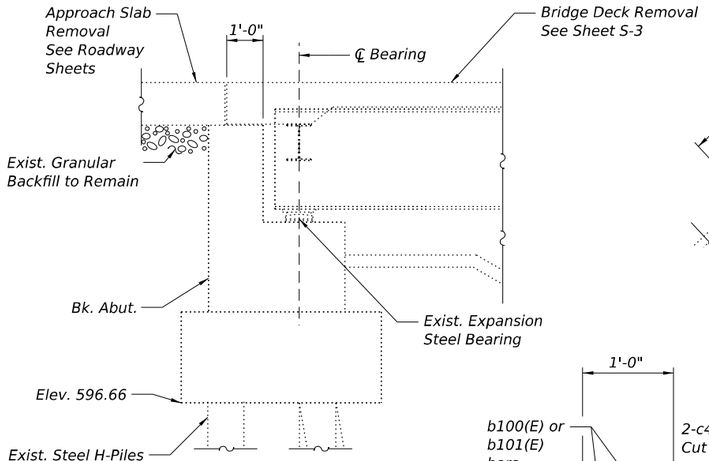
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

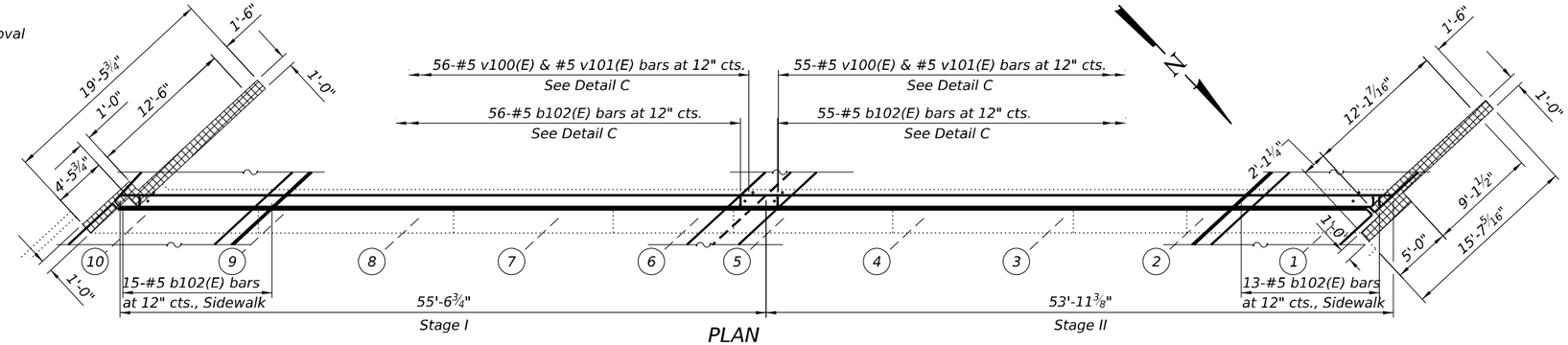
BEARING REPLACEMENT
STRUCTURE NO. 016–0570

SCALE: | SHEET S-63 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	104
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

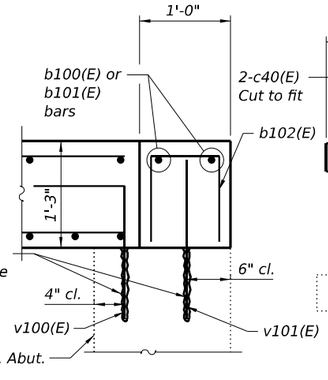


SECTION THROUGH EXISTING ABUTMENT

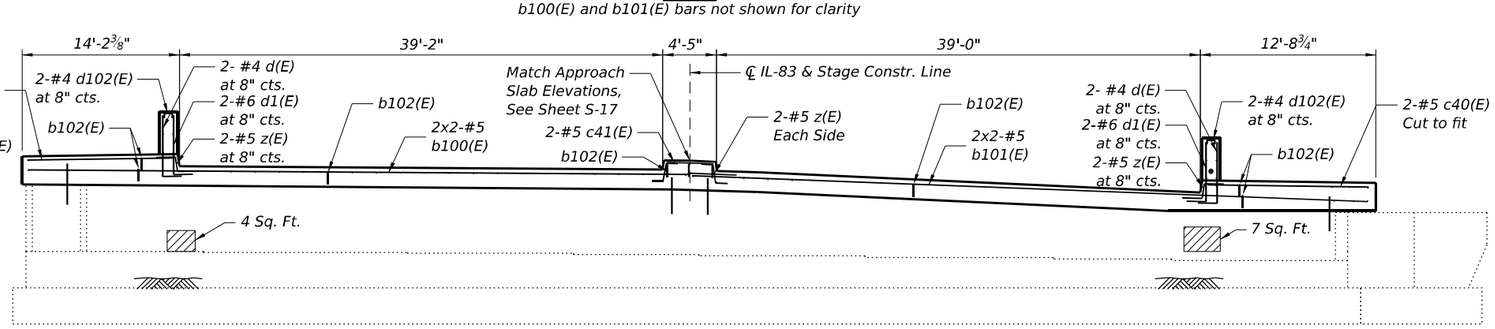


PLAN

b100(E) and b101(E) bars not shown for clarity

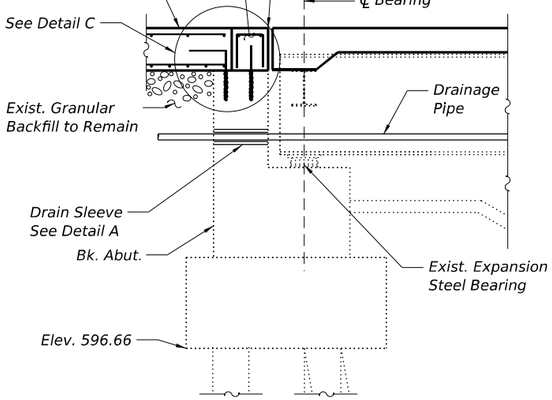


DETAIL C



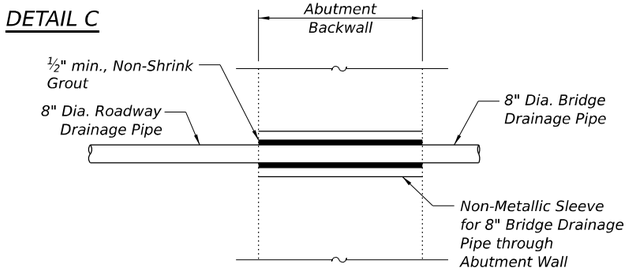
ELEVATION OF WEST ABUTMENT

Looking West

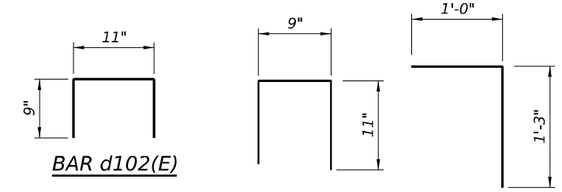


SECTION THROUGH PROPOSED ABUTMENT

Drill and Set v100(E) and v101(E) bars in accordance with Article 584 of the Standard Specifications Minimum embedment shall be 9"



DETAIL A



BAR d102(E) BAR b102(E) BAR v100(E)

BILL OF MATERIAL

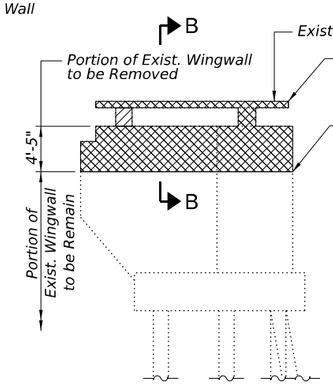
BAR	NO.	SIZE	LENGTH	SHAPE
b100(E)	4	#5	29'-6"	
b101(E)	4	#5	28'-9"	
b102(E)	139	#5	2'-7"	
c40(E)	4	#5	17'-3"	
c41(E)	2	#5	4'-1"	
d(E)	4	#4	4'-1"	
d1(E)	4	#6	4'-5"	
d102(E)	4	#4	2'-5"	
v100(E)	111	#5	2'-8"	
v101(E)	111	#5	1'-9"	
z(E)	8	#5	2'-4"	
Reinforcement Bars, Epoxy Coated			Pound	1,270
Structural Repair of Concrete (Depth Equal to or Less Than 5")			Sq. Ft.	11
Concrete Removal			Cu. Yd.	6.6
Concrete Superstructure			Cu. Yd.	5.5

NOTES:

1. Repair areas are estimated based on inspection completed in 2020 and increased by 15% to account for additional deterioration. Actual repair areas and locations shall be determined by the Engineer and shown as as-built plans.
2. Concrete sealer shall be applied to all repaired concrete areas on all abutment faces. Cost included with Structural Repair of Concrete.
3. Installation of the Non-Metallic Sleeve through Abutment Backwall shall be coordinated with the Drainage System work. The cost of this work shall be included with the Concrete Removal pay item.
4. See Sheet S-20 for bar bending diagrams for d(E), d1(E), and z(E) bars.

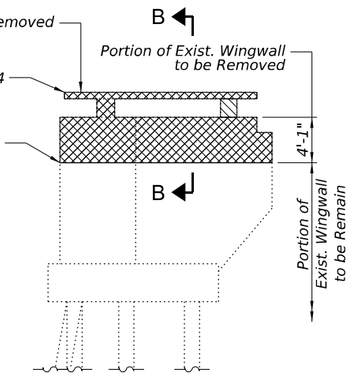
LEGEND:

- Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)
- Concrete Removal



SOUTHWEST WINGWALL

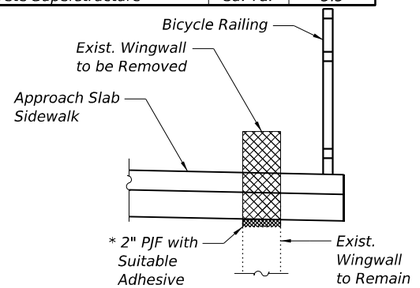
Looking North
See Plan for more Dimensions



NORTHWEST WINGWALL

Looking South
See Plan for more Dimensions

Cost of Railing Removal is included with Concrete Removal.



SECTION B-B

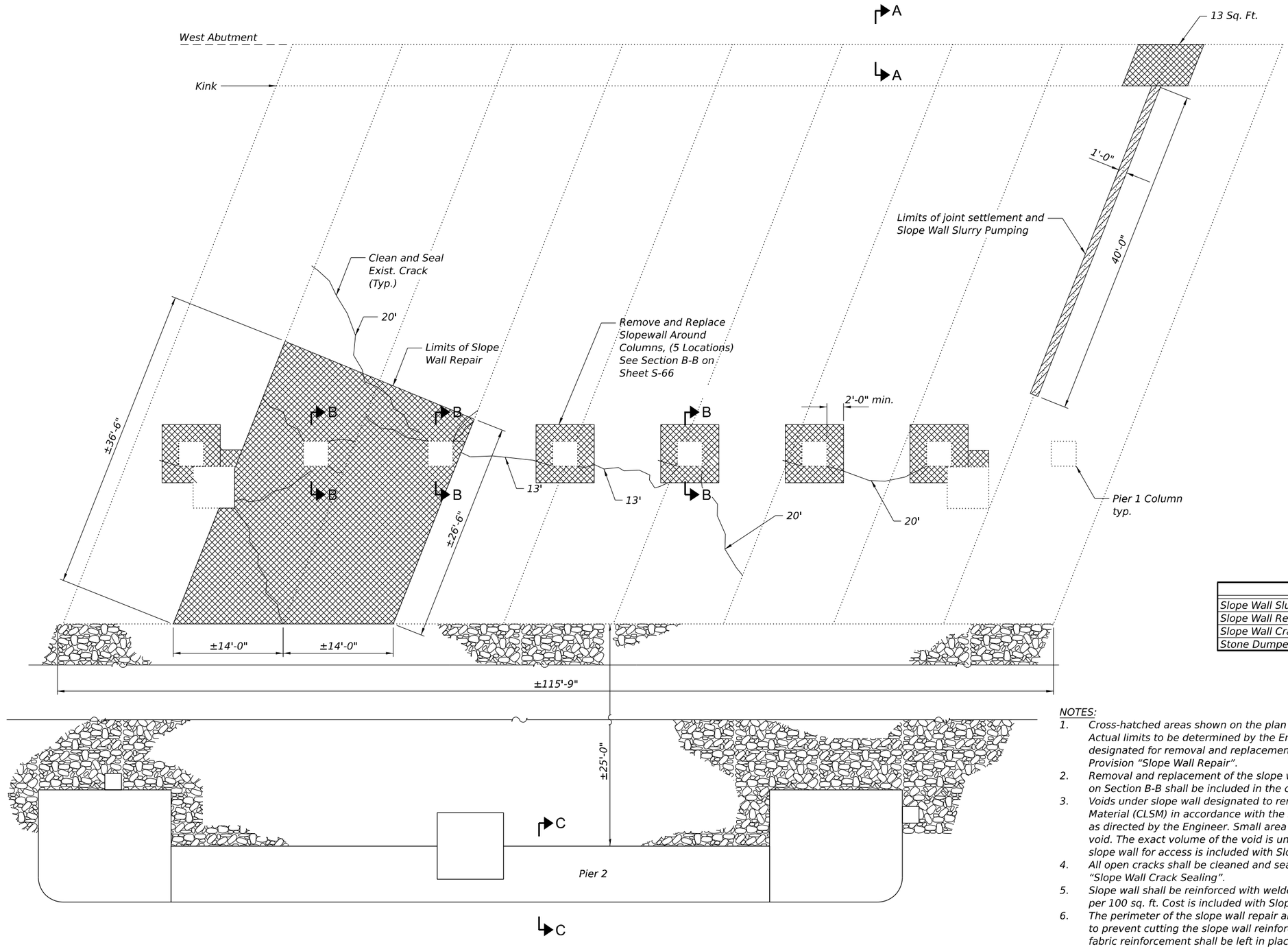
* Adhesive must be compatible with preformed joint material and concrete. Surface preparation shall be conducted in accordance with manufacturer's guidelines. Joint material shall fully extend to surface to prevent concrete pour around joint material. Cost is inlcuded with Concrete Superstrucure (Approach Slab).

MODEL: Structure Condition • West Abutment
FILE NAME: h12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\0105706-02H52\065-West_Abutment_Repairs.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WEST ABUTMENT REPAIRS STRUCTURE NO. 016–0570
	DRAWN - DR	REVISED -		
PLOT SCALE =	CHECKED - EKM	REVISED -		SCALE: SHEET S-64 OF S-70 SHEETS STA. TO STA.
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	105
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



WEST SLOPE WALL PLAN

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Slope Wall Slurry Pumping	Cu. Yd.	3.0
Slope Wall Repair	Sq. Yd.	95
Slope Wall Crack Sealing	Foot	86
Stone Dumped Riprap, Class A6	Sq. Yd.	225

NOTES:

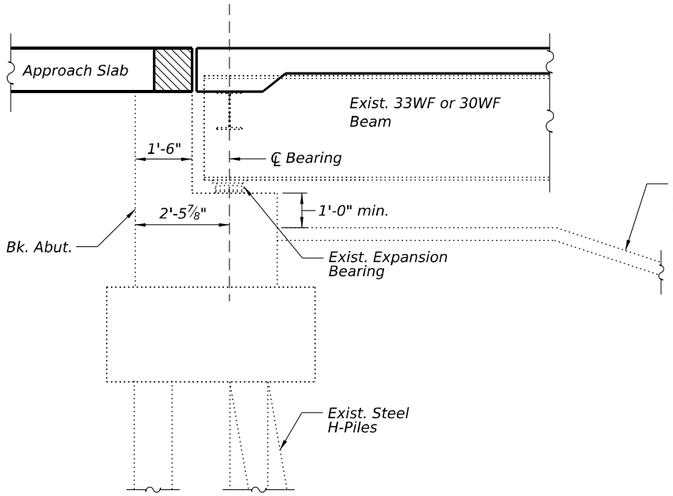
1. *Cross-hatched areas shown on the plan indicate assumed limits of Slope Wall Repairs. Actual limits to be determined by the Engineer. The voids below the slope wall designated for removal and replacement shall be filled in accordance with the Special Provision "Slope Wall Repair".*
2. *Removal and replacement of the slope wall around the pier columns as shown on Section B-B shall be included in the cost of Slope Wall Repair.*
3. *Voids under slope wall designated to remain shall be filled with Controlled Low Strength Material (CLSM) in accordance with the special provision "Slope Wall Slurry Pumping"and as directed by the Engineer. Small area of slope wall may need to be removed to access void. The exact volume of the void is unknown. Cost of removal and replacement of the slope wall for access is included with Slope Wall Slurry Pumping.*
4. *All open cracks shall be cleaned and sealed with hot joint sealer. See Special Provision "Slope Wall Crack Sealing".*
5. *Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0, weighing 58 lbs. per 100 sq. ft. Cost is included with Slope Wall Repair.*
6. *The perimeter of the slope wall repair area should be saw cut to a depth of 1 inch max. to prevent cutting the slope wall reinforcement. At least 1'-0"of the existing welded wire fabric reinforcement shall be left in place along the perimeter, to be incorporated into new slope wall. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost is included with Slope Wall Repair.*
7. *Proposed Riprap is to supplement existing Riprap. No excavation, filter fabric, or bedding material is required.*

MODEL: Substructure Condition • West Slope Wall
FILE NAME: I:\12504 IDOT-IL83 over Calls@\CADD\CADD_Sheets\Structural\016570-02H52-061-West_Slope_Wall_Repairs.dgn

COLLINS ENGINEERS INC

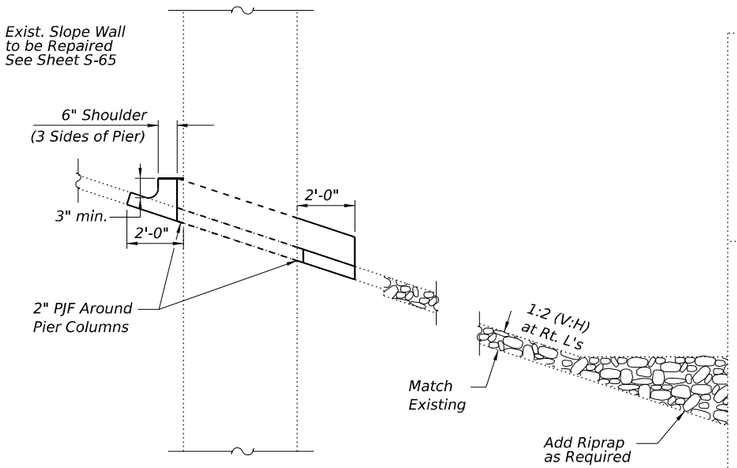
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WEST SLOPE WALL REPAIRS STRUCTURE NO. 016–0570	
	DRAWN - DR	REVISED -			
PLOT SCALE =	CHECKED - EKM	REVISED -			
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -		SCALE:	SHEET S-65 OF S-70 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	106
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



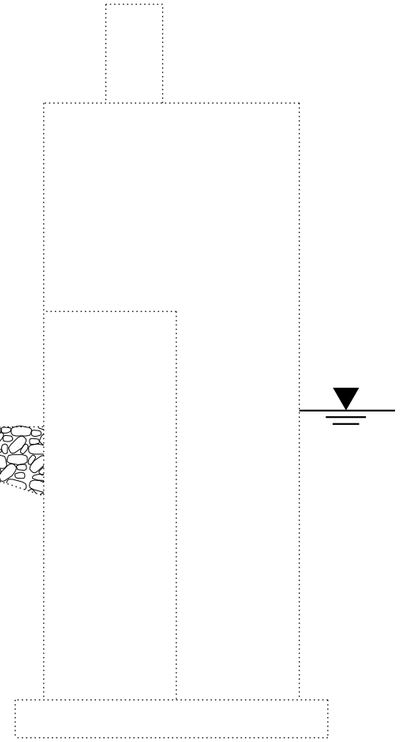
SECTION A-A

Section Through Existing Abutment
Horizontal Dimensions are at Right Angles



SECTION B-B

Slopewall at Pier 1 & Pier 4



SECTION C-C

Slopewall at Pier 2 & Pier 3

MODEL: Substructure Condition - Pier 1
FILE NAME: I:\12504 IDOT-IL83 over CalSag\CADD\CADD_Sheets\Structure\M016057O-02H52-062-Substructure_Condition_Typical_Slope_Wall_Section.dgn

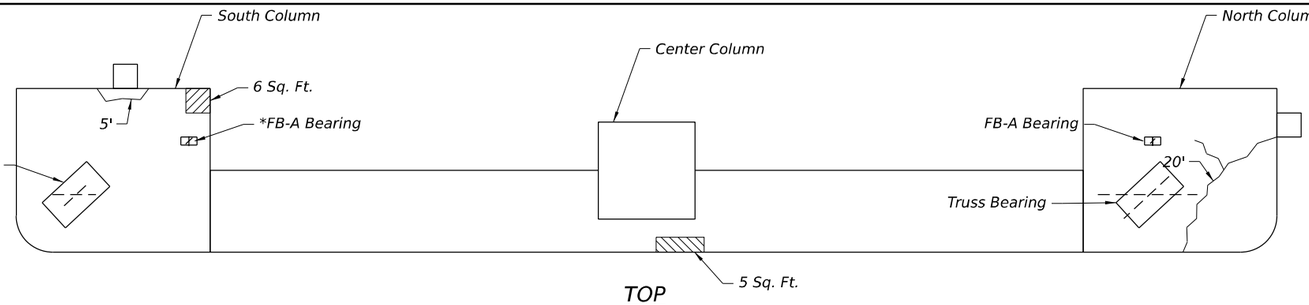
COLLINS ENGINEERS INC.

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SLOPE WALL SECTION STRUCTURE NO. 016–0570	
	DRAWN - DR	REVISED -			
PLOT SCALE =	CHECKED - EKM	REVISED -			
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -		SCALE: SHEET S-66 OF S-70 SHEETS STA. TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	107
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

REACTION TABLE - SOUTH COLUMN			
	Steel DL (k)	Total DL (k)	LL+IM (k)
Floorbeam A	8.4	58.8	82.0

* The Contractor shall provide support and/or temporary shoring for FB-A to perform Structural Concrete Repairs. The support and /or shoring system shall be submitted for approval to the Engineer. Work shall be performed prior to the new deck is poured. See Special Provisions. Cost of the support and/or shoring is included with the Temporary Shoring and Cribbing pay item.



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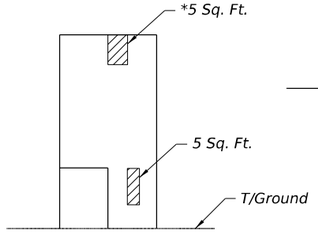
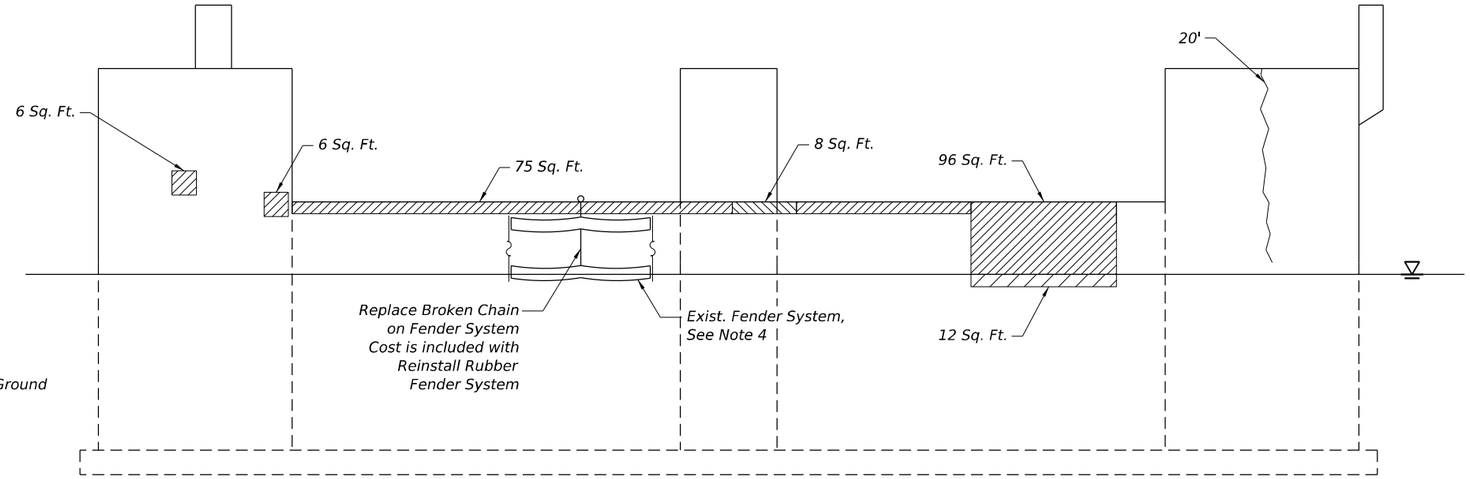
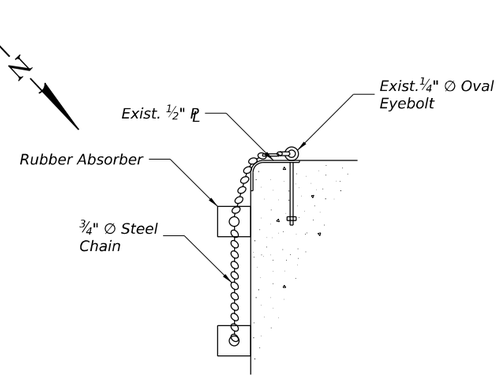
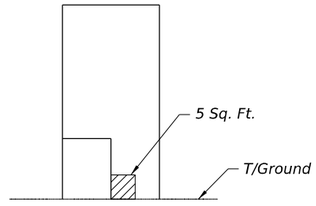


NORTH ELEVATION OF SOUTH COLUMN
Looking South



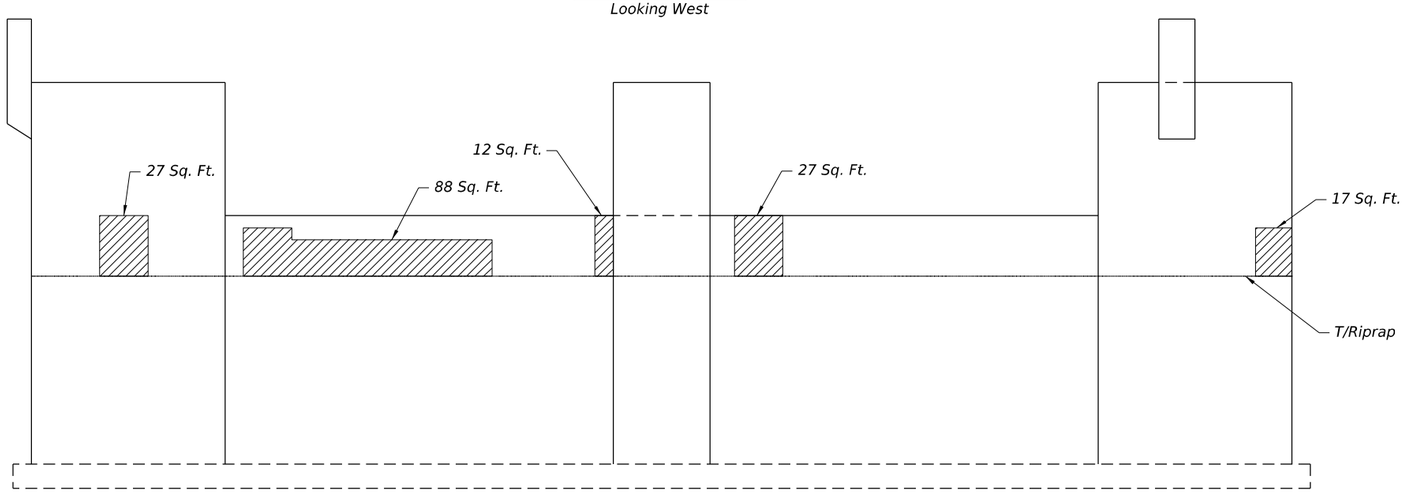


FENDER SYSTEM ATTACHMENT DETAIL



NORTH ELEVATION OF CENTER COLUMN
Looking North

EAST ELEVATION
Looking West



WEST ELEVATION
Looking East

LEGEND:

- Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)
- Underwater Concrete Repair
- Structural Repair of Concrete (Depth Greater Than 5 Inches)
- Concrete Removal
- 6' Epoxy Crack Sealing

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.	380
Structural Repair of Concrete (Depth Greater Than 5")	Sq. Ft.	8
Underwater Concrete Repair	Sq. Ft.	12
Reinstall Rubber Fender System	L Sum	1
Epoxy Crack Injection	Foot	45
Temporary Shoring and Cribbing	Each	1

NOTES:

1. Repair areas are estimated based on inspection completed in 2020 and increased by 15% to account for future deterioration. Actual repair areas and locations shall be determined by the Engineer and shown as as-built plans.
2. Concrete sealer shall be applied to all repaired concrete areas on all abutment faces. Cost included with structural repair of concrete.
3. Crack widths are ⅛", ±1/16" unless otherwise noted.
4. Fender System to be detached as needed to perform repairs and reattached after the repairs are completed. Cost of this work is included with the appropriate Structural Repair of Concrete pay item.
5. Cost of replacement of any deteriorated parts of the Fender System as determined in the field by the Engineer shall be included with the Reinstall Rubber Fender System.
6. Underwater concrete repair quantity shown is estimated and will depend on the water elevation during construction.

MODEL: Substructure Condition - Pier 2
FILE NAME: k:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\R016057G-62H52-0163-Pier2_Repairs.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -
	DRAWN - DR	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

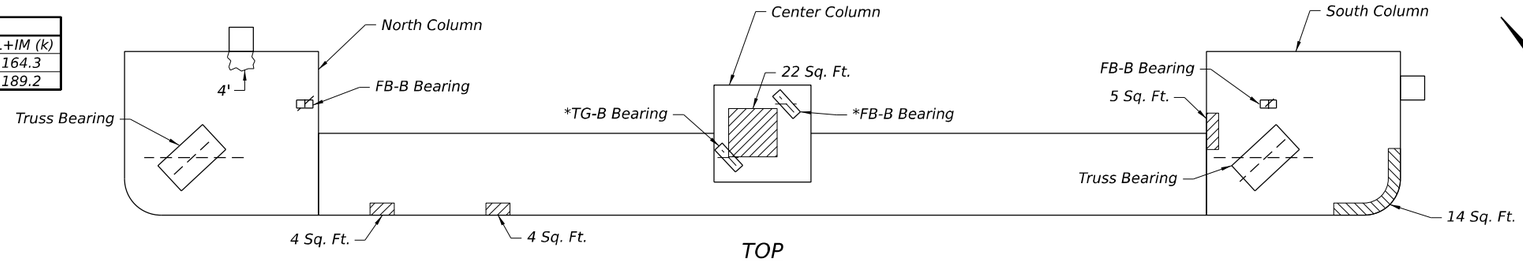
PIER 2 REPAIRS
STRUCTURE NO. 016-0570

SCALE: | SHEET S-67 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	108
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

REACTION TABLE - CENTER COLUMN			
	Steel DL (k)	Total DL (k)	LL+IM (k)
Floorbeam B	20.9	123.6	164.3
Transfer Girder B	19.1	130.9	189.2

* The Contractor shall provide support and/or temporary shoring for FB-B and TG-B bearings to perform Structural Concrete Repairs. The support and /or shoring system shall be submitted for approval to the Engineer. Work shall be performed prior to the new deck is poured. See Special Provisions. Cost of the support and/or shoring is included with the Temporary Shoring and Cribbing pay item.



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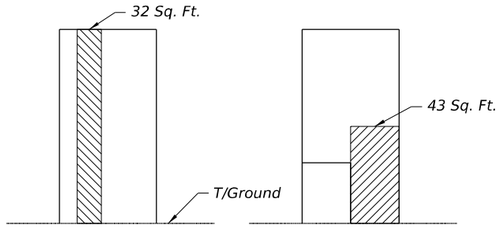
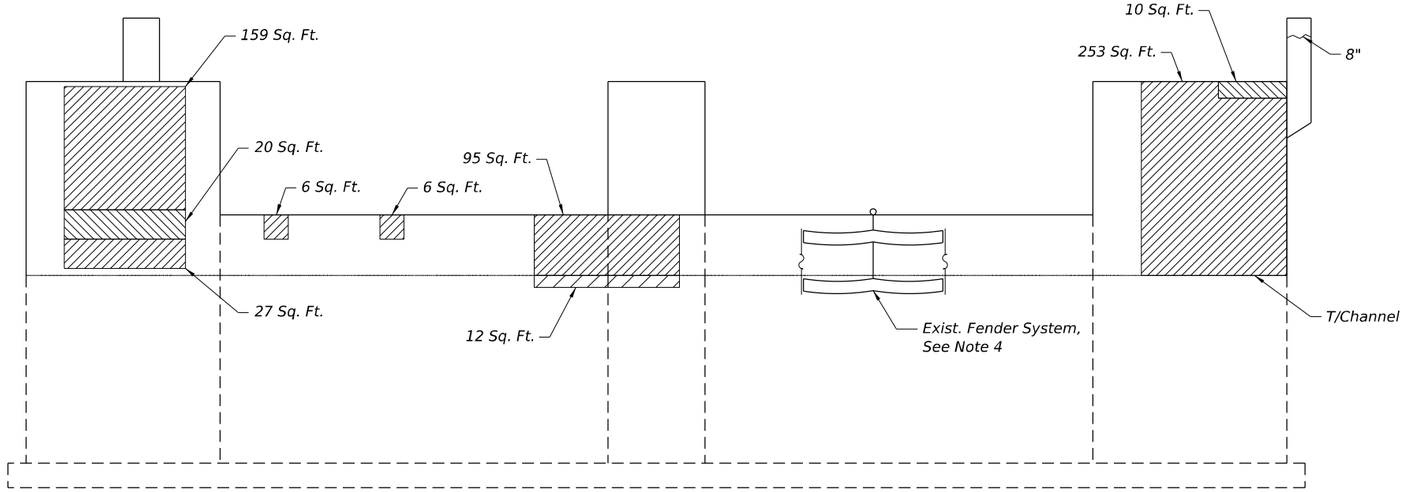
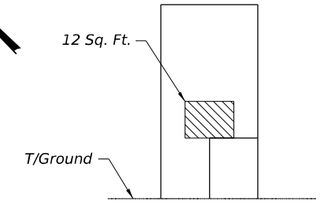


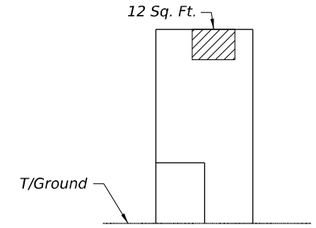
NORTH ELEVATION OF NORTH COLUMN

SOUTH ELEVATION OF NORTH COLUMN

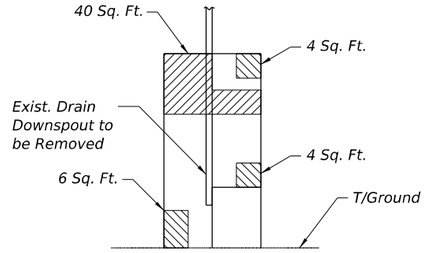




NORTH ELEVATION OF CENTER COLUMN

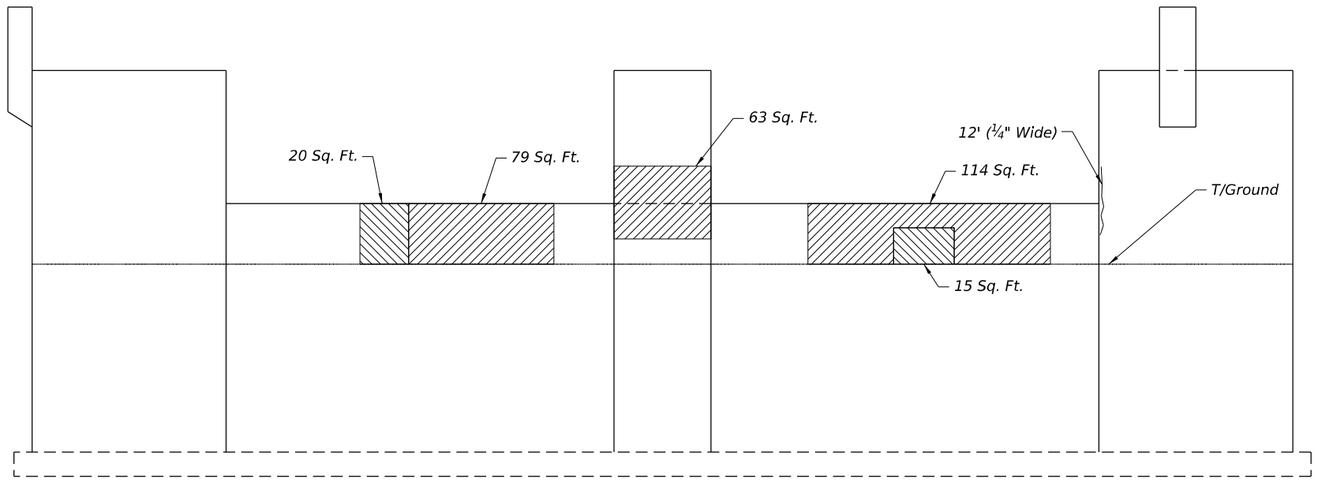


SOUTH ELEVATION OF CENTER COLUMN



NORTH ELEVATION OF SOUTH COLUMN

WEST ELEVATION
Looking East



EAST ELEVATION
Looking West

LEGEND:

- Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)
- Underwater Concrete Repair
- Structural Repair of Concrete (Depth Greater Than 5 Inches)
- Concrete Removal
- 6' — Epoxy Crack Sealing

6 SQ FT — NEW DETERIORATION FROM COLLINS INSPECTION

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.	946
Structural Repair of Concrete (Depth Greater Than 5")	Sq. Ft.	123
Underwater Concrete Repair	Sq. Ft.	12
Epoxy Crack Injection	Foot	24
Temporary Shoring and Cribbing	Each	2

NOTES:

1. Repair areas are estimated based on inspection completed in 2020 and increased by 15% to account for future deterioration. Actual repair areas and locations shall be determined by the Engineer and shown as as-built plans.
2. Concrete sealer shall be applied to all repaired concrete areas on all abutment faces. cost included with structural repair of concrete.
3. Crack widths are ⅛", ±1/16" unless otherwise noted.
4. Fender System to be detached as needed to perform repairs and reattached after the repairs are completed. Cost of this work is included with the appropriate Structural Repair of Concrete pay item.
5. Cost of replacement of any deteriorated parts of the Fender System as determined in the field by the Engineer shall be included with the Reinstall Rubber Fender System.
6. Underwater concrete repair quantity shown is estimated and will depend on the water elevation during construction.

MODEL: Substructure Condition - Pier 3
FILE NAME: k:\12504 IDOT-I-83 over CalSag\CADD\CADD_Sheets\Structural\03160376-62H52-0064-Pier3_Repairs.dgn

COLLINS ENGINEERS INC

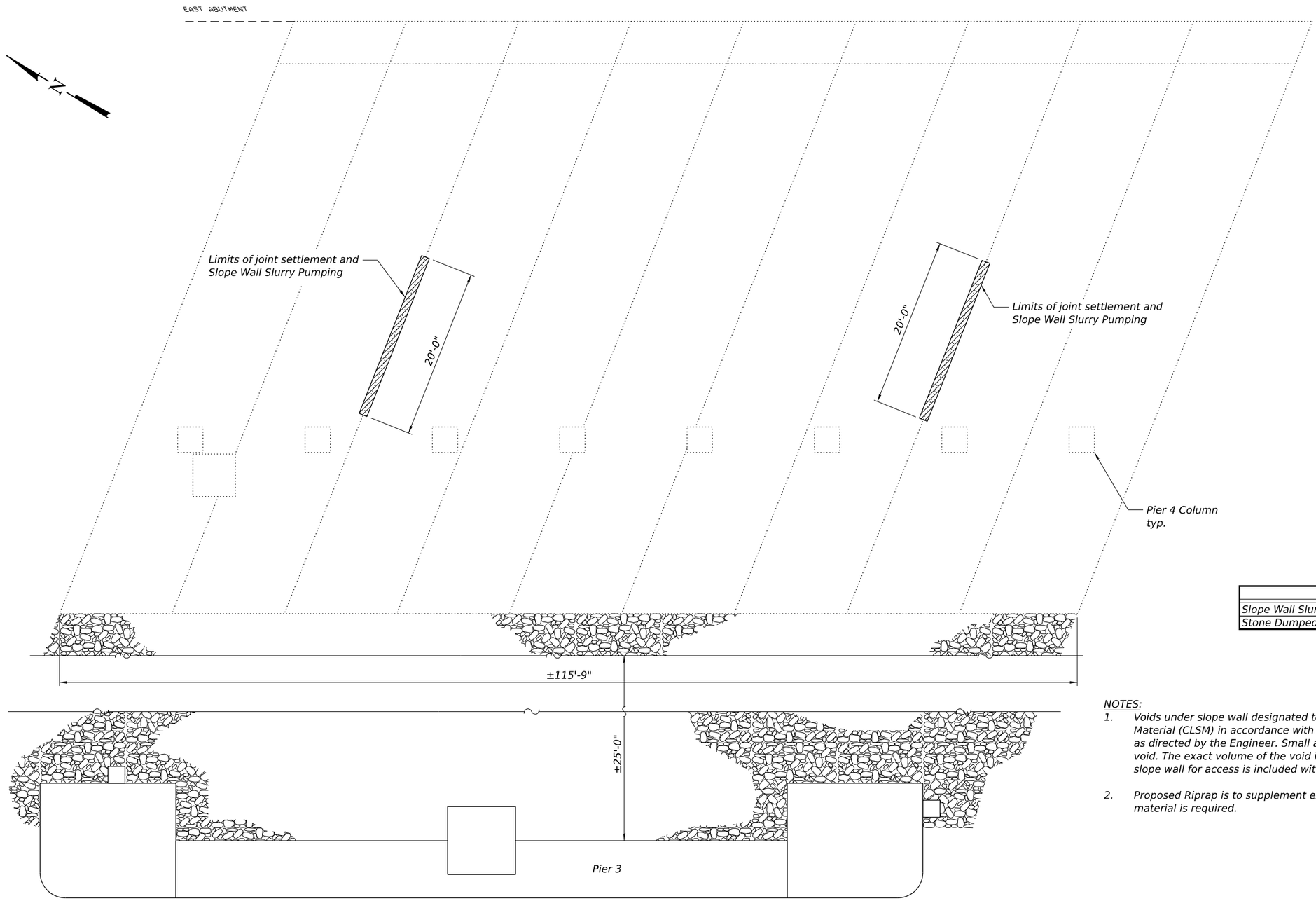
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 REPAIRS
STRUCTURE NO. 016-0570

SCALE: | SHEET S-68 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	109
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



EAST SLOPE WALL PLAN

LEGEND:

Slope Wall Slurry Pumping

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Slope Wall Slurry Pumping	Cu. Yd.	3.0
Stone Dumped Riprap, Class A6	Sq. Yd.	225

NOTES:

1. Voids under slope wall designated to remain shall be filled with Controlled Low Strength Material (CLSM) in accordance with the special provision "Slope Wall Slurry Pumping" and as directed by the Engineer. Small area of slope wall may need to be removed to access void. The exact volume of the void is unknown. Cost of removal and replacement of the slope wall for access is included with Slope Wall Slurry Pumping.

2. Proposed Riprap is to supplement existing Riprap. No excavation, filter fabric, or bedding material is required.

MODEL: Substructure Condition - East Slope Wall
FILE NAME: I:\12504 IDOT-I-83 over Calsag\CADD\CADD_Sheets\Structural\R016057G-62H52-005-East_Slope_Wall_Repairs.dgn

COLLINS ENGINEERS INC

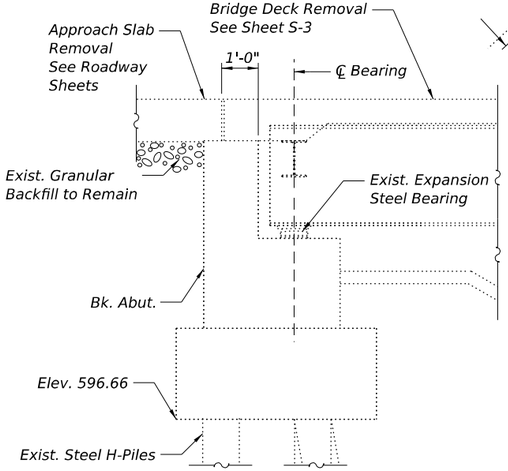
USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

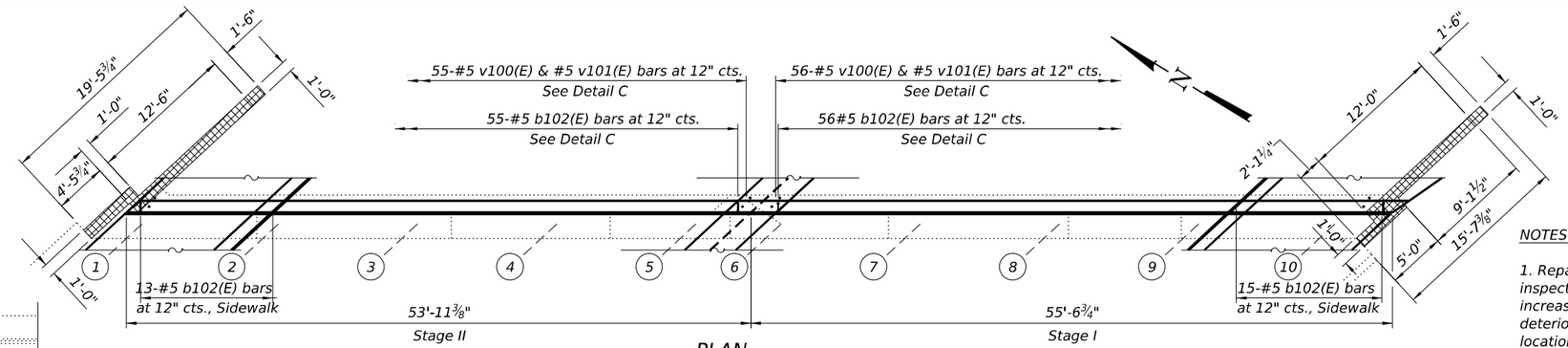
EAST SLOPE WALL REPAIRS
STRUCTURE NO. 016–0570

SCALE: | SHEET S-69 OF S-70 SHEETS | STA. | TO STA.

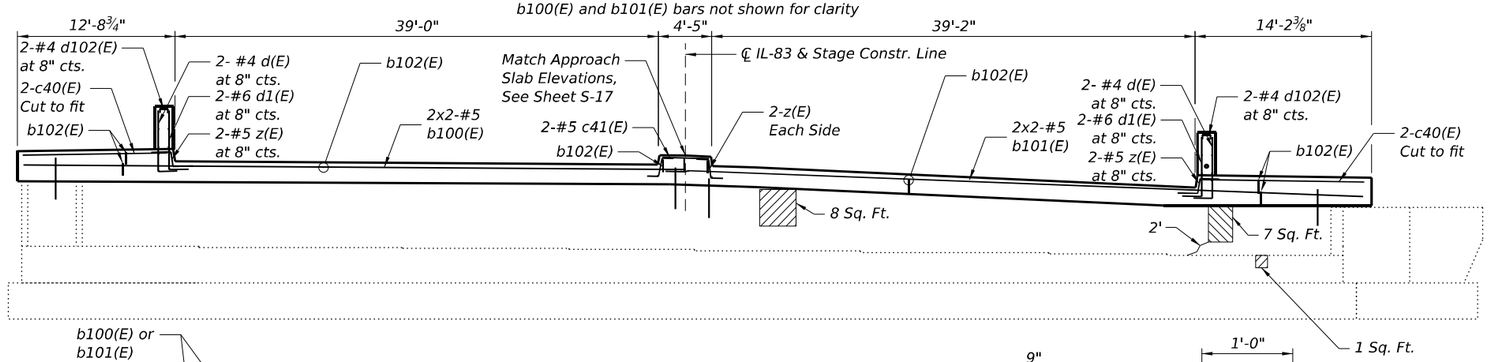
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	110
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



SECTION THROUGH EXISTING ABUTMENT

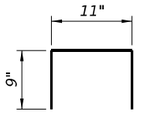


PLAN

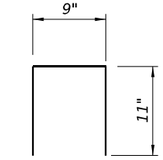


ELEVATION OF EAST ABUTMENT

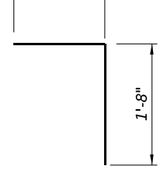
Looking East



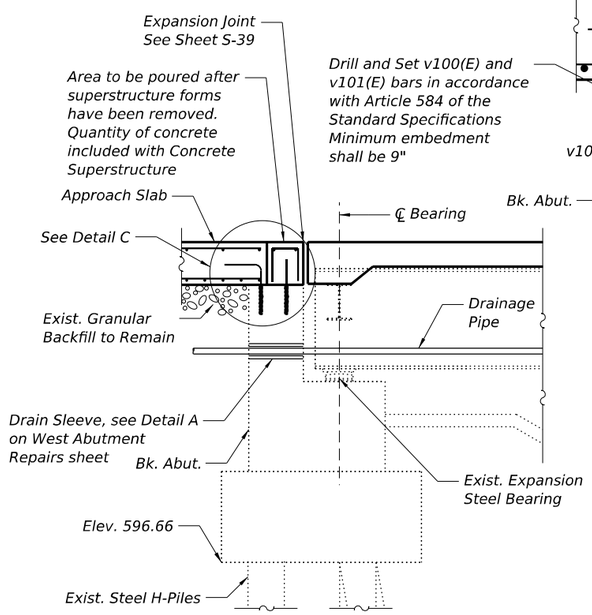
BAR d102(E)



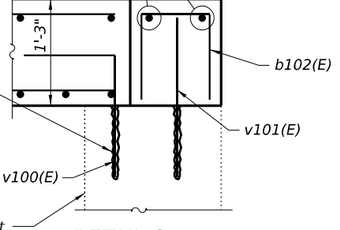
BAR b102(E)



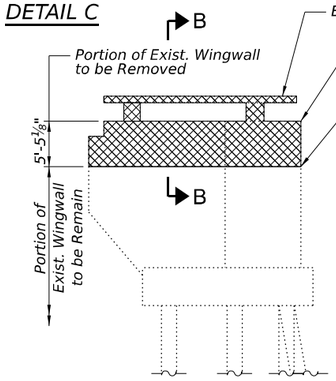
BAR v100(E)



SECTION THROUGH PROPOSED ABUTMENT

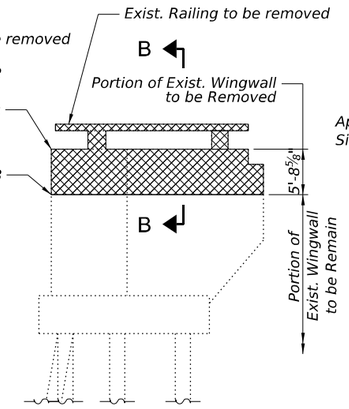


DETAIL C



NORTHWEST WINGWALL

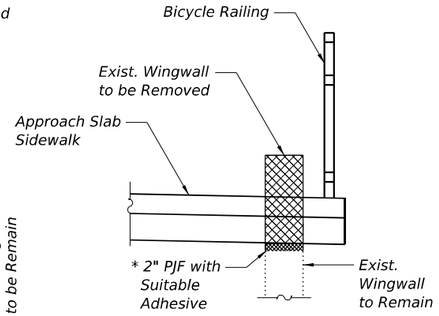
Looking South
See Plan for more Dimensions



SOUTHWEST WINGWALL

Looking North
See Plan for more Dimensions

Cost of Railing removal is included with Concrete Removal.



SECTION B-B

* Adhesive must be compatible with preformed joint material and concrete. Surface preparation shall be conducted in accordance with manufacturer's guidelines. Joint material shall fully extend to surface to prevent concrete pour around joint material. Cost is inlcuded with Concrete Superstrucure (Approach Slab).

NOTES:

1. Repair areas are estimated based on inspection completed in 2020 and increased by 15% to account for additional deterioration. Actual repair areas and locations shall be determined by the Engineer and shown as as-built plans.

2. Concrete sealer shall be applied to all repaired concrete areas on all abutment faces. Cost included with Structural Repair of Concrete.

3. Crack widths are ⅛", ±1⁄16" unless otherwise noted.

4. Installation of Non-Metalic Sleeve through Abutment Backwall shall be coordinated with the Drainage System work. The cost of this work shall be included with the Concrete Removal pay item.

5. See Sheet S-20 for bar bending diagrams for d(E), d1(E), and z(E) bars.

LEGEND:

- Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)
- Structural Repair of Concrete (Depth Greater Than 5 Inches)
- Concrete Removal
- 6' — Epoxy Crack Sealing

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
b100(E)	4	#5	29'-6"	
b101(E)	4	#5	28'-9"	
b102(E)	139	#4	2'-7"	
c40(E)	4	#5	17'-3"	
c41(E)	2	#5	4'-1"	
d(E)	4	#4	4'-1"	
d1(E)	4	#6	4'-5"	
d102(E)	4	#4	2'-5"	
v100(E)	111	#5	2'-8"	
v101(E)	111	#5	1'-9"	
z(E)	8	#5	2'-4"	
Reinforcement Bars, Epoxy Coated		Pound	1,270	
Structural Repair of Concrete (Depth Equal to or Less Than 5")		Sq. Ft.	9.0	
Structural Repair of Concrete (Depth Greater Than 5")		Sq. Ft.	7	
Concrete Removal		Cu. Yd.	8.6	
Epoxy Crack Injection		Foot	2	
Concrete Superstructure		Cu. Yd.	5.4	

MODEL: Substructure Condition • East Abutment
FILE NAME: I:\12504 IDOT-IL83 over Cal5sag\CADD\CADD_Sheets\Structural\M016057o-62H52-066e-East_Abutment_Repairs.dgn

COLLINS ENGINEERS INC

USER NAME = emroczek	DESIGNED - JFS / NA	REVISED -	
	DRAWN - DR	REVISED -	
PLOT SCALE =	CHECKED - EKM	REVISED -	
PLOT DATE = 4/25/2023	DATE - 04/25/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT REPAIRS
STRUCTURE NO. 016–0570

SCALE: | SHEET S-70 OF S-70 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	111
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

S.N. 016-0570

BENCH MARK #20
U.S.G.S. BRASS PLUG LT. OF STA. 19+00 ROUTE 83 ON HEADWALL CC DATUM EL.+24.02

BRIDGE OMISSION STA 57+89.95 TO STA 65+98.71

510'-4"
395'-10"
12 PANELS @ 32'-6" = 390'-0"
56'-1" 53'-3" 2'-11" 53'-6" 2'-11" SC-6

DIMENSIONS ALONG ℄ OF BRIDGE

℄ PIER 1 ℄ PIER 2 ℄ TRUSS BRGS. ℄ TRUSS BRGS. ℄ PIER 3 ℄ PIER 4 BK. OF EAST ABUT.
BK. OF WEST ABUT.

FUTURE LIFT TOWER NOT INCLUDED IN THIS CONTRACT

FUTURE LIFT TOWER NOT INCLUDED IN THIS CONTRACT

EXP. EXP. FIX. FIX. EXP. FIX. EXP. EXP.

TOP OF BERM EL.+21.67
EXIST. GROUND LINE
SLOPE WALL
HANDRAIL
"TOP OF ROCK
ROCK LINE VARIES VERTICALLY IN SHORT HORIZONTAL DISTANCES
60 A PREP
EL.+8.0
OBSTRUCTION LIGHT
EXIST. GROUND LINE
CHICAGO CITY DATUM (C.C.D.)
NAVIGATION LIGHT
MIN. VERT. EL.+15.5
WATER SURFACE VARIES
BOTTOM OF NEW CHANNEL EL.-13.00
MIN. 65'-0" OPNG. AT EL.-25 TO CHANNEL
CHANNEL LINE
-12' OVERDEPTH
THIS OPENING TO BE MAINTAINED FOR NAVIGATION DURING CONSTRUCTION PERIOD.
EXISTING PIER
EXISTING ABUTMENT
ROCK LINE VARIES VERTICALLY IN SHORT HORIZONTAL DISTANCES
EL.+8.0
EXIST. GROUND LINE
C.O. 20 DECM EL.+21.67

ELEVATION

DESIGN DATA

DESIGN LOADS
LIVE LOAD - H20-S16-44
FUTURE DEAD LOAD - 1/2" WEARING SURFACE

DESIGN STRESSES
CONCRETE
f'c = 3500 P.S.I.
fc = 1400 P.S.I.
fc = 1000 P.S.I. (WITH EARTH PRESSURE)
v = 75 P.S.I. (FOOTINGS)
REINFORCING STEEL
fs = 20,000 P.S.I.
STRUCTURAL STEEL
fs = 20,000 P.S.I. (ASTM A-36)

LOW ALLOY STEEL
fs = 27,000 P.S.I. (3/8" THICK & UNDER)
fs = 24,000 P.S.I. (3/8" TO 1 1/2" THICK)

FOUNDATION
ABUTMENTS - STEEL H BEARING PILES 8BP36 W.T.H. 9,000 P.S.I. OF POINT AREA.
PIERS 1 & 4 FOOTINGS ON HARD PAN 10 TON/S.F.
PIERS 2 & 3 FOOTINGS ON ROCK - 20 TON/S.F.

DESIGN DESIGNATION
127th STREET 14,000 ADT - M - 60

NOTES!
STA. 65+89.75 ℄ 127TH STREET = STA. 567+75.88 CAL-SAG ℄.
ELEVATIONS SHOWN REFER TO CHICAGO CITY DATUM (C.C.D.) WHICH IS 578.18 FEET ABOVE MEAN WATER LEVEL AT FATHER POINT, QUEBEC, INTERNATIONAL GREAT LAKES DATUM (I.G.L.D.) (1955).
THE INTERSECTION OF THE ℄ 127TH STREET WITH THE CAL-SAG ℄ WILL BE THE WORKING POINT FOR THIS PROJECT. ALL STATIONING ALONG 127TH STREET SHALL BE BASED ON THE STATION EQUATION AT THIS LOCATION.

SOUTH CHANNEL LINE
NORTH CHANNEL LINE
℄ 225'-0" CHANNEL
TOP OF SLOPE
TOE OF SLOPE
SHOULDER LINE
EDGE OF STEPS
EDGE OF PAVEMENT
BACK OF WEST ABUT.
STA. 54+77.50 ELEV. 39.55
STA. 54+46.03 ELEV. 39.60
STA. 54+31.33 ELEV. 37.80
POINT OF MIN. VERTICAL CLEARANCE - LOW STEEL ELEV. = 25.05
FACE OF RAILING
EDGE OF DECK
FACE OF CURB
PROFILE GRADE
STA. 62+97.55
STA. 60+45.67 ELEV. 27.53
STA. 60+82.09 ELEV. 25.60
℄ JOINT
℄ TRUSS
30' SIDEWALK
10'
N°1 N°2 N°3 N°4 N°5 N°9 N°10 N°11 N°12
℄ 127th STREET
EDGE OF PAVEMENT
BACK OF EAST ABUT.
STA. 65+79.45 ELEV. 27.55
38°-01'-00"
EDGE OF SLOPEWALL
CAL-SAG ℄
EDGE OF WATER
AT EL. +3.70 - CHANNEL
112'-6" AT EL. +3.70 - CHANNEL
100'-0"
2:1 SLOPE
AT EL. +3.70

NOTE!
◆ INDICATES LOCATION OF BORINGS

NORTH

PLAN
SCALE 1" = 100'

2'-0" EDGE OF DECK
6"
2'-0"
SLOPEWALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC 6"x6" MESH #6 WIRE WEIGHING 58#/100 SQ. FT.
LIMIT OF CLASS 'A' EXCAVATION

DETAIL OF EDGE OF SLOPEWALL
NOTE - THE 2'-0" ℄ EDGEWALL IS CONSIDERED 3.0 SQUARE FEET OF 6" SLOPEWALL.

BILL OF MATERIAL - SLOPEWALL

ITEM	UNIT	QUANTITY DESIGN STAGE	QUANTITY AS - BUILT
SLOPEWALL 6"	SQ.YD.	535	621
CLASS 'A' EXCAVATION	CU. YD.	6	—

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
SEYMOUR SIMON, PRESIDENT BOARD OF COMMISSIONERS
ANDREW V. PLUMMER, SUPERINTENDENT OF HIGHWAYS

GENERAL PLAN & ELEVATION
127TH STREET BRIDGE
OVER CALUMET-SAG CHANNEL

ALFRED BENESCH & ASSOCIATES
CONSULTING ENGINEERS
10 S. WABASH AVE. CHICAGO, ILLINOIS
APPROVED
CHIEF ENGINEER

PROJECT
SCALE
APPROVED

County Highway	Sheet No.	Total Sheets	Drawing No.
180-1414.1-BPT	15	52	

REEL B.O. 180B

FOR INFORMATION ONLY

USER NAME = CEComln	DESIGNED - RVV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - RVV	REVISED -	
PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

EXISTING PLANS
SN 016-0570

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	112
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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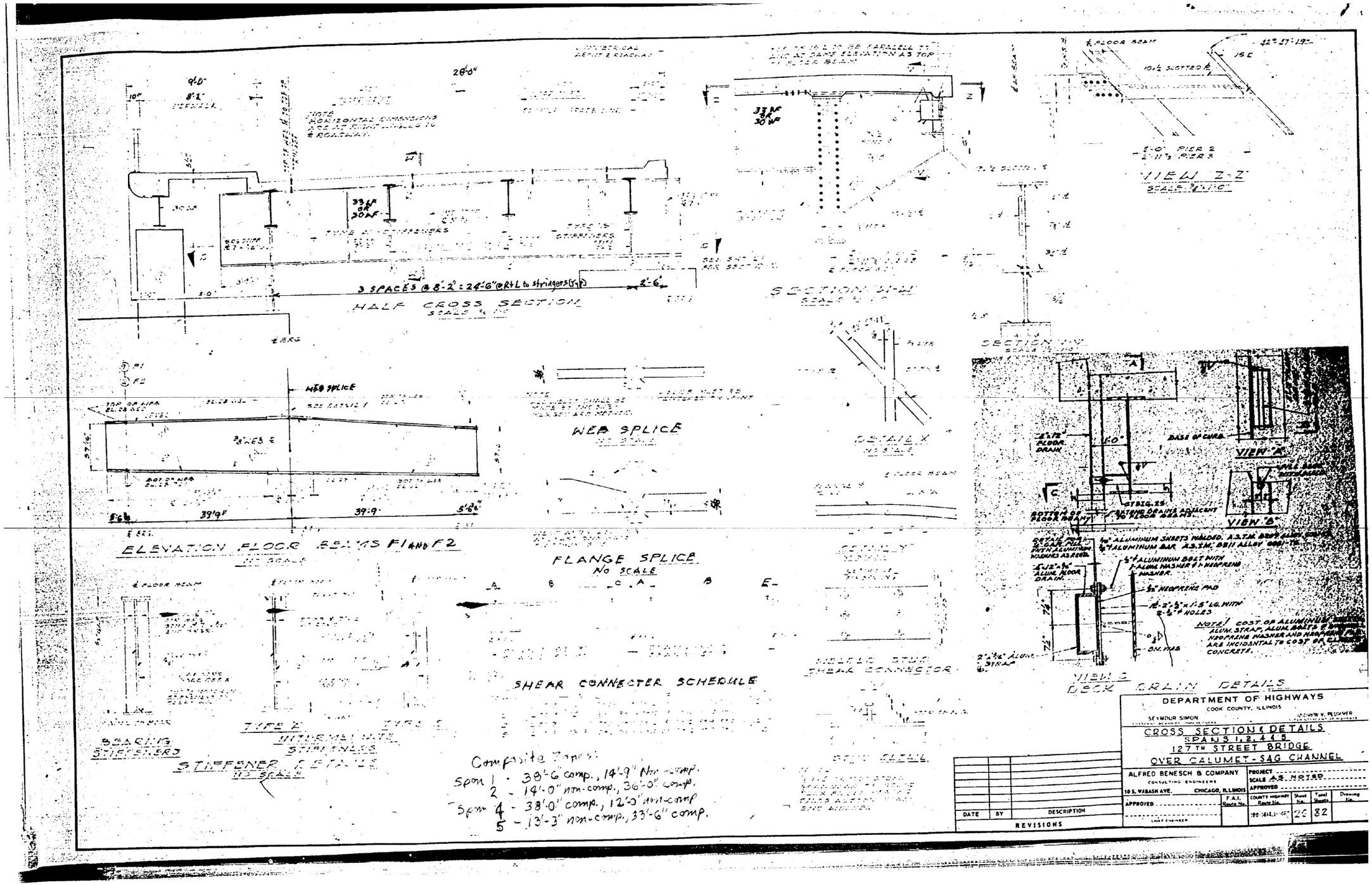

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
SEYMOUR SIMON — ARTHUR V. PLUCHER

CROSS SECTION & DETAILS
SPANS 1, 2, 4 & 5
127TH STREET BRIDGE
OVER CALUMET-SAG CHANNEL

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
10 S. WABASH AVE. CHICAGO, ILLINOIS

PROJECT
SCALE AS NOTED
APPROVED

APPROVED ..... LHMP ENGINEER

F.A.I. Route No.	County Highway Route No.	Sheet No.	Total Sheets	Drawing No.
	310-5414.1-4[illegible]	20	82	

DATE	BY	DESCRIPTION

REVISIONS

FOR INFORMATION ONLY

USER NAME = CEComln	DESIGNED - RVV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - RVV	REVISED -	
PLOT SCALE = 0.2 '' / In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

EXISTING PLANS
SN 016-0570

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	113
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

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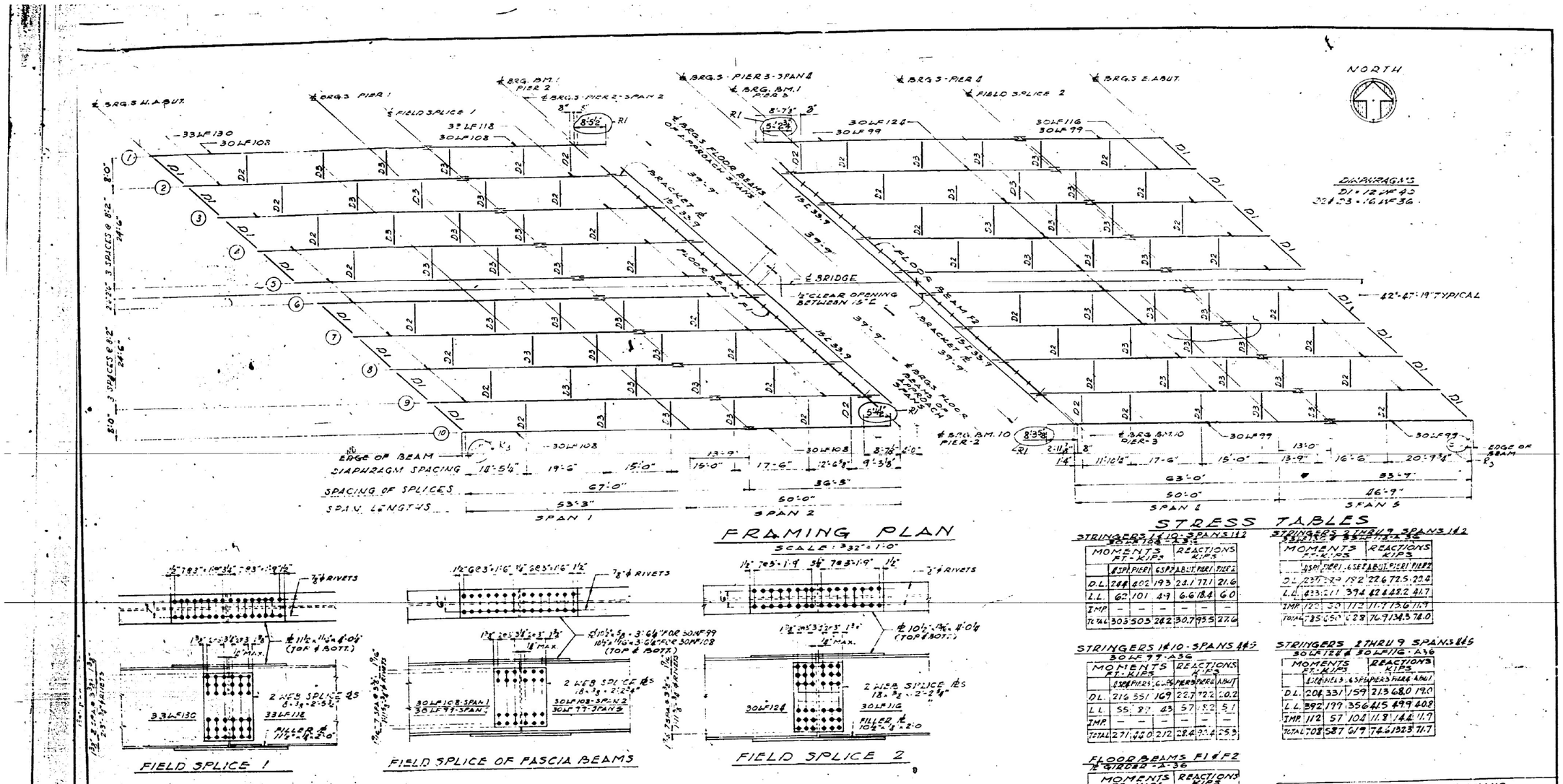

STRESS TABLES

STRINGERS 1 & 10 - SPANS 1 & 2
30 LF 108 & 33 LF

MOMENTS FT-KIPS			REACTIONS KIPS		
	@SP1	PIER 2	@SP2	ABUT.	PIER 2
D.L.	244	402	193	23.1	77.1
L.L.	62	101	49	6.6	18.4
IMP.	–	–	–	–	–
TOTAL	303	503	242	30.7	95.5

STRINGERS 2 THRU 9 - SPANS 1 & 2
30 LF 108 & 33 LF

MOMENTS FT-KIPS			REACTIONS KIPS		
	@SP1	PIER 2	@SP2	ABUT.	PIER 2
D.L.	239	393	192	22.6	72.5
L.L.	63	111	34	4.2	13.2
IMP.	72	55	72	11.7	15.6
TOTAL	374	559	298	38.5	101.3

STRINGERS 1 & 10 - SPANS 4 & 5
30 LF 99 - A36

MOMENTS FT-KIPS			REACTIONS KIPS		
	@SP4	PIER 3	@SP5	PIER 4	ABUT.
D.L.	216	351	169	22.7	7.2
L.L.	55	87	43	5.7	1.8
IMP.	–	–	–	–	–
TOTAL	271	438	212	28.4	9.0

STRINGERS 2 THRU 9 - SPANS 4 & 5
30 LF 126 & 30 LF 116 - A36

MOMENTS FT-KIPS			REACTIONS KIPS		
	@SP4	PIER 3	@SP5	PIER 4	ABUT.
D.L.	208	331	159	21.3	6.8
L.L.	59	87	43	5.7	1.8
IMP.	112	57	104	11.8	4.2
TOTAL	379	475	306	38.8	12.8

FLOOR BEAMS F1 & F2
W 24 x 120 @ 42 - A36

MOMENTS FT-KIPS				REACTIONS KIPS		
	@ SP4	@ SP5	PIER 3	END	CTR.	END
D.L.	422	370	422	28.7	10.0	28.3
L.L.	168	139	168	36.9	13.5	36.9
IMP.	132	128	132	10.8	27.6	10.8
TOTAL	722	637	722	76.4	51.1	76.0

TOP OF STRINGER ELEVATIONS FOR FABRICATION ONLY

LOCATION / STRINGER NO.	1	2	3	4	5	6	7	8	9	10
℄ BRG'S. WEST ABUTMENT	25.929	25.765	26.127	26.417	26.770	26.897	27.017	27.088	27.110	27.290
℄ BRG'S. PIER 1	26.786	26.774	27.326	27.635	27.898	27.997	28.081	28.111	28.108	28.246
℄ FIELD SPLICE 1	27.111	27.241	27.632	27.934	28.182	28.281	28.356	28.376	28.358	28.394
	27.109	27.240	27.631	27.933	28.181	28.280	28.355	28.376	28.357	28.392
℄ BRG'S. PIER 2 - SPAN 2	27.815	27.938	28.301	28.579	28.806	28.882	28.932	28.932	28.897	28.875
℄ BRG'S. PIER 3 - SPAN 4	28.878	28.839	28.938	28.936	28.886	28.862	28.879	28.901	28.884	28.815
℄ BRG'S. PIER 4	28.899	28.105	28.178	28.084	28.000	27.896	27.638	27.327	26.976	26.787
	28.055	27.901	27.901	27.865	27.773	27.660	27.371	27.073	26.741	26.546
℄ FIELD SPLICE 2	28.053	27.902	27.902	27.822	27.757	27.659	27.395	27.072	26.715	26.541
℄ BRG'S. EAST ABUTMENT	27.922	27.764	27.764	27.726	27.686	27.622	27.433	27.210	26.900	26.692

R1 = R2(BM.1 TO 10) INCL.
R2(BM.1 TO 10) INCL.
R2(BM.2, 3,4,5,9&10)

NOTES
ELEVATIONS SHOWN IN LINES NOTED THUS * ARE FOR UNEXPLECTED BEAMS PRIOR TO BE USED FOR FABRICATION PURPOSES ONLY.
ELEVATIONS SHOWN IN LINES NOTED THUS ** ARE FOR ERECTED BEAMS PRIOR TO PLACING CONCRETE DECK. ELEVATIONS ARE ADJUSTED FOR D.L. DEFLECTION OF STRUCTURAL STEEL ONLY.

ELEV. AT ℄ OF END FL. BM. SPANS 2 & 4

STRINGER		ELEVATION	ELEVATION	TOP OF STR TO TOP OF WEB ℄
PIER 2	PIER 3	TOP OF STR	TOP OF WEB	
9	2	28.887	28.642	3"
8	3	28.932	28.642	3½"
7	4	28.936	28.642	3½"
6	5	28.886	28.592	3"
5	6	28.802	28.538	3"
4	7	28.579	28.284	3½"
3	8	28.301	28.010	3½"
2	9	27.984	27.736	3"

DATE	BY	REVISIONS
8-26-68	RL	Beam Layout Spacing
8-12-68	C.C.	REV. T/BM ELEV. ℄2
7-23-68	C.C.	BMS. 1 & 10-T/BK ELEV. R1

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
RICHARD B. OGILVIE — ANDREW V. PLUMMER

FRAMING PLAN - SPANS 1,2,4 & 5
127TH STREET BRIDGE
OVER CALUMET - SAG CHANNEL

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
10 S. WABASH AVE. CHICAGO, ILLINOIS

PROJECT
SCALE AS NOTED
APPROVED
APPROVED
CHIEF ENGINEER

COUNTY HIGHWAY Route No.	Sheet No.	Total Sheets	Drawing No.
180-1414-1 MFT	27K	82	CS88

FOR INFORMATION ONLY

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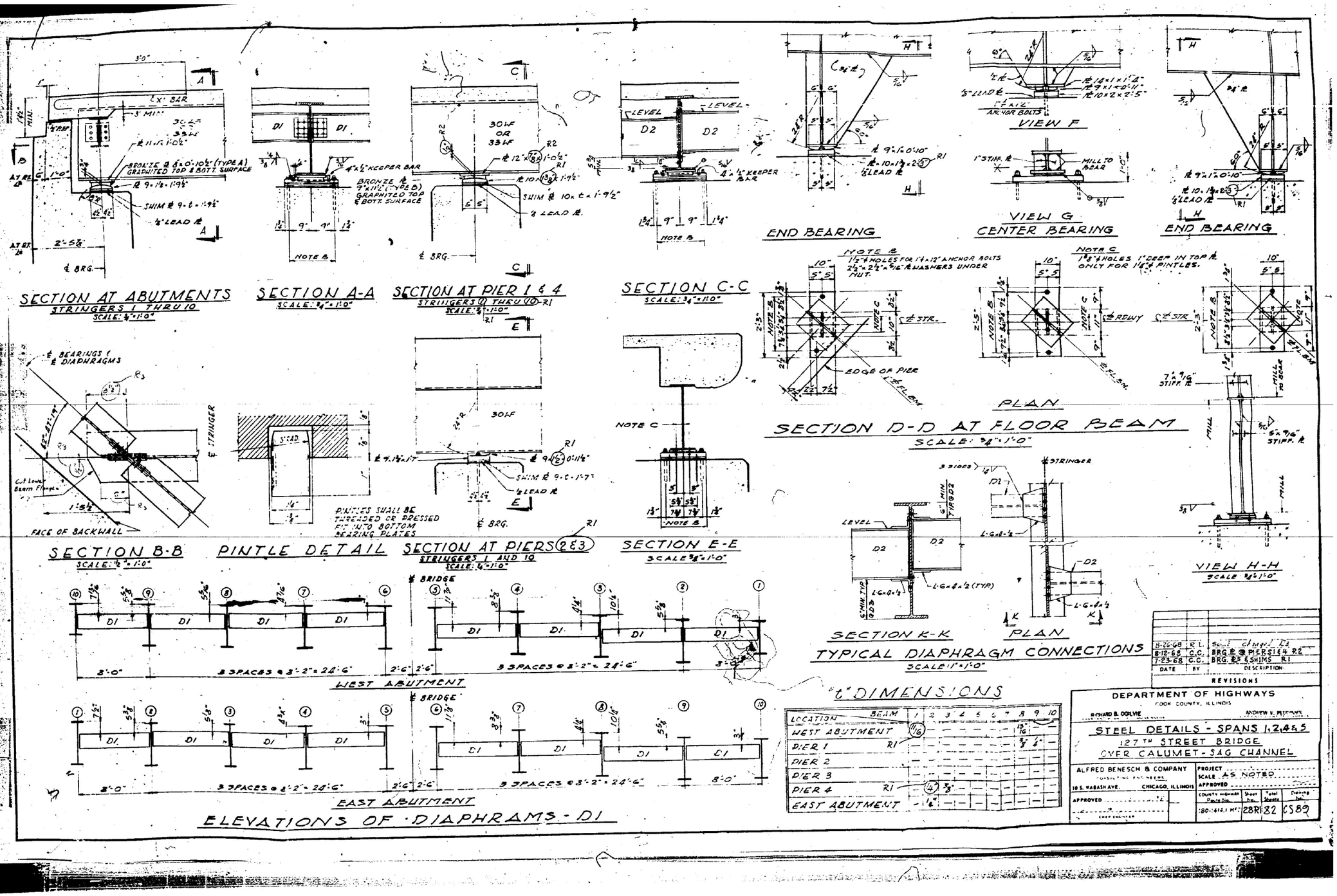
TranSystems	USER NAME = CEComln	DESIGNED - RVV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLANS SN 016–0570
		DRAWN - RVV	REVISED -		
	PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 5/17/2022	DATE - XXX	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	114
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		



FOR INFORMATION ONLY

TranSystems	USER NAME = CEComln	DESIGNED - RVV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLANS SN 016-0570	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - RVV	REVISED -			344	2018-125-B-R	COOK	141	115
	PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -					CONTRACT NO. 62H52		
	PLOT DATE = 5/17/2022	DATE - XXX	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		

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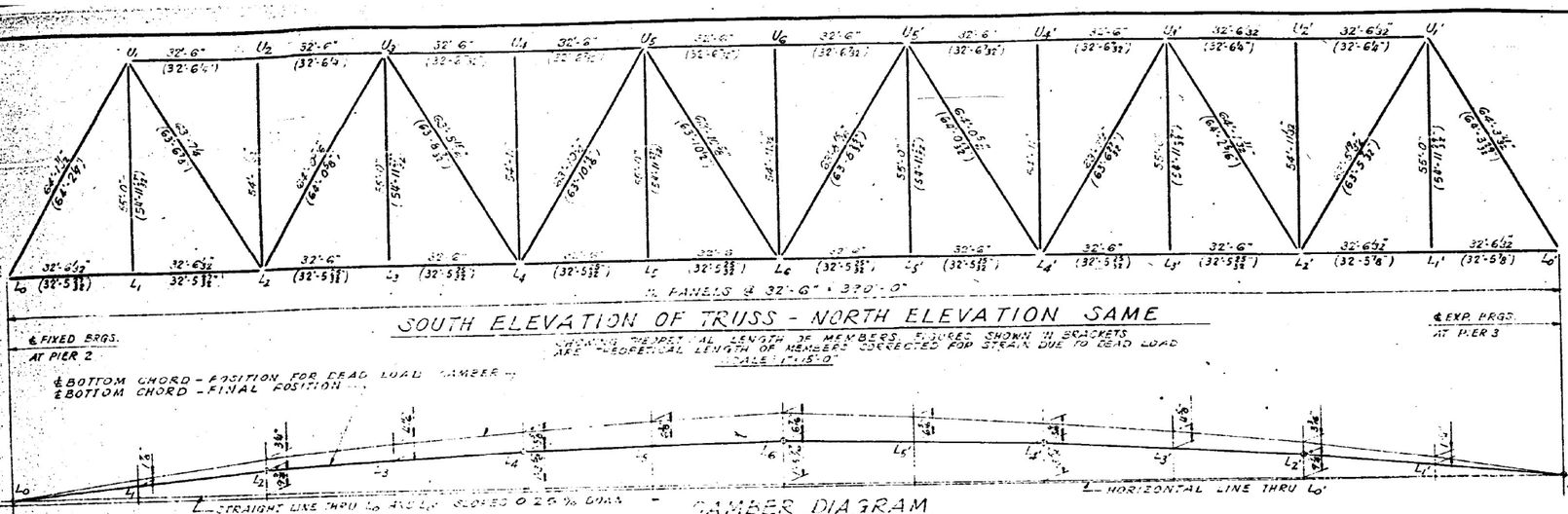

SOUTH ELEVATION OF TRUSS - NORTH ELEVATION SAME

SHOWING THEORETICAL LENGTH OF MEMBERS. FIGURES SHOWN IN BRACKETS ARE THEORETICAL LENGTH OF MEMBERS CORRECTED FOR STRAIN DUE TO DEAD LOAD

SCALE 1"=15'-0"

CAMBER DIAGRAM

NO SCALE

TRUSS REACTIONS

DEAD LOAD	1452
LIVE LOAD	271
IMPACT	26
SIDEWALK LIVE LOAD	42
TOTAL	1791

STRESS TABLE

MEMBER	SECTION	LENGTH C TO C JOINT FEET	X in	Y in	UNIT STRESS (MAX.)	AREA SQ. IN. GROSS	NET	NET EFFECTIVE	DEAD LOAD D	LIVE LOAD L	IMPACT I	SIDEWALK LIVE LOAD SL	WIND STRESSES KIPS +WIND	−WIND	D+L+I KIPS +LIVE	D+W KIPS +33% WIND	A	B	C	ALLOWABLE UNIT STRESSES KIPS PER SQ. IN. A	B & C	E.L. DEFORM. IN INCH D+L A-E	GRADE OF STEEL	MEMBER
L_0 - U_1	4 ES 30 x ⅝ 2 ES .4 x ⅝ 4 LS 8 x 8 x ⅝ 2 COV. PL 19 x ½	64.162	15.47	1.51	51.0	131.94	–	114.94	73.5	+27.5	27	-42	-83	–	-1823	-1515	-1847	14.32	20.05	16.80	18.30	22.85	+⅜	A-440	L_0 - U_1
		64.305			81.1				27.9	+28.4	25	-42	-83	–	-1700	-1462	-1725	13.45	19.35	15.90			-⅛		L_0' - U_1'
L_0' - U_1'		32.500	11.58	1.57	40.8	83.26	–	82.26	47.15	+24.2	24	-38	-54	–	-1651	-1402	-1664	20.55	17.80	20.65	21.07	26.35	+⅛	A-440	U_1 - U_3
U_1 - U_3	2 ES 30 x ⅞ 4 LS 8 x 6 x ½ 2 COV. PL 20 x ½	32.533							43.10	+23.3	23	-35	-52	–	-1595	-1321	-1616	19.90	17.30	20.23			-⅛		U_1' - U_3'
U_1' - U_3'		32.500							43.10	+23.3	23	-35	-52	–	-1595	-1321	-1616	19.90	17.30	20.23			+⅛		
U_3 - U_5	4 ES 30 x ⅝ 2 ES .4 x ⅝ 4 LS 8 x 6 x ½ 2 COV. PL 19 x ¾	32.500	10.21	1.56	40.7	135.30	–	104.00	39.7	+21.4	21	-32	-61	–	-1624	-1215	-1651	20.95	18.05	21.20	21.07	26.40	+⅜	A-440	U_3 - U_5
U_3' - U_5'		32.500							39.7	+21.4	21	-32	-61	–	-1624	-1215	-1651	20.95	18.05	21.20			+⅜		U_3' - U_5'
U_5 - U_6'	4 ES 30 x ⅞ 2 ES .4 x ½ 4 LS 8 x 6 x ½ 2 COV. PL 18½ x ½	32.500	12.10	1.51	41.0	167.50	–	143.50	53.6	+24.6	24	-42	-69	-91	–	-2940	-2484	-2727	21.03	18.07	21.33	21.06	26.33	+⅝	A-440	U_5 - U_5'
L_0 - L_2	2 PL 30 x ¾ 1 PL 20½ x ½ WELDED	32.503	7.62	9.92	99.9	55.25	43.50	–	+.820	+.334	+.3	+.21	+124	+16	+1.174	+.874	+.973	20.00	14.46	21.23	20.00	25.00	-⅜	A-36	L_0 - L_2
L_0' - L_2'		32.503							+.302	+.117	+.11	+.21	+.124	+.15	+.551	+.326	+.906	18.62	18.47	17.86			-½		L_0' - L_2'
L_2 - L_4	2 PL 30 x ½ 1 PL 19 x 1 WELDED	32.500	7.85	9.91	99.6	109.00	95.50	–	+.623	+.319	+.32	+.52	+199	+.28	+.2182	+1775	+.2270	23.90	21.98	24.88	24.00	30.00	-⅝	A-441	L_2 - L_4
L_2' - L_4'		32.500							+.722	+.422	+.31	+.52	+.199	+.28	+.2182	+1776	+.2270	23.90	21.98	24.88			-¾		L_2' - L_4'
L_4 - L_6	2 PL 30 x ½ 1 PL 18 x ⅝ WELDED	32.500	7.71	9.21	90.5	151.50	139.50	–	+.1.023	+.425	+.41	+.67	+.224	+.32	+.2565	+.2547	+.2962	22.55	20.40	23.34	22.00	27.50	-⅞	A-441	L_4 - L_6
L_4' - L_6'		32.500							+.1.023	+.422	+.41	+.67	+.224	+.32	+.2563	+.2547	+.2952	22.46	20.33	23.25			-⅞		L_4' - L_6'
U_1 - L_2	2 PL 22 x ½ 1 PL 19 x 1 WELDED	63.634	5.59	9.59	136.5	85.00	71.50	–	+.1167	+.535	+.26	+.35	–	–	+.1465	–	–	23.80	–	–	24.00	–	-⅞	A-441	U_1 - L_2
U_1' - L_2'		63.455			136.0				+.1160	+.236	+.26	+.35	–	–	+.1477	–	–	23.75	–	–			-⅜		U_1' - L_2'
L_2 - U_3	2 PL 22 x ⅜ 4 LS 5 x 5 x ⅝ 2 COV. PL 20½ x ⅜	64.322	8.60	9.44	89.3	76.50	–	72.00	.911	.376	.23	.28	–	–	.1156	–	–	17.26	–	–	17.50	–	+⅝	A-440	L_2 - U_3
L_2' - U_3'		64.168			89.5				.934	.193	24	.28	–	–	.1184	–	–	17.62	–	–			+½		L_2' - U_3'
U_3 - L_4	2 PL 22 x ⅜ 1 PL 20½ x ½ WELDED	63.745	5.55	1.73	137.7	43.75	36.50	–	+.1445	+.1150	+.21	+.23	–	–	+.1473	–	–	26.67	–	–	27.00	–	-⅝	A-441	U_3 - L_4
U_3' - L_4'		63.604			137.5				+.647	+.167	+.21	+.23	–	–	+.973	–	–	27.27	–	–			-½		U_3' - L_4'
L_4 - U_5	2 - PL 5/8 x 58.0 2 COV. PL 21 x ⅝	63.885	7.42	9.28	133.3	57.50	–	50.34	.1557	.727	.18	.19	–	–	.550	–	–	12.20	–	–	12.80	–	-⅛	A-36	L_4 - U_5
L_4' - U_5'		64.026			135.5				.1.1	.727	.18	.19	–	–	.572	–	–	12.65	–	–			-⅜		L_4' - U_5'
U_5 - L_6	2 PL 18 x ½ 1 PL 21 x ⅜ WELDED	63.895	4.34	9.58	176.5	25.88	21.38	–	.1.2	.1.0	+16	+.3	–	–	.1.2	–	–	14.15	–	–	20.00	–	-⅝	A-36	U_5 - L_6
U_5' - L_6'		63.745			176.2				.189	.1.0	+16	.3	–	–	.168	–	–	17.18	–	–			-⅝		U_5' - L_6'
U_1 - L_1	2 PL 14 x ⅝ 1 PL 20½ x ⅜ WELDED	55.000	1.38	1.50	176.5	25.29	22.44	–	.1.5	.1.1	+26	+.10	–	–	.1.3	–	–	13.90	–	–	20.00	–	-⅝	A-36	U_1 - L_1
U_1' - L_1'									.1.1	.1.1	+.15	+.10	–	–	.1.68	–	–	0.15	–	–			-⅝		U_1' - L_1'
U_2 - L_2	2 PL 14 x ⅝ 1 PL 20½ x ½ WELDED	54.919	5.51	10.68	18.5	27.88	–	7.50	–	–	–	–	–	–	-16	–	–	2.93	–	–	11.80	–	–	A-36	U_2 - L_2
U_2' - L_2'									–	–	–	–	–	–	–	–	–	2.13	–	–			–		U_2' - L_2'
L_2 - U_3, L_2' - U_3'	2 PL 14 x ⅝ 1 PL 20½ x ⅜ WELDED	55.000	3.36	1.57	176.5	25.29	22.44	–	.1.25	+.1.0	+26	+.10	–	–	+.317	–	–	14.10	–	–	20.00	–	-⅝	A-36	L_2 - U_3, L_2' - U_3'
L_2' - U_3', L_2' - U_3'									.1.16	+.1.0	+.16	+.10	–	–	+.320	–	–	14.20	–	–			-⅝		L_2' - U_3', L_2' - U_3'
L_4 - U_5, L_4' - U_5'	2 PL 14 x ⅝ 1 PL 20¾ x ½ WELDED	54.917	5.57	10.63	18.5	27.90	–	7.50	.1.3	–	–	–	–	–	-28	–	–	3.73	–	–	11.80	–	–	A-36	L_4 - U_5, L_4' - U_5'
U_5 - L_6		54.917							.1.3	–	–	–	–	–	-30	–	–	4.00	–	–			–		U_5 - L_6

* INCLUDES SECONDARY STRESS DUE TO WEIGHT OF MEMBER AND WIND ON MEMBER

ELEVATIONS

PANEL POINT SOUTH TRUSS	PROFILE GRADE	WORK POINT "B"	℄ BOTTOM CHORD	PANEL POINT NORTH TRUSS
–	29.047	27.980	24.147	L_0'
–	29.575	28.468	24.635	L_1'
L_0	30.022	28.955	25.122	L_2'
L_1	30.388	29.280	25.447	L_3'
L_2	30.672	29.605	25.772	L_4'
L_3	30.875	29.768	25.934	L_5'
L_4	30.997	29.930	26.097	L_6'
L_5	31.032	29.930	26.097	L_6'
L_6	30.997	29.930	26.097	L_4'
L_5'	30.875	29.768	25.934	L_3'
L_4'	30.672	29.605	25.772	L_2'
L_3'	30.388	29.280	25.447	L_1'
L_2'	30.022	28.955	25.122	L_0
L_1'	29.575	28.468	24.635	–
L_0'	29.047	27.980	24.147	–

NOTES:

FOR GENERAL NOTES SEE SHEET 1G
FOR ADDITIONAL NOTES SEE SHEET 2E
ELEVATIONS GIVEN ARE AFTER DEAD LOAD DEFLECTION.

DATE	BY	DESCRIPTION

REVISIONS

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

SEYMOUR SIMON, PRESIDENT, BOARD OF COMMISSIONERS
ANDREW K. PLUMMER, SUPERINTENDENT OF HIGHWAYS

TRUSS ELEVATION & STRESS TABLE
127TH STREET BRIDGE
OVER CALUMET-SAG CHANNEL

ALFRED BENESCH & COMPANY, CONSULTING ENGINEERS, 10 S. WABASH AVE., CHICAGO, ILLINOIS

PROJECT
SCALE AS NOTED
APPROVED
APPROVED ..... CHIEF ENGINEER

F.A.I. Route No.	County Highway Route No.	Sheet No.	Total Sheets	Drawing No.
	180-8014.1-HFT	29	82	

FOR INFORMATION ONLY

USER NAME = CEComln	DESIGNED - RVV	REVISED -	
	DRAWN - RVV	REVISED -	
PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

TranSystems

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	116
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

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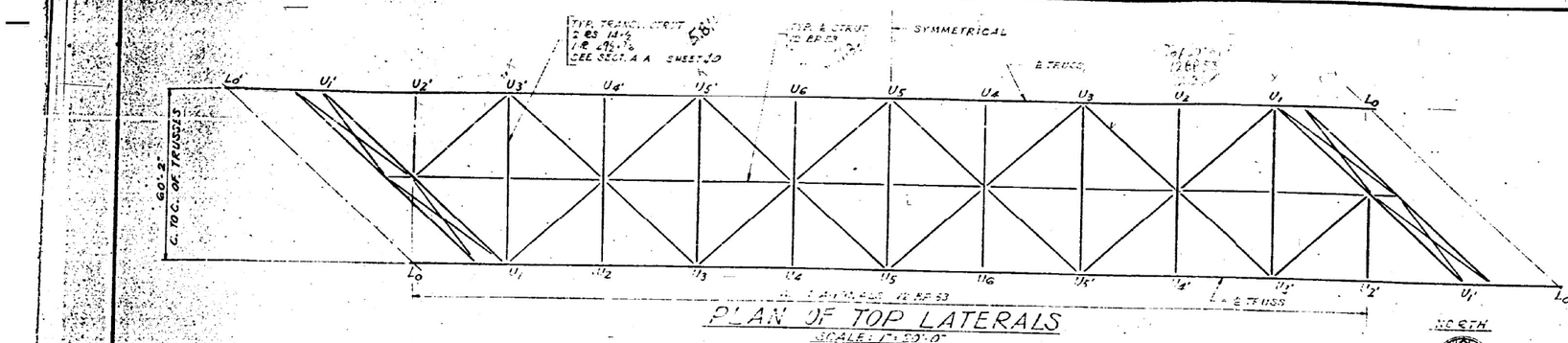
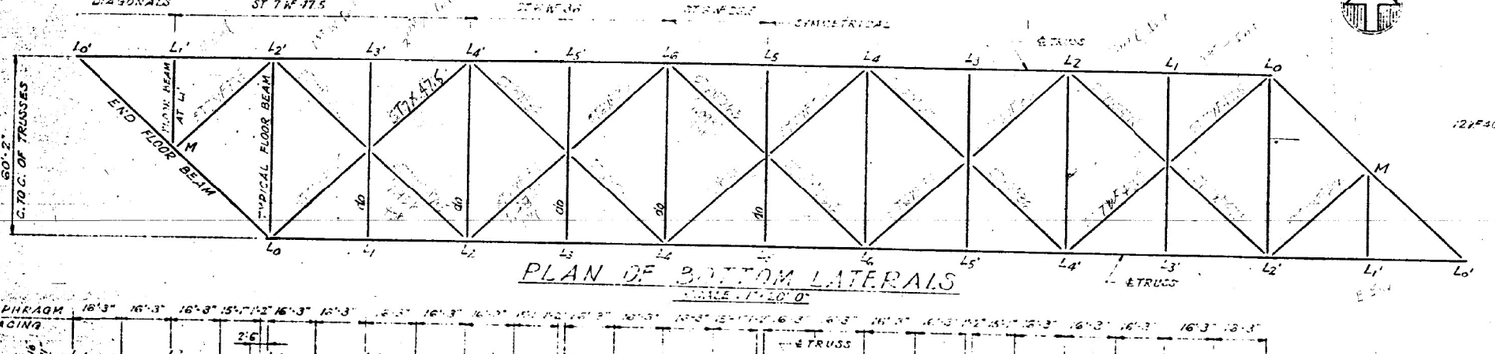


PLAN OF TOP LATERALS

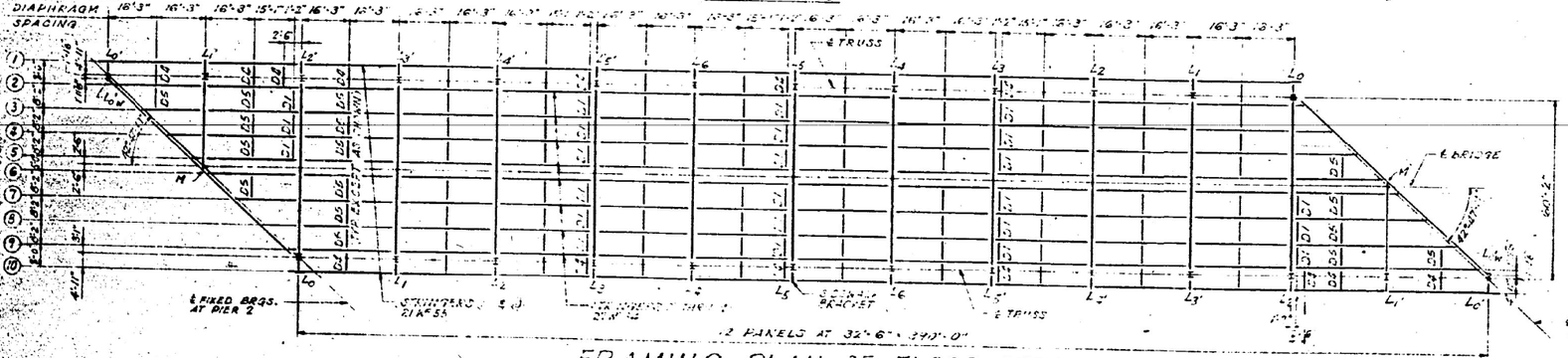
SCALE: 1"=50'-0"

NORTH



PLAN OF BOTTOM LATERALS

SCALE: 1"=50'-0"



FRAMING PLAN OF FLOOR STEEL

SCALE: 1"=50'-0"

DIAPHRAGMS

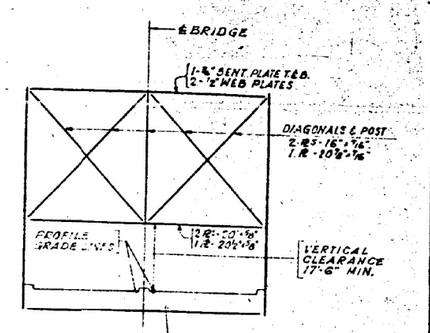
D1 - 12 WF 40

D2 - 10 WF 25

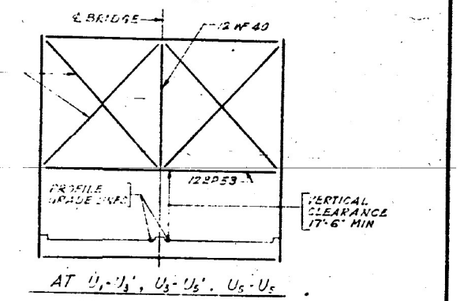
D3 - 14 WF 37

NOTE

FOR DETAIL FRAMING PLAN OF FLOOR STEEL PANEL L0' TO L3 SEE SHEET 31



PORTAL FRAME



AT U1-U3', U3-U5', U5-U6

SWAY FRAME

NOTES:

FOR GENERAL NOTES SEE SHEET 16

FOR ADDITIONAL NOTES SEE SHEET 32

DATE	BY	DESCRIPTION

REVISIONS

DEPARTMENT OF HIGHWAYS

COOK COUNTY, ILLINOIS

SEYMOUR SIMON — ANDREW V. PLUMMER

FRAMING PLAN SPAN 3

127TH STREET BRIDGE

OVER CALUMET-SAG CHANNEL

ALFRED BENESCH & COMPANY

CONSULTING ENGINEERS

10 S. WABASH AVE. CHICAGO, ILLINOIS

PROJECT

SCALE AS NOTED

APPROVED

APPROVED — CHIEF ENGINEER

F.A.I. Route No.	County Highway Route No.	Sheet No.	Total Sheets	Drawing No.
	180-1414.1-HFT	30	82	

FOR INFORMATION ONLY

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PLOT DATE = 5/17/2022	DATE - XXX	REVISED -

TranSystems

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	117
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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STRESS TABLE FOR STRINGERS AND FLOOR BEAMS

MEMBER	MOMENT (FT-KIPS) DL	LL	I	TOTAL	REACTION (KIPS) DL	LL	I	TOTAL	SECTION	GRADE OF STEEL
ROADWAY STRINGER	130.5	237.8	71.3	439.6	15.9	38.5	11.5	65.9	27 WF 84	A-36
SIDEWALK STRINGER	146.0	33.0	–	179.0	7.9	4.4	–	22.0	21 WF 55	A-36
INTERIOR FLOOR BEAM	2096.0	1447.0	391.0	3934.0	135.4	96.0	25.9	257.3	36 WF 328 PLATE GIRDER	A-441
FLOOR BEAM AT L_1'	392.0	541.0	163.0	1094.0	57.2	58.4	17.5	133.1	24 WF 162 PLATE GIRDER	A-36
END FLOOR BEAM *	-269.0	-331.0	-97.0	-697.0	102.6	97.5	29.3	229.4	36 WF 328 PLATE GIRDER	A-441
END FLOOR BM. JACKING FULL DL*	1940.0	–	–	1940.0	75.3	–	–	75.3	36 WF 328 PLATE GIRDER	A-441

□ COMPOSITE BEAM
* MOMENTS & REACTIONS AT ℄ SUPPORT
† UNDER JACKING OR LIFTING CONDITION WITHOUT ℄ SUPPORT

TOP OF STRINGER ELEVATIONS

℄ FLOOR BEAM AT JOINT	STRINGERS 1 & 10	2 & 9	3 & 8	4 & 7	5 & 6	℄ FLOOR BEAM AT JOINT
L_0'	28.136	28.136	28.297	28.429	28.511	–
L_1'	28.624	28.664	28.827	28.957	29.039	–
L_2'	29.111	29.111	29.274	29.404	29.486	L_2
L_3'	27.436	27.477	27.640	27.770	27.852	L_3
L_4'	29.761	29.761	29.924	30.054	30.136	L_4
L_5'	29.924	29.962	30.127	30.257	30.339	L_5
L_6	30.086	30.086	30.249	30.379	30.461	L_6
L_5	30.085	30.127	30.290	30.420	30.502	L_5

ELEV. AT ℄ OF END FLOOR BEAM

STRINGER PIER 2	STRINGER PIER 3	ELEV. TOP OF STRINGER	ELEV. TOP OF WEB	TOP OF STRINGER TO TOP OF WEB PLATE
2	9	28.172	28.013	0.159	1 15/16"
3	8	28.484	28.289	0.195	2 3/8
4	7	28.758	28.560	0.198	2 3/8
5	6	28.178	28.336	0.142	1 11/16
6	5	29.060	28.919	0.141	1 11/16
7	4	29.106	28.719	0.187	2 1/4
8	3	29.098	28.919	0.179	2 1/16
9	2	29.052	28.919	0.133	1 5/8

PANEL DEAD LOADS - KIPS

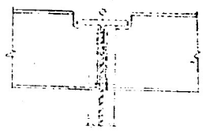
JOINT	SIDEWALK CONCRETE	ROADWAY SLAB AND WEARING SURFACE	FLOOR STEEL	TRUSS STEEL	TOTAL
L_0'	22.5	13.7	7.8	30.8	66.8
L_1'	40.0	37.8	12.5	73.5	163.8
L_2'	40.0	96.1	27.8	52.3	215.8
L_3'	40.0	101.0	25.7	62.9	229.6
L_4'	40.0	101.0	25.8	59.2	225.6
L_5'	40.0	101.0	28.0	66.3	235.3
L_6	40.0	101.0	25.8	56.6	223.0
L_5	40.0	101.0	28.0	65.9	234.9
L_4	40.0	101.0	25.5	58.7	225.2
L_3	40.0	101.0	28.0	62.8	231.8
L_2	40.0	101.0	25.3	57.1	223.5
L_1	40.0	101.0	25.7	86.7	253.1
L_0	25.8	97.2	28.8	45.2	196.6
M	—	74.1	28.5	–	102.6

PANEL LIVE LOADS - KIPS (4 LANES)

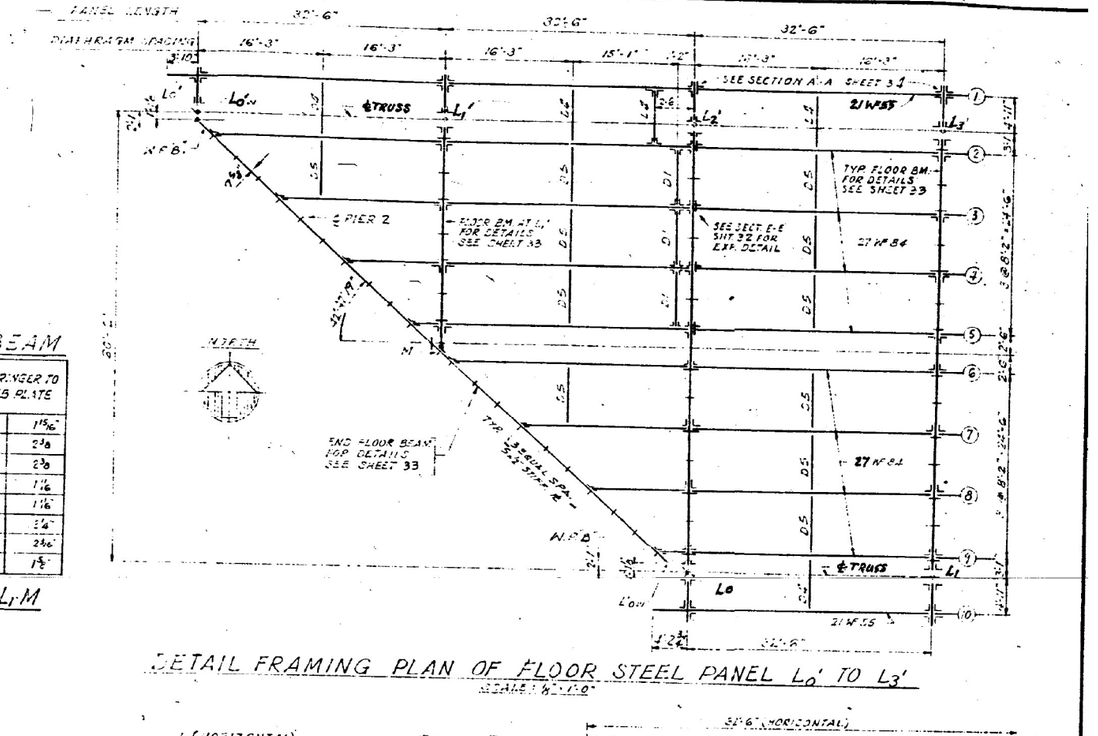
TYPE	PANEL POINT L_1'	L_2'	ALL OTHERS
UNIFORM LOAD	16.8	35.4	36.2
CONCENTRATED LOAD (MOMENT)	17.7	31.4	31.4
CONCENTRATED LOAD (SHEAR)	25.5	45.3	45.3
TRUCK LOADING	18.4	95.1	95.6
SIDEWALK	6.5	6.5	6.5

ELEV. TOP OF STRINGER AT FLOOR BEAM L_1-M

STRINGER PIER 2	STRINGER PIER 3	ELEV. TOP OF STRINGER	ELEV. TOP OF WEB	TOP OF STRINGER TO TOP OF WEB PLATE
9	2	28.765	28.500	0.265	3"
8	3	28.871	28.614	0.208	2 1/2"
7	4	28.967	28.754	0.213	2 5/8
6	5	29.034	28.859	0.175	2 1/8

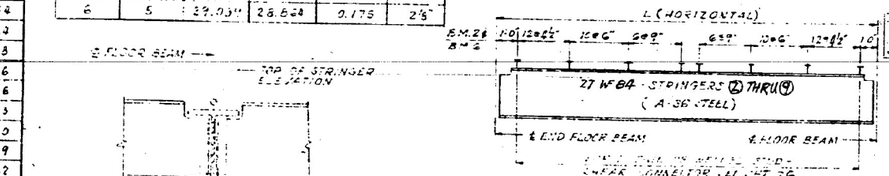


NOTE:
ELEVATIONS GIVEN ARE AFTER DEAD LOAD DEFLECTIONS.

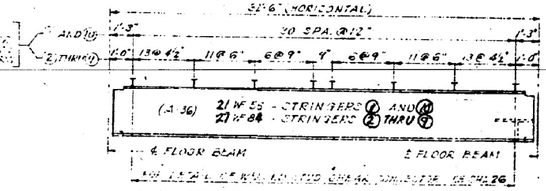


DETAIL FRAMING PLAN OF FLOOR STEEL PANEL L_0' TO L_3'

SCALE: 1" = 10'-0"



PANELS L_0' TO L_3'



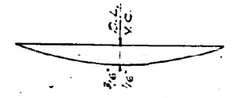
TYPICAL FOR ALL PANELS U.N.

FOR D.L. DEFLECTION DIAGRAM SEE SHT. 25

STRINGER ELEVATIONS

NO SCALE

NOTE:
FOR GENERAL NOTES SEE SHEET 16
FOR ADDITIONAL NOTES SEE SHEET 32



STRINGER DEAD LOAD DEFLECTION AND VERTICAL CURVE CORRECTION FOR PANELS L_0' TO L_3'

DATE	BY	DESCRIPTION

REVISIONS

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
SEYMOUR SIMON
SUPERINTENDENT OF HIGHWAYS

STRUCTURAL STEEL DETAILS - SPAN 3
127TH STREET BRIDGE
OVER CALUMET-SAG CHANNEL

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
205 W. WACKER DR. CHICAGO, ILLINOIS

PROJECT
SCALE AS NOTED
APPROVED
APPROVED
CHIEF ENGINEER

F.A.I. Route No.	COUNTY HIGHWAY Route No.	Sheet No.	Total Sheets	Drawing No.
	180-1414-HFT	31	82	

FOR INFORMATION ONLY

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PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	118
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

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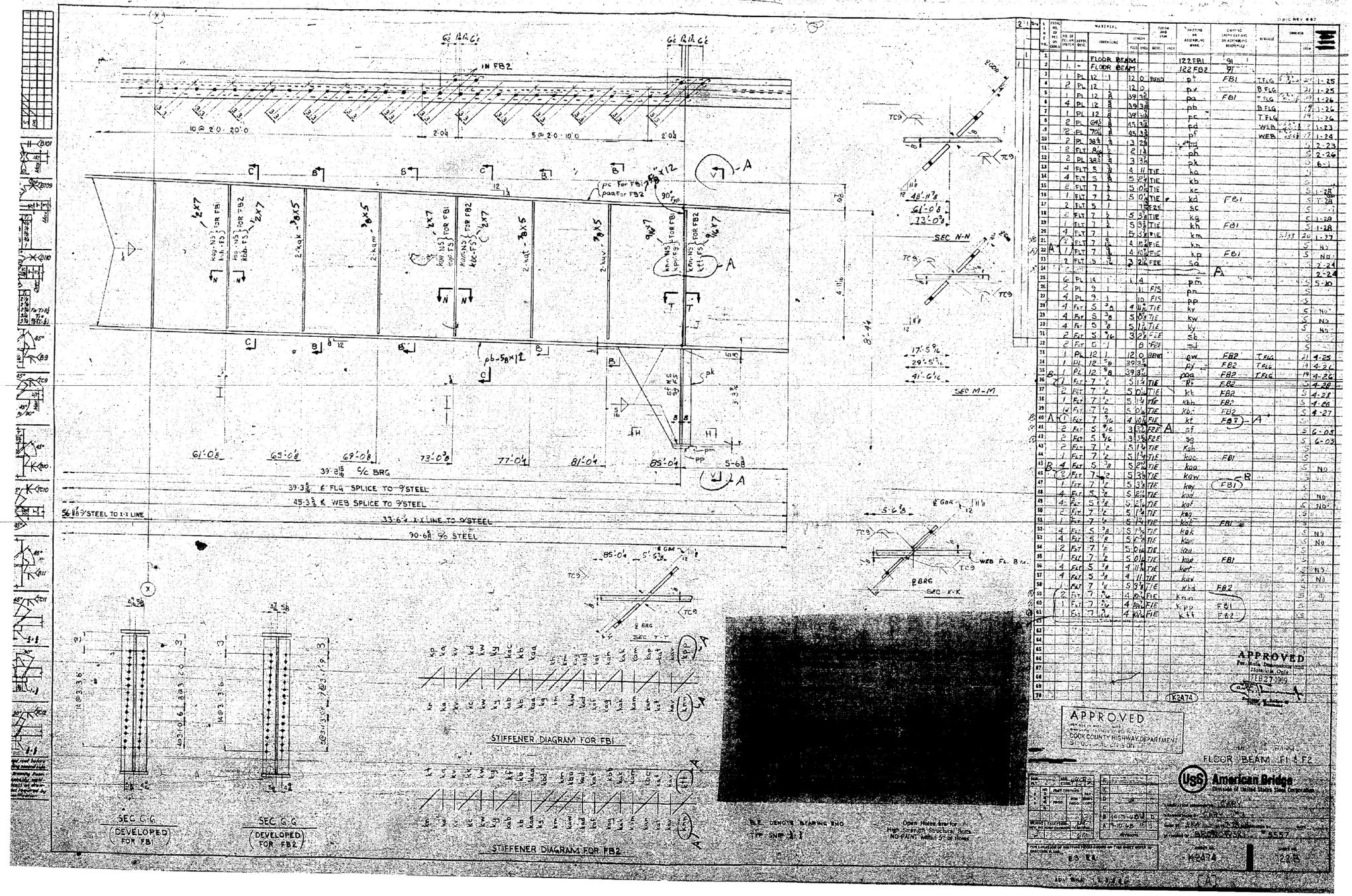

FOR INFORMATION ONLY

USER NAME = CEComln	DESIGNED - RVV	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
	DRAWN - RVV	REVISED -	
PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	119
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

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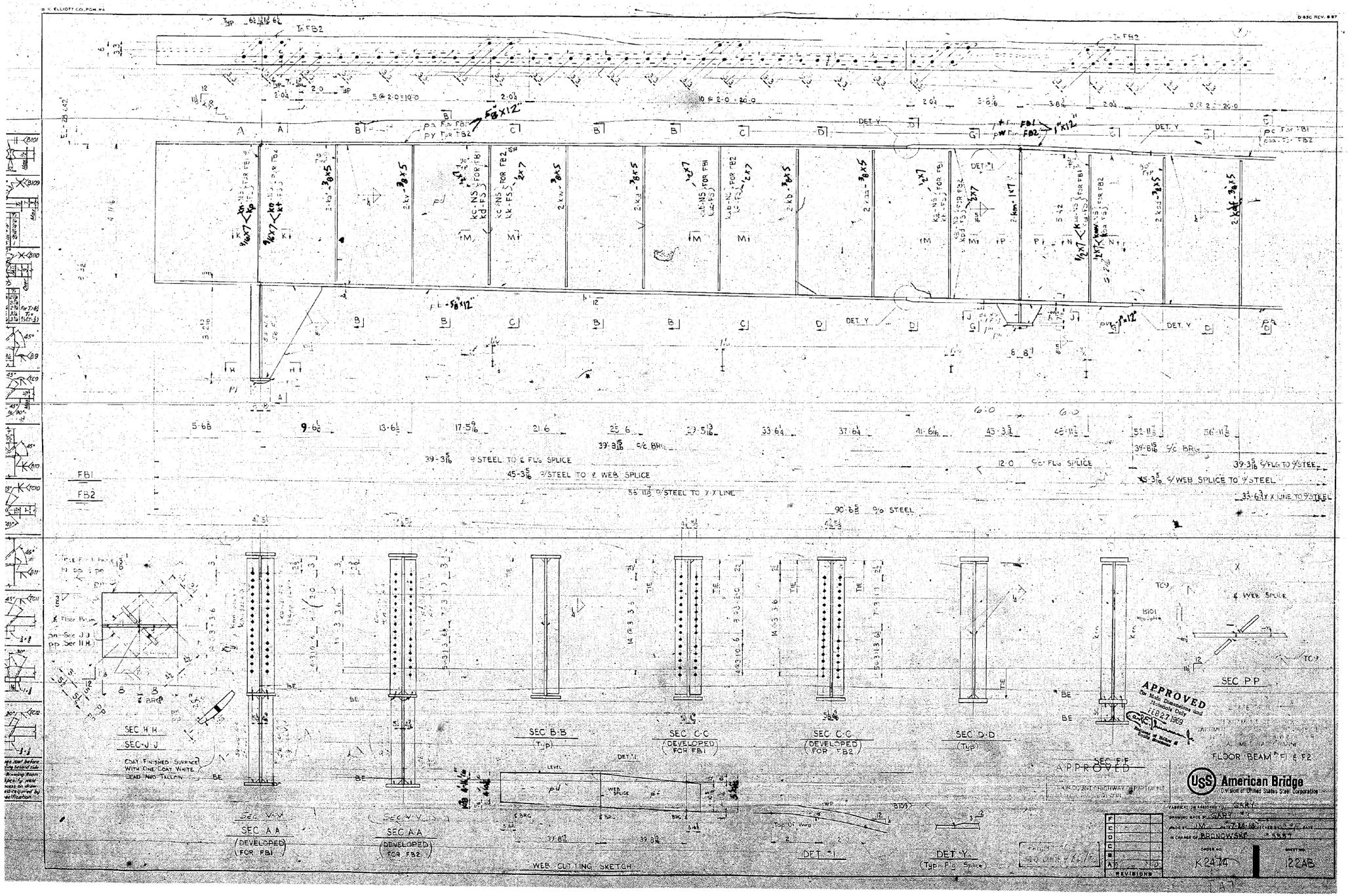

FOR INFORMATION ONLY

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PLOT SCALE = 0.2 '' / In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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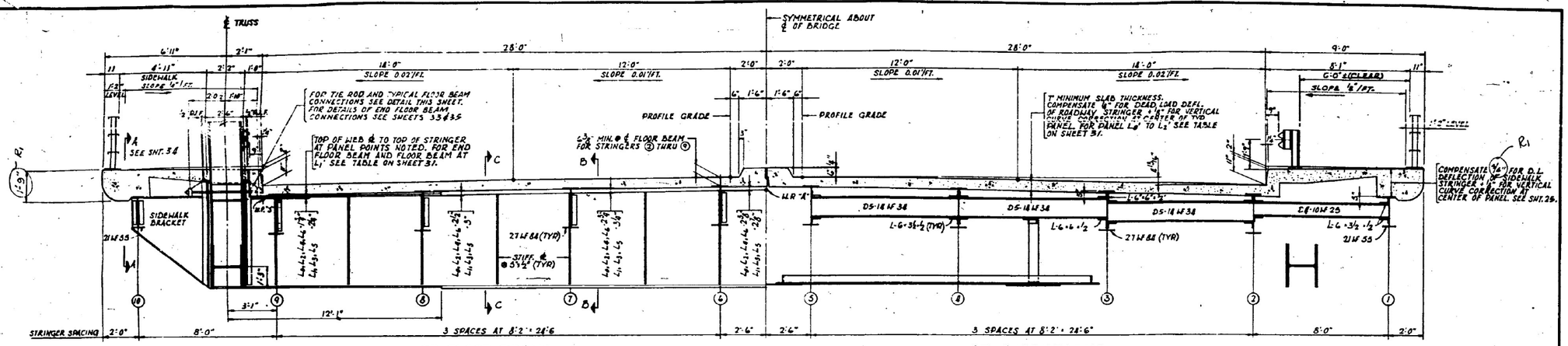
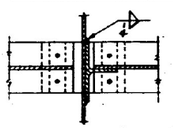
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



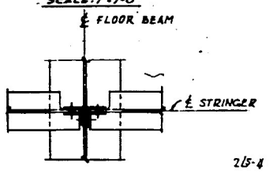
TYPICAL CROSS SECTION

SCALE: 3/16" = 1'-0"



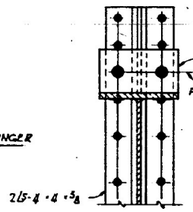
SECTION M-M

SCALE: 1" = 1'-0"



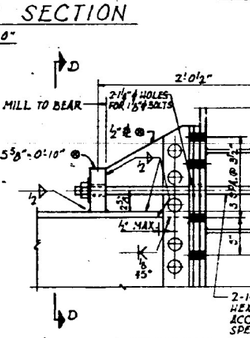
SECTION H-H

SCALE: 3/4" = 1'-0"



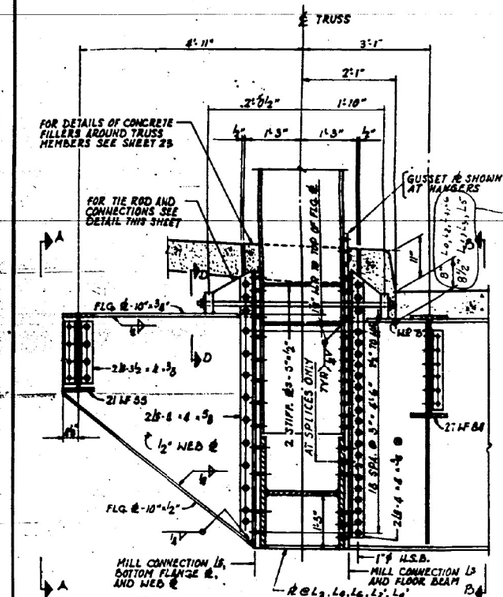
SECTION D-D

SCALE: 1 1/2" = 1'-0"



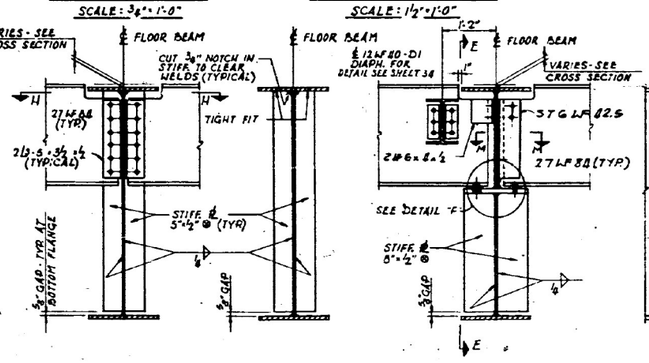
TYPICAL DETAIL OF TIE ROD

SCALE: 1 1/2" = 1'-0"



TYPICAL FLOOR BEAM AND SIDEWALK BRACKET CONNECTIONS

SCALE: 3/8" = 1'-0"



SECTION B-B AT L0 L1 L2 L4 L6 L8 L9 L11 L12 L13 L14 L15 L16 L17 SECTION C-C SECTION B-B AT L3 L5 L7 L15 L2' SECTION E-E

STIFFENER DETAILS AND STRINGER CONNECTIONS

SCALE: 3/32" = 1'-0"

DETAIL "F"

SCALE: 1 1/2" = 1'-0"

DETAIL "G"

AT FLOOR BEAMS

AT DIAPHRAGMS

NOTES: TRUSSES

FOR GENERAL NOTES SEE SHEET 1A.

ALL SHOP CONNECTIONS SHALL BE RIVETED, ALL FIELD CONNECTIONS SHALL BE HIGH STRENGTH BOLTS IN FRICTION TYPE CONNECTIONS UNLESS OTHERWISE SHOWN OR NOTED.

ALL RIVETS OR BOLTS IN GUSSETS SHALL BE 1" DIAMETER UNLESS OTHERWISE SHOWN OR NOTED. ALL OTHER CONNECTIONS SHALL BE 7/8" DIAMETER RIVETS OR BOLTS.

℗ - DESIGNATES HIGH STRENGTH LOW ALLOY STEEL:
A.S.T.M. A440 FOR RIVETED SECTIONS.
A.S.T.M. A441 FOR WELDED SECTIONS.

ALL OTHER STEEL SHALL BE CARBON STEEL: A.S.T.M. A36.

LOCATION OF HANDHOLES SHALL BE ADJUSTED SO THAT BOTTOM EDGE OF OPENING IS MIN. 3" VERTICALLY ABOVE TOP OF SIDEWALK.

DRAIN HOLES: WIDE FLANGE SECTIONS FORMING HORIZONTAL OR NEARLY HORIZONTAL TROUGHS AND OTHER POINTS WHERE WATER MAY COLLECT SHALL BE ADEQUATELY DRAINED. DRAIN HOLES, WHERE INDICATED ON THE DETAILS, SHALL BE USED. DRAIN HOLES SHALL BE LOCATED ON DETAILS WITH DUE REGARD TO MAINTAINING DESIGNED NET SECTIONS OF MEMBERS.

FOR FLOOR BEAM AND SIDEWALK BRACKET CONNECTIONS SEE SHEETS 32 AND 33.

FOR TRUSS BEARING DETAILS SEE SHEET 41.

FOR DETAILS OF PORTAL SEE SHEET 39.

FOR DETAILS OF TOP LATERALS SEE SHEET 40.

FOR DETAILS OF BOTTOM LATERALS SEE SHEET 38.

ALL FILLERS WHICH WOULD OTHERWISE BE SHIPPED LOOSE SHALL BE SHOP WELDED IN PLACE BEFORE REAMING.

DATE	BY	DESCRIPTION
8/28/68	R.L.	DIMENSION CHANGES - P.I
	C.C.	GUARDRAIL & HANDRAIL

REVISIONS

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

RICHARD B. OGILVIE
PRESIDENT BOARD OF COUNTY HIGHWAYS

ANDREW V. PLUMMER
SUPERINTENDENT OF HIGHWAYS

CROSS SECTION & DETAILS - SPAN 3
127TH STREET BRIDGE
OVER CALUMET - SAG CHANNEL

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
105 S. WABASH AVE. CHICAGO, ILLINOIS

PROJECT
SCALE AS NOTED
APPROVED

APPROVED 6-7-68
CHIEF ENGINEER

F.A.I. Route No.	COUNTY numbered Route No.	Sheet No.	Total Sheets	Drawing No.
	130-1814-1MFT	32R	82	C593

FOR INFORMATION ONLY

USER NAME = CEComln	DESIGNED - RVV	REVISED -	
	DRAWN - RVV	REVISED -	
PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

TranSystems

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	121
		CONTRACT NO. 62H52		
		ILLINOIS FED. AID PROJECT		

MODEL: Default
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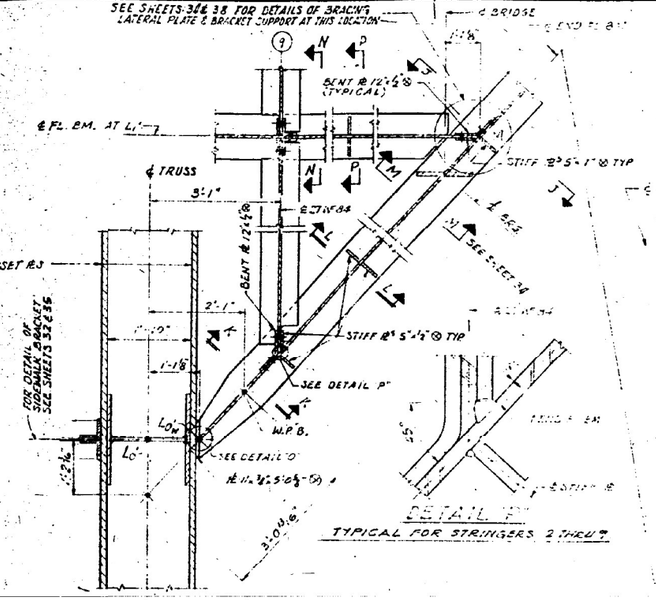
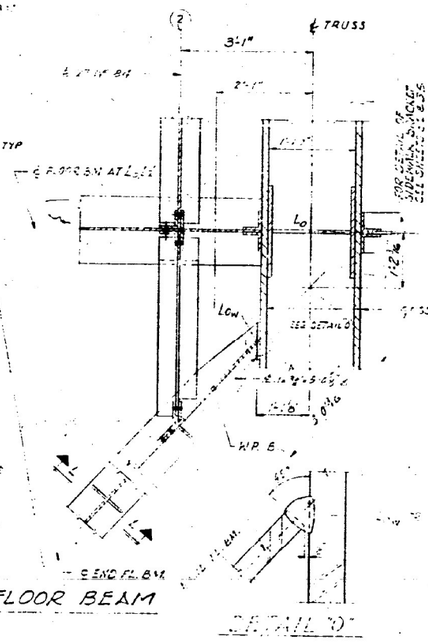
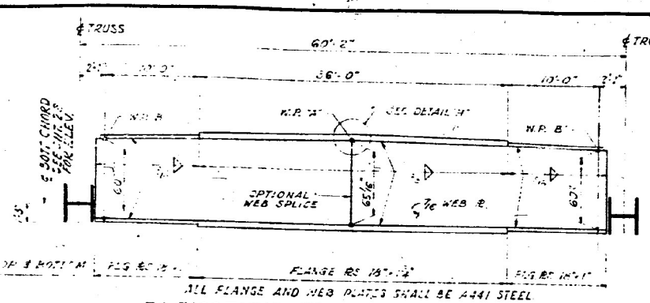
SEE SHEETS 36 & 38 FOR DETAILS OF BRACING LATERAL PLATE & BRACKET SUPPORT AT THIS LOCATION





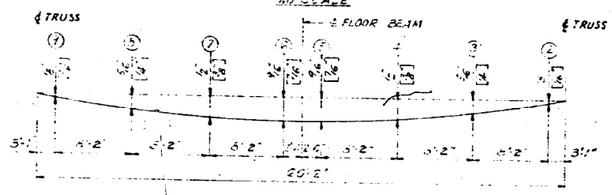
DETAIL PLAN OF EAST END FLOOR BEAM

SCALE: 3/4"=1'-0"



ELEVATION OF TYPICAL FLOOR BEAM

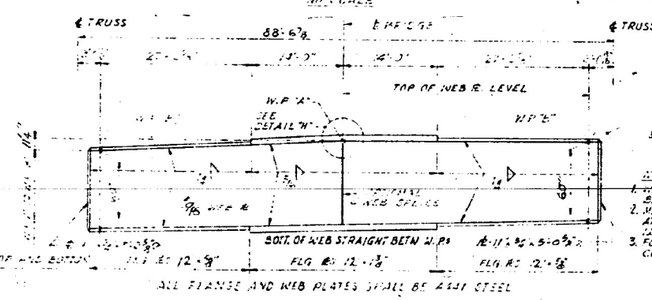
NO SCALE



NOTE: DEAD LOAD DEFLECTION OF FLOOR BEAMS IS PROVIDED FOR INFORMATIONS GIVEN ON TYPICAL CROSS SECTION AND FLOOR BEAM ELEVATION. FIGURES SHOWN THIS SHEET ARE FABRICATIONS DUE TO CONCRETE ONLY.

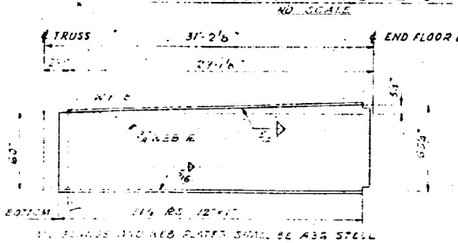
DEAD LOAD DEFLECTION DIAGRAM FOR TYPICAL FLOOR BEAM

NO SCALE



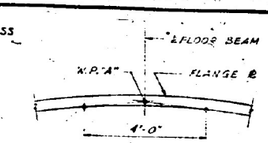
ELEVATION OF END FLOOR BEAM

NO SCALE



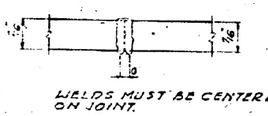
ELEVATION OF FLOOR BEAM AT L'

1/2 SCALE



DETAIL 'H'

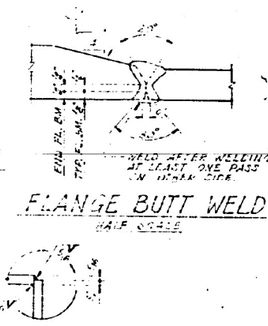
NO SCALE



WELDS MUST BE CENTERED ON JOINT.

WEB BUTT WELD

FULL SCALE

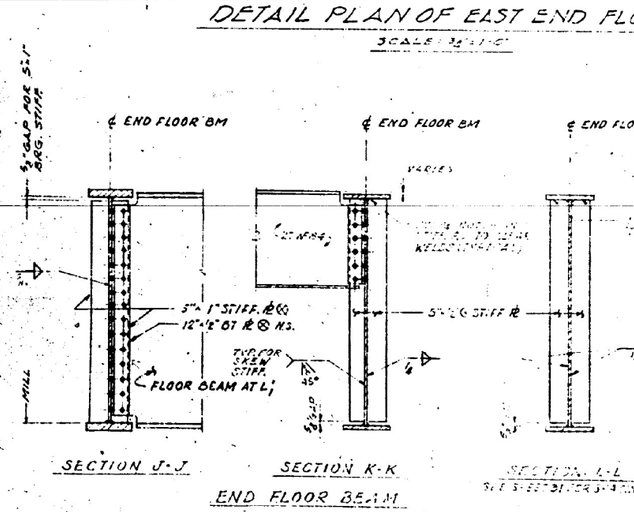


FLANGE BUTT WELD

HALF SCALE

NOTES FOR FLOOR BEAMS

1. WEB PLATES TO BE CUT ON STRAIGHT LINES BETWEEN W.P.'A' AND W.P.'B'. SEE DETAIL 'N'.
2. MAX. DEAD LOAD DEFLECTION OF FLOOR BEAM AT L' AND END FLOOR BEAM EQUALS 1⅛" OR LESS, THEREFORE CAN BE NEGLECTED.
3. FOR DETAIL OF WELDED STUD SHEAR CONNECTOR SEE SHEET 26.



STIFFENER AND CONNECTION DETAILS

NOTES:
FOR GENERAL NOTES SEE SHEET 16
FOR ADDITIONAL NOTES SEE SHEET 32

DATE	BY	DESCRIPTION

REVISIONS

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
SEYMOUR SIMON
PRESIDENT BOARD OF COMMISSIONERS — SUPERINTENDENT OF HIGHWAYS

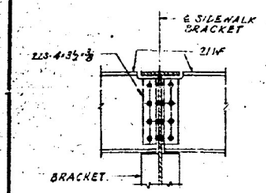
FLOOR BEAM DETAILS
127TH STREET BRIDGE OVER CALUMET-SAG CHANNEL

ALFRED BENESCH & COMPANY CONSULTING ENGINEERS		PROJECT			
10 S. WABASH AVE. CHICAGO, ILLINOIS		SCALE AS NOTED			
APPROVED	F.A.I. Route No.	APPROVED			
CHIEF ENGINEER		COUNTY HIGHWAY Route No.	Sheet No.	Total Sheets	Drawing No.
		180-1414.1-WFT	33	82	

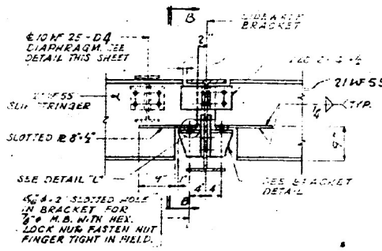
FOR INFORMATION ONLY

TranSystems	USER NAME = CEComln	DESIGNED - RVV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLANS SN 016-0570
		DRAWN - RVV	REVISED -		
	PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -		SCALE: / SHEET OF SHEETS / STA. / TO STA.
	PLOT DATE = 5/17/2022	DATE - XXX	REVISED -		

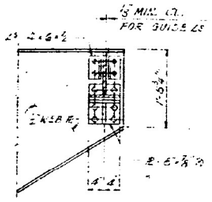
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	122
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			



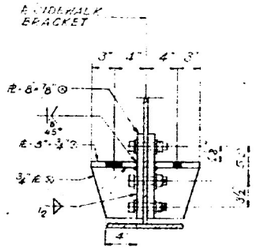
SECTION A-A
SCALE: ¾"=1'-0"
(SEE SHEET 31)



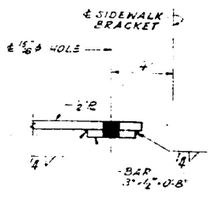
SECTION A-A AT SLIP JOINT
SCALE: ¼"=1'-0"



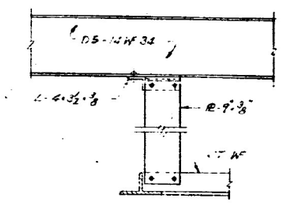
SECTION 3-3
SCALE: ¾"=1'-0"



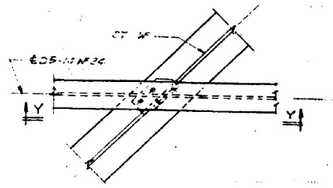
BRACKET DETAIL
SCALE: ½"=1'-0"



DETAIL "L"
SCALE: 3"=1'-0"



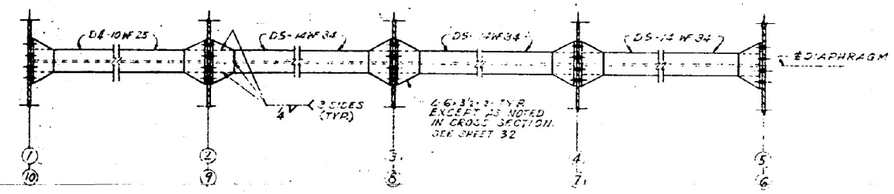
SECTION Y-Y
SCALE: ¾"=1'-0"



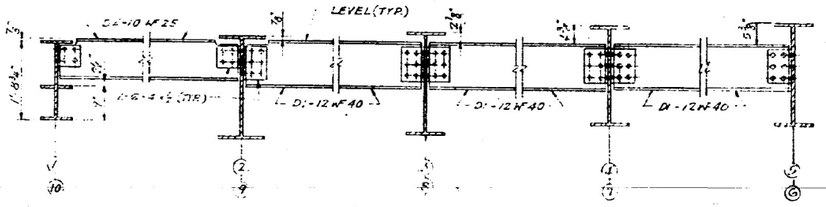
PLAN
SCALE: ¼"=1'-0"

STRINGER TO SIDEWALK BRACKET CONNECTIONS

TYPICAL BOTTOM LATERAL SUPPORT

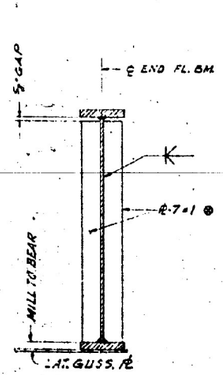


TYPICAL DIAPHRAGM

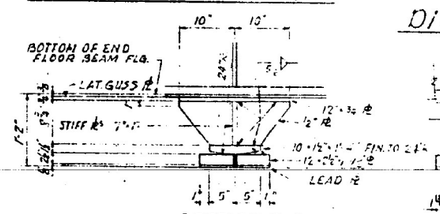


DIAPHRAGM AT SLIP JOINTS L_0-L_2', L_3-L_5' & L_5-L_5'

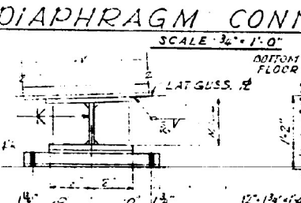
DIAPHRAGM CONNECTIONS



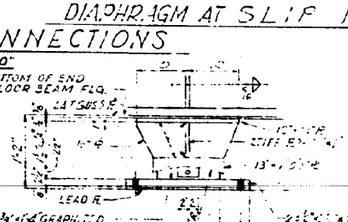
SECTION M-M
SCALE: ½"=1'-0"
(SEE SHEET 33)



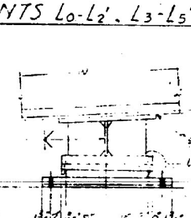
SECTION C-C

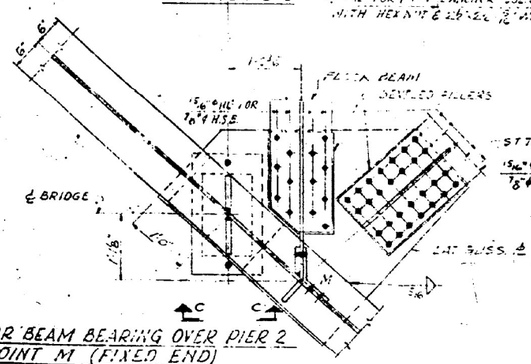


½" ø HOLES FOR 1" ø ANCHOR BOLTS WITH HEX NUT & 2½"x2½"x½" WASHERS

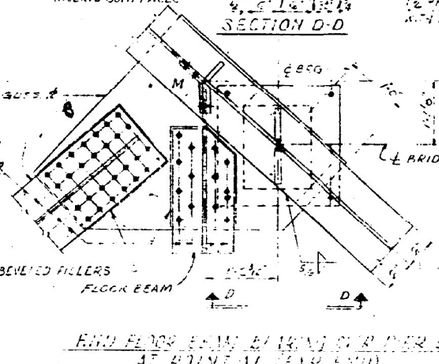


SECTION D-D

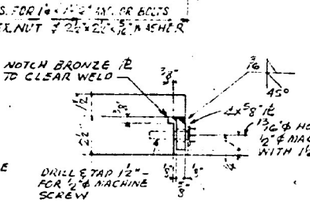




END FLOOR BEAM BEARING OVER PIER 2 AT POINT M (FIXED END)
SCALE: 1"=1'-0"



END FLOOR BEAM BEARING OVER PIER 3 AT POINT M (FIXED END)
SCALE: 1"=1'-0"



DETAIL "E"
SCALE 3"=1'-0"

FOR GENERAL NOTES SEE SHEET 16
FOR ADDITIONAL NOTES FOR TRUSSES SEE SHEET 32

DATE	BY	DESCRIPTION
		REVISIONS

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
SEYMOUR SIMON
PRESIDENT, BOARD OF COUNTY HIGHWAYS — SUPERINTENDENT OF HIGHWAYS

MISCELLANEOUS STEEL DETAILS
127TH STREET BRIDGE
OVER CALUMET-SAG CHANNEL

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
10 S. WABASH AVE. CHICAGO, ILLINOIS

PROJECT
SCALE AS NOTED
APPROVED

APPROVED
CHIEF ENGINEER

F.A.I. Route No.	County Highway Route No.	Sheet No.	Total Sheets	Drawing No.
	180-4414.1-NFT	34	82	

FOR INFORMATION ONLY

USER NAME = CEComln	DESIGNED - RVV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - RVV	REVISED -	
PLOT SCALE = 0.2 '' / In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	123
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

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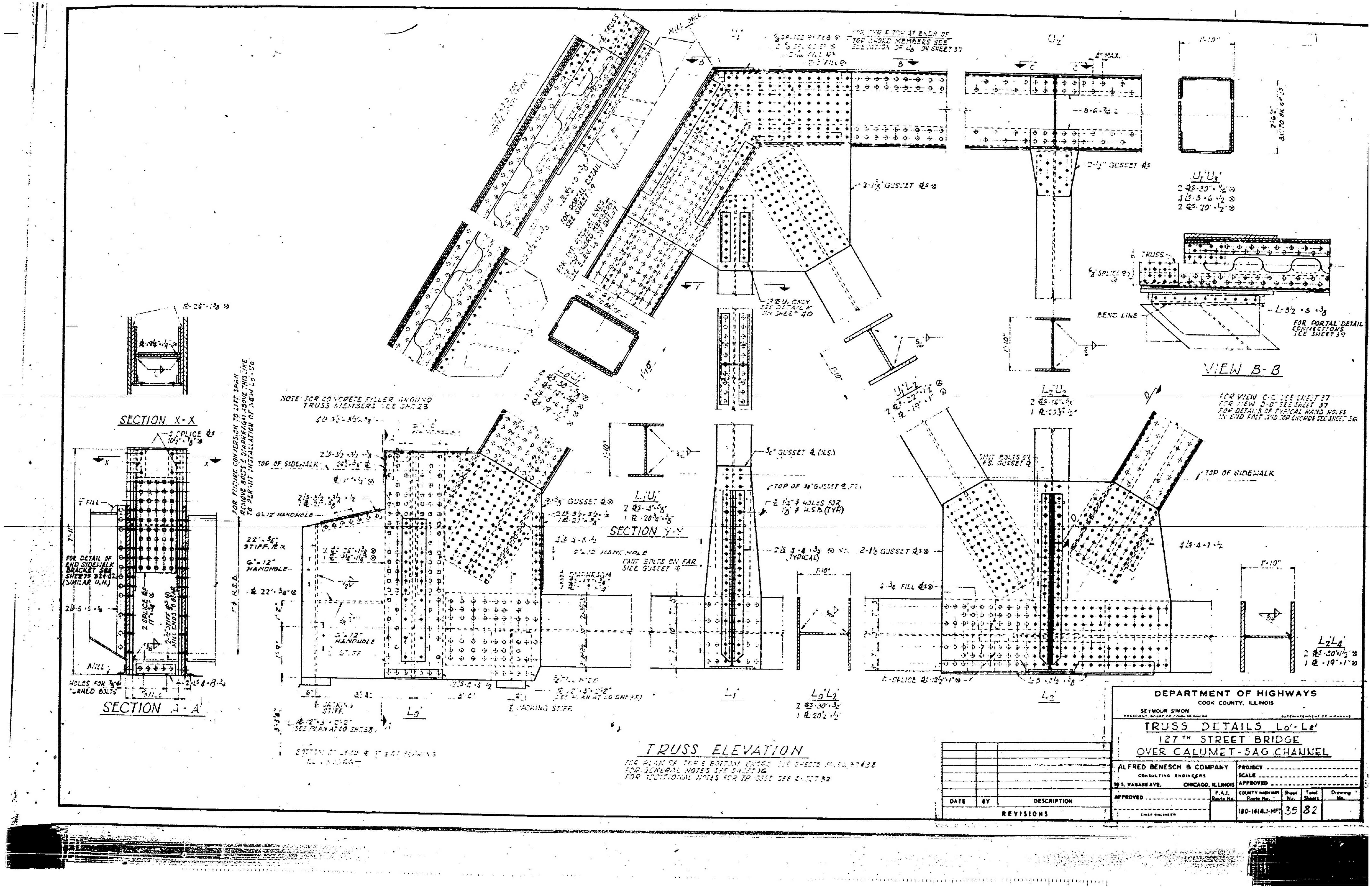

FOR INFORMATION ONLY

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PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
SN 016–0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 62H52		
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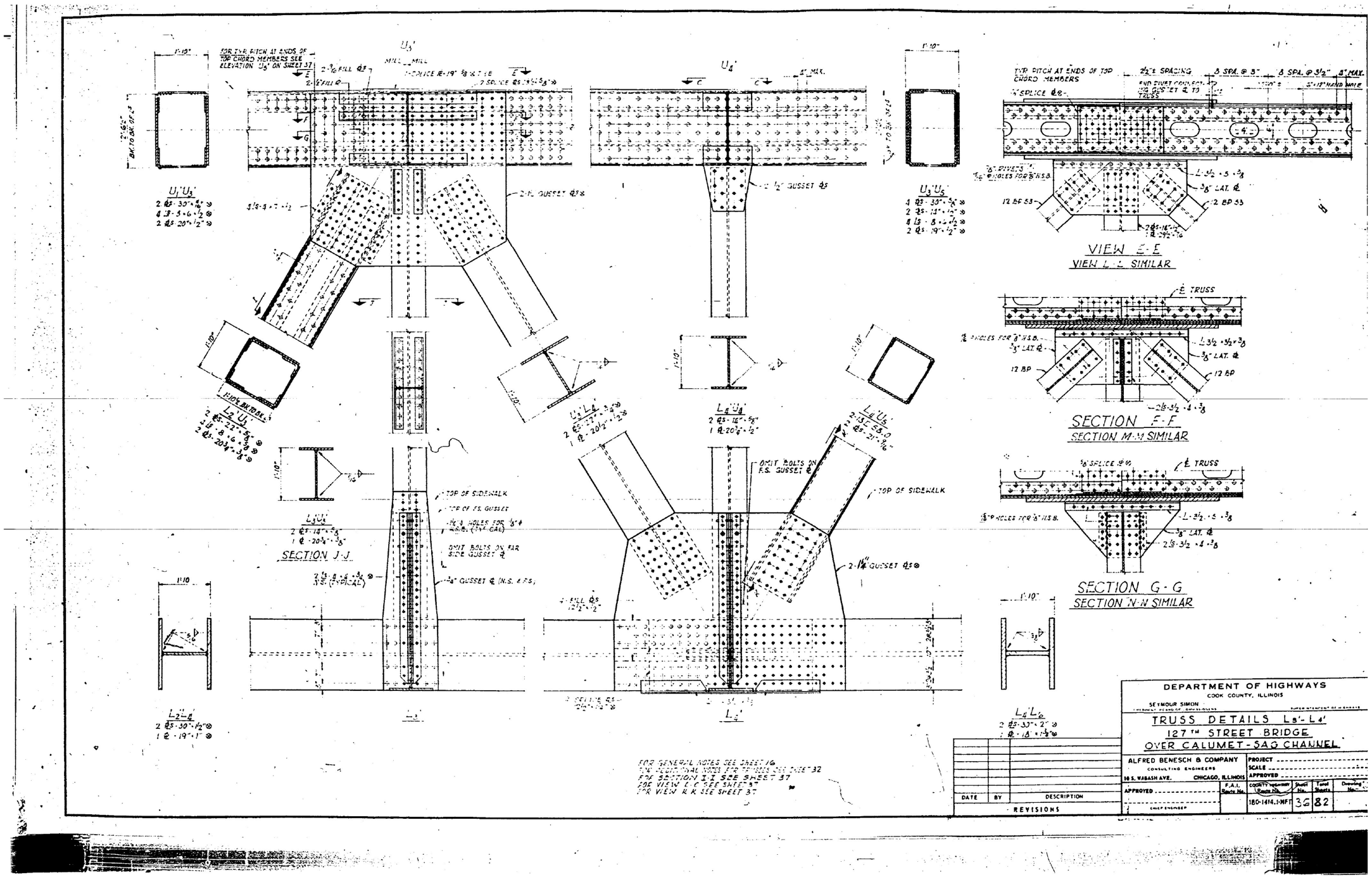

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

SEYMOUR SIMON
HIGHWAY ENGINEER AND EX-OFFICIO SUPERINTENDENT OF HIGHWAYS

TRUSS DETAILS L3'-L4'
127TH STREET BRIDGE
OVER CALUMET-SAG CHANNEL

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
10 S. WABASH AVE. CHICAGO, ILLINOIS

APPROVED .....
CHIEF ENGINEER

PROJECT	
SCALE	
APPROVED	

F.A.I. Route No.	County Highway Route No.	Sheet No.	Total Sheets	Drawing No.
	180-1414.1-MFT	36	82	

DATE	BY	DESCRIPTION
		REVISIONS

FOR INFORMATION ONLY

USER NAME = CEComln	DESIGNED - RVV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - RVV	REVISED -	
PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	ILLINOIS FED. AID PROJECT			

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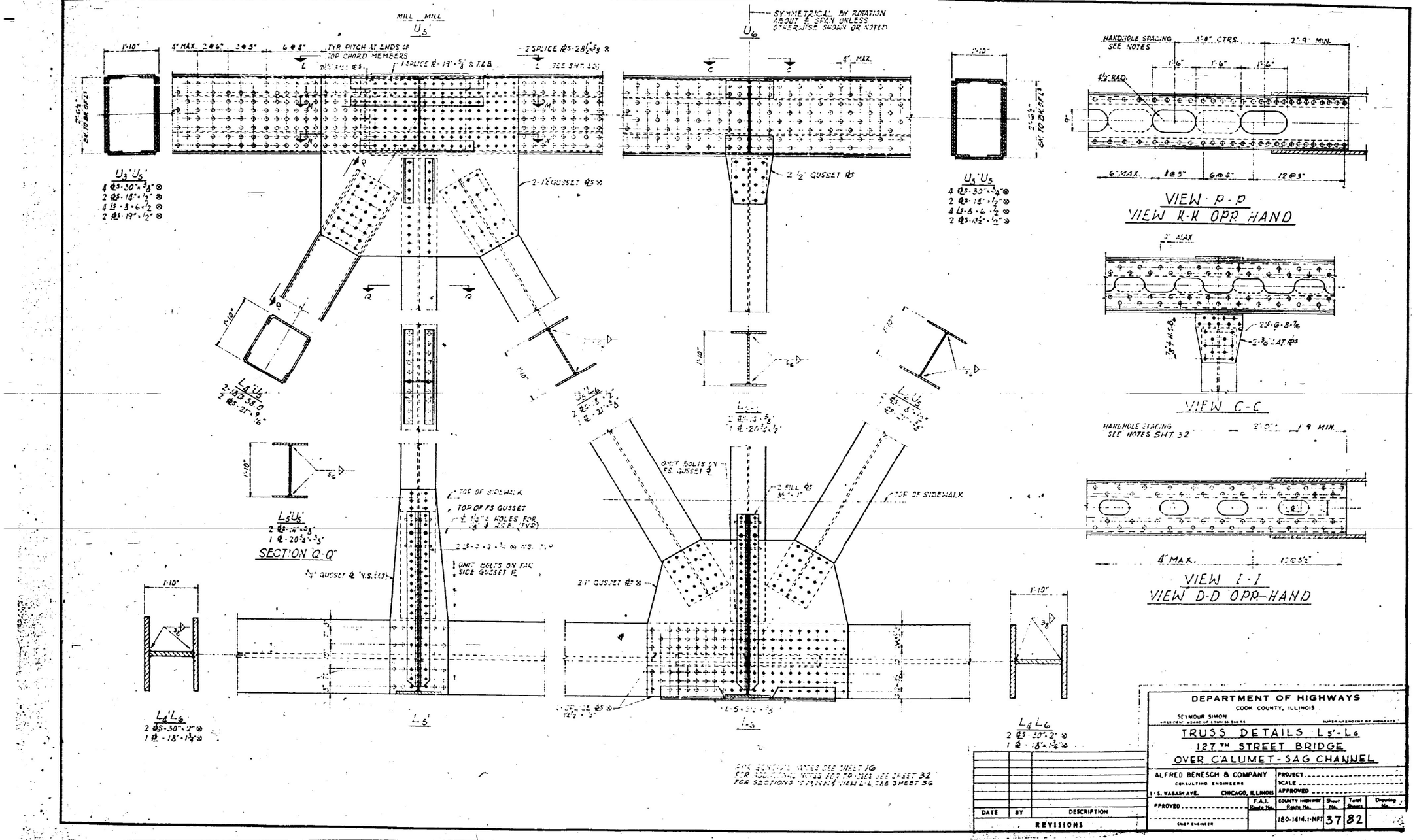

DATE	BY	DESCRIPTION

REVISIONS

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
SEYMOUR SIMON
PRESIDENT BOARD OF COMMISSIONERS — SUPERINTENDENT OF HIGHWAYS

TRUSS DETAILS L_5-L_6
127TH STREET BRIDGE
OVER CALUMET-SAG CHANNEL

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
135 S. WABASH AVE. CHICAGO, ILLINOIS
APPROVED
CHIEF ENGINEER

PROJECT
SCALE
APPROVED

F.A.I. Route No.	County Highway Route No.	Sheet No.	Total Sheets	Drawing No.
	180-1414.1-NFT	37	82	

FOR INFORMATION ONLY

USER NAME = CEComln	DESIGNED - RVV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - RVV	REVISED -	
PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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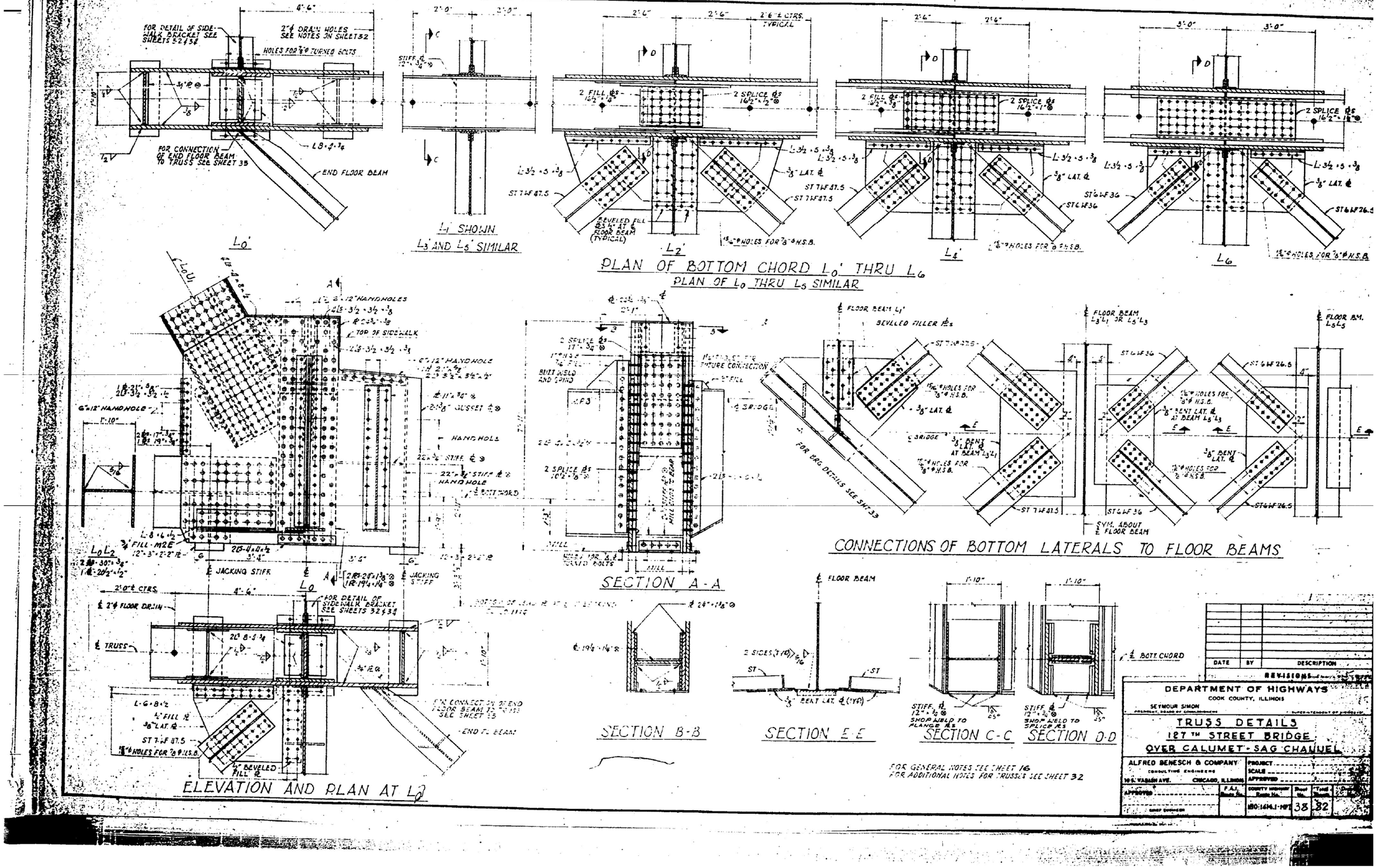
	ILLINOIS	FED. AID PROJECT		



DATE	BY	DESCRIPTION
		REVISIONS

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
SEYMOUR SIMON
PRESIDENT, BOARD OF COMMISSIONERS — SUPERINTENDENT OF HIGHWAYS

TRUSS DETAILS
127TH STREET BRIDGE
OVER CALUMET-SAG CHANNEL

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
70 E. WABASH AVE. CHICAGO, ILLINOIS

PROJECT
SCALE
APPROVED
APPROVED — DIST. ENGINEER
F.A.I. Route No.
COUNTY HIGHWAY Route No. 180-1414.1-HPT
Sheet No. 33
Total Sheets 32

FOR INFORMATION ONLY

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	DRAWN - RVV	REVISED -	
PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

TranSystems

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	127
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

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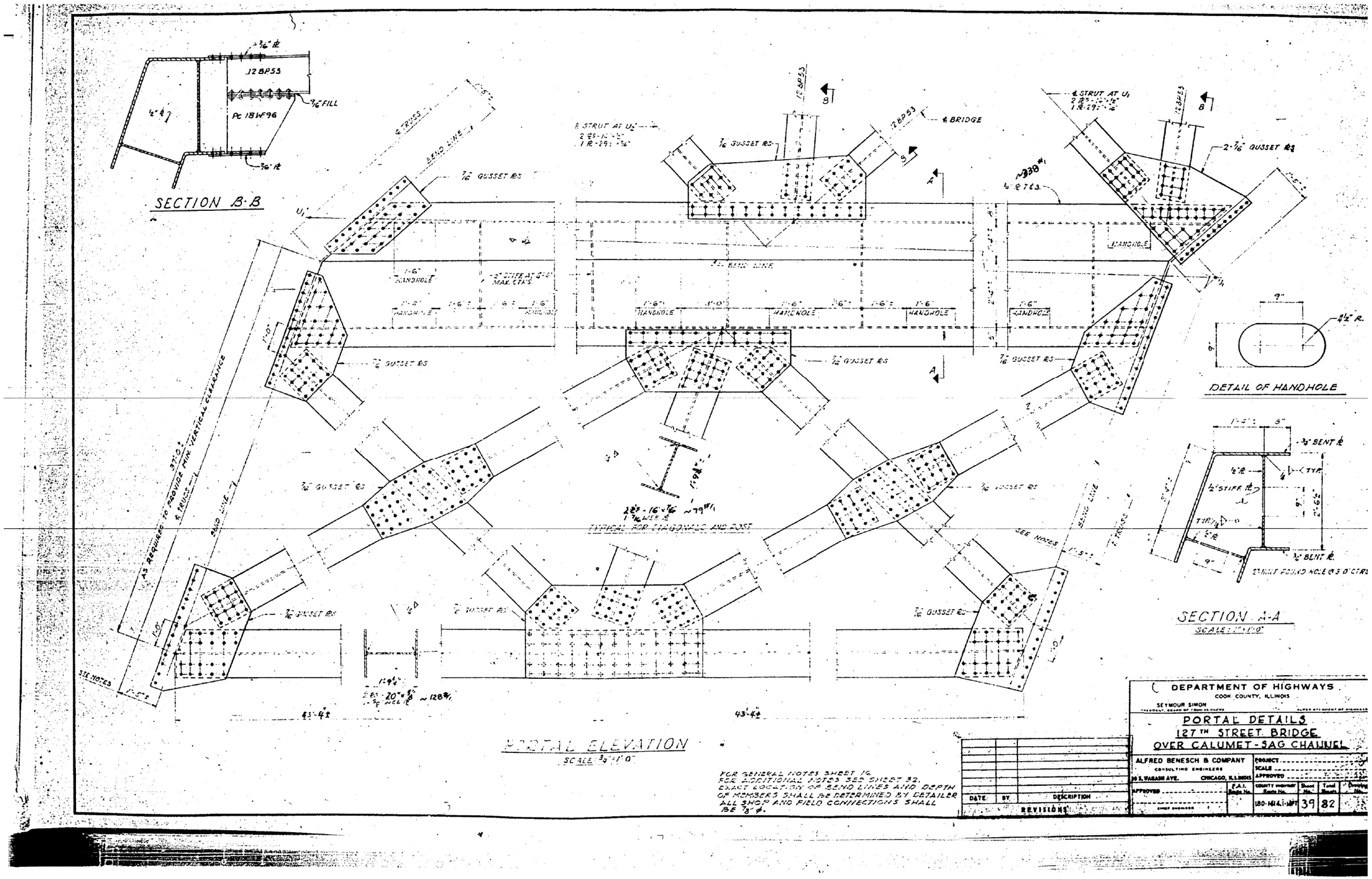

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
SEYMOUR SIMON
PRESIDENT, BOARD OF COUNTY COMMISSIONERS — SUPERINTENDENT OF HIGHWAYS

PORTAL DETAILS
127TH STREET BRIDGE OVER CALUMET-SAG CHANNEL

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
100 S. WABASH AVE. CHICAGO, ILLINOIS

PROJECT
SCALE
APPROVED
APPROVED — CHIEF ENGINEER

F.A.I. Route No.	County Highway Route No.	Sheet No.	Total Sheets	Drawing No.
	180-1414-HPT	39	82	

DATE	BY	DESCRIPTION
		REVISIONS

FOR GENERAL NOTES SHEET 16.
FOR ADDITIONAL NOTES SEE SHEET 32.
EXACT LOCATION OF BEND LINES AND DEPTH OF MEMBERS SHALL BE DETERMINED BY DETAILER.
ALL SHOP AND FIELD CONNECTIONS SHALL BE 7/8" ϕ.

FOR INFORMATION ONLY

USER NAME = CEComln	DESIGNED - RVV	REVISED -	
	DRAWN - RVV	REVISED -	
PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

TranSystems

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	128
		CONTRACT NO. 62H52		
	ILLINOIS	FED. AID PROJECT		

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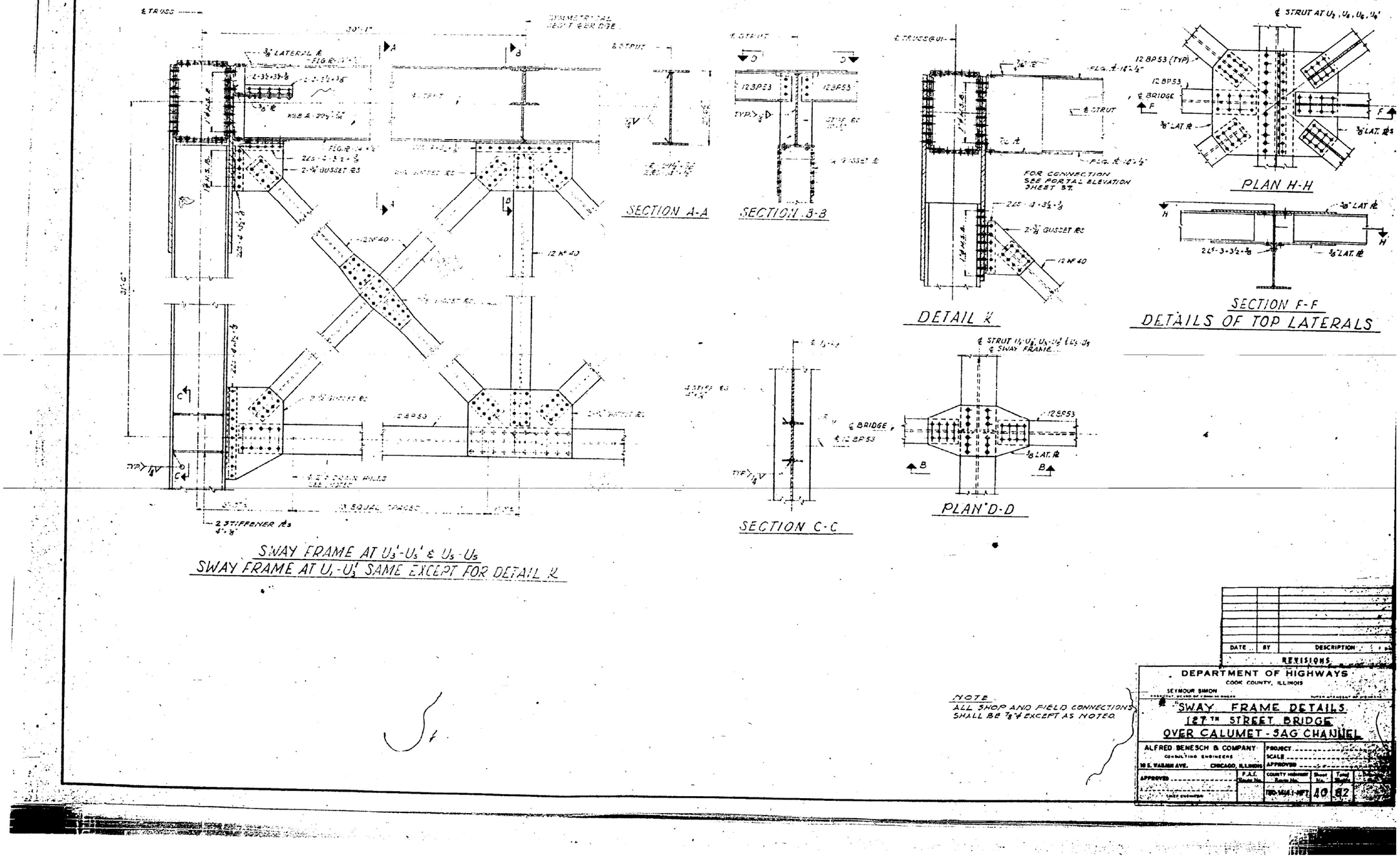

NOTE
ALL SHOP AND FIELD CONNECTIONS SHALL BE ⅞" ℄ EXCEPT AS NOTED.

DATE	BY	DESCRIPTION

REVISIONS

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
SEYMOUR SIMON
PRESIDENT, BOARD OF COMMISSIONERS

SWAY FRAME DETAILS 127TH STREET BRIDGE OVER CALUMET - SAG CHANNEL

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
30 E. WABASH AVE. CHICAGO, ILLINOIS

PROJECT
SCALE
APPROVED
APPROVED
CHIEF ENGINEER

F.A.I. Route No.	County Highway Route No.	Sheet No.	Total Sheets	No.
	TRD-1414-HFT	40	82	

FOR INFORMATION ONLY

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	DRAWN - RVV	REVISED -	
PLOT SCALE = 0.2 '/ In.	CHECKED - XXX	REVISED -	
PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	129
		CONTRACT NO. 62H52		
	ILLINOIS FED. AID PROJECT			

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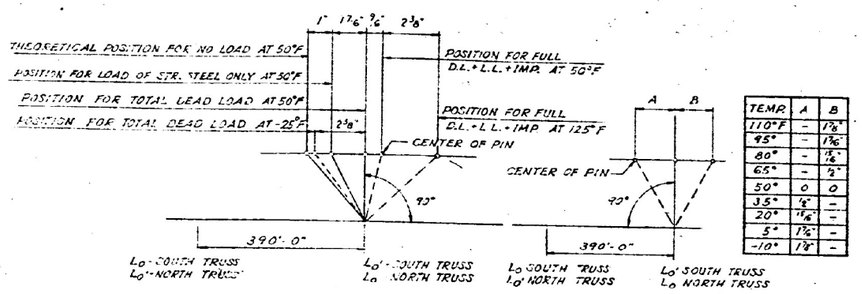
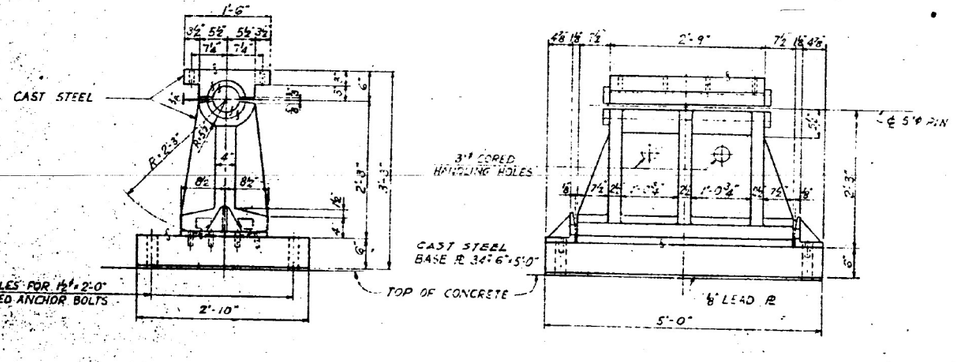
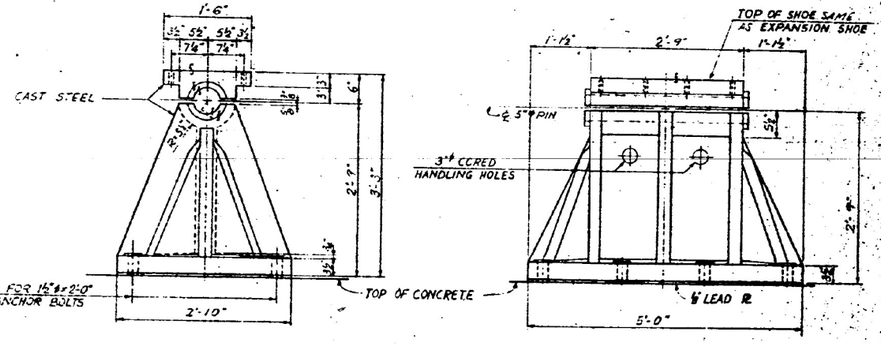


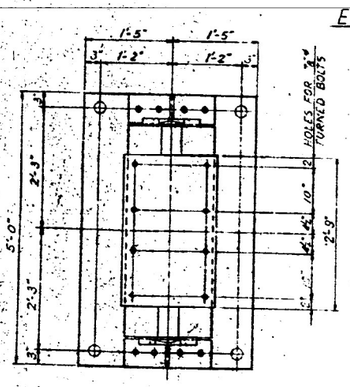
TEMP.	A	B
110°F	-	1⅞"
95°	-	1⅜"
80°	-	⅞"
65°	-	½"
50°	0	0
35°	⅝"	-
20°	1¼"	-
5°	1⅞"	-
-10°	1⅜"	-

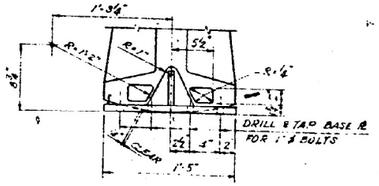
FOR LOADING CONDITIONS CORRECTION FOR TEMPERATURE ROCKER SETTINGS

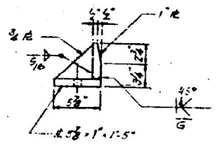




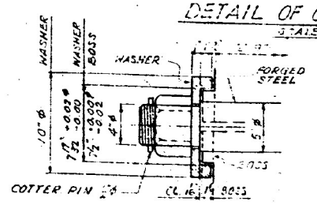
EXPANSION SHOES
SCALE: 1" = 1'-0"







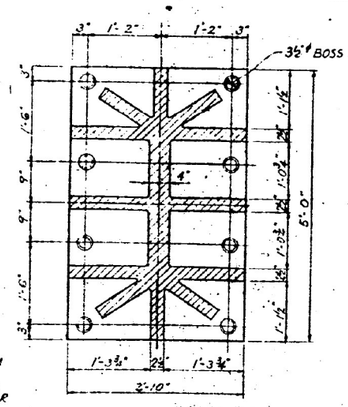
DETAIL OF GUIDE LUGS
SCALE: ½" = 1'-0"



PIN DETAIL
SCALE: 2" = 1'-0"

NOTES
CAST STEEL SHALL CONFORM TO A.S.T.M. SPEC. A148, GRADE 80-50, FULL ANNEALED.
FORGED STEEL SHALL CONFORM TO A.S.T.M. SPEC. A237, CLASS A.
MATERIAL IN GUIDE LUGS SHALL CONFORM TO A.S.T.M. SPEC. A-36.
HOLES FOR SWEDGED ANCHOR BOLTS SHALL BE DRILLED IN THE PIER AND THE ANCHOR BOLTS SHALL BE SET WITH GROUT.
ALL FILLETS ON CASTINGS SHALL BE ¾" RADIUS.

FIXED SHOES
SCALE: 1" = 1'-0"



DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
SEYMOUR SIMON, PRESIDENT
TRUSS BEARING DETAILS
127TH STREET BRIDGE
OVER CALUMET SAG
ALFRED BENESCH & COMPANY, CONSULTING ENGINEERS, CHICAGO, ILLINOIS
DATE, BY, REVISIONS

FOR INFORMATION ONLY

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PLOT DATE = 5/17/2022	DATE - XXX	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

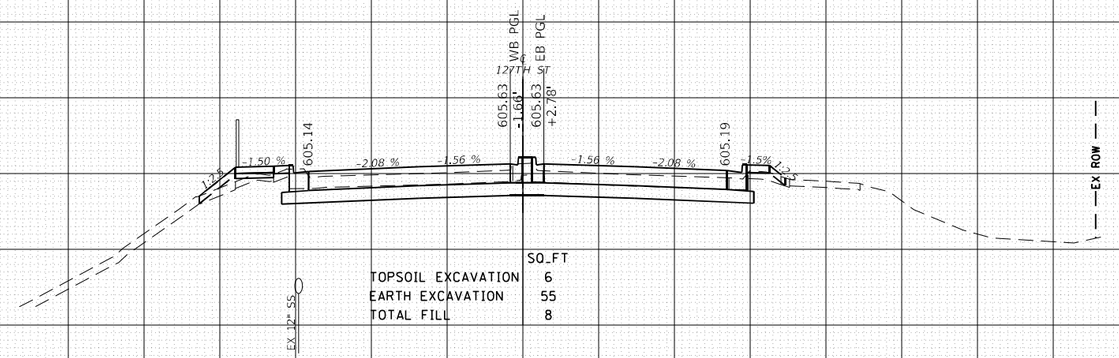
EXISTING PLANS
SN 016-0570

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	130
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

615
610
605
600



SQ_FT	
TOPSOIL EXCAVATION	6
EARTH EXCAVATION	55
TOTAL FILL	8

1275 + 77.39

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

FILE FOR XS SHEETS

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

MODEL: Default
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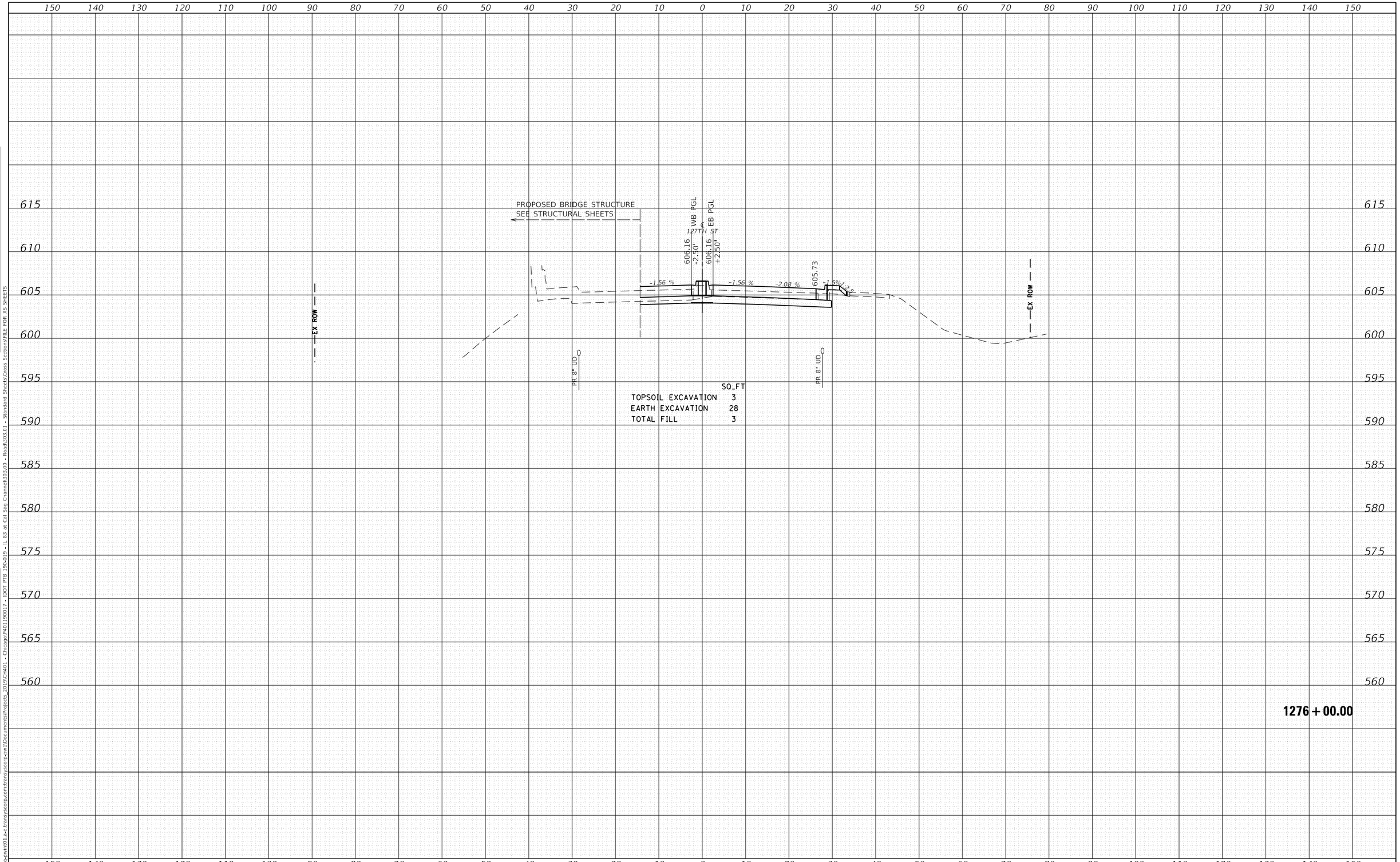
USER NAME = CEComin	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/6/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET) CAL SAG ROAD TO HOLIDAY ROAD
PROPOSED CROSS SECTIONS
SCALE: 1"=10' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	131
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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TranSystems

USER NAME = CEComin	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/6/2022	DATE -	REVISED -

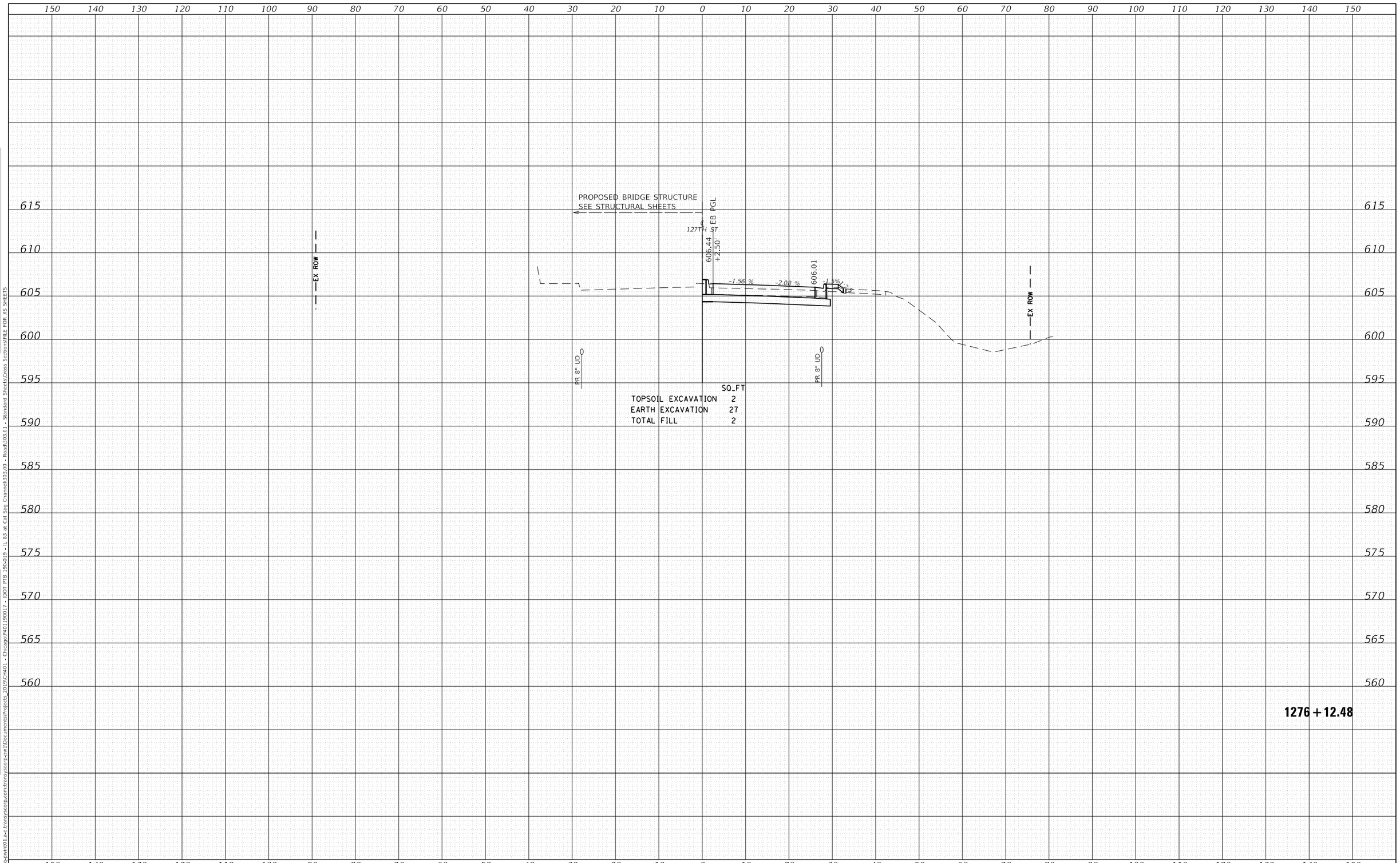
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET) CAL SAG ROAD TO HOLIDAY ROAD

PROPOSED CROSS SECTIONS

SCALE: 1"=10' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	132
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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TranSystems

USER NAME = CEComin	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/6/2022	DATE -	REVISED -	

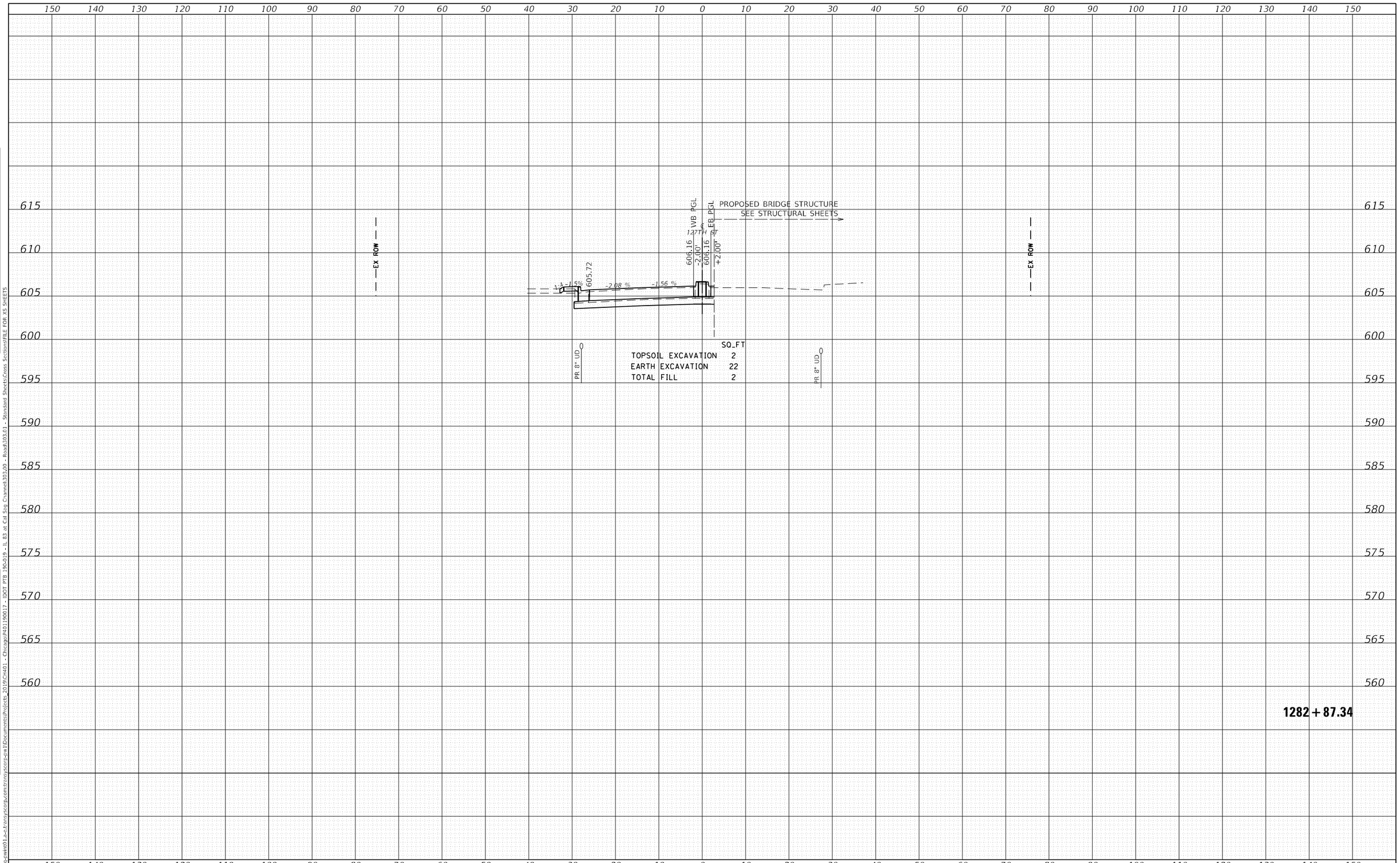
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET) CAL SAG ROAD TO HOLIDAY ROAD

PROPOSED CROSS SECTIONS

SCALE: 1"=10' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	133
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — DATE — BY

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — DATE — BY

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	DRAWN -	REVISED -	
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/6/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET) CAL SAG ROAD TO HOLIDAY ROAD

PROPOSED CROSS SECTIONS

SCALE: 1"=10' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	134
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

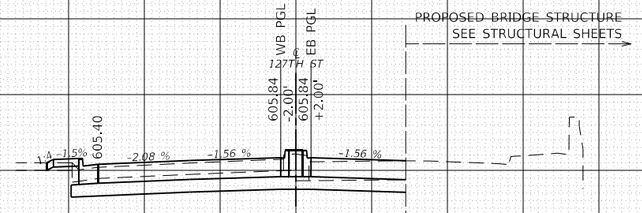
615 610 605 600 595 590 585 580 575 570 565 560

EX ROW

EX ROW

PR 8" UD

PR 8" UD



PROPOSED BRIDGE STRUCTURE
SEE STRUCTURAL SHEETS

	SQ_FT
TOPSOIL EXCAVATION	2
EARTH EXCAVATION	44
TOTAL FILL	2

1283 + 00.00

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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PLOT DATE = 5/6/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET) CAL SAG ROAD TO HOLIDAY ROAD

PROPOSED CROSS SECTIONS

SCALE: 1"=10' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	135
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

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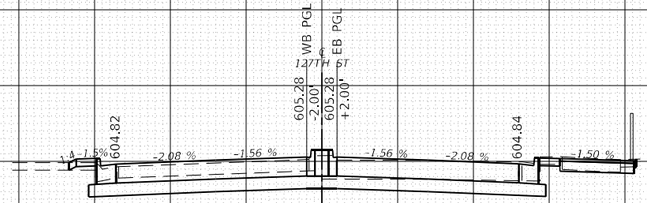
615 610 605 600 595 590 585 580 575 570 565 560

EX ROW



SQ_FT	
TOPSOIL EXCAVATION	3
EARTH EXCAVATION	61
TOTAL FILL	1

PR 15" SS

EX ROW

1283 + 22.43

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

USER NAME = CEComin	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 5/6/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET) CAL SAG ROAD TO HOLIDAY ROAD

PROPOSED CROSS SECTIONS

SCALE: 1"=10' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	136
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — DATE — BY

FILE FOR XS SHEETS

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — DATE — BY

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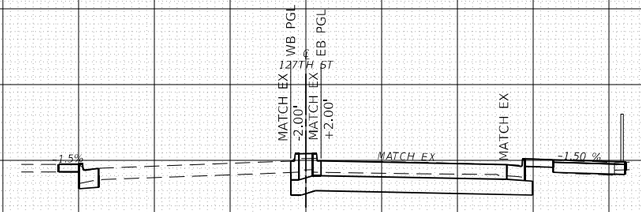

SQ_FT	
TOPSOIL EXCAVATION	1
EARTH EXCAVATION	41
TOTAL FILL	1

1283 + 32.24

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

615 610 605 600 595 590 585 580 575 570 565 560

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — DATE — BY

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — DATE — BY

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TranSystems

USER NAME = CEComin	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/6/2022	DATE -	REVISED -

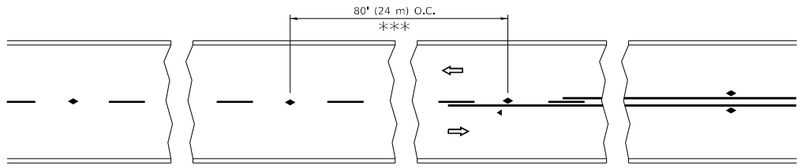
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (W 127TH STREET) CAL SAG ROAD TO HOLIDAY ROAD

PROPOSED CROSS SECTIONS

SCALE: 1"=10' | SHEET OF SHEETS | STA. | TO STA.

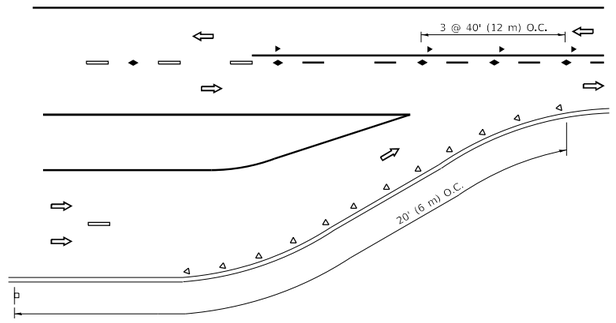
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	137
		CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	



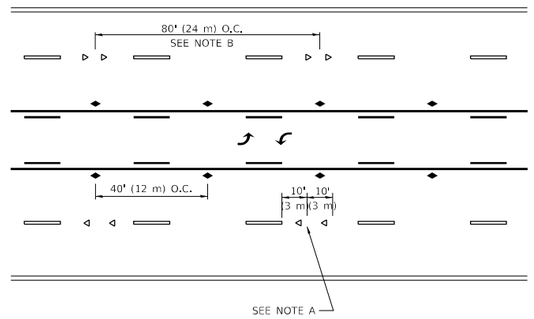
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO–LANE/TWO–WAY

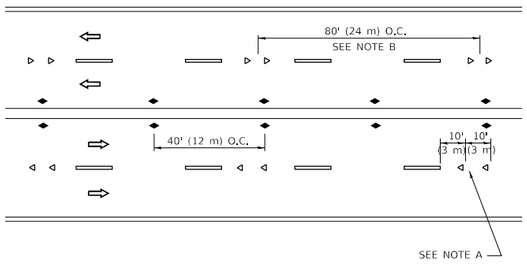
SEE FIGURE 3B-14 MUTCD



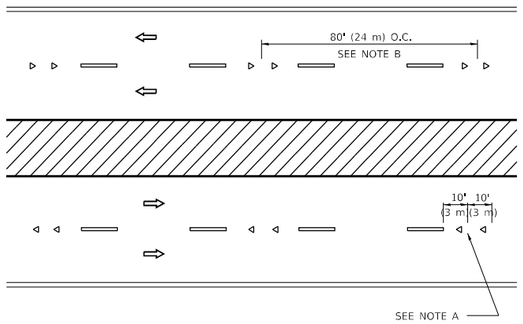
LANE REDUCTION TRANSITION



TWO–WAY LEFT TURN



MULTI–LANE/UNDIVIDED



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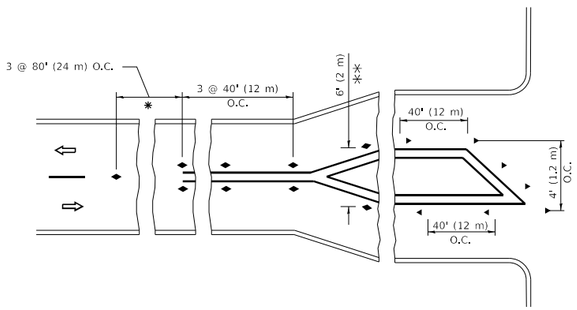

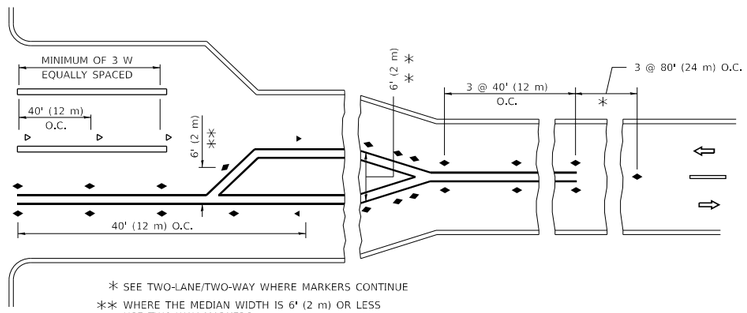

* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

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

TURN LANES

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.
4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

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.

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

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COLLINS ENGINEERS INC

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PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 07-01-13	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			141	138
	TC-11	CONTRACT NO.		
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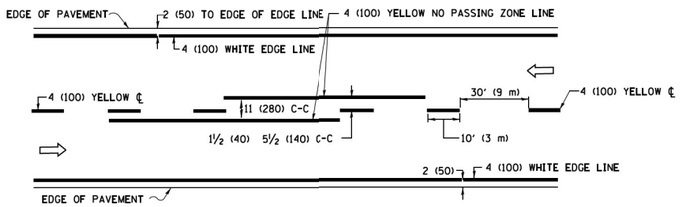
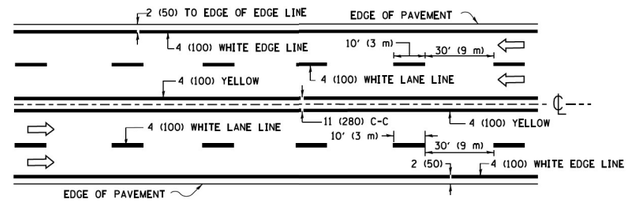
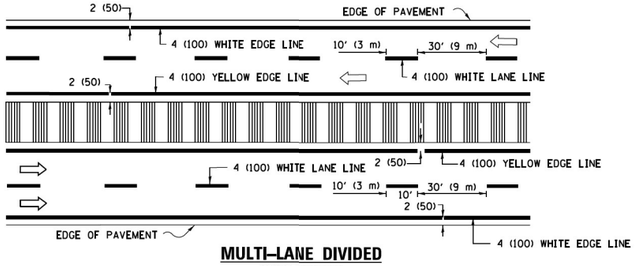


2–LANE ROADWAY

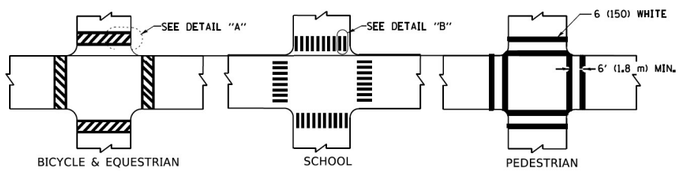


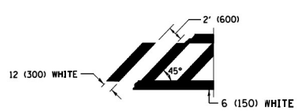
MULTI–LANE UNDIVIDED



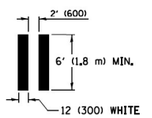
MULTI–LANE DIVIDED
WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING





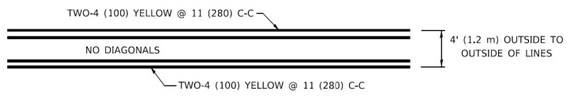
DETAIL "A"



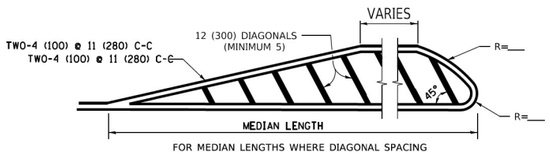
DETAIL "B"

TYPICAL CROSSWALK MARKING

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



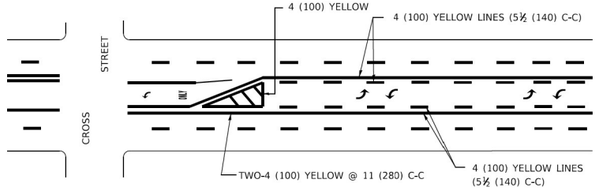
4' (1.2 m) WIDE MEDIANS ONLY



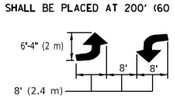
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

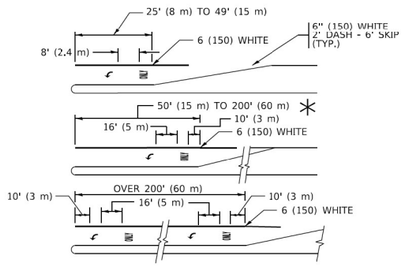


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO–WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

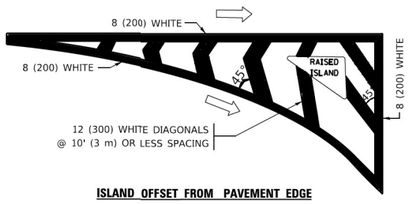


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m²) **ONLY** AREA = 20.8 SQ. FT. (1.9 m ²

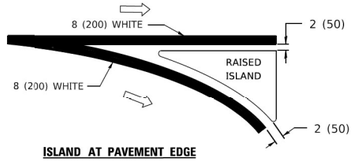
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

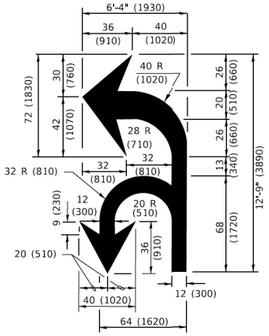


ISLAND OFFSET FROM PAVEMENT EDGE

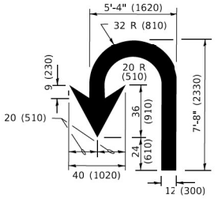


ISLAND AT PAVEMENT EDGE

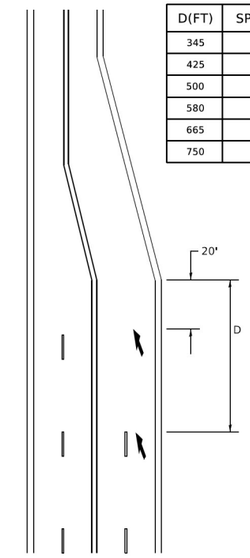
TYPICAL ISLAND MARKING



COMBINATION LEFT AND U–TURN



U–TURN



LANE REDUCTION TRANSITION

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

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

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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COLLINS ENGINEERS INC.

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	DRAWN -	REVISED - C. JUCIUS 07-01-13	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	139
	TC–13	CONTRACT NO. 62H52		
		ILLINOIS	FED. AID PROJECT	

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ROUTE MARKERS

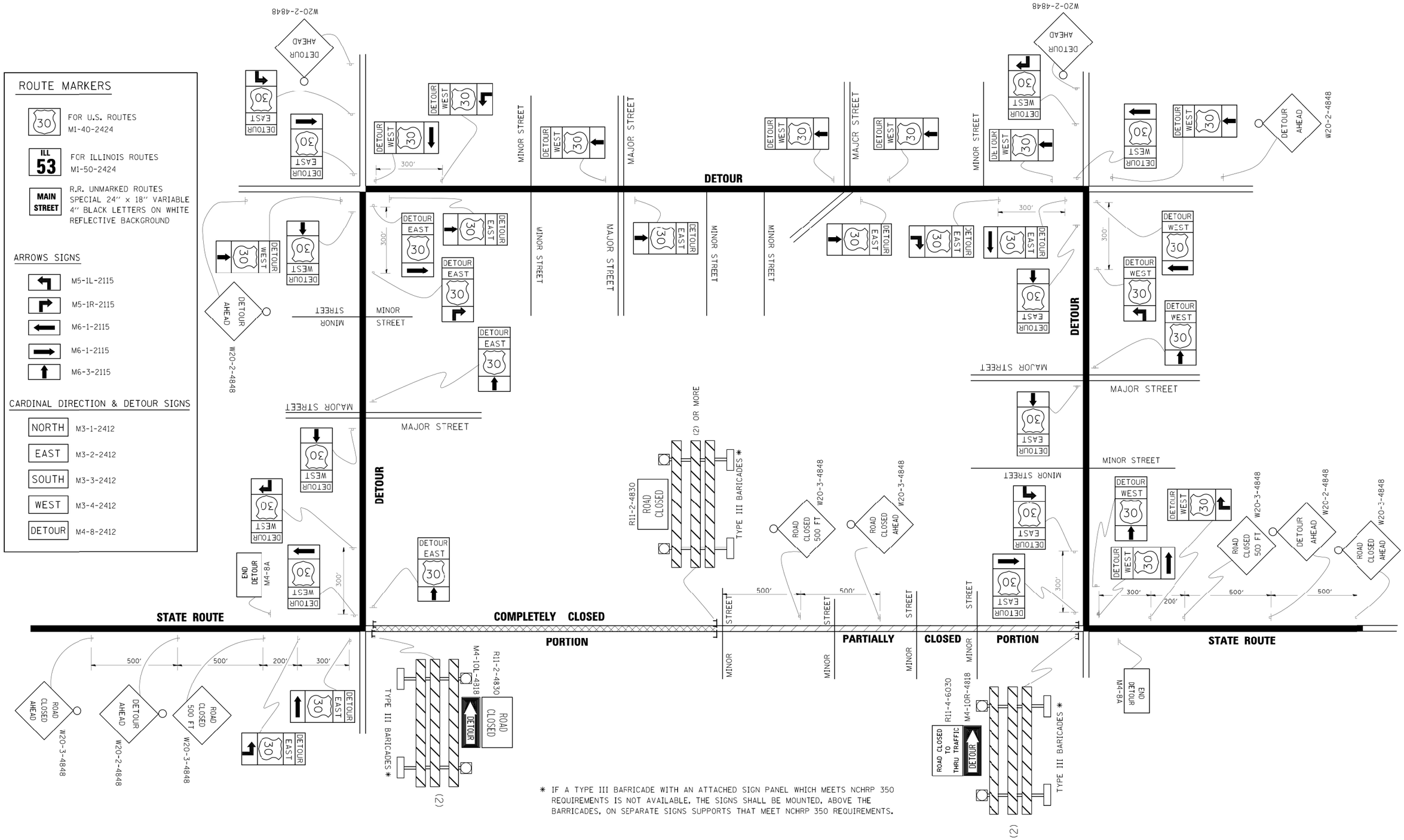
- 30 — FOR U.S. ROUTES M1-40-2424
- ILL 53 — FOR ILLINOIS ROUTES M1-50-2424
- MAIN STREET — R.R. UNMARKED ROUTES SPECIAL 24" x 18" VARIABLE 4" BLACK LETTERS ON WHITE REFLECTIVE BACKGROUND

ARROWS SIGNS

- M5-1L-2115
- M5-1R-2115
- M6-1-2115
- M6-1-2115
- M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

- NORTH M3-1-2412
- EAST M3-2-2412
- SOUTH M3-3-2412
- WEST M3-4-2412
- DETOUR M4-8-2412



* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR SIGNING
FOR CLOSING STATE HIGHWAYS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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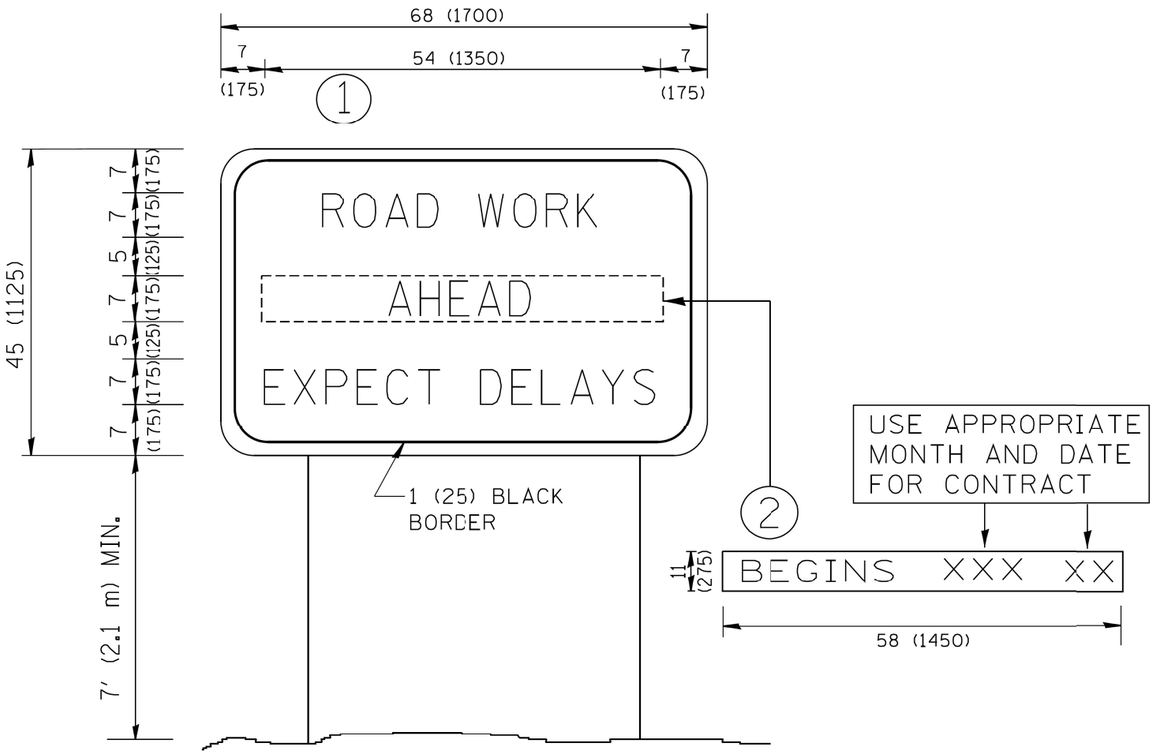
	TC-21	CONTRACT NO. 62H52		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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.

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REVISED - R. MIRS 12-11-97
REVISED -T. RAMMACHER 02-02-99
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. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	141
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