

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

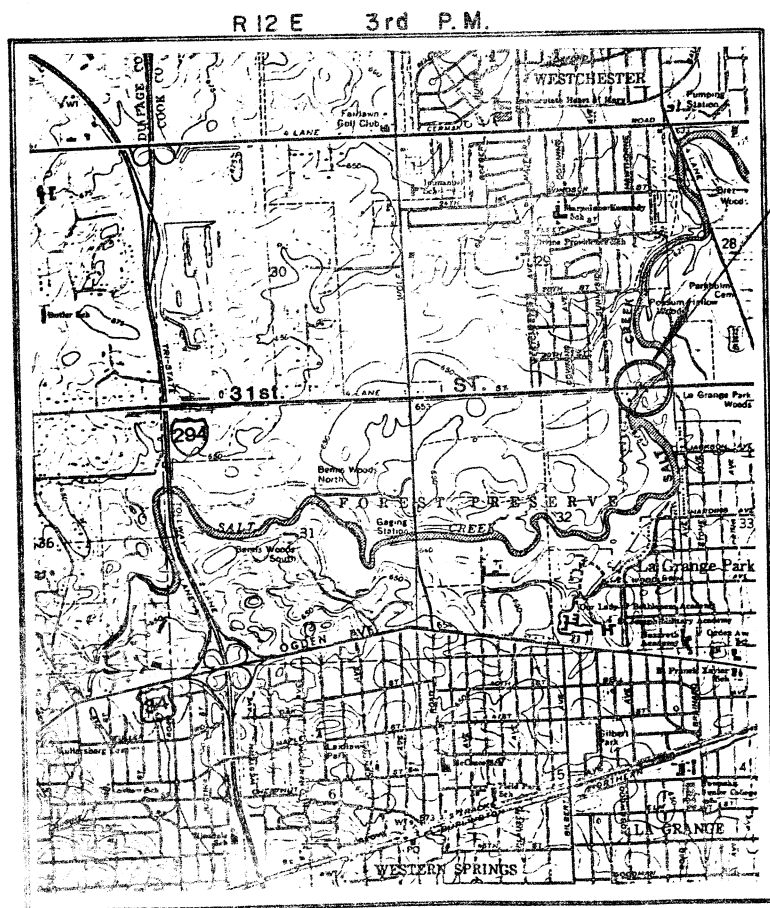
PLANS FOR PROPOSED
 FEDERAL AID HIGHWAY

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PLAN 1" = 20'
 PROFILE HORIZ. 1" = 20'
 PROFILE VERT. 1" = 2'
 CROSS SECTIONS 1" = 5' VERT. & HORIZ.

FAU. ROUTE 1467 (31st STREET)
 SECTION 1288-BR (82)
 PROJECT IX-6003 (356)
 STRUCTURE REHABILITATION
 31st STREET OVER SALT CREEK
 COOK COUNTY
 C-91-102-84

THE IMPROVEMENT CONSISTS OF REMOVAL OF THE EXISTING 3 SPAN CONCRETE BRIDGE DECK, BEAMS, MEDIAN, SIDEWALKS, PARAPETS AND RAILINGS; REPLACING WITH NEW WIDENED CONCRETE DECK, MEDIAN, SIDEWALKS, PARAPETS AND ALUMINUM RAILINGS. REPLACEMENT OF NEW CONTINUOUS STEEL BEAMS AND BEARINGS. RECONSTRUCTION OF PIER CAPS, ABUTMENTS AND WINGWALLS. REPAIR OF PIER, ABUTMENTS AND WINGWALLS. ALSO RECONSTRUCTION OF THE EAST AND WEST APPROACHES. TWO WAY TRAFFIC SHALL BE MAINTAINED USING STAGE CONSTRUCTION.



LOCATION MAP

LOCATION OF PROJECT
 STRUCTURE No. 016-0868

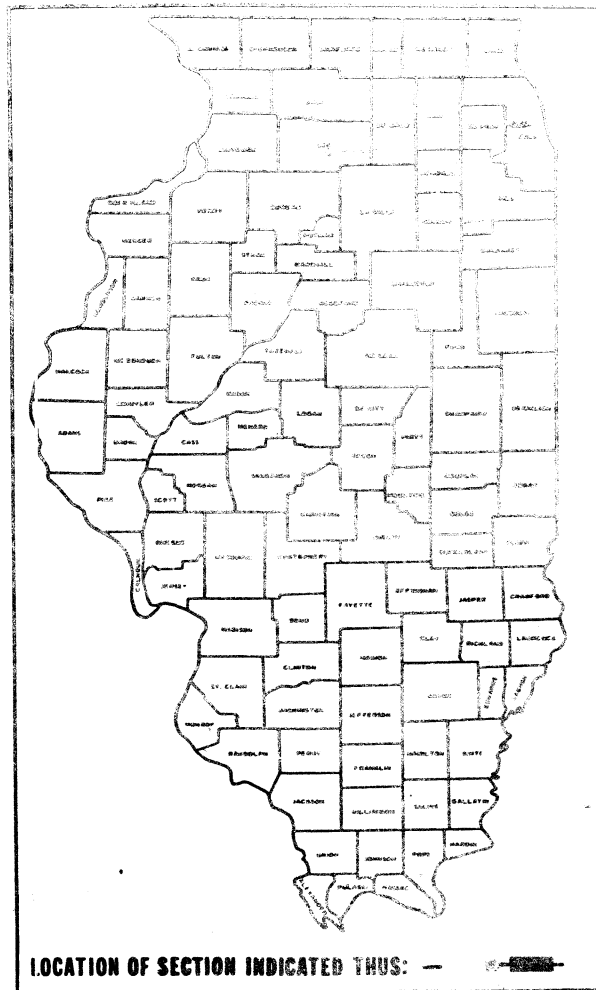
TRAFFIC DATA

31st STREET . ADT = 24,000
 DHV = 2340
 DESIGN SPEED = 45
 CLASS = MAJOR ROADWAY

LENGTH OF IMPROVEMENT 550 LIN. FT. (0.1042 MILES)

PLAN	SECTION	COUNTY	TOTAL SHEET
1467	1288-BR (82)	COOK	25

P. 581-459-1-82



LOCATION OF SECTION INDICATED THUS: —

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED: MAY 4 1984

DESIGNED: *[Signature]* DISTRICT ENGINEER

DRAWN: *[Signature]* ENGINEER OF PLANS AND CONTRACTS

APPROVED: *[Signature]* SUPERVISOR OF TRADING

0-173

REVISED SET
 6-18-84

016-0868

CONTRACT NO. 38268

BRIDGE DESCRIPTION

31st Street Structures Section 157-D1241-1467 over Salt Creek in LaGrange Park, Cook County, is a three span, reinforced concrete deck bridge with four 11 foot spans and a roadway width of 44'-0" and two foot sidewalks. The length of the structure End to End is 144'-0".

S.N. 016-0866

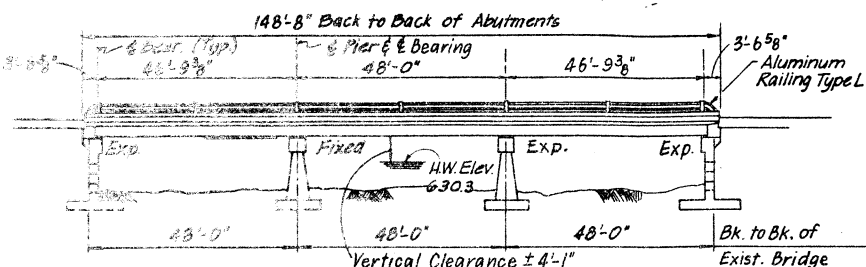
Design Mark: "X" in N.W. Wing Wall of 31st Street Bridge over Salt Creek. Elevation 1938.42.

WATERWAY INFORMATION

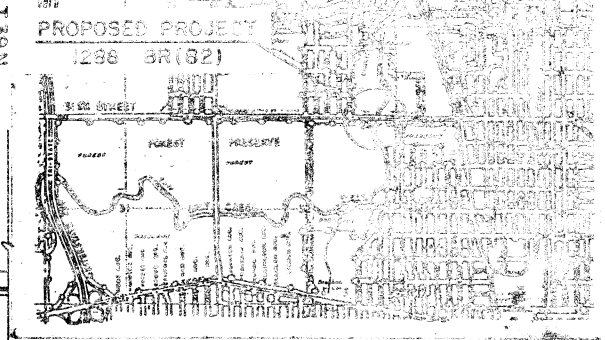
Drainage Area	116 Sq. Mi.	Low Grade Elev.	626.7	At Sta.	43+00	
Flood	Freq. Tr.	Q C.F.S.	Opening Sq. Ft.	Nat. H.W.L.	Ann. H.C.	Headwater Elev.
Design:	50	3150	593	593	630.3	6.40 8.80 530.70 530.70
Base:	100	3645	662	662	630.7	0.50 9.50 621.26 621.26
Overtopping:						
Max. Calc.:	500	4700	742	631.7		632.52

SHEET 1 of 15

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	1288 BR(82)	COOK	25	9
STA.	TO STA.			
FWHA REG.	ILLINOIS FED. RD. PROJECT			



ELEVATION
Proposed Improvement



LOCATION MAP

STATION 47+51.60
REBILTY 1983

STATE OF ILLINOIS
F.A.U.RTE. 1467 SEC 1288 BR(82)
F.A.U. PROJ. IX-6000(356)
LOADING HS 20
STR. NO. 016-0866

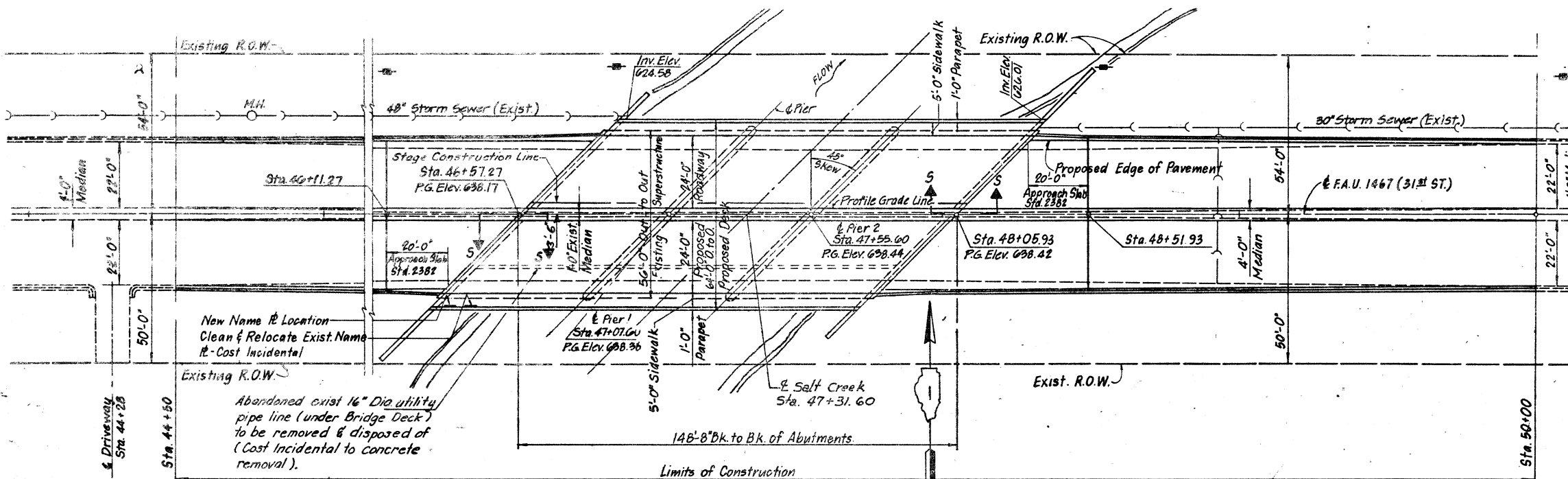
NAME PLATE
(1 Req'd)
(See Ill. Std. 2113)

DESIGN DATA

DESIGN SPECIFICATIONS:
AASHTO 1971 Standard Specifications for Highway Bridges and 1978 through 1983 Interims. Standard Specifications for Road and Bridge Construction, State of Illinois, dated October 1, 1983

DESIGN CRITERIA:
Working Stress for steel stringers.
Ultimate Strength Design for Deck Slab. Live Load HS-20-44
Allow 25 psf. for future wearing surface.

DESIGN STRESSES:
Reinforced Concrete: $f'_c = 3500$ p.s.i. (class X), $n = 9$
Reinforcement: $f_y = 60,000$ p.s.i. (new)
 $f_y = 40,000$ p.s.i. (existing)
(All bars in Deck Slab shall be epoxy coated)
Structural Steel: $f_u = 24,000$ p.s.i. (M183)
 $f_u = 27,000$ p.s.i. (M 223, Gr. 50)



PLAN
Proposed Improvement

Note: For Section S-S, see Sht. #11 of 14.

GENERAL NOTES

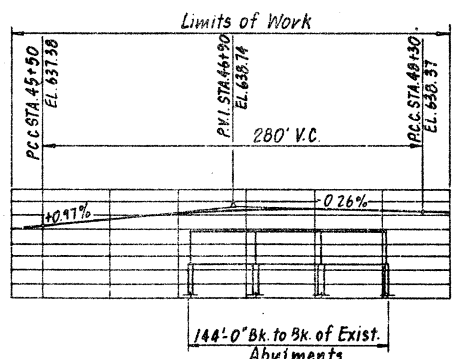
PLAN DIMENSIONS AND DETAILS, RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS, AND, ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

ALL SAWING OF EXISTING ASPHALT SURFACE SHALL BE CONSIDERED AS INCIDENTAL TO THE REMOVAL ITEM INVOLVED.

REPAIR AREAS AND CRACKS WERE OBSERVED DURING A FIELD INSPECTION MADE MAY, 1983. SIZE AND LOCATION OF CRACKS AND REPAIR AREAS SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FIELD VERIFICATION.

FASTENERS SHALL BE HIGH STRENGTH BOLTS 3/4" Ø, OPEN HOLES 13/16" Ø, UNLESS OTHERWISE NOTED.

THE ZINC-SILICATE AND VINYL PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL EXCEPT WHERE OTHERWISE NOTED.



PROPOSED PROFILE
No Scale

THE BACK FACE OF THE NEWLY CONSTRUCTED PORTIONS OF CLOSED ABUTMENTS SHALL BE WATERPROOFED ACCORDING TO ARTICLE 502 II OF THE STANDARD SPECIFICATIONS.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 OR M-53 GRADE 60.

CALCULATED WEIGHT OF STRUCTURAL STEEL = 55,390 lbs. (M183)
105,500 lbs. (M223, Gr. 50)

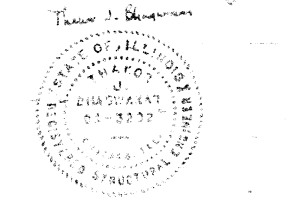
TOTAL BILL OF MATERIAL				
ITEM	UNIT	SUB	SUPER	TOTAL
CLASS X CONCRETE	CU. YD.	225.7	301.8	527.5
REINFORCEMENT BARS	LBS.	18,430		18,430
REINFORCEMENT BARS(EPOXY COATED)	LBS.		62,500	62,500
PROTECTIVE COAT	SQ. YD.		650	650
NAME PLATES	EACH		1	1
ALUMINUM RAILING TYPE L	LIN. FT.		291	291
EXPANSION BOLTS 3/4" Ø	EACH	450		450
STRUCTURAL STEEL	L. S.		1	1
CONCRETE REMOVAL	CU. YD.	97.4		97.4
REPAIR CONCRETE STRUCTURE	SQ. FT.	31		31
EPOXY CRACK SEALING	LIN. FT.	311		311
NEOPRENE EXPANSION JOINT(2")	LIN. FT.		181	181
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH		18	18
REMOVAL OF EXISTING SUPERSTRUCTURE	L. S.		1	1
STRUCTURE EXCAVATION	CU. YD.	530.0		530.0
ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH		9	9
TEMPORARY SHEET PILING	30. FT.	1500		1500

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

ANCHOR BOLTS SHALL BE SET BEFORE BOLTING DIAPHRAGMS OVER SUPPORTS.

THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE SPLICE PLATE MATERIAL AND THE STEEL WIDE FLANGE BEAMS.

APPROVED FOR STRUCTURAL ADEQUACY ONLY

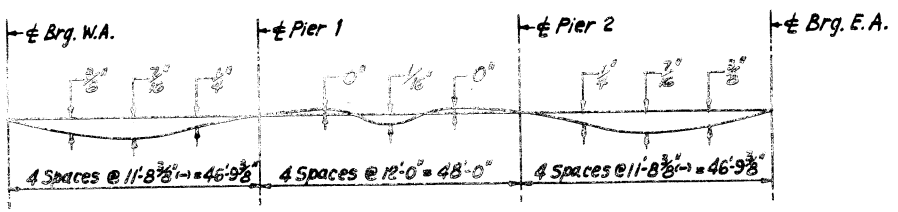


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
AND ELEVATION
REHABILITATION OF
31st STREET OVER SALT CREEK
FALL RTE. 1467 COOK COUNTY SEC. 1288 BR(82)

GLOBETROTTERS
ENG. CORP.
drawn by SP
checked PFF
DATE 5-1-84

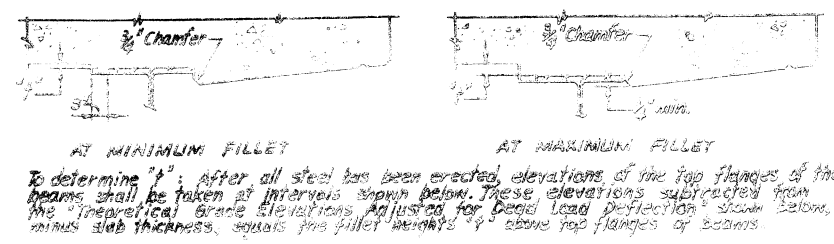
SHEET 9

Rev. 6-6-84 L.W.

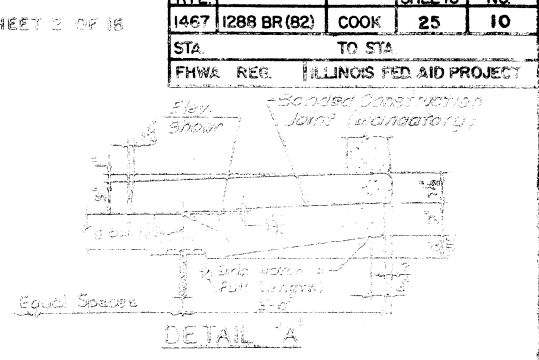


DEAD LOAD DEFLECTION DIAGRAM
(includes weight of concrete only)

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.



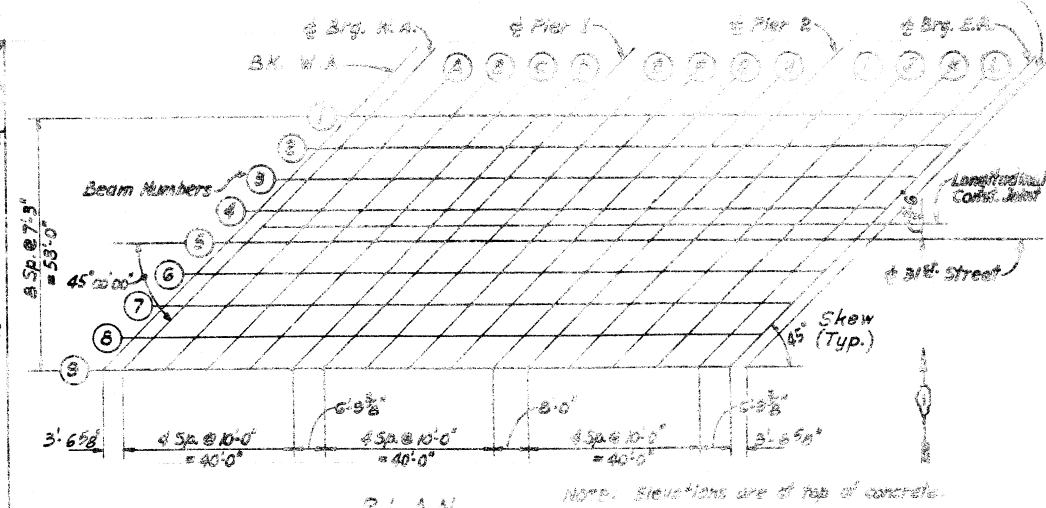
FILLET HEIGHTS



DETAIL 'A'

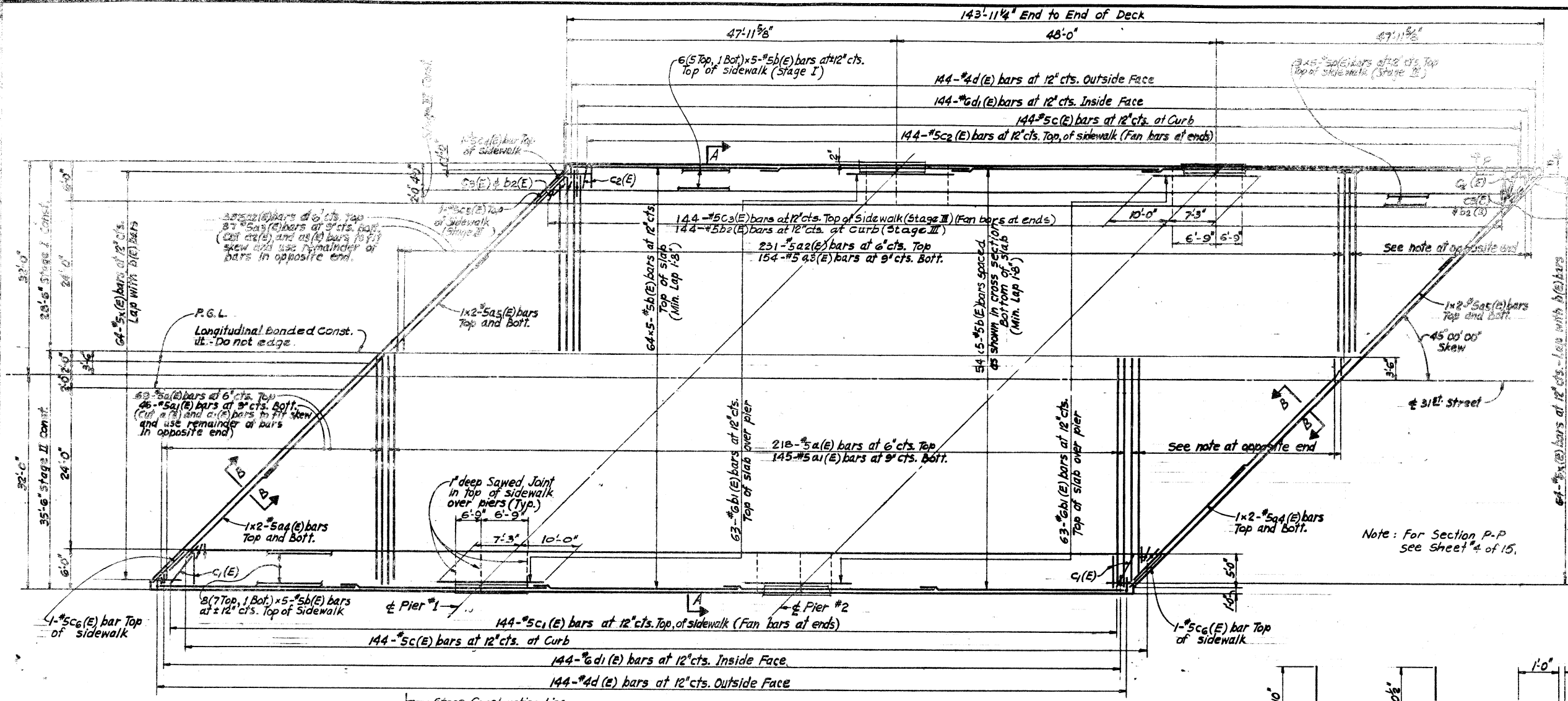
BEAM 1				BEAM 2				BEAM 3				BEAM 4				LONGITUDINAL CONST. JOINT				BEAM 5			
Location	Station	Offset	Theoretical Grade Elevations Adjusted for D.L. Def.	Location	Station	Offset	Theoretical Grade Elevations Adjusted for D.L. Def.	Location	Station	Offset	Theoretical Grade Elevations Adjusted for D.L. Def.	Location	Station	Offset	Theoretical Grade Elevations Adjusted for D.L. Def.	Location	Station	Offset	Theoretical Grade Elevations Adjusted for D.L. Def.	Location	Station	Offset	Theoretical Grade Elevations Adjusted for D.L. Def.
Back W.A.	46+84.37	-29.00	637.872	Back W.A.	46+78.02	-21.75	637.957	Back W.A.	46+71.77	-14.50	638.042	Back W.A.	46+65.52	-7.25	638.127	Back W.A.	46+59.27	0	638.212	Back W.A.	46+53.02	7.25	638.297
Brig. W.A.	46+64.66	-29.00	637.888	Brig. W.A.	46+82.67	-21.75	637.971	Brig. W.A.	46+75.32	-14.50	638.055	Brig. W.A.	46+68.07	-7.25	638.139	Brig. W.A.	46+61.82	0	638.223	Brig. W.A.	46+55.57	7.25	638.308
A	46+89.82		637.918	A	46+92.57		638.007	A	46+85.22		638.091	A	46+77.97		638.175	A	46+71.72		638.259	A	46+65.47		638.344
B	47+08.82		637.946	B	47+02.57		638.039	B	46+95.32		638.123	B	46+88.07		638.207	B	46+81.82		638.289	B	46+75.57		638.374
C	47+19.82		637.971	C	47+12.57		638.066	C	47+05.32		638.160	C	46+98.07		638.241	C	46+91.82		638.325	C	46+85.57		638.410
D	47+29.82		637.990	D	47+22.57		638.088	D	47+15.32		638.186	D	47+08.07		638.269	D	47+01.82		638.350	D	46+95.57		638.435
Pier 1	47+36.00		638.001	Pier 1	47+29.35		638.103	Pier 1	47+22.10		638.202	Pier 1	47+14.85		638.293	Pier 1	47+07.60		638.384	Pier 1	46+99.35		638.469
E	47+46.80		638.026	E	47+39.35		638.118	E	47+32.10		638.220	E	47+24.65		638.311	E	47+17.40		638.402	E	47+11.15		638.487
F	47+56.80		638.053	F	47+49.35		638.129	F	47+42.10		638.235	F	47+34.35		638.326	F	47+27.10		638.417	F	47+20.85		638.502
G	47+66.80		638.082	G	47+59.35		638.136	G	47+52.10		638.245	G	47+44.35		638.336	G	47+37.10		638.428	G	47+30.85		638.513
H	47+76.80		638.085	H	47+69.35		638.139	H	47+62.10		638.250	H	47+54.35		638.340	H	47+47.10		638.431	H	47+40.85		638.518
Pier 2	47+84.00		638.081	Pier 2	47+77.25		638.137	Pier 2	47+70.10		638.252	Pier 2	47+62.35		638.344	Pier 2	47+55.10		638.435	Pier 2	47+48.85		638.520
I	47+94.80		638.082	I	47+87.25		638.132	I	47+80.10		638.249	I	47+72.35		638.336	I	47+65.10		638.428	I	47+58.85		638.513
J	48+04.60		637.999	J	47+97.35		638.122	J	47+90.10		638.242	J	47+82.35		638.329	J	47+75.10		638.420	J	47+68.85		638.505
K	48+14.60		637.981	K	48+07.35		638.107	K	48+00.10		638.231	K	47+92.35		638.318	K	47+85.10		638.412	K	47+78.85		638.500
L	48+24.60		637.959	L	48+17.35		638.088	L	48+10.10		638.215	L	48+02.35		638.302	L	47+95.10		638.394	L	47+88.85		638.480
Brig. E.A.	48+31.38		637.941	Brig. E.A.	48+24.10		638.073	Brig. E.A.	48+16.38		638.202	Brig. E.A.	48+08.63		638.289	Brig. E.A.	48+01.38		638.381	Brig. E.A.	48+04.13		638.466
Back E.A.	48+34.93		637.931	Back E.A.	48+27.68		638.064	Back E.A.	48+20.43		638.195	Back E.A.	48+12.68		638.282	Back E.A.	48+05.43		638.374	Back E.A.	48+08.18		638.459

BEAM 6				BEAM 7				BEAM 8				BEAM 9			
Location	Station	Offset	Theoretical Grade Elevations Adjusted for D.L. Def.	Location	Station	Offset	Theoretical Grade Elevations Adjusted for D.L. Def.	Location	Station	Offset	Theoretical Grade Elevations Adjusted for D.L. Def.	Location	Station	Offset	Theoretical Grade Elevations Adjusted for D.L. Def.
Back W.A.	46+50.02	7.25	638.048	Back W.A.	46+42.77	14.50	637.896	Back W.A.	46+35.52	21.75	637.741	Back W.A.	46+28.27	29.00	637.586
Brig. W.A.	46+53.57	7.25	638.067	Brig. W.A.	46+46.32	14.50	637.915	Brig. W.A.	46+39.07	21.75	637.762	Brig. W.A.	46+31.82	29.00	637.606
A	46+63.57		638.116	A	46+56.32		637.968	A	46+49.07		637.817	A	46+41.82		637.664
B	46+73.57		638.160	B	46+66.32		638.015	B	46+59.07		637.868	B	46+51.82		637.719
C	46+83.57		638.201	C	46+76.32		638.059	C	46+69.07		637.915	C	46+61.82		637.768
D	46+93.57		638.231	D	46+86.32		638.098	D	46+79.07		637.957	D	46+71.82		637.814
Pier 1	47+00.35		638.258	Pier 1	46+93.10		638.122	Pier 1	46+85.85		637.983	Pier 1	46+78.60		637.842
E	47+10.35		638.287	E	47+03.10		638.154	E	46+95.85		638.018	E	46+88.60		637.880
F	47+20.35		638.311	F	47+13.10		638.181	F	47+05.85		638.049	F	46+98.60		637.914
G	47+30.35		638.330	G	47+23.10		638.204	G	47+15.85		638.075	G	47+08.60		637.943
H	47+40.35		638.346	H	47+33.10		638.222	H	47+25.85		638.096	H	47+18.60		637.966
Pier 2	47+48.35		638.355	Pier 2	47+41.10		638.234	Pier 2	47+33.85		638.110	Pier 2	47+26.60		637.985
I	47+58.35		638.362	I	47+51.10		638.249	I	47+43.85		638.124	I	47+36.60		638.001
J	47+68.35		638.365	J	47+61.10		638.250	J	47+53.85		638.133	J	47+46.60		638.019
K	47+78.35		638.363	K	47+71.10		638.252	K	47+63.85		638.138	K	47+56.60		638.028
L	47+88.35		638.357	L	47+81.10		638.249	L	47+73.85		638.135	L	47+66.60		638.028
Brig. E.A.	47+95.15		638.350	Brig. E.A.	47+87.88		638.244	Brig. E.A.	47+80.65		638.136	Brig. E.A.	47+73.38		638.021
Back E.A.	47+98.60		638.346	Back E.A.	47+91.43		638.241	Back E.A.	47+84.18		638.134	Back E.A.	47+76.93		638.020



FALL RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	1288 BR(82)	COOK	25	11
STA.		TO STA.		
FHWA REG.		ILLINOIS FED. AID PROJECT		

SHEET 5 OF 15



DECK SLAB-BAR SCHEDULE

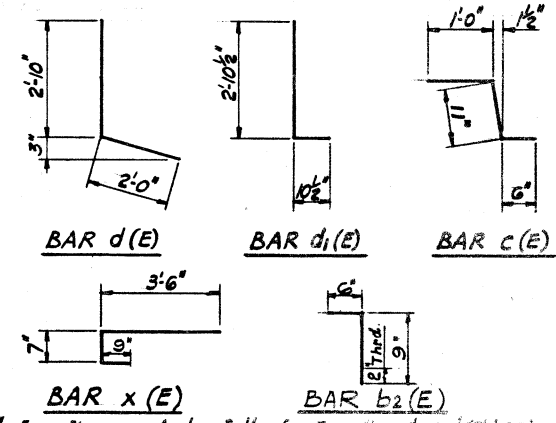
BAR NO.	SIZE	LENGTH	SHAPE
a(E)	#5	23'-0"	
a ₁ (E)	#5	39'-6"	
a ₂ (E)	#5	27'-6"	
a ₃ (E)	#5	20'-0"	
a ₄ (E)	#5	20'-0"	
b(E)	#5	20'-0"	
b ₁ (E)	#5	17'-0"	
b ₂ (E)	#5	1'-3"	
c(E)	#5	2'-5"	
c ₁ (E)	#5	5'-6"	
c ₂ (E)	#5	3'-6"	
c ₃ (E)	#5	1'-10"	
c ₄ (E)	#5	4'-6"	
c ₅ (E)	#5	2'-8"	
c ₆ (E)	#5	7'-0"	
d(E)	#4	4'-10"	L
d ₁ (E)	#6	3'-9"	L
x(E)	#5	4'-10"	

ITEM	UNIT	QTY.
Reinforcement Bars (Epoxy Coated)	Lbs.	61,210
Class X Concrete	Cu.Yds.	284.3

Note: For Section P-P see Sheet #4 of 15.

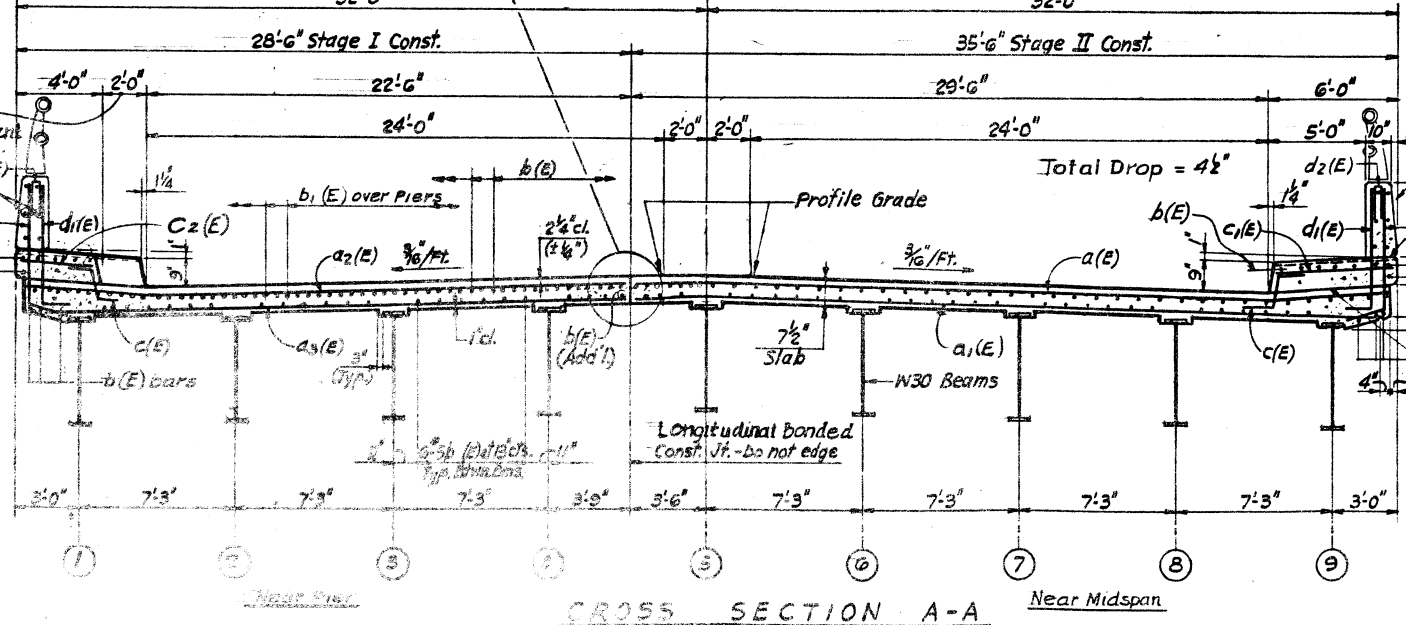
DECK PLAN

Note: For Bar Splicer Details see Sht. #7 of 15.
 Note: For Parapet and Rail Eley. on Sheet #4 for placement of Bars e(E), e₁(E) & d₂(E).



SECTION B-B

NOTES:
 Reinforcement bars designated (E) shall be epoxy coated.
 Bars indicated thus: 54x5 #5 etc. indicates 54 lines of bars with 5 lengths per line. #5 bars shall be lapped 1'-8" min.



CROSS SECTION A-A

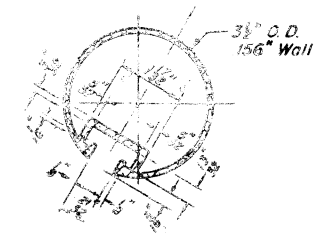
* Place h₁, h₂ and a₁(E), a₂(E) bars in back of anchor bolt as shown if required to maintain 1" cl. (+0-1/8"). Anchor Bolts should be tied to a₁(E), a₂(E) and h₁, h₂ bars.

Work this sheet w/ sheet #4 of 15

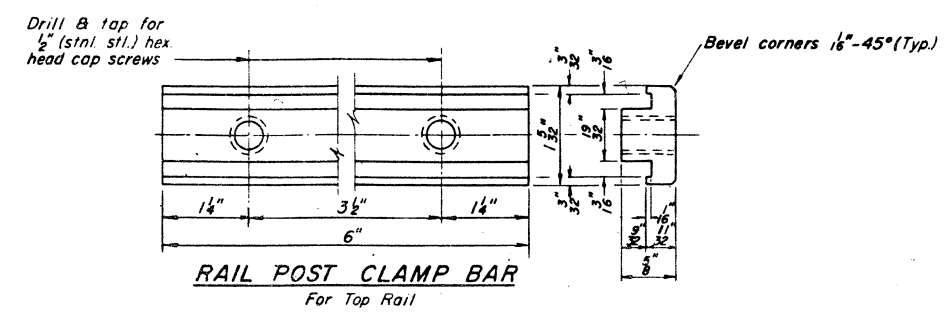
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DECK PLAN & DETAILS
 REHABILITATION OF
 31ST STREET OVER SALT CREEK
 FALL RTE. 1467 COOK COUNTY SEC. NO. 1288 BR(82)
 GLOBETROTTERS drawn by EX scale None SHEET
 ENG. CORP. checked A/R/ date 5-1-84 11

ROUTE	SECTION	COUNTY	SHEETS	SHEET NO.
1467	1288 BR (82)	COOK	25	13
STA.		TO STA.		
FHWA REG.		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



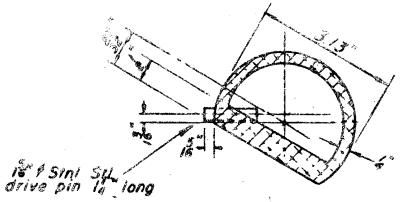
SECTION THRU TOP RAIL



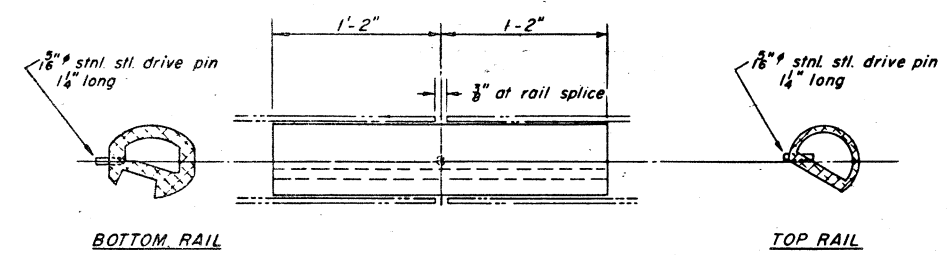
RAIL POST CLAMP BAR
For Top Rail

NOTES:

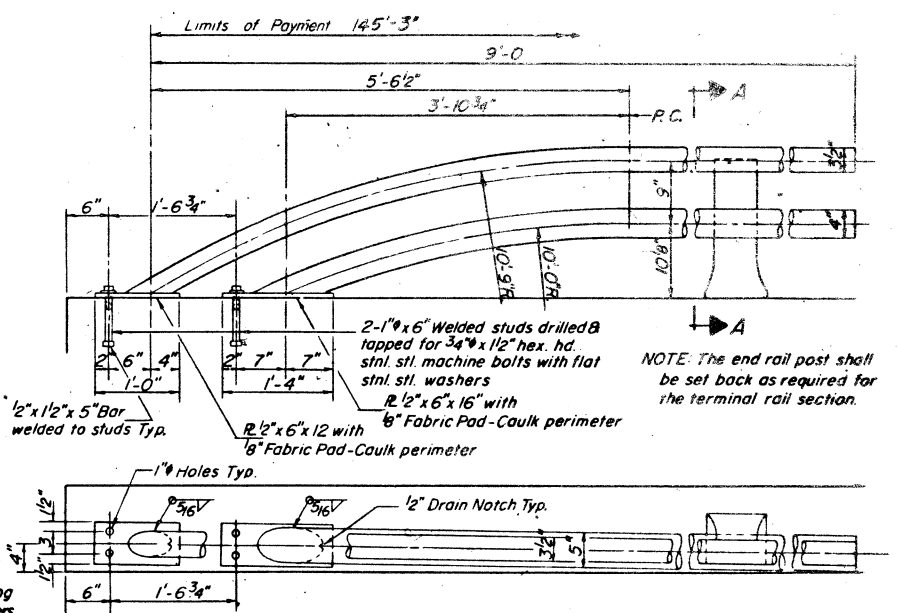
All Posts shall be normal to parapet.
All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.
All joints in rail shall be spliced per detail.
Provide 1-1/8" and 2-1/8" Aluminum Shim for 25% of the Posts.
Rail elements shall be parallel to Grade - high spots shall be ground and low spots shimmed.
Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per lineal foot for ALUMINUM RAILING, TYPE L.
Aluminum alloy rail shall conform to ASTM B 221 alloy 5061-T8 or 5351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.



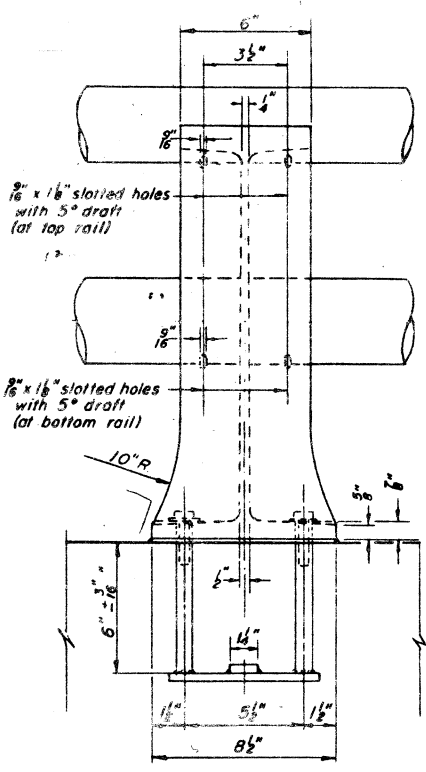
SECTION THRU SPLICE
TOP RAIL



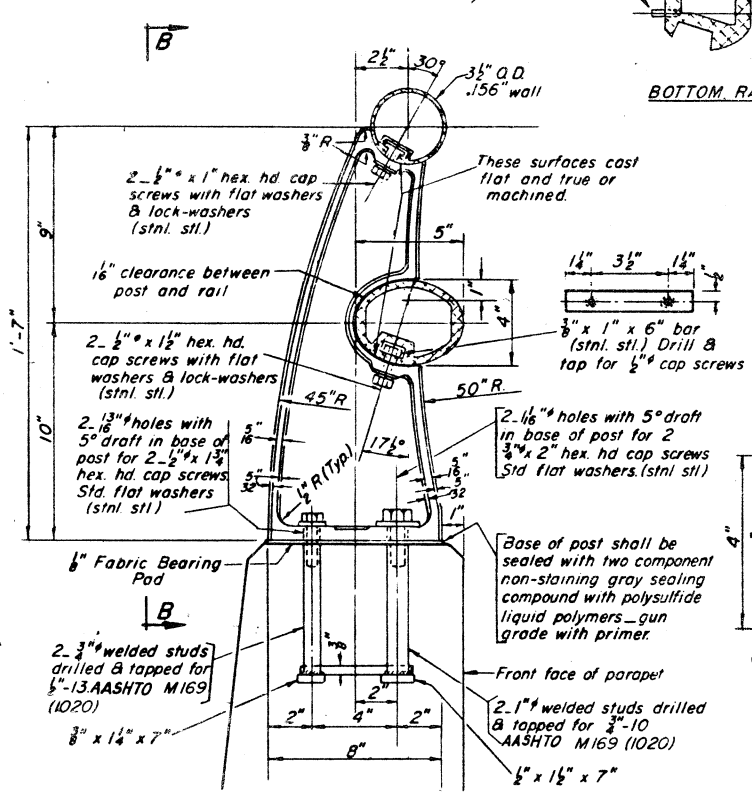
RAIL SPLICE



RAIL TERMINAL SECTION

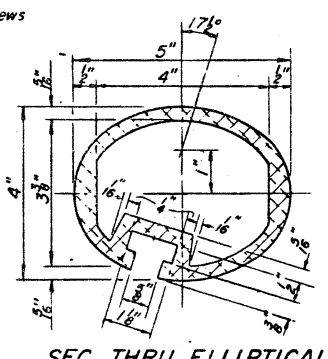


VIEW B-B

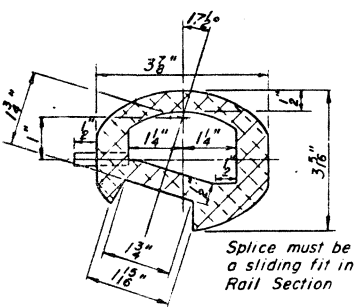


SECTION A-A

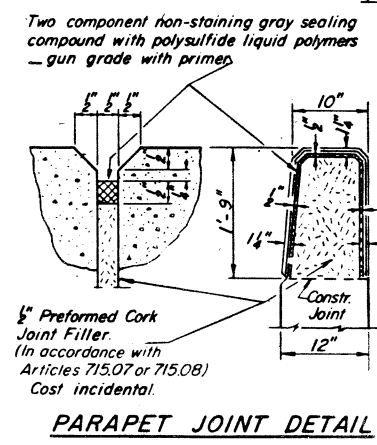
RAIL POST DETAILS



SEC. THRU ELLIPTICAL
RAIL SECTION



SEC. THRU SPLICE



PARAPET JOINT DETAIL

BILL of MATERIALS

Item	Unit	Quantity
ALUMINUM RAILING, TYPE L	Lin. Ft.	291

DESIGNED	
CHECKED	
DRAWN	
CHECKED	

R-20 6-1-82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALUMINUM RAILING, TYPE L
REHABILITATION OF
31ST STREET OVER SALT CREEK

FAH. RTE. 1467 COOK COUNTY SEC. NO. 1288 BR/82

GLOBETROTTERS drawn by 12 scale 1/8" = 1'-0" SHEET
ENG. CORP. checked NRP date 5-1-84 13

FALL RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	1288 BR(82)	COOK	25	14
STA.		TO STA.		
FHWA REG.		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Joint Size	"C" at 50°F	"D" at 50°F
2	2"	1 1/2" min
2 1/2	2 1/2"	1 3/4" min
4	3"	2 1/2" min

INSTALLATION NOTES

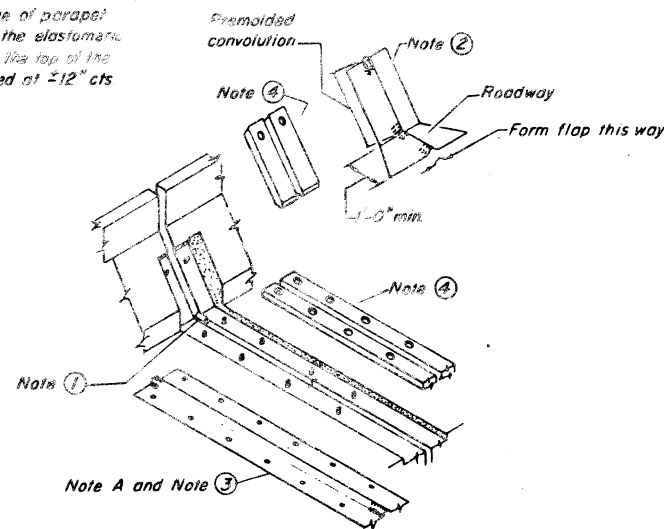
1. Install sponge mandrels into positions shown to form flap convolution
2. Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy)
3. Install continuous seal in roadway
4. Install anchor blocks as indicated.

NOTE A - Maximum spacing of anchor bolts shall be 12" centers

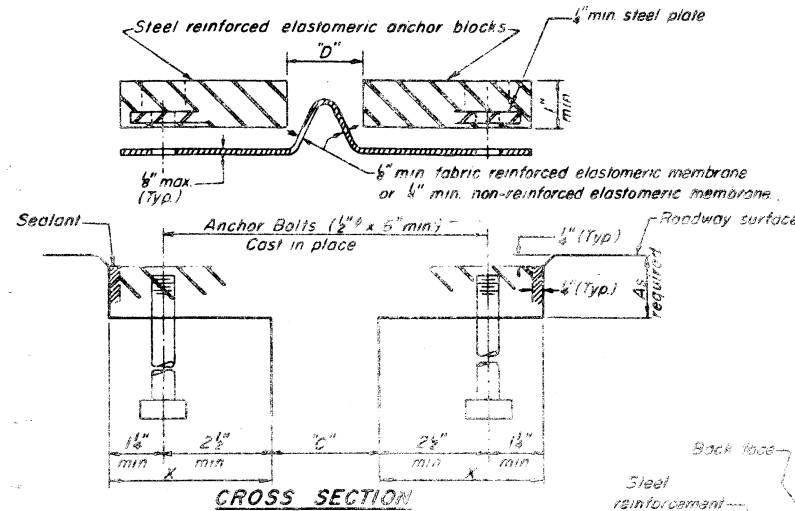
SKEW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews.

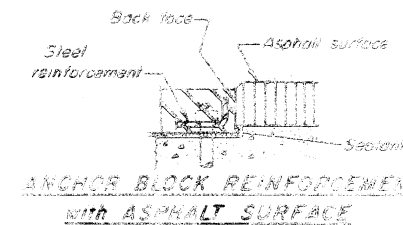
For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimension "D", might require modifications to insure a minimum clearance of 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at 12" cts.



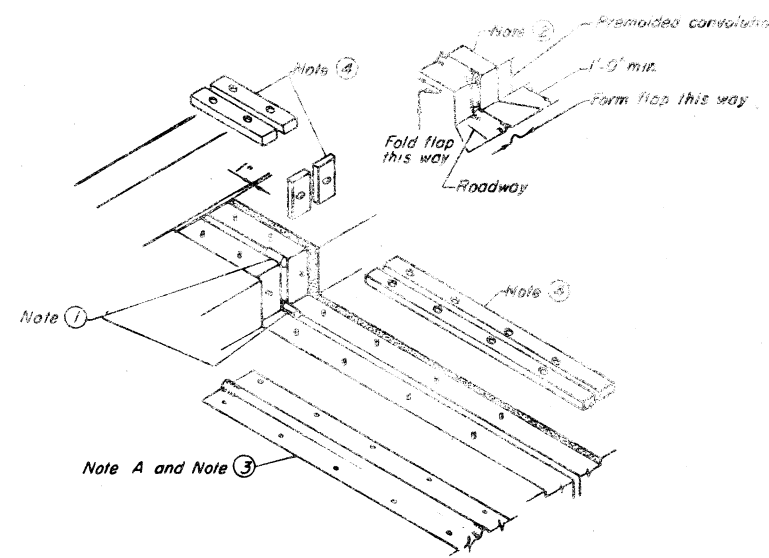
AT PARAPET
(Not Applicable)



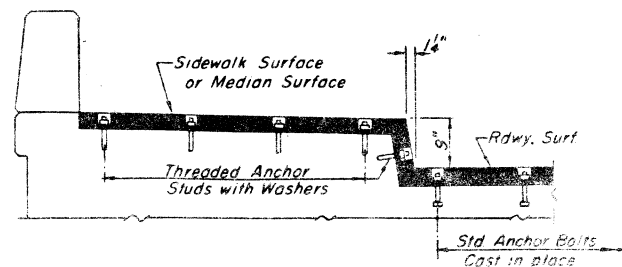
CROSS SECTION



ANCHOR BLOCK REINFORCEMENT WITH ASPHALT SURFACE



AT SIDEWALK



AT SOUTH SIDEWALK
TYPICAL END TREATMENTS

GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded narrow blocks of elastomer and steel wire assembled over continuous lengths of elastomeric membrane. See Special Provisions.

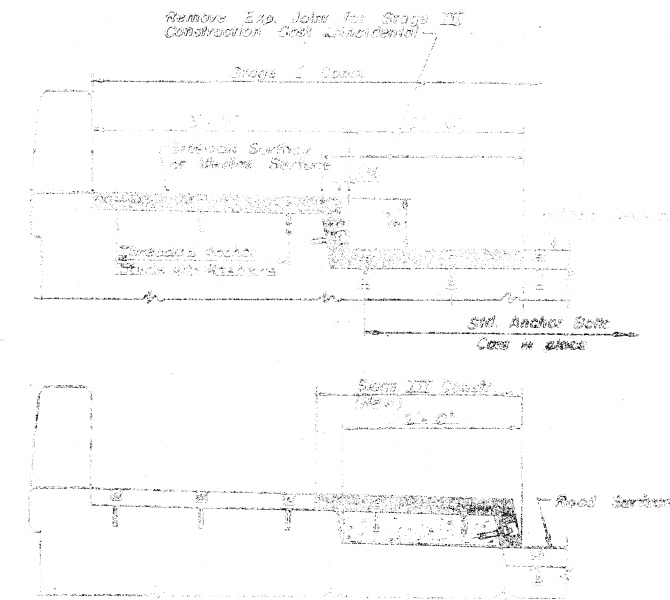
The elastomeric membrane shall be preformed with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.

The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout.

The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.

Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.



AT NORTH SIDEWALK
TYPICAL END TREATMENTS

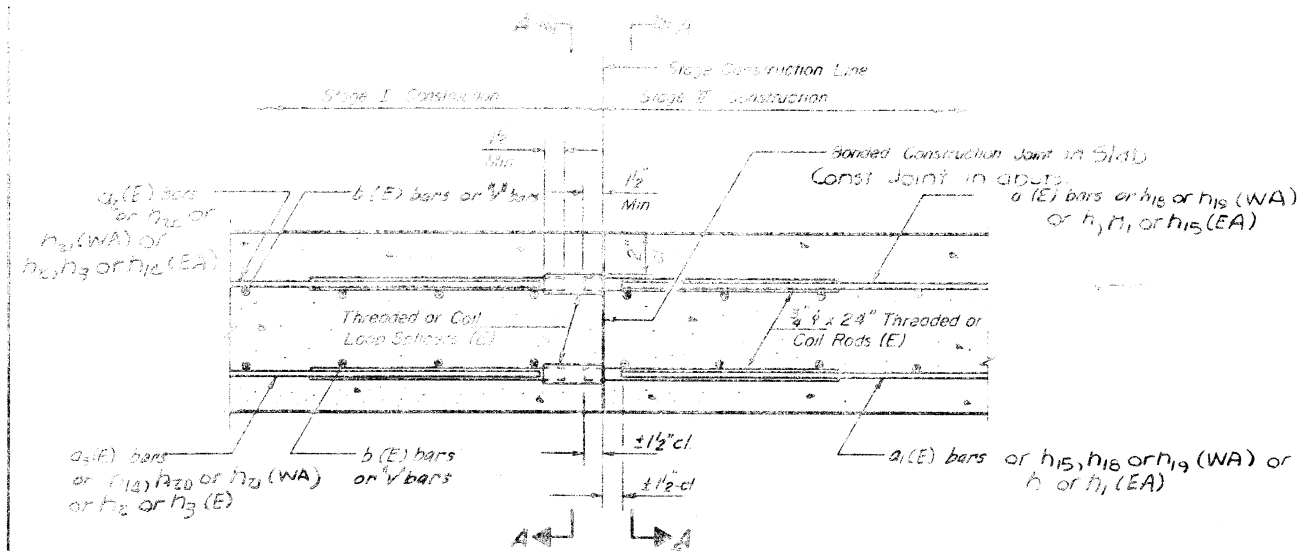
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Neoprene Expansion Joint (2") Lin. Ft.		181

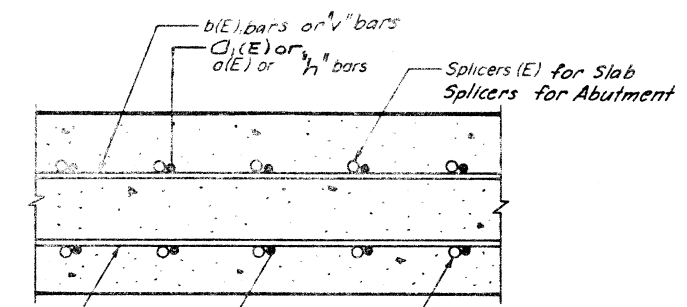
DESIGNED
CHECKED
DRAWN
CHECKED

EJ-GS 2-1-83

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
CONTINUOUS SEAL TYPE
NEOPRENE EXPANSION JOINTS (2")
REHABILITATION OF
31ST STREET OVER SALT CREEK
FALL RTE. 1467 COOK COUNTY SEC. NO. 1288 BR(82)
GLOBETROTTERS drawn by LK scale None SHEET
EMC CORP. checked JRP date 5-1-04 14



SECTION THRU SLAB & ABUTMENT

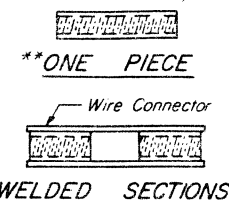


SECTION A-A

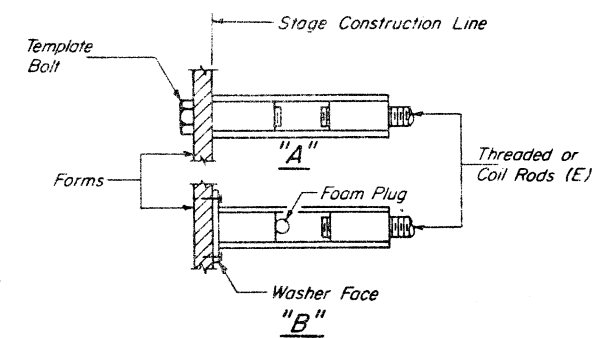
SPLICER DETAILS

No Req'd 486 (Epoxy Coated) for Slab
No Req'd 32 for Abutment

Cost of Splicer to be incidental to the
Cost of Reinforcement bars.



SPLICER ALTERNATIVES
** Heavy Hex Nuts conforming to ASTM A563, Grade C, D or DH may be used



INSTALLATION AND SETTING METHODS

"A" Set splicer by means of a template bolt.
"B" Set splicer by nailing to wood forms or cementing to steel forms.
(E) Indicates epoxy coating, see Special Provisions.

NOTES

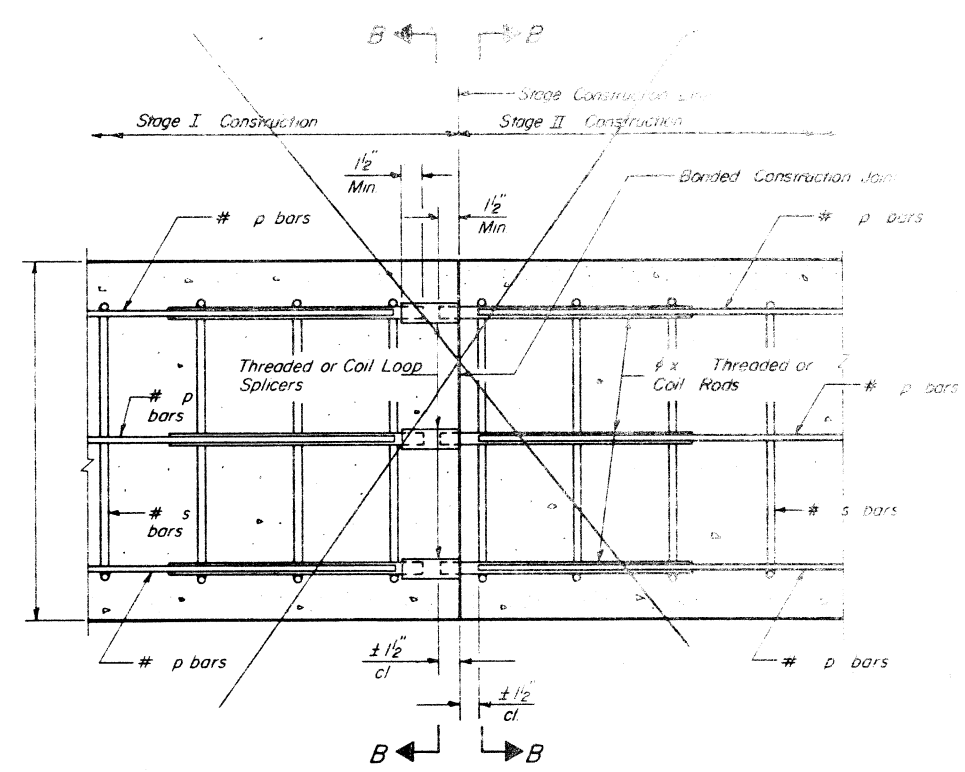
Steel Splicer (Coupler) assembly shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Steel Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length and have effective tensile stress area equal or greater than that of the lapped reinforcement bars.
Splicer rods shall extend minimum 1/2 inches into the couplers.
All reinforcement bars shall be lapped and tied to the splicer rods.
Splicer (coupler) assembly in the slab shall be epoxy coated in accordance with the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed splicer (coupler) assembly satisfies the following requirements:

- Minimum Capacity = $1.25 \times f_y \times A_s$
(Tension in kips)
- Minimum *Pull-out Strength = $1.25 \times f_{sallow} \times A_s$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in k.s.i.
 f_{sallow} = Allowable tensile stress in lapped reinforcement bars in k.s.i. (Service Load)
 A_s = Tensile stress area of lapped reinforcement bars
* 28 day concrete

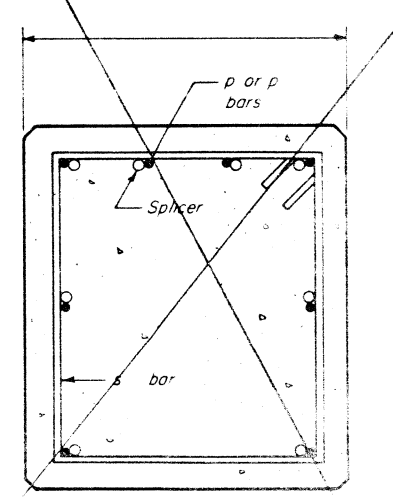
Typical Splicer (Coupler) Assembly Sizes

In Slabs	#5 bar lap with 3/4" Splicer (Coupler) x 2'-0" Splicer Rods	Minimum Capacity = 23.0 kips-tension
		Minimum Pull-out Strength = 9.2 kips-tension
In Sub-structures	#7 bar lap with 1" Splicer (Coupler) x 3'-5" Splicer Rods	Minimum Capacity = 45 kips-tension
		Minimum Pull-out Strength = 18.0 kips-tension
	#8 bar lap with 1 1/4" Splicer (Coupler) x 4'-6" Splicer Rods	Minimum Capacity = 58.9 kips-tension
		Minimum Pull-out Strength = 23.6 kips-tension



SECTION THRU ABUTMENTS AND PIERS

No epoxy coating required.



SECTION B-B

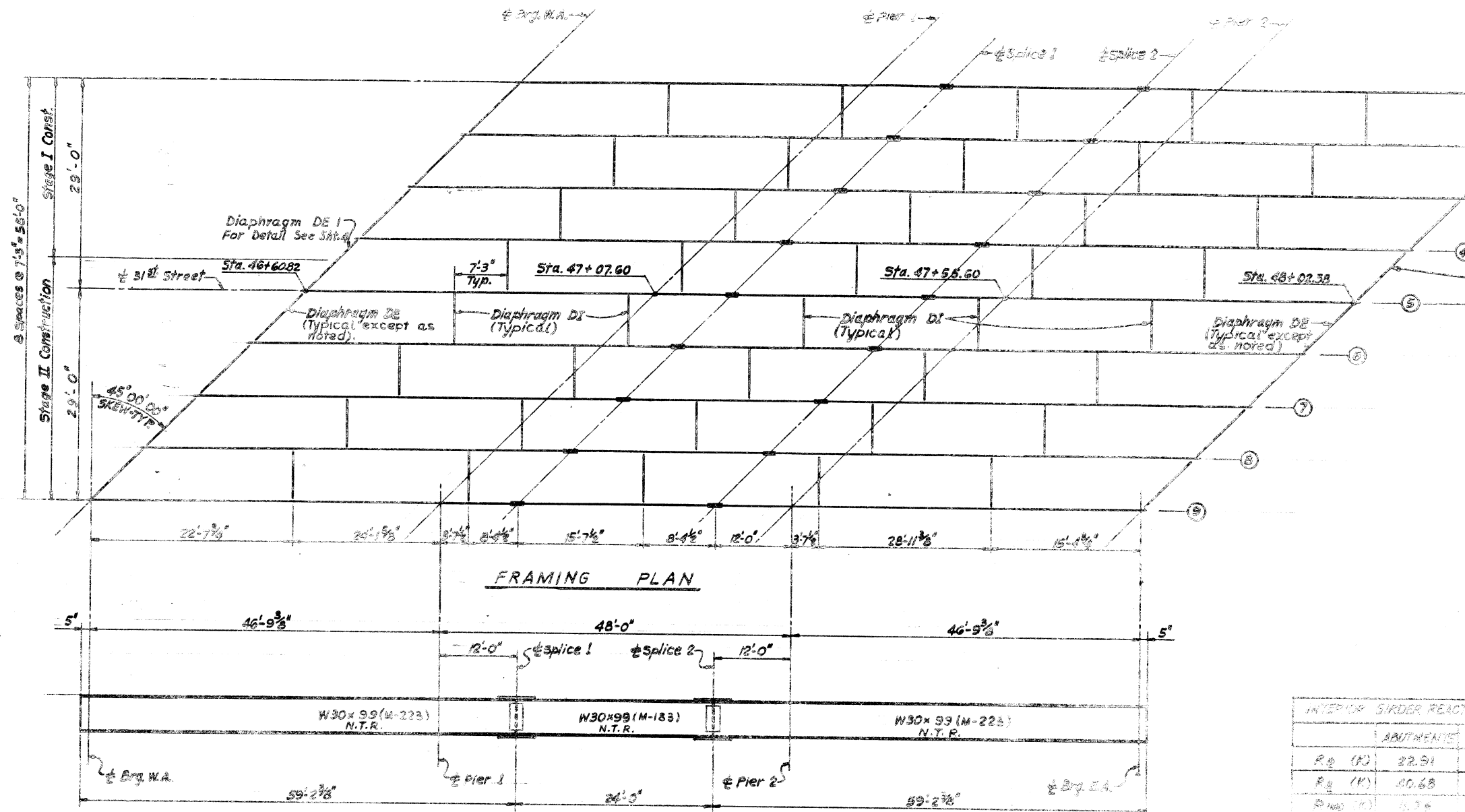
SPLICER DETAILS
(No Req'd)

BAR SPLICER (COUPLER) DETAILS AT STAGE CONSTRUCTION

DESIGNED
CHECKED
DRAWN
CHECKED

BSD-1 E-1-R2

SHEET 15 OF 16



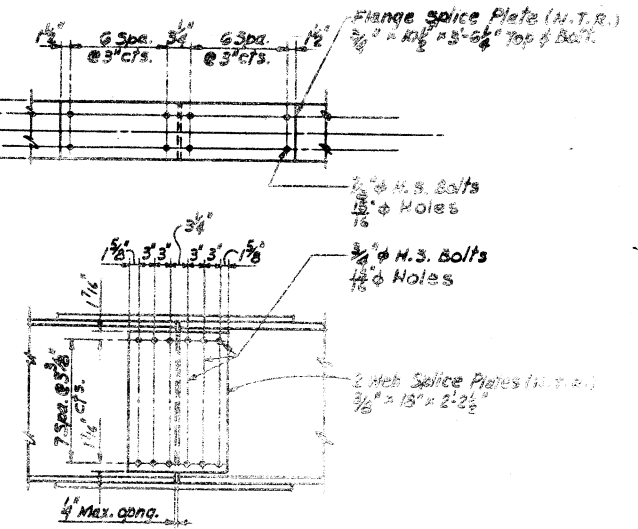
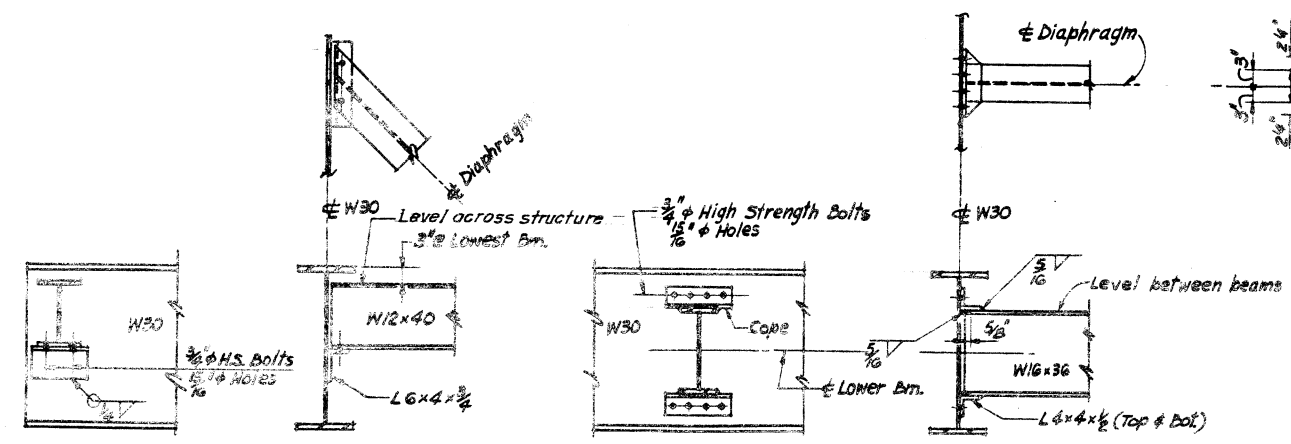
Loc.	Brig. W.A.	Pier 1	Splice 1	Splice 2	Pier 2	Brig. E.A.
1	EL. 637.22	EL. 637.27	EL. 637.29	EL. 637.30	EL. 637.28	EL. 637.27
2	EL. 637.50	EL. 637.57	EL. 637.58	EL. 637.61	EL. 637.59	EL. 637.57
3	EL. 637.58	EL. 637.68	EL. 637.50	EL. 637.57	EL. 637.58	EL. 637.58
4	EL. 637.47	EL. 637.57	EL. 637.63	EL. 637.58	EL. 637.57	EL. 637.47
5	EL. 637.55	EL. 637.66	EL. 637.57	EL. 637.58	EL. 637.58	EL. 637.55
6	EL. 637.30	EL. 637.53	EL. 637.54	EL. 637.58	EL. 637.58	EL. 637.30
7	EL. 637.25	EL. 637.39	EL. 637.45	EL. 637.45	EL. 637.51	EL. 637.51
8	EL. 637.12	EL. 637.28	EL. 637.30	EL. 637.36	EL. 637.38	EL. 637.47
9	EL. 637.0	EL. 637.18	EL. 637.16	EL. 637.25	EL. 637.26	EL. 637.36

FRAMING PLAN

BEAM ELEVATION
N.T.R. indicate Notch Toughness Requirement.

	ABUTMENTS	PIERS
R _g (K)	22.91	68.99
R _h (K)	40.68	49.31
R _{max} (K)	4.76	11.6
R _{total} (K)	78.35	129.9

	Ab. Sp. 1-2	Pier 1 or 2	Ab. Sp. 2
I (in ⁴)	3390.0	3390.0	3390.0
D (ft)	17.30	17.30	17.30
M _g (K)	298	172	242
M _h (K)	35	-62	71
M _{total} (K)	577	-529	385
f _s (KSI)	25.87	23.5	17.85



All structural steel shall be AASHTO M153 except that noted M223, which shall be AASHTO M223.

Note: Two hardened washers shall be required for all 3/4 inch holes for diaphragm connections.

END DIAPHRAGM DE
12 Required

INTERIOR DIAPHRAGM DI
40 Required

TYPICAL SPLICE DETAIL

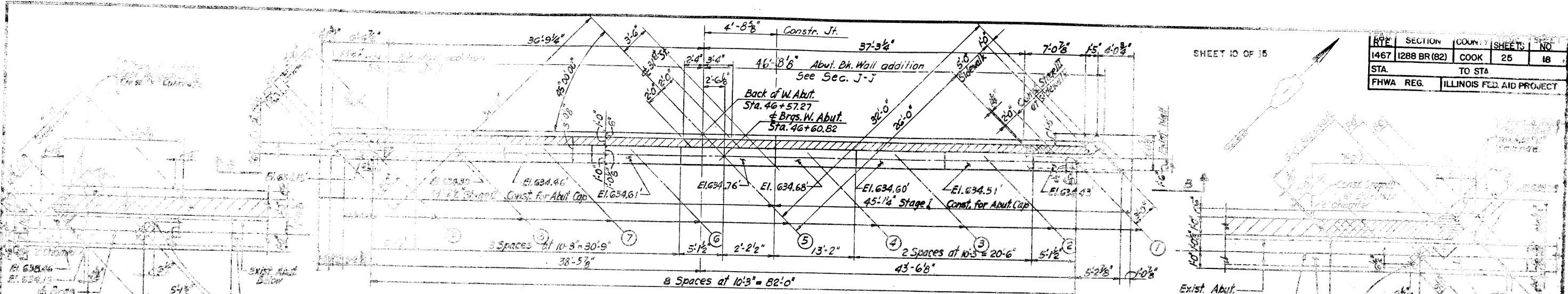
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
REHABILITATION OF
31ST STREET OVER SALT CREEK

FALL RTE. 1467 COOK COUNTY SEC. NO. 128A BR(R2)

GLOBETROTTERS ENGINEERING CORPORATION
drawn by EK
checked NRP
date 5-1-84

SHEET 16

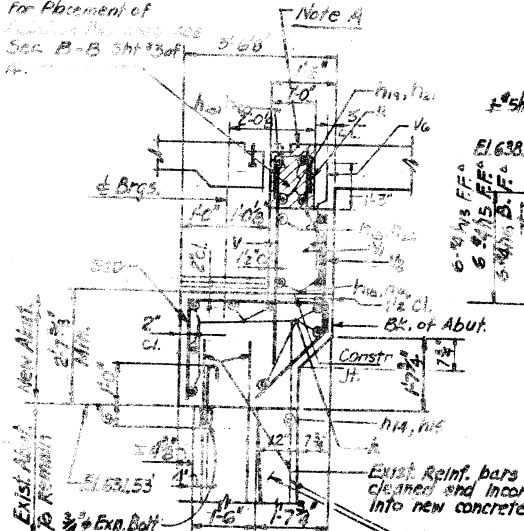


TOP PLAN - WEST ABUTMENT

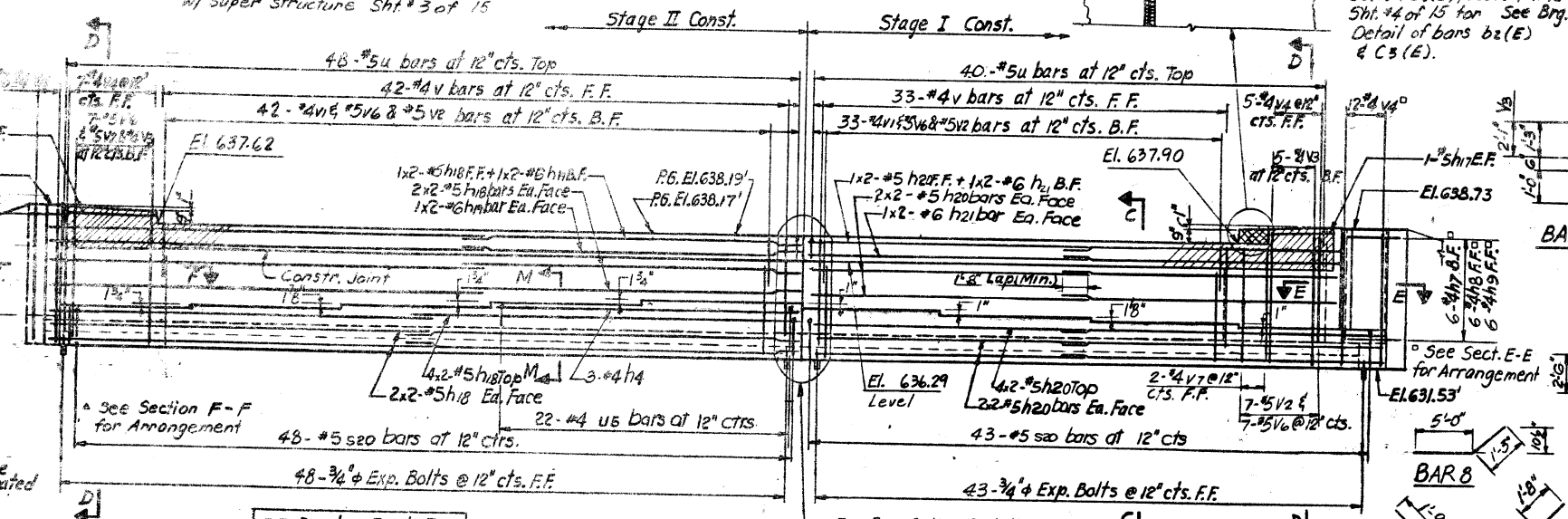
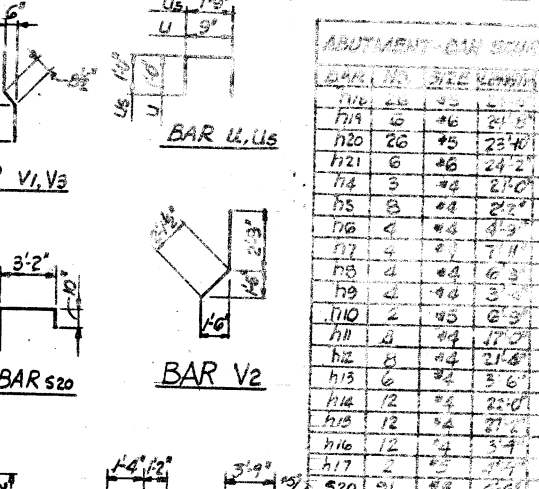
Note A: hatched area to be poured after superstructure falsework has been removed. Quantity of Class X Conc. included w/ super structure Sht. # 3 of 15

* See North Sidewalk Below Reinf. Detail Sht. # of 15 for method of installation of bars b2(E) & C3(E), see 1" x 12" A. Bolt, 2" Proj. Sht. # 4 of 15 for See Brg. Det. Sht. # Detail of bars b2(E) & C3(E).

DETAIL AT SOUTH-WEST END OF ABUTMENT



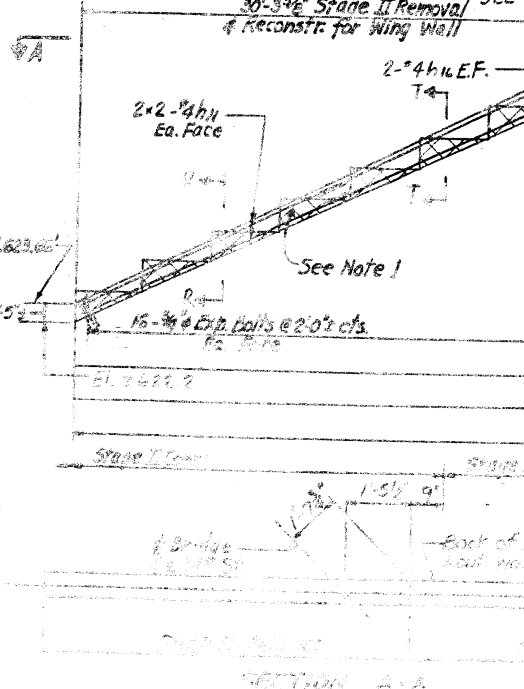
DETAIL AT NORTH-EAST END OF ABUTMENT



SECTION B-B

BAR	NO.	SIZE	LENGTH	QTY.
h1	40	#6	21' 5"	
h1a	40	#6	21' 5"	
h2	26	#5	23' 10"	
h21	6	#6	24' 2"	
h4	3	#4	21' 0"	
h5	8	#4	21' 2"	
h6	4	#4	4' 3"	
h7	4	#4	7' 11"	
h8	4	#4	6' 3"	
h9	4	#4	3' 7"	
h10	2	#5	6' 3"	
h11	8	#4	17' 2"	
h12	8	#4	21' 6"	
h13	6	#4	3' 6"	
h14	12	#4	22' 0"	
h15	12	#4	21' 2"	
h16	12	#4	3' 4"	
h17	2	#5	7' 7"	
s20	21	#5	6' 6"	
b2(E)	2	#5	1' 3"	
C3(E)	2	#5	1' 0"	
U	120	#6	3' 6"	
V7	2	#4	1' 2"	
U	88	#5	3' 9"	
U5	12	#4	3' 9"	
V	75	#4	4' 3"	
V1	75	#4	3' 0"	
V2	85	#4	4' 11"	
V3	12	#4	3' 10"	
V4	30	#4	5' 0"	
V5	120	#6	13' 6"	
V6	39	#5	2' 0"	

SECTION C-C

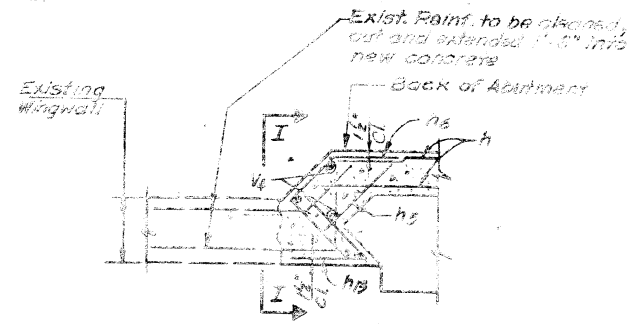


ELEVATION OF EXISTING ABUTMENT

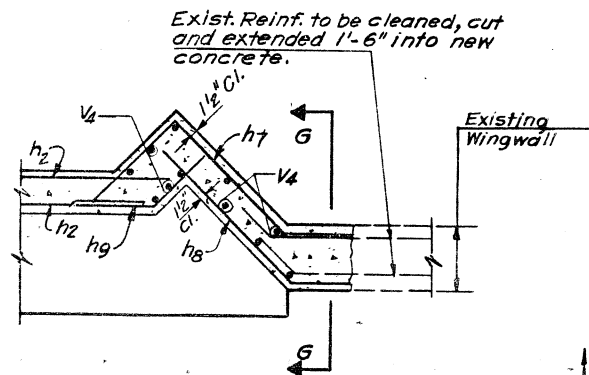
- NOTES:
- Remove existing concrete as shown. Existing reinforcing bars to be cleaned and incorporated into new concrete. Cost incidental.
 - The designation 3x2 #5, etc. indicates 3 lines of bars with 2 lengths per line.
 - For Sections D-D, E-E, F-F, M-M see Sht. # 12 of 15.
 - For Section J-J, see Sht. # 4 of 15.
 - For Sect. R-R & T-T, see Sht. # 11 of 15.
- * Quantities shown are estimated. Final quantities to be determined by the Engineer in field.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
WEST ABUTMENT
REPAIR & WOENING
REHABILITATION OF
31ST STREET OVER SALT CREEK
FALL RTE 1467 COOK COUNTY SEC. 40
GLOBETROTTERS
ENG. CORP.

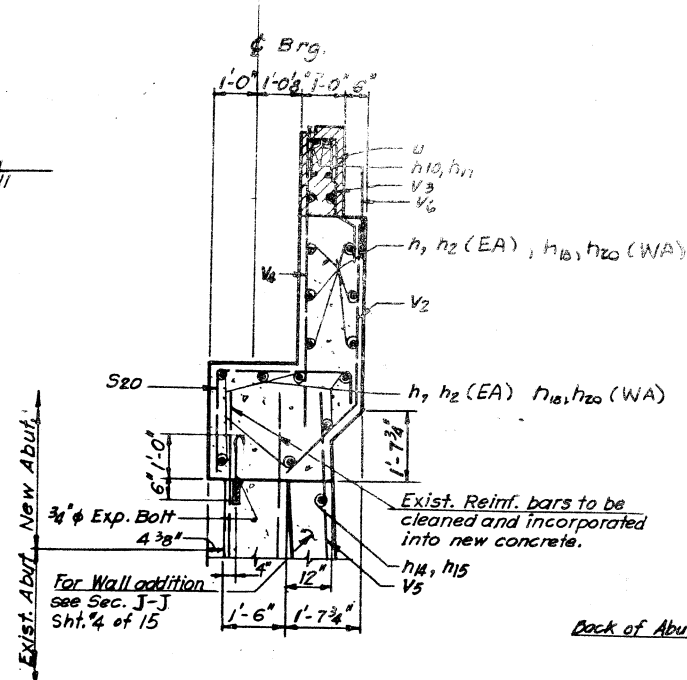
FALL RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	1288 BR (B2)	COOK	25	20
STA.		TO STA.		
FHWA REG.	ILLINOIS FED AID PROJECT			



SECTION F-F

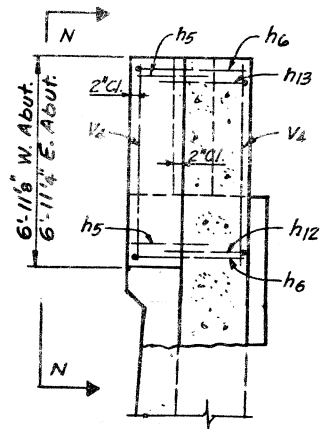


SECTION E-E

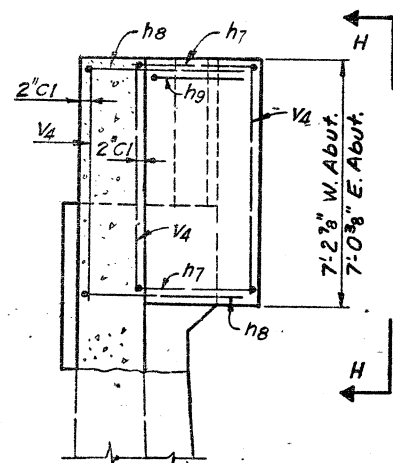


SECTION D-D

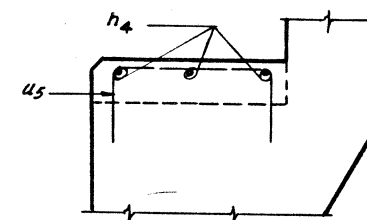
Temporary Sheet Piling for support of adjacent travelled roadway during construction of the Proposed Back addition. Extreme Caution shall be exercised by the contractor to prevent damage to the existing footing during the driving of Sheet Piling and placement of temporary bracing.



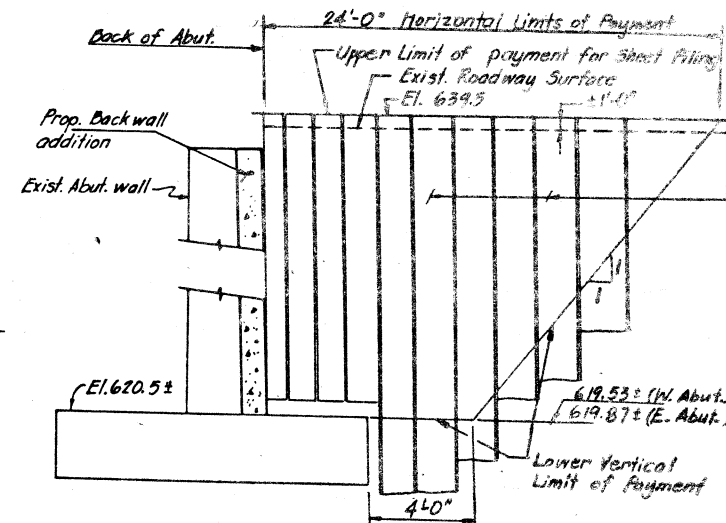
SECTION I-I



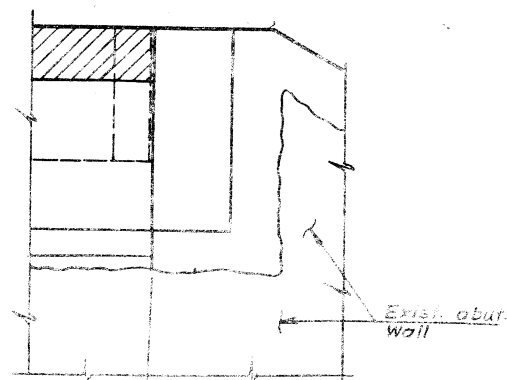
SECTION G-G



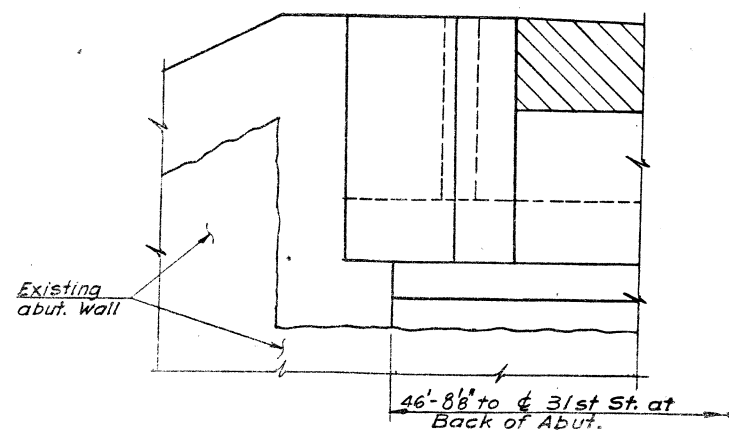
SECTION M-M
PAD DETAIL



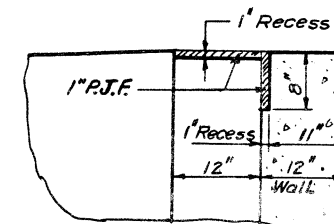
SECTION S-S



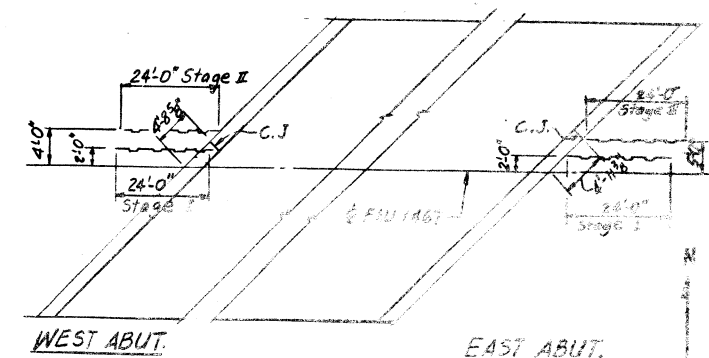
VIEW H-N



VIEW H-H



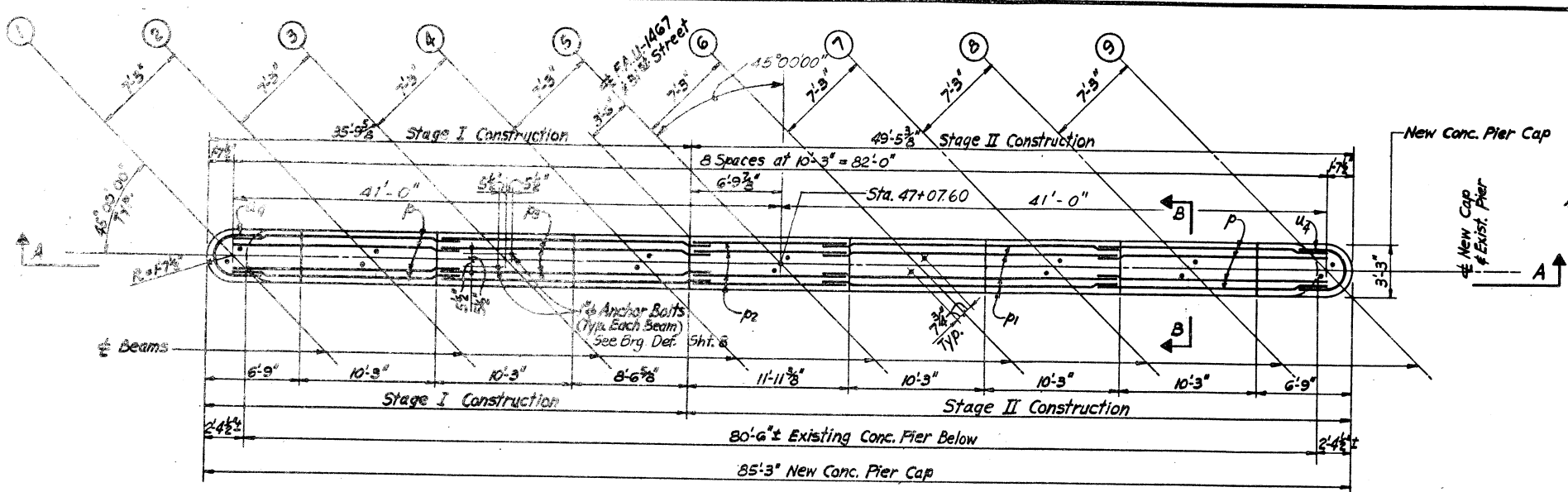
SECTION K-K
Section L-L similar



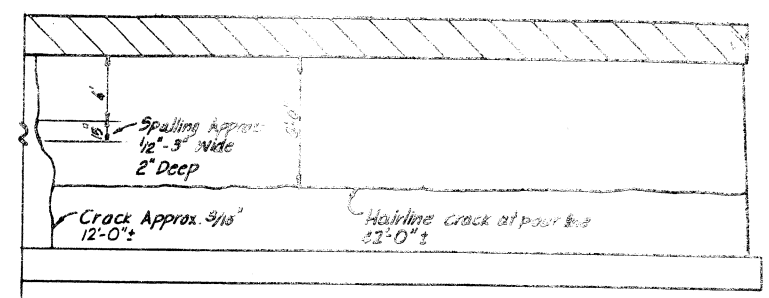
PLAN OF SHEET PILING

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
ABUTMENT DETAILS REHABILITATION OF 31 ST STREET OVER SALT CREEK	
FALL RTE. 1467 COOK COUNTY	SEC. NO. 1288 BR (B2)
GLOBETROTTERS ENG. CORP.	drawn by J.M. [unclear] checked N.R. [unclear] date 5-1-84
	SHEET NO. 20

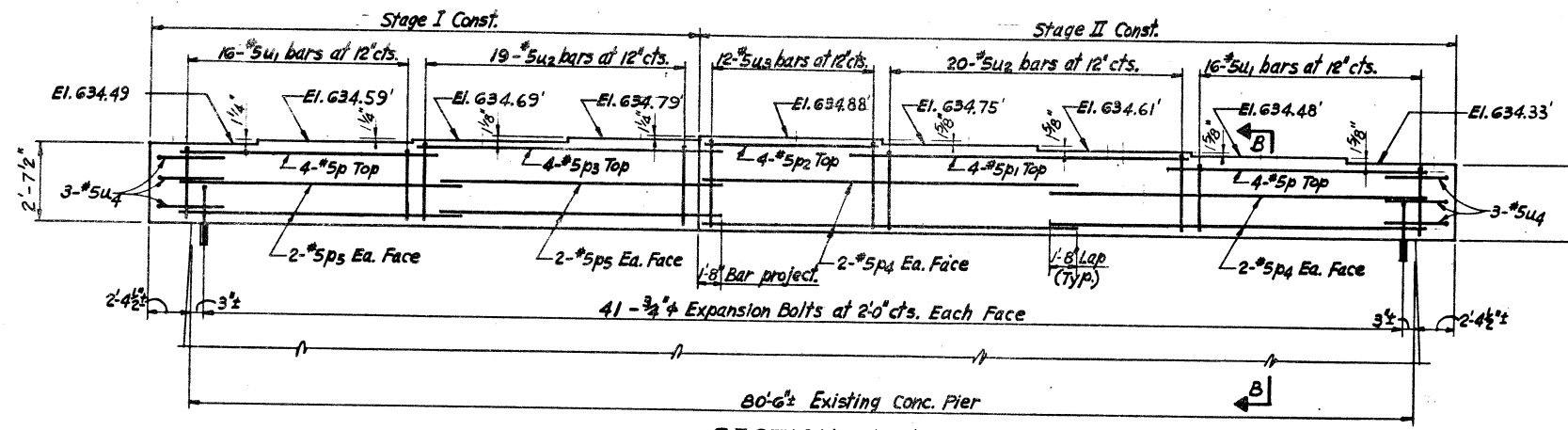
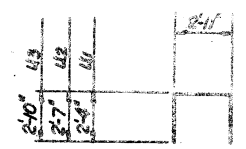
FALL RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1467	1288 BR (82)	COOK	25	21
STA	TO STA.			
FHWA REG.	ILLINOIS FED. AID PROJECT			



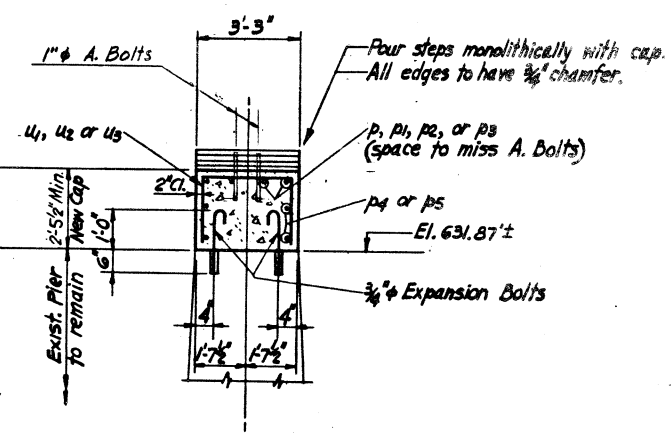
PLAN OF CAP FOR PIER NO. 1



ELEVATION EXIST PIER NO. 1
LOOKING NORTH - WEST

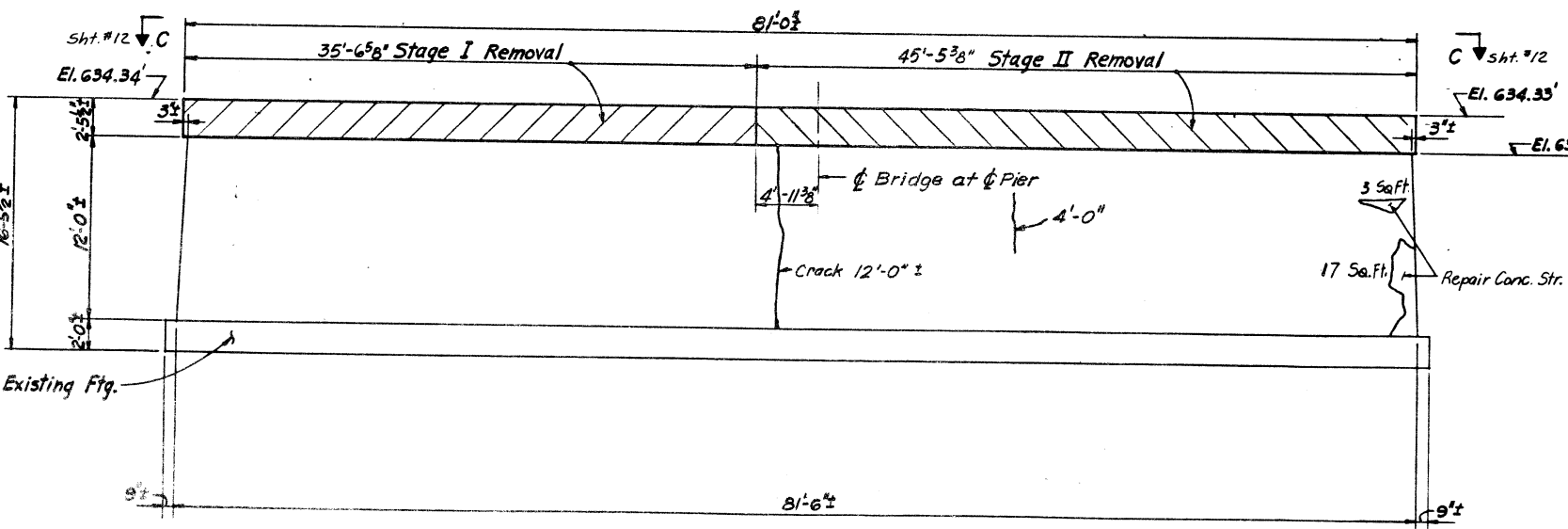
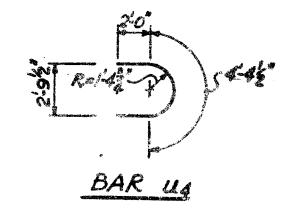


SECTION A-A

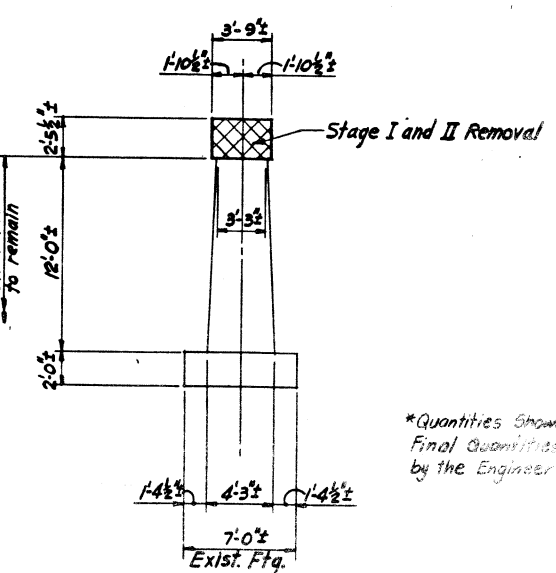


SECTION B-B

BAR u1, u2 & u3



ELEVATION OF EXISTING PIER NO. 1
LOOKING SOUTH-EAST



END ELEVATION

Note: For Section C-C, see Sht. #13 of 14.

PIER CAP - BAR SCHEDULE				
BAR NO.	SIZE	LENGTH	SHAPE	
P	#5	17'-0"	—	
P1	#5	22'-0"	—	
P2	#5	11'-6"	—	
P3	#5	20'-3"	—	
P4	#5	24'-10"	—	
P5	#5	18'-8"	—	
u4	#5	8'-4 1/2"	U	
u1	#5	7'-7"	□	
u2	#5	8'-1"	□	
u3	#5	8'-7"	□	
ITEM	UNIT	QTY.		
Reinforcement Bars	Lbs.	1470		
Class x Concrete	Cu Yds.	28.3		
Concrete Removal	Cu Yds.	27.2		
Expansion Bolts 3/4"	Each	82		
Repair Conc. Struct.	Sq. Ft.	20		
Epoxy Crack Sealing	Lin. Ft.	76		

*Quantities shown are estimated. Final quantities to be determined by the Engineer in field.

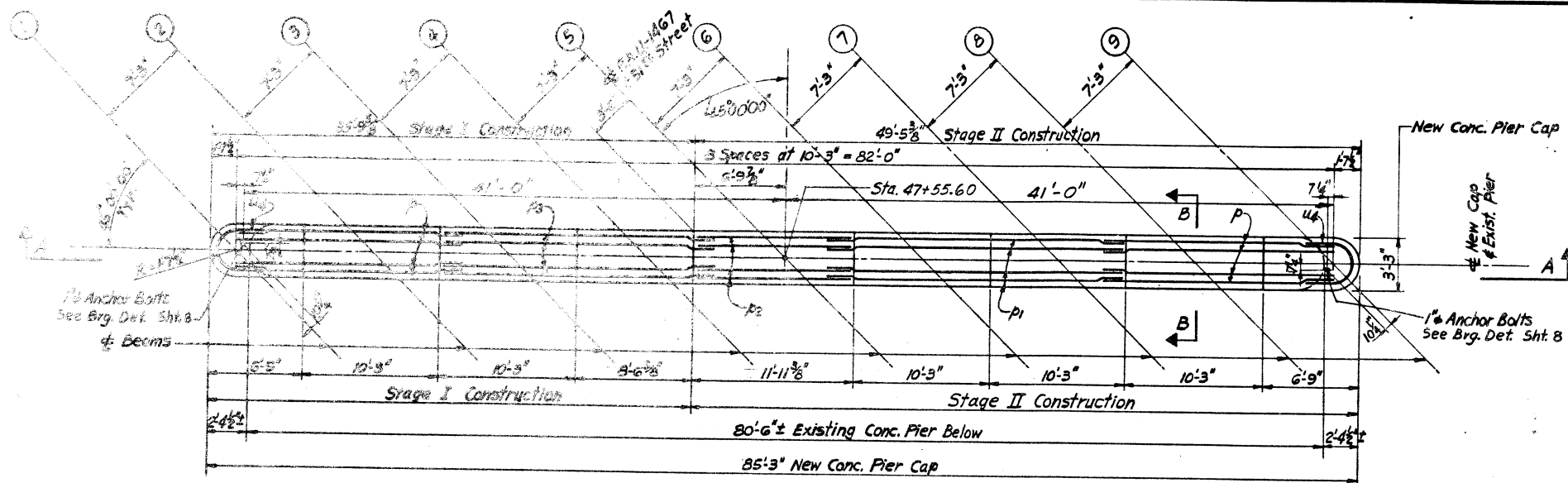
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER NO. 1, REPAIRS
REHABILITATION OF
31st STREET OVER SALT CREEK

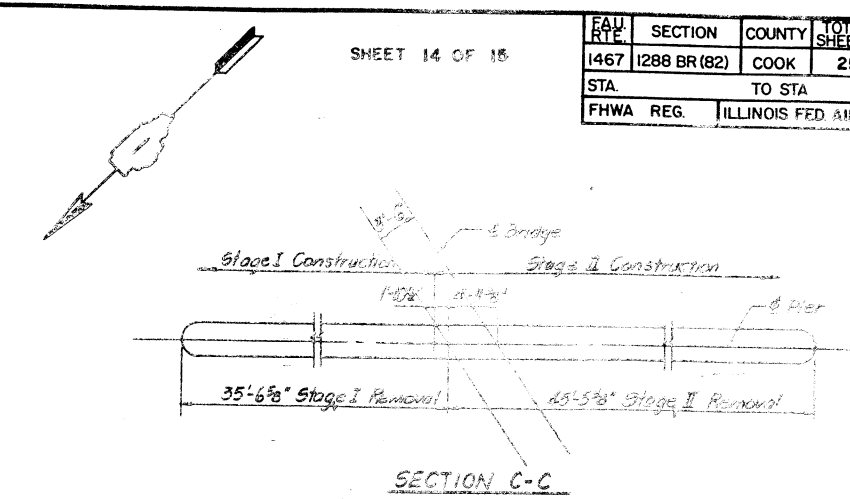
FALL RTE. 1467 COOK COUNTY SEC. NO. 1288 BR (82)

GLOBETROTTERS drawn by EK iscale None SHEET
ENG. CORP. checked WRP date 5-1-84 21

EAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	1288 BR (B2)	COOK	25	22
STA.		TO STA.		
FHWA REG.		ILLINOIS FED. AID PROJECT		

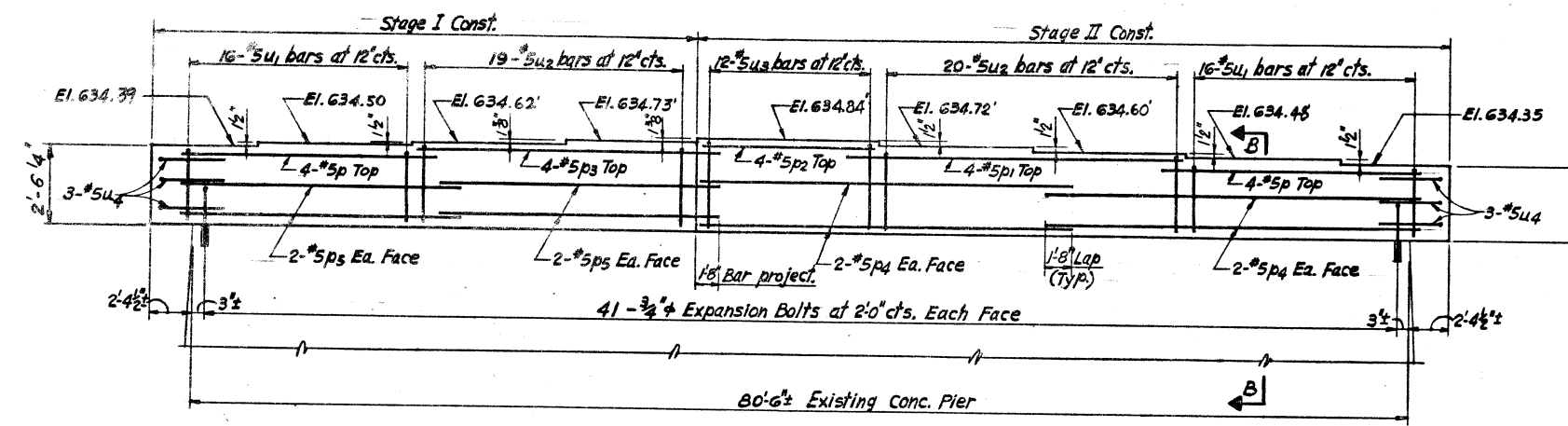


PLAN OF CAP FOR PIER NO. 2

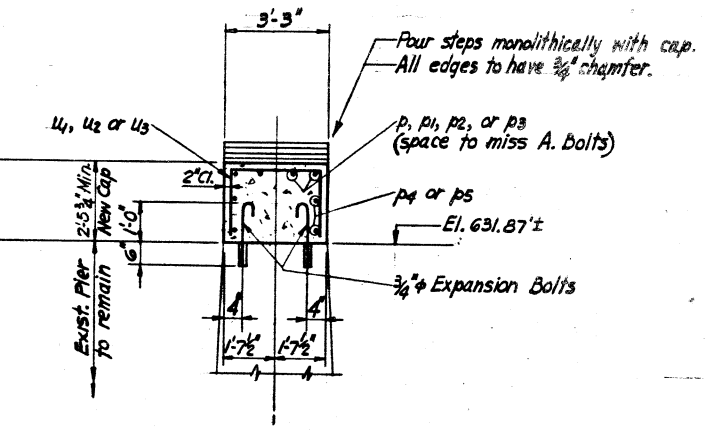


SECTION C-C

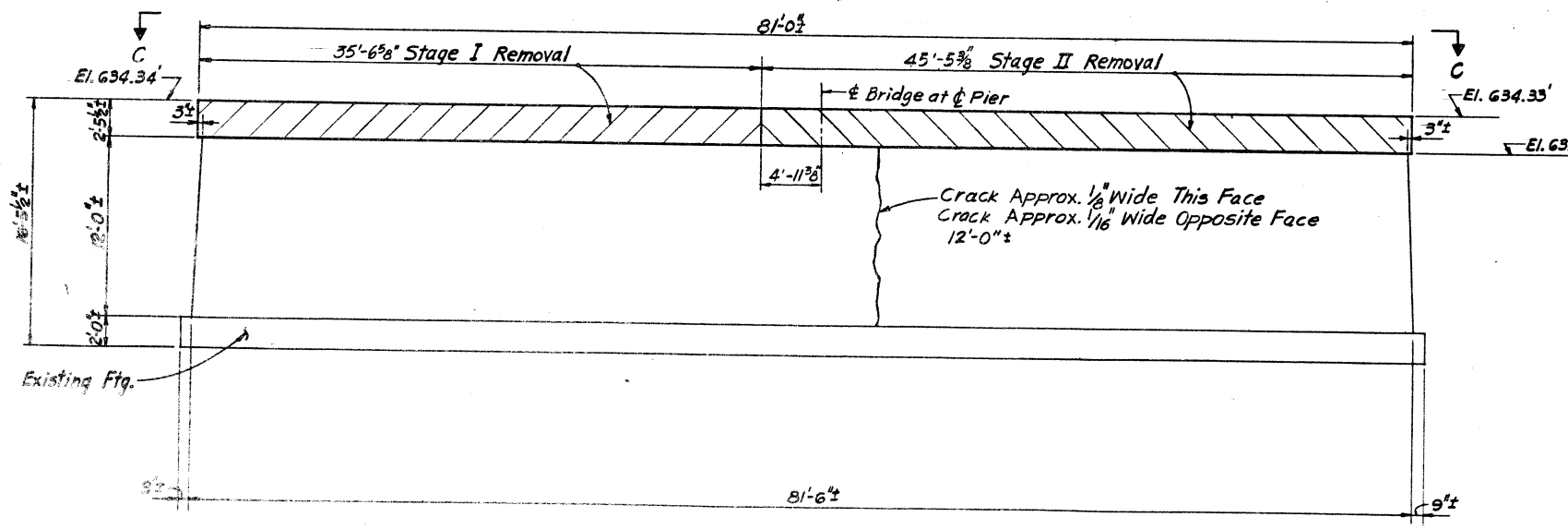
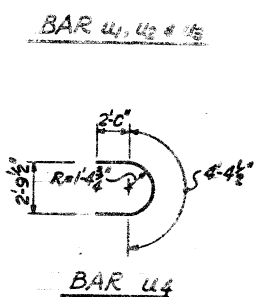
U1	U2	U3	U4	U5
32'	39'	12'	7'	7'



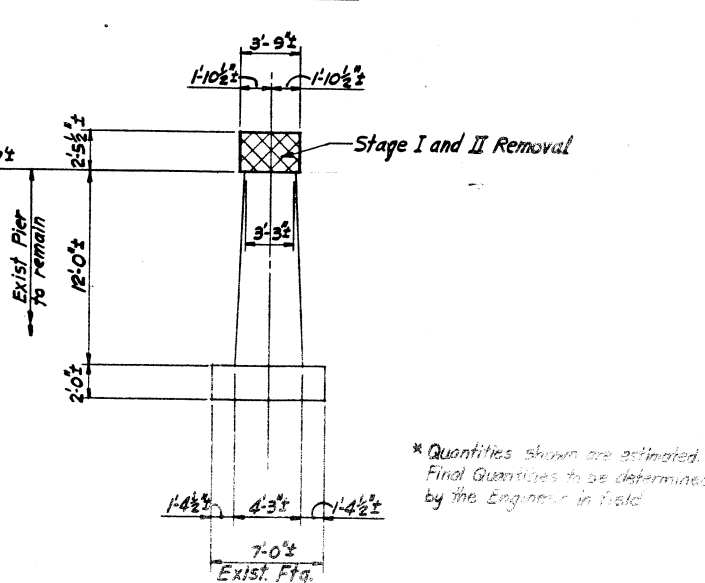
SECTION A-A



SECTION B-B



ELEVATION OF EXISTING PIER NO. 2
LOOKING SOUTH-EAST



END ELEVATION

PIER CAP - BAR SCHEDULE				
BAR NO.	SIZE	LENGTH	SHAPE	
P	#5	17'-0"	—	
P1	#5	22'-0"	—	
P2	#5	11'-6"	—	
P3	#5	20'-3"	—	
P4	#5	24'-10"	—	
P5	#5	18'-8"	—	
U1	#5	8'-4 1/2"	U	
U2	#5	7'-7"	U	
U3	#5	8'-1"	U	
U4	#5	8'-7"	U	
U5	#5	8'-7"	U	

ITEM	UNIT	QTY.
Reinforcement bars	Lbs.	1470
Class x Concrete	Cu Yds.	28.2
Concrete Removal	Cu Yds.	27.2
Expansion bolts	Each	82
Epoxy Crack Sealing	Lin Ft.	24

* Quantities shown are estimated. Final quantities to be determined by the Engineer in field.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER NO. 2, REPAIRS
REHABILITATION OF
31ST STREET OVER SALT CREEK

FALL RTE. 1467 COOK COUNTY SEC. NO. 1288 BR (B2)

GLOBETROTTERS ENGINEERS & ARCHITECTS
drawn by EK
checked NPP date 5-1-84

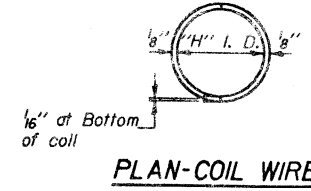
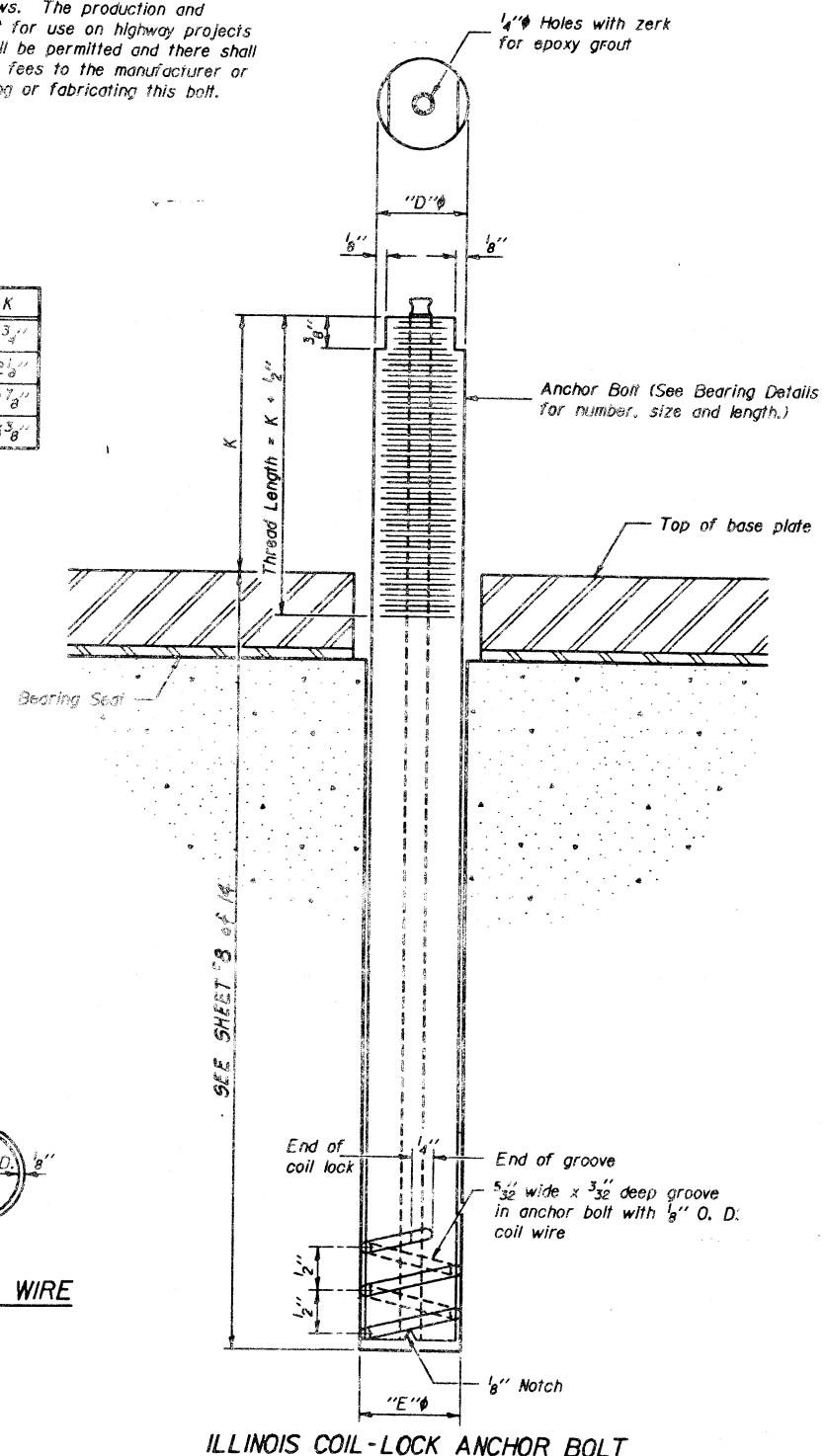
SHEET NO. 22

FALL RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1467	1288 BR (B2)	COOK	25	23
STA.		TO STA.		
PAMA REG.		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K
1"	1 1/8"	1 3/16"	1 3/4"
1 1/2"	1 5/8"	1 5/16"	2 1/8"
2"	2 1/8"	1 3/8"	2 7/8"
2 1/2"	2 5/8"	2 5/16"	3 3/8"



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A519, Grade 1026 and supplied with hexagonal nuts and cut washers.
The coil wire shall be made of any suitable soft steel wire.
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C881, Type I, Grade I and of a Class suitable for the temperature at installation.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or in accordance with the manufacturer's recommendation after beams or girders have been erected and adjusted.
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for "Furnishing and Erecting Structural Steel".

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes in accordance with the manufacturer's recommendations and procedures.
The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer conforming to ASTM A307.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

DESIGNED
CHECKED
DRAWN
CHECKED

ABB-1 6-15-83

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ANCHOR BOLT DETAILS
FOR BEARINGS
REHABILITATION OF
31ST STREET OVER SALT CREEK
FALL RTE. 1467 COOK COUNTY SEC. NO. 1288 BR (B2)
GLOBETROTTERS drawn by RS scale None SHEET
ENG. CORP. checked NRP date 5-7-84 23

INDEX OF SHEETS

SHEET NO.	TITLE	PAGE
"	2	PLAN & PROFILE
"	4	GENERAL ELEVATION DETAIL OF PIERS
"	5	DETAIL OF SUPERSTRUCTURE
"	6	" SUBSTRUCTURE
"	3	LOCATION PLAN
"	7	CROSS SECTIONS

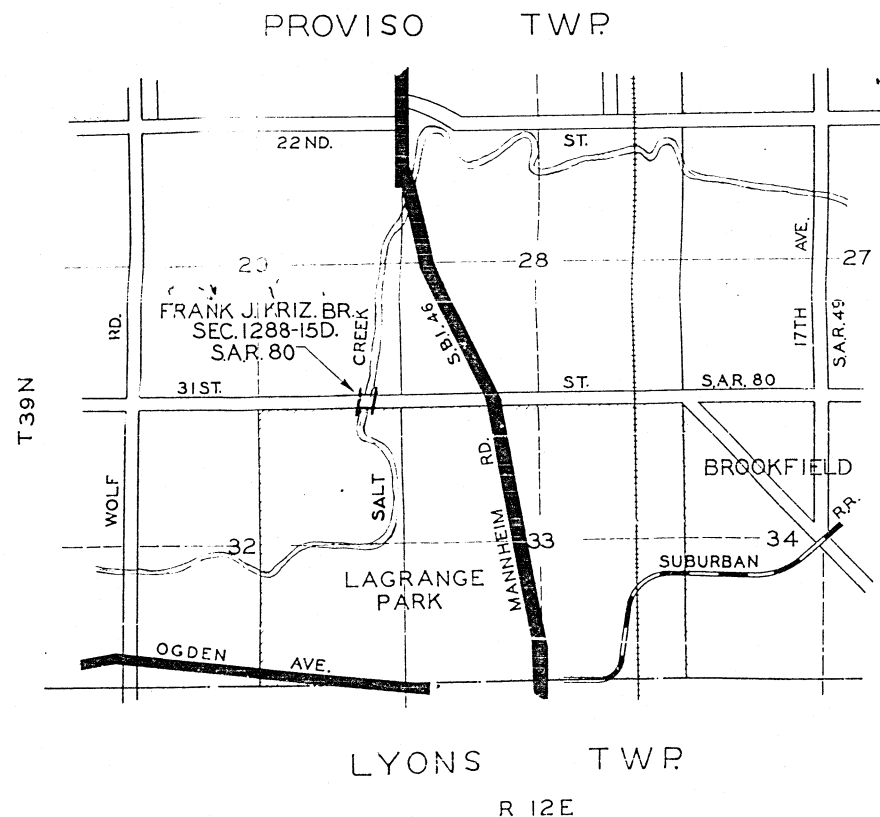
**STATE OF ILLINOIS
COUNTY OF COOK
DEPARTMENT OF HIGHWAYS**

**PLAN AND PROFILE OF PROPOSED
STATE AID HIGHWAY**

SCALES

PLAN	1 INCH	100 FEET
PROFILE HORIZONTAL	1 INCH	100 FEET
PROFILE VERTICAL	1 INCH	10 FEET
CROSS SECTION	1 INCH	5 FEET

**FRANK J. KRIZ. BR.
SEC. 1288-15D. S.A.R. 80.**



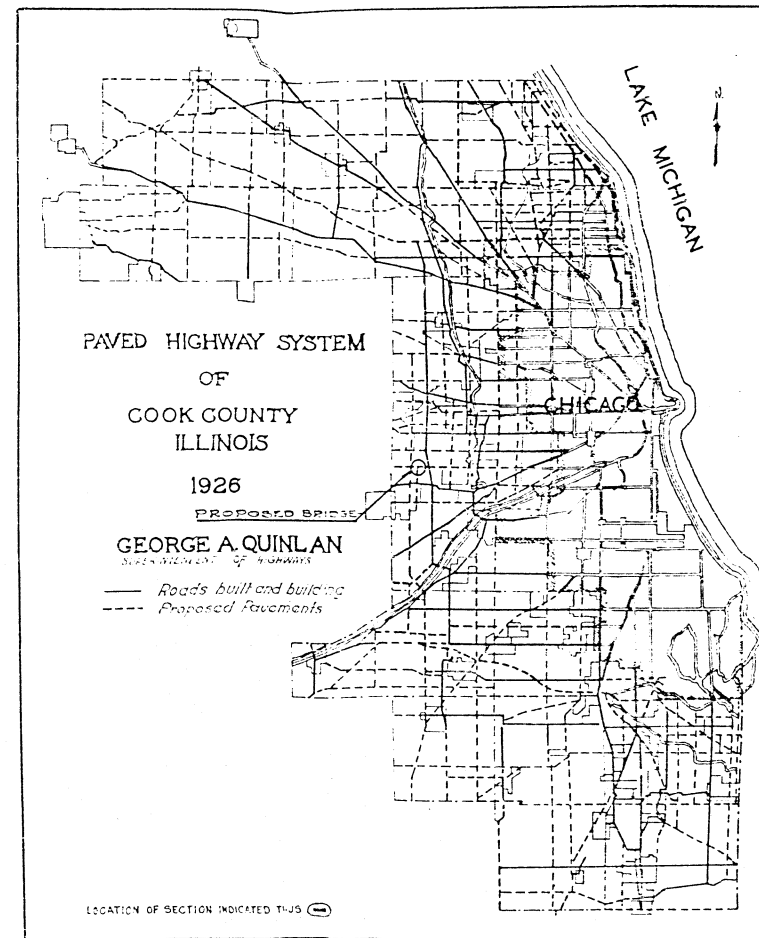
SUMMARY OF QUANTITIES

1290.3	CU. YDS. CLASS-A-CONCRETE	
20594.70	LBS. REINFORCING STEEL	
13.35	CU. YDS. BRICK HAND RAIL	
192.0	SQ. FT. 1/2" BITUMINOUS FELT	
2750.0	LBS. CAST IRON ROCKERS	
1595.0	" STEEL BEARING PLATES	
3210.0	" STEEL EXPANSION GUARD	
2	NAME PLATES	
1150.0	CU. YDS. EXCAVATION & BACK FILL	
2781.0	" " CHANNEL EXCAVATION	
2600.0	" " BORROW	
1	OLD BRIDGE REMOVED	
320.0	CU. YDS. OF BROKEN STONE	} MACADAM WEARING SURFACE
145.0	" " SCREENINGS	
1287.0	SQ. FT. STANDARD 10" PARTITION TILE	
1872.0	" " (0.10") WIRE MESH REINFORCEMENT	
53.0	CU. YDS. OLD MASONRY REMOVED	

LAYOUT

SCALE 1" = 100 FT.

TOTAL NET LENGTH OF LAYOUT = FT. = MILES



CONVENTIONAL SIGNS

STATE AND NATIONAL LINE	-----	LEVEE	-----
COUNTY LINE	-----	CULVERTS	-----
CITY-VILLAGE OR BOROUGH	-----	DROP INLET	-----
TOWNSHIP LINE	-----	TROLLEY POLE	-----
GRANT LINE	-----	ROWER POLE	-----
SECTION LINE	-----	TELEPHONE OR TELEGRAPH POLES	-----
FENCE LINE	-----	MARSH	-----
GUARD RAIL	-----	HEDGE	-----
UNFENCED PROPERTY	-----	GROUND ELEVATION	-----
RIGHT OF WAY LINE	-----	GRADE ELEVATION	-----
TRAVELED WAY	-----		
RAILROADS	-----		
RETAINING WALL	-----		
BASE OR SURVEY LINE	-----		

APPROVED	_____	19
SUPERINTENDENT OF HIGHWAYS		
THE DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS		
PASSED	_____	19
ROAD ENGINEER		
APPROVED	_____	19
CHIEF HIGHWAY ENGINEER		
APPROVED	_____	19
SUPERINTENDENT OF HIGHWAYS		
APPROVED	_____	19
DIRECTOR		

REVISED PLAN

RECOMMENDED FOR APPROVAL

CHIEF ENGINEER OFFICE OF PUBLIC ROADS & RURAL ENGINEERING
APPROVED

DIRECTOR OFFICE OF PUBLIC ROADS & RURAL ENGINEERING

016-0868

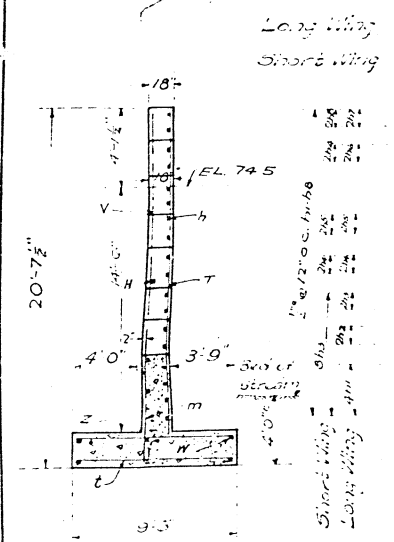
0-58A

1288-15D

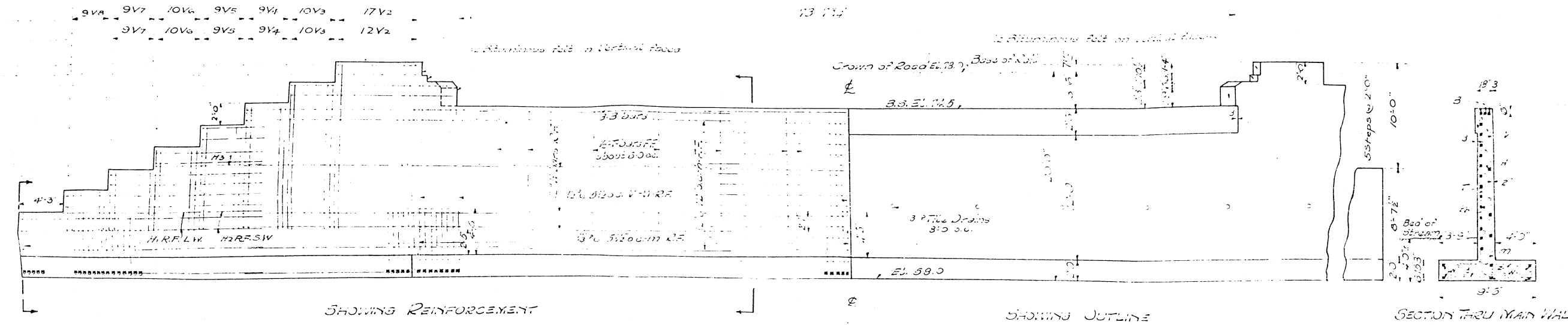
DEPARTMENT OF HIGHWAYS
COOK COUNTY

State A	Fiscal Year	Sheet No.	Total Sheets
80	1900	6	7

SECTION 1288-150



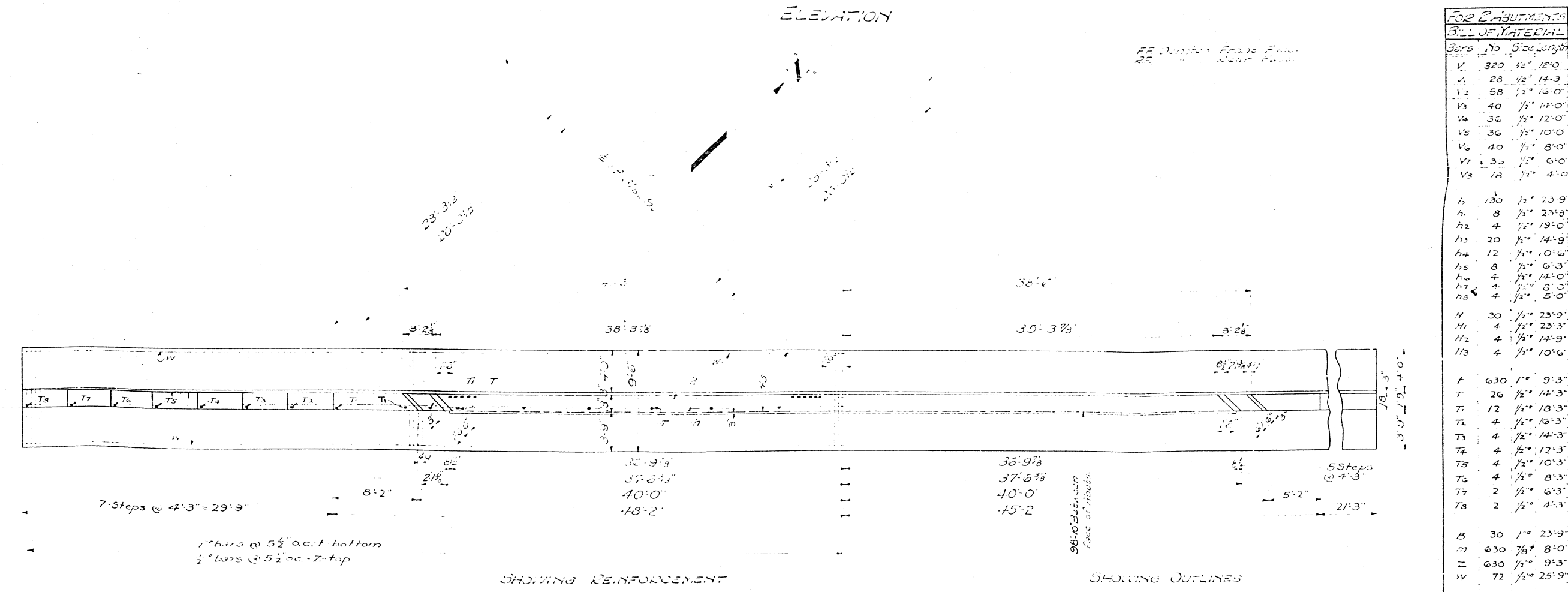
SECTION AT END OF WING



ELEVATION

NOTE
Class A Concrete to be used throughout. Proportions 1-2 1/2-4.
All edges of exposed concrete to be beveled by use of 3/4 inch triangular mauling.
All reinforcing bars shall be either new bright steel or galvanized steel conforming to the requirements of Section 41.1-974 of the County Ordinance for Highways and Bridges. All bars must be cut in full lengths as stated in the Bill of Material.
All reinforcing steel shall be securely wired in position before concrete is placed.

Place 3 inch diameter 8 ft. diameter abutment and wing with a one foot above ground line at face of abutment.
Abutments and wing shall be constructed around 6 inch tiles, 6 inch pipes or conduits as directed by the Engineer in field.
The wing shall be at the option of the Engineer be constructed at any angle with the face of the abutment.



SHOWING REINFORCEMENT

SHOWING OUTLINES

PLAN

Face of East Abutment
East Abutment same on West
Abutment only opposite hand.
See Location Plan.

DETAIL OF ABUTMENT
FRANK KRIZ BRIDGE
Section 1288-150

FOR ABUTMENTS		BILL OF MATERIAL	
Bars	No	Size	Length
V1	320	1/2"	12'-0"
V2	28	1/2"	14'-3"
V3	58	1/2"	16'-0"
V4	40	1/2"	14'-0"
V5	36	1/2"	10'-0"
V6	40	1/2"	8'-0"
V7	35	1/2"	6'-0"
V8	1A	1/2"	4'-0"
H1	130	1/2"	23'-9"
H2	8	1/2"	23'-3"
H3	4	1/2"	19'-0"
H4	20	1/2"	14'-9"
H5	12	1/2"	10'-6"
H6	8	1/2"	6'-3"
H7	4	1/2"	8'-0"
H8	4	1/2"	5'-0"
T1	30	1/2"	23'-9"
T2	4	1/2"	23'-3"
T3	4	1/2"	14'-9"
T4	4	1/2"	10'-6"
T5	630	1/2"	9'-3"
T6	26	1/2"	14'-3"
T7	12	1/2"	18'-3"
T8	4	1/2"	16'-3"
T9	4	1/2"	14'-3"
T10	4	1/2"	12'-3"
T11	4	1/2"	10'-3"
T12	4	1/2"	8'-3"
T13	2	1/2"	6'-3"
T14	2	1/2"	4'-3"
B	30	1/2"	23'-9"
M	630	1/2"	8'-0"
Z	630	1/2"	9'-3"
W	72	1/2"	25'-9"

CONC. CUB. YDS. 4470
STEEL LBS. 49,966

APPROVED: *[Signature]*
D. J. Sullivan
S. COOK COUNTY DEPT. OF HIGHWAYS
COMPUTED: *[Signature]*
DRAWN: *[Signature]*
CHECKED: *[Signature]*
REVISED 5-30-27 J.F.K.
6-17-27 B.K.