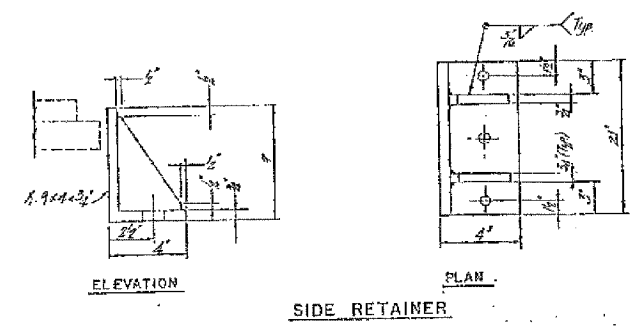
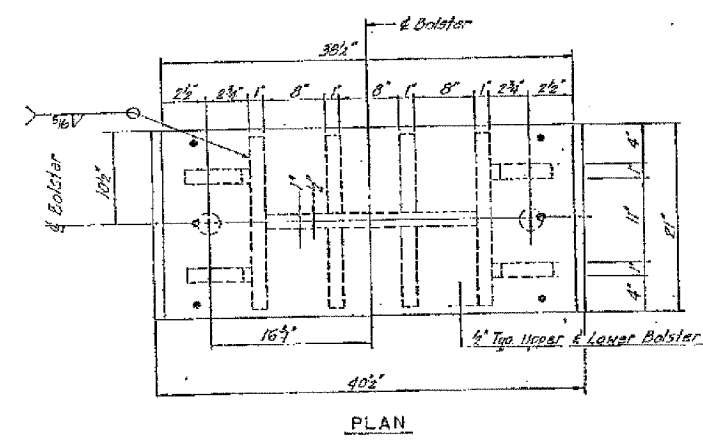
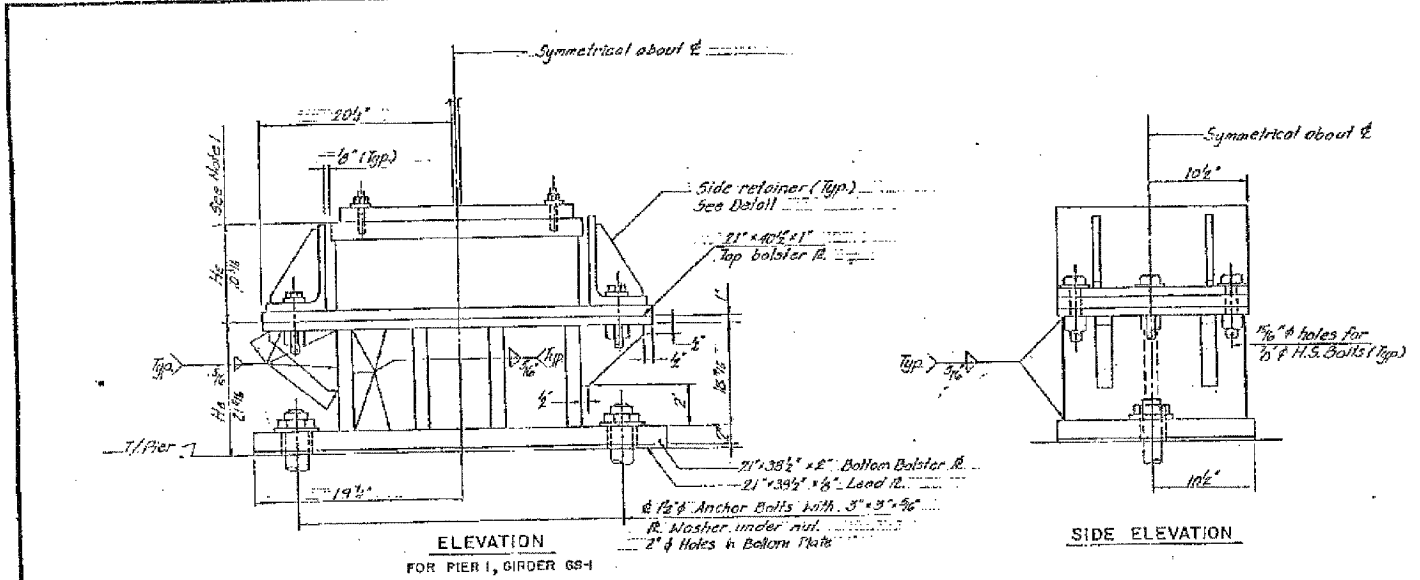


60B07

SECTION	NO.	TOTAL SHEETS	SHEET NO.
2005-086 I	K	228	201
STA.		TO STA.	
FED. ROAD DIST. NO.		ILLINOIS	
FED. AID PROJECT		60B07	



SHIM THICKNESS SCHEDULE - EXISTING GIRDERS

STRUCTURE NO.	PIER LOCATION	GIRDER NO.												
		1	2	3	4	5	6	7	8	9	10	11	12	13
016-1117	26(S)	0	0	0	0	1/16	0	1/16	0	0	0	0	0	0
	151	0	0	0	0	0	0	0	0	0	0	0	0	0
	16(S)	0	0	3/8	0	0	2/8	0	0	0	0	0	0	0
	14(N)	0	0	0	0	1/8	0	0	0	0	0	0	0	0
	15(S)	0	0	0	0	0	0	0	0	0	0	0	0	0
016-1067	A1(S)	0	0	0	0	0	0	0	0	0	0	0	0	0
	A1(N)	2 3/8	1 5/8	3/4	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
	A2(S)	1	0	0	0	1 1/8	1	0	0	0	0	0	0	0
	A4(N)	0	0	1 1/2	0	0	0	0	0	0	0	0	0	0
	A13(S)	1 1/8	0	0	0	1 3/8	0	0	0	0	0	0	0	0
016-1116	A16(S)	2 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
	B(S)	0	0	0	0	0	0	0	0	0	0	0	0	0

* Shims has been revised. See sheet BRG-4 for details and for additional shims.
 † Shims no longer required at this location.

SHIM THICKNESS SCHEDULE - ROADWAY WIDENING GIRDERS

STRUCTURE NO.	PIER NO.	GA-1			GA-2			STRUCTURE NO.	PIER NO.	GS-1	GS-2
		GA-1	GA-2	GA-3	GA-1	GA-2	GA-3				
016-1067	A6(N)	5/16	0	0	0	0	0	016-1117	14(N)	0	1 1/2
	A13(S)	1 1/8	1 1/8	0	0	0	0		15(N)	1 1/8	0
	A13(N)	0	0	0	0	0	0		17(S)	3/8	0
	A16(S)	0	3/8	0	0	0	0		20(N)	1 1/8	0
								21(N)	3/8	0	
								23(N)	5/8	0	

BOLSTER SCHEDULE

STRUCTURE NO.	PIER LOCATION	GIRDER NO.	NO. REQ'D	BRG. TYPE	REMARKS
016-1116	1	G5-1	1	B	

ALL MATERIALS SHOWN ON THIS SHEET ARE FURNISHED UNDER A SEPARATE SUPPLY CONTRACT (SECTION 1985-0-11), UNLESS NOTED OTHERWISE.

SHEET BRG59 OF 48

REVISIONS	
NO.	DESCRIPTION
1	Revision

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 50 / 94 (DAN RYAN EXPRESSWAY)
 SECTION 1985-082 R - COOK COUNTY
 S.B. MAINLINE RECONSTRUCTION
 BEARINGS - STRUCTURE NO. 016-1116
 BOLSTER DETAILS
 AND SHIM SCHEDULES
 Scale: None
 Date: AUGUST 14, 1987
 Drawn By: D.C.
 Checked By: H.B.
 ENVIRONMENTAL ENGINEERS INC.
 Chicago, Illinois

FOR INFORMATION ONLY

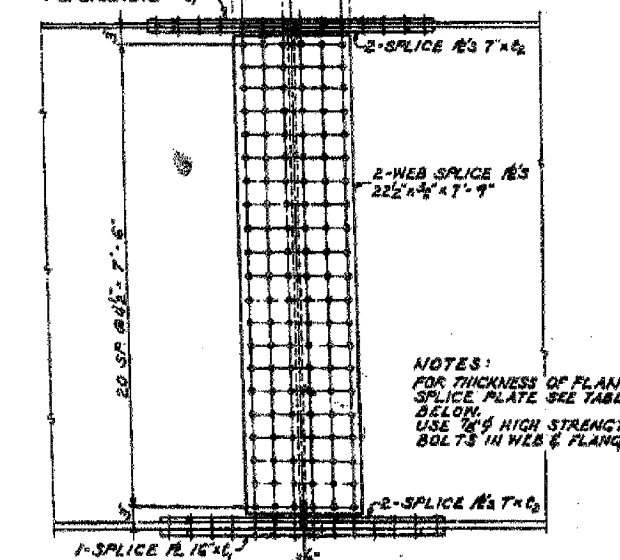
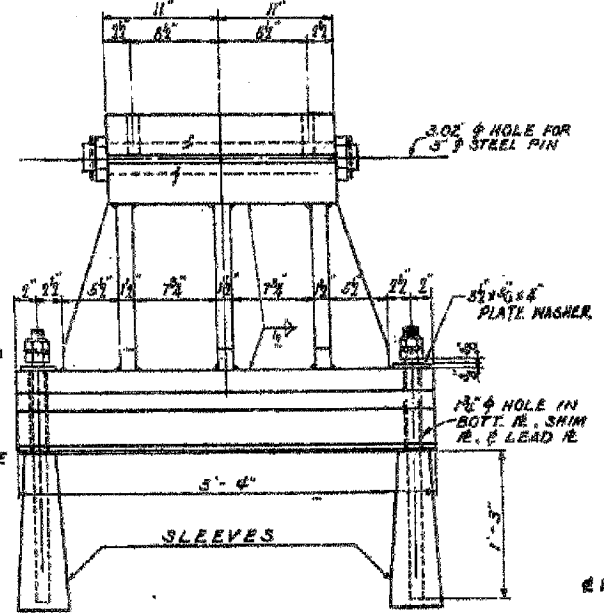
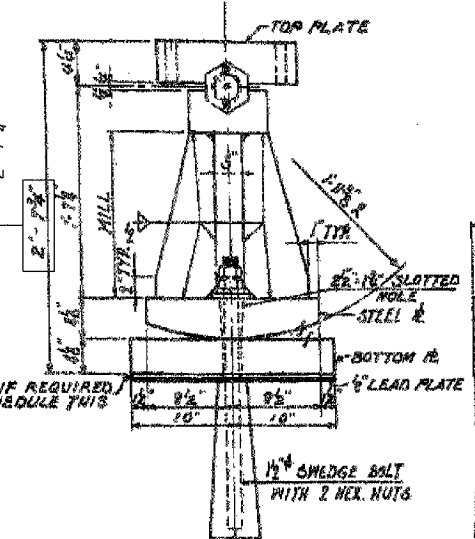
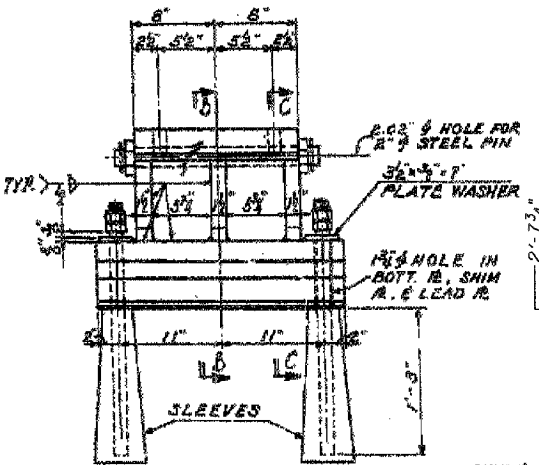
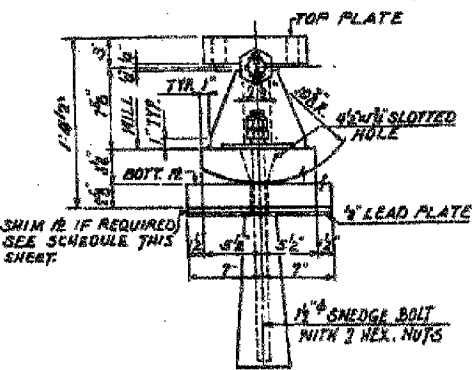
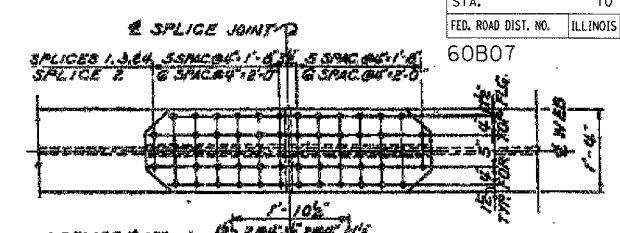
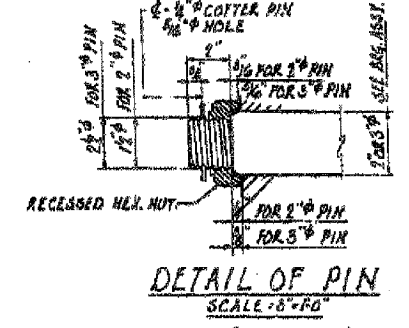
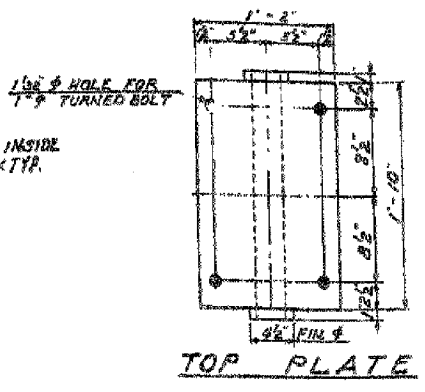
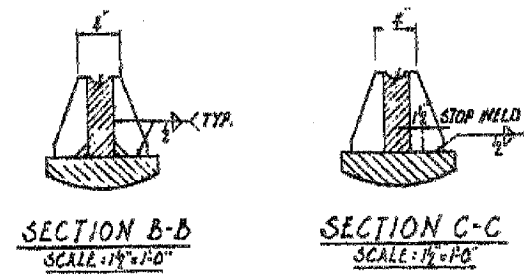
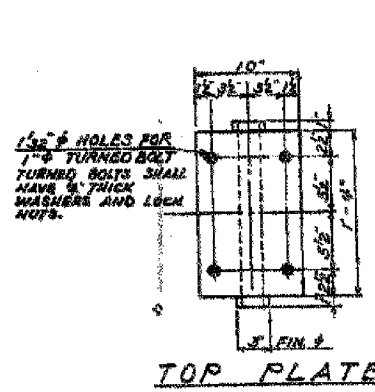
BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbainc.com

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 DAN RYAN ELEVATED BRIDGE
 BEARING REPLACEMENT & STEEL REPAIR
 EXISTING PLAN INFORMATION
 SN 016-1116
 SCALE: NTS
 DATE: 5/18/2007
 DRAWN BY: LAM
 CHECKED BY: BLU

5/24/2007 5:05 PM

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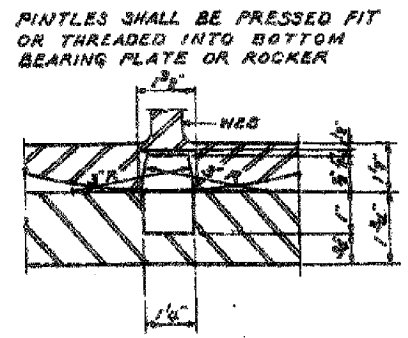
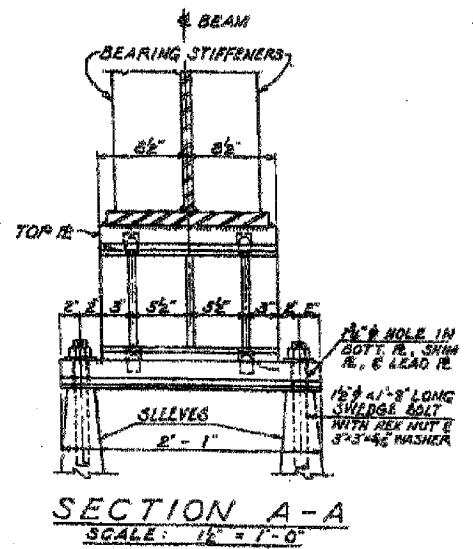
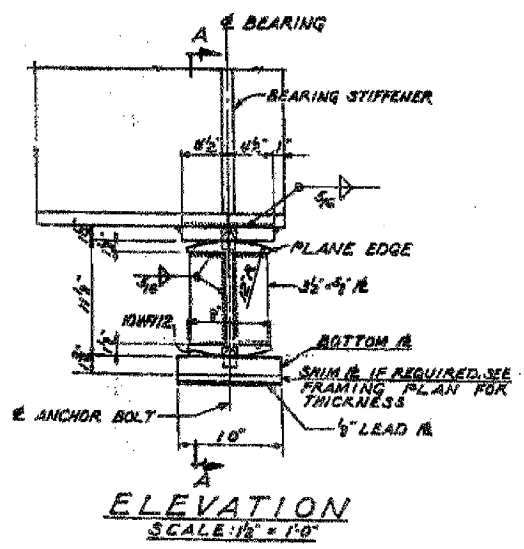


NOTES:
FOR THICKNESS OF FLANGE SPLICE PLATE SEE TABLE BELOW.
USE 1/2 INCH HIGH STRENGTH BOLTS IN WEBS & FLANGES.

DETAILS OF EXPANSION BEARING AT PIER 26
SCALE: 1/2" = 1'-0"

DETAILS OF EXPANSION BEARING AT PIER 1
SCALE: 1/2" = 1'-0"

DETAIL OF FIELD SPLICE
SCALE: 3/4" = 1'-0"



BOTTOM PINTLE DETAIL
(TOP PINTLE DETAIL SIMILAR)
SCALE: 1/2" = 1'-0"

SHIM # SCHEDULE

BEAM PIER	6	7	9	12	15
26	-	3/8"	3/8"	-	3/8"
1	3/8"	-	-	-	-
3	3/8"	-	-	3/8"	-

TABLE OF FLANGE SPLICE PLATES

NO. OF GIRDER	LOCATION ON TOP & BOTTOM FLANGES	THICKNESS OF SPLICE PLATE	
		* SPLICES 1, 3, 4, 5	* SPLICE 2
1, 9, & 17	E ₁	3/8"	1/2"
	E ₂	7/16"	3/8"
2, 3, 4, & 5	E ₁	3/8"	3/8"
	E ₂	7/16"	1/2"
6, 11, 12, 13, & 14	E ₁	3/8"	3/8"
	E ₂	7/16"	1/2"
7, 8, 10, 15, & 16	E ₁	3/8"	3/8"
	E ₂	7/16"	3/8"

* FOR LOCATION OF SPLICES SEE FRAMING SHEETS 4, 12 & 13

NOTE!
FOR DETAIL OF FIXED BEARING AT PIER 2 SEE SHR. 38.

DETAILS OF EXPANSION BEARING AT PIER 3
SCALE: 1/2" = 1'-0"

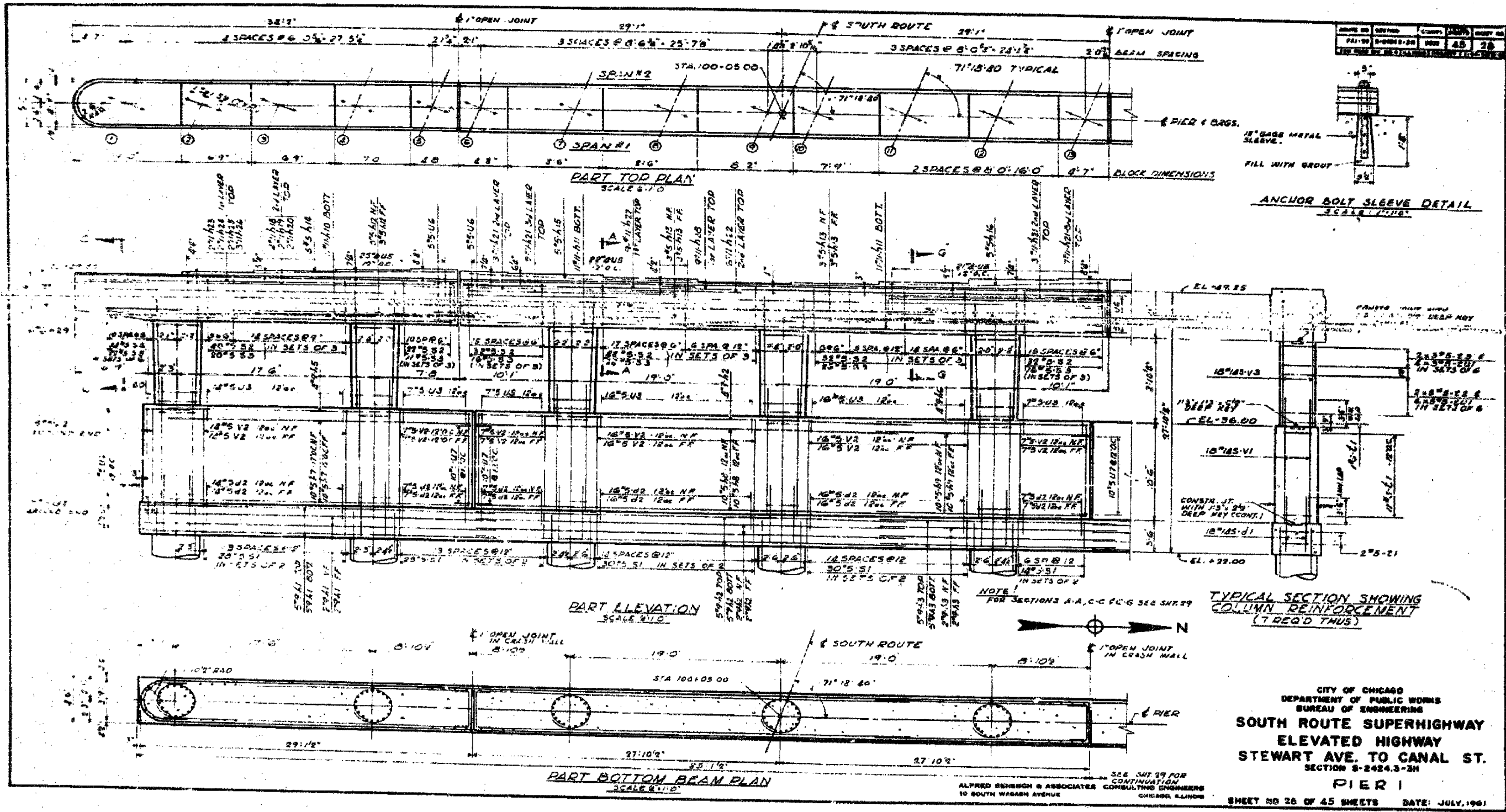
CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
SOUTH ROUTE SUPERHIGHWAY
ELEVATED HIGHWAY
STEWART AVE. TO CANAL ST.
SECTION 8-2424.3-3H
BEARING & SPLICE DETAILS

REVISIONS		DATE	ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) DAN RYAN ELEVATED BRIDGE BEARING REPLACEMENT & STEEL REPAIR EXISTING PLAN INFORMATION SN 016-1116
NAME	NO.		

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CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
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Sheet 15 of 45
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SCALE: NTS
DATE: 5/18/2007
DRAWN BY: LAM
CHECKED BY: BLU



CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
**SOUTH ROUTE SUPERHIGHWAY
ELEVATED HIGHWAY**
STEWART AVE. TO CANAL ST.
SECTION 8-2424.3-3H
PIER 1
SHEET NO 26 OF 45 SHEETS DATE: JULY, 1991

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1116
SCALE: NTS DRAWN BY: LAM
DATE: 5/18/2007 CHECKED BY: BLU

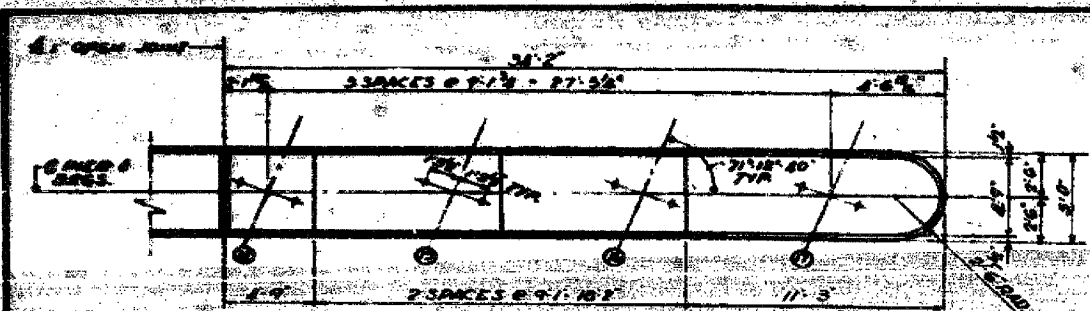
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CONSULTING ENGINEERS
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312.228.0100
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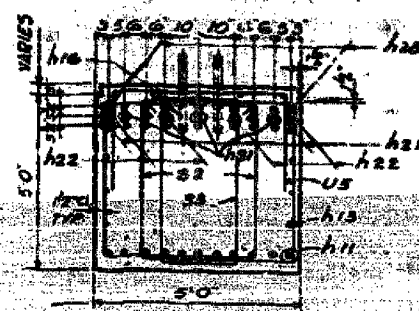
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2005-086 I	COOK	228	204
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

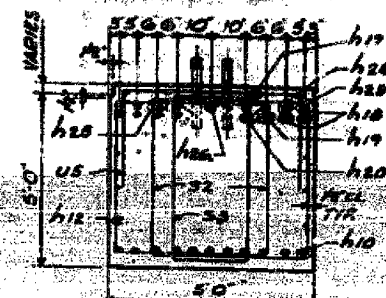
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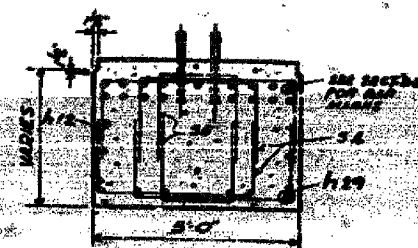
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SCALE: 1/8"



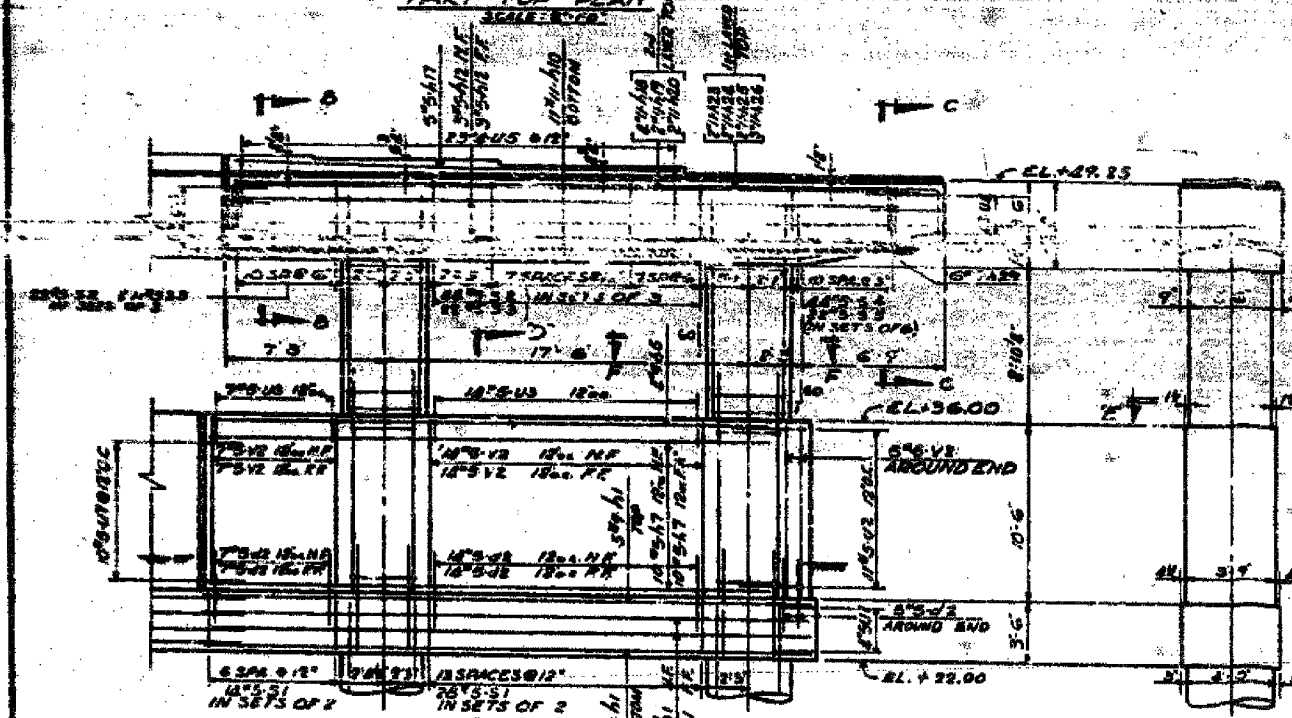
SECTION A-A
SECTION 'G-G' SIMILAR
SCALE: 1/4"



SECTION B-B
SCALE: 1/4"



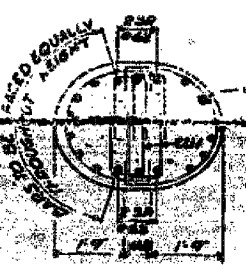
SECTION C-C
SCALE: 1/4"



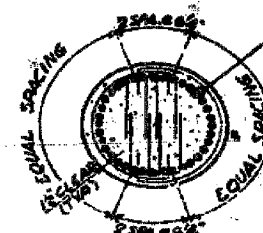
PART ELEVATION
SCALE: 1/8"

END VIEW
SCALE: 1/4"

SECTION D-D
SCALE: 1/4"



SECTION E-E
SCALE: 1/4"

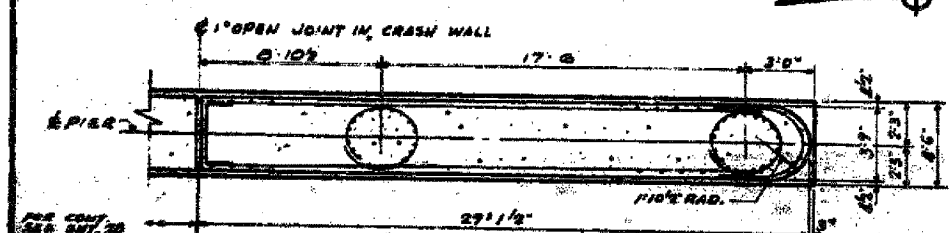


SECTION F-F
SCALE: 1/4"

- NOTES**
1. BEARING BLOCKS TO BE ROUGHED MONOLITHIC WITH CAP BEAM
 2. ALL STEEL BRACING TO AVOID USE OF BOLTS WITH AVERAGE 3000 LB. TENSILE STRENGTH
 3. ALL REINFORCEMENT BAR LISTS SEE SHEET 24
 4. USE RE BAR LISTS AS MINIMUM L&B FOR REINFORCEMENT
 5. BARS INDICATED WITH 1/2" OR 3/4" INDICATES 2 LINES OF BARS PER LINE WITH 2 LINES OF BARS

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITIES
1	CLASS V CONCRETE CURB	PIER	1
2	REINFORCEMENT BARS LB.	LB.	84,750



PART BOTTOM BEAM PLAN
SCALE: 1/8"

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
**SOUTH ROUTE SUPERHIGHWAY
ELEVATED HIGHWAY
STEWART AVE. TO CANAL ST.
SECTION S-2484.3-20
PIER 1**

ALFRED BENSCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVENUE CHICAGO, ILLINOIS
SHEET NO. 29 OF 45 SHEETS DATE: JULY, 1961

FOR INFORMATION ONLY

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) DAN RYAN ELEVATED BRIDGE BEARING REPLACEMENT & STEEL REPAIR EXISTING PLAN INFORMATION SN 016-1116 SCALE: NTS DATE: 5/18/2007	DRAWN BY: LAM CHECKED BY: BLU
NAME	DATE		

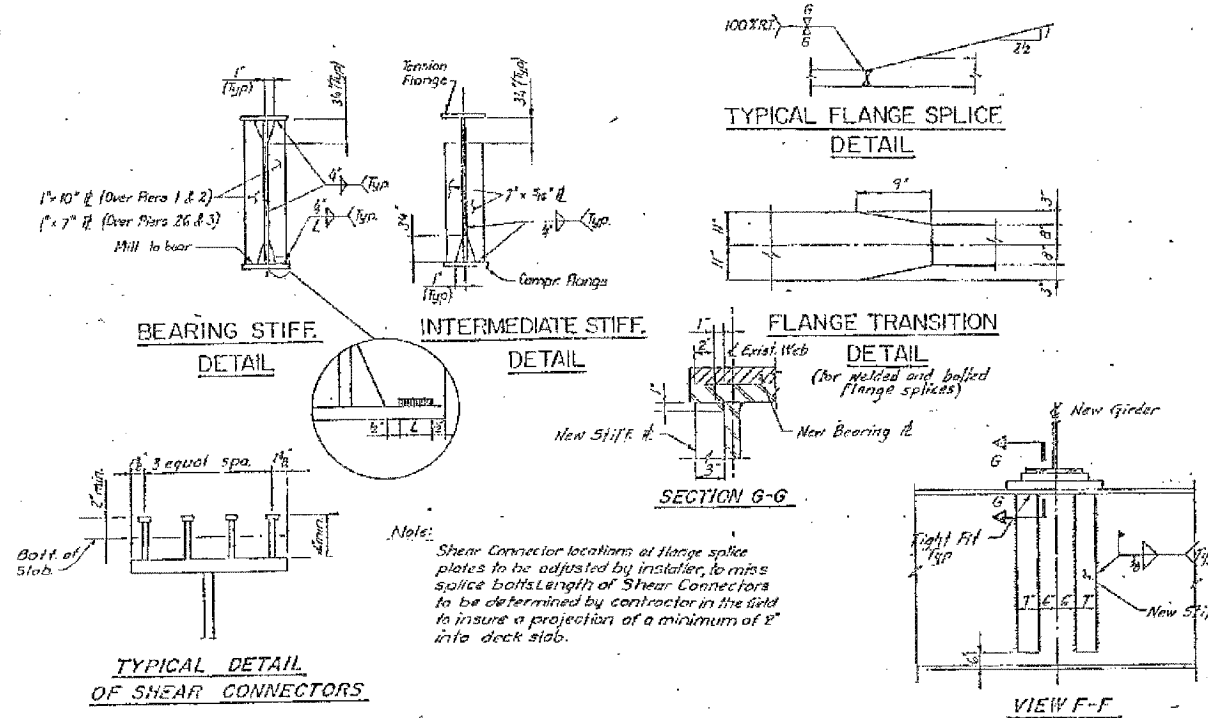
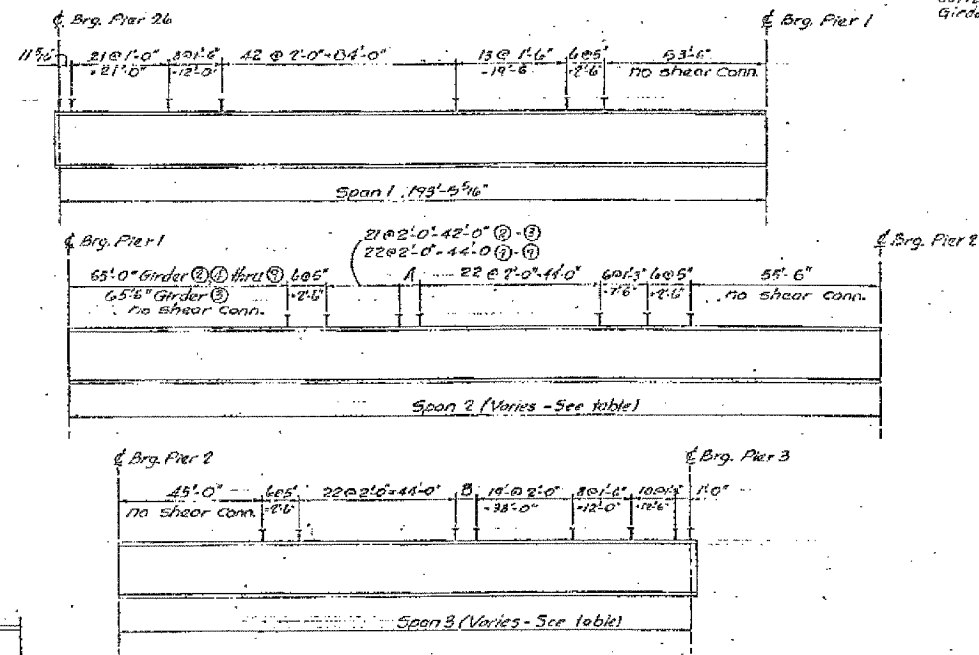
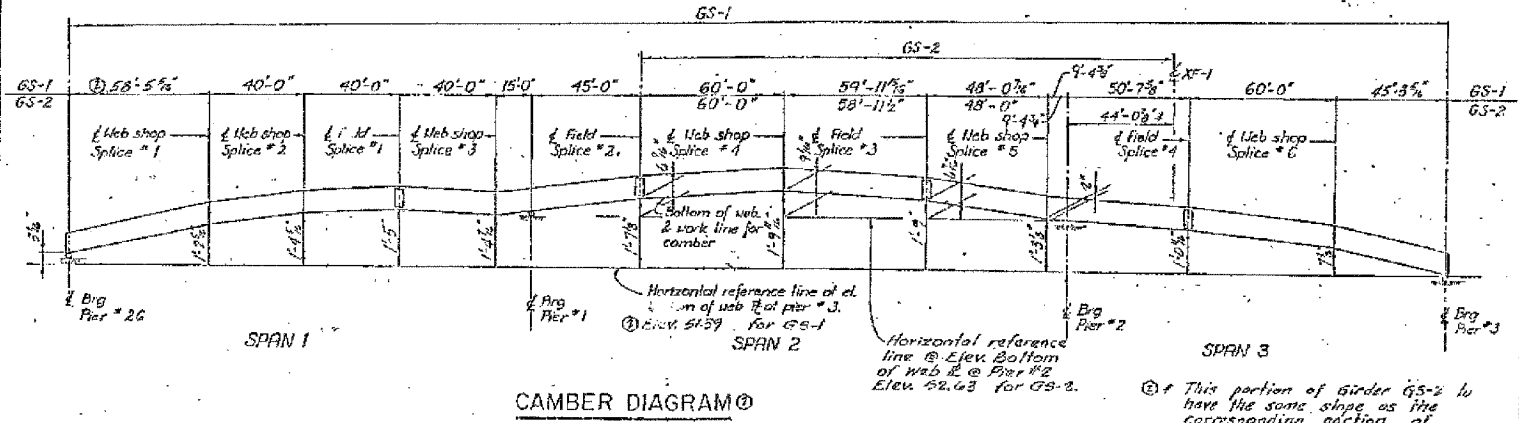
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DATE	BY	CHKD
9/13/07	W	COOK
10/11/07	W	20
11/14/07	W	9

MOMENT, REACTION & STRESS TABLE

Location	Girder G5-1						Girder G5-2						XF-1
	Pier 26	.4L	Pier 1	.5L	Pier 2	.6L	Pier 3	Pier 26	.4L	Pier 1	.5L	Pier 2	
Is (in ⁴)	152027	374220	10734	317557	11034		197571	422285	11034	37557			
Ic (in ⁴)	274515		216434		216434		339420		216434				
Ss (in ³)	3427	7338	2417	6280	2417		3423	8210	2417	6280			
Sc (in ³)	4357		3289		3289		4645		3289				
W _x (in ²)	1.094	1.153	0.932	1.223	1.059		1.158	1.507	0.892	1.113			
W _y (in ²)	2.615	5582	1167	3925	1497		2.735	5742	1205	3.132			
I _{o-nom} (in ⁴)	9.2	2.1	5.8	7.5	7.4		9.6	8.4	6.0	6.0			
W _{sp} (in ²)	0.100	0.100	0.100	0.100	0.100		0.100	0.100	0.100	0.100			
M _{sp} (in ²)	255	485	191	376	195		250	498	199	348			
M _u (in ²)	1976	2347	1299	1813	1495		1758	2175	1079	1579			
M _{imp} (in ²)	310	352	156	288	265		276	326	155	302			
M _{total} (in ²)	2541	3104	1671	2411	1905		2234	2977	1433	2229			
f _a comp. (ksi)	7.0	5.2	6.1	4.7	7.0		5.9	4.4	5.2	6.3			
f _a tot. (ksi)	16.2	14.3	11.9	12.2	14.3		15.5	12.8	11.2	10.3			
V _{range} (k)	437		321		48.6		416		31.9				
R _B (k)	81.6	291.7	230.4		63.3	62.7	297.7		192.3		-44.4		
R _H (k)	52.1		110.4		79.8		50.7	48.5		103.7		74.0	
R _{imp} (k)	8.2		10.9		7.9		9.0	7.6		16.6		9.3	
R _{total} (k)	141.9		413.0		318.1		123.0	128.8		480.0		281.6	



GIRDER	A	B
2	1'-9 1/2"	1'-2 1/2"
3	1'-11 1/2"	1'-4 1/2"
4	1'-2 1/2"	1'-7 1/2"
5-7	2'-0"	1'-10 1/2"

SHEET 19 OF 120

REVISIONS	DATE
(2)	2-5-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 90/84 (DAN RYAN EXPRESSWAY)
SECTION 905-082R - COOK COUNTY
S.B. MAINLINE RECONSTRUCTION
STRUCTURE 016-1116
STRUCTURAL STEEL DETAILS
Scale: NONE
Date: AUG. 14, 1987
Drawn By: D.M.T.S.
Checked By: A.V.R.
ENGINEERS INC.
Chicago, Illinois

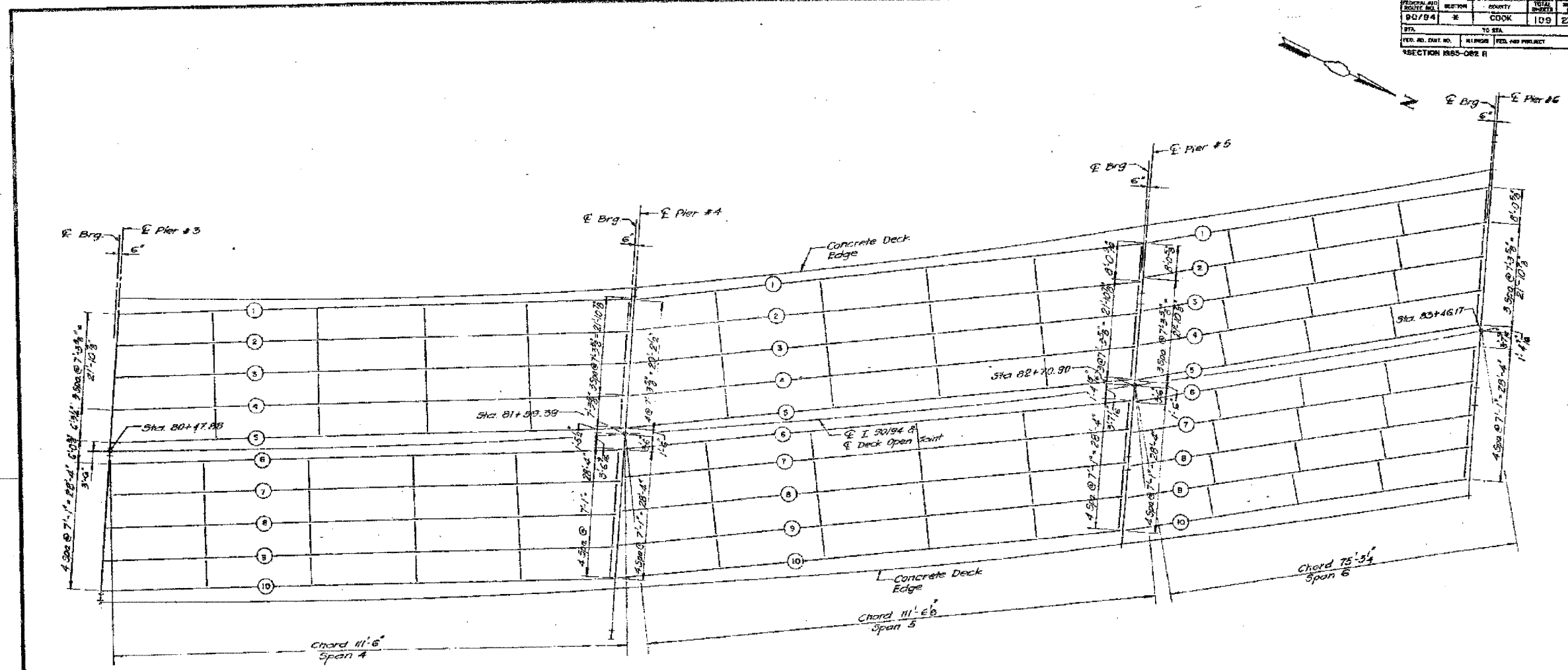
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1116
SCALE: NTS
DATE: 5/18/2007
DRAWN BY: LAM
CHECKED BY: BLU

FOR INFORMATION ONLY

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2005-086 I	COOK	228	206
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

60B07

SECTION	ROUTE NO.	COUNTY	TOTAL SHEETS	SHEET NO.
1985-082 R	90/94	COOK	109	23
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



PLAN - SPANS 4, 5 & 6

Note:
 This Sheet is furnished for Reference only.
 No New Steel Beams or Diaphragms, Plate girders
 or Cross frames are Required.

ALL NEW MATERIALS SHOWN ON THIS SHEET ARE FURNISHED UNDER A SEPARATE
 STEEL FABRICATION CONTRACT (SECTION 1985-081F), UNLESS NOTED
 OTHERWISE.

SHEET J 23 OF 109

REVISIONS	
Name	Date

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)
 SECTION 1985-082 R - COOK COUNTY
 S.B. MAINLINE RECONSTRUCTION
 STRUCTURE DIS-1117 (MAINLINE)
 FRAMING PLAN SPANS 4, 5, & 6

Scale: NONE
 Date: AUGUST 14, 1997
 Drawn By: L.D.
 Checked By: sc

ENVIRONMENTAL ENGINEERS INC.
 Chicago, Illinois

FOR INFORMATION ONLY

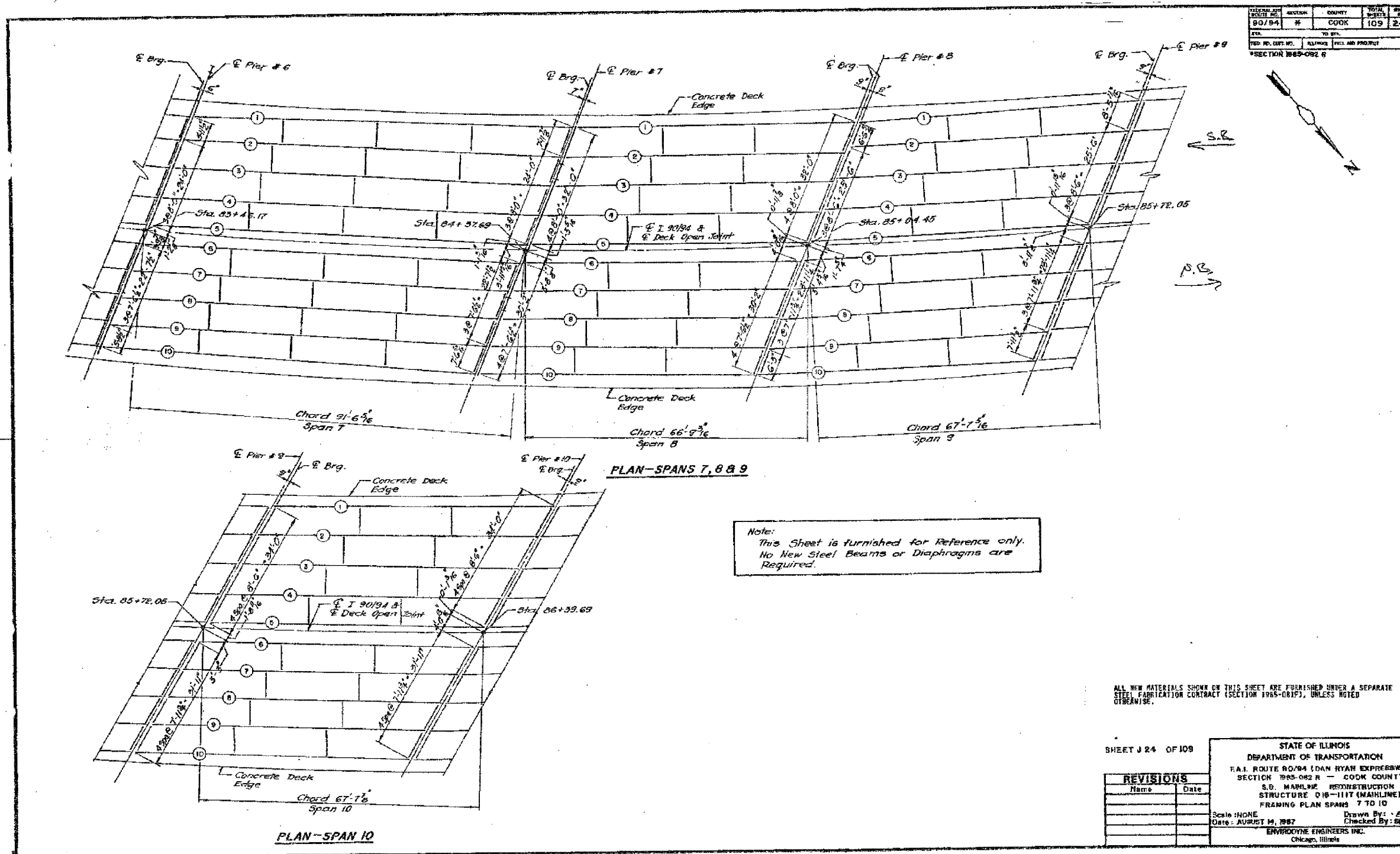
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 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbainc.com

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 DAN RYAN ELEVATED BRIDGE
 BEARING REPLACEMENT & STEEL REPAIR
 EXISTING PLAN INFORMATION
 SN 016-1117

SCALE: NTS
 DATE: 5/18/2007
 DRAWN BY: LAM
 CHECKED BY: BLU

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CONSULTING ENGINEERS
Chicago, Illinois
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REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1117

SCALE: NTS
DATE: 5/18/2007

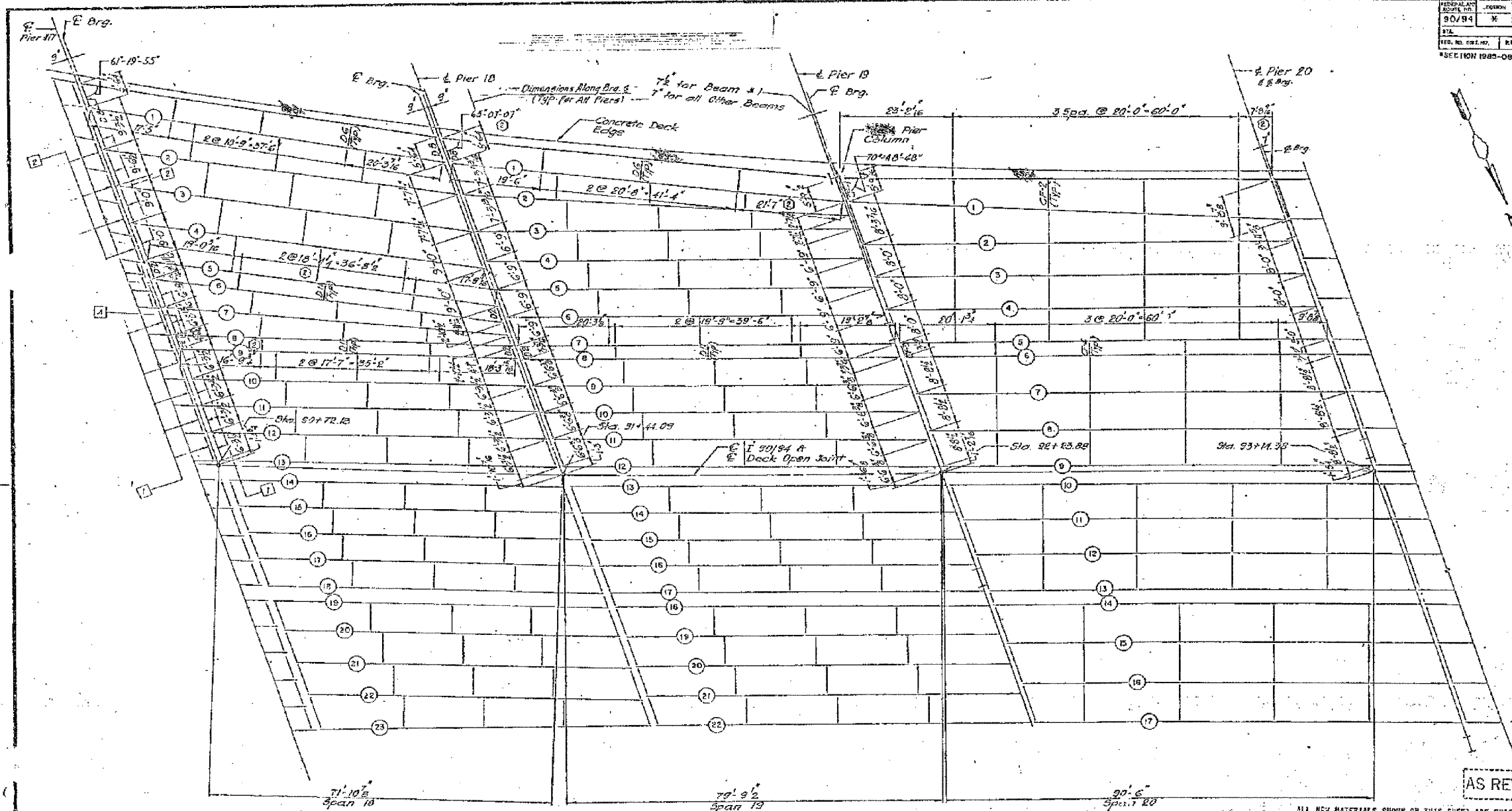
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2005-086 1	COOK	228	208
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

60B07

FEDERAL AID PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	1	COOK	109	27
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



AS REVISED

ALL NEW MATERIALS SHOWN ON THIS SHEET ARE FUGGESH'S SEPARATE STEEL FABRICATION CONTRACT (SECTION 1095-081F), UNLESS OTHERWISE NOTED.

SHEET J 27 OF 109

REVISIONS	
Name	Date
(1) Rev.	1-8-88
(2) Rev.	2-5-88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)
SECTION 1095-086 1 - COOK COUNTY
S.B. MAINLINE RECONSTRUCTION
STRUCTURE 016-1117 (MAINLINE)
FRAMING PLAN SPANS 18 TO 20
Scale: NONE
Date: AUGUST 14, 1987
Checked By: JSK
ENVIRONMENTAL ENGINEERS INC.
Chicago, Illinois

- (1) A Repair Girder Web Near Bearing Stiffener, For Details See Sheet SR-3-Vol.13
- (1) F End Cross Frame, Type D11, See Sheet SR-3, Vol.13 For Details
- (1) E End Cross Frame Type D10, See Sheet SR-3, Vol.13 For Details

PLAN - SPANS 18, 19 & 20

Note:
For diaphragm details D1 and D2 see sheet no. J 33
For diaphragm details D5 see sheet no. J 34
For diaphragm details D8 see sheet no. J 35
For cross frame details CF1 and CF2 see sheet no. J 33
For cross frame details CF3 and CF4 see sheet no. J 34

FOR INFORMATION ONLY

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CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
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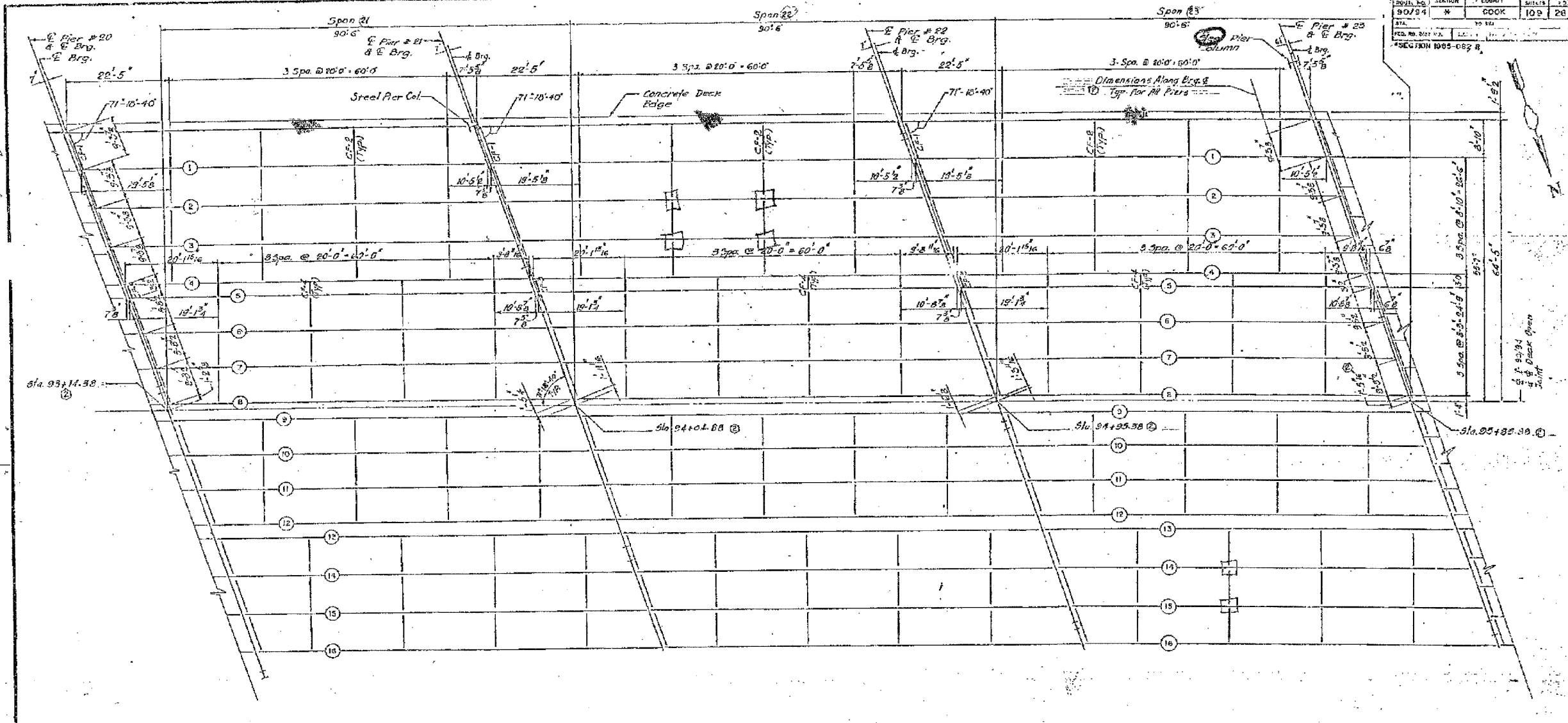
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1117
SCALE: NTS
DATE: 5/18/2007
DRAWN BY: LAM
CHECKED BY: BLU

5/18/2007 5:24:20 PM

60B07

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/84	COOK	109	28
FED. ROAD DIST. NO.		ILLINOIS	
SECTION 1995-082 B			



ALL NEW MATERIALS SHOWN ON THIS SHEET ARE FURNISHED UNDER A SEPARATE STEEL FABRICATION CONTRACT (SECTION 1995-082B), UNLESS NOTED OTHERWISE.

PLAN - SPANS 21, 22 & 23

Notes: For crossframe details CF1 and CF2 see sheet no. J33
For crossframe details CF3 and CF4 see sheet no. J34

SHEET 228 OF 109

REVISIONS	
Name	Date
(1) Rev	2.5.88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 94/90 (DAN RYAN EXPRESSWAY)
SECTION 1995-082 B - COOK COUNTY
S.B. MAINLINE RECONSTRUCTION
STRUCTURE 016-1117 (MAINLINE)
FRAMING PLAN SPANS 21 TO 23
Scale: NONE
Date: AUGUST 14, 1997
Drawn By: [Signature]
Checked By: [Signature]
ENVIRODYNE ENGINEERS INC.
Chicago, Illinois

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1117
SCALE: NTS
DATE: 5/18/2007
DRAWN BY: LAM
CHECKED BY: BLU

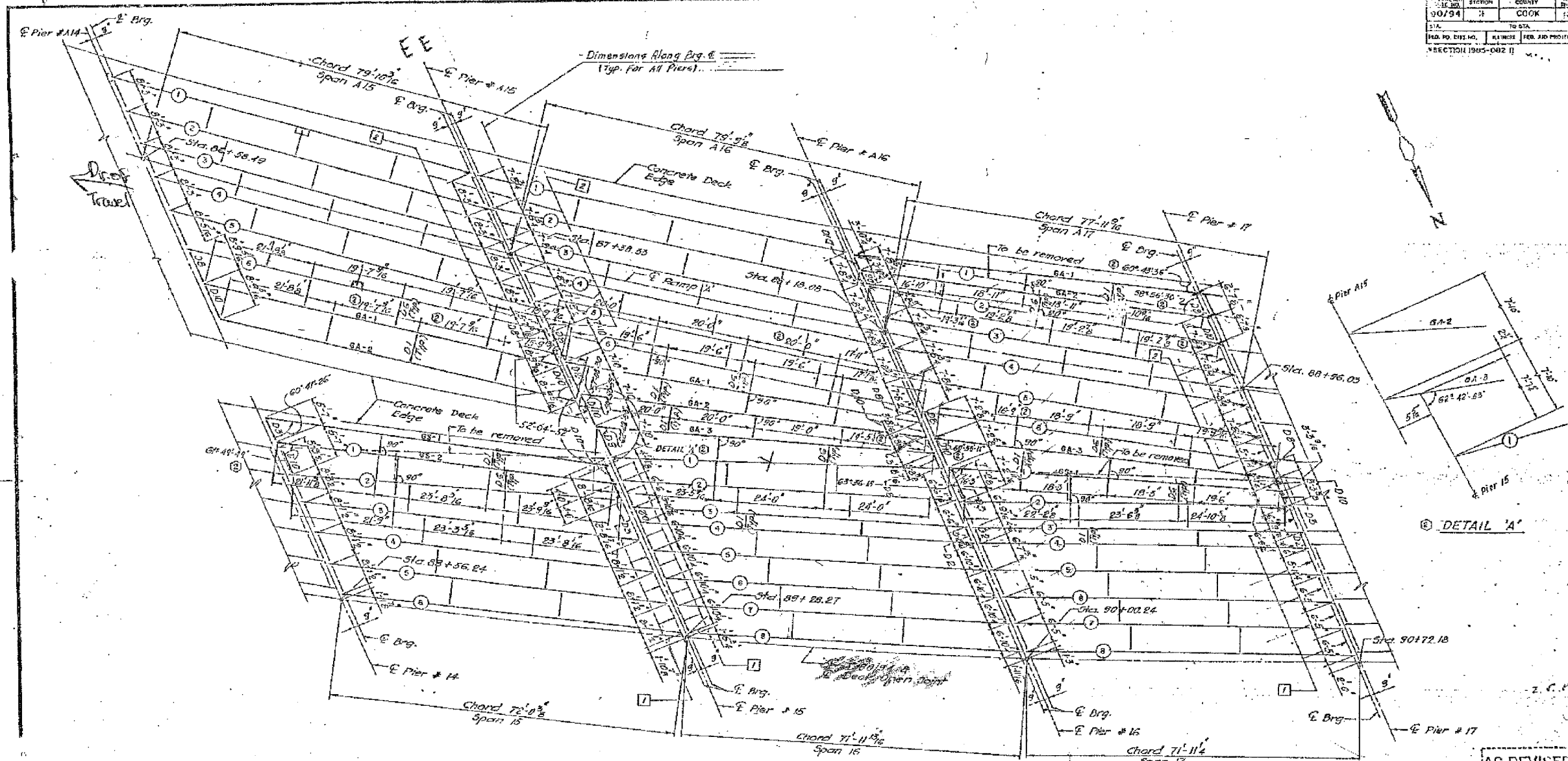
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CONSULTING ENGINEERS
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312.228.0100
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5/24/2007 5:07:29 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2005-086 I	COOK	228	210
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
60B07				

FILE NO.	STATION	COUNTY	DISTRICT	SHEET NO.
90/94	1	COOK	179	26
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
SECTION 1045-042 I				



- ① ⑦ End Cross Frame, Type D11, See Sheet SR-3, Vol 13 For Details.
- ① ⑧ End Cross Frame, Type D10, See Sheet SR-3, Vol 13 For Details.

PLAN - SPANS A15, A16 & A17
SPANS 15, 16 & 17

Note: For diaphragm details D1 and D2 see sheet no. U33
 For diaphragm details D3 and D4 see sheet no. U34
 For diaphragm details D5, D6 and D7 see sheet no. U35

ALL NEW MATERIALS SHOWN ON THIS SHEET ARE FURNISHED UNDER A SEPARATE STEEL FABRICATION CONTRACT (SECTION 1905-081F), UNLESS NOTED OTHERWISE.

SHEET J 25 OF 109

REVISIONS	
Name	Date
(1) Rev.	7.8.00
(2) Rev.	2.5.00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)
 SECTION 1985-082 R - COOK COUNTY
 S.D. MAINLINE RECONSTRUCTION
 STRUCTURE 018-1067 & 1117 (RAMP A & MAINLINE)
 FRAMING PLAN SPANS A15 TO A17 B 15 TO 17
 Scale: NTS
 Date: AUGUST 14, 1987
 Checked By: SK
 Drawn By: SK
 ENVIRONMENTAL ENGINEERS INC.
 Chicago, IL

AS REVISED

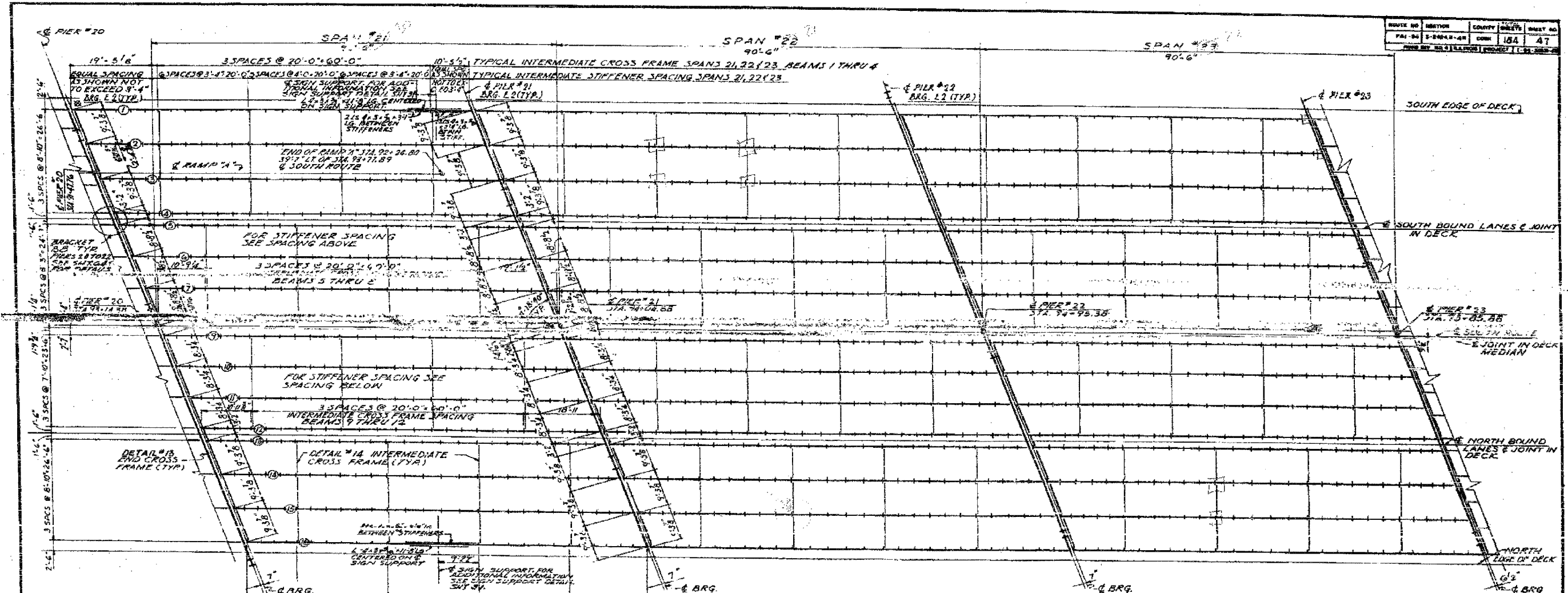
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 DAN RYAN ELEVATED BRIDGE
 BEARING REPLACEMENT & STEEL REPAIR
 EXISTING PLAN INFORMATION
 SN 016-1117 & SN 016-1067
 SCALE: NTS
 DATE: 5/18/2007
 DRAWN BY: LAM
 CHECKED BY: BLU

N:\60B07\BRIDGE\210\SHEETS\60B_210_06107-EP1209



FRAMING PLAN SPANS 21 TO 23
SCALE: 1/4" = 1'-0"

NOTE: CROSS FRAME SPACING AND STIFFENER SPACING SHOWN IN SPAN 21 TYPICAL FOR SPANS 22 & 23

BILL OF MATERIAL

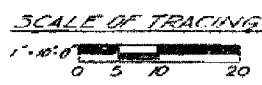
DESCRIPTION	UNIT	QUANTITY	SPAN 21	SPAN 22	SPAN 23
STRUCTURAL STEEL	LBS.	350,750	350,500	370,200	

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

**SOUTH ROUTE SUPERHIGHWAY
ELEVATED HIGHWAY
28TH PLACE TO STEWART AVE.**

SECTION 5-2424.3-4H
**FRAMING PLAN
SPANS 21 TO 23**

SHEET NO. 47 OF 154 SHEETS DATE: MARCH, 1961



ALFRED GENESCH & ASSOCIATES CONSULTING ENGINEERS
14 SOUTH WABASH AVENUE CHICAGO, ILLINOIS

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Chicago, Illinois
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FOR INFORMATION ONLY

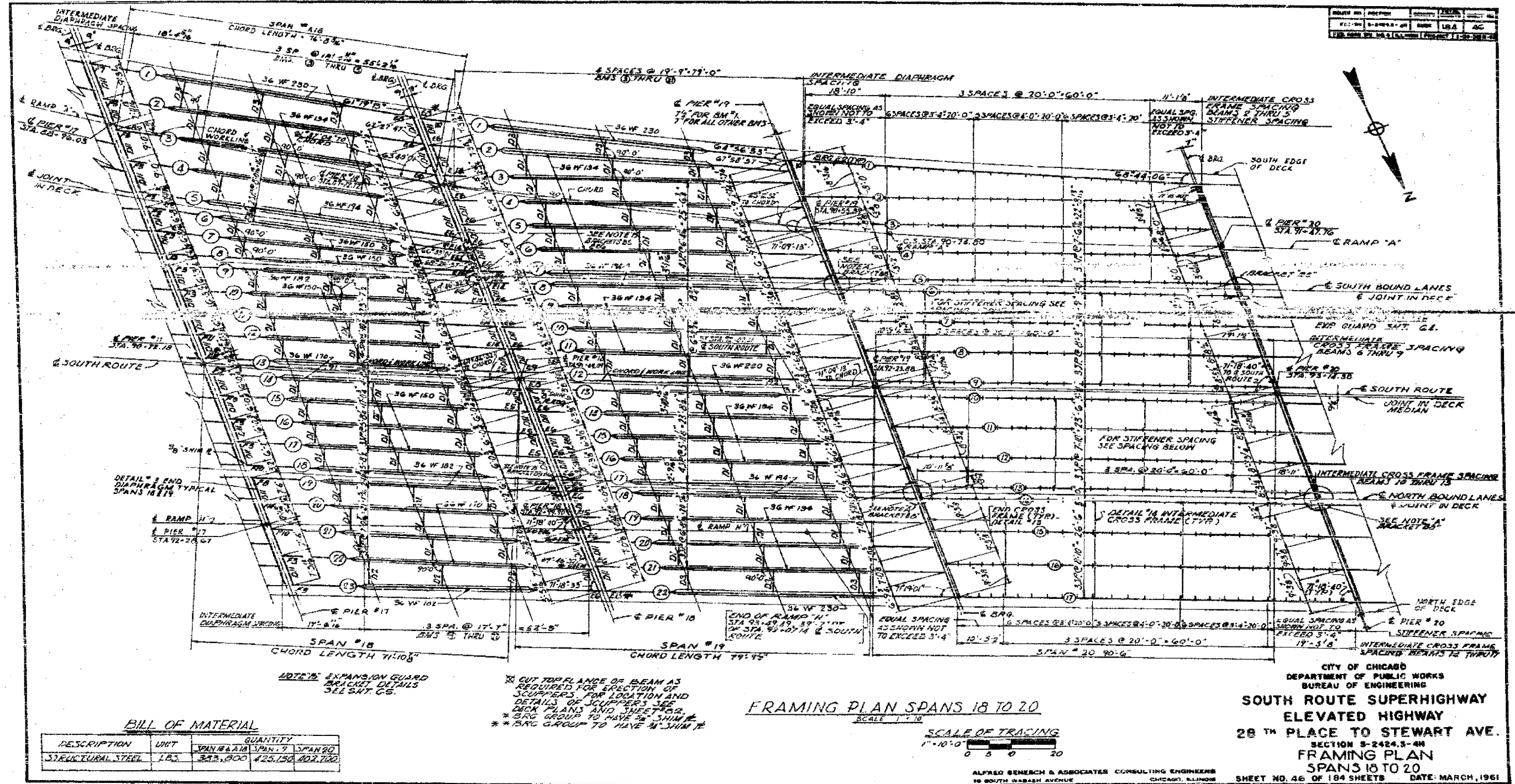
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR

EXISTING PLAN INFORMATION
SN 016-1117 & SN 016-1067

SCALE: NTS DRAWN BY: LAM
DATE: 5/18/2007 CHECKED BY: BLU

116560-0000-BRIDGE-21ASHEET 5 560-21A-06-1117-E-FIG.029 5/24/2007 5:27:55 PM

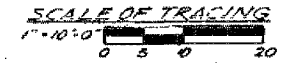


BILL OF MATERIAL

DESCRIPTION	UNIT	SPAN #18	SPAN #19	SPAN #20
STRUCTURAL STEEL	LBS	343,900	425,150	408,700

NOTE: EXPANSION GUARD BRACKET DETAILS SEE SHT. C5.
 * CUT TOP FLANGE OF BEAM AS REQUIRED FOR ERECTION OF JOIST/BEAMS. FOR LOCATION AND DETAILS OF JOIST/BEAMS SEE DECK PLANS AND SHEET C2.
 * BRG GROUP TO HAVE 3/8\"/>

FRAMING PLAN SPANS 18 TO 20
 SCALE 1\"/>



ALFRED BENECH & ASSOCIATES CONSULTING ENGINEERS
 16 SOUTH WABASH AVENUE CHICAGO, ILLINOIS

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
**SOUTH ROUTE SUPERHIGHWAY
 ELEVATED HIGHWAY
 28TH PLACE TO STEWART AVE.**
 SECTION 9-2424.3-4H
**FRAMING PLAN
 SPANS 18 TO 20**
 SHEET NO. 46 OF 184 SHEETS DATE: MARCH, 1961

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FOR INFORMATION ONLY

REVISIONS	
NAME	DATE

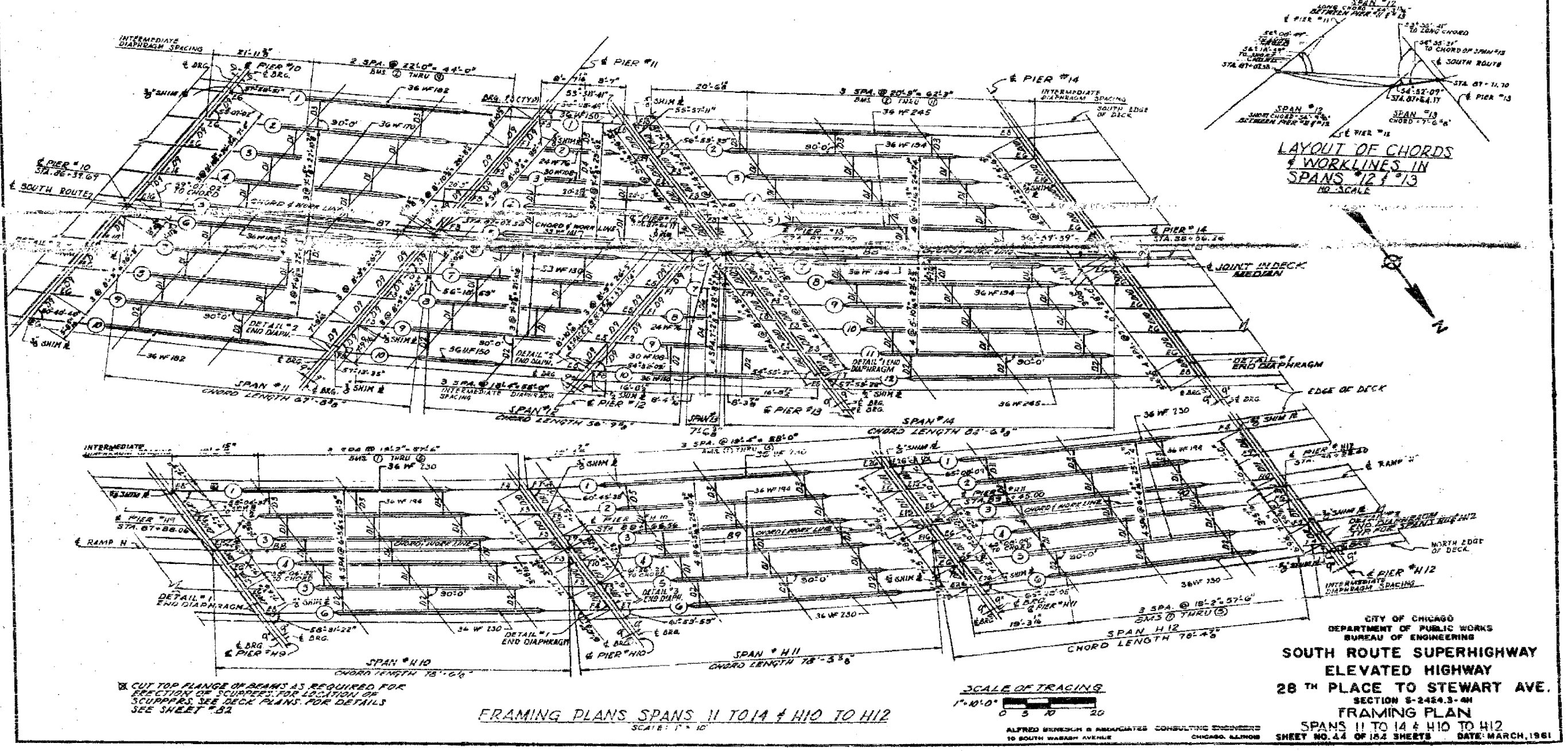
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 DAN RYAN ELEVATED BRIDGE
 BEARING REPLACEMENT & STEEL REPAIR
 EXISTING PLAN INFORMATION
 SN 016-1117, SN 016-1067, SN 016-1118
 SCALE: NTS DRAWN BY: LAM
 DATE: 5/18/2007 CHECKED BY: BLU

N:\60807\BRIDGE\212\18-20\18-20-FRAME.PLT

BILL OF MATERIAL

DESCRIPTION	UNIT	QUANTITY						
		SPAN 11	SPAN 12	SPAN 13	SPAN 14	SPAN 15	SPAN 16	SPAN 17
STRUCTURAL STEEL	LBS	18,050	22,450	36,850	2,050	12,130	128,640	127,220

ROUTE NO.	SECTION	COUNTY	DATE	DRAWN BY
28-1117	2005-086 I	COOK	10.24.04	LAM



CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
SOUTH ROUTE SUPERHIGHWAY
ELEVATED HIGHWAY
28TH PLACE TO STEWART AVE.
 SECTION 2-2454.3-4M
FRAMING PLAN
 SPANS 11 TO 14 & H10 TO H12
 SHEET NO. 44 OF 152 SHEETS DATE: MARCH, 1961

FRAMING PLANS SPANS 11 TO 14 & H10 TO H12
SCALE: 1" = 10'

SCALE OF TRACING
 1" = 10'-0"
 0 5 10 20

ALFRED BRINSHAM & ASSOCIATES CONSULTING ENGINEERS
 10 SOUTH WABASH AVENUE CHICAGO, ILLINOIS

CUT TOP FLANGE OF BEAMS AS REQUIRED FOR
 ERECTION OF SCUPPERS. TOP LOCATION OF
 SCUPPERS SEE DECK PLANS FOR DETAILS
 SEE SHEET #52

FOR INFORMATION ONLY

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

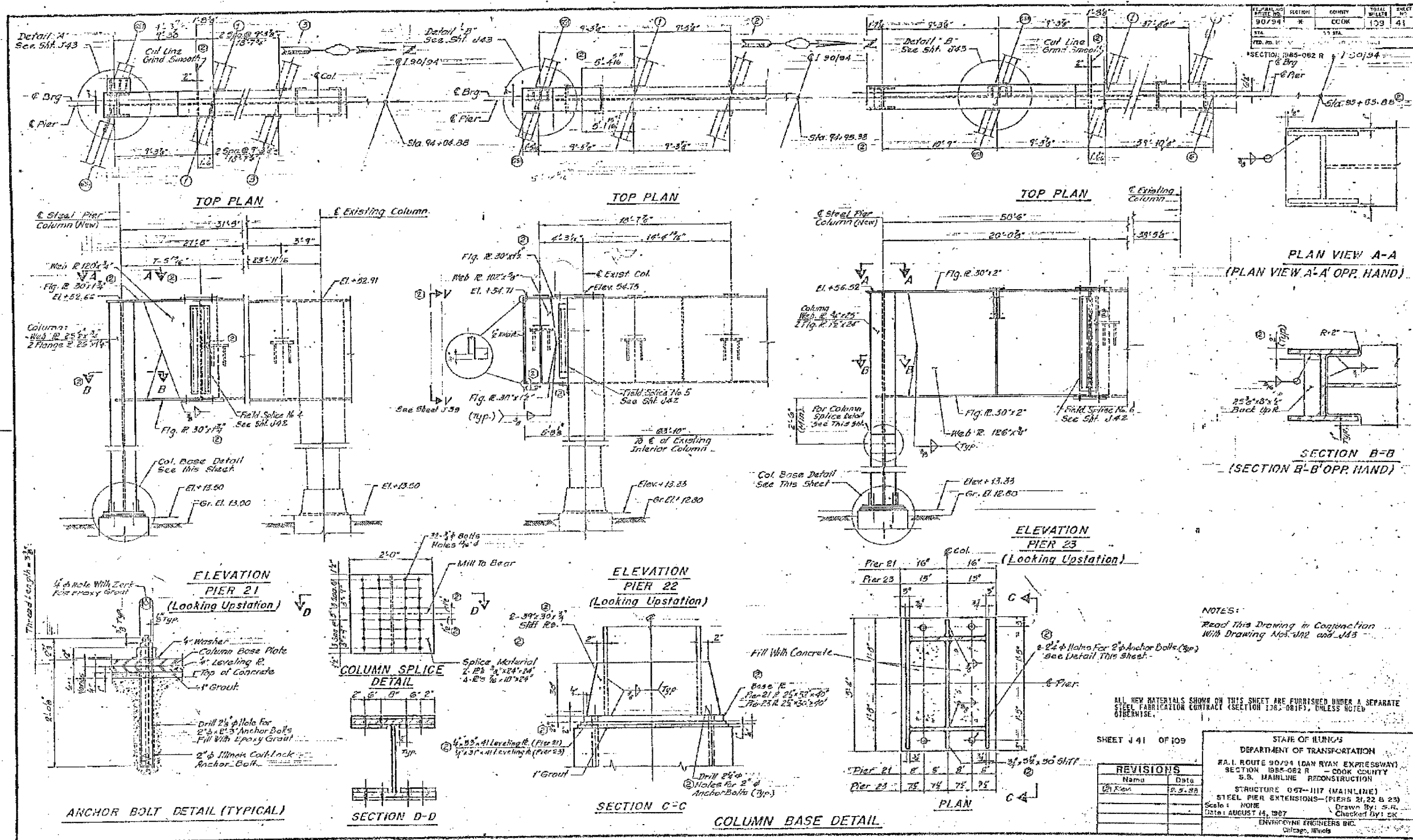
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 DAN RYAN ELEVATED BRIDGE
 BEARING REPLACEMENT & STEEL REPAIR
 EXISTING PLAN INFORMATION
 SN 016-1117 & SN 016-1118
 SCALE: NTS DRAWN BY: LAM
 DATE: 5/18/2007 CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2005-086 I	COOK	228	214
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

60B07



NOTES:
 Read This Drawing in Conjunction
 With Drawing Nos. J42 and J43

ALL NEW MATERIALS SHOWN ON THIS SHEET ARE FURNISHED UNDER A SEPARATE
 STEEL FABRICATION CONTRACT (SECTION 136-081F), UNLESS NOTED
 OTHERWISE.

SHEET J 41 OF 109

REVISIONS	NAME	DATE

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)
 SECTION 136-082 R - COOK COUNTY
 S.S. MAINLINE RECONSTRUCTION
 STRUCTURE 057-117 (MAINLINE)
 STEEL PIER EXTENSIONS - (PIERS 21, 22 & 23)
 Scale: NONE
 Date: AUGUST 14, 1987
 Drawn By: S.R.
 Checked By: S.K.
 ENVIRONMENTAL ENGINEERS INC.
 Chicago, Illinois

FOR INFORMATION ONLY

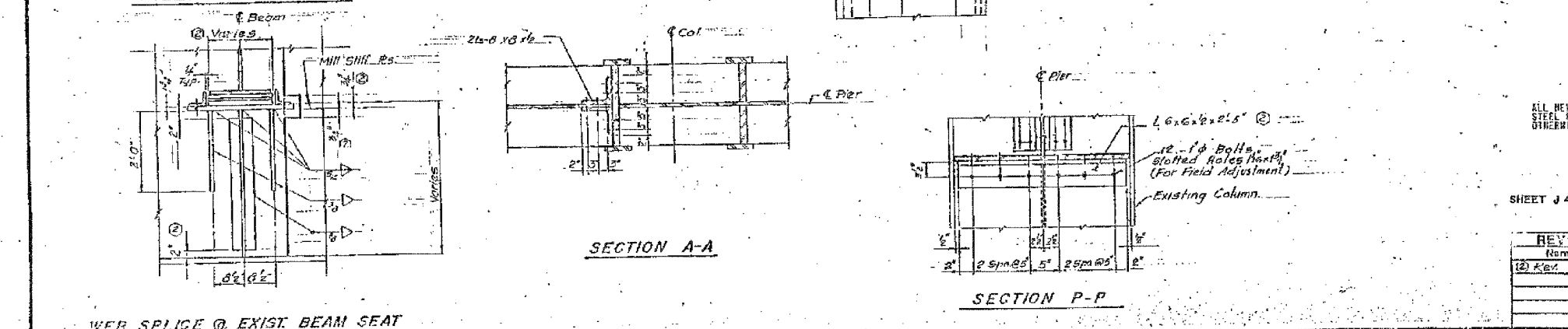
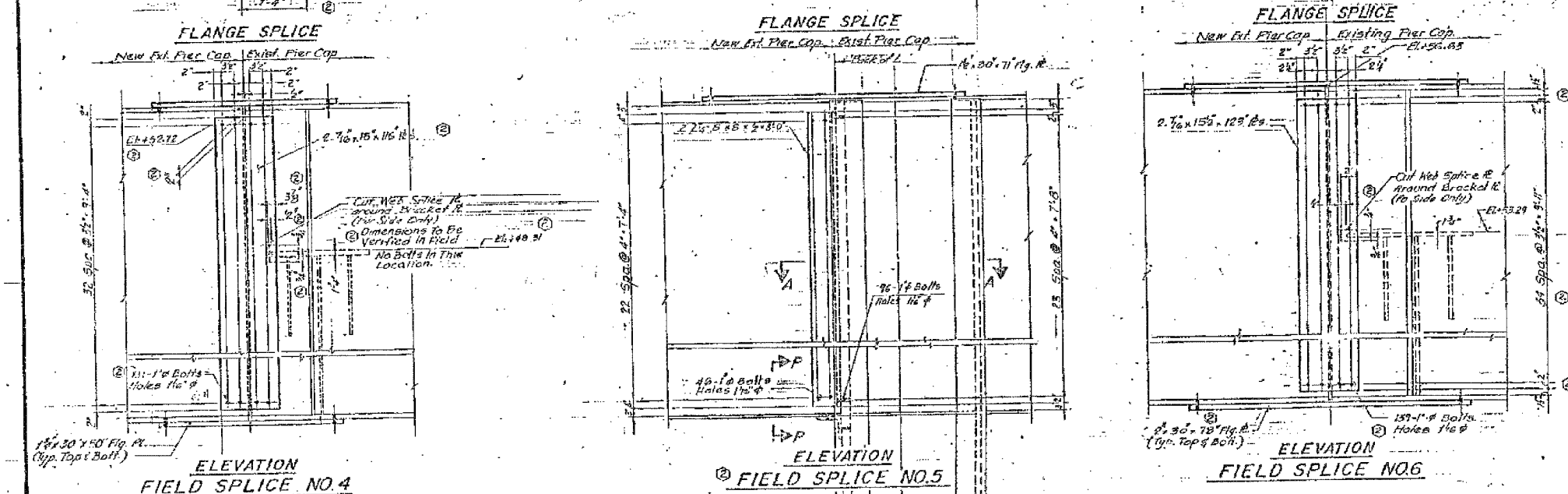
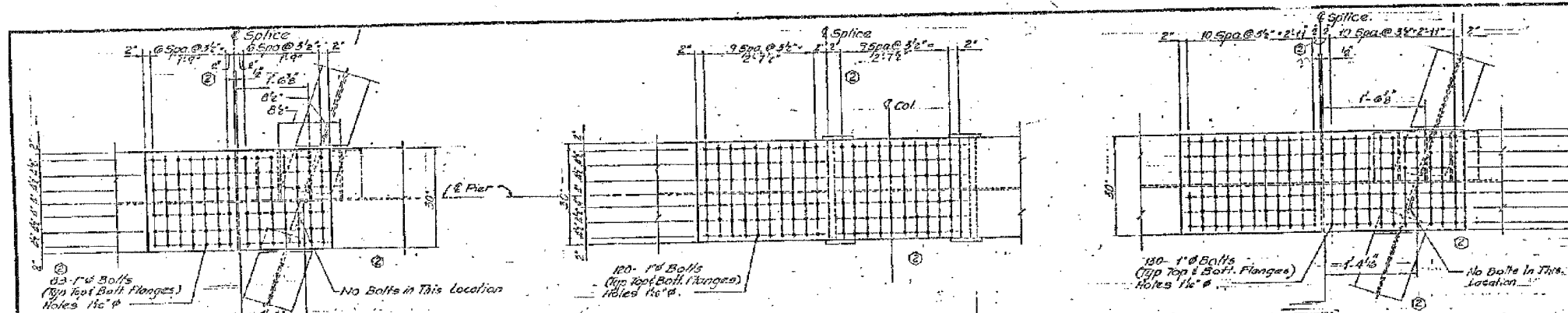
BOWMAN, BARRETT & ASSOCIATES INC.
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ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 DAN RYAN ELEVATED BRIDGE
 BEARING REPLACEMENT & STEEL REPAIR
 EXISTING PLAN INFORMATION
 SN 016-1117
 SCALE: NTS
 DATE: 5/18/2007
 DRAWN BY: LAM
 CHECKED BY: BLU

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60B07

11	DRILL AND	ELECTRIC	COUNTY	NO.	117
90/94	94	COOK	109	12	
STL	TO STA.				
FED. RD. DIST. NO.	ILLINOIS	FED. AID PROJECT			



NOTES:
Read This Drawing in Conjunction With
Drawing Nos. J21 & J43

ALL NEW MATERIALS SHOWN ON THIS SHEET ARE FURNISHED UNDER A SEPARATE STEEL FABRICATION CONTRACT (SECTION 1965-081F), UNLESS NOTED OTHERWISE.

SHEET J 42 OF 100

REVISIONS	
NO.	DATE
12	2-5-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 00/94 (DAN RYAN EXPRESSWAY)
SECTION 1965-082 R - COOK COUNTY
S.B. MAINLINE RECONSTRUCTION
STRUCTURE 016-1117 (MAINLINE)
STEEL PIER DETAILS - (PIERS 21, 22, & 23)
Scale: NONE
Date: AUGUST 14, 1997
Checked By: SP
ENVIRONMENTAL ENGINEERS INC.
Chicago, Illinois

REVISIONS	
NAME	DATE

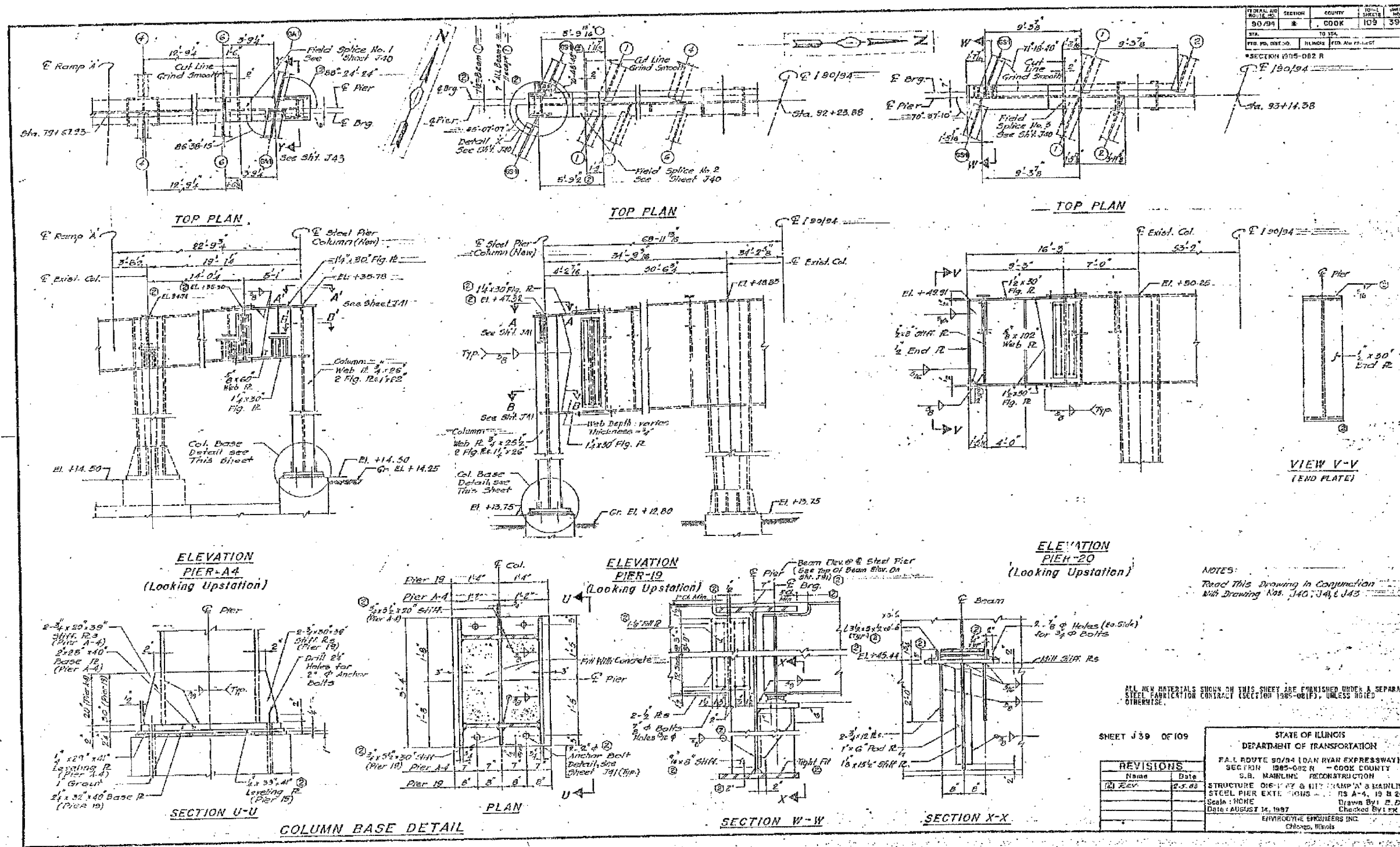
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1117
SCALE: NTS
DATE: 5/18/2007
DRAWN BY: LAM
CHECKED BY: BLU

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5/24/2007

60B07



NOTES:
 Read This Drawing in Conjunction
 with Drawing Nos. J40, J41 & J43

ALL NEW MATERIALS SHOWN ON THIS SHEET ARE FURNISHED UNDER A SEPARATE
 STEEL FABRICATION CONTRACT (SECTION 1985-081F), UNLESS NOTED
 OTHERWISE.

SHEET J39 OF 109

REVISIONS	
Name	Date
Rev	2.5.08

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 94/90 (DAN RYAN EXPRESSWAY)
 SECTION 1985-082 R - COOK COUNTY
 S.B. MAINLINE RECONSTRUCTION
 STRUCTURE 016-117 & 017 (RAMP A & MAINLINE)
 STEEL PIER EXTENSIONS - SN A-4, 19 & 20
 Scale: NONE
 Date: AUGUST 14, 1997
 Drawn By: E.D.
 Checked By: [Signature]
 ENVIRONMENTAL ENGINEERS INC.
 Chicago, Illinois

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 DAN RYAN ELEVATED BRIDGE
 BEARING REPLACEMENT & STEEL REPAIR
 EXISTING PLAN INFORMATION
 SN 016-117 & SN 016-1067
 SCALE: NTS
 DATE: 5/18/2007
 DRAWN BY: LAM
 CHECKED BY: BLU

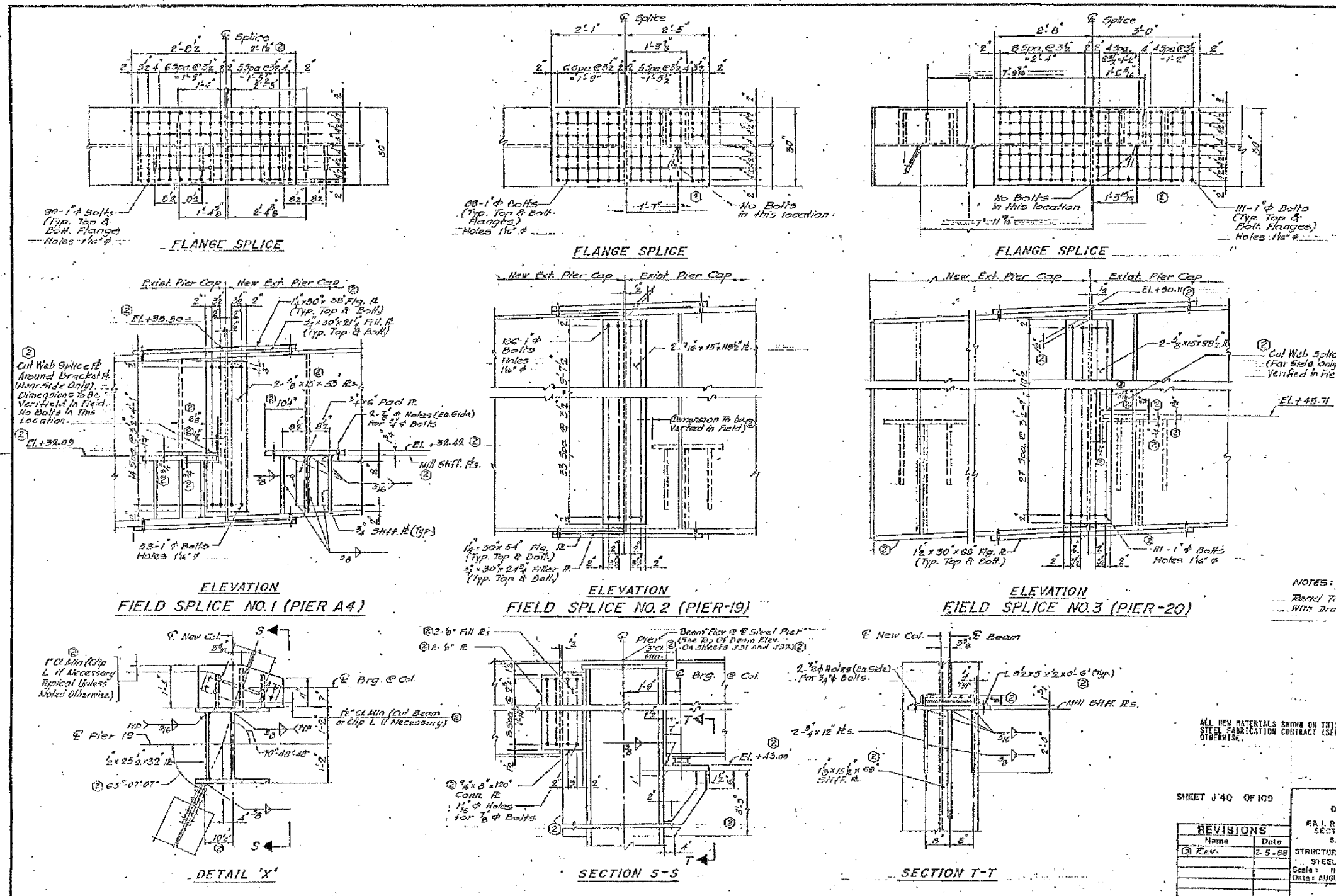
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SECTION	NO.	DATE
90/84	1	10/94
STA.	TO STA.	FED. AID PROJECT
10000	10000	ILLINOIS

*SECTION: 1985-082 R



NOTES:
 Read This Drawing in Conjunction
 With Drawing Nos. 139, 141, & 143

ALL NEW MATERIALS SHOWN ON THIS SHEET ARE FURNISHED ON A SEPARATE
 STEEL FABRICATION CONTRACT (SECTION 1985-081F), UNLESS NOTED
 OTHERWISE.

SHEET J'40 OF 109

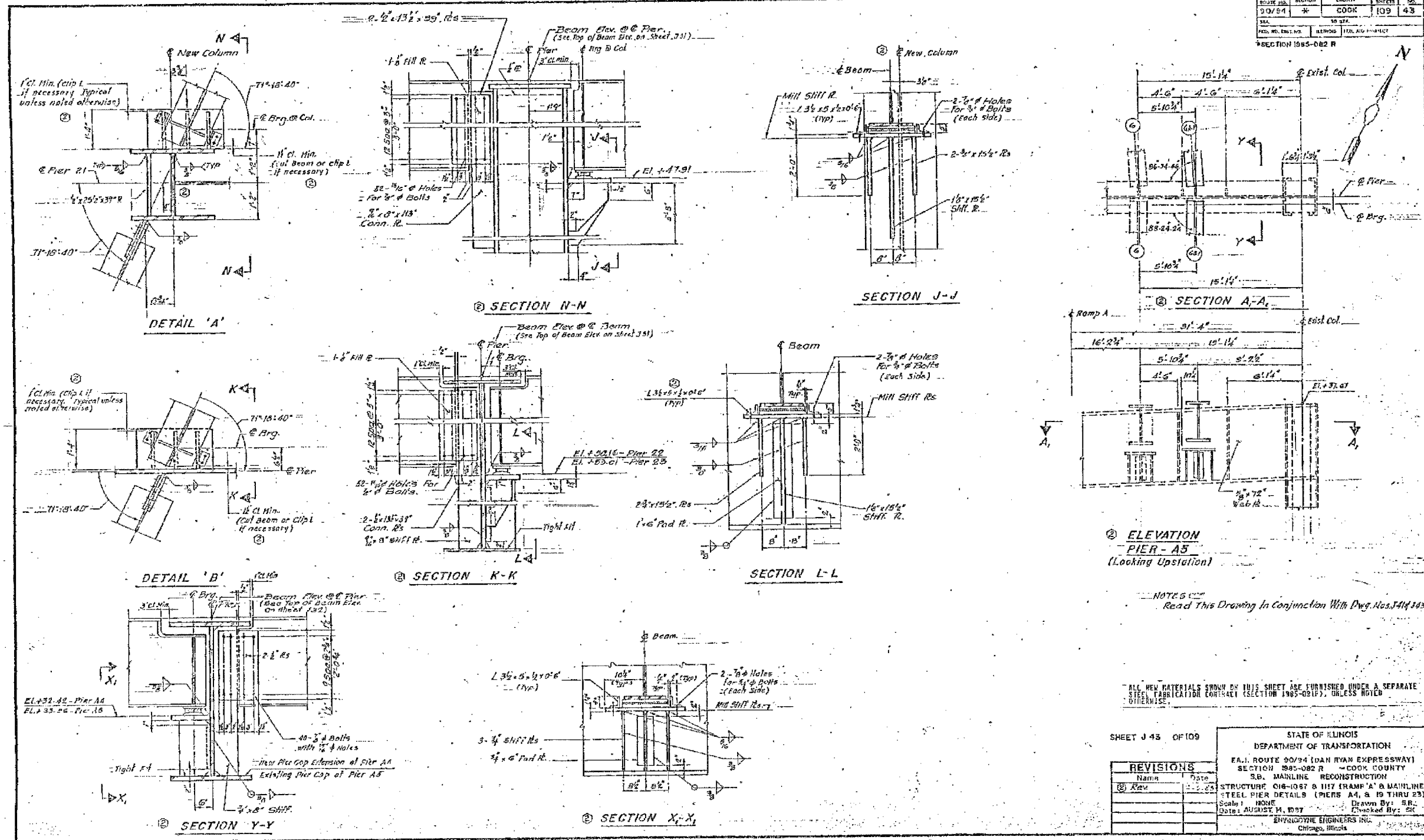
REV.	NAME	DATE
1	Rev.	2-5-88

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 (DAN RYAN EXPRESSWAY)
 SECTION 2005-082 R - COOK COUNTY
 S.B. MAINLINE RECONSTRUCTION
 STRUCTURE 016-1067 & 1117 (RAMP & MAINLINE)
 STEEL PIER DETAILS (PIERS A-4, 19 & 20)
 Scale: NONE
 Date: AUGUST 14, 1987
 Drawn By: ED
 Checked By: SK
 ENVIRONMENTAL ENGINEERS INC.
 Chicago, Illinois

REV.	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 DAN RYAN ELEVATED BRIDGE
 BEARING REPLACEMENT & STEEL REPAIR
 EXISTING PLAN INFORMATION
 SN 016-1117 & SN 016-1067
 SCALE: NTS
 DATE: 5/18/2007
 DRAWN BY: LAM
 CHECKED BY: BLU

FOR INFORMATION ONLY



FOR INFORMATION ONLY

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CONSULTING ENGINEERS
Chicago, Illinois
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REVISIONS		DATE	
NAME	DATE	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1117 & SN 016-1067
SCALE: NTS
DATE: 5/18/2007
DRAWN BY: LAM
CHECKED BY: BLU

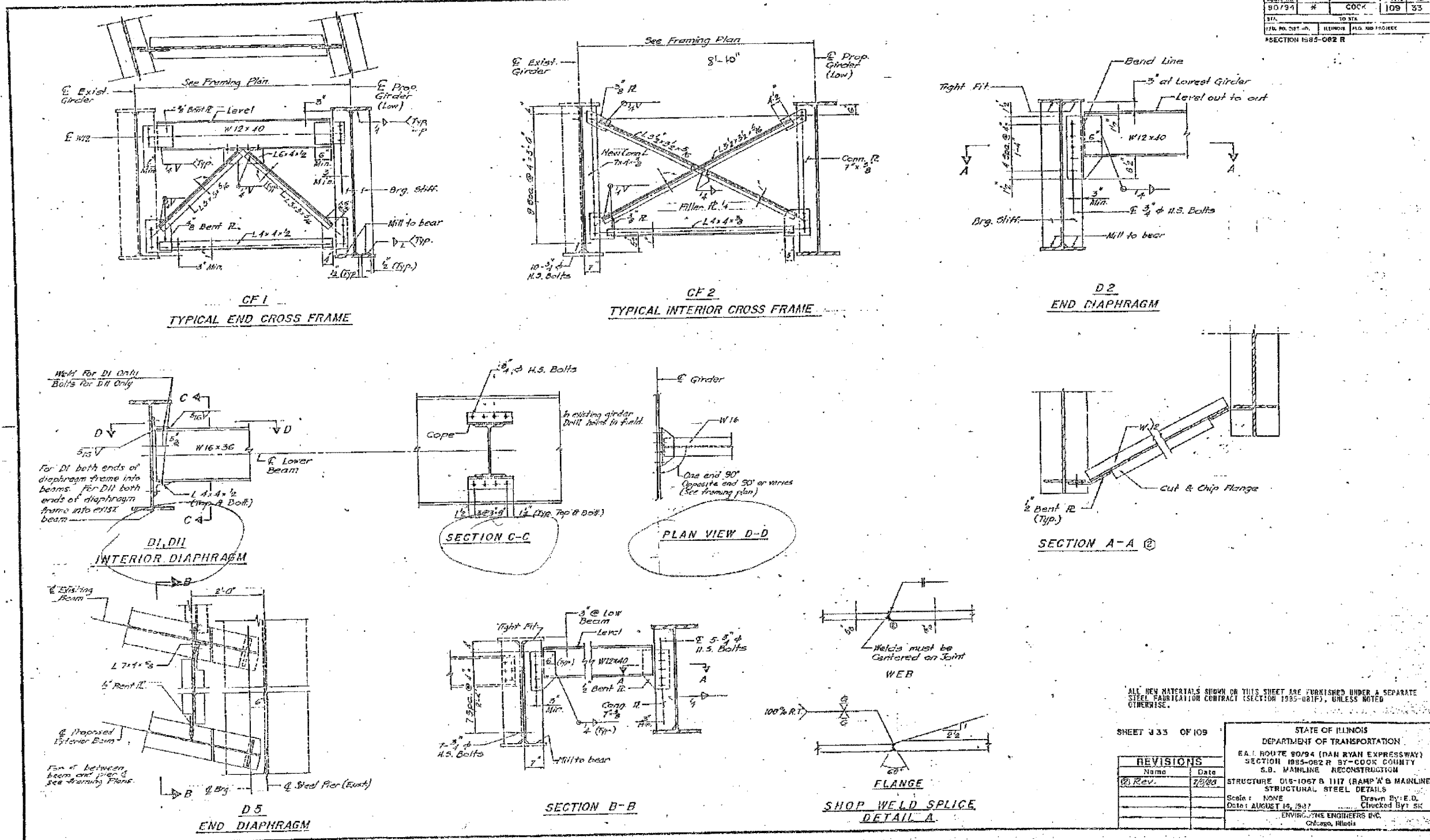
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2005-086 I	COOK	228	220
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

60B07

REVISION NO.	SECTION	COUNTY	DATE	BY
50/94	#	COOK	109	33
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
SECTION 1985-082 R				



ALL NEW MATERIALS SHOWN ON THIS SHEET ARE FURNISHED UNDER A SEPARATE STEEL FABRICATION CONTRACT (SECTION 1985-081F), UNLESS NOTED OTHERWISE.

SHEET 333 OF 109

REVISIONS	
NO.	DATE
1	7/2/00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
E.A. ROUTE 90/94 (DAN RYAN EXPRESSWAY)
SECTION 1985-082 R BY-COOK COUNTY
S.D. MAINLINE RECONSTRUCTION
STRUCTURE 016-1067 B 1117 (RAMP 'N' & MAINLINE)
STRUCTURAL STEEL DETAILS
Scale: NONE
Date: AUGUST 15, 1997
Checked By: SK
ENVIRONMENTAL ENGINEERS INC.
Chicago, Illinois

FOR INFORMATION ONLY

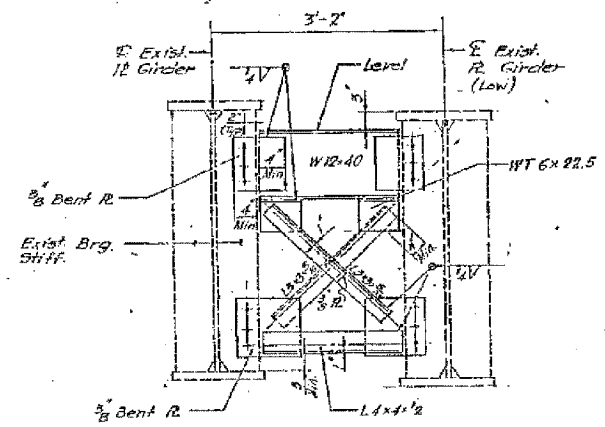
BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	F.A.I. 94/90 (DAN RYAN EXPRESSWAY)	
		DAN RYAN ELEVATED BRIDGE	
		BEARING REPLACEMENT & STEEL REPAIR	
		EXISTING PLAN INFORMATION	
		SN 016-1117 & SN 016-1067	
		SCALE: NTS	DRAWN BY: LAM
		DATE: 5/18/2007	CHECKED BY: BLU

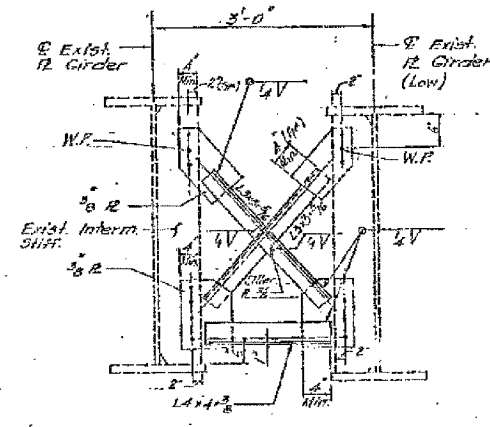
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DATE	BY	CHKD	TOTAL SHEETS	SHEET NO.
9/13/07	COOK	J.F.J.	228	221
TO STA.				
FED. ROAD DIST. NO.				

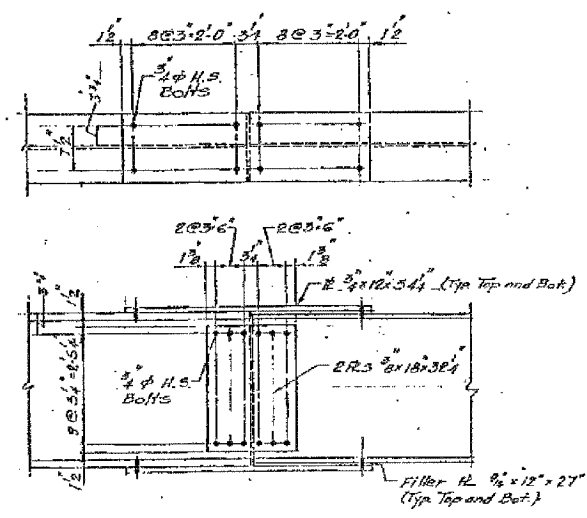
*SECTION 1985-082 R



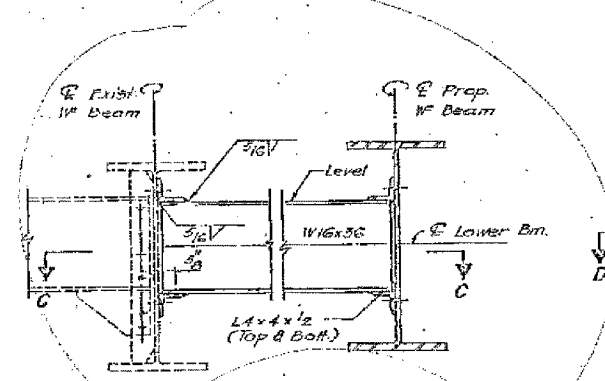
CF 3
TYPICAL END GROSS FRAME



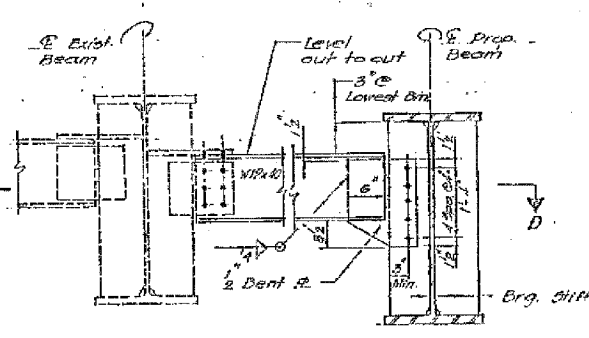
CF 4
TYPICAL INTERIOR CROSS FRAME



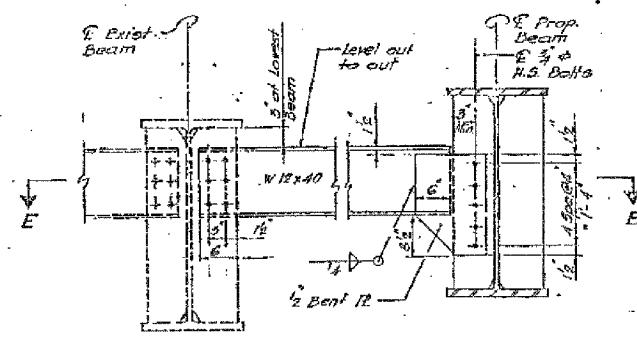
TYPICAL BOLTED FIELD SPLICE



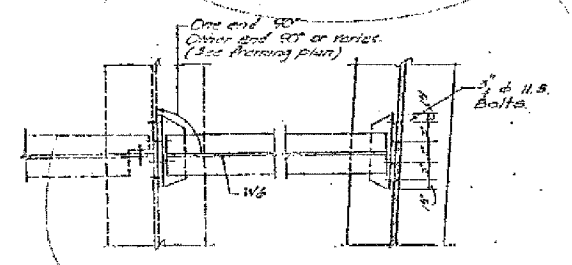
D6
INTERIOR DIAPHRAGM



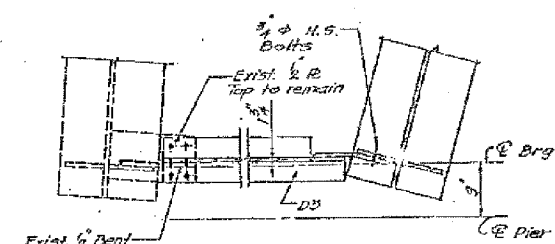
D3
END DIAPHRAGM



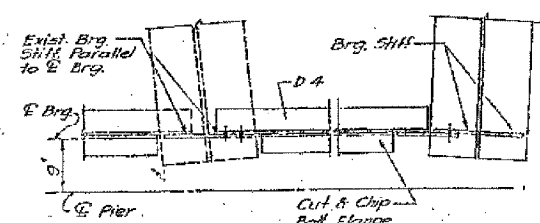
D4
END DIAPHRAGM



SECTION C-C



SECTION D-D



SECTION E-E

ALL NEW MATERIALS SHOWN ON THIS SHEET ARE FURNISHED UNDER A SEPARATE STEEL FABRICATION CONTRACT (SECTION 1985-081F), UNLESS NOTED OTHERWISE.

SHEET J 34 OF 109

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)
SECTION 1985-082 R - COOK COUNTY
S.B. MAINLINE RECONSTRUCTION
STRUCTURE 016-1067 & HIT RAMP 'A' & MAINLINE
STRUCTURAL STEEL DETAILS
Scale: NONE
Date: AUGUST 14, 1997
Drawn By: E.D.
Checked By: SK
ENVIRONMENTAL ENGINEERS INC.
Chicago, Illinois

REVISIONS	
Name	Date

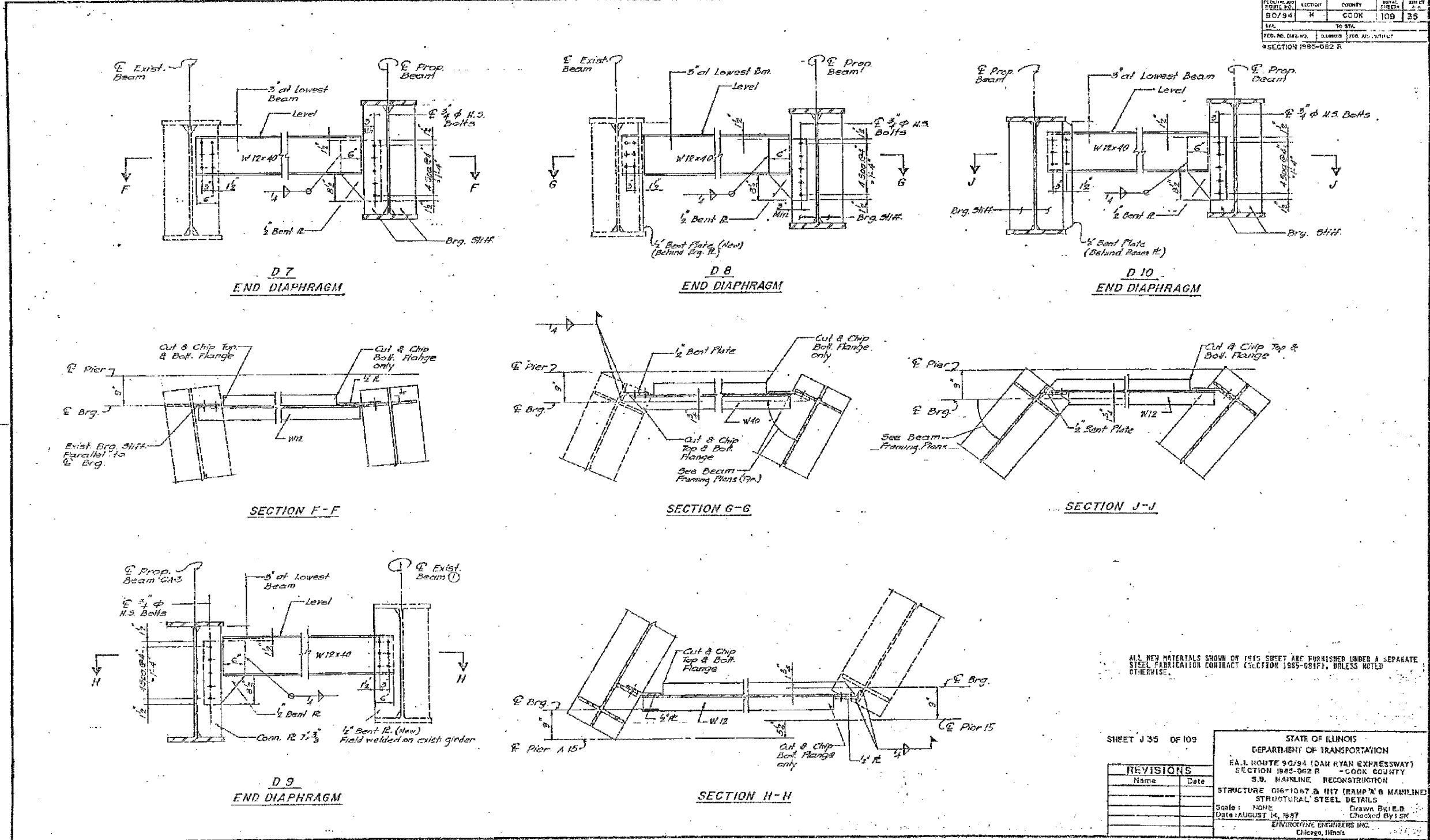
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1117 & SN 016-1067
SCALE: NTS
DATE: 5/18/2007
DRAWN BY: LAM
CHECKED BY: BLU

FOR INFORMATION ONLY

I:\9606060\BRIDGE\2\ASHEETS\1660_21A_016-1117-EPI08207

DESIGNED BY	CHECKED BY	COUNTY	DATE	SCALE
BO/94	H	COOK	10/9	3/8
FED. NO. DIST. NO.		ILLINOIS FED. AID PROJECT		
STA.		TO STA.		
SECTION 1985-082 R				



ALL NEW MATERIALS SHOWN ON THIS SHEET ARE FURNISHED UNDER A SEPARATE STEEL FABRICATION CONTRACT (SECTION 1985-081F), UNLESS NOTED OTHERWISE.

SHEET J 35 OF 109

REVISIONS	
Name	Date

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)
SECTION 1985-082 R - COOK COUNTY
S.B. MAINLINE RECONSTRUCTION
STRUCTURE 016-1067 & 1117 (RAMP 'A' & MAINLINE)
STRUCTURAL STEEL DETAILS
Scale: NONE Drawn By: E.D.
Date: AUGUST 14, 1987 Checked By: SK
ENVIRONMENTAL ENGINEERS INC.
Chicago, Illinois

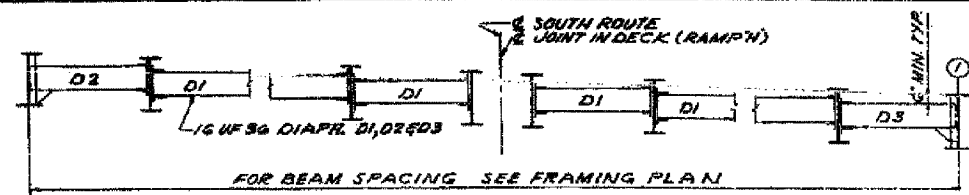
FOR INFORMATION ONLY

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CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

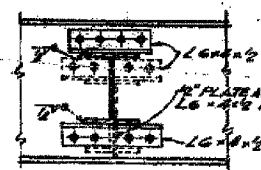
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1117 & SN 016-1067
SCALE: NTS DRAWN BY: LAM
DATE: 5/18/2007 CHECKED BY: BLU

5/24/2007 5:08:03 PM

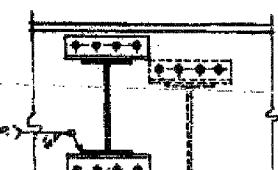
60B07



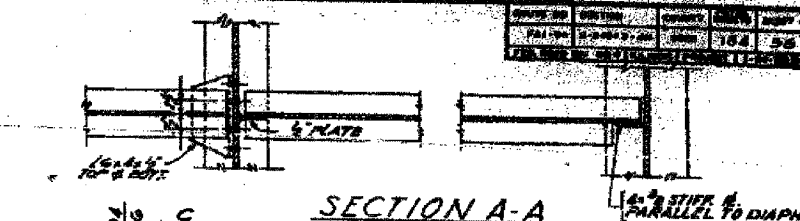
TYPICAL PARTIAL ELEVATION
SPANS #6 THRU #11, #14 THRU #19 & #1
SCALE: 3/4" = 1'-0"



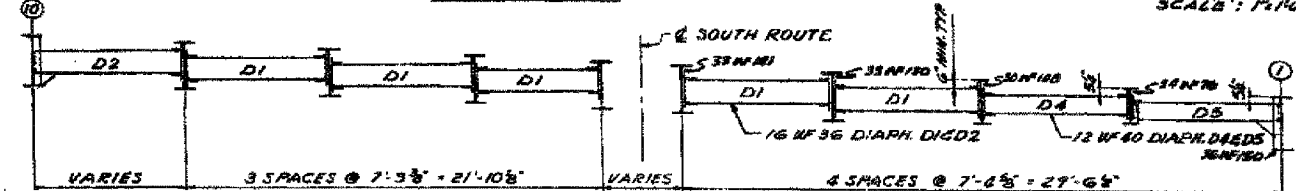
SECTION C-C
SECTION F-F SIMILAR
SCALE: 1/4" = 1'-0"



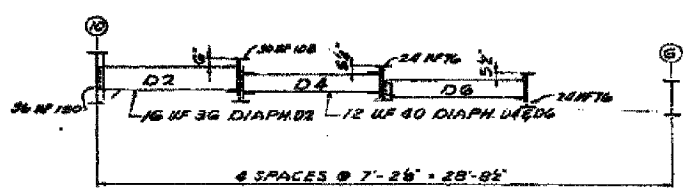
SECTION D-D
SECTION E-E SIMILAR
SCALE: 1/4" = 1'-0"



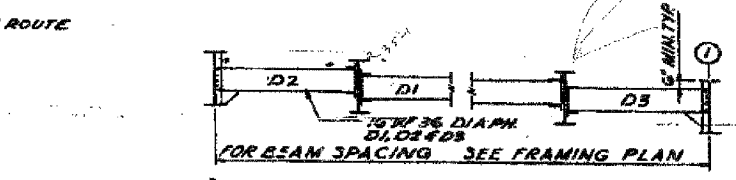
SECTION A-A
DIAPHRAGMS D4, D5 & D6
SCALE: 1/4" = 1'-0"



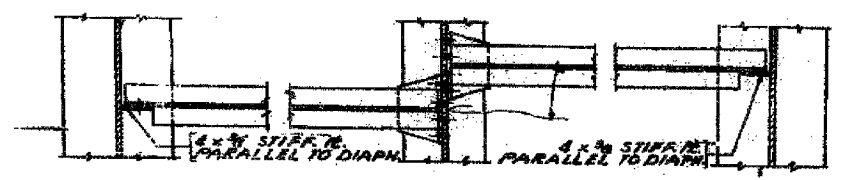
TYPICAL ELEVATION - SPAN #12
SCALE: 3/4" = 1'-0"



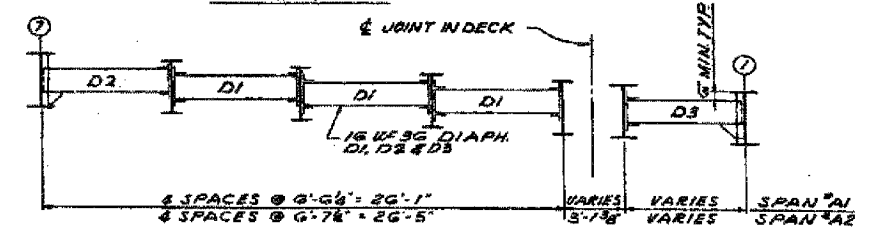
TYPICAL ELEVATION - SPAN #13
SCALE: 3/4" = 1'-0"



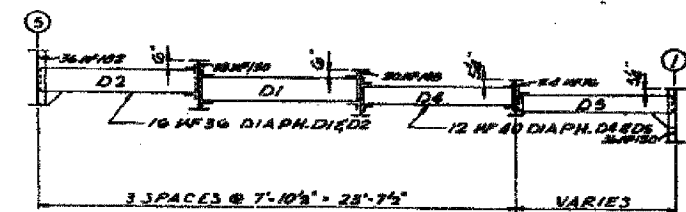
TYPICAL PARTIAL ELEVATION
SPANS #A3 THRU #A12, #A14 THRU #A17 & #H7 THRU #H13
SCALE: 3/4" = 1'-0"



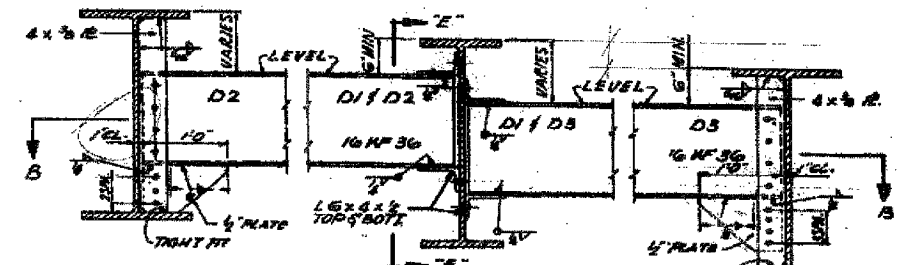
SECTION B-B
DIAPHRAGMS D1, D2 & D3
SCALE: 1/4" = 1'-0"



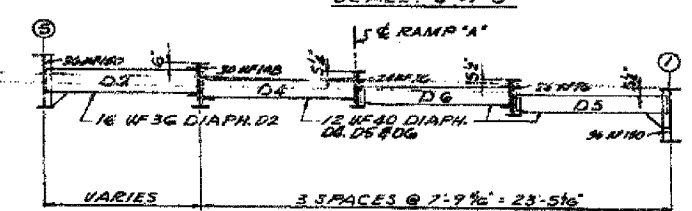
TYPICAL ELEVATION - SPANS #A1 & #A2
SCALE: 3/4" = 1'-0"



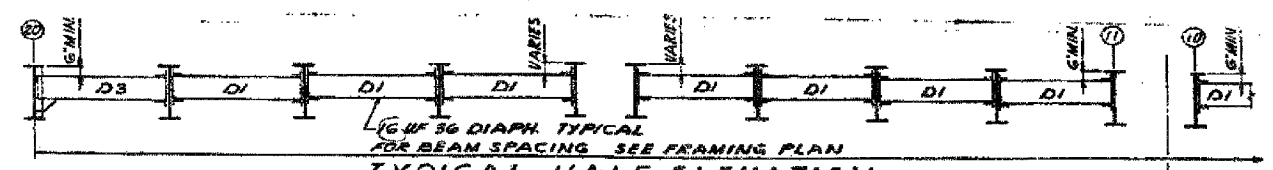
TYPICAL ELEVATION - SPAN #H6
SCALE: 3/4" = 1'-0"



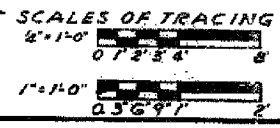
DIAPHRAGMS D1, D2 & D3
INTERMEDIATE DIAPHRAGM CONNECTIONS
SCALE: 1/4" = 1'-0"



TYPICAL ELEVATION - SPAN #A13
SCALE: 3/4" = 1'-0"



TYPICAL HALF ELEVATION
SPANS #24, #25 & #26
SCALE: 3/4" = 1'-0"



SYMMETRICAL ABOUT
SOUTH ROUTE
SUPERHIGHWAY

ALFRED BENECH & ASSOCIATES CONSULTING ENGINEERS
30 SOUTH WABASH AVENUE CHICAGO, ILLINOIS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
**SOUTH ROUTE SUPERHIGHWAY
ELEVATED HIGHWAY
28TH PLACE TO STEWART AVE.**
SECTION 2 - BEARINGS IN
INTERMEDIATE
DIAPHRAGM DETAILS
SHEET NO. 56 OF 104 SHEETS DATE: MARCH, 1991

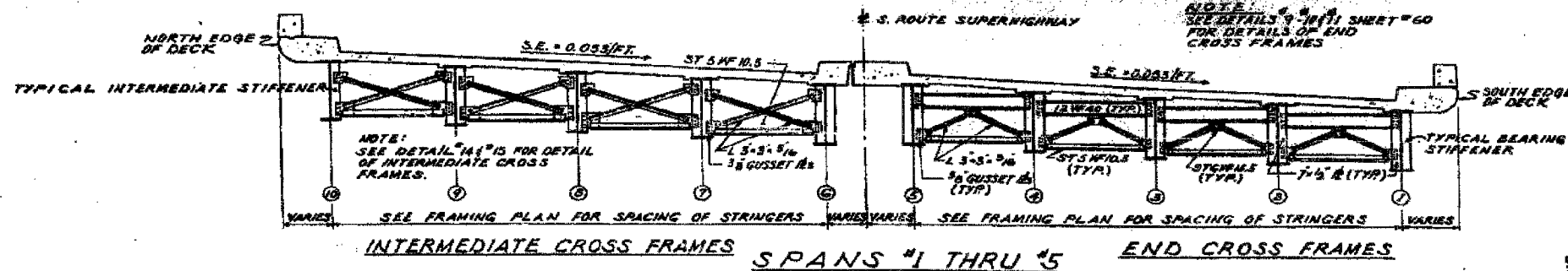
BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbancinc.com

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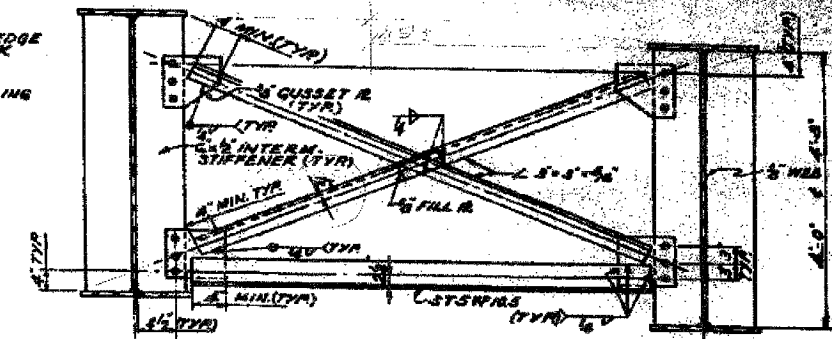
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) DAN RYAN ELEVATED BRIDGE BEARING REPLACEMENT & STEEL REPAIR EXISTING PLAN INFORMATION SN 016-1117, SN 016-1067, SN 016-1118 SCALE: NTS DATE: 5/18/2007
NAME	DATE	
		DRAWN BY: LAM CHECKED BY: BLU

5/24/2007 10:56:07 AM N:\60000\BRIDGE\21ASHEETS\60B_21A_016-1117-EP10.dwg

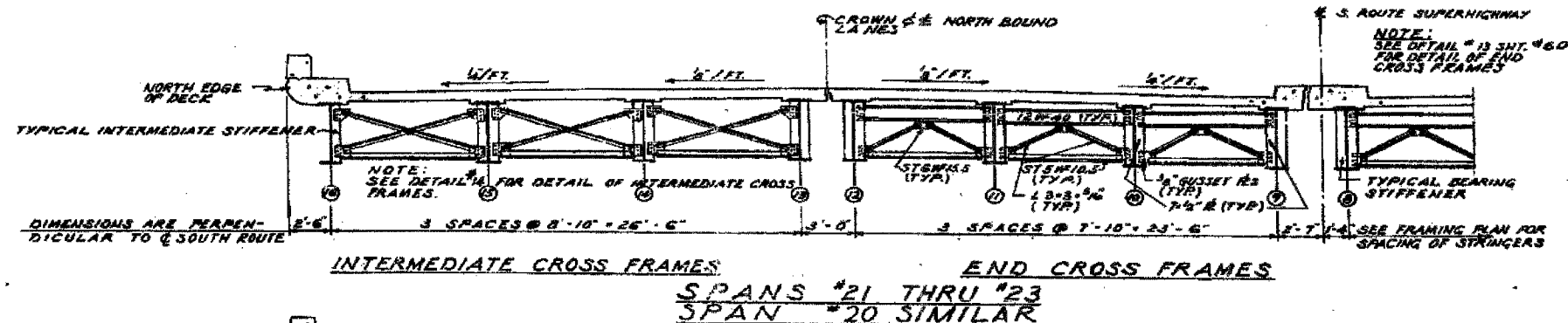
60B07



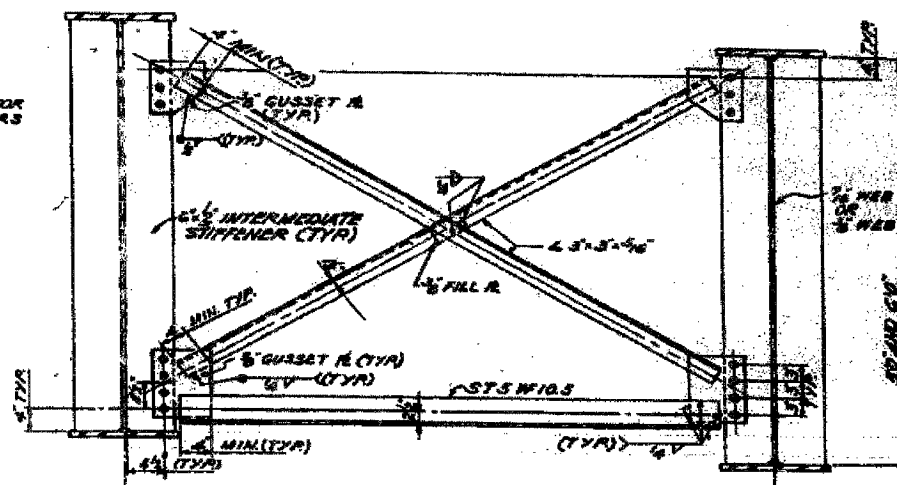
INTERMEDIATE CROSS FRAMES SPANS #1 THRU #5 END CROSS FRAMES



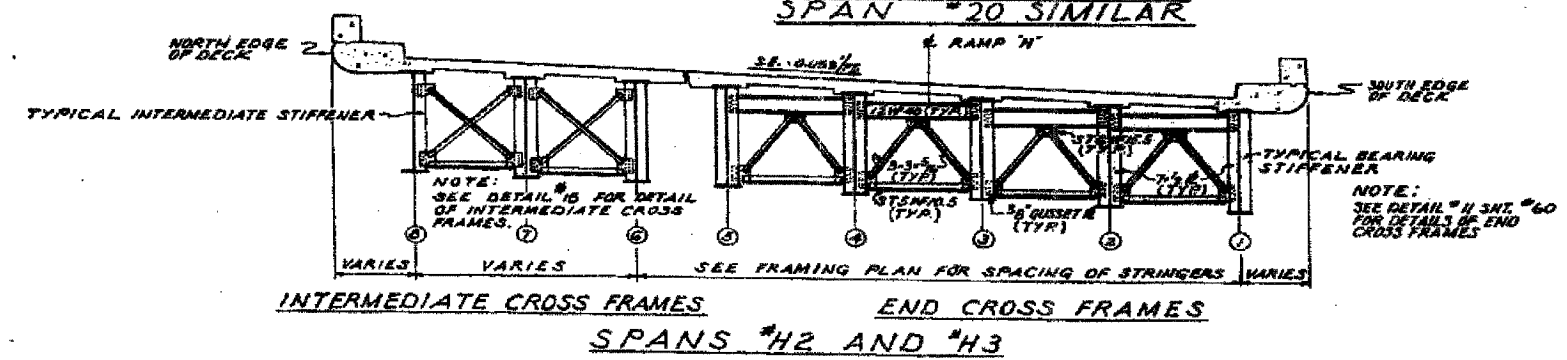
DETAIL #14 SPANS #1 #2 & #3 AND #20 THRU #23



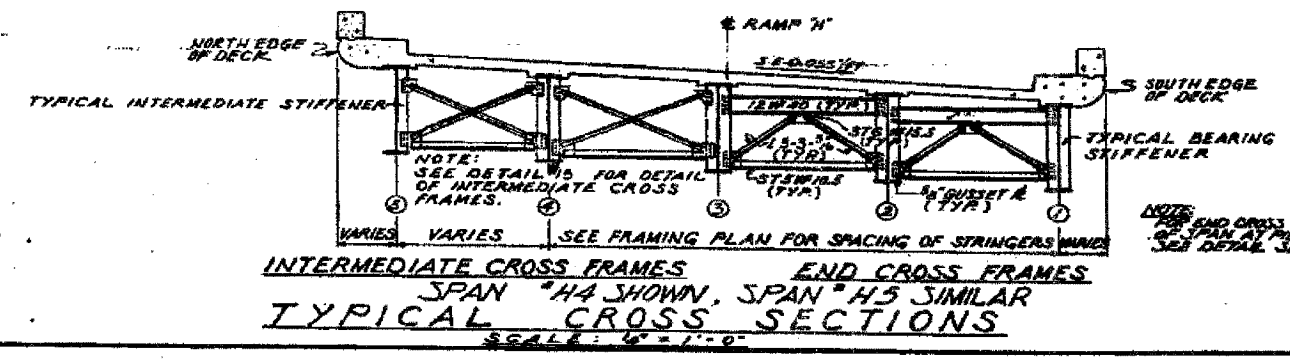
INTERMEDIATE CROSS FRAMES SPANS #21 THRU #23 END CROSS FRAMES SPAN #20 SIMILAR



DETAIL #15 SPANS #4 AND #5 #12 THRU #15 TYPICAL INTERMEDIATE CROSS FRAMES SCALE: 1\"/>



INTERMEDIATE CROSS FRAMES SPANS #12 AND #13



INTERMEDIATE CROSS FRAMES SPAN #4 SHOWN, SPAN #5 SIMILAR TYPICAL CROSS SECTIONS SCALE: 1\"/>



ALFRED BENECH & ASSOCIATES CONSULTING ENGINEERS CHICAGO, ILLINOIS SHEET NO. 24 OF 24 SHEETS DATE MARCH 1994

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
**SOUTH ROUTE SUPERHIGHWAY
ELEVATED HIGHWAY
28TH PLACE TO STEWART AVE.**
SECTION 9-2428 E-401
**CROSS FRAME ELEVATIONS AND
INTERMEDIATE CROSS FRAME DETAILS**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1117, SN 016-1067, SN 016-1118
SCALE: NTS DRAWN BY: LAM
DATE: 5/18/2007 CHECKED BY: BLU

FOR INFORMATION ONLY

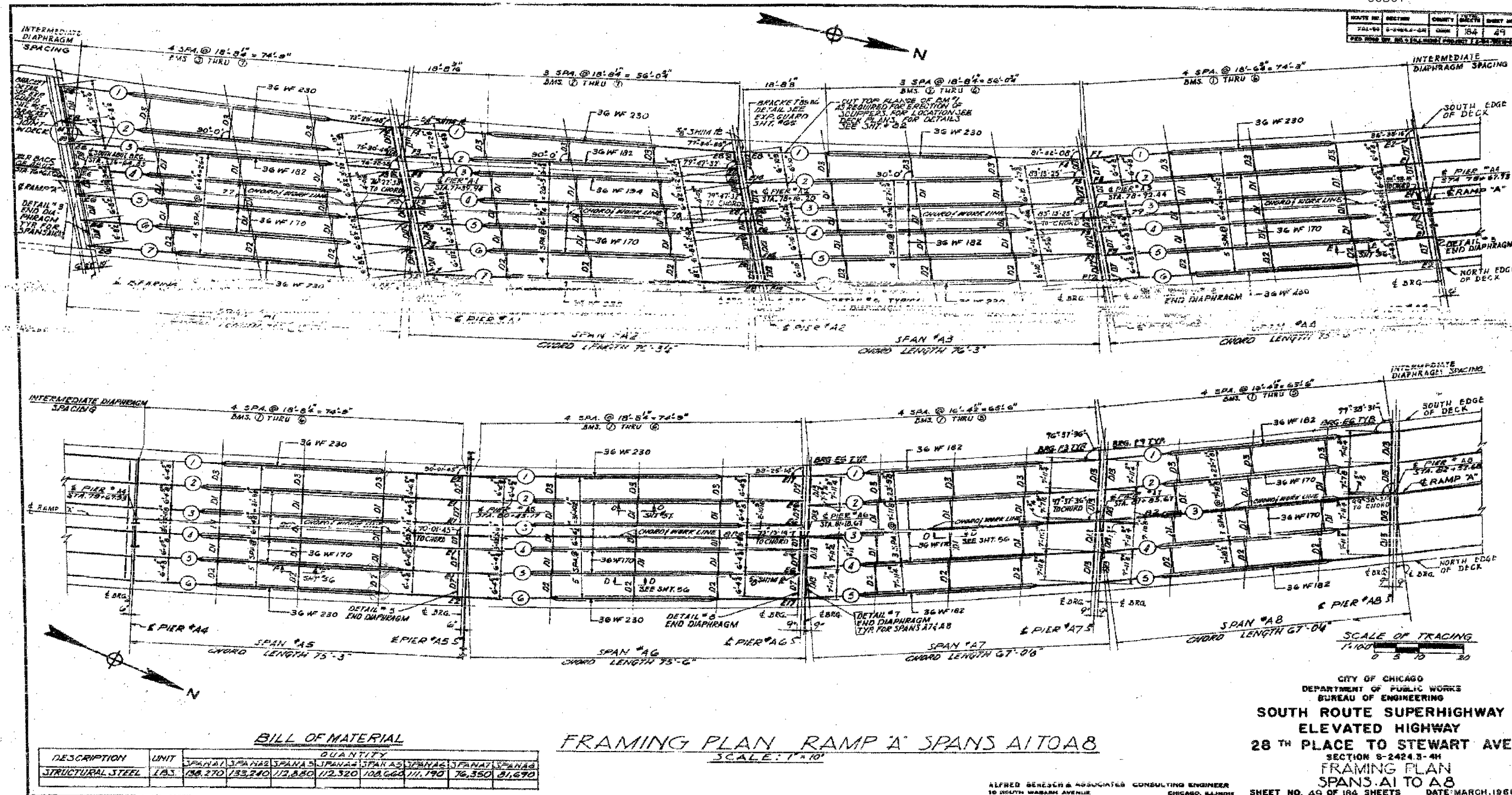
BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
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5/24/2007

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2005-086 I	COOK	228	225
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

60B07

NOV 1991	SECTION	COUNTY	DATE	SHEET NO.
FBI-91	2-2005-086-I	COOK	184	49
FED. ROAD DIST. NO. 2005-086-I PROJECT 2005-086-I				



BILL OF MATERIAL

DESCRIPTION	UNIT	SPAN A1	SPAN A2	SPAN A3	SPAN A4	SPAN A5	SPAN A6	SPAN A7	SPAN A8
STRUCTURAL STEEL	TBS	138,270	133,240	113,880	112,520	108,660	111,190	76,350	81,670

FRAMING PLAN RAMP 'A' SPANS A1 TO A8
SCALE: 1"=10'

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
**SOUTH ROUTE SUPERHIGHWAY
ELEVATED HIGHWAY
28TH PLACE TO STEWART AVE.**
SECTION 8-2424.3-4H
**FRAMING PLAN
SPANS A1 TO A8**
ALFRED BENESE & ASSOCIATES CONSULTING ENGINEER
10 SOUTH WABASH AVENUE CHICAGO, ILLINOIS
SHEET NO. 49 OF 184 SHEETS DATE: MARCH, 1961

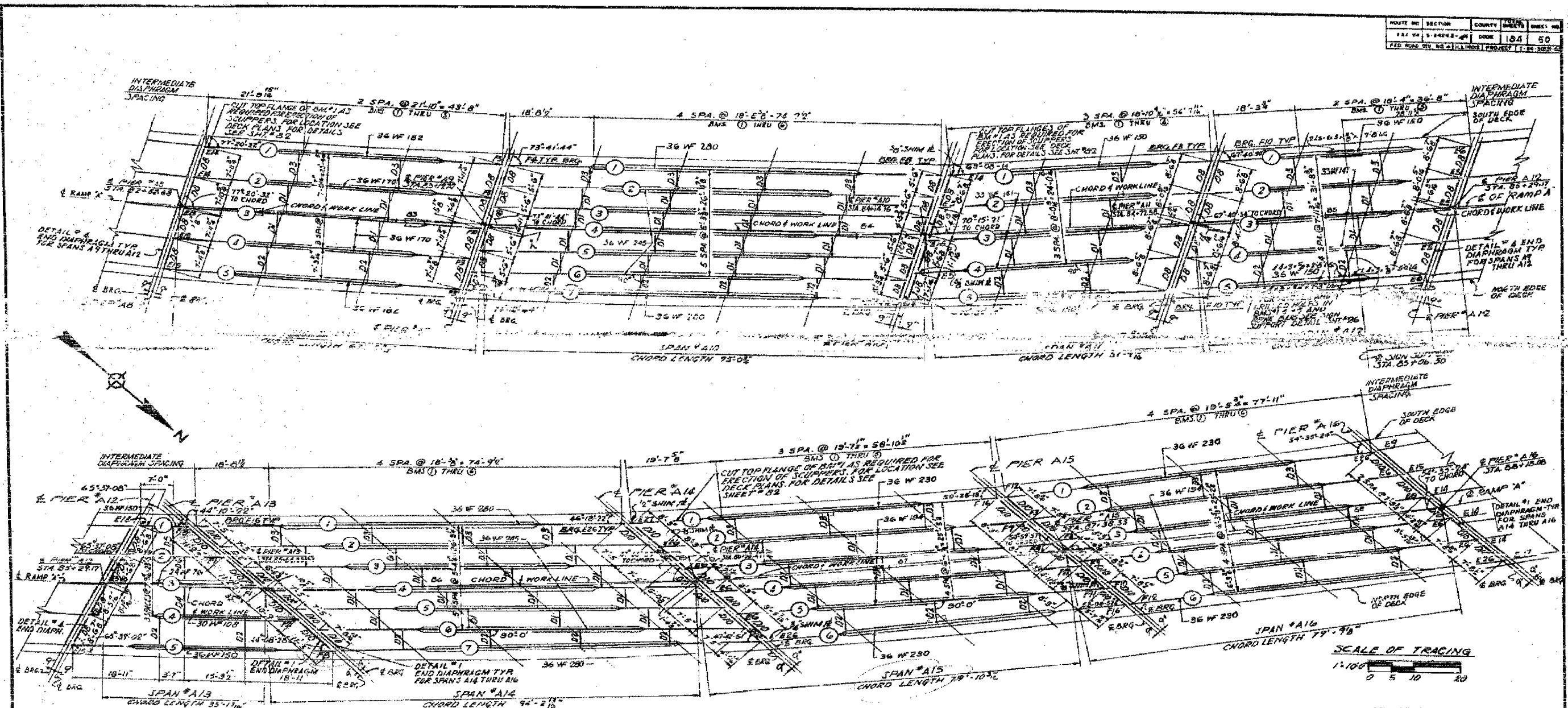
BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
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FOR INFORMATION ONLY

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1067
SCALE: NTS
DATE: 5/18/2007
DRAWN BY: LAM
CHECKED BY: BLU

11/660/CDD/BRIDGE/21A/SHEET'S/660_21A_016-1067-F/101/49



BILL OF MATERIAL

DESCRIPTION	UNIT	QUANTITY
STRUCTURAL STEEL	LBS	75,090
		21,030
		56,260
		62,430
		27,660
		212,530
		123,420
		129,300

FRAMING PLAN RAMP A' SPANS A9 TO A16
SCALE: 1"=10'

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
**SOUTH ROUTE SUPERHIGHWAY
ELEVATED HIGHWAY
28TH PLACE TO STEWART AVE.**
SECTION S-2424.3-4H
**FRAMING PLAN
SPANS A9 TO A16**
ALFRED BENECH & ASSOCIATES CONSULTING ENGINEERS
12 SOUTH WABASH AVENUE CHICAGO, ILLINOIS
SHEET NO. 50 OF 104 SHEETS DATE: MARCH, 1961

FOR INFORMATION ONLY

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
EXISTING PLAN INFORMATION
SN 016-1067
SCALE: NTS DRAWN BY: LAM
DATE: 5/18/2007 CHECKED BY: BLU

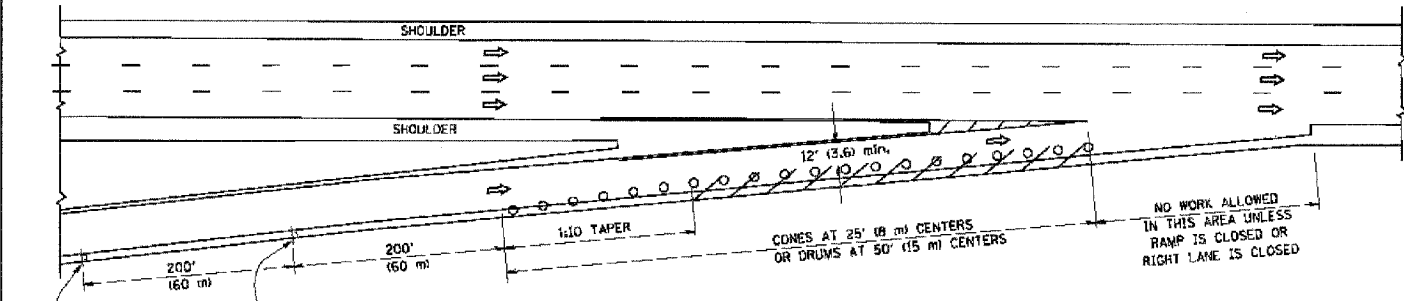
BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com

5/24/2007 5:06:06 PM

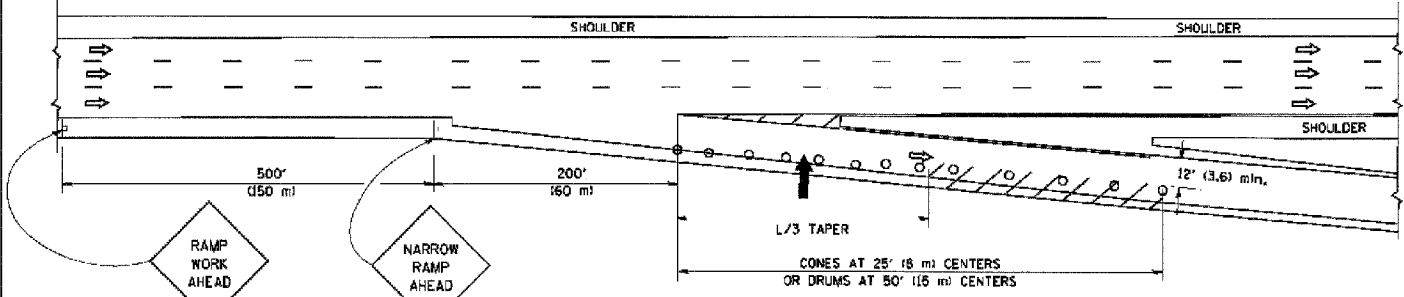
PARTIAL RAMP CLOSURE DETAILS

SHOULDER CLOSURE DETAILS

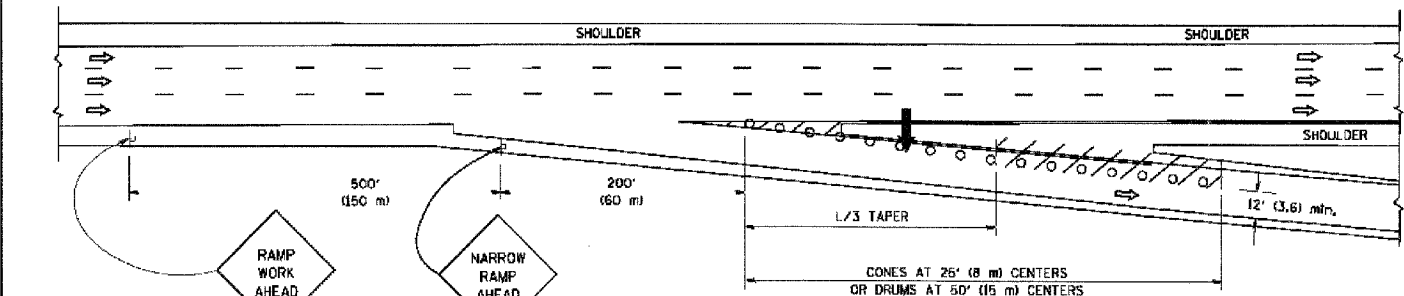
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2005-086 I	COOK	228	227
STA.	TO STA.		ILLINOIS FED. AID PROJECT	
FED. ROAD DIST. NO.	60B07			



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

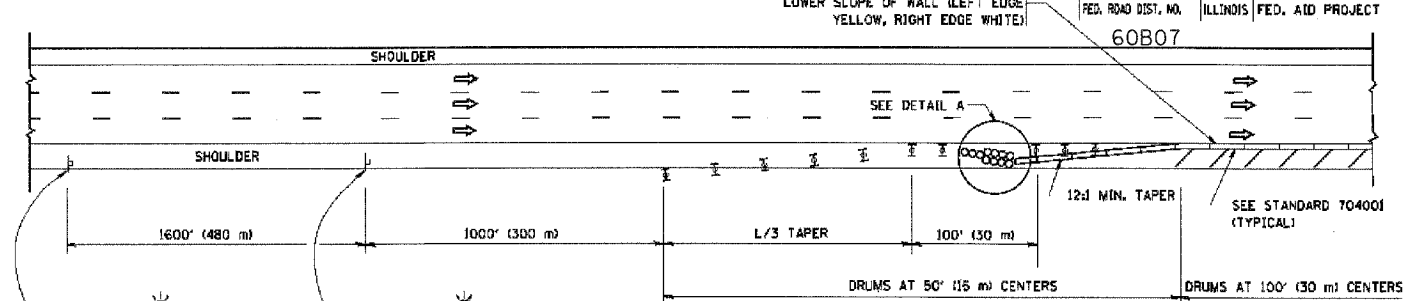
SYMBOLS

- ➔ ARROWBOARD
- ▨ WORK AREA
- ⊥ SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- ⊥ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

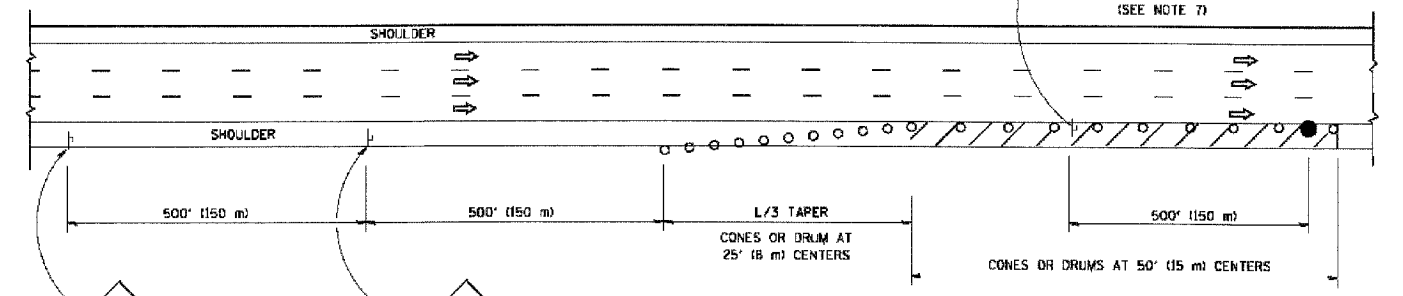
GENERAL NOTES

- THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC: $L=0.65(W)(S)$
	ENGLISH: $L=(W)(S)$
	W = WIDTH OF OFFSET IN FEET (METERS)
	S = NORMAL POSTED SPEED MPH (KM/H)
- PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT FOR POSTED SPEED.

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

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03
JAF	2/06
SPB	1/07

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL DETAILS
 FOR FREEWAY
 SHOULDER CLOSURES
 PARTIAL RAMP CLOSURES
 DESIGNED BY: DWS
 DRAWN BY:
 CHECKED BY:
 TC-17

PLT DATE: 3/7/2007
 FILE NAME: K:\Users\Aval7\p...
 USER NAME: A...
 BOARD:

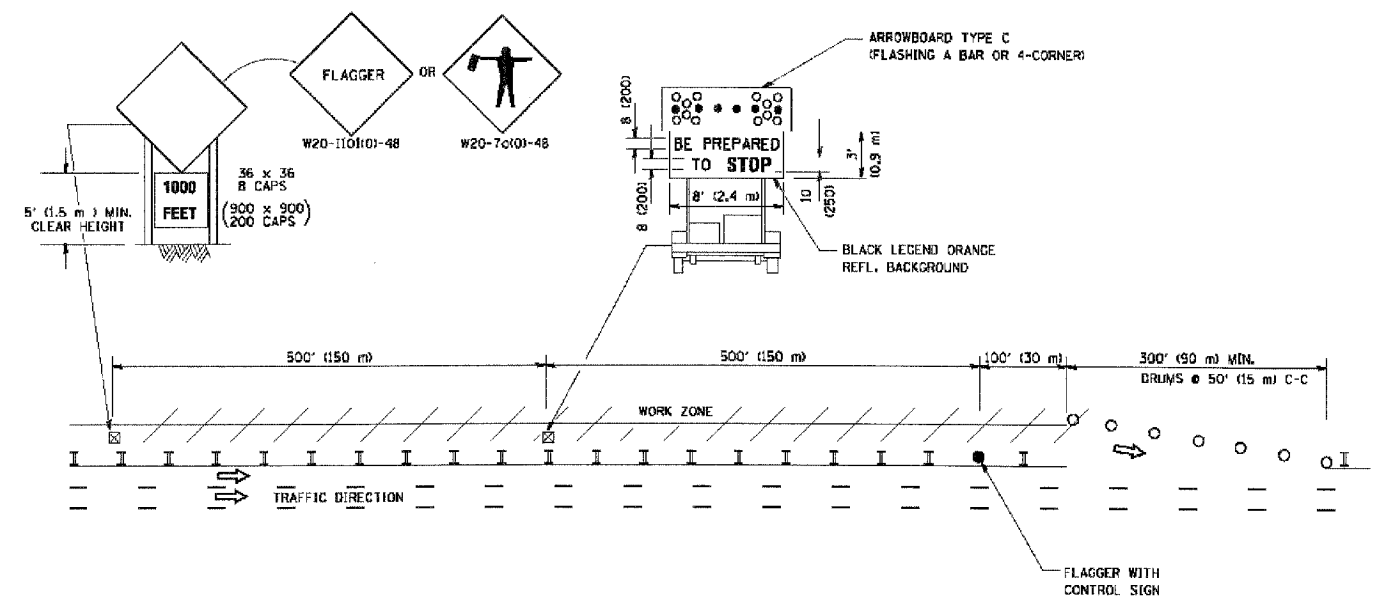
BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
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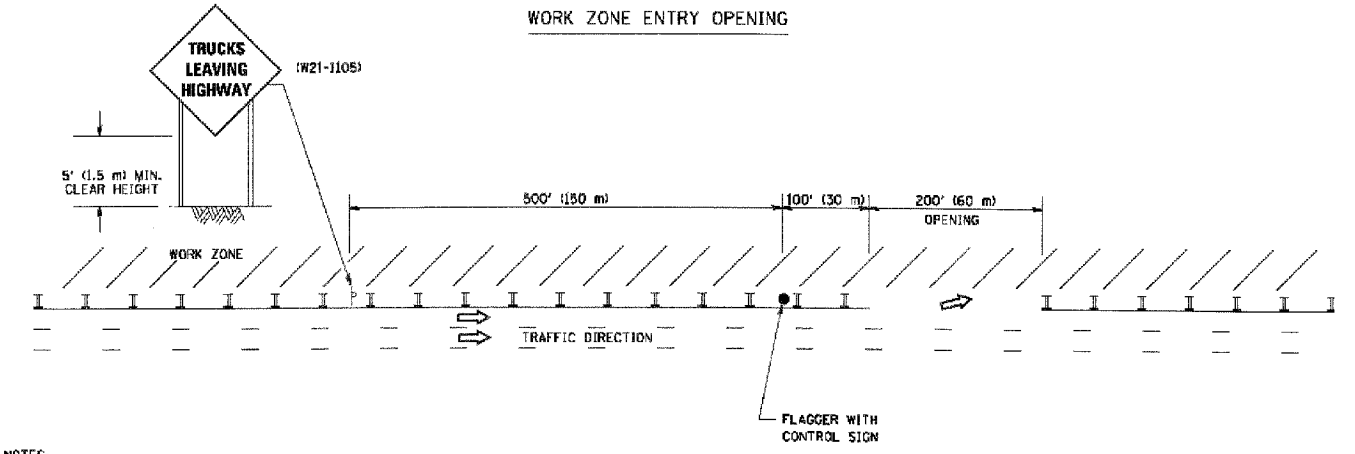
CONTRACT NO.		TOTAL SHEETS		SHEET NO.	
F.A. RTE.	SECTION	COUNTY	228	228	
94/90	2005-086 I	COOK			
STA.	TO STA.				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			
	60B07				

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving Highway sign shall be removed or turned away from traffic and the exit and entry openings shall be closed when the flagging operation ceases.
2. Work Zone Exit Openings should be a minimum of one half mile apart.
3. Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
4. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
DWS	8/98
JAF	4/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
SIGNING FOR FLAGGING OPERATIONS
AT WORK ZONE OPENINGS

SCALE: NONE

DRAWN BY CADD
CHECKED BY
TC-18

PLOT DATE : 3/7/2007
PLOT SCALE : 1/8"=1'-0"
USER NAME : bbarrett

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com



I:\660\cadd\BRIDGE\21A\SHEET\5\660_21A_1202207.dwg 5:33:11 PM 3/24/2007