

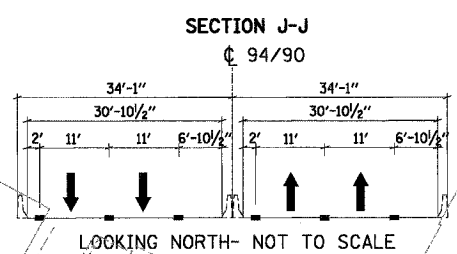
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	101
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62580				

**WHITE SOX PARKING**  
 CASH USE 35TH OR PERSHING  
 RESERVED USE 31ST

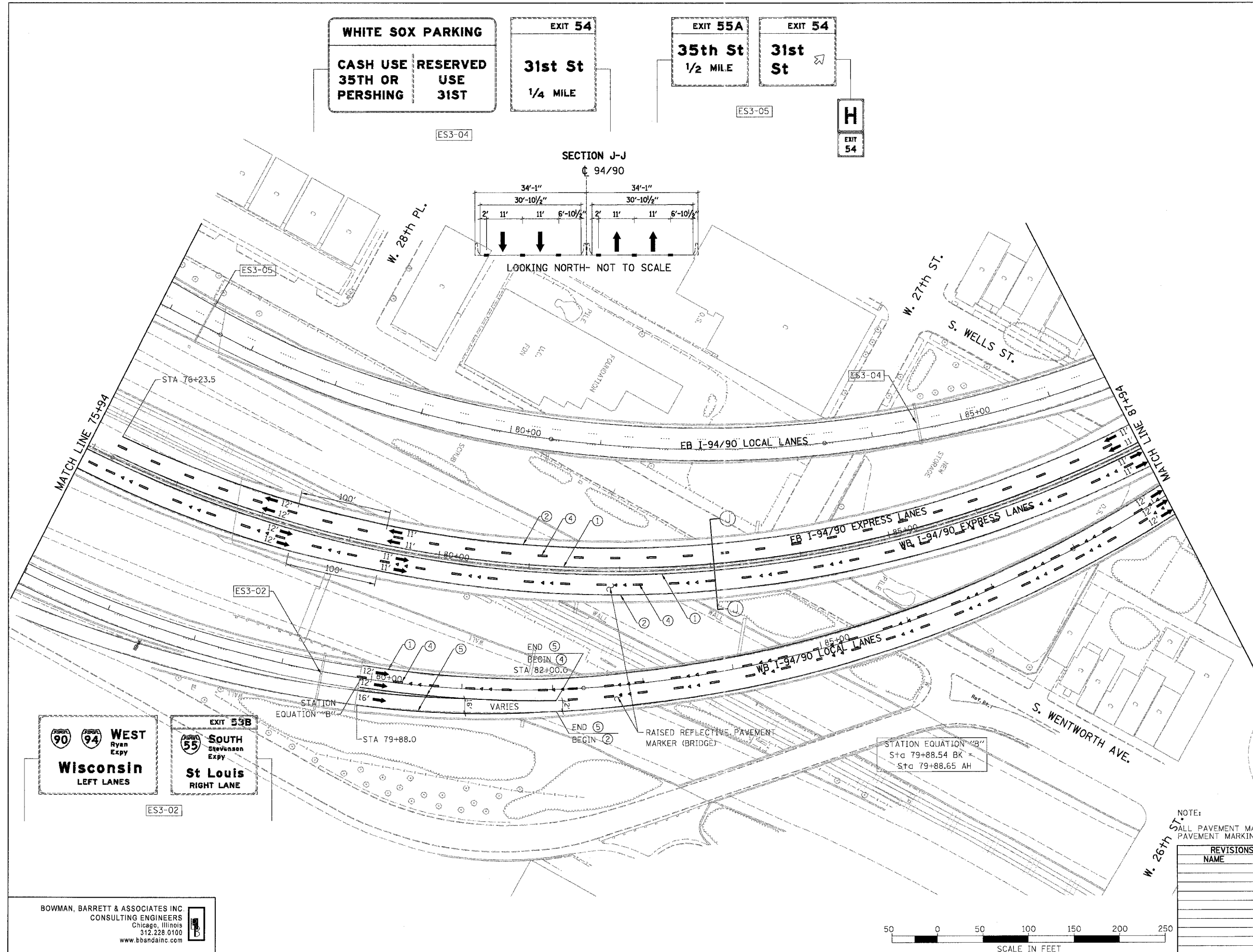
EXIT 54  
**31st St**  
 1/4 MILE

EXIT 55A  
**35th St**  
 1/2 MILE

EXIT 54  
**31st St**



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS

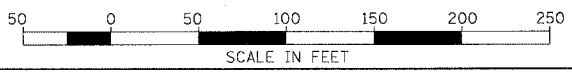


**WEST**  
 Ryan Expy  
**Wisconsin**  
 LEFT LANES

EXIT 53B  
  
**SOUTH**  
 Stevenson Expy  
**St Louis**  
 RIGHT LANE

NOTE:  
 ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

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REVISIONS	
NAME	DATE

CPM-03

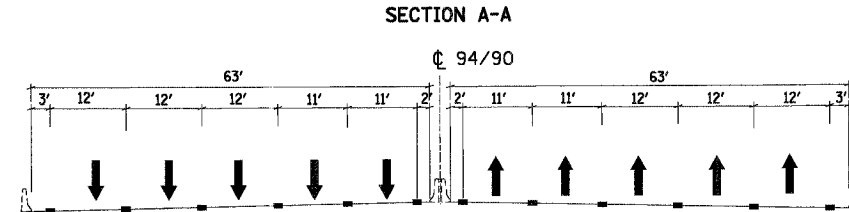
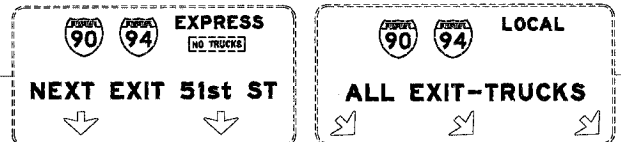
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PROPOSED PAVEMENT MARKING PLAN  
 STA. 75+94 TO STA. 87+94

SCALE: 1"=50'  
 DATE: 7/22/2005

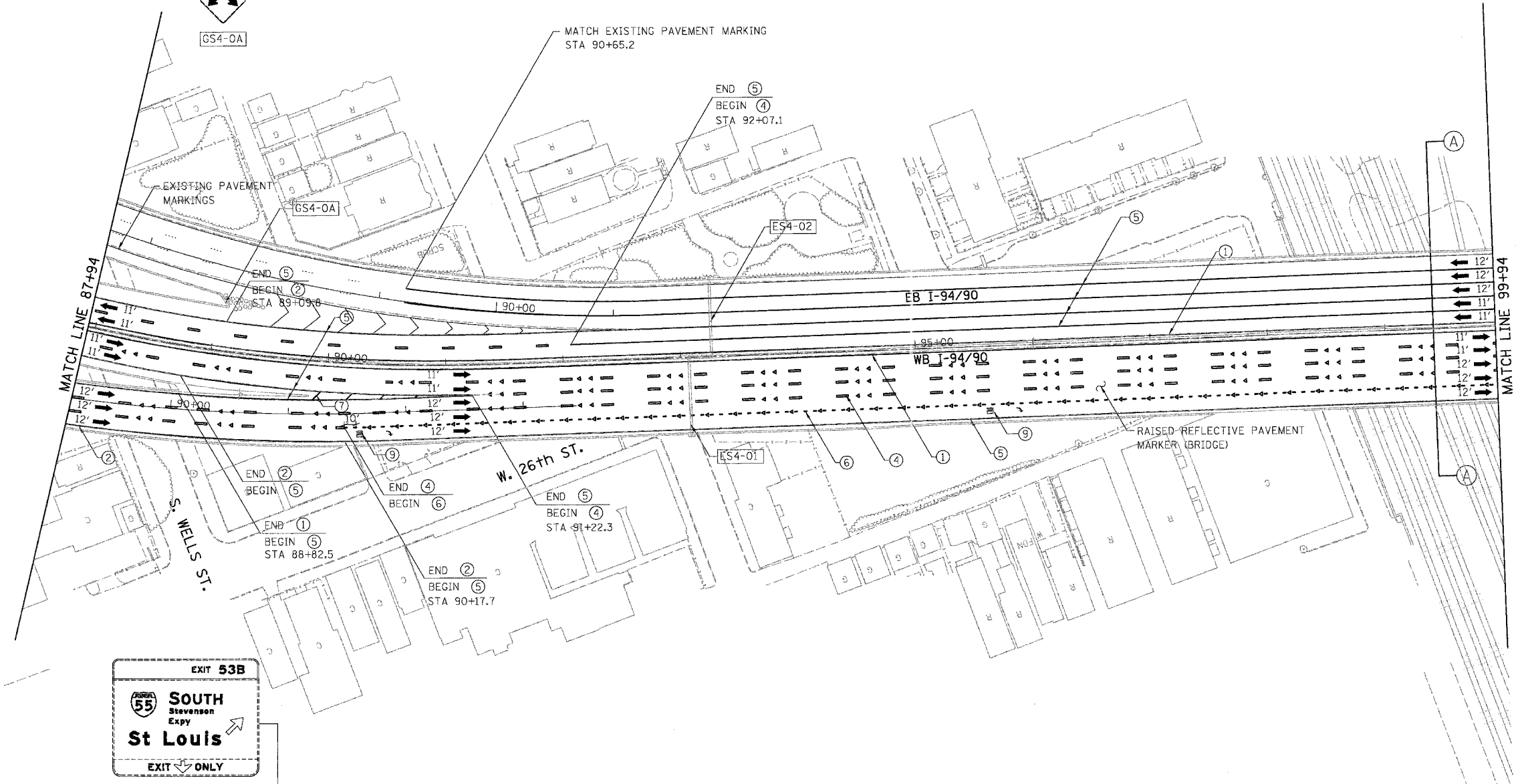
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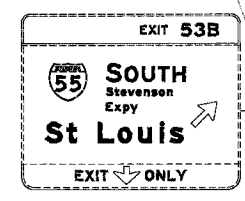
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	102
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	62580	



LOOKING NORTH - NOT TO SCALE



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS



NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

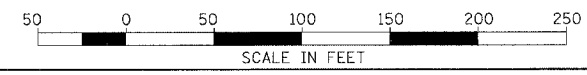
CPM-04

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**F.A.I. 94/90 (DAN RYAN EXPRESSWAY)**  
**NB DAN RYAN ELEVATED BRIDGE**  
**REPAIR FROM 15TH TO 28TH STREETS**  
**PROPOSED PAVEMENT MARKING PLAN**  
**STA. 87+94 TO STA. 99+94**

SCALE: 1"=50'  
DATE: 7/22/2005

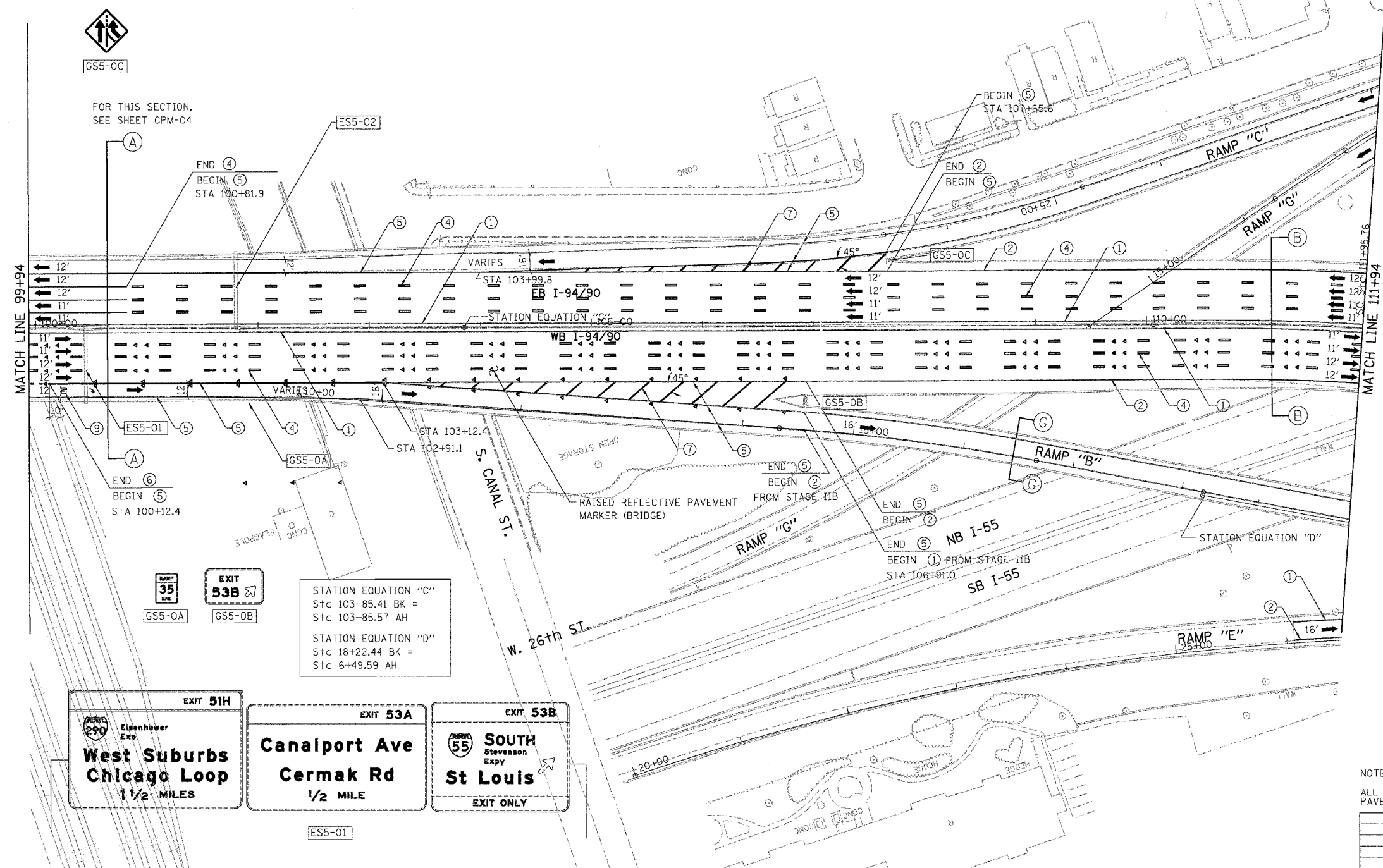
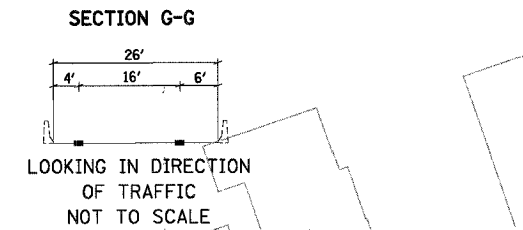
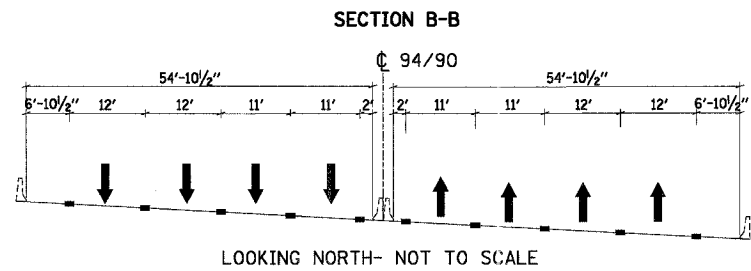
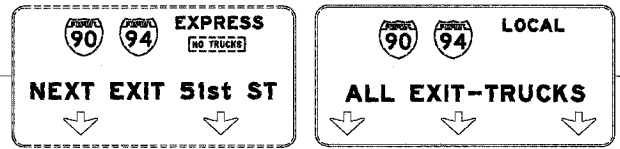
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CHECKED BY: RS



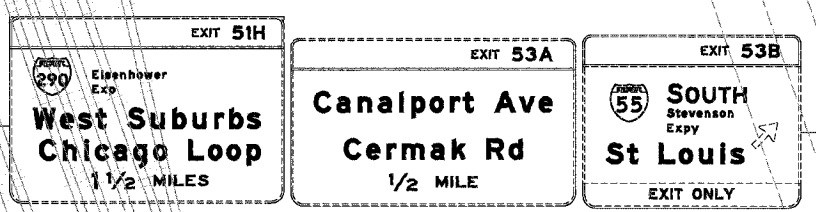
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3/28/06 PM 7/27/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	103
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				

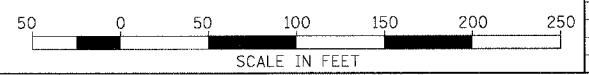


- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS



NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) NB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS PROPOSED PAVEMENT MARKING PLAN STA. 99+94 TO STA. 111+94
NAME	DATE	
		SCALE: 1"=50' DATE: 8/12/2005 DRAWN BY: RA CHECKED BY: RS

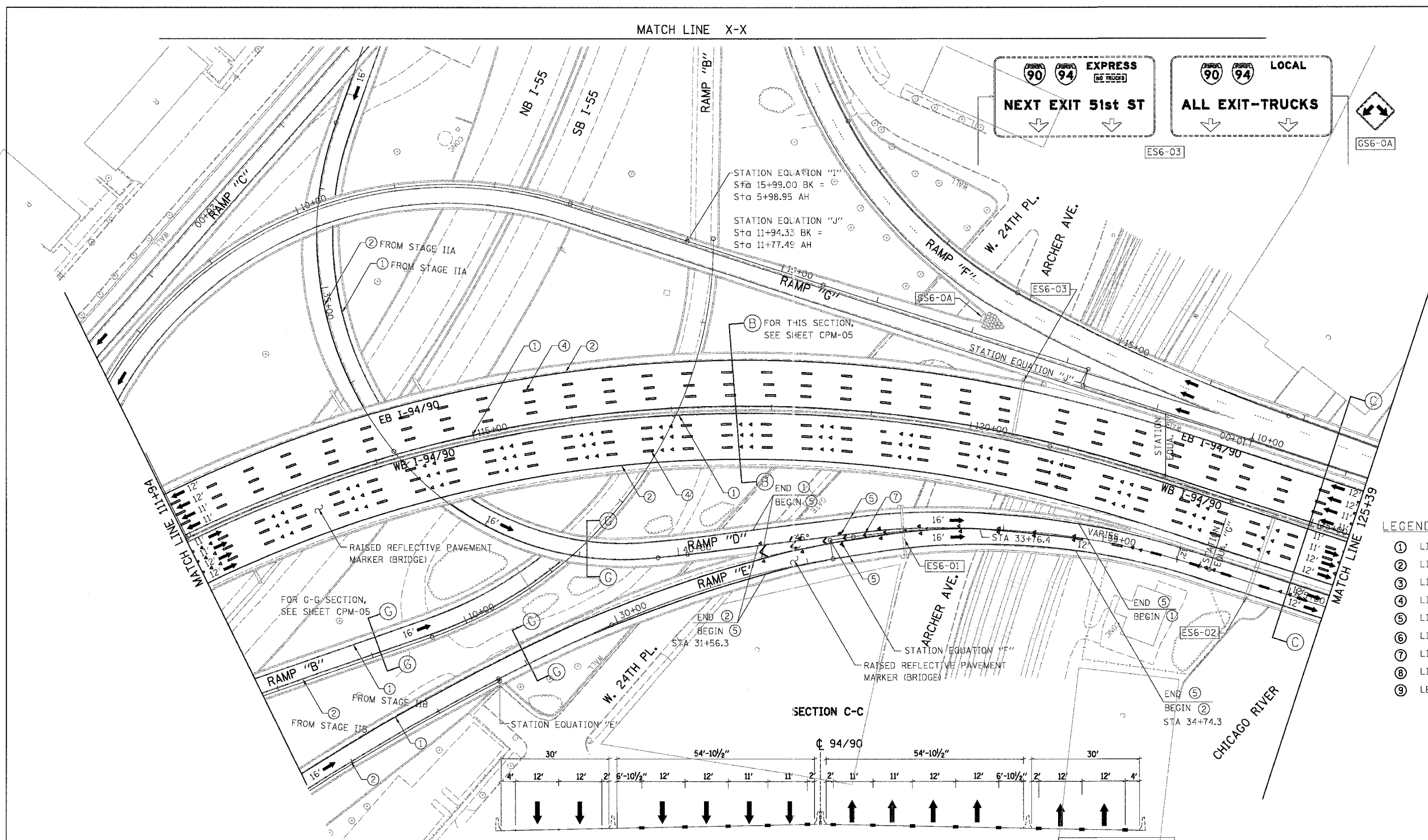


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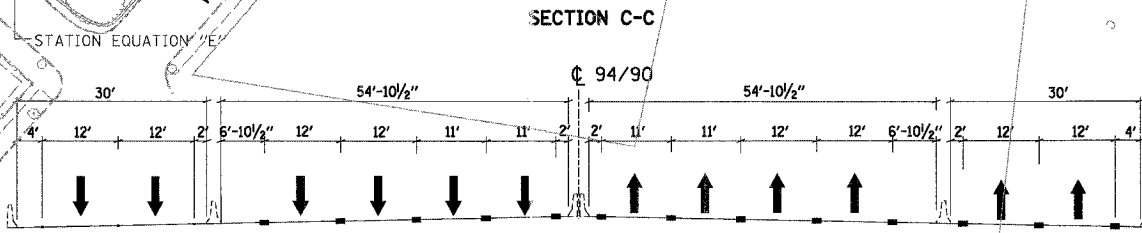
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	104
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62580				

MATCH LINE X-X



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS



LOOKING NORTH- NOT TO SCALE

EXIT 53A  
**Canalport Ave  
Cermak Rd**  
LEFT 1/4 MILE

DMS

STATION EQUATION "E"  
Sta 28+70.78 BK =  
Sta 28+68.28 AH

STATION EQUATION "F"  
Sta 32+25.87 BK =  
Sta 32+25.87 AH

STATION EQUATION "C"  
Sta 36+10.50 BK =  
Sta 124+16.76 AH

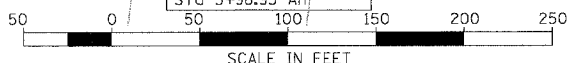
STATION EQUATION "H"  
Sta 15+99.00 BK =  
Sta 5+98.95 AH

NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED. CPM-06

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. 111+94 TO STA. 125+39

SCALE: 1"=50' DRAWN BY: RA  
DATE: 7/22/2005 CHECKED BY: RS

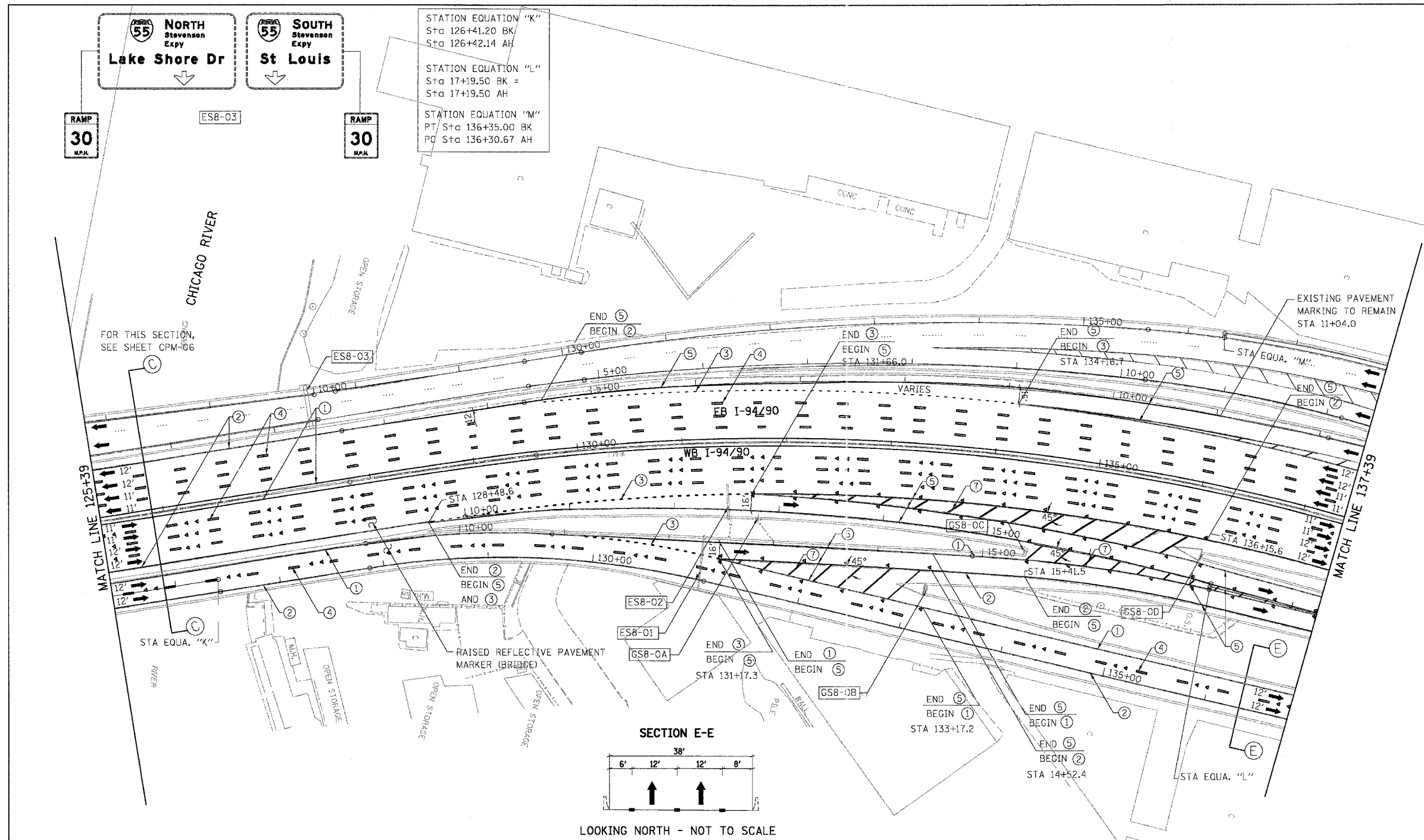


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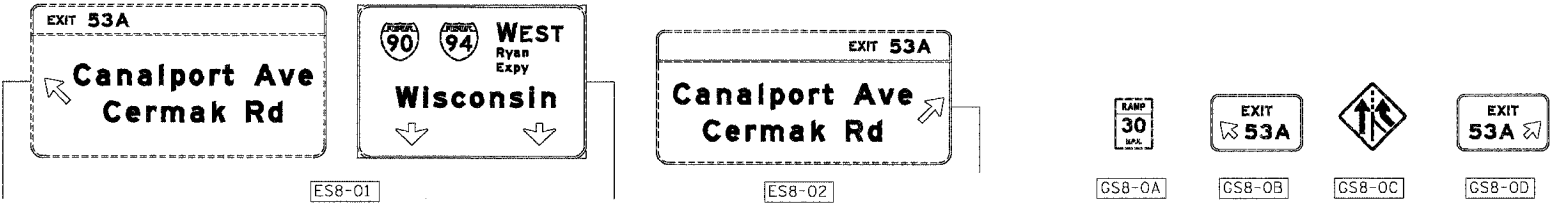
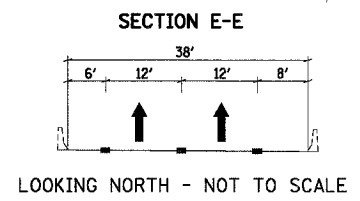
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	106
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62580				



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS



NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

CPM-08

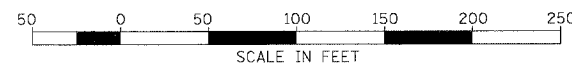
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. 125+39 TO STA. 137+39

SCALE: 1"=50'  
DATE: 8/12/2005

DRAWN BY: RA  
CHECKED BY: RS

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CONSULTING ENGINEERS  
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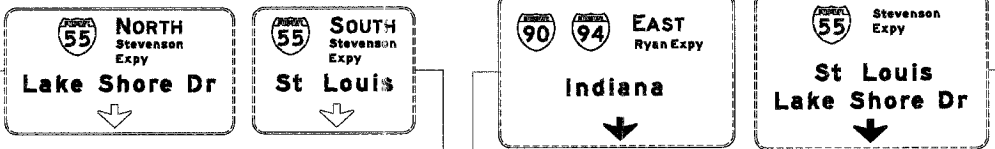


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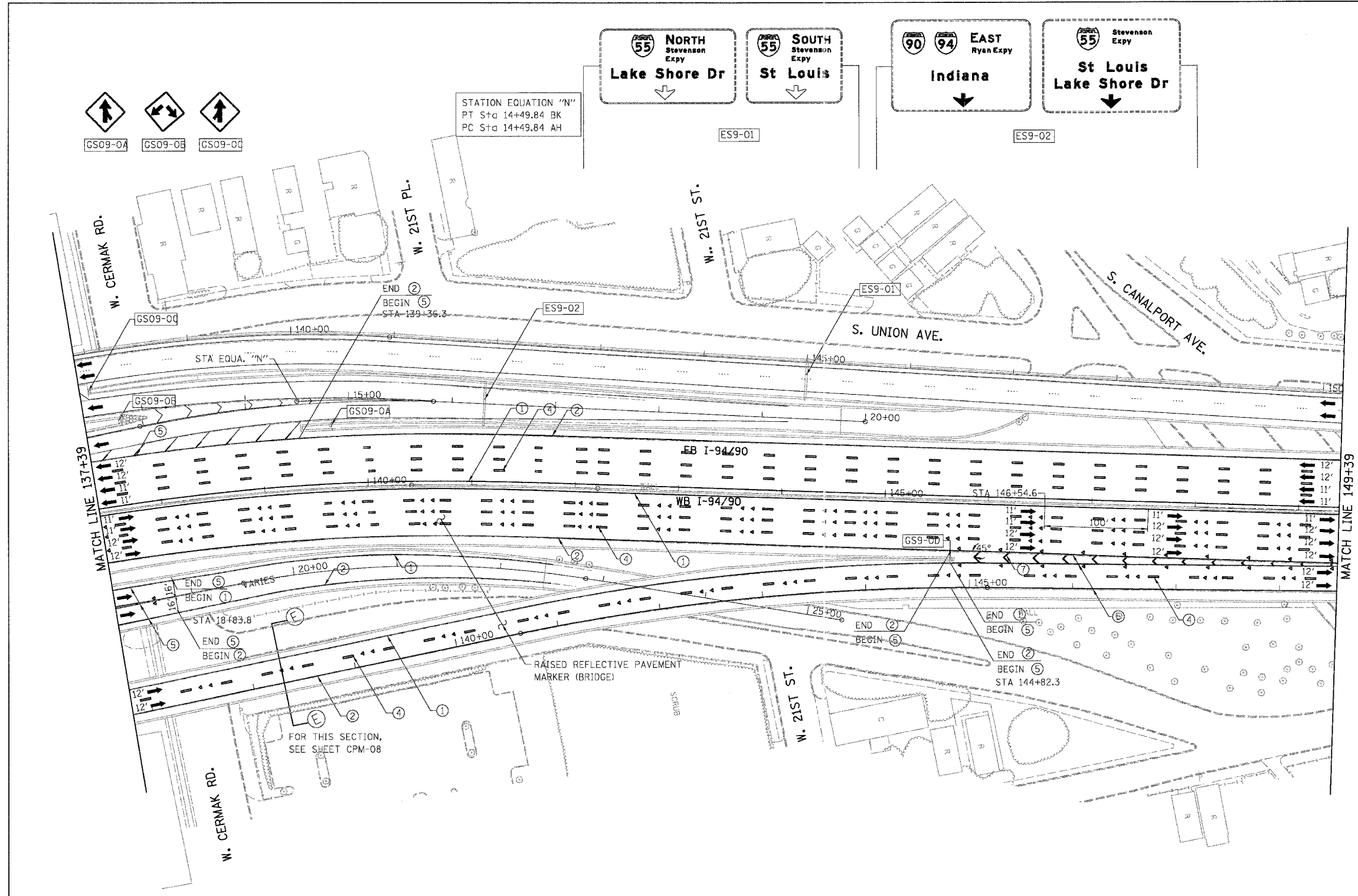
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	107
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



STATION EQUATION "N"  
PT Sta 14+49.84 BK  
PC Sta 14+49.84 AH



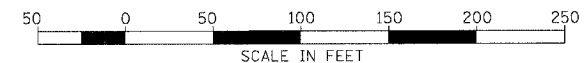
- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS



FOR THIS SECTION,  
SEE SHEET CPM-08

NOTE:  
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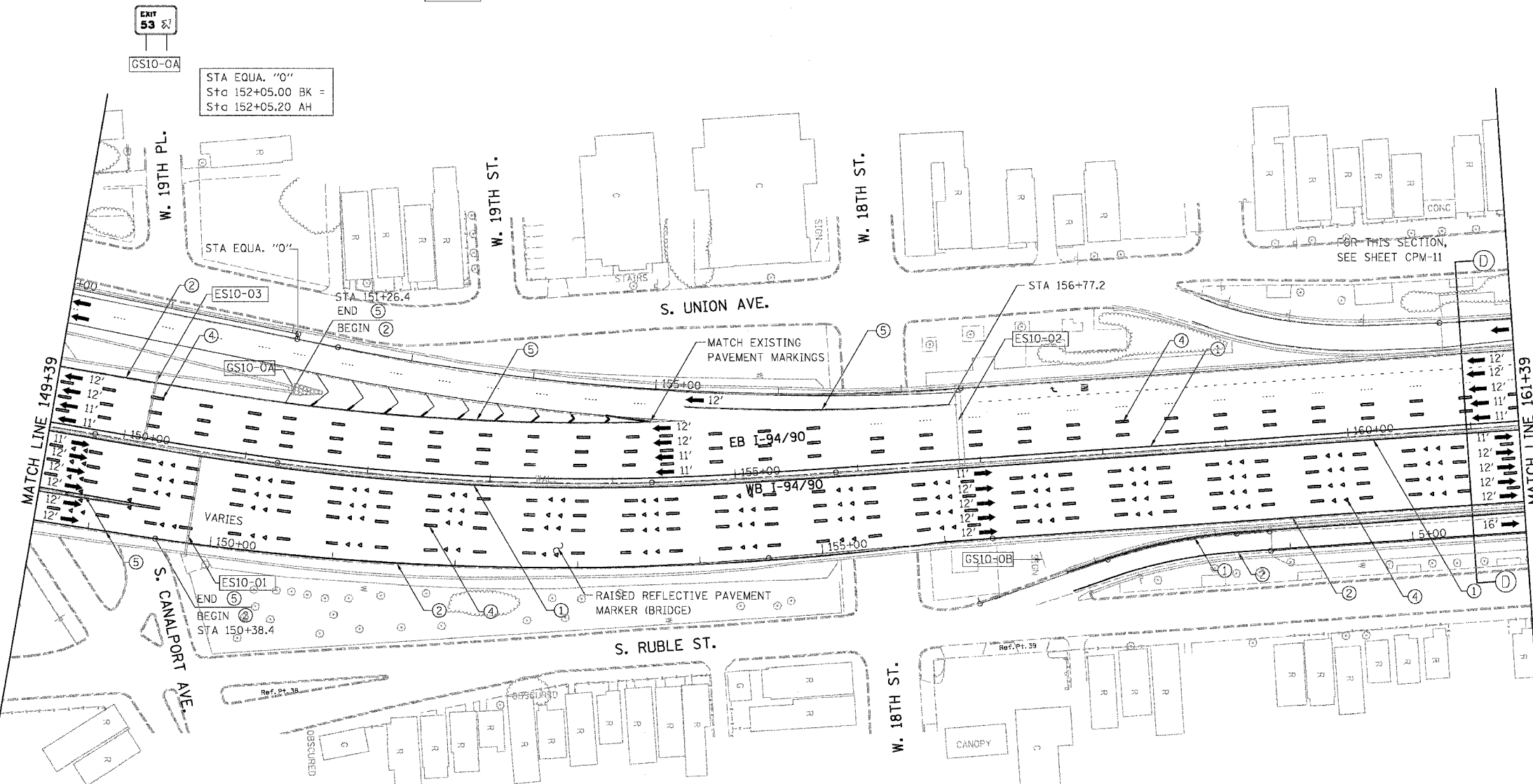
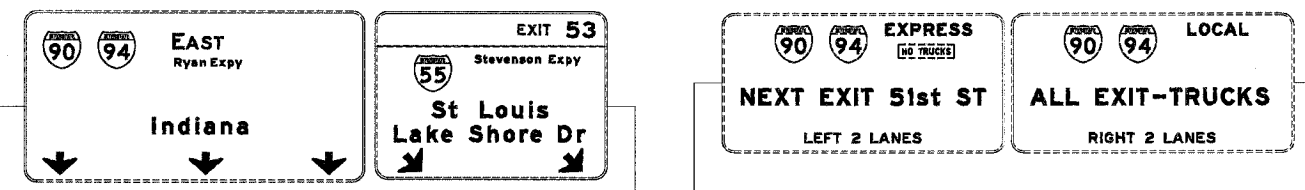


REVISIONS	
NAME	DATE

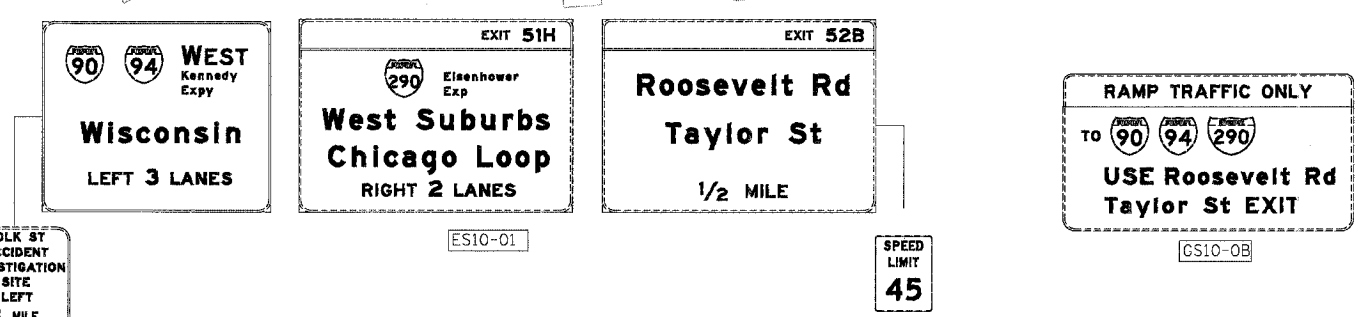
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. 137+39 TO STA. 149+39  
SCALE: 1"=50'  
DATE: 7/22/2005  
DRAWN BY: RA  
CHECKED BY: RS

7/20/2005 3:33:46 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	108
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



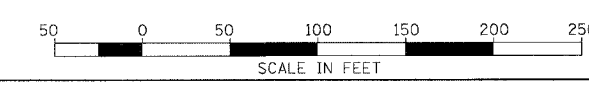
- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS



NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**F.A.I. 94/90 (DAN RYAN EXPRESSWAY)**  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PROPOSED PAVEMENT MARKING PLAN  
 STA. 149+39 TO STA. 161+39  
 SCALE: 1"=50'  
 DATE: 7/22/2005  
 DRAWN BY: RA  
 CHECKED BY: RS

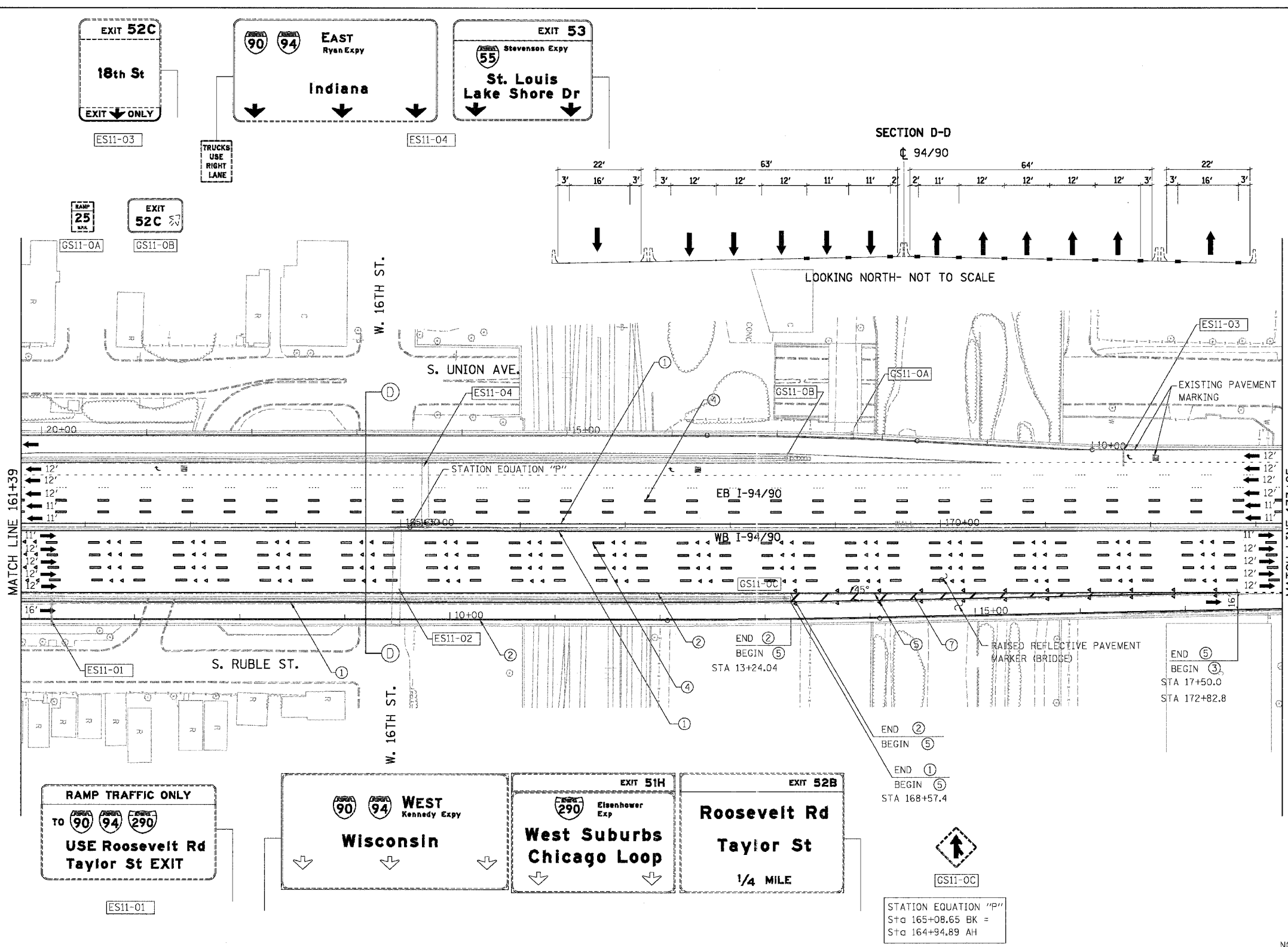


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7/22/2005 3:33:44 PM



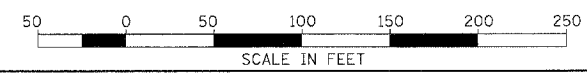
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	109
STA.		TO STA.		
62580				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS

NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

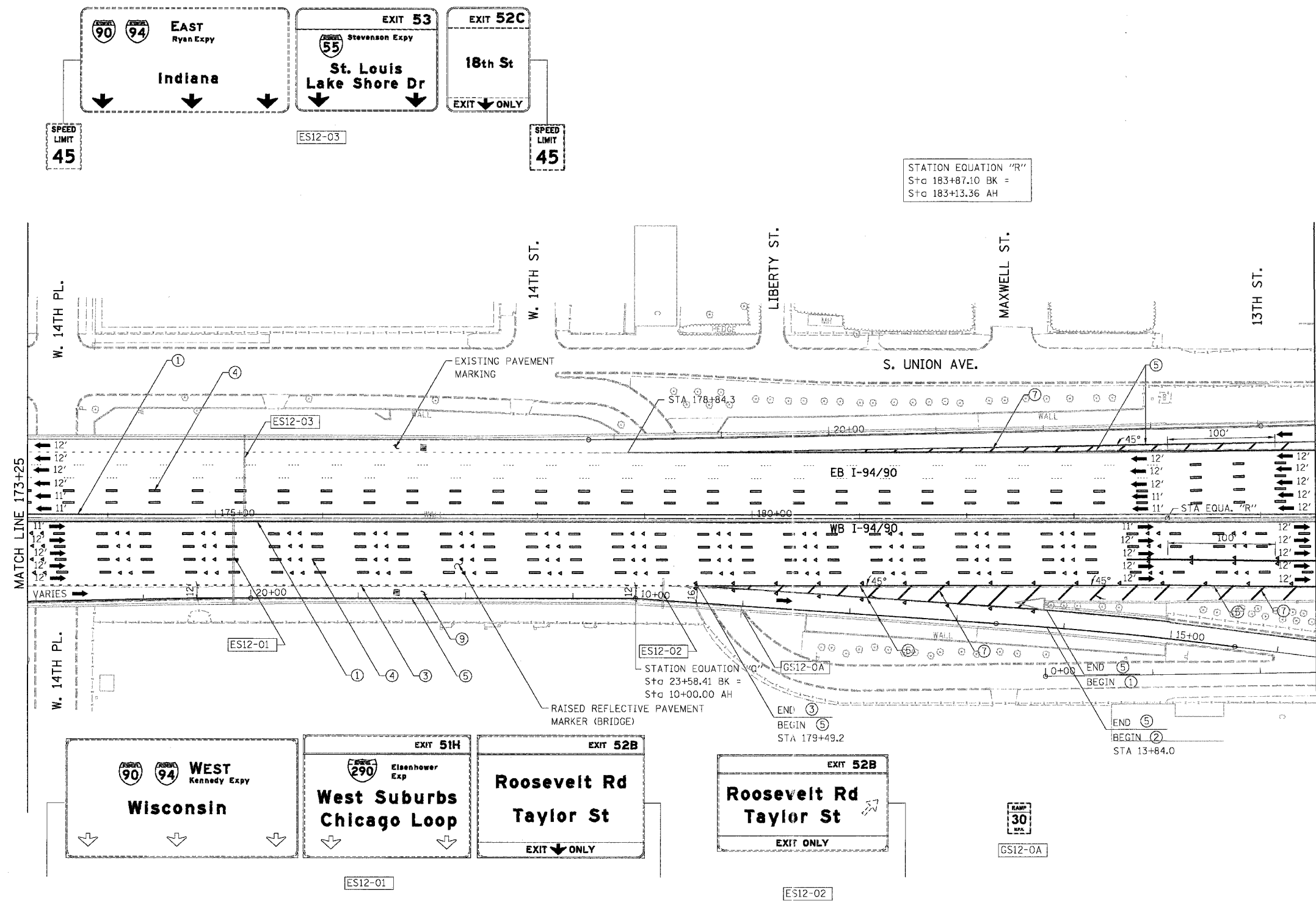
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) NB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS PROPOSED PAVEMENT MARKING PLAN STA. 161+39 TO STA. 173+25
NAME	DATE	
		SCALE: 1"=50' DATE: 7/22/2005 DRAWN BY: RA CHECKED BY: RS



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MAGDOUGHERT/SCHULTZ/STANLEY/3.3.46 PM 7/27/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	110
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS

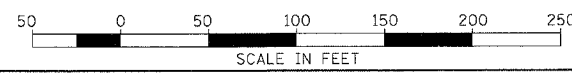
NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. 173+25 TO STA. 184+51

SCALE: 1"=50'  
DATE: 8/12/2005

DRAWN BY: RA  
CHECKED BY: RS



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10/2005 AM 8/12/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	111
STA.		TO STA.		
62580				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

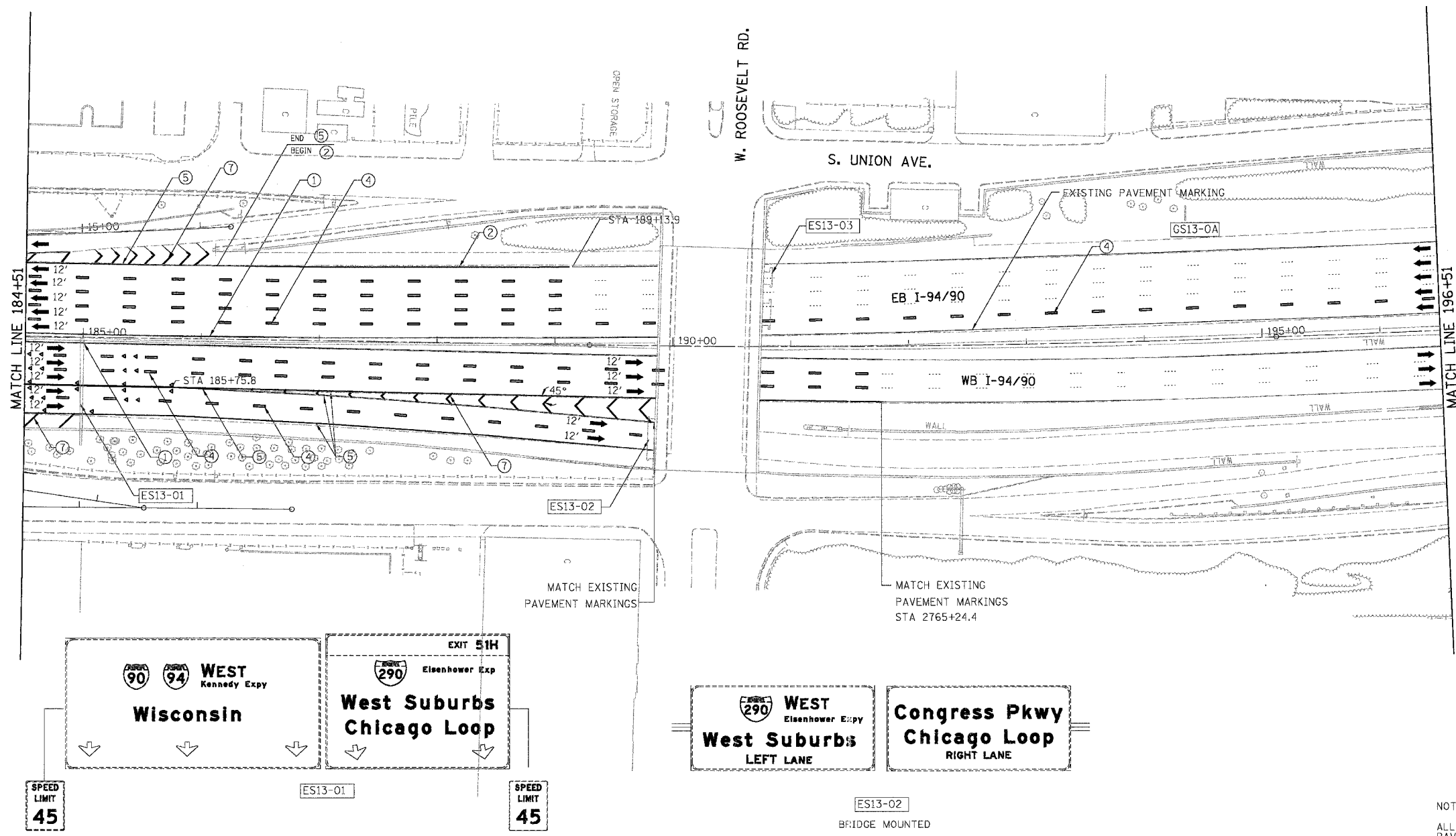
U.s. Cellular Field  
TOURIST INFO  
Turn Radio To  
1620 AM

GS13-0A

EXIT 53  
Stevenson Expy  
St. Louis  
Lake Shore Dr  
1/2 MILE

EXIT 52C  
18th St  
3/4 MILE

ES13-03  
BRIDGE MOUNTED



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS

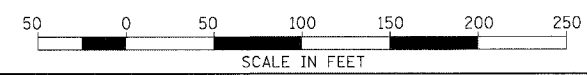
NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

CPM-13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. 184+51 TO STA. 196+51

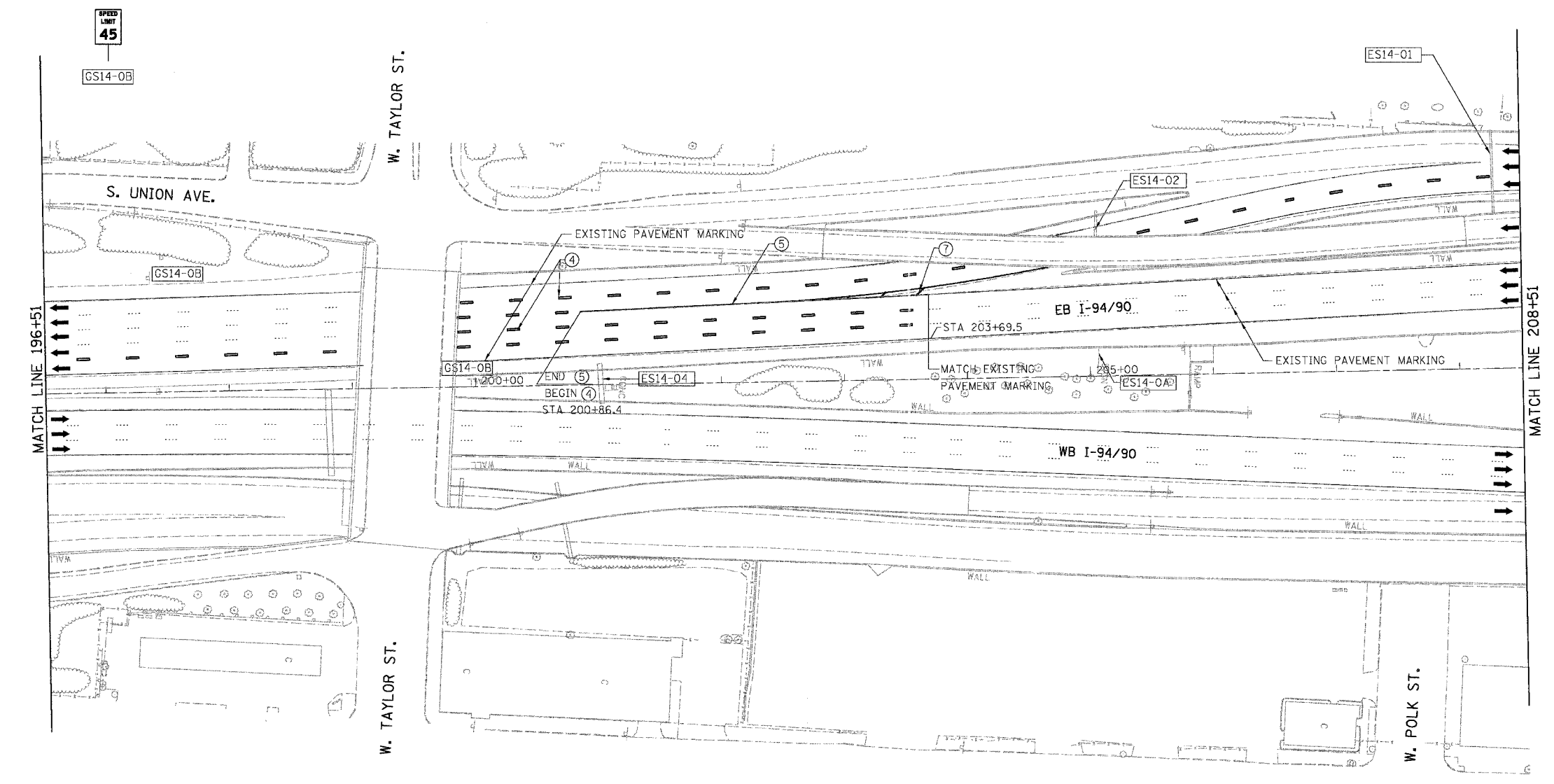
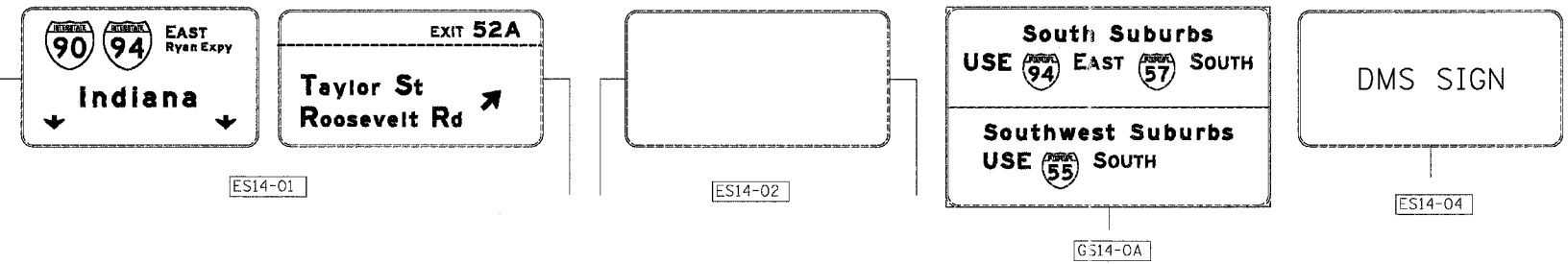
SCALE: 1"=50'  
DATE: 7/22/2005  
DRAWN BY: RA  
CHECKED BY: RS



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3/25/05 PM 7/21/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-02BF	COOK	419	112
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS

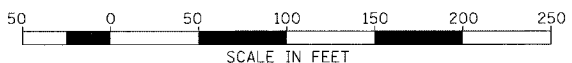
NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**F.A.I. 94/90 (DAN RYAN EXPRESSWAY)**  
**NB DAN RYAN ELEVATED BRIDGE**  
**REPAIR FROM 15TH TO 28TH STREETS**  
**PROPOSED PAVEMENT MARKING PLAN**  
**STA. 196+51 TO STA. 208+51**

SCALE: 1"=50'  
DATE: 7/22/2005

DRAWN BY: RA  
CHECKED BY: RS



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7/21/2005 3:55:47 PM







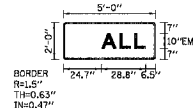




62580

na:\600\road\94\90\3\sheet\660\_117.dwg - signed.dwg

**SIGN DETAIL**  
1:50



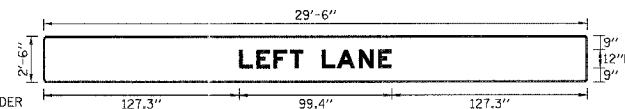
SIGN NUMBER	TS19-03
WIDTH x HGHT.	5'-0" x 2'-0"
BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Black

SYMBOL	X	Y	WID	HT

Panel Style: construction\_guide.asi  
Dimensions are in inches, tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)					LENGTH	SERIESIZE
A	L	L			EM	
24.7	35.8	46.2			28.8	10

**SIGN DETAIL**  
1:50



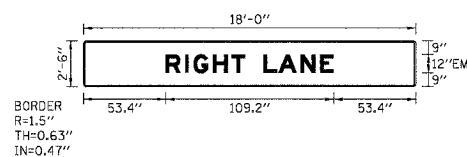
SIGN NUMBER	TS11-01, TS12-01 & TS13-01
WIDTH x HGHT.	29'-6" x 2'-0"
BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Black

SYMBOL	X	Y	WID	HT

Panel Style: construction\_guide.asi  
Dimensions are in inches, tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE	
L	E	F	T	L	A	N	E			EM		
127.3	138.6	149.9	160.3	169.1	181.1	190.8	205.3	217.9			99.4	12

**SIGN DETAIL**  
1:50



SIGN NUMBER	TS27-01 & TS12-02
WIDTH x HGHT.	18'-0" x 2'-0"
BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Black

SYMBOL	X	Y	WID	HT

Panel Style: construction\_guide.asi  
Dimensions are in inches, tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)											LENGTH	SERIESIZE	
R	I	G	H	T	L	A	N	E			EM		
53.4	66.1	71.5	84.2	96.2	105	117	128.6	141.1	153.8			109.2	12

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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) NB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS TEMPORARY INFORMATION SIGNING
NAME	DATE	

SCALE: -NTS  
DATE: 7/22/2005

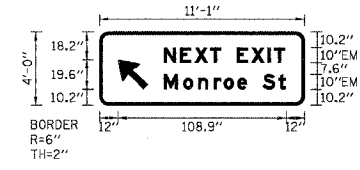
DRAWN BY: RA  
CHECKED BY: RS

TIS04  
94984 AN  
7/21/2005



I:\NSD\CONTRACTS\SHEET\9403\9403\_119.DWG

**SIGN DETAIL**  
1:50



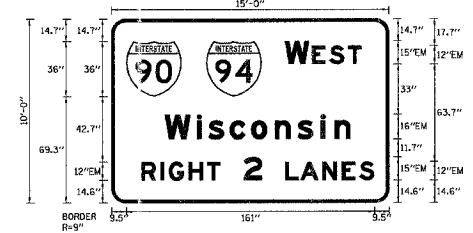
SIGN NUMBER	TS17-01
WIDTH x HGHT.	11'-1" x 4'-0"
BORDER WIDTH	2"
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/Pure White

SYMBOL	X	Y	WID	HT
ARMED	12	10.2	16	25.2

Panel Style: guide\_exp\_advance\_base  
Dimensions are in inches, tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE
N	E	X	T	E	X	I	T				EM
41.7	52.2	61.6	71.6	79	89	98.4	109.1	113.1		78.7	10
M	o	a	r	o	e	S	t				EM
41.7	54.4	64	74.2	80.6	88.4	95.8	105.8	115.9		79.2	107.5

**SIGN DETAIL**  
1:50



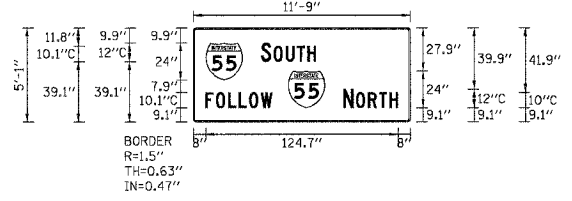
SIGN NUMBER	TS17-02
WIDTH x HGHT.	15'-0" x 10'-0"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/Pure White

SYMBOL	X	Y	WID	HT
M1.1	9.5	69.3	36	36
M1.1	61.5	69.3	36	36

Panel Style: guide\_exp\_advance\_base  
Dimensions are in inches, tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE	
W	E	S	T								EM	
112.5	130.1	141.4	153.4							49.8	15.12	
W	i	a	c	o	n	s	i	n			EM	
34.4	55.4	60	76.6	90.5	106	120.7	135.7	144.9		120.5	16.12	
R	I	G	H	T	2	L	A	N	E	S		EM
19.1	31.5	37.2	49.8	61.9	80.7	112.7	132.3	136.5	149.4	160.7	151.4	12.15

**SIGN DETAIL**  
1:50



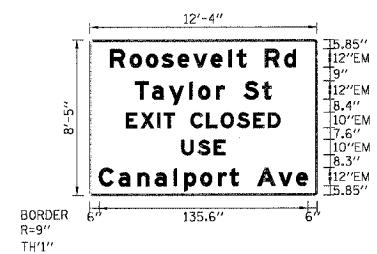
SIGN NUMBER	TS17-03
WIDTH x HGHT.	11'-9" x 5'-1"
BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Red/Black

SYMBOL	X	Y	WID	HT
M1.1	8	27.1	24	24
M1.1	61.4	9.1	24	24

Panel Style: construction\_guide\_base  
Dimensions are in inches, tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE
S	O	U	T	H							C
43.9	52.1	60.1	67.3	74.1						35.6	12, 10.1
F	O	L	L	O	W						C
8	14.8	22.7	29.5	36.3	43.7					43.3	10.1
N	O	R	T	H							C
97.4	105.6	113.4	120.6	127.3						35.3	12, 10

**SIGN DETAIL**  
1:50



SIGN NUMBER	TS21-01 & TS19-01
WIDTH x HGHT.	12'-4" x 8'-5"
BORDER WIDTH	1"
CORNER RADIUS	9"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Black

SYMBOL	X	Y	WID	HT

Panel Style: guide\_exp\_advance\_base  
Dimensions are in inches, tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE		
R	o	o	s	e	v	e	l	t	R	d		EM	
13.5	26.2	36.7	46.9	57.2	67.4	78.7	90.1	95.7	101.8	118.8	120.5	120.7	
T	a	y	l	o	r	S	t					EM	
28.5	40.6	51.5	64.6	70.6	82.1	88	100	112.1			88.7	129	
E	X	I	T	C	L	O	S	E	D			EM	
23.7	33.2	43.9	48	55.4	65.6	75.7	85.2	95.6	106.3	115.5		100.3	
U	S	E										EM	
59.8	70.1	80.7									28.4	10	
C	a	n	a	l	p	o	r	t	A	v	e		EM
6	18.8	31	42.4	54.6	61.4	71.8	83.3	90.7	96.7	108.7	122.6	133.9	

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TEMPORARY INFORMATION SIGNING

SCALE: =NTS  
DATE: 8/12/2005

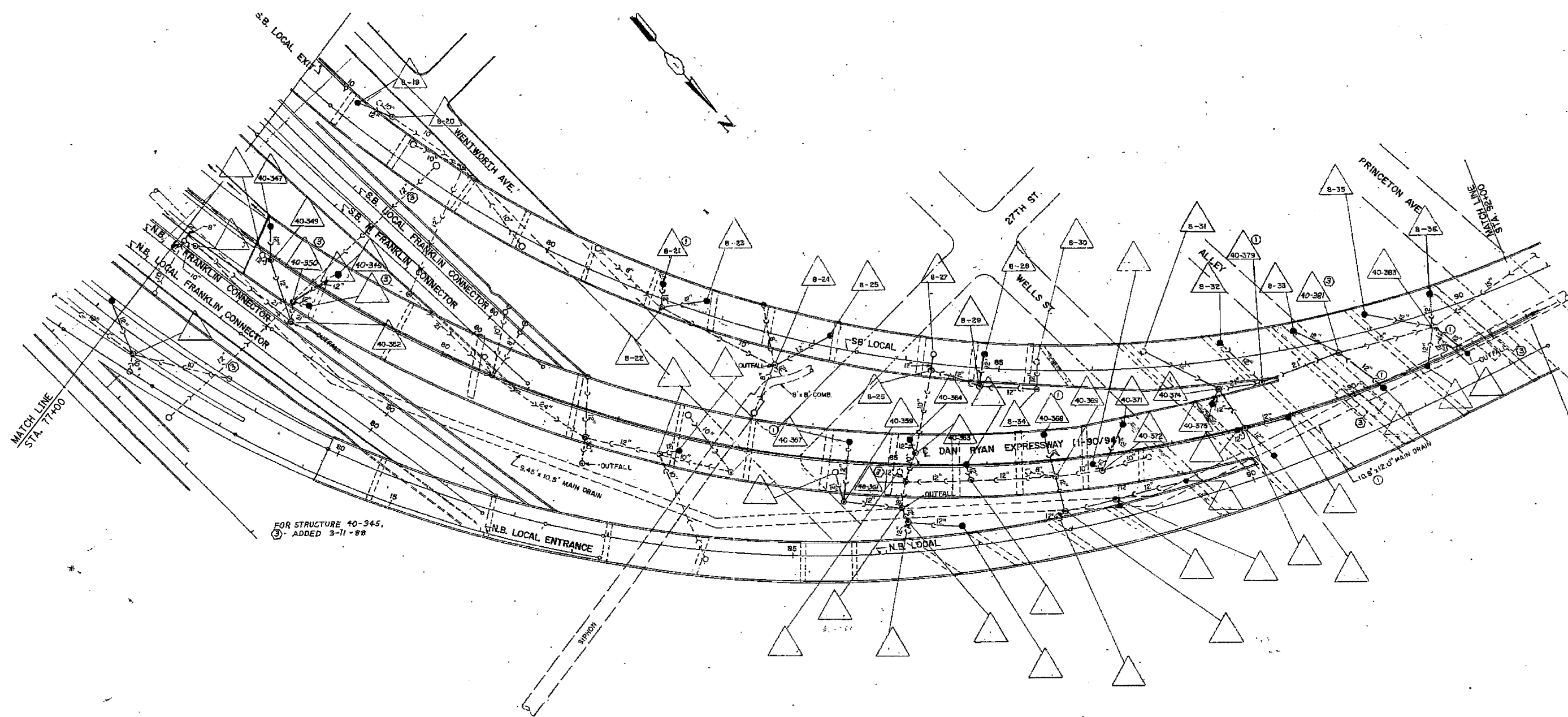
DRAWN BY: RA  
CHECKED BY: RS

TIS06  
8/11/2005





F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	122
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				



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FOR INFORMATION ONLY

NOTE:  
Information from 1988-89 As-Builts to show probable location of existing catch basins collecting bridge drainage. Field verify location with Engineer. Clean all catch basins receiving drainage from NB viaduct.

REVISIONS	
NAME	DATE

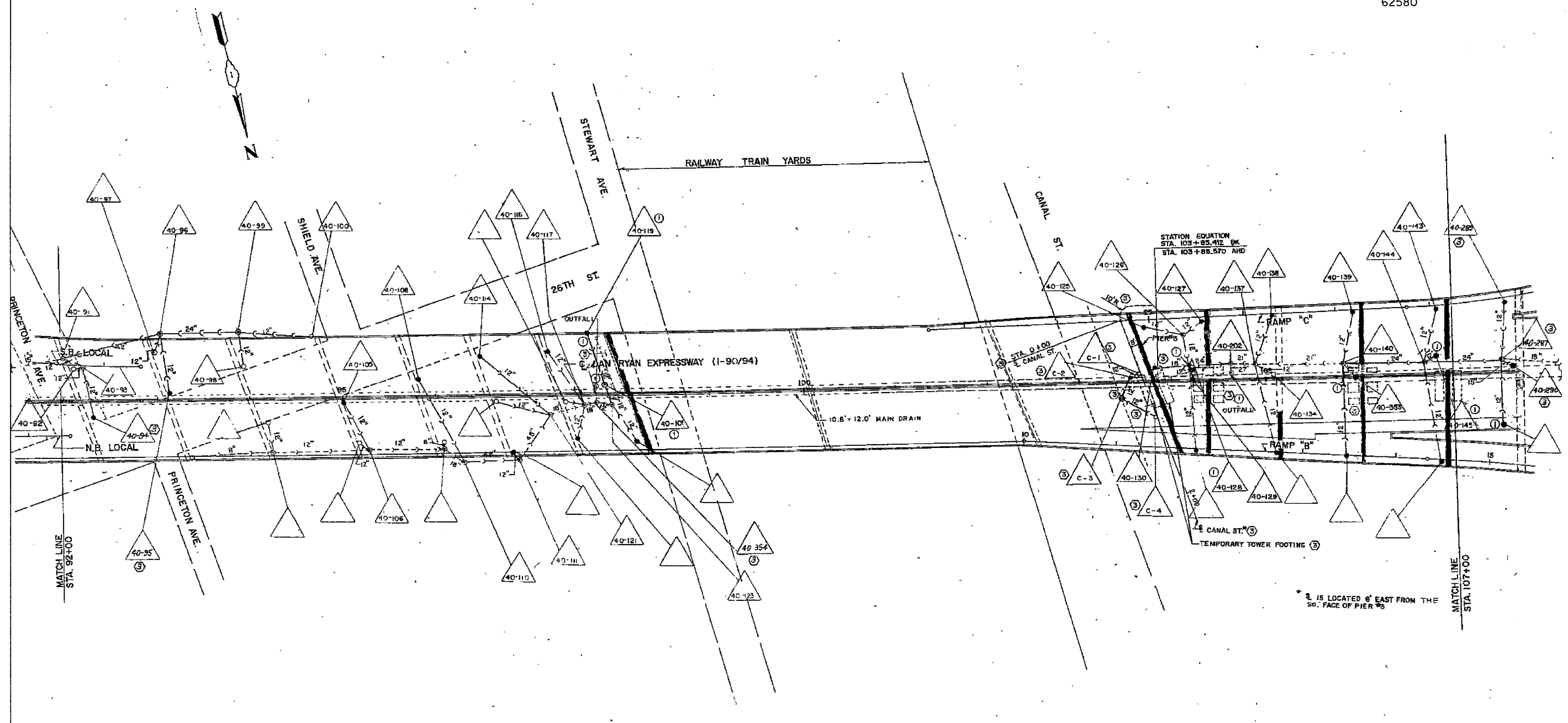
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
EXISTING DRAINAGE SYSTEM  
DETAILS

SCALE: NTS  
DATE: 7/22/2005

DRAWN BY: BDC  
CHECKED BY: BLU

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	123
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62580



\* IS LOCATED 6' EAST FROM THE SO. FACE OF PIER #5

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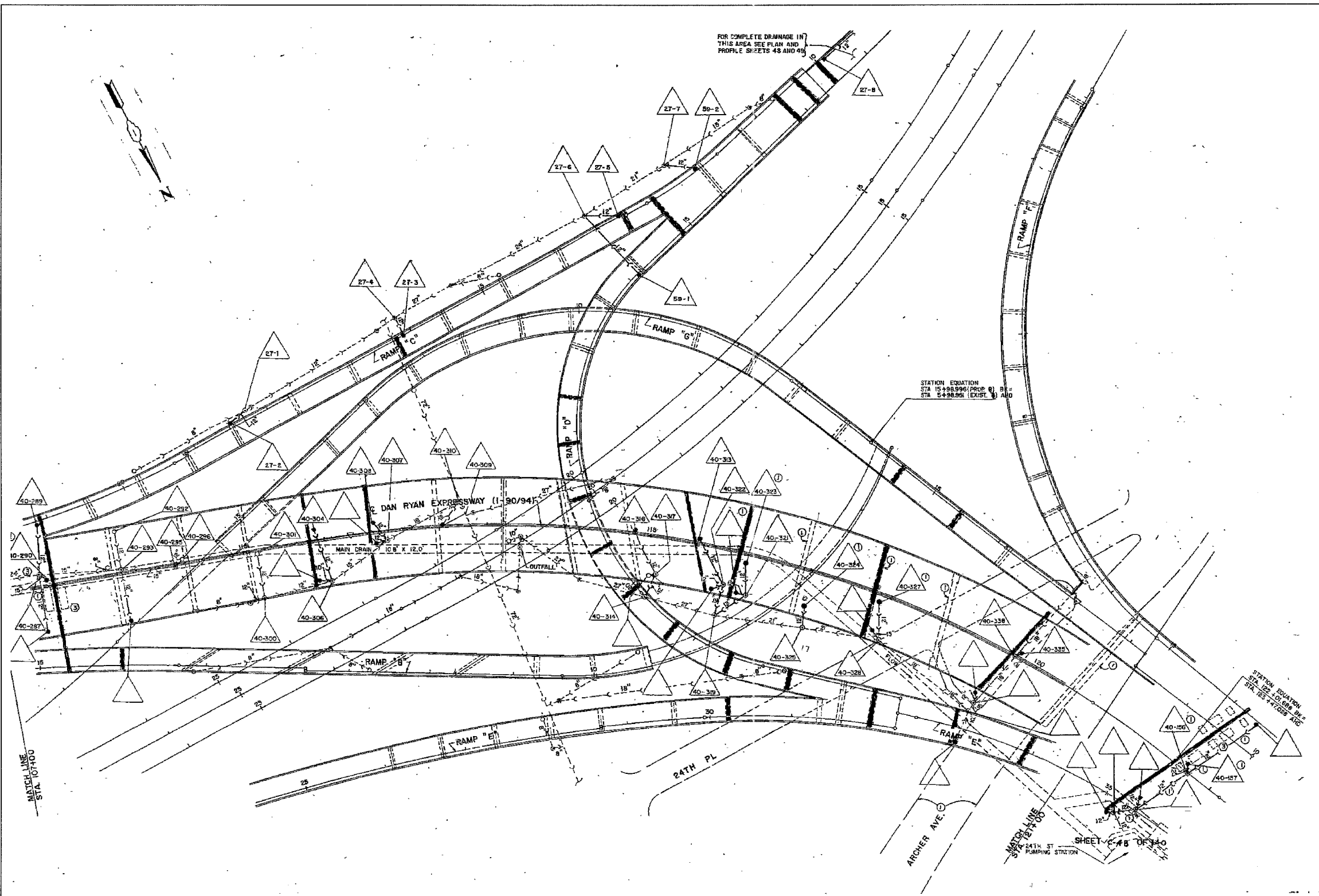
FOR INFORMATION ONLY

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REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
EXISTING DRAINAGE SYSTEM  
DETAILS  
SCALE: NTS  
DATE: 7/22/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	124
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62580				



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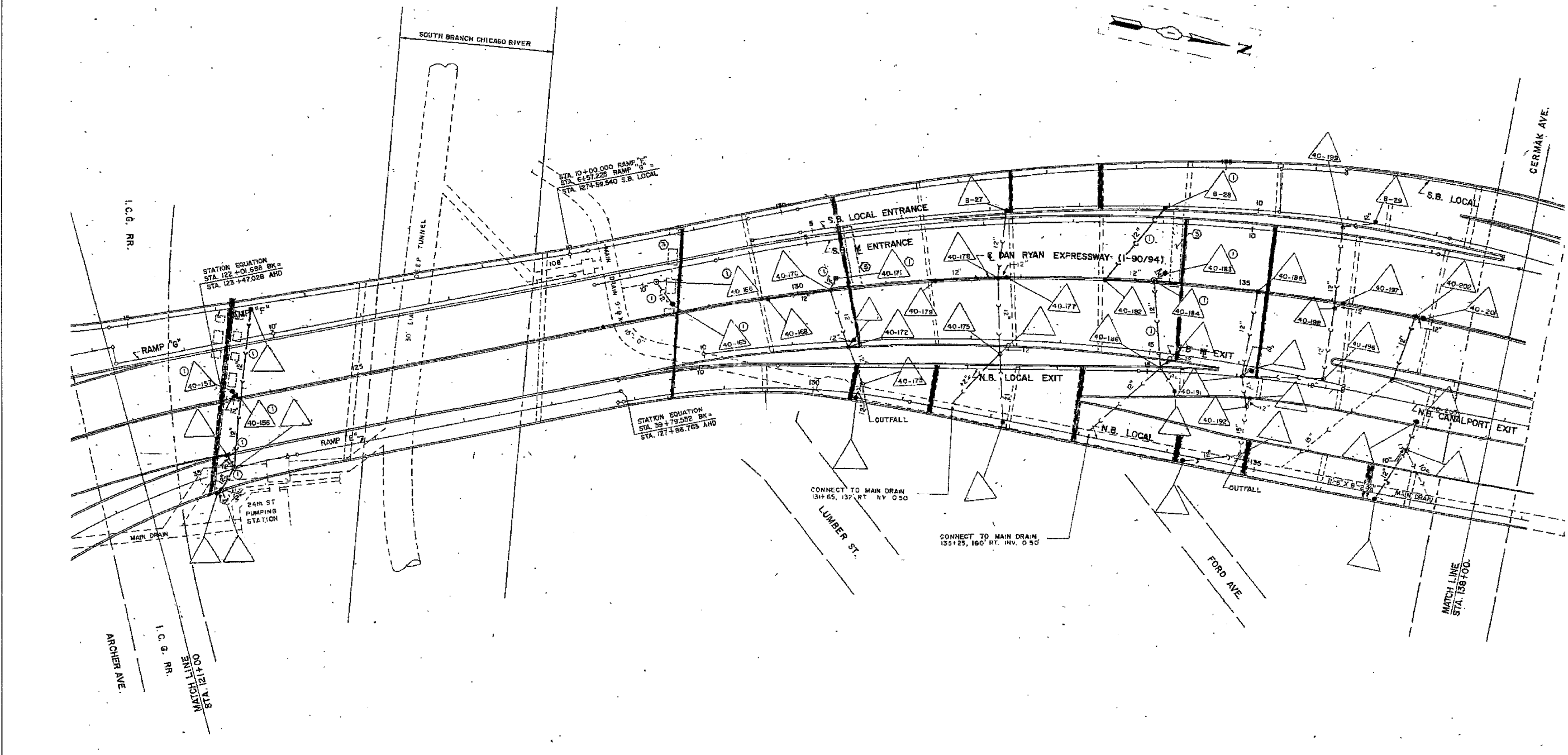
NOTE:  
Information from 1988-89 As-Builts to show probable location of existing catch basins collecting bridge drainage. Field verify location with Engineer. Clean all catch basins receiving drainage from NB viaduct.

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
EXISTING DRAINAGE SYSTEM  
DETAILS  
SCALE: NTS  
DATE: 7/22/2005  
DRAWN BY: BDC  
CHECKED BY: BLU



F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	125
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



FOR INFORMATION ONLY

NOTE:  
 Information from 1988-89 As-Builts to show probable location of existing catch basins collecting bridge drainage. Field verify location with Engineer. Clean all catch basins receiving drainage from NB viaduct.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 EXISTING DRAINAGE SYSTEM  
 DETAILS

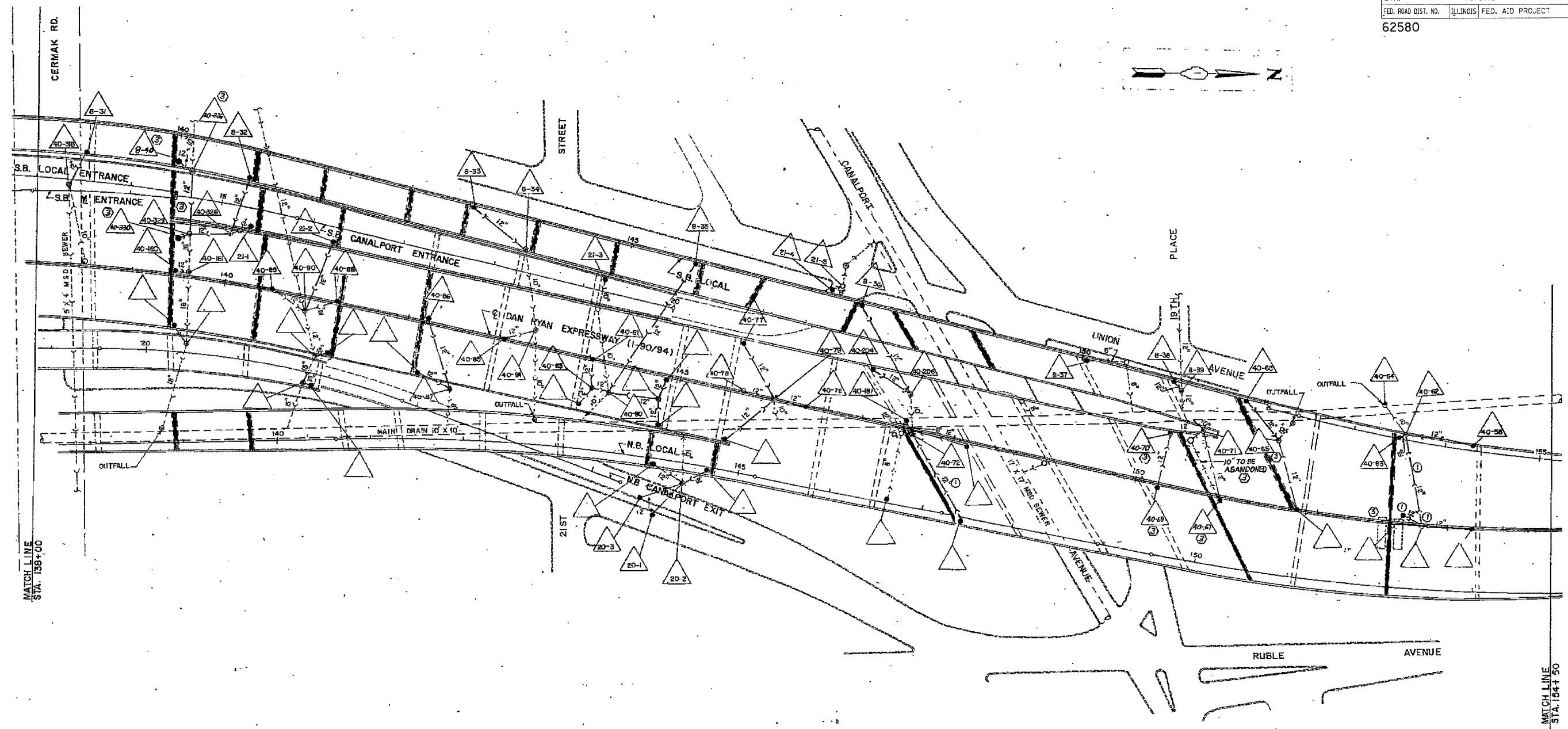
SCALE: NTS  
 DATE: 7/22/2005

DRAWN BY: BDC  
 CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	126
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

62580



MATCHLINE  
STA. 198+00

MATCHLINE  
STA. 194+50

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NOTE:  
Information from 1988-89 As-Builts to show probable location of existing catch basins collecting bridge drainage. Field verify location with Engineer. Clean all catch basins receiving drainage from NB viaduct.

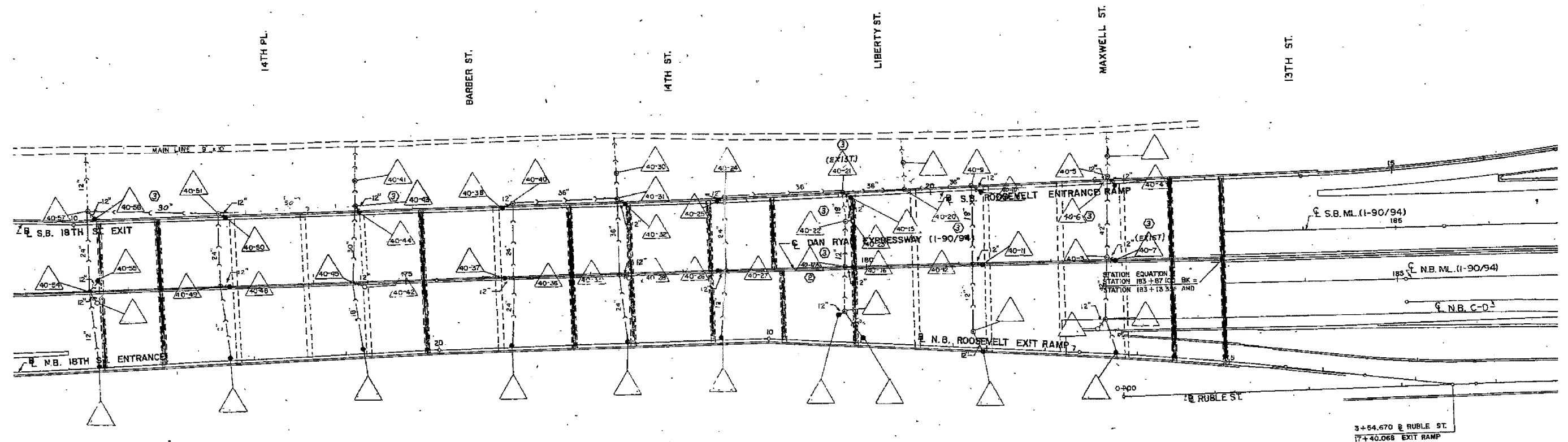
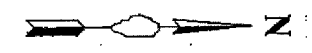
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
EXISTING DRAINAGE SYSTEM  
DETAILS  
SCALE: NTS  
DATE: 7/22/2005  
DRAWN BY: BDC  
CHECKED BY: BLU



F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	128
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

62580



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Information from 1988-89 As-Builts to show probable location of existing catch basins collecting bridge drainage. Field verify location with Engineer. Clean all catch basins receiving drainage from NB viaduct.

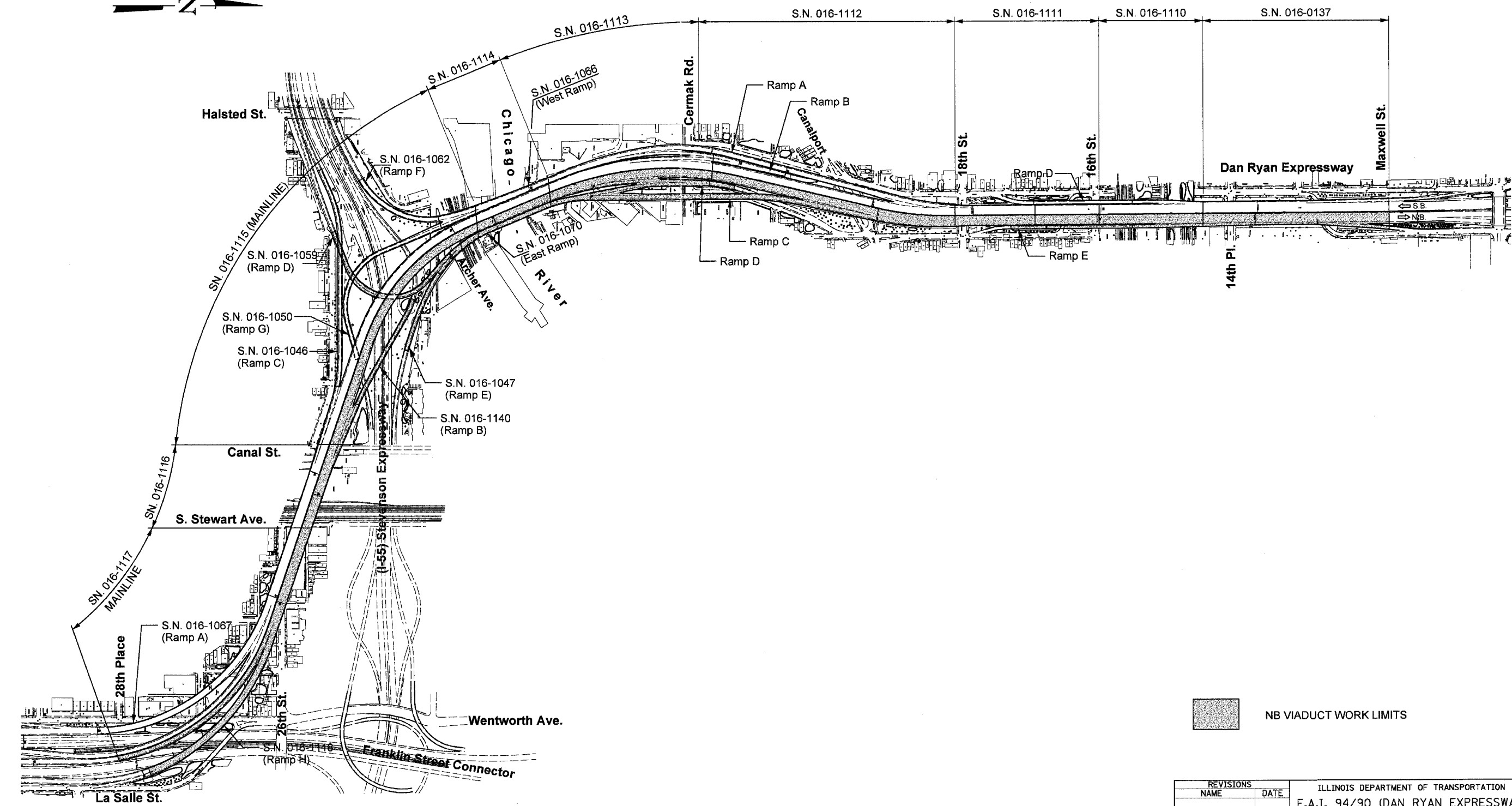
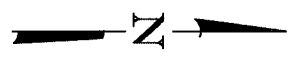
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
EXISTING DRAINAGE SYSTEM  
DETAILS

SCALE: NTS  
DATE: 7/22/2005

DRAWN BY: BDC  
CHECKED BY: BLU

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	129
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



 NB VIADUCT WORK LIMITS

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
VIADUCT KEY PLAN  
SCALE: 1"=300'  
DATE: 7/22/2005  
DRAWN BY: BDC  
CHECKED BY: BLJ



F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	131
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

62580

**TOTAL BILL OF MATERIALS**

ITEM DESCRIPTION	UNIT	QUANTITY	SN 016-0137	SN 016-1047	SN 016-1059	SN 016-1070	SN 016-1110	SN 016-1111	SN 016-1112	SN 016-1113	SN 016-1114	SN 016-1115	SN 016-1116	SN 016-1117	SN 016-1118	SN 016-1140
CONCRETE REMOVAL	CU YD	1,158.0	109.5	39.5	31.0	-	57.5	50.8	200.0	147.8	13.6	165.4	16.4	209.5	84.8	32.2
CONCRETE SUPERSTRUCTURE	CU YD	1,289.0	120.5	45.0	35.0	-	56.1	59.0	225.4	169.6	15.4	185.0	19.0	214.0	96.0	39.0
BRIDGE DECK GROOVING	SQ YD	97,841	10,695	2,420	2,069	1,614	6,248	7,957	16,595	14,115	3,012	12,176	4,065	10,207	4,566	2,102
PROTECTIVE COAT	SQ YD	3,340	292	176	107	-	76	74	655	409	42	455	55	622	272	105
ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	127	74	-	-	-	21	32	-	-	-	-	-	-	-	-
ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	16	-	-	-	-	-	16	-	-	-	-	-	-	-	-
FORMED CONCRETE REPAIR (DEPTH GREATER THAN 5")	SQ FT	355.2	-	68.2	-	-	-	-	-	17.6	50.4	38.1	-	106.1	61.0	13.8
ERECTING STRUCTURAL STEEL	L SUM	1	0.08	-	-	-	0.27	0.25	-	0.23	-	-	0.05	0.12	-	-
JACK AND REMOVE EXISTING BEARINGS	EACH	153	74	-	-	-	21	48	-	-	-	-	-	-	-	-
STRUCTURAL STEEL REPAIR	POUND	15,488	-	-	-	2,435	-	490	60	1,920	6,698	1,875	115	955	940	-
REINFORCEMENT BARS, EPOXY COATED	POUND	180,010	21,120	8,050	5,410	-	3,700	2,230	41,460	21,820	2,610	22,110	2,800	29,740	13,440	5,520
EPOXY CRACK SEALING	FOOT	628.9	75.4	113.9	1.2	-	4.6	15	192.1	134.6	-	50.7	-	31.6	-	9.8
CATCH BASINS TO BE CLEANED	EACH	147	14	3	1	-	8	22	27	18	3	24	-	23	4	-
MODULAR GLARE SCREEN SYSTEM	FOOT	50	-	-	-	-	-	-	50	-	-	-	-	-	-	-
ANCHOR BOLTS	EACH	326	148	-	-	-	42	96	-	-	-	-	40	-	-	-
HIGH PERFORMANCE ENHANCED SHOTCRETE	SQ FT	7,029	187.8	270.6	184.0	-	126.2	212.9	645.6	2,124.5	450.1	870.1	107.5	891.7	710.8	247.2
SILICONE JOINT SEALER, 1"	FOOT	70	-	42	-	-	28	-	-	-	-	-	-	-	-	-
MECHANICAL SPLICER	EACH	958	-	-	-	-	312	262	-	254	-	-	-	130	-	-
CLEANING BRIDGE SCUPPERS AND DOWNSPOUTS	EACH	245	21	3	3	4	19	23	39	17	10	31	16	34	21	4
BRIDGE JOINT SYSTEM (EXPANSION), 1"	FOOT	414.9	97.7	54.0	-	-	-	-	-	-	-	-	82.2	100.6	53.4	27.0
BRIDGE JOINT SYSTEM (EXPANSION), 1-5/8"	FOOT	1,550.4	-	-	27.2	-	23.0	-	313.7	244.3	-	346.3	-	464.6	131.3	-
BRIDGE JOINT SYSTEM (FIXED)	FOOT	584.4	-	88.9	-	-	23.0	69.1	175.3	117.1	-	-	-	32.1	51.8	27.1
ERECTING FLOATING BEARINGS, GUIDED EXPANSION - 400K	EACH	3	-	-	-	-	-	-	-	-	-	-	3	-	-	-
ERECTING FLOATING BEARINGS, GUIDED EXPANSION - 550K	EACH	7	-	-	-	-	-	-	-	-	-	-	7	-	-	-
FURNISHING TEMPORARY CONCRETE BARRIER	FOOT	570	40	-	-	-	30	160	100	90	-	-	-	150	-	-
BRIDGE DRAINAGE SYSTEM REPAIRS	FOOT	364	37	10	-	-	15	32	78	23	15	39	-	107	8	-
STRIP SEAL EXPANSION JOINT ASSEMBLY	FOOT	3,109	427.2	133.8	147.2	-	23.0	46.0	707.9	451.2	93.7	425.4	-	327.3	195.7	130.6
BAR SPLICERS	EACH	1,354	120	36	-	-	48	48	362	252	36	254	23	175	-	-
BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2 1/4"	SQ YD	98,764	10,700	2,475	2,140	1,729	6,440	8,120	16,525	14,290	3,090	12,210	4,145	10,140	4,565	2,195
BRIDGE DECK HYDRO-SCARIFICATION, 1/2"	SQ YD	98,764	10,700	2,475	2,140	1,729	6,440	8,120	16,525	14,290	3,090	12,210	4,145	10,140	4,565	2,195
CLEANING BRIDGE SEATS	SQ FT	35,556	3,855	910	630	290	1,720	3,132	6,390	6,970	625	4,090	580	3,754	1,460	1,150
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	140	7.5	7.5	7.5	7.5	7.5	7.5	15	7.5	12.5	25	7.5	12.5	7.5	7.5
PROTECTIVE SHIELD	SQ YD	39,910	1,371	733	672	907	4,451	2,064	3,656	4,976	1,540	6,328	4,427	4,274	3,574	937
TEMPORARY SHORING AND CRIBBING	EACH	3	-	-	-	-	-	-	-	-	-	-	1	1	1	-
ADJUSTING DRAINAGE SCUPPERS, TYPE A	EACH	107	10	2	-	-	8	11	26	3	-	8	8	27	2	2
ADJUSTING DRAINAGE SCUPPERS, TYPE B	EACH	26	-	-	-	-	-	-	1	2	10	3	-	7	3	-
ADJUSTING DRAINAGE SCUPPERS, TYPE C	EACH	109	11	1	-	4	11	12	12	-	20	8	-	16	2	-
BRIDGE DECK THERMOGRAPHY	SQ YD	98,764	10,700	2,475	2,140	1,729	6,440	8,120	16,525	14,290	3,090	12,210	4,145	10,140	4,565	2,195
COLUMN REPAIR	L SUM	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-
ERECTING FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	487	-	-	-	-	155	131	-	133	-	-	-	68	-	-

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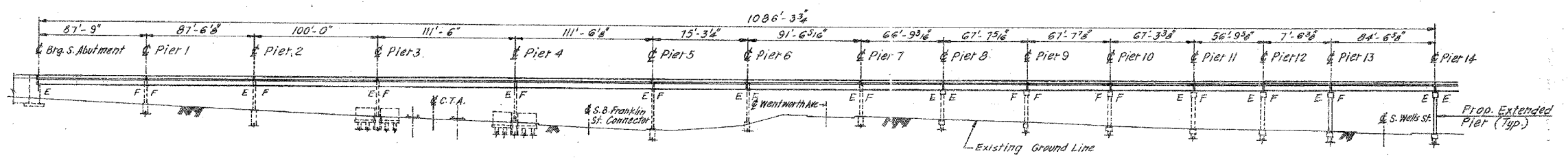


REVISIONS	
NAME	DATE

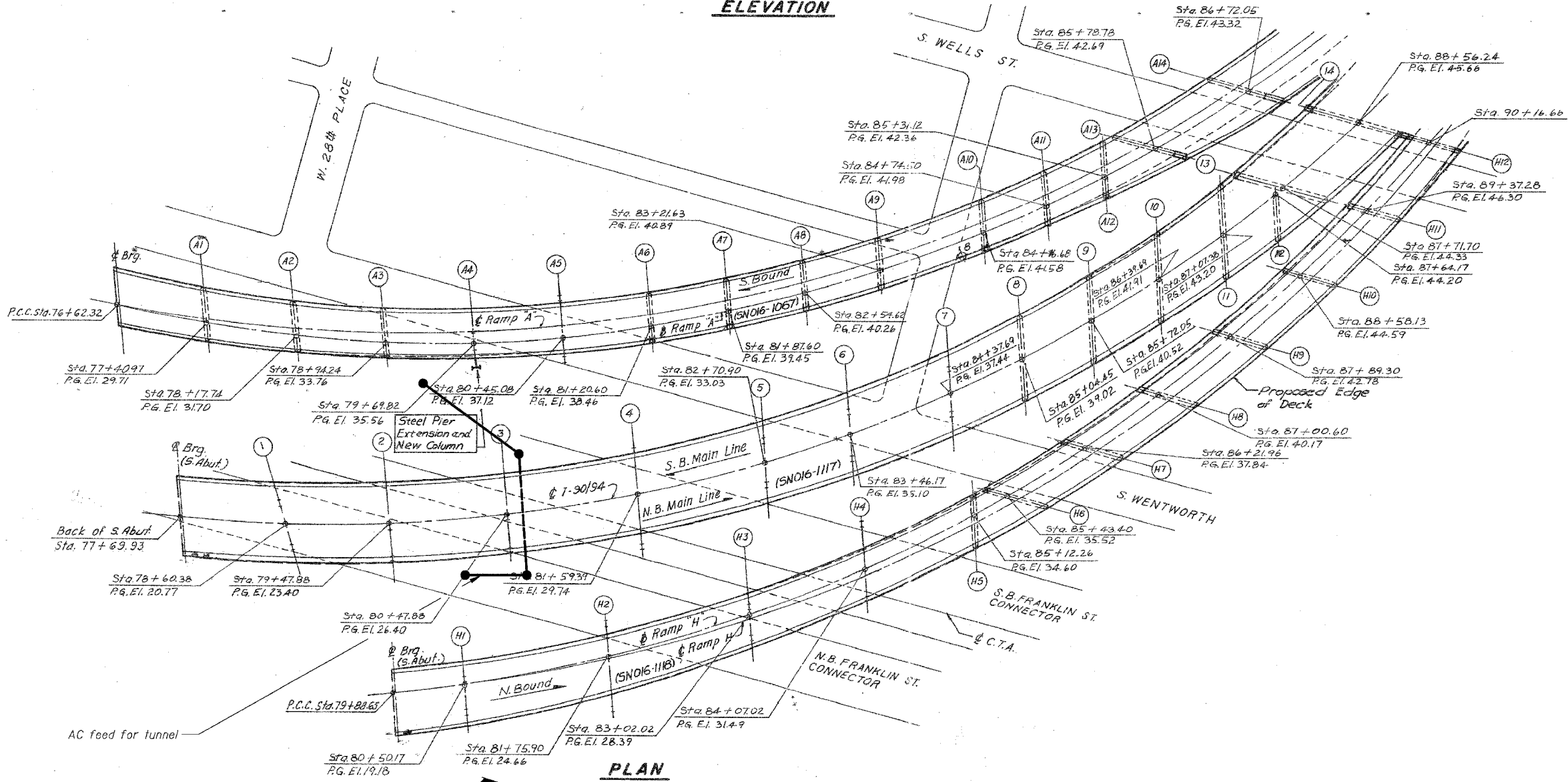
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
STRUCTURAL  
TOTAL BILL OF MATERIALS  
SCALE: N/A  
DATE: 8/12/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

1164637 AM 8/17/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	132
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**ELEVATION**



**PLAN**

Notes:

This sheet created from original 1988-89 reconstruction as-builts. These are provided for general reference to structure number, span lengths, etc. Work Items for this contract are identified on the partial deck plans, framing plans and detail sheets that follow.

The indicated Locations for the Detector Loops are approximate. The Contractor shall verify the exact locations and shall reference to Traffic System Drawings and Specifications for the work required for these Detector Loops.

An AC feed for the CTA's tunnel is shown above. The Contractor shall take all necessary safety precautions and exercise extra care not to damage the AC feed. The Contractor shall coordinate his work for the safety precautions according to CTA's regulations.

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**LEGEND**  
□ Detector Loop

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
GENERAL PLAN AND ELEVATION  
SN 016-1117, SN 016-1118

SCALE: NTS  
DATE: 8/12/2005

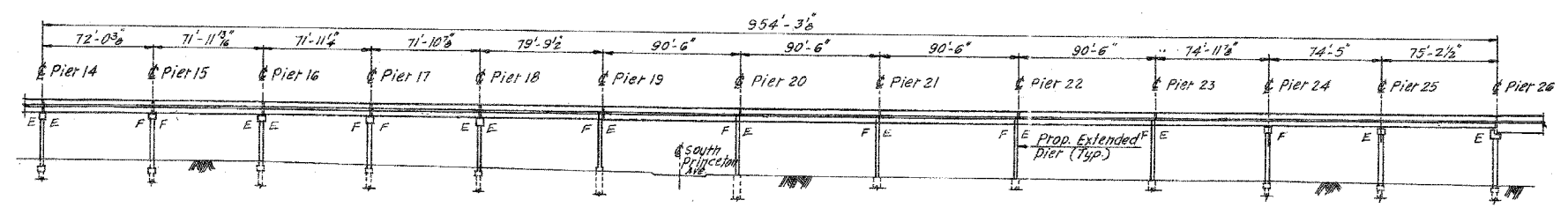
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11/5/49/AM 8/17/2005

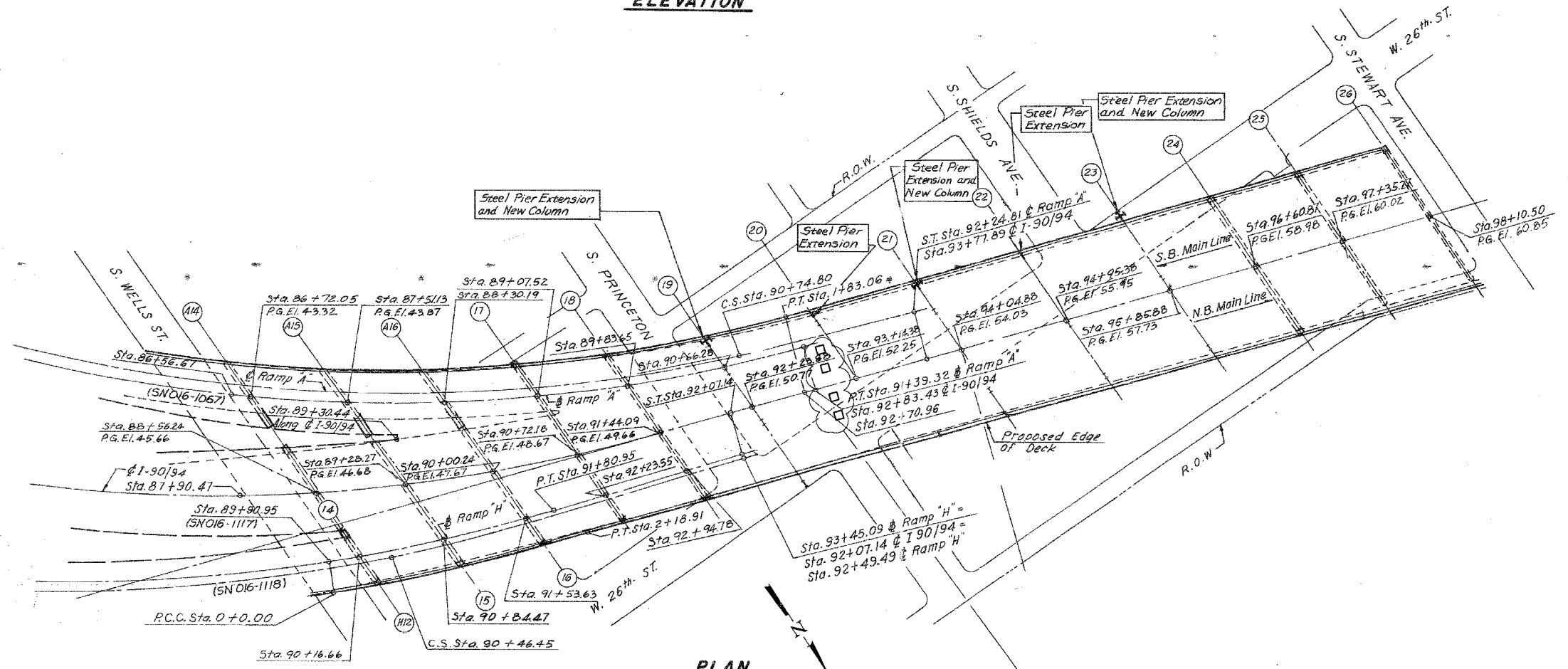


F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	133
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

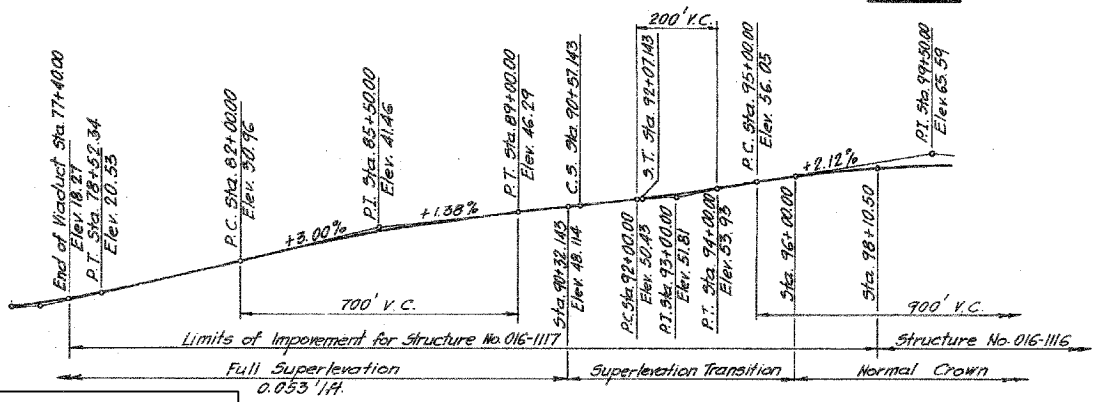
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**ELEVATION**



**PLAN**



**MAINLINE PROFILE GRADE**

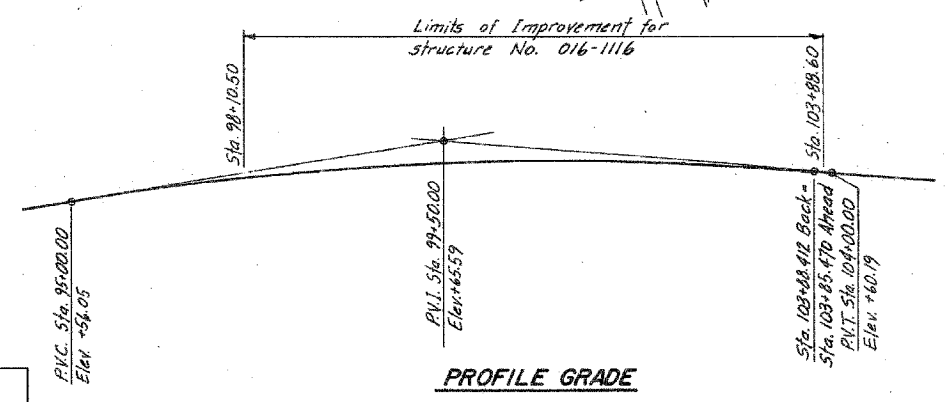
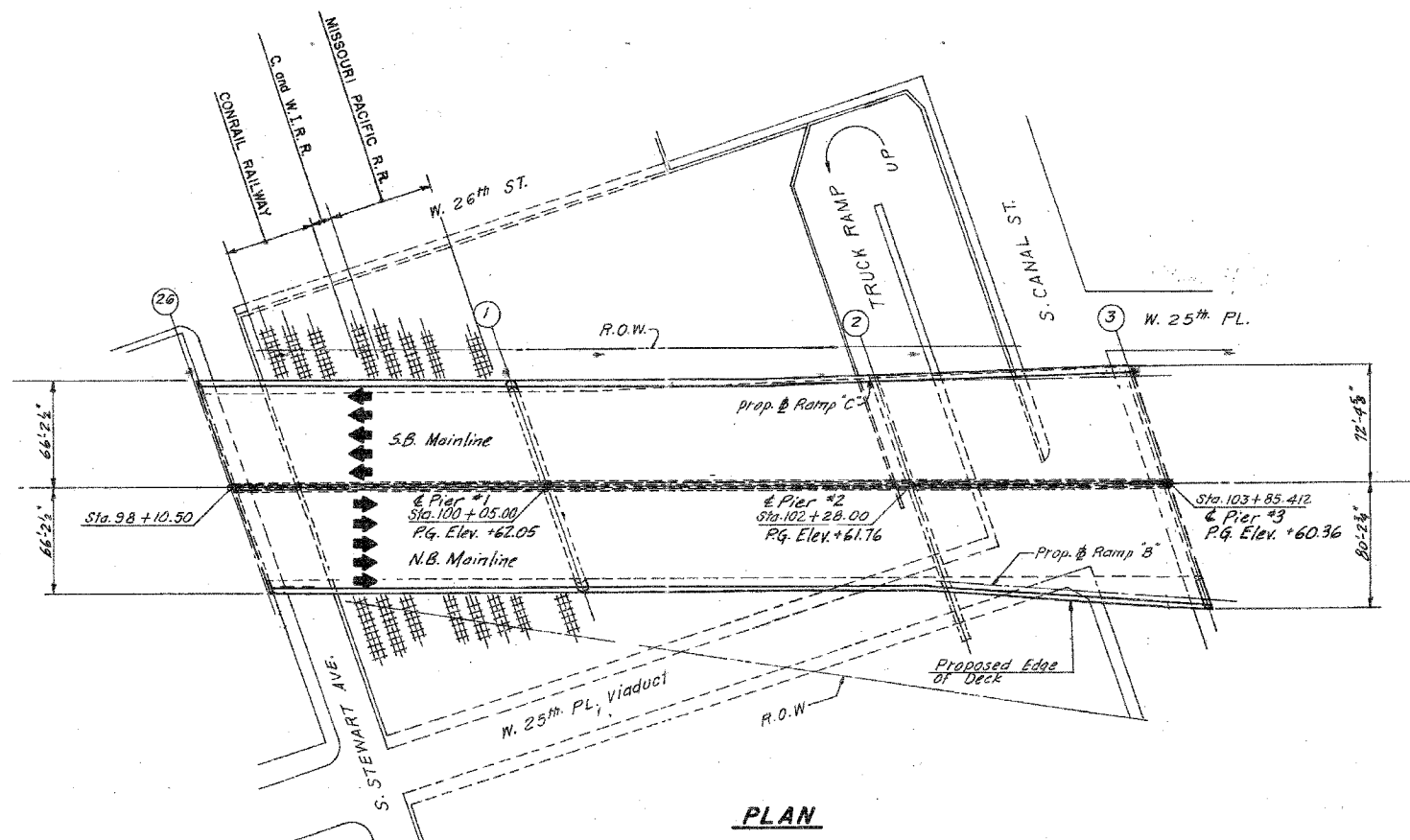
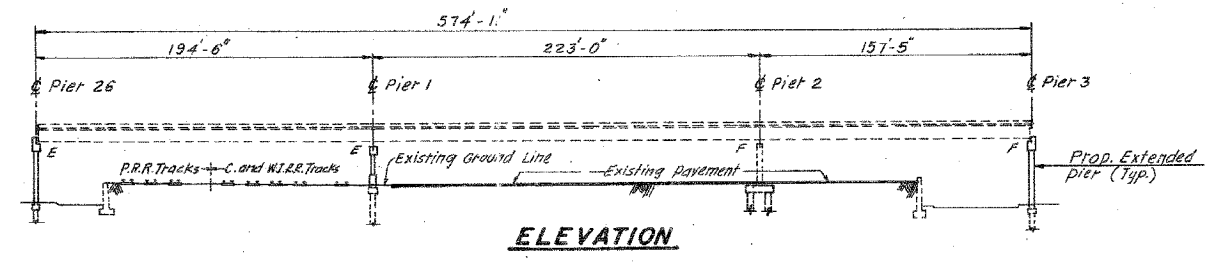
For Notes and Legend see sheet 132.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 GENERAL PLAN AND ELEVATION  
 SN 016-1117, SN 016-1118 (CONT.)  
 SCALE: NTS  
 DATE: 7/22/2005  
 DRAWN BY: BDC  
 CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	134
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
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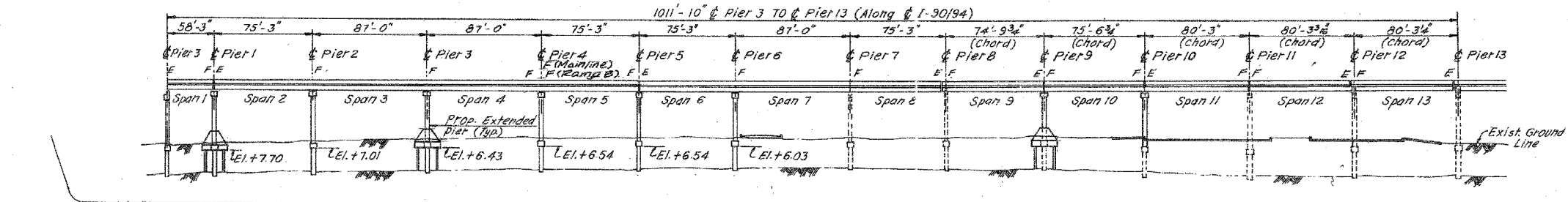
REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
GENERAL PLAN AND ELEVATION  
SN 016-1116

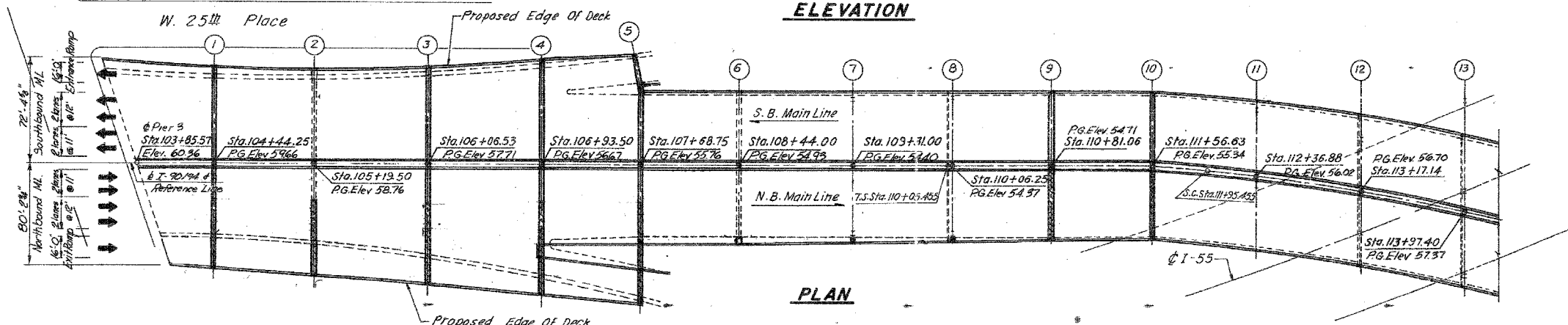
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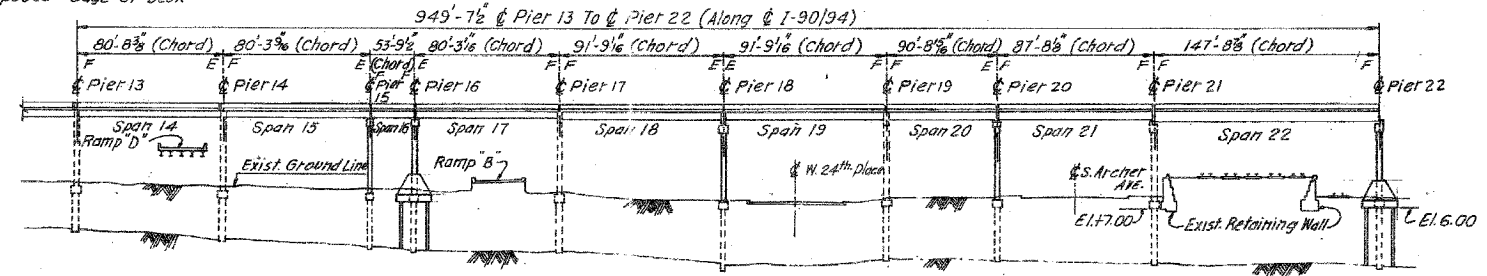
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



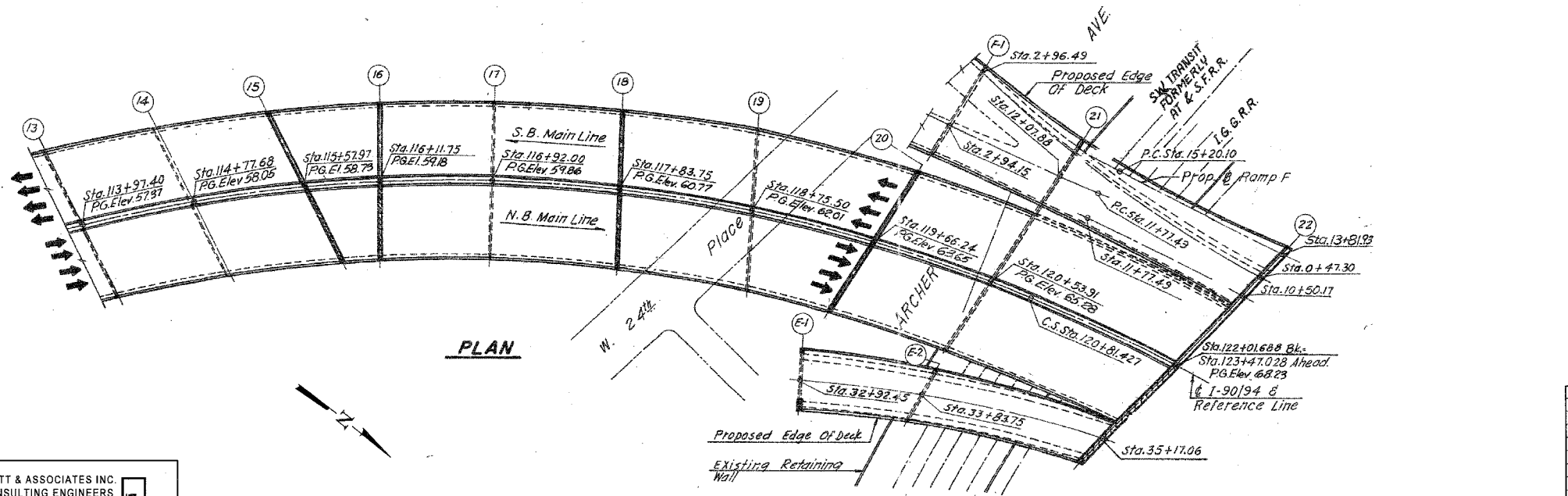
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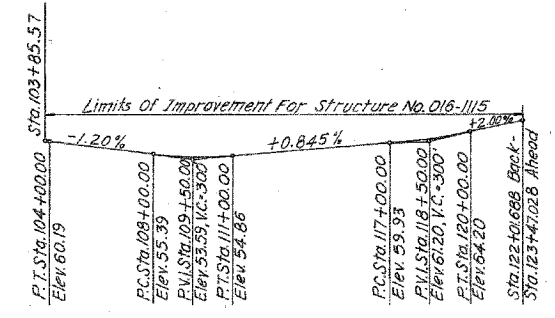
**PLAN**



**ELEVATION**



**PLAN**



**PROFILE GRADE**  
DAN RYAN EXPRESSWAY (I-90/94)

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 GENERAL PLAN AND ELEVATION  
 SN 016-1115

SCALE: NTS  
 DATE: 7/22/2005

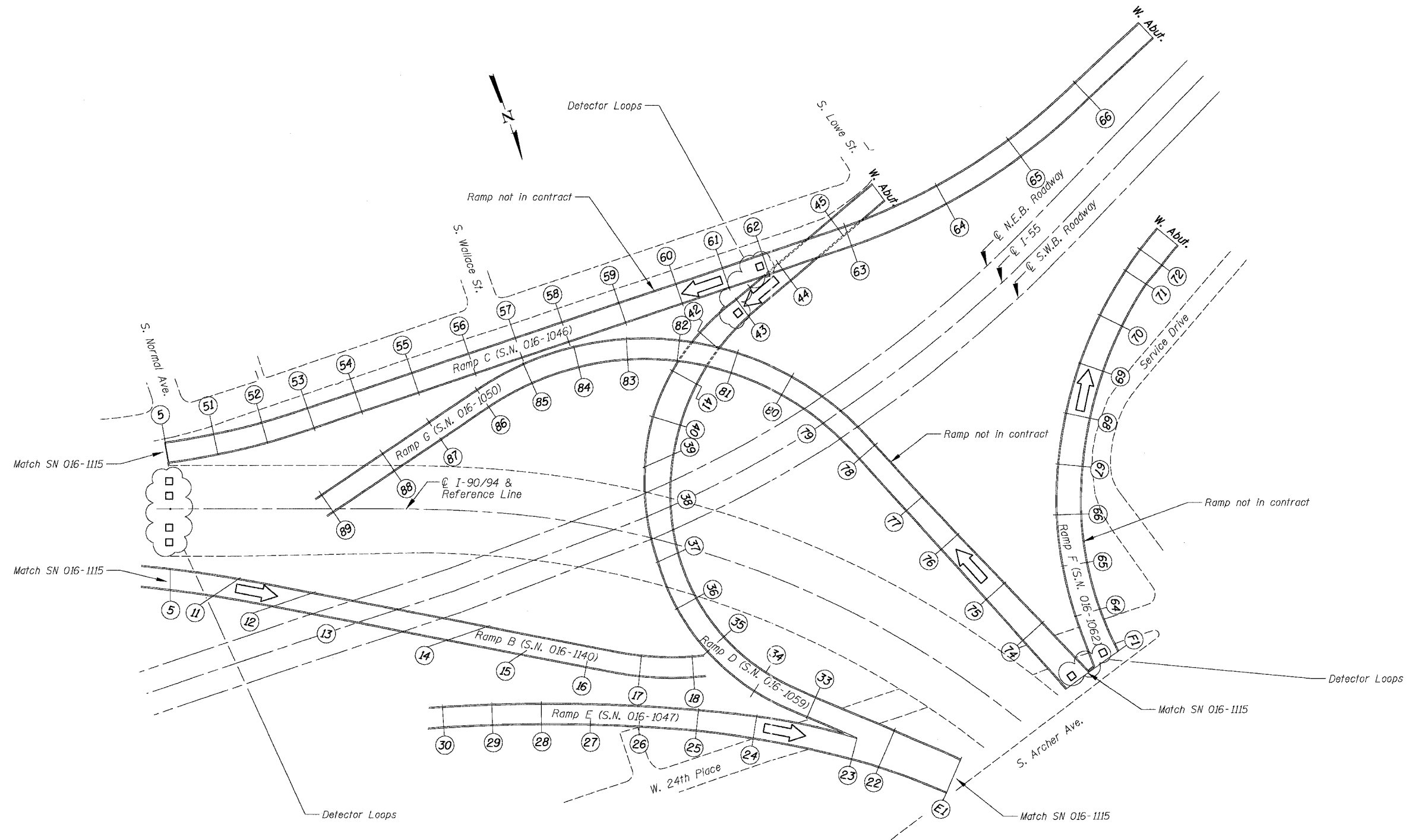
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	136
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

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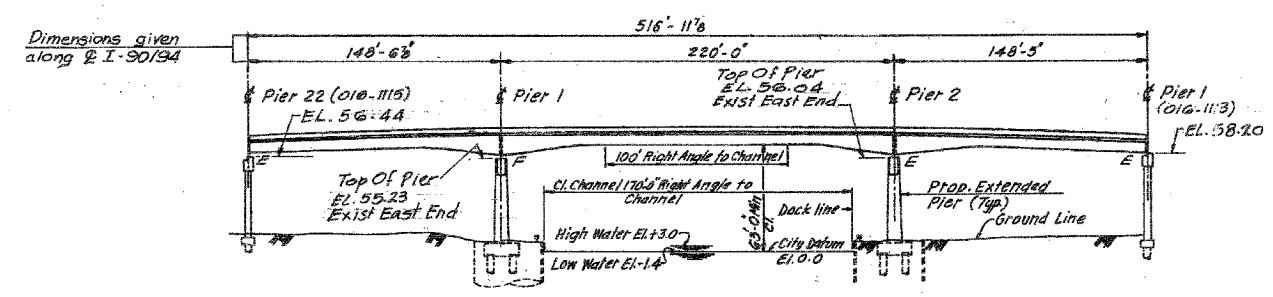
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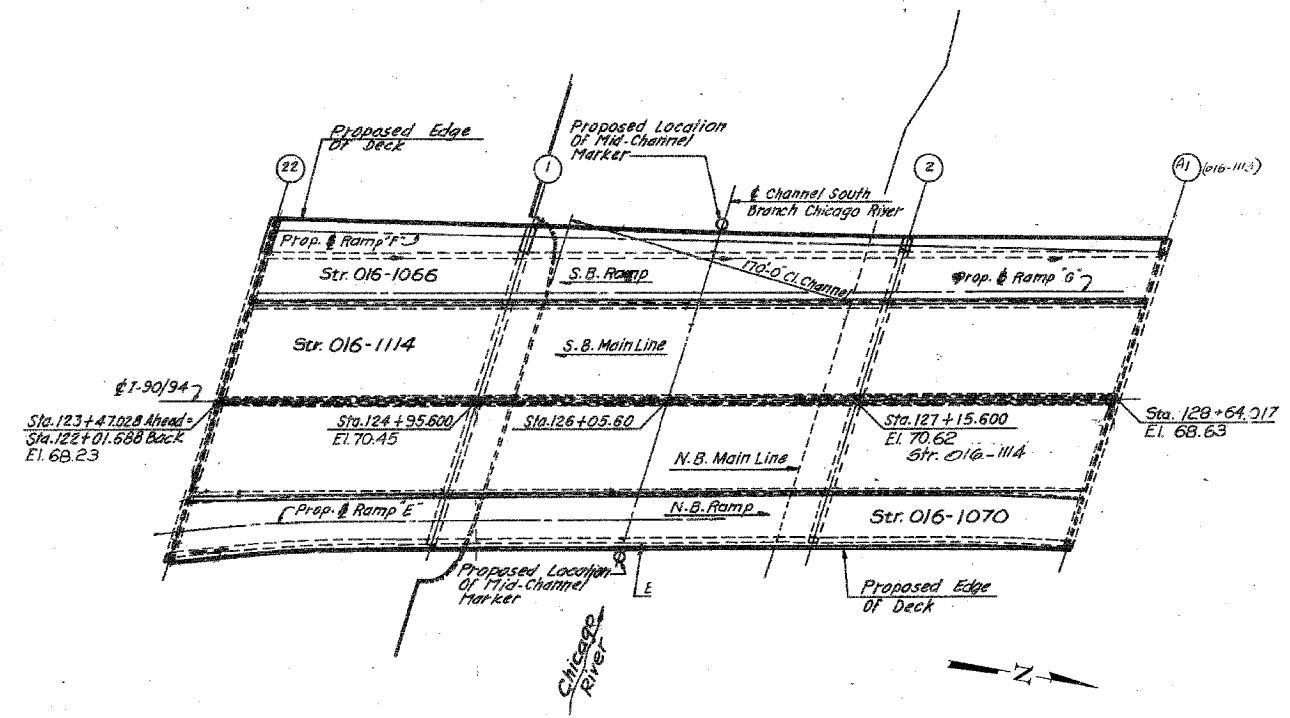
REVISIONS		DATE	ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) NB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS GENERAL PLAN AND ELEVATION SN 016-1047, SN 016-1059, SN 016-1140 SCALE: NTS DATE: 7/22/2005
NAME			

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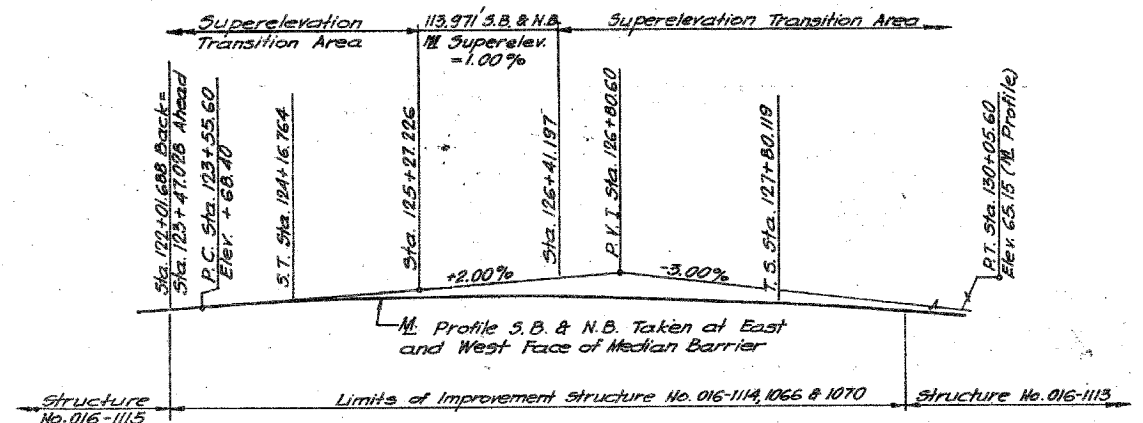
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



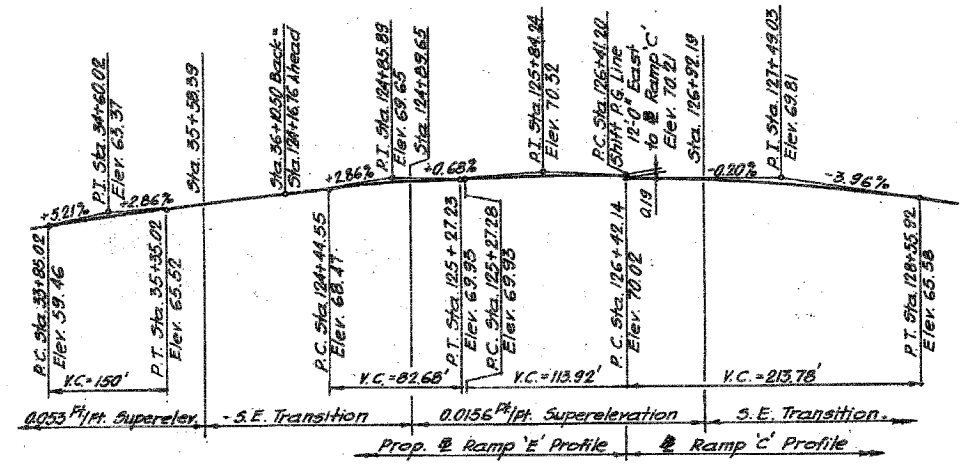
**ELEVATION**



**PLAN**



**PROFILE - S.B. & N.B.**



**RAMP 'E' & RAMP 'C'**

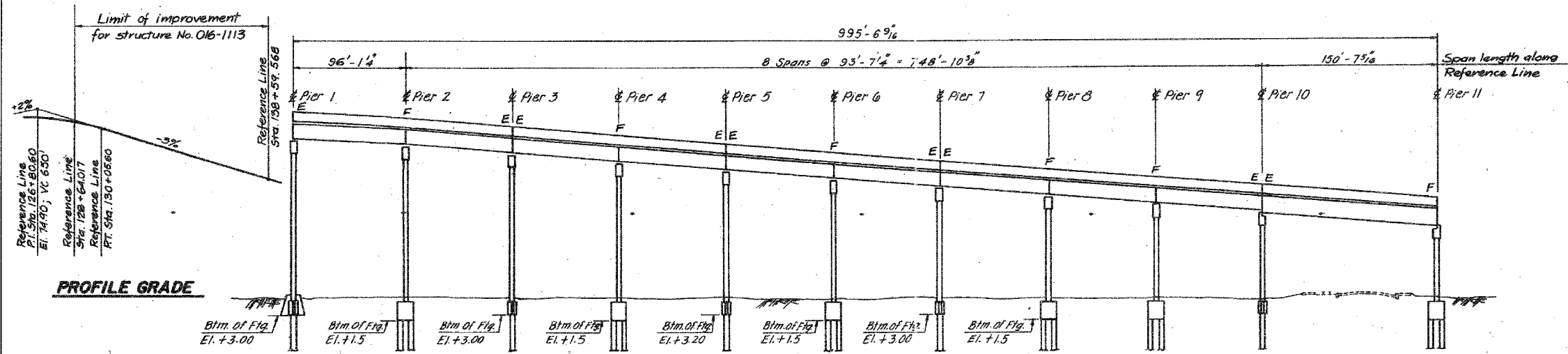
REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 GENERAL PLAN AND ELEVATION  
 SN 016-1114, SN 016-1070  
 SCALE: NTS  
 DATE: 7/22/2005  
 DRAWN BY: BDC  
 CHECKED BY: BLU

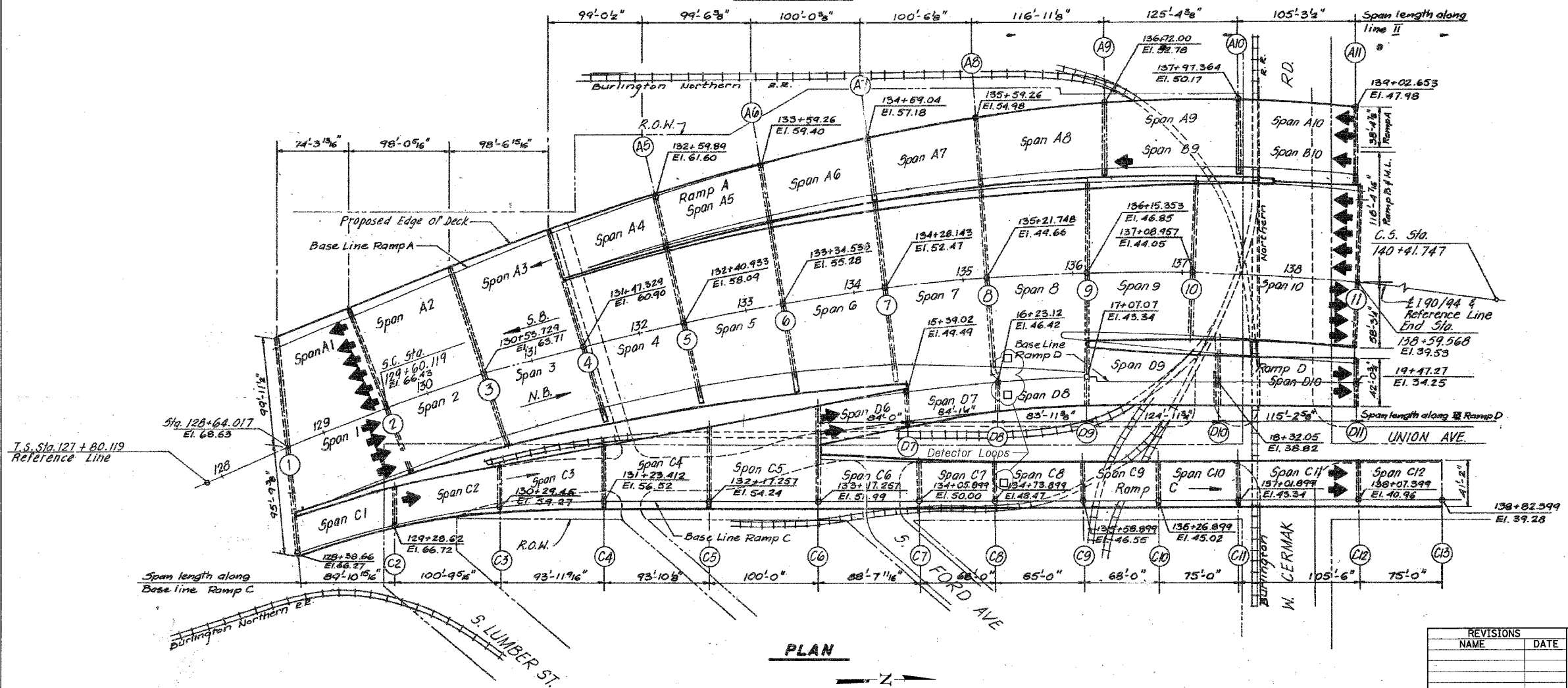
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	138
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				



**ELEVATION**



**PLAN**

REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 GENERAL PLAN AND ELEVATION  
 SN 016-1113

SCALE: NTS  
 DATE: 7/22/2005

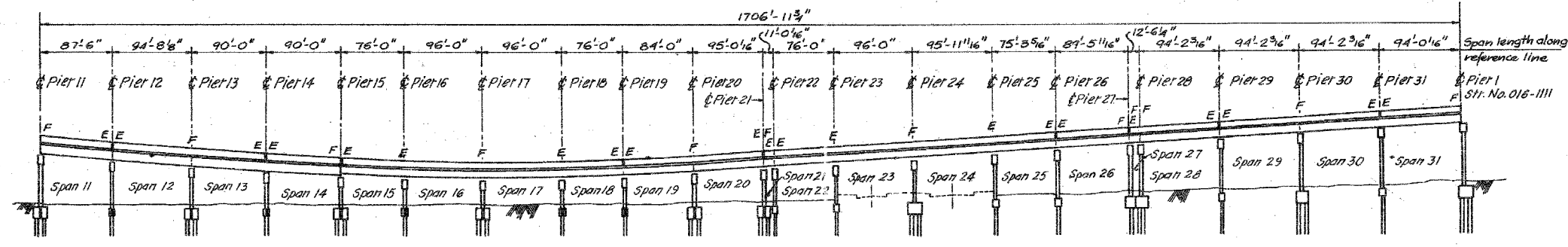
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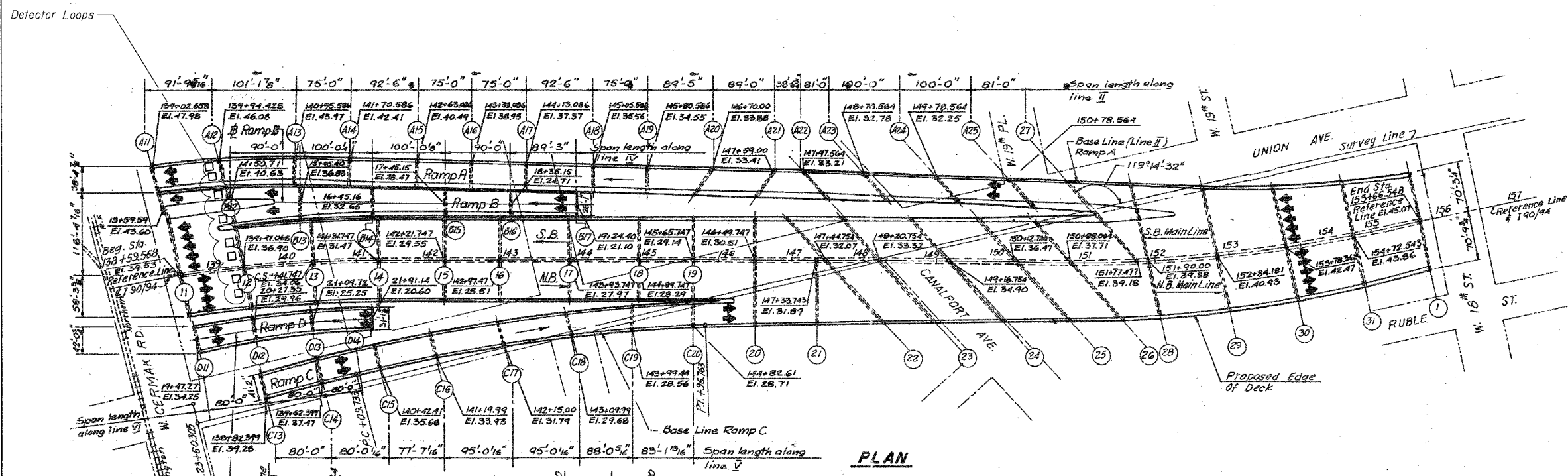
For Notes and Legend see sheet 132.

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	139
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

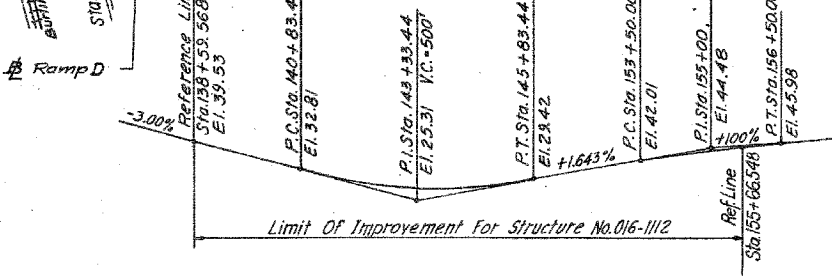
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**ELEVATION**



**PLAN**



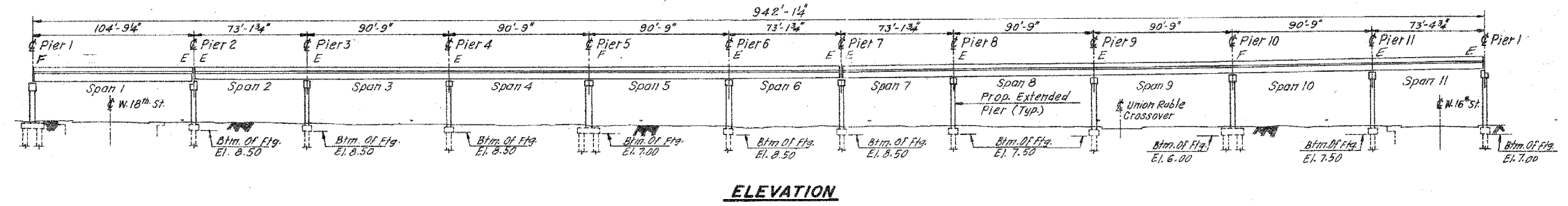
**PROFILE GRADE**

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	F.A.I. 94/90 (DAN RYAN EXPRESSWAY)	
		NB DAN RYAN ELEVATED BRIDGE	
		REPAIR FROM 15TH TO 28TH STREETS	
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		SN 016-1112	
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		DATE: 7/22/2005	CHECKED BY: BLU

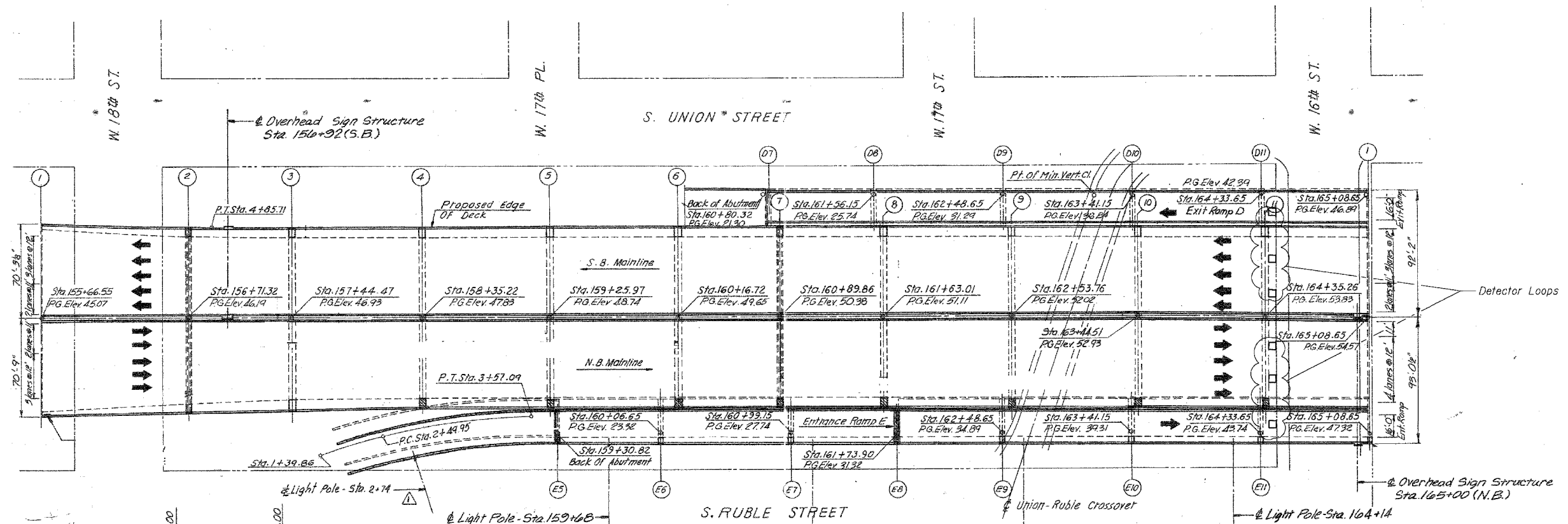
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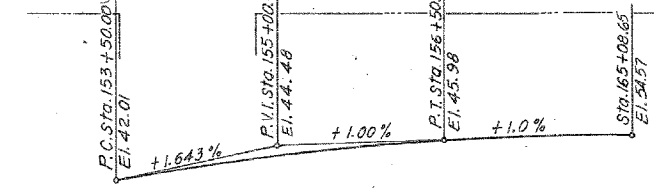
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94/90	2003-028F	COOK	419	140
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
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**ELEVATION**



**PLAN**



**PROFILE GRADE**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 GENERAL PLAN AND ELEVATION  
 SN 016-1111

SCALE: NTS  
 DATE: 7/22/2005

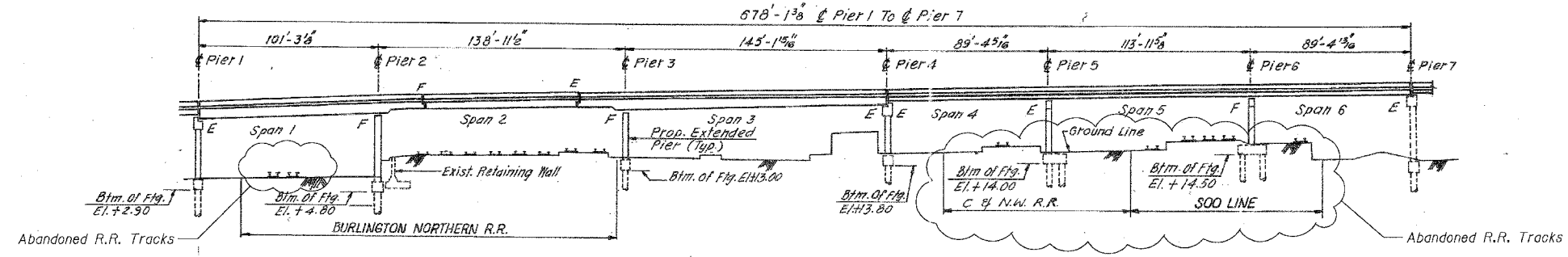
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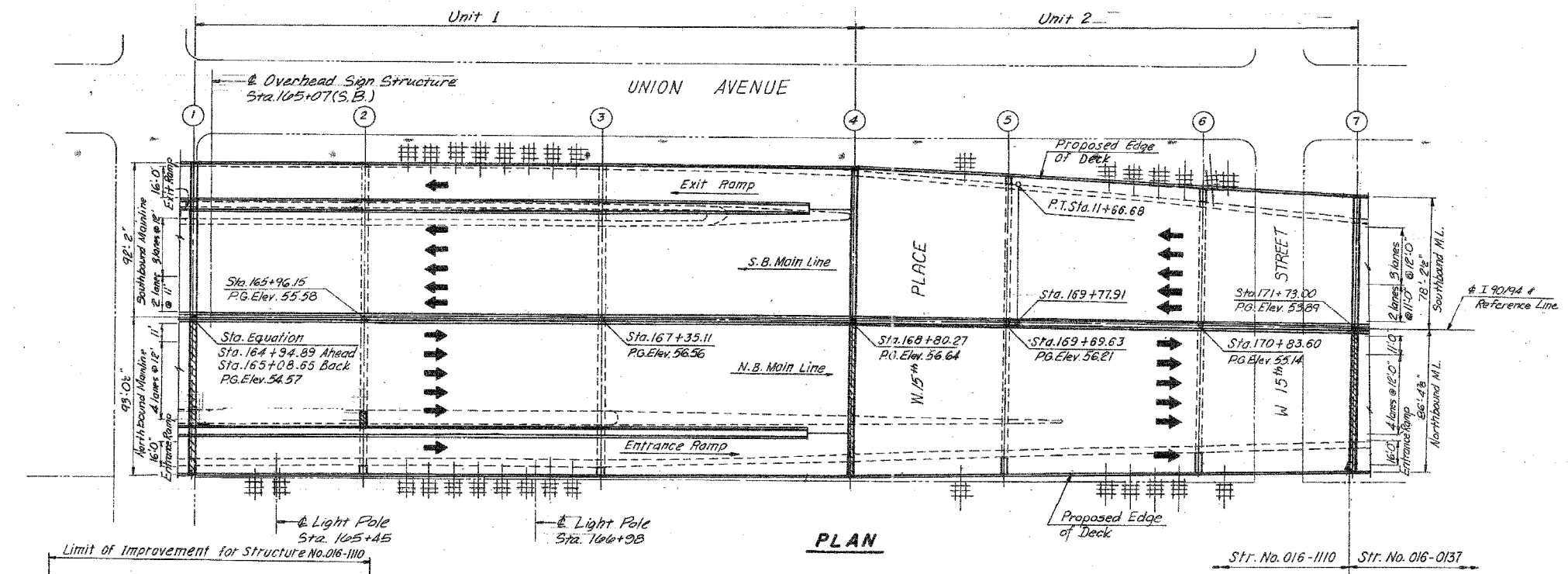
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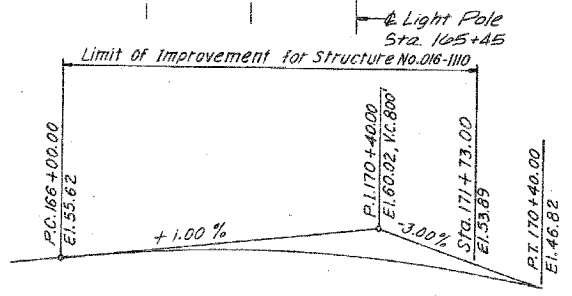
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94/90	2003-028F	COOK	419	141
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				



**ELEVATION**



**PLAN**



**PROFILE GRADE**  
DAN RYAN EXPRESSWAY (I-90/94)

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REVISIONS	
NAME	DATE

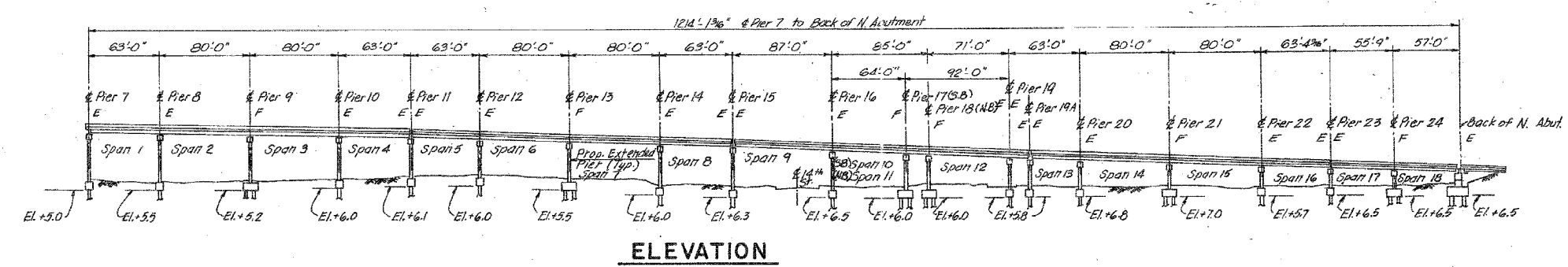
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
GENERAL PLAN AND ELEVATION  
SN 016-1110

SCALE: NTS  
DATE: 7/22/2005

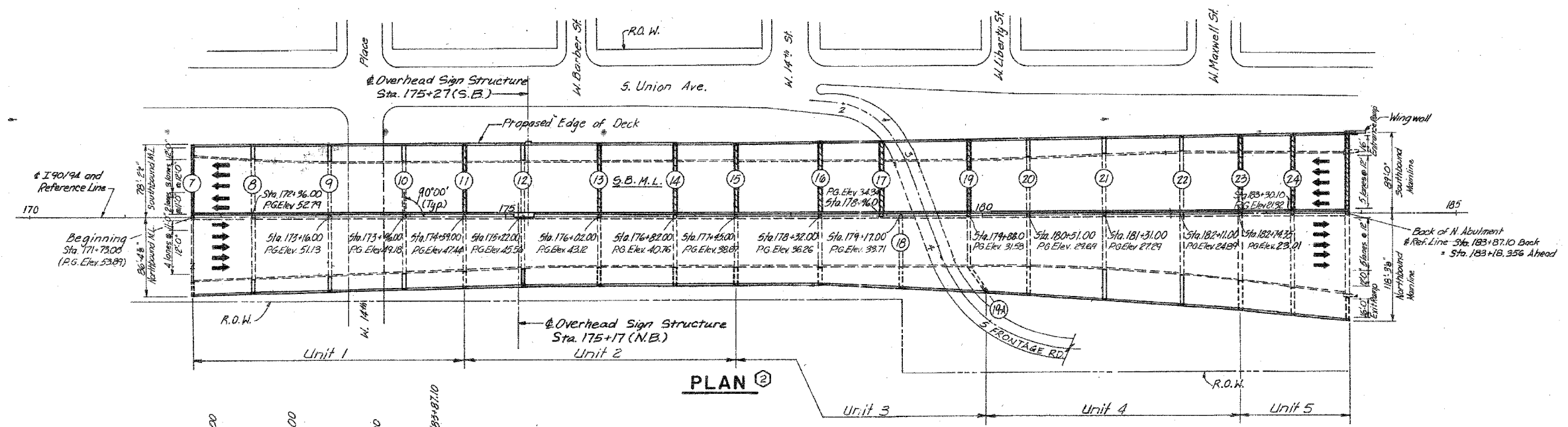
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	142
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

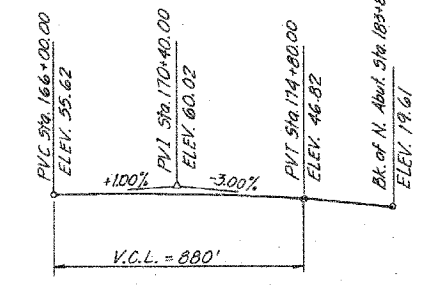
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**ELEVATION**



**PLAN**



**PROFILE GRADE**  
DAN RYAN EXPRESSWAY ( I 90 / 94 )

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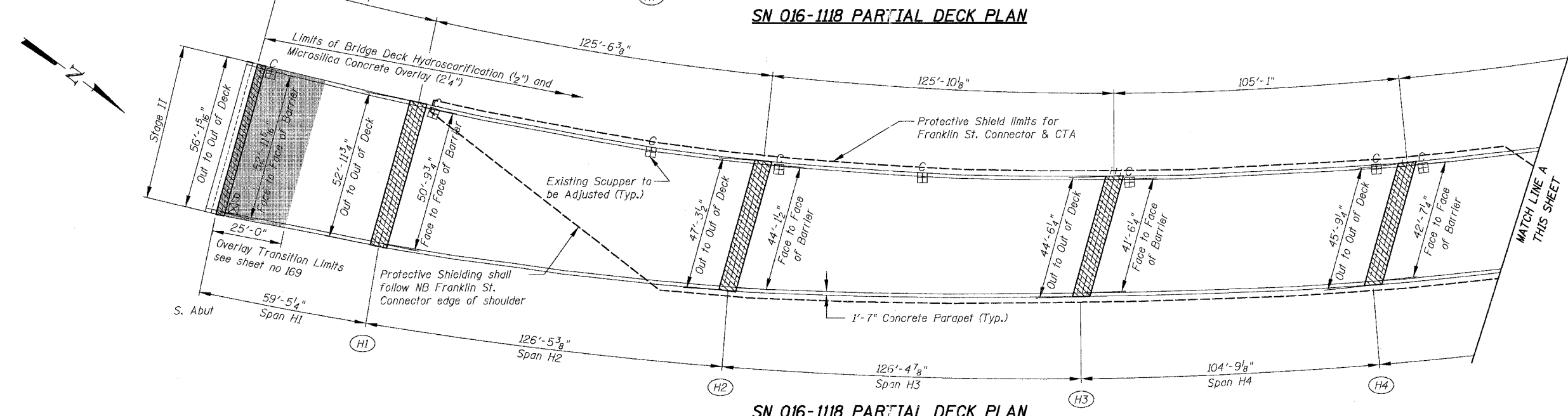
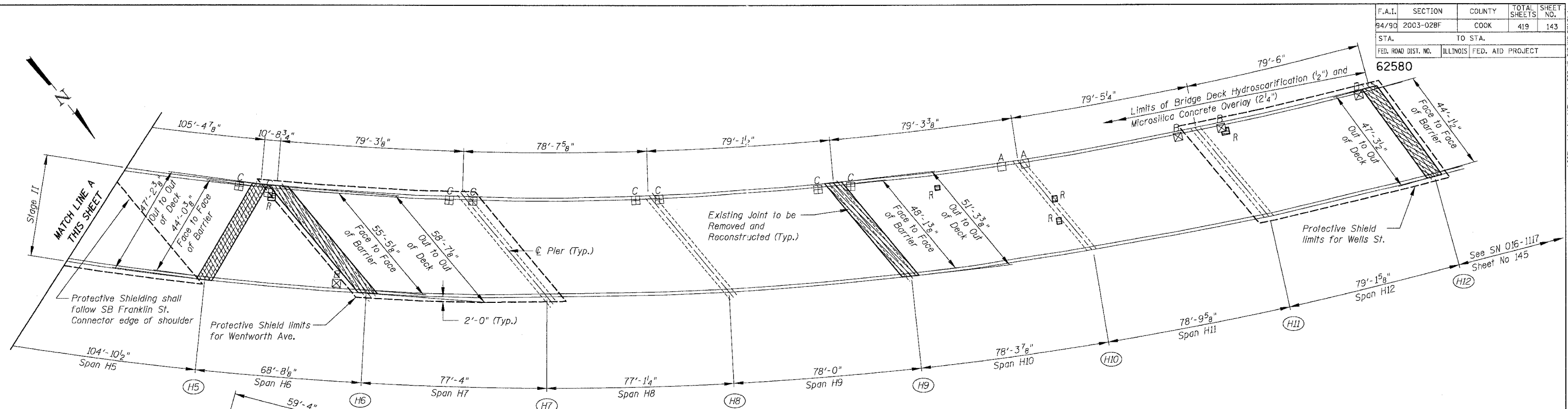
For Notes and Legend see sheet 132.

REVISIONS		DATE	ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) NB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS GENERAL PLAN AND ELEVATION SN 016-0137
NAME			

SCALE: NTS  
DATE: 7/22/2005  
DRAWN BY: BOC  
CHECKED BY: BLU

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	143
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

62580



**LEGEND**

- Overlay Transition Limits
- Protective Shield Limits
- Limits of Stage I
- Pier Number
- Concrete Removal / Joint Reconstruction
- Deck Slab Repair Partial Depth
- Deck Slab Repair Full Depth
- Scupper - Type A
- Scupper - Type B
- Scupper - Type C
- Scupper - Special

**Notes:**

The limits of the deck slab repair partial depth are shown for information only as per special provision. The additional volume of Overlay required to fill all depressions below the specified thickness will be paid for at the contractor's actual material cost for Microsilica Concrete per square yard plus 15 percent.

An estimated quantity of 140 sy is shown in the table of "Total Bill of Material" for "Deck Slab Repair (Full Depth Type I)". The exact quantity will be measured in the field as directed by the Engineer after Hydroscarification has been completed.

The limits of Hydroscarification and Microsilica Concrete Overlay does not include the concrete removal area (shown as hatched on the plans), nor 4' on each side of the Finger Plate Joint locations.

Parapet repairs are shown at approximate locations. The Contractor, as directed by the Engineer, shall visually inspect and determine the location(s) and the extent of the parapet concrete damages. The cost for the repairs shall be included in the cost of "Concrete Removal" and "Concrete Superstructure".

All dimensions are given along  $\phi$  of Pier unless noted otherwise.

Limits of Protective Shield shown graphically for clarity. Shielding shall be provided from  $\phi$  pier to  $\phi$  pier over spans shown out to out of deck, unless noted otherwise. Full shielding shall be provided over streets, railroads and waterways for Hydroscarification operations. Protective Shield shall be provided for any full depth slab repairs.

The Contractor shall exercise care during the removal of the concrete parapet for the joint reconstruction not to damage any parapet mounted junction boxes that may interfere with the removal. The Contractor shall repair any damages at no additional cost to the Department.

For stages of work, plan, cross sections and TCB, see MOT plans. Alignment show was derived from as built plans for contractors reference and should not be used for dimensional purposes.

For existing and proposed joint details see sheets 160 & 161.

For existing joint sections see sheet 162.

For proposed joint sections see sheet 163.

For existing and proposed joint plans see sheets 164 to 166.

For Scupper adjustment details see sheet 307 & 308.

For Hydroscarification and Microsilica Concrete Overlay details see sheet 169.

For Finger Plate Joint details see sheets 179 to 235.

For Pier and Abutment Skew Angles see sheets 160 & 161.

For Silicone Joint Sealer details see sheet 170A.

For Closure Wall details see sheet 168.

For Parapet Concrete repair, see Detail "B" sheet 170A.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PARTIAL DECK PLAN  
 SN 016-1118 (RAMP H)

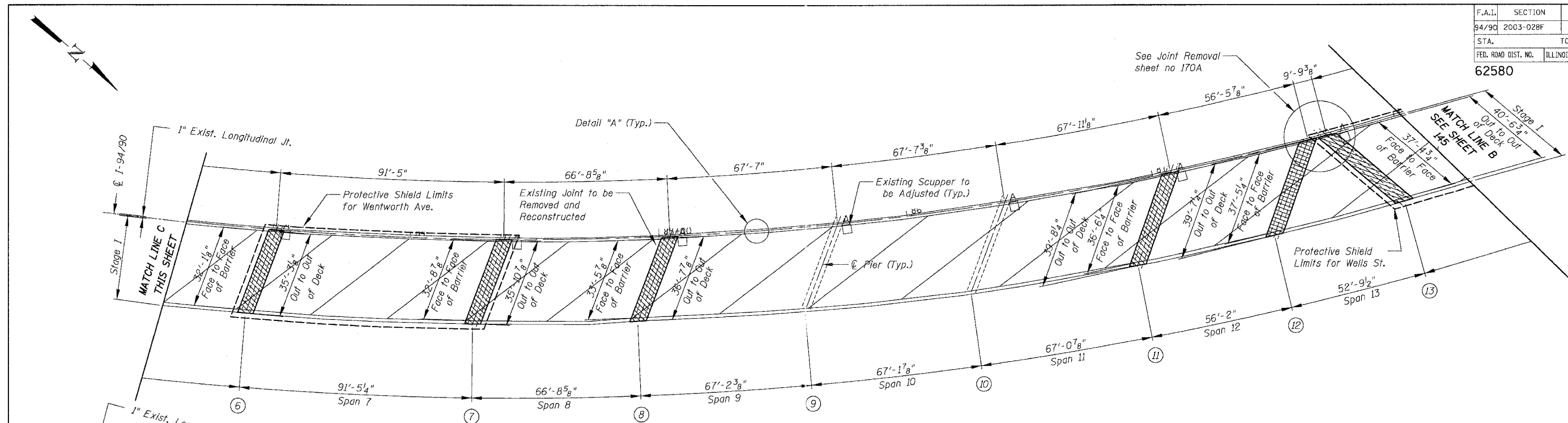
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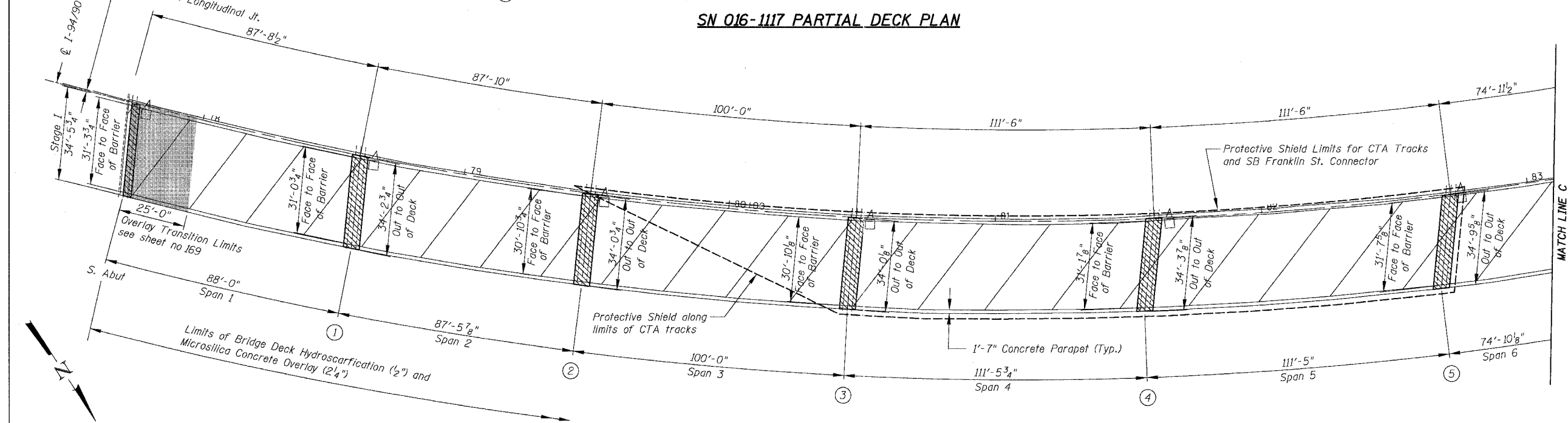
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	144
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

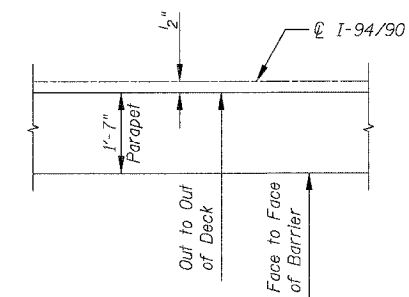
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**SN 016-1117 PARTIAL DECK PLAN**



**SN 016-1117 PARTIAL DECK PLAN**



**DETAIL "A" (TYP)**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PARTIAL DECK PLAN  
 SN 016-1117

SCALE: 1"=20'  
 DATE: 8/12/2005

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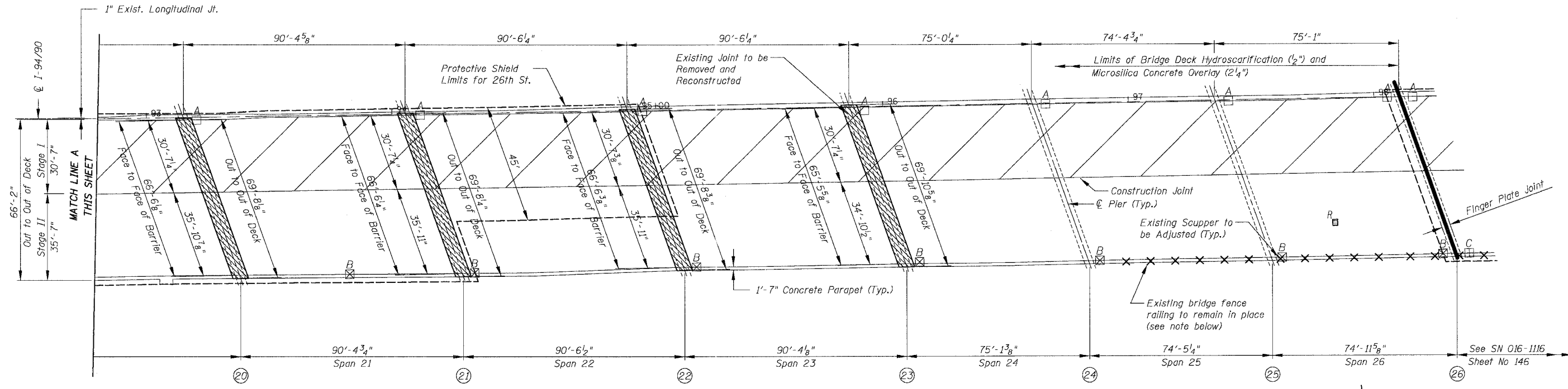
BOWMAN, BARRETT & ASSOCIATES INC.  
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For Notes and Legend See Sheet 143

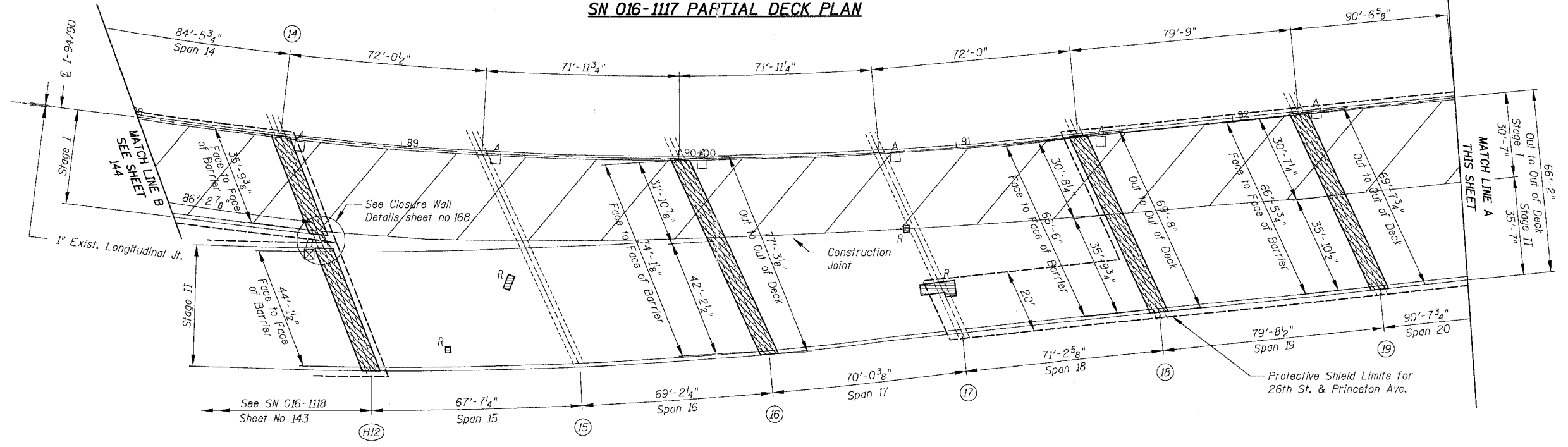
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62580



SN 016-1117 PARTIAL DECK PLAN



SN 016-1117 PARTIAL DECK PLAN

Notes:  
 The bridge fence railing located on top of the parapet shown at the approximate location above shall be removed and reinstalled (posts and railing) as required for the partial removal of the barrier for the joint reconstruction. The Contractor shall verify the exact location of the bridge fence railing. The work required for the removal and reinstallation of the bridge fence railing will not be paid separately but shall be included in the pay item for "Concrete Removal" and "Concrete Superstructure".  
 For additional Notes and Legend See Sheet 14.3

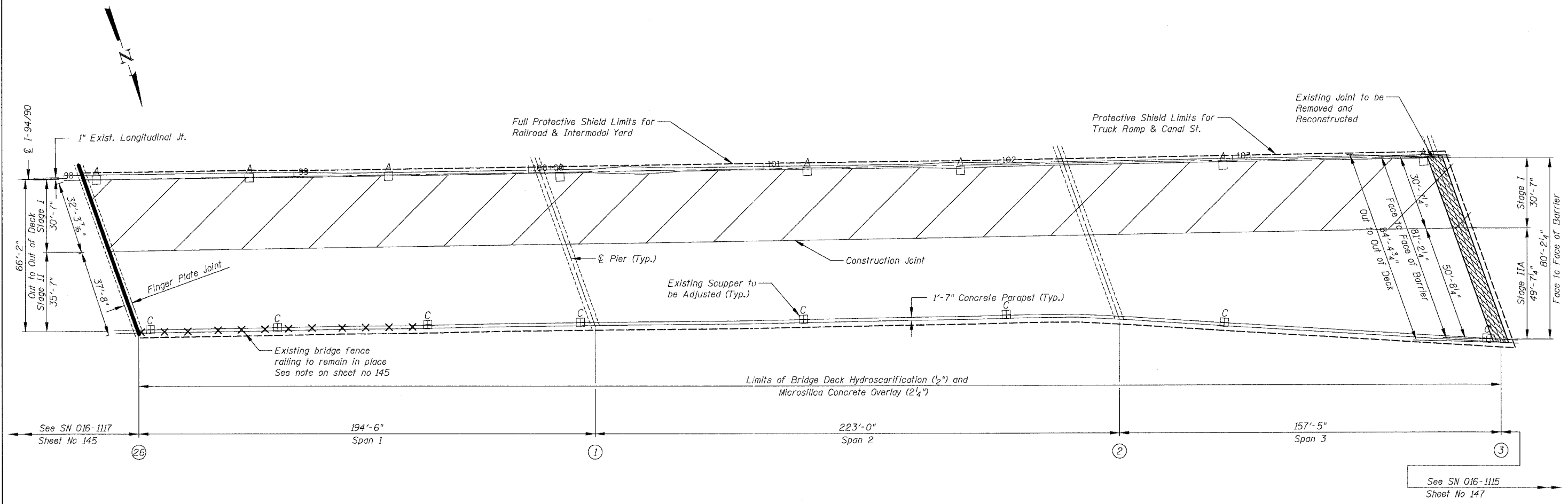
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PARTIAL DECK PLAN  
 SN 016-1117  
 SCALE: 1"=20'  
 DATE: 8/12/2005  
 DRAWN BY: BDC  
 CHECKED BY: BLU

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94/90	2003-028F	COOK	419	146
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**SN 016-1116 PARTIAL DECK PLAN**

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Chicago, Illinois  
312.238.0100  
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For Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

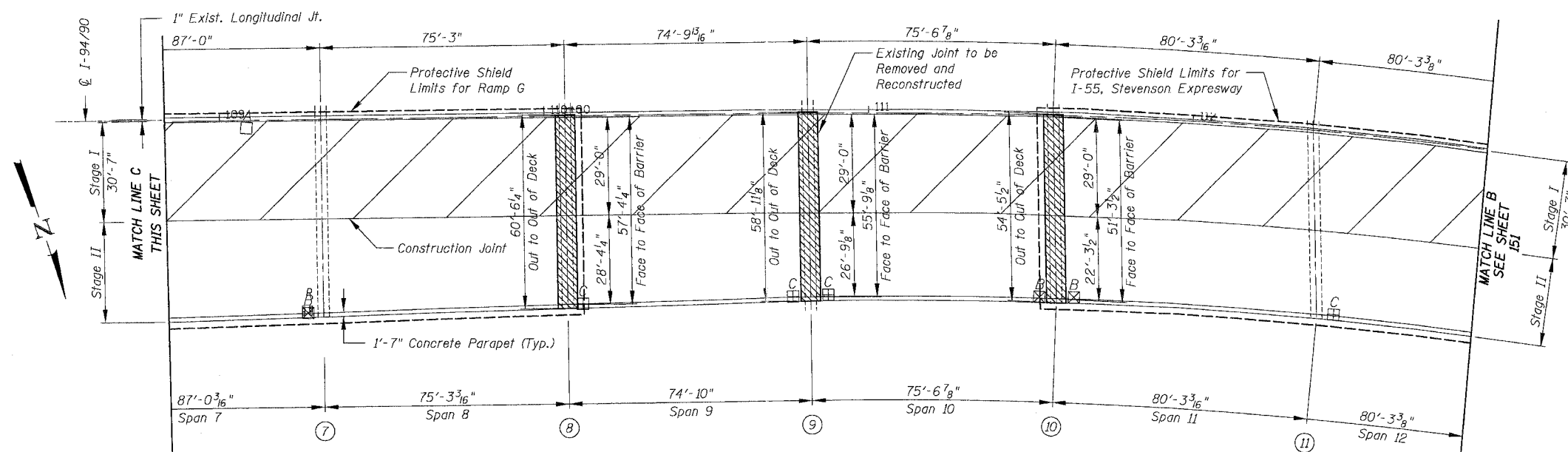
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**F.A.I. 94/90 (DAN RYAN EXPRESSWAY)**  
**NB DAN RYAN ELEVATED BRIDGE**  
**REPAIR FROM 15TH TO 28TH STREETS**  
**PARTIAL DECK PLAN**  
**SN 016-1116**

SCALE: 1"=20'  
DATE: 8/12/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

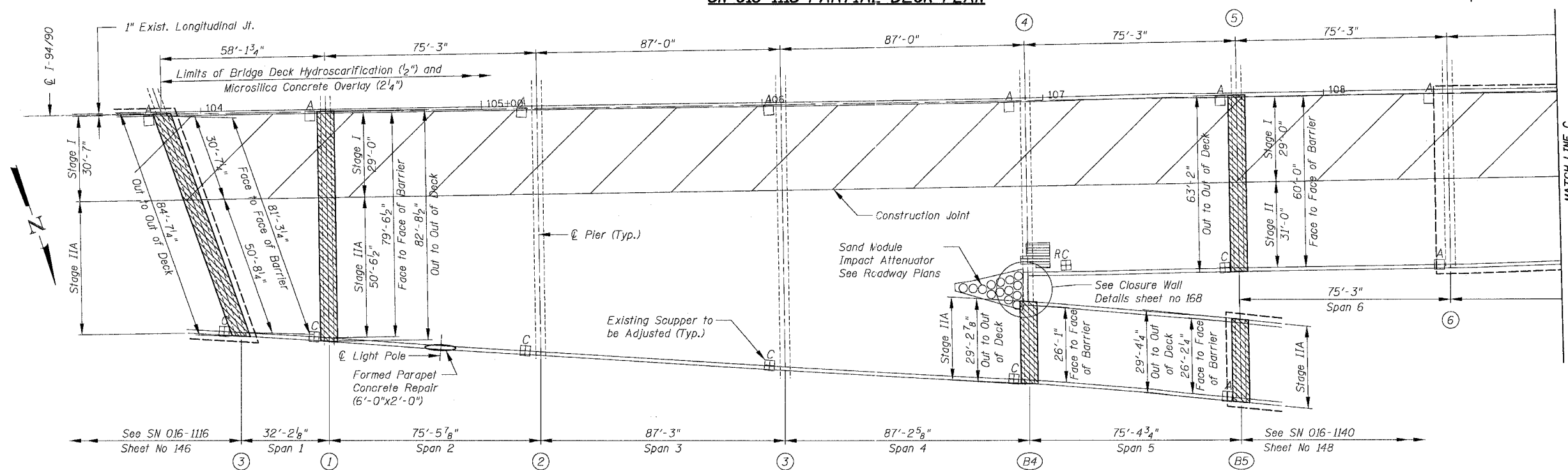
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94/90	2003-028F	COOK	419	147
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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**SN 016-1115 PARTIAL DECK PLAN**



**SN 016-1115 PARTIAL DECK PLAN**

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Notes:  
The cost for formed parapet concrete repair will be included in the cost of "Formed Concrete Repair (Depth Greater than 5")"  
For Additional Notes and Legend See Sheet 143

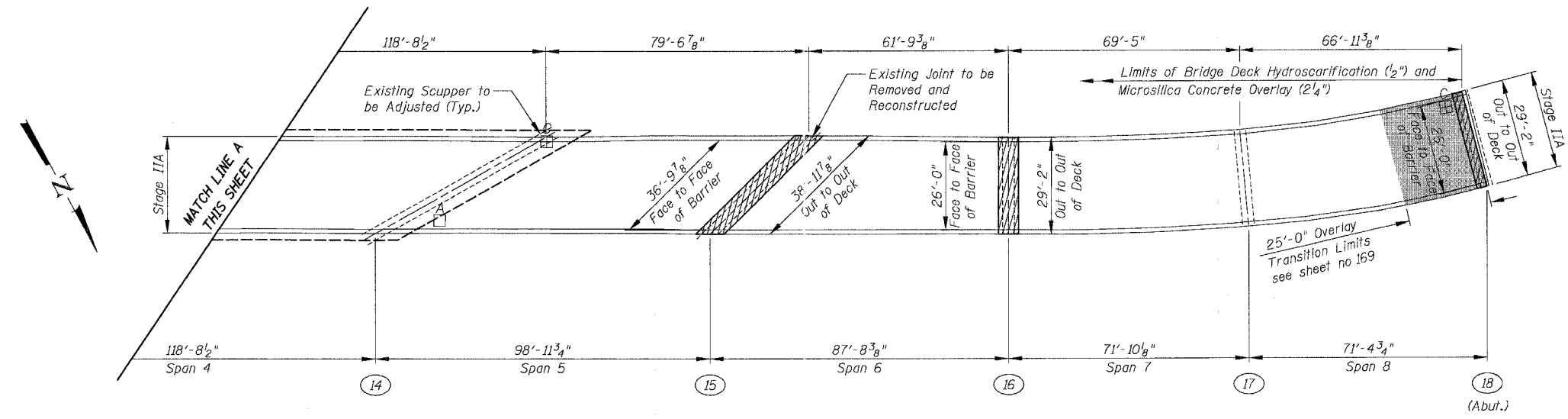
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1115

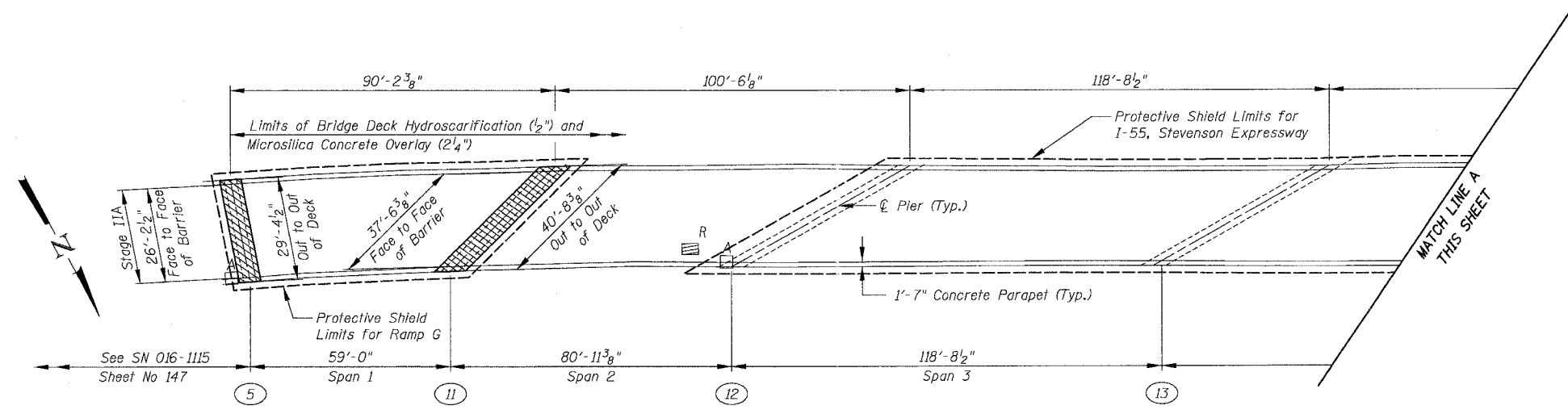
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94/90	2003-028F	COOK	419	148
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



SN 016-1140 PARTIAL DECK PLAN



SN 016-1140 PARTIAL DECK PLAN

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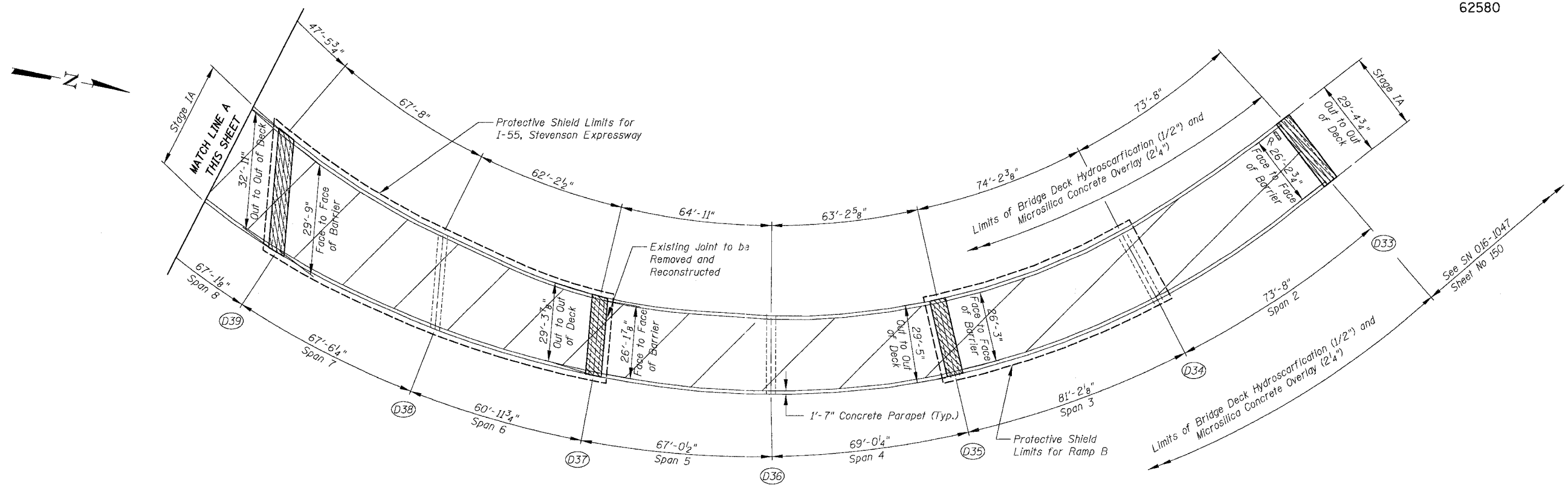
For Notes and Legend See Sheet 143

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	F.A.I. 94/90 (DAN RYAN EXPRESSWAY)	
		NB DAN RYAN ELEVATED BRIDGE	
		REPAIR FROM 15TH TO 28TH STREETS	
		PARTIAL DECK PLAN	
		SN 016-1140 (RAMP B)	
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		DATE: 8/12/2005	CHECKED BY: BLU

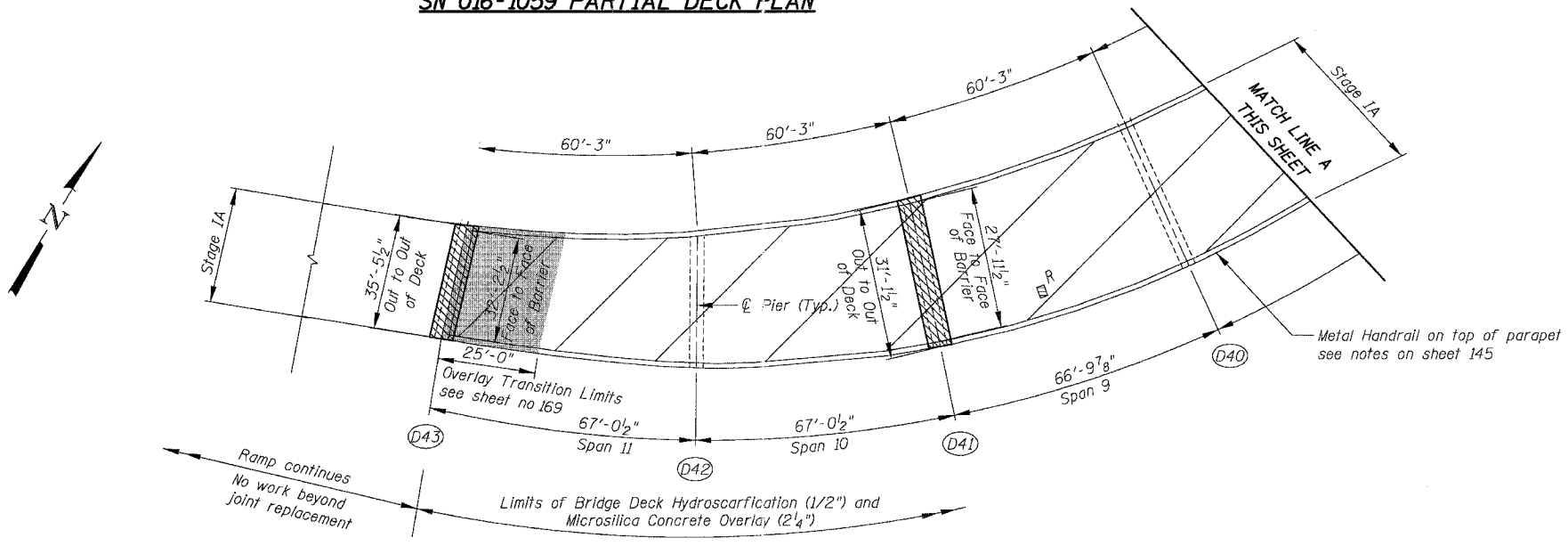
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**SN 016-1059 PARTIAL DECK PLAN**



**SN 016-1059 PARTIAL DECK PLAN**

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For Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

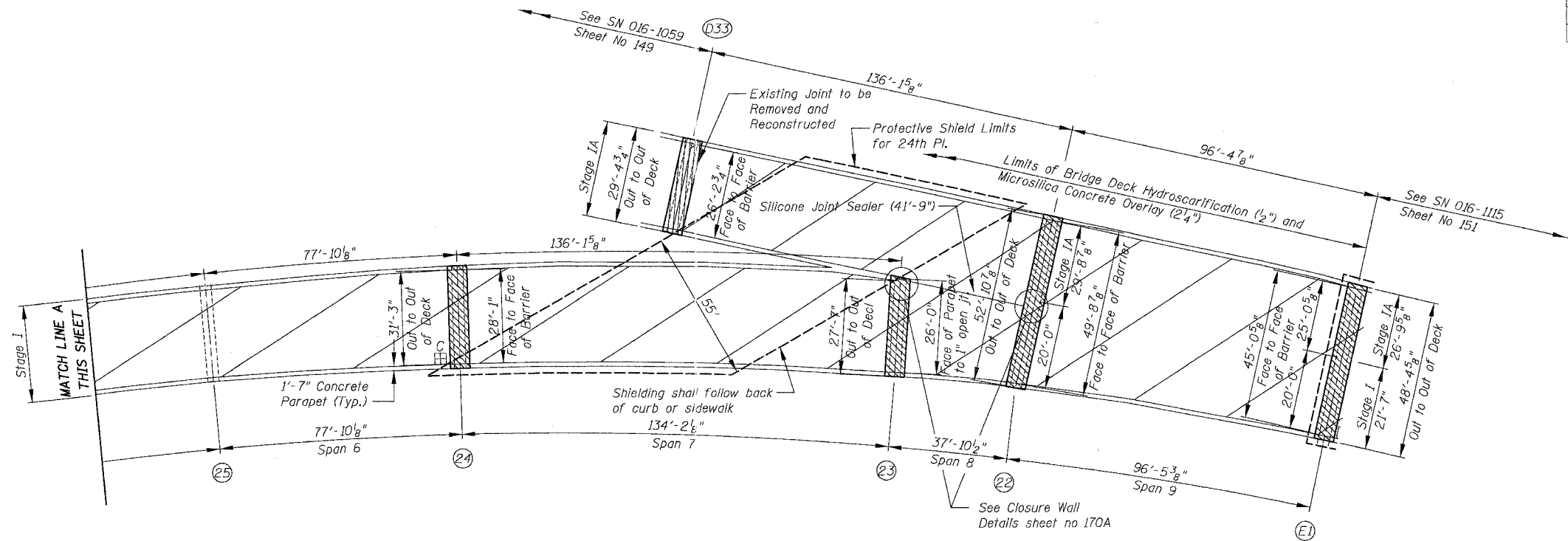
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F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
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PARTIAL DECK PLAN  
SN 016-1059 (RAMP D)

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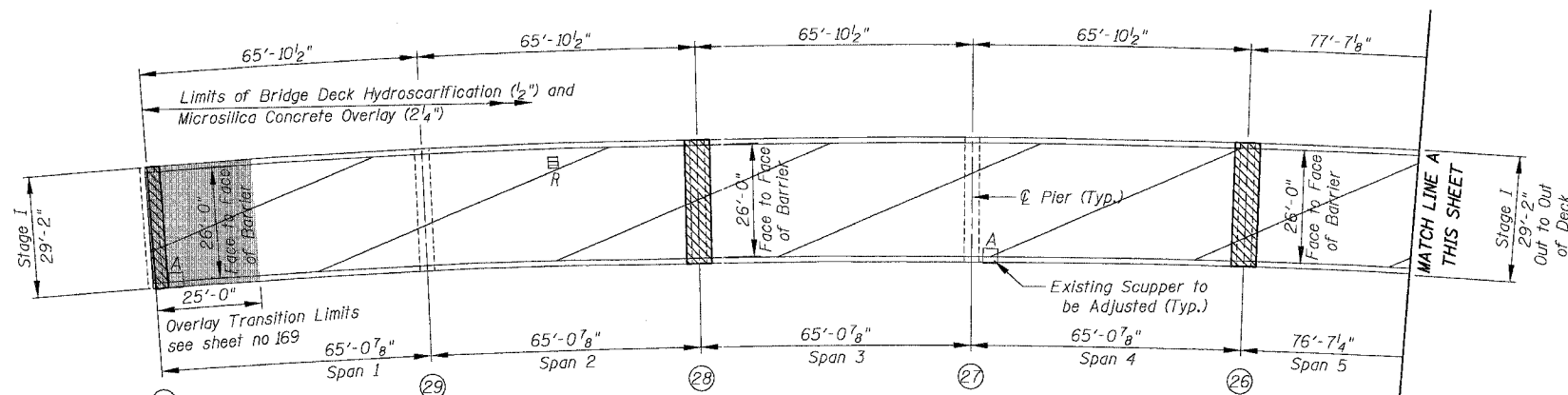
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94/90	2003-028F	COOK	419	150
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**SN 016-1047 PARTIAL DECK PLAN**



**SN 016-1047 PARTIAL DECK PLAN**

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For Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

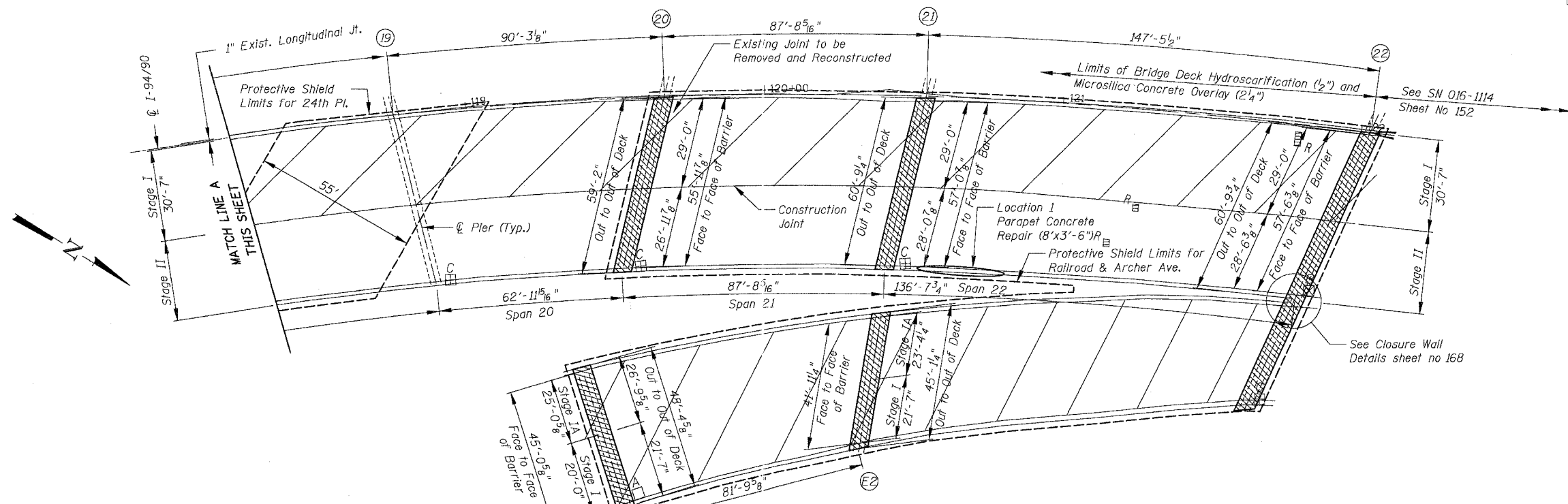
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1047 (RAMP E)

SCALE: 1"=20'  
DATE: 8/12/2005

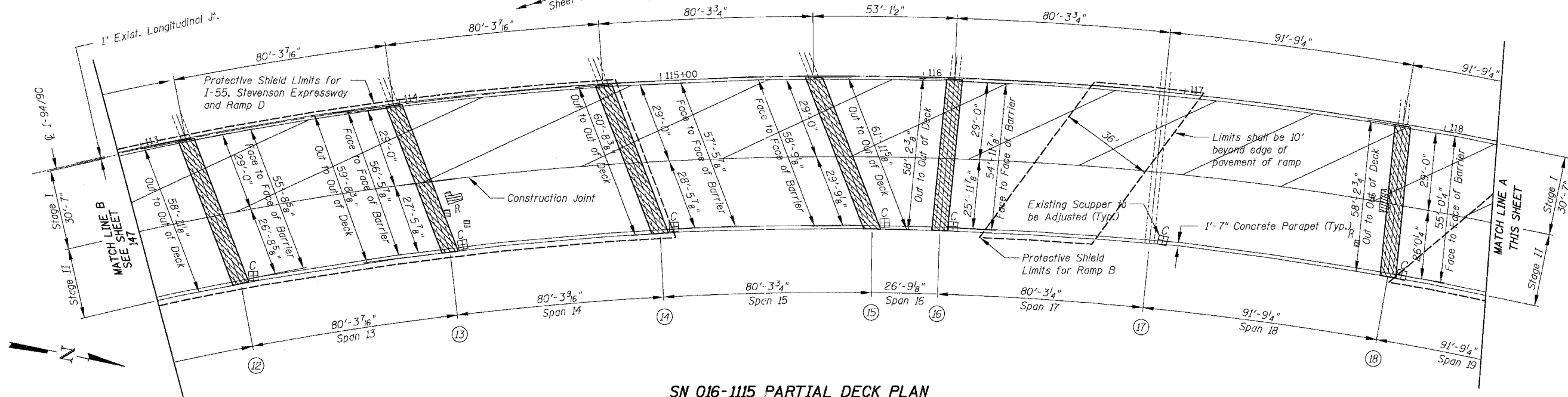
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10/25/2005 8/11/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-02BF	COOK	419	151
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



SN 016-1115 PARTIAL DECK PLAN



SN 016-1115 PARTIAL DECK PLAN

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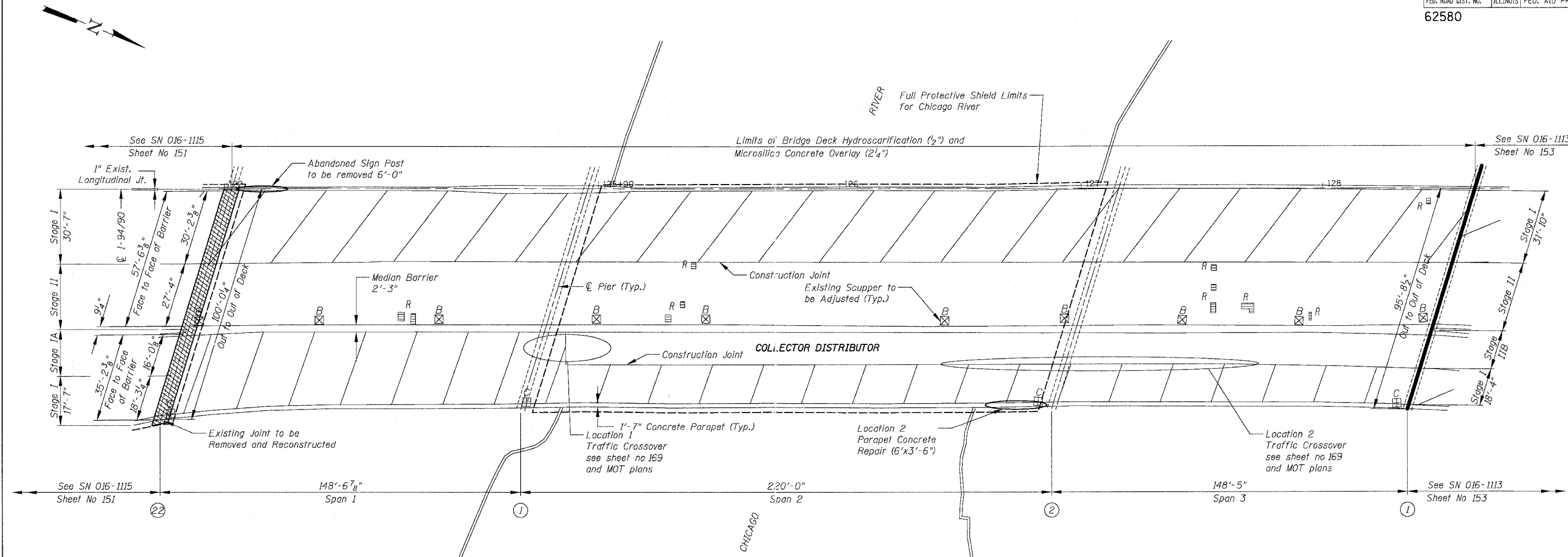
Notes:  
For parapet concrete repair see sheet 170A  
For Additional Notes and Legend See Sheet 143

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1115  
SCALE: 1"=20'  
DATE: 8/12/2005  
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10/25/2005 8/11/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	152
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62580				



**SN 016-1114 & SN 016-1070 PARTIAL DECK PLAN**

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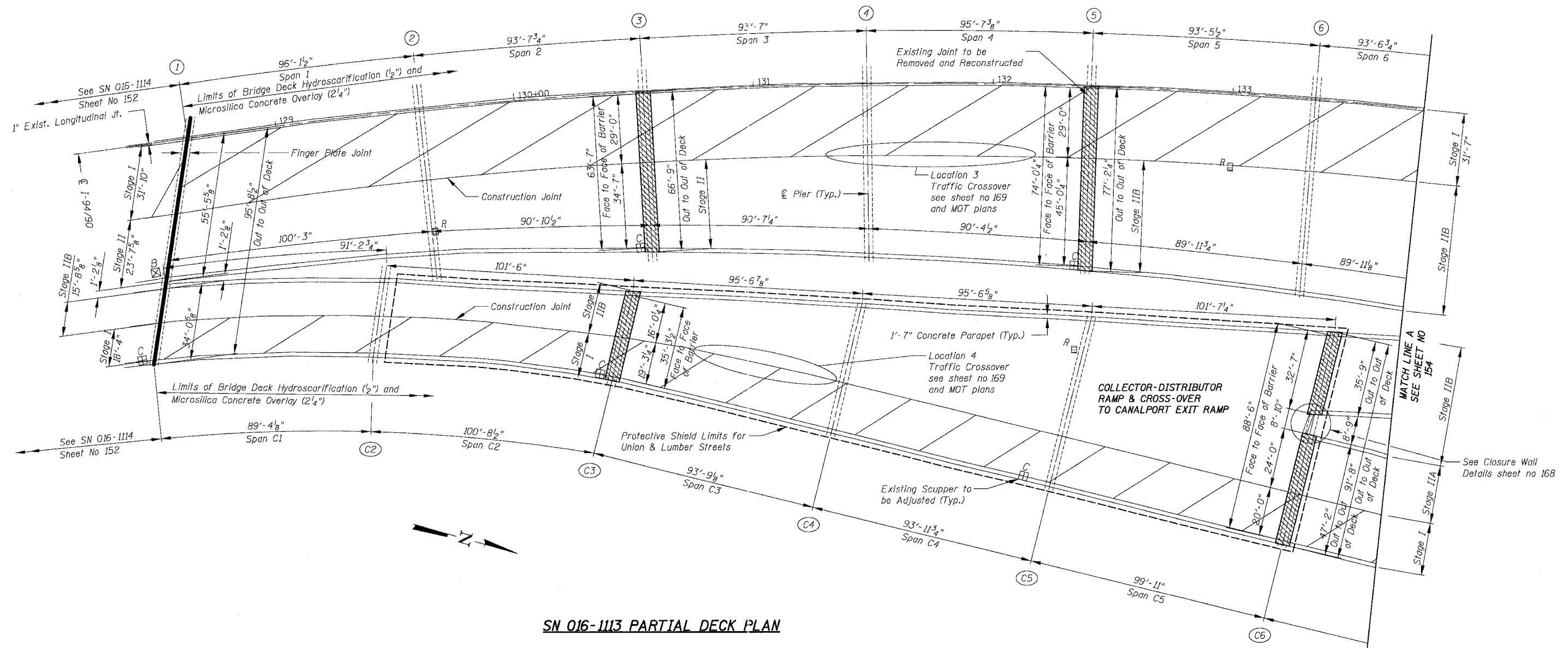
Notes:  
The cost for removal of the abandoned sign post shall be included in the cost for "Concrete Removal"  
For parapet concrete repair see sheet 170A  
For additional Notes and Legend See Sheet 14.3

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1114 & 016-1070  
SCALE: 1"=20'  
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CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	153
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				



SN 016-1113 PARTIAL DECK PLAN

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For Notes and Legend See Sheet 143

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1113

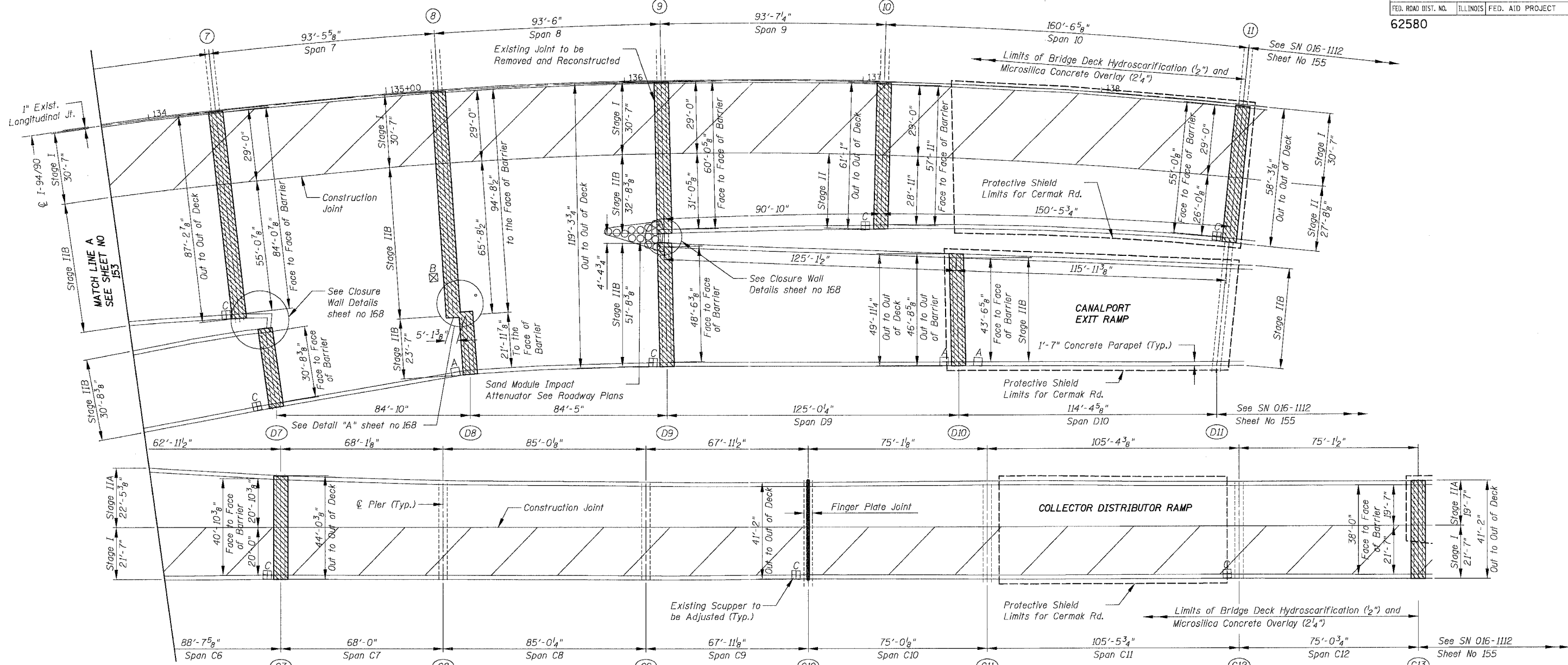
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94/90	2003-028F	COOK	419	154
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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SN 016-1113 PARTIAL DECK PLAN

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For Notes and Legend See Sheet 14.3

REVISIONS	
NAME	DATE

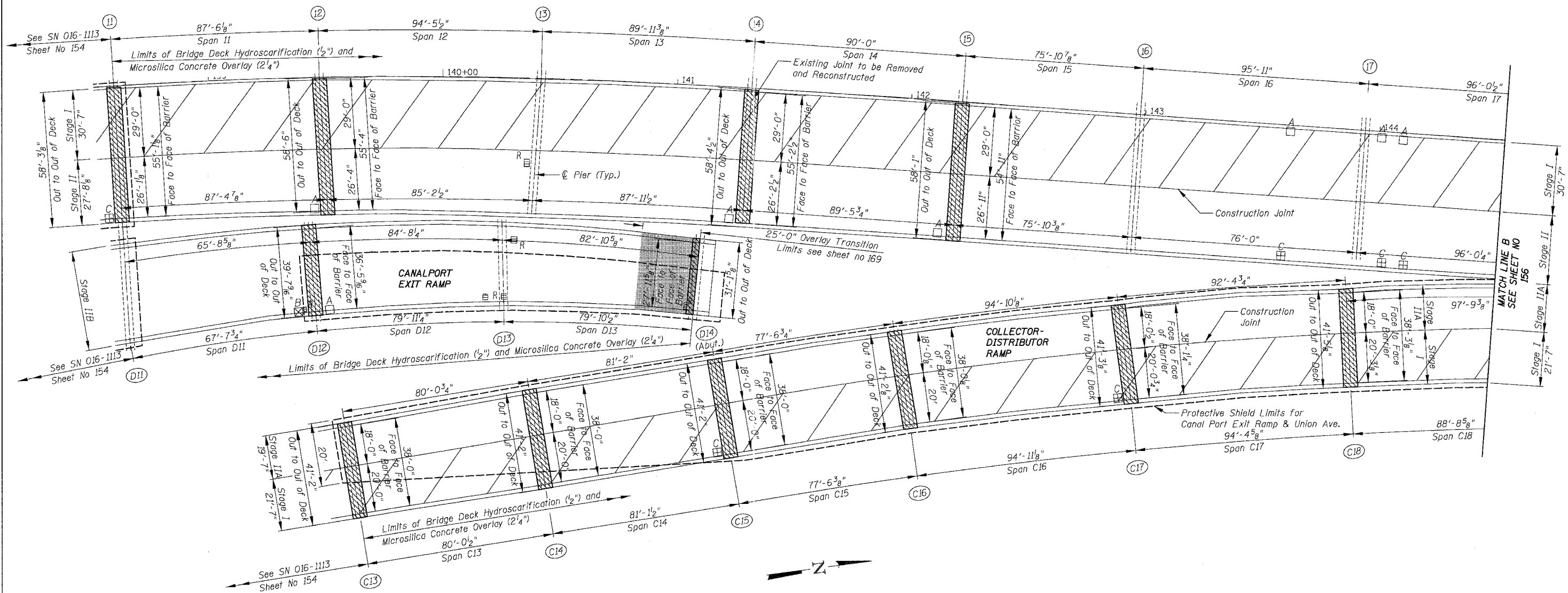
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1113

SCALE: 1"=20'  
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	155
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



SN 016-1112 PARTIAL DECK PLAN

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For Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

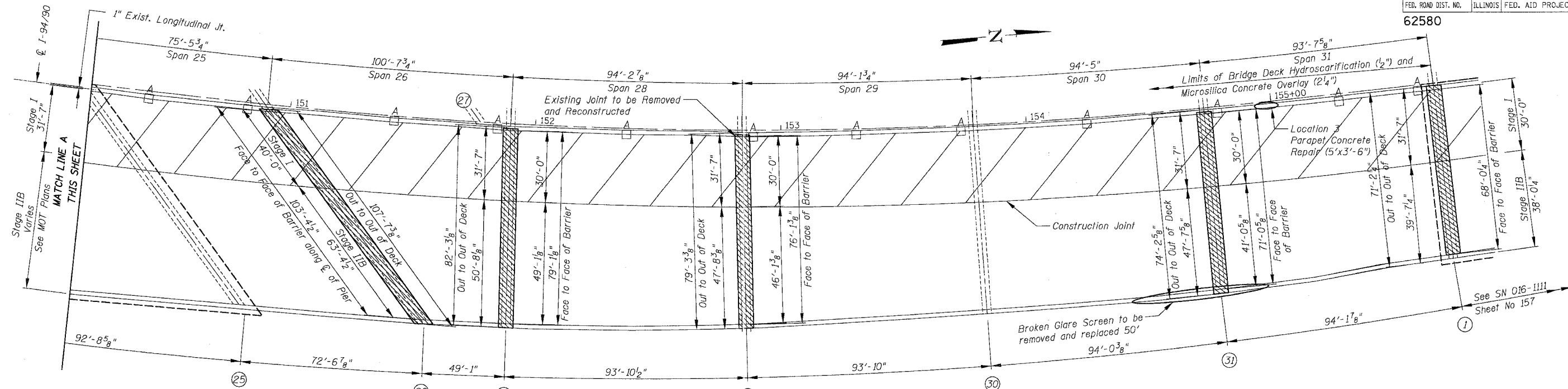
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F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
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REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1112

SCALE: 1"=20'  
DATE: 8/12/2005  
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CHECKED BY: BLU

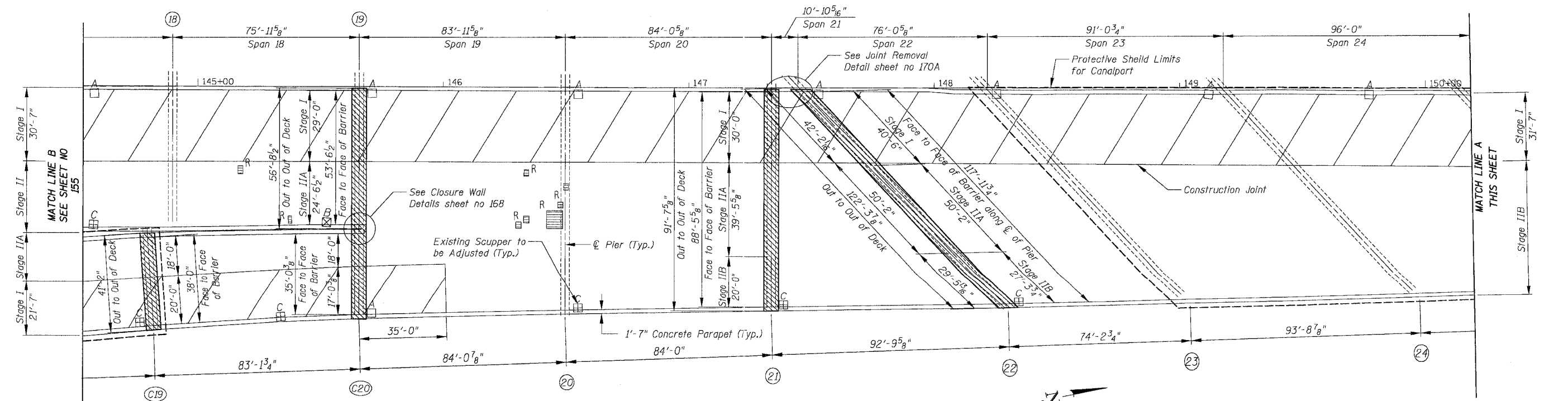
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	156
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

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SN 016-1112 PARTIAL DECK PLAN



SN 016-1112 PARTIAL DECK PLAN

An estimated length of 50' is provided for removal and replacement of the existing Modular Glare Screen System. The Contractor and the Engineer shall take exact field measurements of the existing Glare Screen that needs to be replaced. The cost of the removal and replacement shall be included in the cost per foot for "Modular Glare Screen System"  
 For parapet concrete repair see sheet 170A  
 For Additional Notes and Legend See Sheet 143

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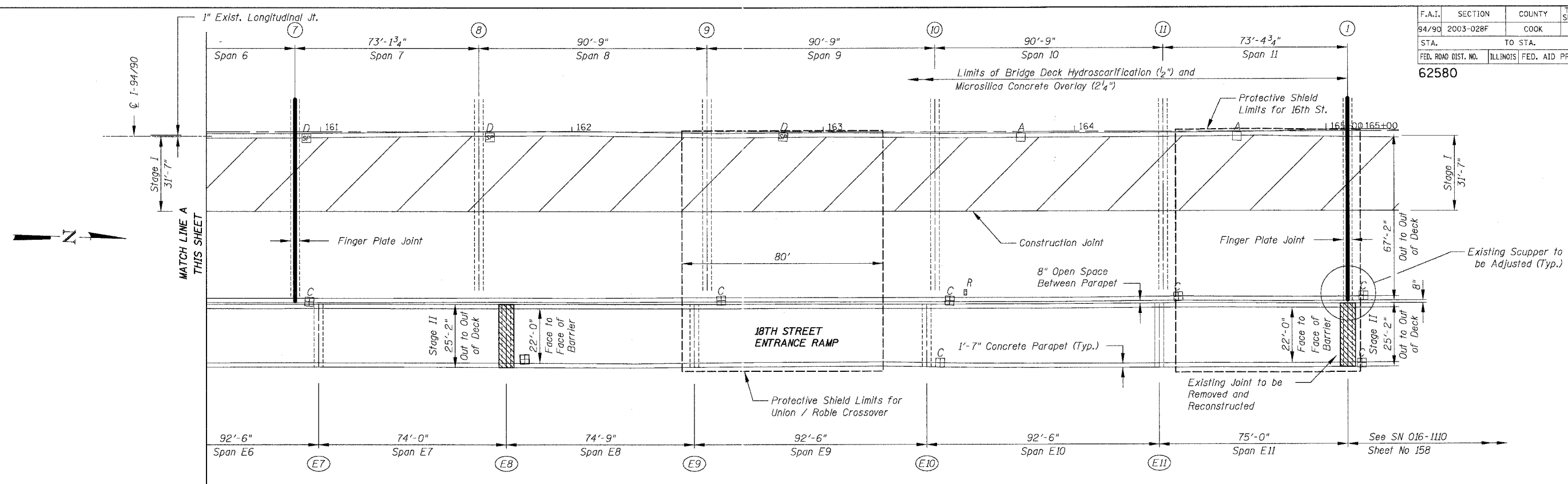
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PARTIAL DECK PLAN  
 SN 016-1112  
 SCALE: 1"=20'  
 DATE: 8/12/2005  
 DRAWN BY: BDC  
 CHECKED BY: BLU

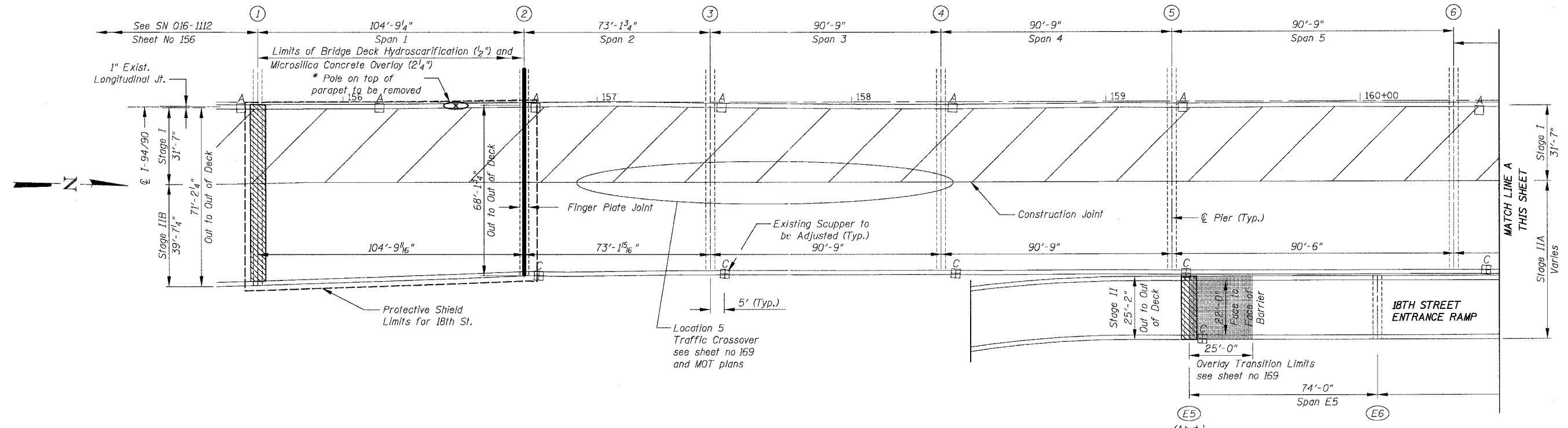
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	157
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**SN 016-1111 PARTIAL DECK PLAN**



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For Notes and Legend See Sheet 143  
\* Location of the pole to be removed is approximate, post removal shall be included in the cost for "Concrete Removal"

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1111

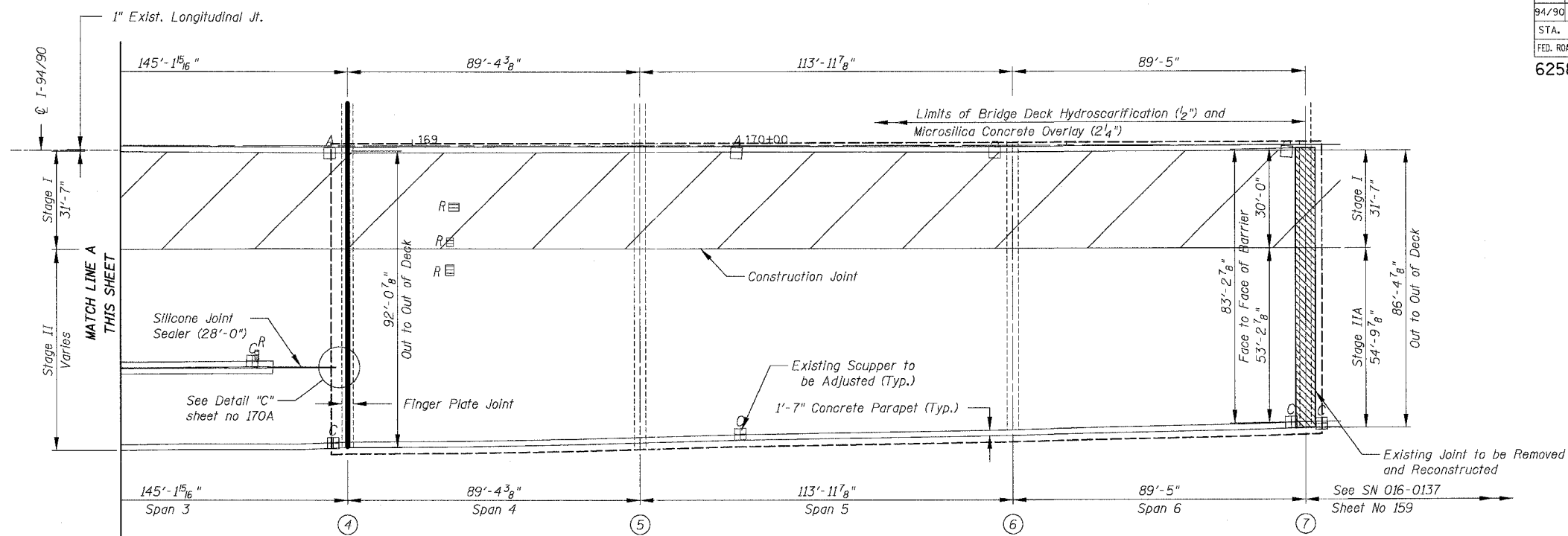
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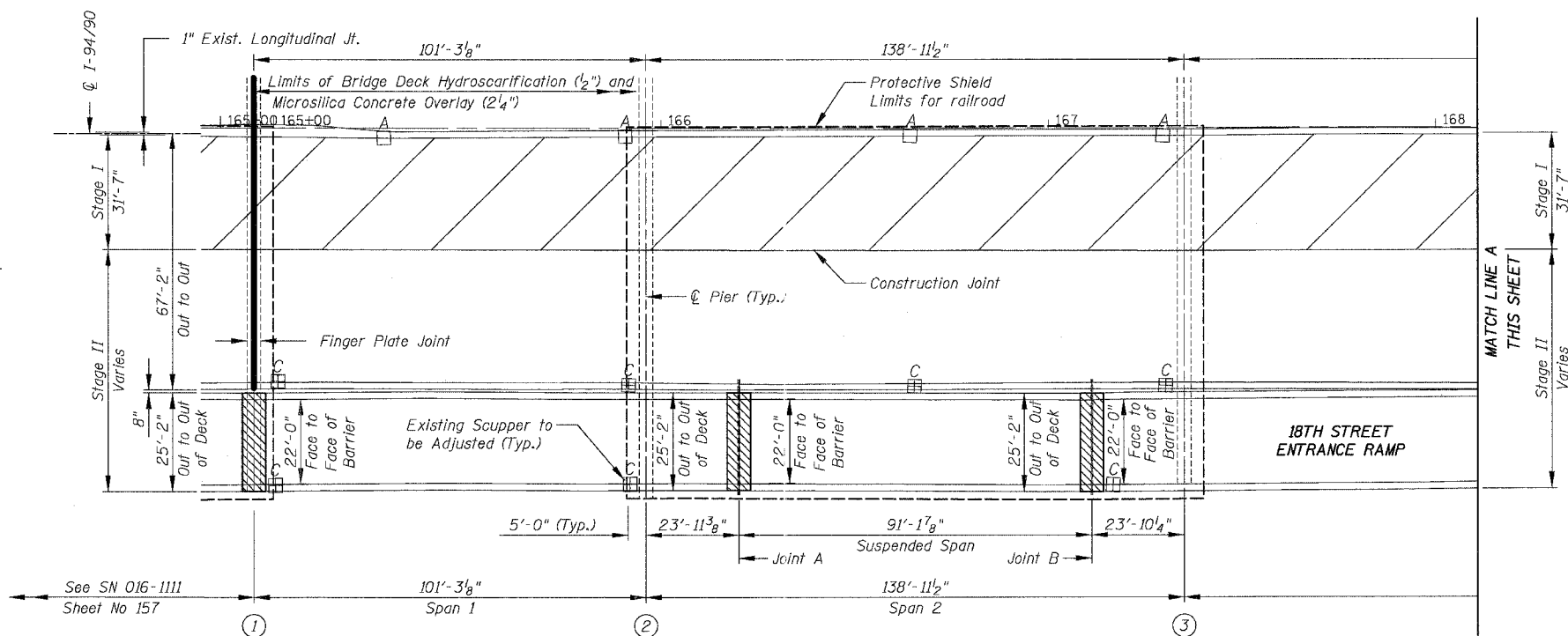
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	158
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

62580



SN 016-1110 PARTIAL DECK PLAN



SN 016-1110 PARTIAL DECK PLAN

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For Notes and Legend See Sheet 14.3

REVISIONS	NAME	DATE

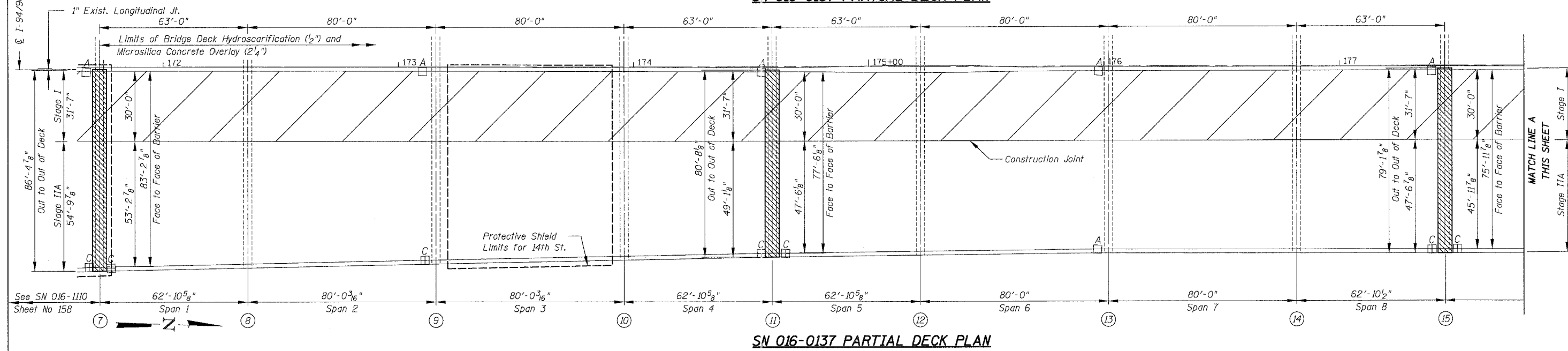
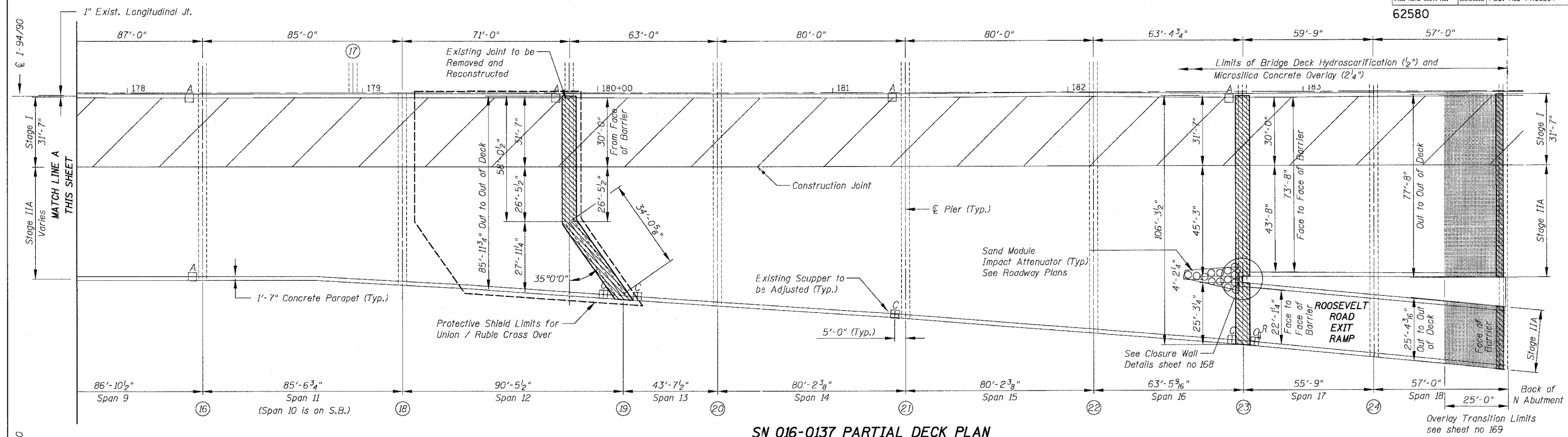
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1110

SCALE: 1"=20'  
DATE: 8/12/2005

DRAWN BY: BOC  
CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	159
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				



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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PARTIAL DECK PLAN  
 SN 016-0137

SCALE: 1"=20'  
 DATE: 8/12/2005

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**LOCATION & DESIGNATION OF JOINTS**

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-02BF	COOK	419	161
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
<b>62580</b>				

STRUCTURE NUMBER (SN)	LOCATION PIER	DESIGNATION 1 CROSS SECTIONS THRU JOINTS		EXISTING JOINT		LENGTH CONTR. TO EXP. (ft)	SKEW ANGLE (°)	PROPOSED JOINT		LENGTH OF JOINT FACE TO FACE OF PARAPET	DESIGNATION 2 STAGED AND NON STAGED CONSTRUCTION	
		EXISTING	PROPOSED	TYPE	SIZE			TYPE	"A"			
016-1117	S. Abut.	2	3	PJS	4"	88'-0"	9°39'0"	④	2 3/4"	31'-3 3/4"	B	
	1	4a	2	PJS	2 1/2"	FIXED	5°43'12"	②	1"	31'-0 3/4"	B	
	2	4b	4	PJS	4"	87'-6"	1°46'12"	④	2 3/4"	30'-10 3/4"	B	
	3	4b	4	PJS	4"	100'-0"	2°43'48"	④	2 3/4"	30'-10 1/2"	A	
	4	4b	4	PJS	4"	111'-6"	7°45'0"	④	2 3/4"	31'-1 1/8"	A	
	5	4b	4	PJS	4"	111'-6"	12°46'12"	④	2 3/4"	31'-7 5/8"	A	
	6	7	4	Neoprene	2"	75'-0"	16°9'0"	③	1 3/4"	32'-1 1/8"	A	
	7	7	4	Neoprene	2"	90'-6"	20°16'12"	④	2 3/4"	32'-8 1/8"	A	
	8	6	1	Neoprene	2 1/2"	159'-0"	23°16'12"	①	2 1/2"	33'-5 7/8"	A	
	11	6	1	Neoprene	2"	102'-0"	31°18'0"	①	2 1/2"	36'-6 1/4"	G	
	12	6	1	Neoprene	2"	57'-0"	33°52'12"	①	2 1/2"	37'-5 1/4"	G	
	13	6	1	Neoprene	2"	7'-6"	34°55'12"	①	2 1/2"	37'-4 3/4"	H	
	14	6	1	Neoprene	2 1/2"	157'-0"	27°34'48"	①	2 1/2"	35'-9 3/8"	B	
	16	6	1	Neoprene	2"	144'-0"	24°37'12"	①	2 1/2"	74'-1 1/8"	E	
	18	6	1	Neoprene	2"	152'-0"	19°10'12"	①	2 1/2"	66'-6"	E	
	19	7	4	Neoprene	2"	90'-6"	18°42'0"	④	2 3/4"	66'-5 3/4"	E	
	20	7	4	Neoprene	2"	90'-6"	18°42'0"	④	2 3/4"	66'-6 1/8"	E	
	21	7	4	Neoprene	2"	90'-6"	18°42'0"	④	2 3/4"	66'-6 1/4"	E	
	22	7	4	Neoprene	2"	90'-6"	18°42'0"	④	2 3/4"	66'-6 3/8"	E	
	23	7	4	Neoprene	2"	75'-0"	18°42'0"	③	1 3/4"	66'-5 5/8"	E	
	26	FPJ	-	Finger Plate	4 1/2"	800'-0"	18°42'0"	-	-	-	-	-
	016-1118 (RAMP H)	S. Abut.	2	3	PJS	2 1/2"	59'-3"	1°49'12"	③	1 3/4"	52'-11 1/8"	A
		H1	4a	2	PJS	2 1/2"	FIXED	3°13'48"	②	1"	50'-9 3/4"	A
		H2	4b	4	PJS	4"	125'-6"	9°6'0"	④	2 3/4"	44'-1 1/8"	A
		H3	4b	4	PJS	4"	125'-6"	15°57'0"	④	2 3/4"	41'-6 1/4"	A
		H4	7	4	Neoprene	2"	104'-3"	20°34'12"	④	2 3/4"	42'-7 1/4"	A
H5		6	1	Neoprene	2 1/2"	146'-6"	25°3'0"	①	2 1/2"	44'-0 3/8"	A	
H6		6	1	Neoprene	2"	118'-0"	44°51'0"	①	2 1/2"	55'-5 5/8"	H	
H9		6	1	Neoprene	4"	235'-6"	34°21'0"	①	2 1/2"	48'-1 3/8"	H	
H12		6	1	Neoprene	2"	189'-9"	21°43'12"	①	2 1/2"	44'-1 1/8"	B	
016-1059 (RAMP D)		D33	6	1	Neoprene	2 1/2"	113'-8"	6°10'48"	④	2 3/4"	26'-2 3/4"	B
		D35	6	1	Neoprene	2"	148'-0"	0°0'0"	①	2 1/2"	26'-0"	C
		D37	6	1	Neoprene	2"	129'-6"	9°4'12"	①	2 1/2"	26'-1 1/8"	B
	D39	6	1	Neoprene	2"	125'-2"	34°0'0"	①	2 1/2"	29'-9"	H	
	D41	1	1	PJS	4"	126'-6"	1°55'12"	①	2 1/2"	27'-11 1/2"	B	
	D43	6	1	Neoprene	2"	137'-10"	5°58'12"	①	2 1/2"	32'-2 1/2"	A	
016-1140 (RAMP B)	B4	1	1	PJS	2 1/2"	FIXED	7°1'48"	②	1"	26'-1"	B	
	B5	6	1	Neoprene	4"	228'-1"	7°1'48"	①	2 1/2"	26'-2 1/4"	H	
	B11	6	1	Neoprene	4"	203'-11"	47°16'12"	①	2 1/2"	37'-6 3/8"	A	
	B15	6	1	Neoprene	4"	210'-5"	45°0'0"	①	2 1/2"	36'-9 1/8"	A	
	B16	1	1	PJS	4"	156'-8"	0°0'0"	①	2 1/2"	26'-0"	C	
	B18 Abut.	1	3	PJS	2 1/2"	71'-9"	0°0'0"	③	1 3/4"	26'-0"	C	
	016-1047 (RAMP E)	E30 Abut.	1	3	PJS	2 1/2"	66'-9"	0°0'0"	③	1 3/4"	26'-0"	C
E28		1	1	PJS	2 1/2"	130'-6"	0°0'0"	①	2 1/2"	26'-0"	C	
E26		1	1	PJS	2 1/2"	141'-10"	0°0'0"	①	2 1/2"	26'-0"	C	
E24		6	1	Neoprene	2"	211'-8"	0°28'12"	①	2 1/2"	28'-1"	B	
E23		1	1	Neoprene	2 1/2"	38'-8"	0°10'12"	③	1 3/4"	26'-0"	B	
E22		1	1	PJS	4"	321'-7"	4°40'48"	①	2 1/2"	49'-8 1/8"	D	
E1		1	1	PJS	4"	FIXED	0°31'12"	②	1"	45'-0 5/8"	D	
E2		1	1	PJS	2 1/2"	FIXED	21°39'0"	②	1"	41'-11 1/4"	D	

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- ① Strip Seal Expansion Joint Assembly
- ② Bridge Joint System (Fixed)
- ③ Bridge Joint System (Expansion), 1"
- ④ Bridge Joint System (Expansion), 1 5/8"

REVISIONS		DATE
NAME		

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
LOCATION AND  
DESIGNATION OF JOINTS 2

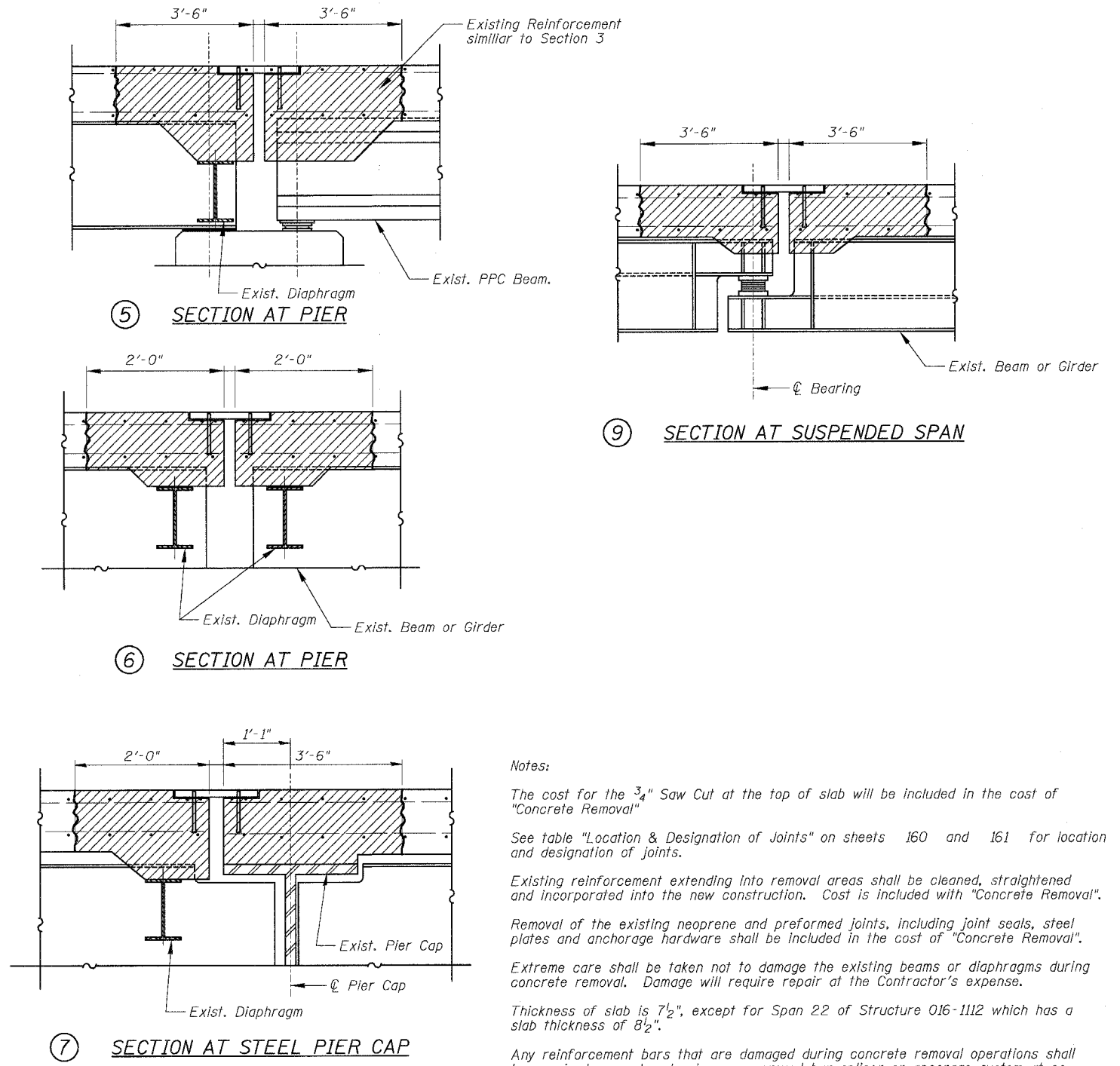
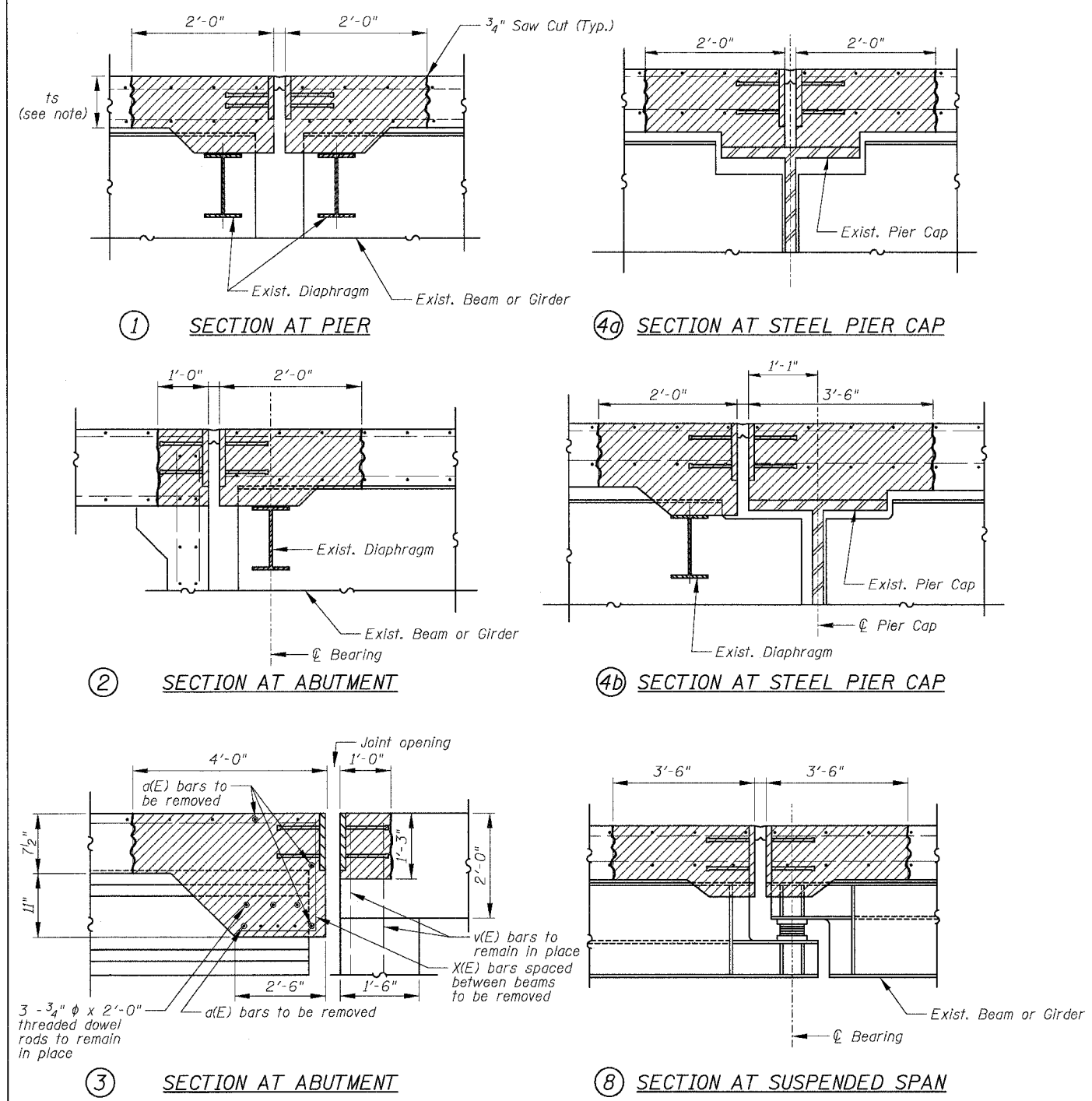
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	162
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				

**EXISTING PREFORMED JOINT SEALS**

**EXISTING NEOPRENE EXPANSION JOINTS**



**Notes:**

The cost for the 3/4" Saw Cut at the top of slab will be included in the cost of "Concrete Removal"

See table "Location & Designation of Joints" on sheets 160 and 161 for location and designation of joints.

Existing reinforcement extending into removal areas shall be cleaned, straightened and incorporated into the new construction. Cost is included with "Concrete Removal".

Removal of the existing neoprene and preformed joints, including joint seals, steel plates and anchorage hardware shall be included in the cost of "Concrete Removal".

Extreme care shall be taken not to damage the existing beams or diaphragms during concrete removal. Damage will require repair at the Contractor's expense.

Thickness of slab is 7 1/2", except for Span 22 of Structure 016-1112 which has a slab thickness of 8 1/2".

Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system at no additional cost to the Department.

All dimensions shown are at right angle to the centerline of the Piers or Abutments.

**LEGEND**

Concrete Removal

Joint Designator

*ts* Thickness of Slab

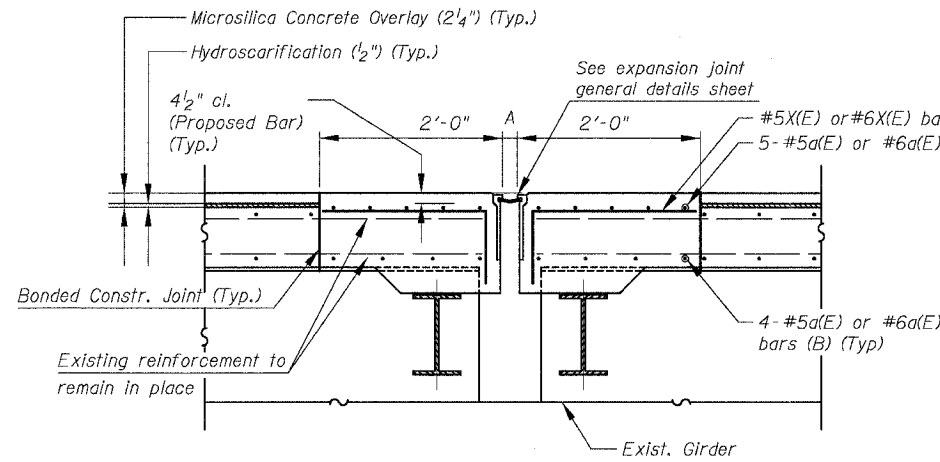
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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	F.A.I. 94/90 (DAN RYAN EXPRESSWAY) NB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS TYPICAL SECTIONS EXISTING JOINTS	
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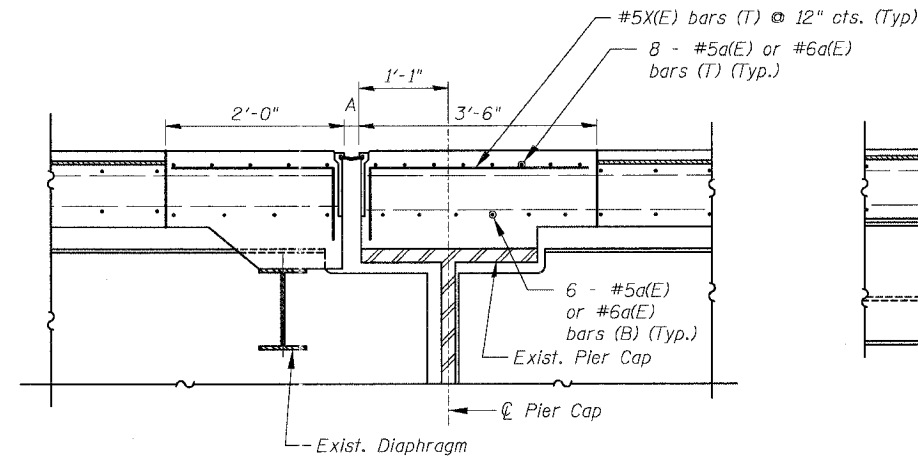
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				

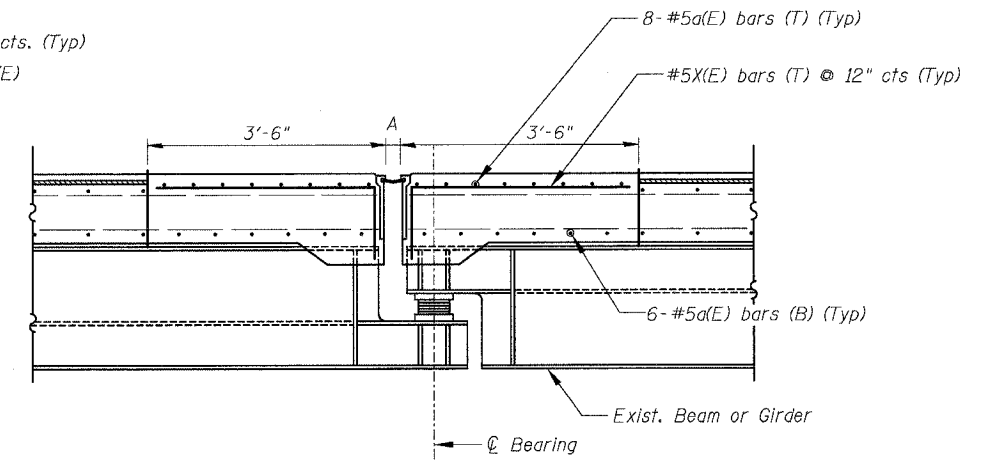
**PROPOSED JOINTS**  
(Only Strip Seal types shown)



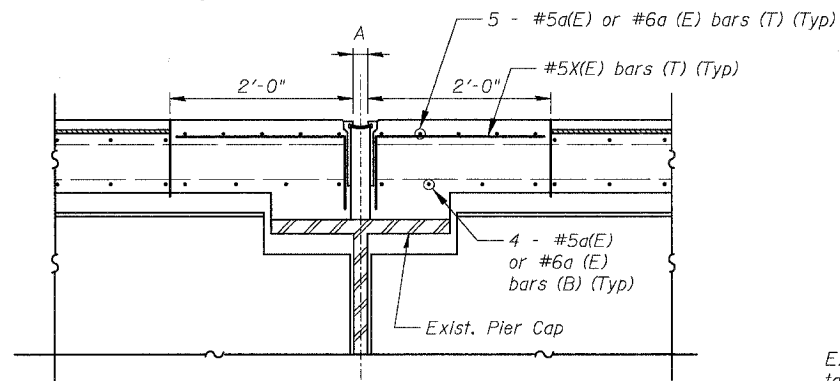
① SECTION AT PIER



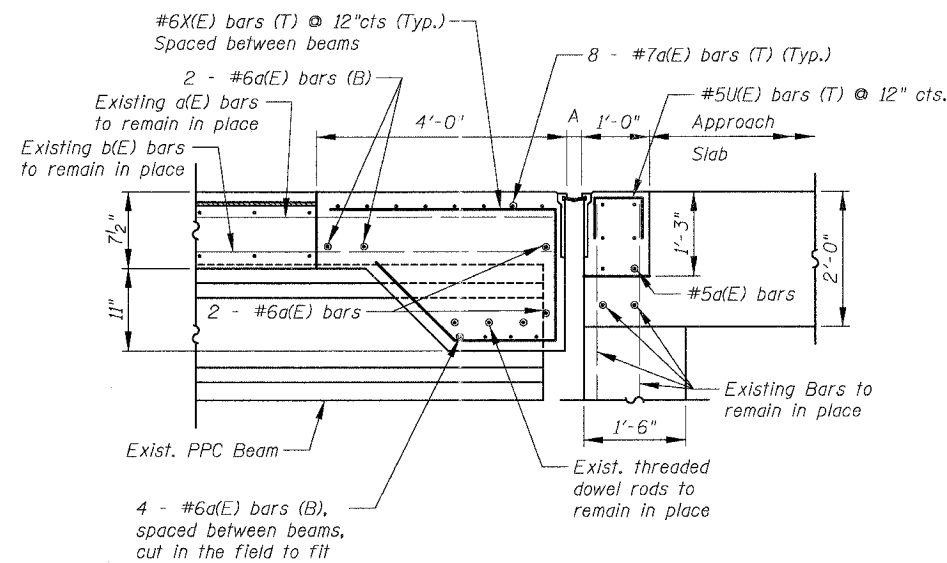
④ SECTION AT STEEL PIER CAP



⑥ SECTION AT SUSPENDED SPAN



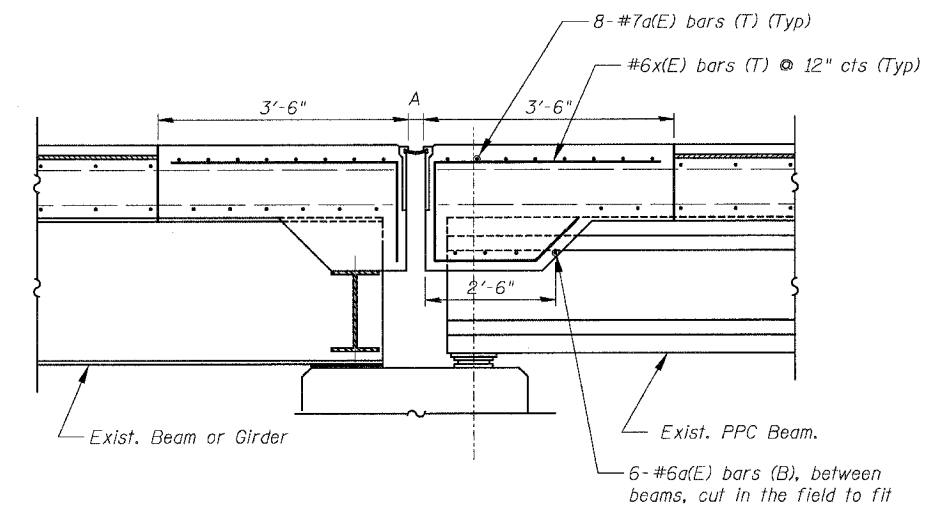
② SECTION AT STEEL PIER CAP



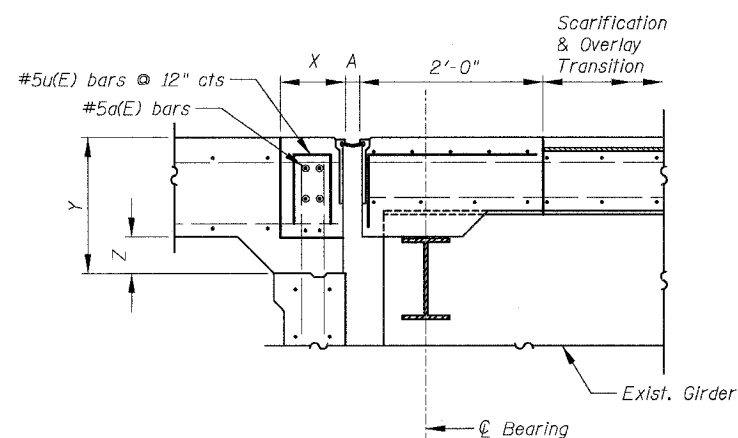
⑤ SECTION AT ABUTMENT

**ABBREVIATIONS**

T - Top  
B - Bottom



⑦ SECTION AT PIER



③ SECTION AT ABUTMENT

STRUCTURE	PIER	X	Y	Z
016-1111	E5 / Abut.	1'-0"	1'-6"	0"
016-1112	D14 / Abut.	1'-0"	1'-3"	0"
016-1140	B18 / Abut.	1'-3 3/8"	1'-6"	1 1/2"
016-1047	E30 / Abut.	1'-3 3/8"	1'-6"	1 1/2"
016-1117	S. Abut.	1'-3"	1'-1"	0"
016-1118	S. Abut.	1'-3"	1'-1"	0"

Notes:  
For bar designations, number of bars and bar lengths see sheets 171 to 178.  
For joint size and location see sheets 160 and 161.  
Existing Reinforcement Bars shown are to be cleaned, straightened and incorporated into new construction.  
All joints between new and old concrete shall be bonded construction joints.  
Reinforcement bars designated (E) shall be epoxy coated.  
For Scarification and Overlay Transition Detail, see sheet no 169.  
All dimensions shown are at right angle to the centerline of the Piers or Abutments

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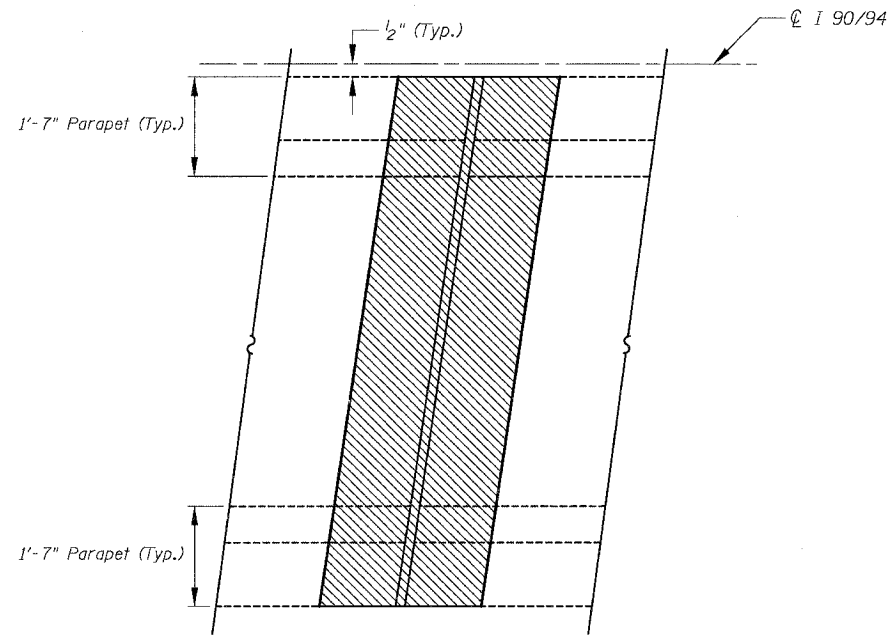
REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TYPICAL SECTIONS  
PROPOSED JOINTS

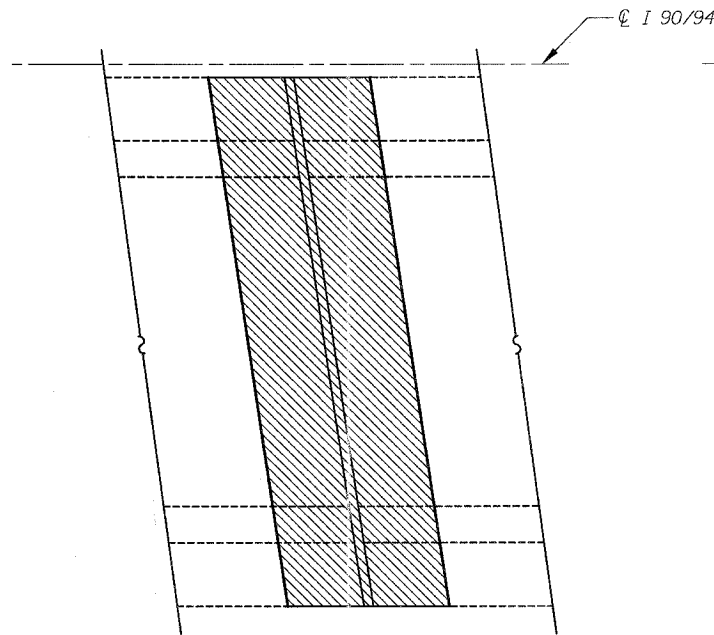
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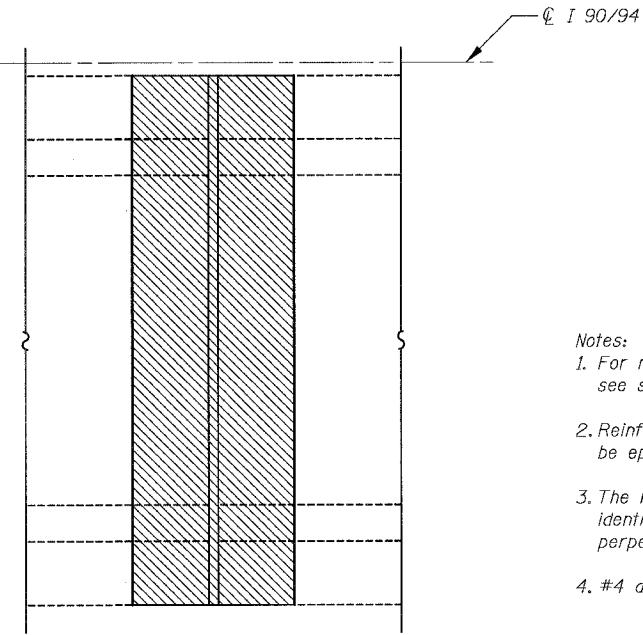
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	164
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				



**EXISTING PARTIAL PLAN  
(SKEWED LEFT FORWARD)**

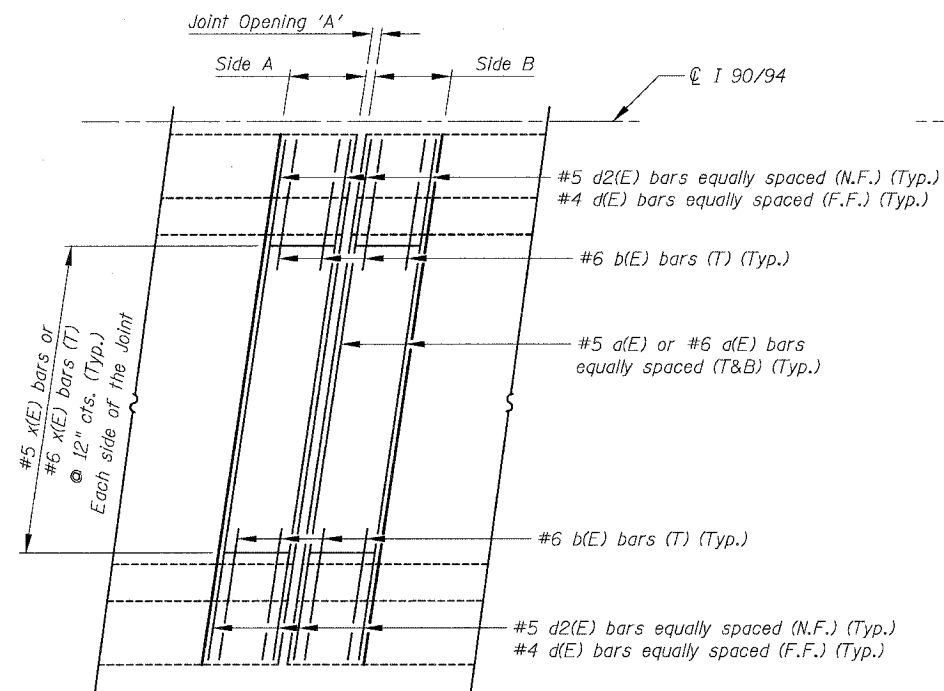


**EXISTING PARTIAL PLAN  
(SKEWED RIGHT FORWARD)**

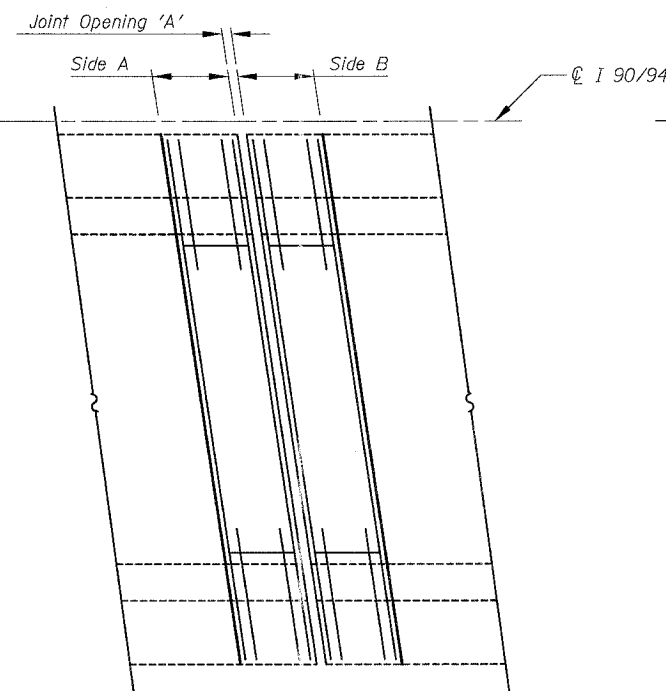


**EXISTING PARTIAL PLAN  
(NO SKEW)**

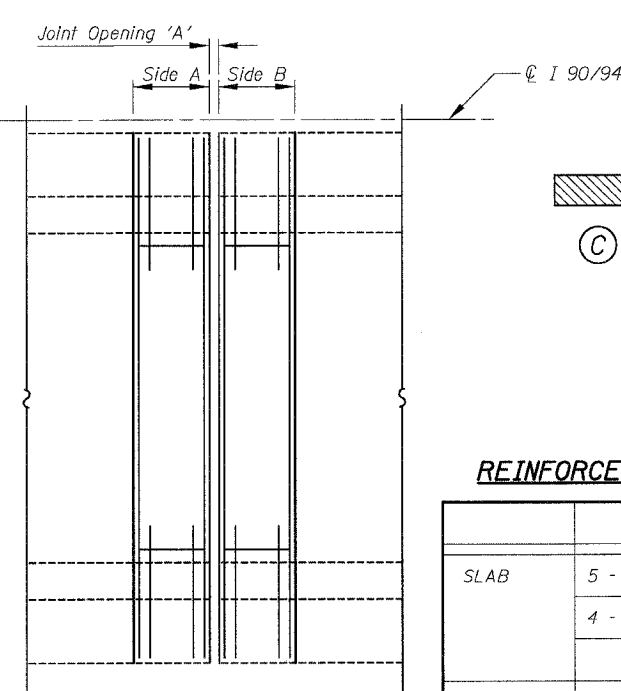
- Notes:
- For number of bars required per joint see sheets 171 to 177 for "Bar Details".
  - Reinforcement bars designated (E) shall be epoxy coated.
  - The left forward and right forward are identified as per skew angle from the perpendicular line to the CL of the roadway.
  - #4 d(E) Denotes #4 d1(E), #4 d3(E), #4 d4(E), #4 d5(E), #4 d6(E), #4 d7(E), #4 d8(E), etc.
  - Bend bars in the field as required.
  - Joint Opening 'A' is measured perpendicular to the joint.



**(A) PROPOSED PARTIAL PLAN  
(NON-STAGED CONSTRUCTION)  
(SKEWED LEFT FORWARD)**



**(B) PROPOSED PARTIAL PLAN  
(NON-STAGED CONSTRUCTION)  
(SKEWED RIGHT FORWARD)**



**(C) PROPOSED PARTIAL PLAN  
(NON-STAGED CONSTRUCTION)  
(NO SKEW)**

- LEGEND**
- Concrete Removal / Joint Reconstruction
  - Designation 2 Staged and Non-Staged Construction

- ABBREVIATION**
- N.F. Near Face
  - F.F. Far Face

**REINFORCEMENT BARS LOCATION**

	Side A or Side B (2'-0")	Side A or Side B (3'-6" or 4'-0")
SLAB	5 - #5 d(E) or #6 a(E) (T)	8 - #5 d(E) or #6 d(E) (T)
	4 - #5 a(E) or #6 a(E) (B)	6 - #5 a(E) or #6 d(E) (B)
	3 - #6 b(E) (T)	3 - #6 b(E) (T)
PARAPET	3 - #4 d(E) (F.F.)	5 - #4 d(E) (F.F.)
	3 - #5 d2(E) (N.F.)	5 - #5 d2(E) (N.F.)

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F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TYPICAL PARTIAL PLAN  
AT NON-STAGED ROADWAYS

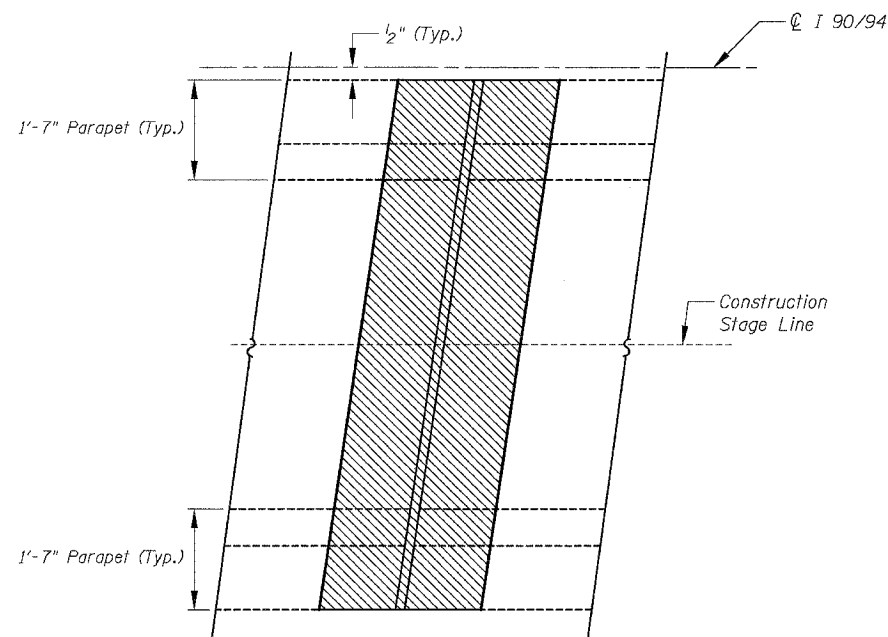
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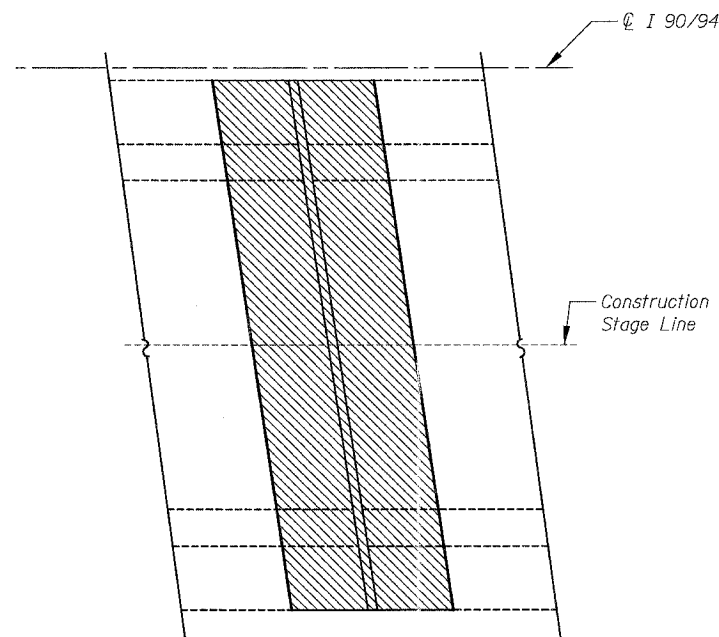
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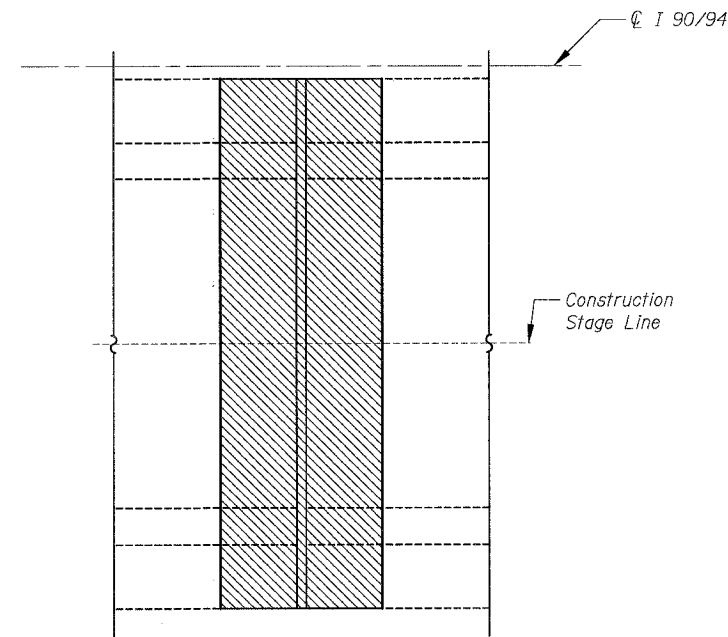
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	165
STA.		TO STA.		
62580				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



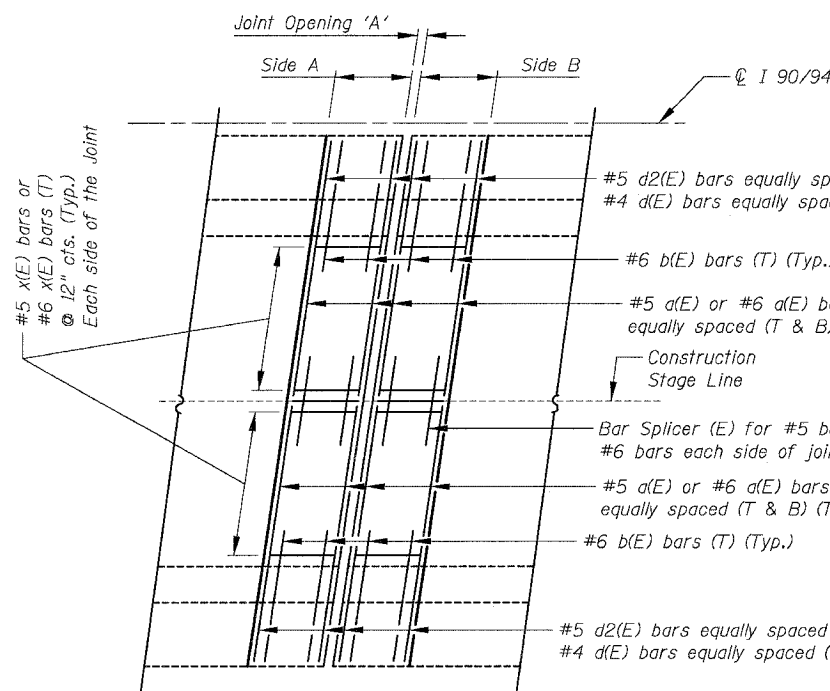
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(SKEWED LEFT FORWARD)**



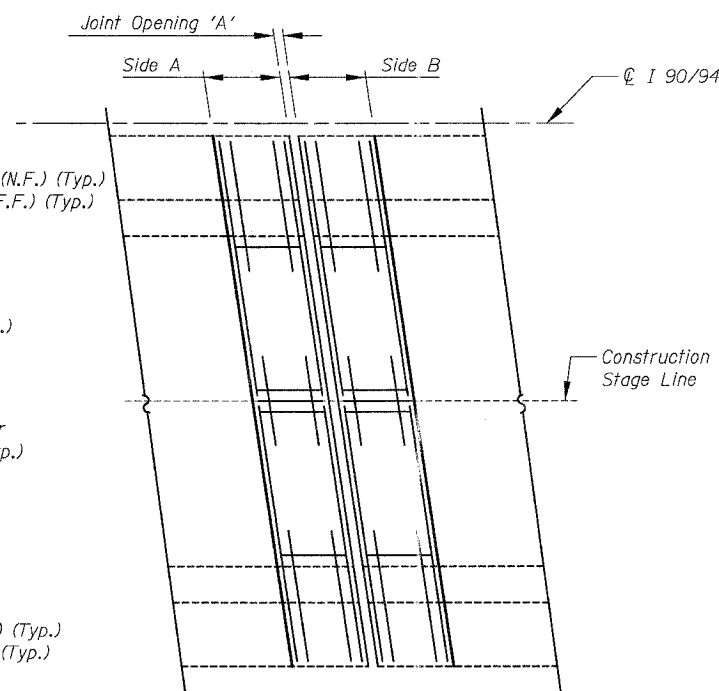
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(SKEWED RIGHT FORWARD)**



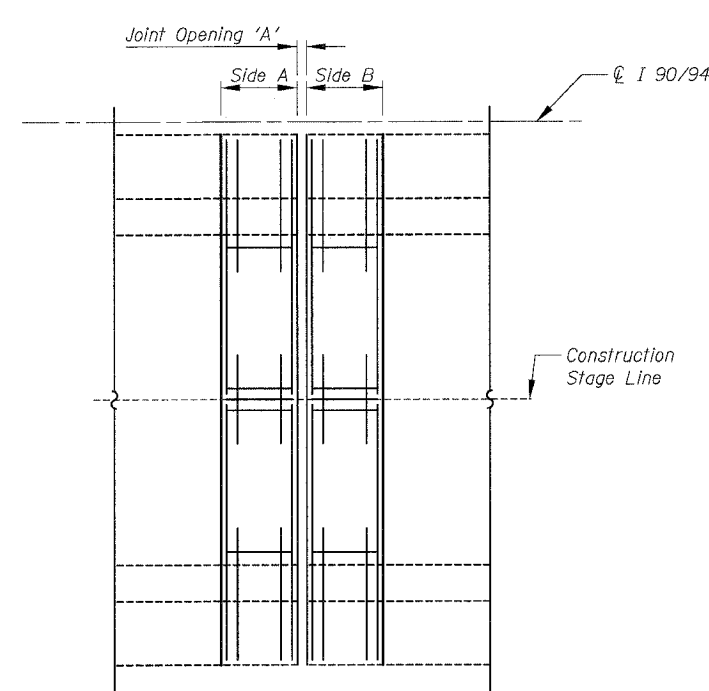
**EXISTING PARTIAL PLAN  
(NO SKEW)**



**D PROPOSED PARTIAL PLAN  
(STAGED CONSTRUCTION)  
(SKEWED LEFT FORWARD)**



**E PROPOSED PARTIAL PLAN  
(STAGED CONSTRUCTION)  
(SKEWED RIGHT FORWARD)**



**F PROPOSED PARTIAL PLAN  
(STAGED CONSTRUCTION)  
(NO SKEW)**

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For Notes, Legend, Abbreviations and Reinforcement Bar Locations see sheet 164

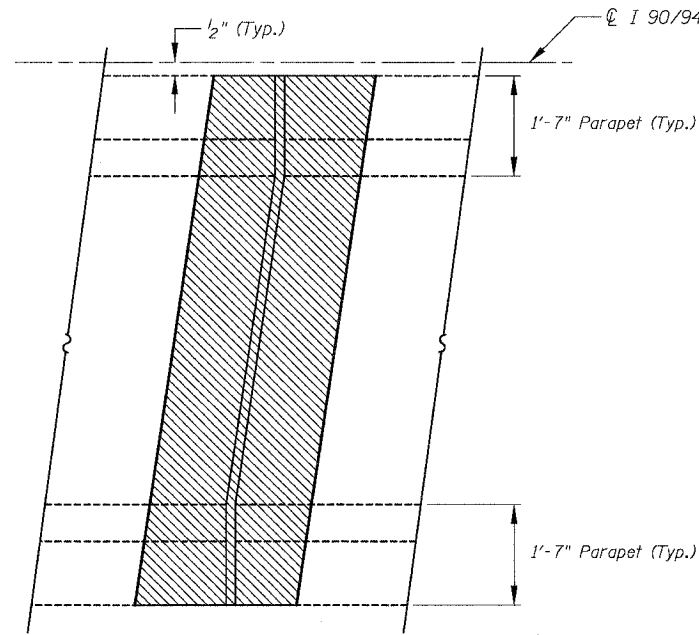
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TYPICAL PARTIAL PLAN  
AT STAGED ROADWAYS

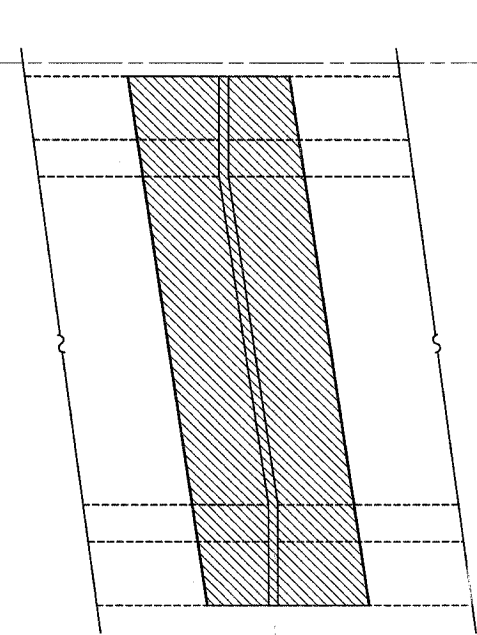
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DATE: 8/12/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

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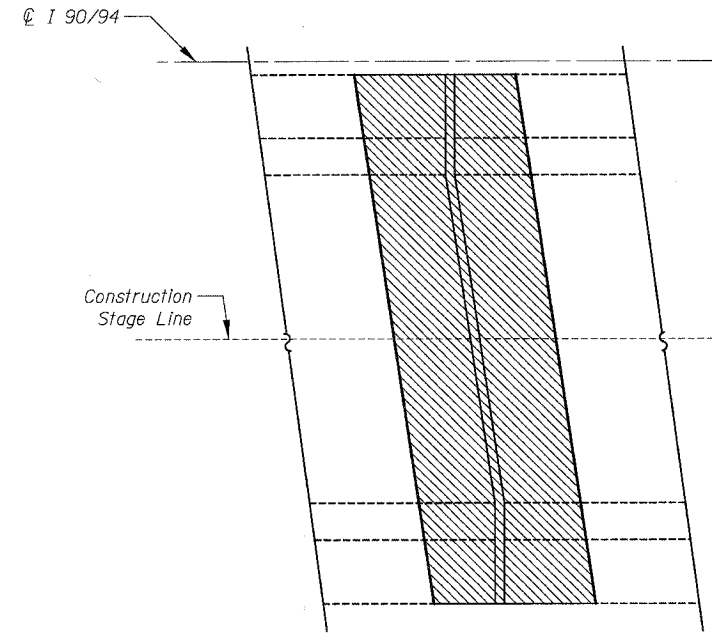
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	166
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



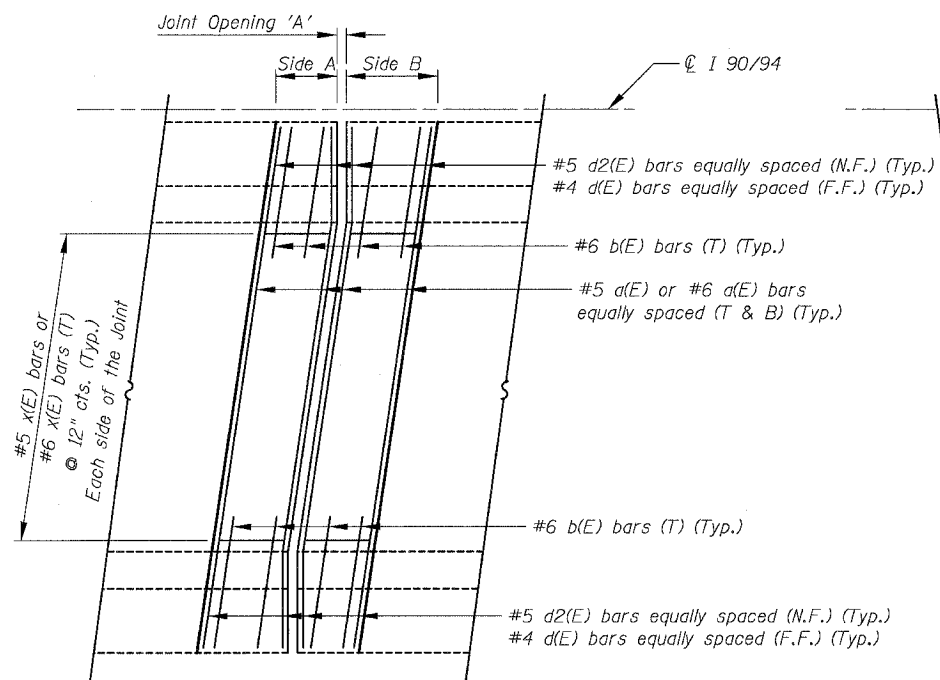
**EXISTING PARTIAL PLAN  
(SKEWED LEFT FORWARD)**



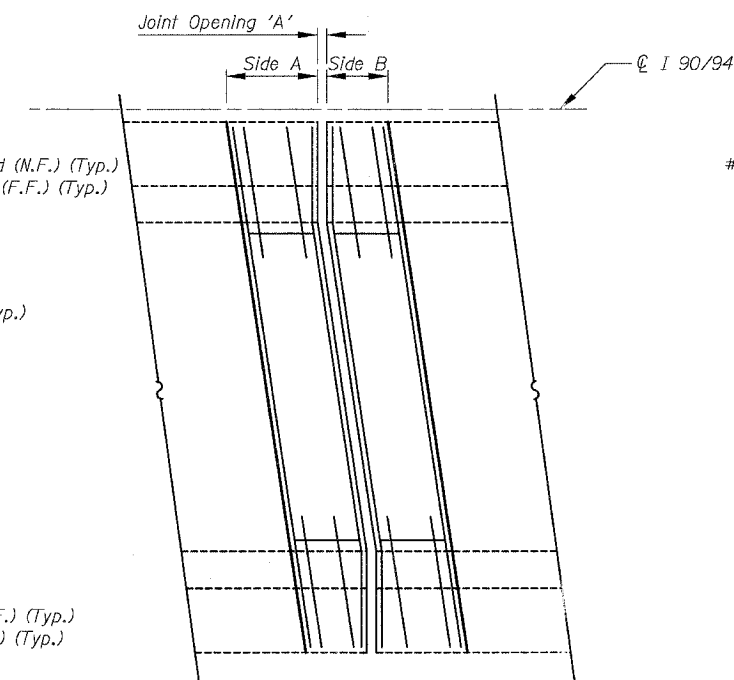
**EXISTING PARTIAL PLAN  
(SKEWED RIGHT FORWARD)**



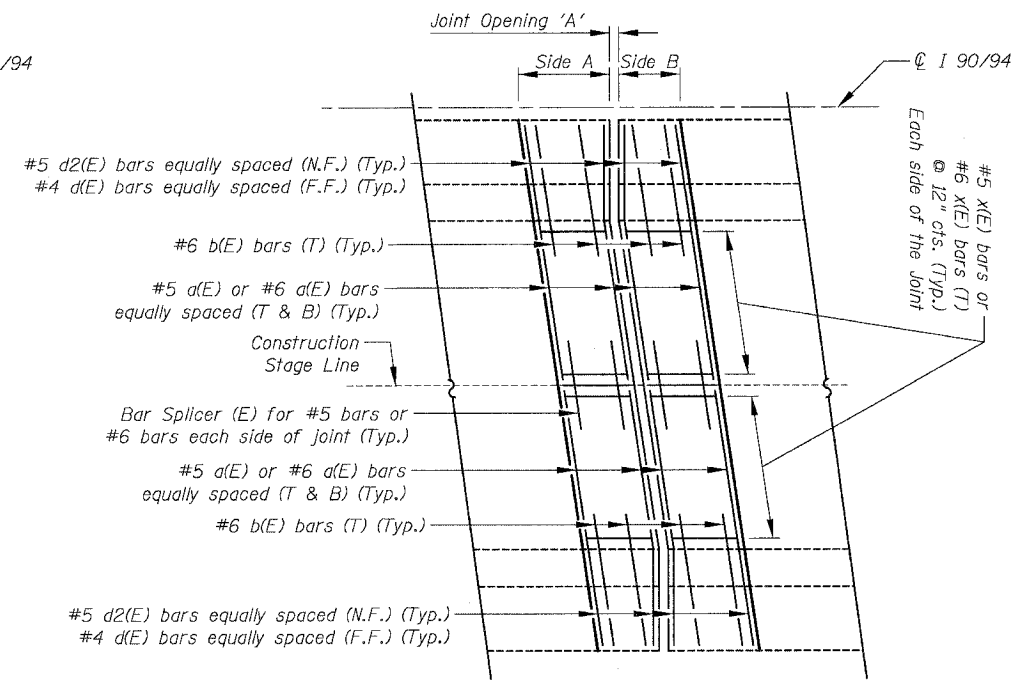
**EXISTING PARTIAL PLAN  
(SKEWED RIGHT FORWARD)**



**Ⓒ PROPOSED PARTIAL PLAN  
(NON-STAGED CONSTRUCTION)  
(SKEWED LEFT FORWARD > 30°-0'-0")  
(Strip Seal Joints)**



**⒣ PROPOSED PARTIAL PLAN  
(NON-STAGED CONSTRUCTION)  
(SKEWED RIGHT FORWARD > 30°-0'-0")  
(Strip Seal Joints)**



**Ⓓ PROPOSED PARTIAL PLAN  
(STAGED CONSTRUCTION)  
(SKEWED RIGHT FORWARD > 30°-0'-0")  
(Strip Seal Joints)**

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For Notes, Legend, Abbreviations and Reinforcement Bar Locations see sheet 164

REVISIONS	
NAME	DATE

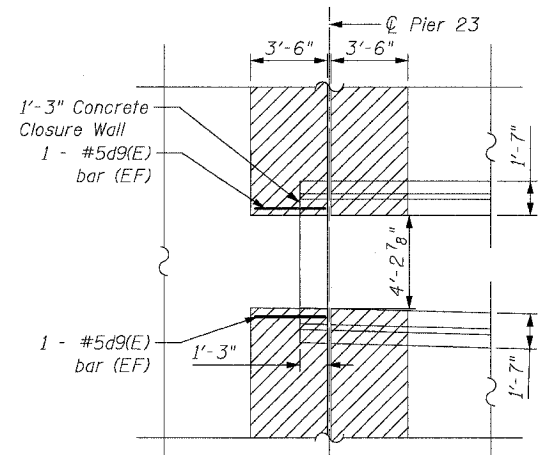
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TYPICAL PARTIAL PLAN AT STAGED  
AND NON STAGED ROADWAYS  
SCALE: NTS  
DATE: 8/12/2005  
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CHECKED BY: BLU

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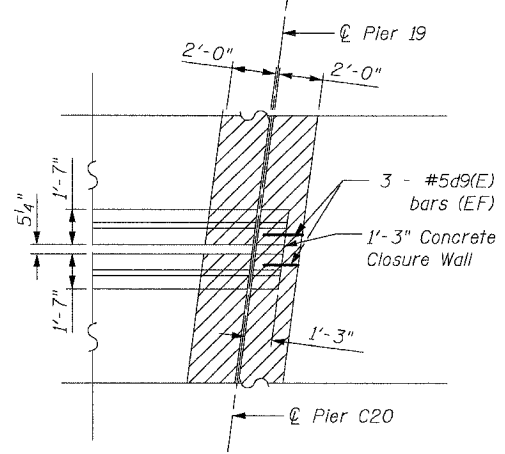
\* Pg 167 is DELETED \*

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

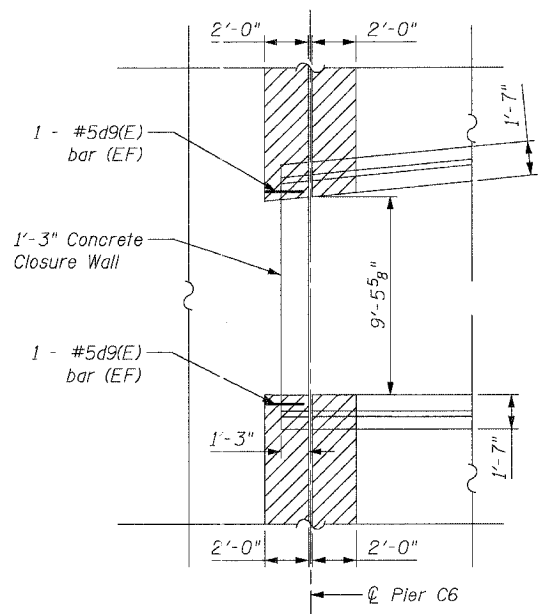
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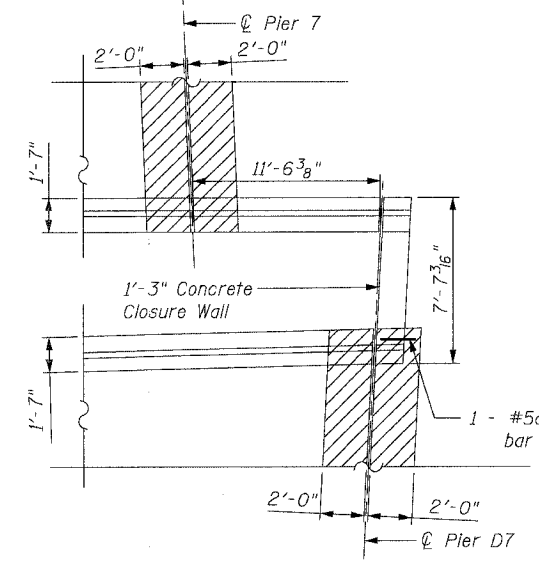
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SN 016-0137 PIER 23  
(NTS)



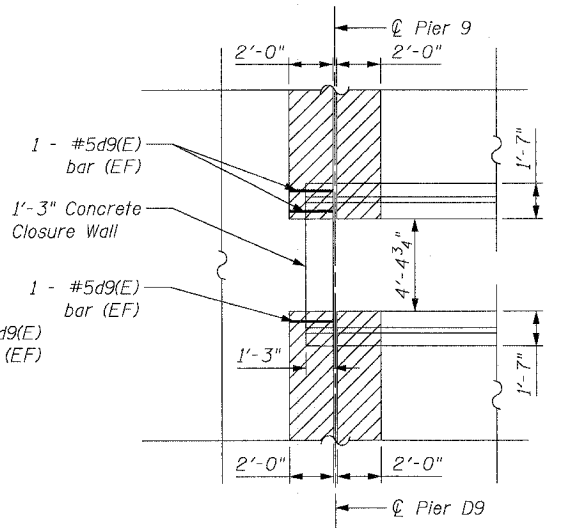
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SN 016-1112 PIER 19 / PIER C20  
(NTS)



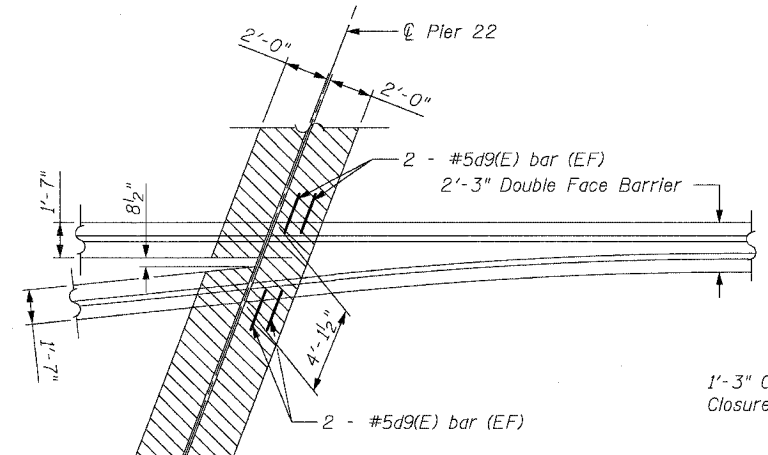
**CLOSURE WALL DETAIL**  
SN 016-1113 PIER C6  
(NTS)



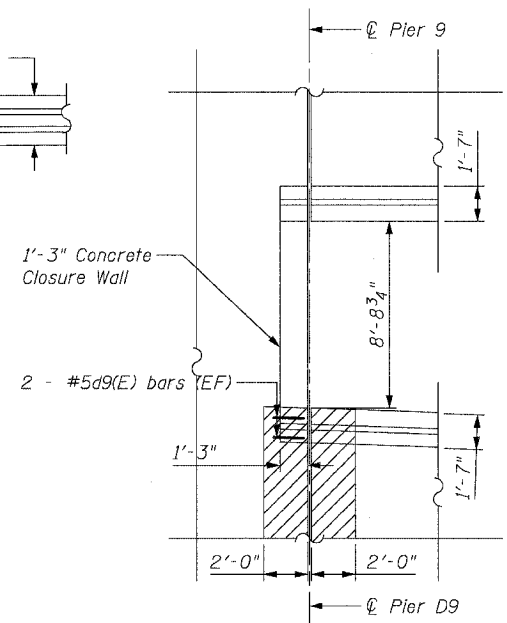
**CLOSURE WALL DETAIL**  
SN 016-1113 PIER 7 / PIER D7  
(NTS)



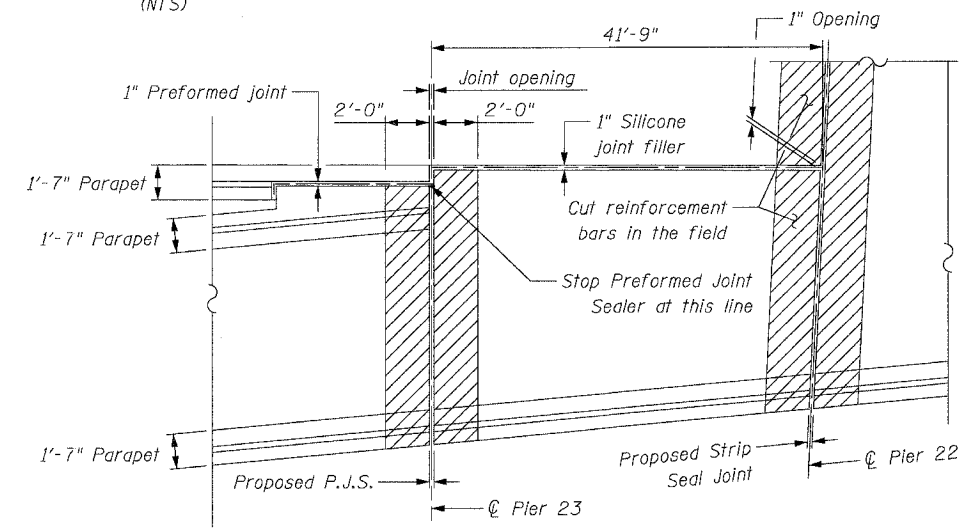
**CLOSURE WALL DETAIL**  
SN 016-1113 PIER 9 / PIER D9  
(NTS)



**CLOSURE WALL DETAIL**  
SN 016-1114 PIER 22  
(NTS)



**CLOSURE WALL DETAIL**  
SN 016-1115 PIER 4  
(NTS)

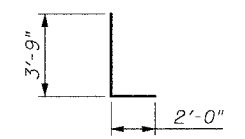


**CLOSURE WALL DETAIL**  
SN 016-1047 PIER 22 & 23  
(NTS)

**CLOSURE WALL REINFORCEMENT BAR SCHEDULE**

STRUCTURE	PIER	MARK	NUMBER	SIZE	LENGTH	SHAPE
016-0137	23	d9	4	#5(E)	5'-9"	L
016-1112	19/C20	d9	6	#5(E)	5'-9"	L
016-1113	9/D9	d9	4	#5(E)	5'-9"	L
	7/D7	d9	2	#5(E)	5'-9"	L
016-1114	C6	d9	4	#5(E)	5'-9"	L
	22	d9	4	#5(E)	5'-9"	L
016-1115	4	d9	4	#5(E)	5'-9"	L
016-1117	14	d9	4	#5(E)	5'-9"	L
016-1118	H12	d9	4	#5(E)	5'-9"	L

**BAR TYPE**



(Cut d9 bar in the field to fit the Closure Wall)

**JOINT REMOVAL BILL OF MATERIALS**

ITEM DESCRIPTION	UNIT	QUANTITY	016-0137	016-1112	016-1113	016-1115	016-1117	016-1118
Reinforcement Bars Epoxy Coated	POUND	180	20	30	50	40	20	20

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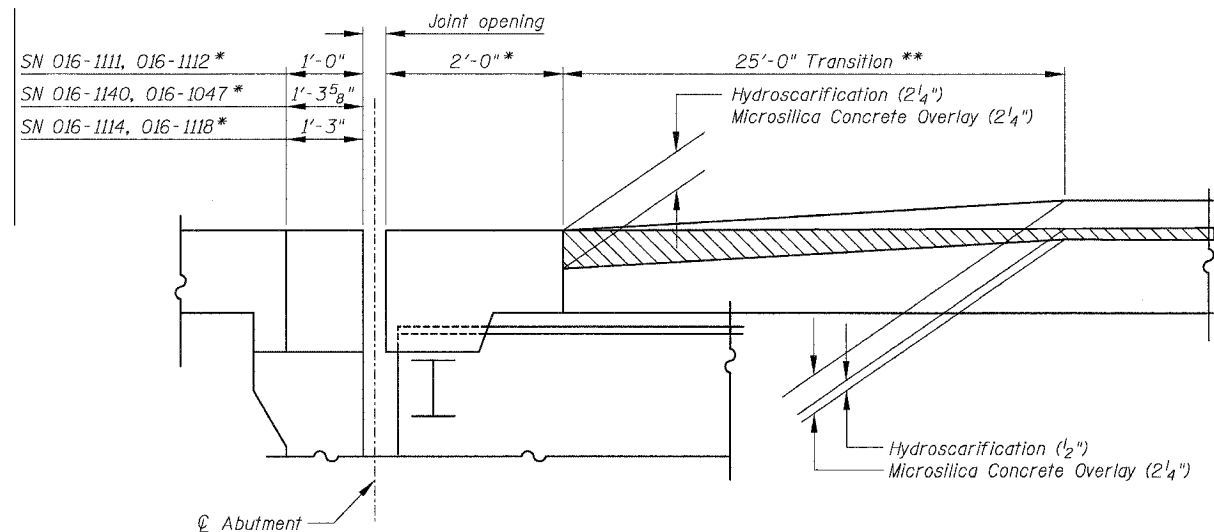
Note:  
For locations of closure walls see Partial Deck Plans

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
CLOSURE WALL  
GENERAL DETAILS  
SCALE: NTS  
DATE: 8/12/2005  
DRAWN BY: BDC  
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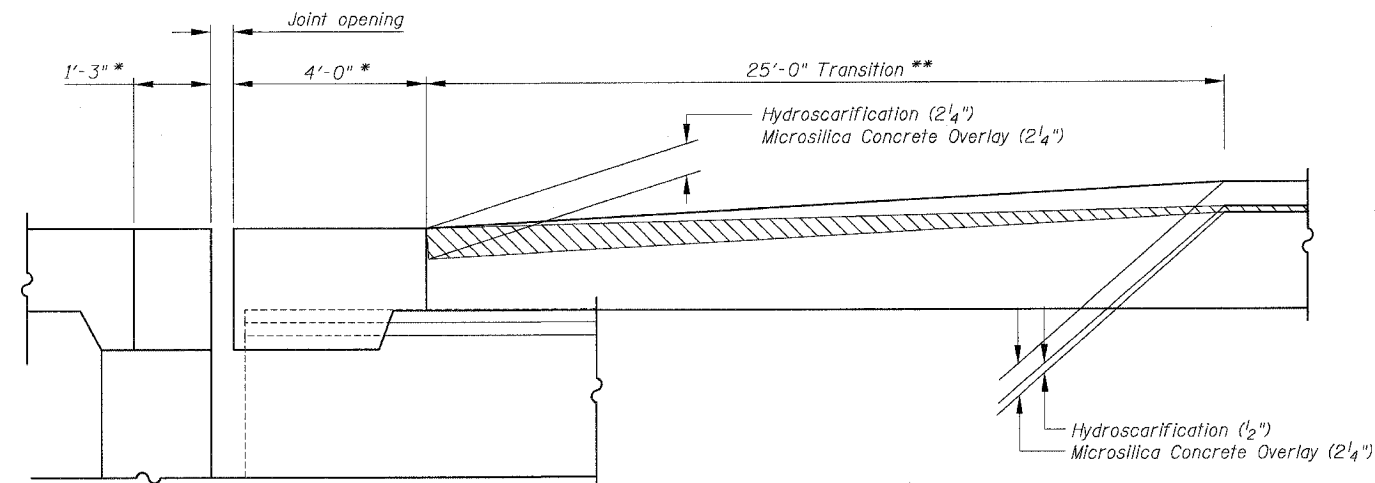
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



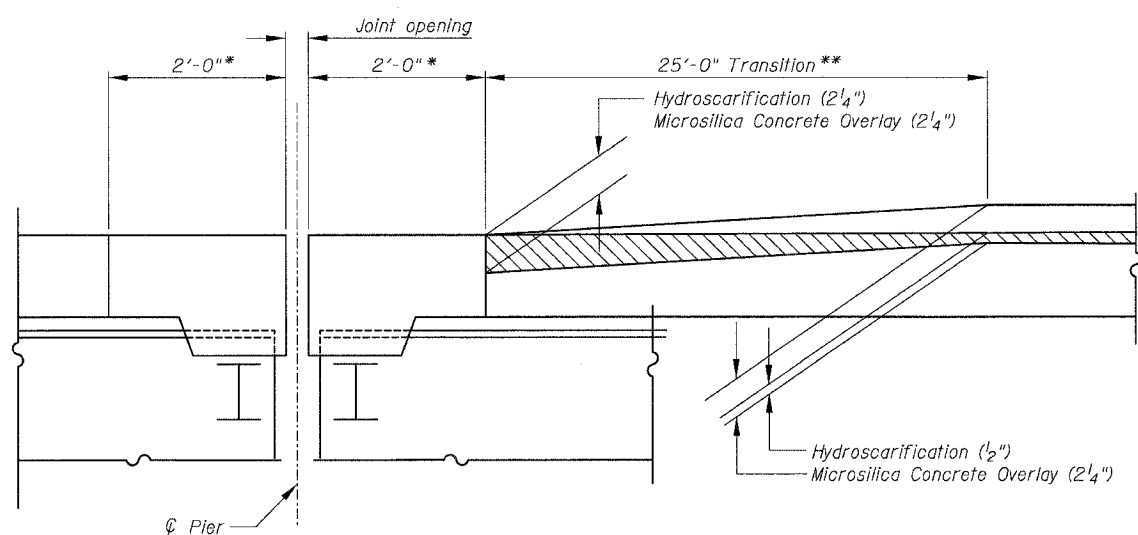
**SCARIFICATION & OVERLAY TRANSITION DETAIL**

SN 016-1111 E5 / Abut.  
 SN 016-1112 D14 / Abut.  
 SN 016-1140 B18 / Abut.  
 SN 016-1047 E30 / Abut.  
 SN 016-1117 S. Abut.  
 SN 016-1118 S. Abut.



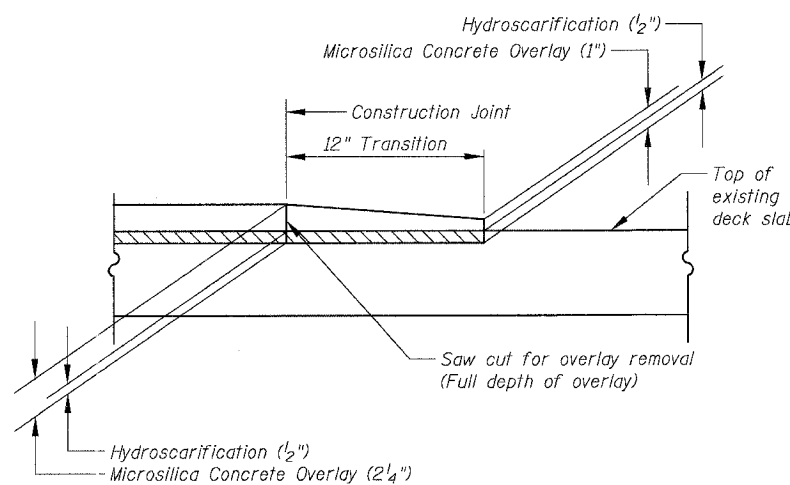
**SCARIFICATION & OVERLAY TRANSITION DETAIL**

SN 016-0137 N. Abut.



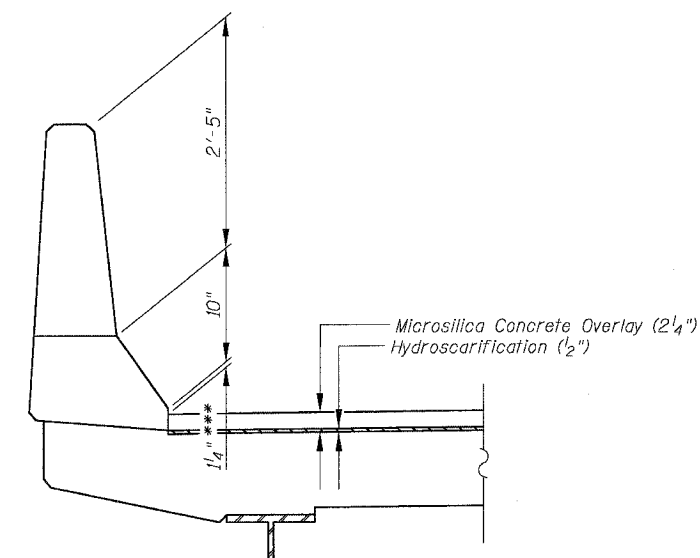
**SCARIFICATION & OVERLAY TRANSITION DETAIL**

SN 016-1059 Pier 43



**SCARIFICATION & OVERLAY TRANSITION DETAIL AT TRAFFIC CROSSOVER**

Location	Sheet Number
1 & 2	152
3 & 4	153
5	157



**SCARIFICATION & OVERLAY DETAIL AT PARAPET (Typ.)**

**Notes:**

Microsilica Concrete Overlay shall be used for the transition for traffic crossover locations as shown on the Partial Deck Plans and MOT Plans. When the Contractor proceeds to the next stage of the construction and the transition is no longer required the Contractor shall remove the overlay by saw cut full depth and hydroscarifying.  
 The cost of the overlay for the transition, materials and installation shall be included in the cost for "Microsilica Concrete Overlay (2 1/4")".  
 The cost of the saw cut full depth and the removal of the overlay shall be included in the cost for "Bridge Deck Hydroscarification (1/2)".  
 \* Construct new concrete at joints to same lines and grades as existing at these locations.  
 \*\* Cost of increased hydroscarification depth over length of transition shall be included with "Bridge Deck Hydroscarification (1/2)".  
 \*\*\* Contractor shall increase scarification thickness or reduce overlay thickness as directed by the Engineer to ensure this is never less than 0".

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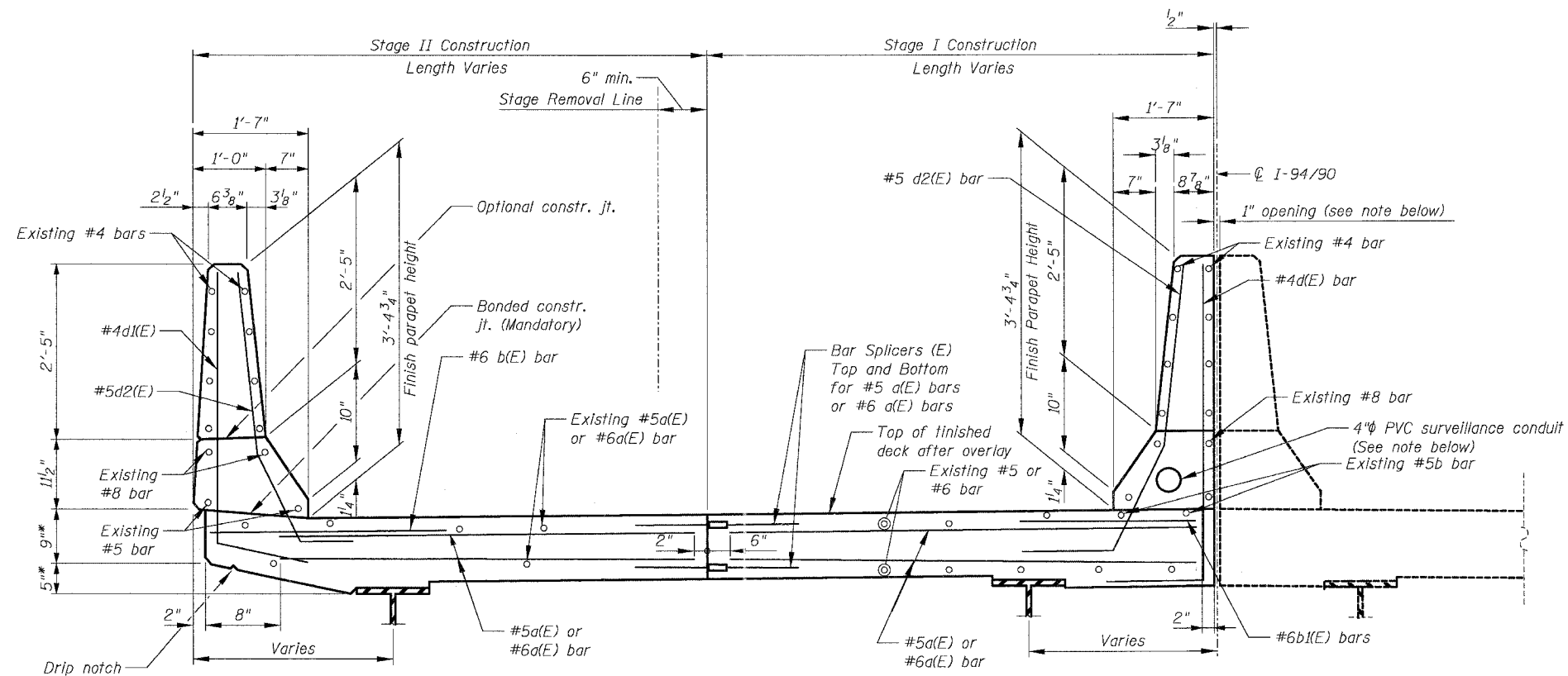
REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
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 REPAIR FROM 15TH TO 28TH STREETS  
 SCARIFICATION & OVERLAY  
 TRANSITION DETAILS  
 SCALE: NTS  
 DATE: 8/12/2005  
 DRAWN BY: BDC  
 CHECKED BY: BLU

11/5/4/05 AM 8/17/2005

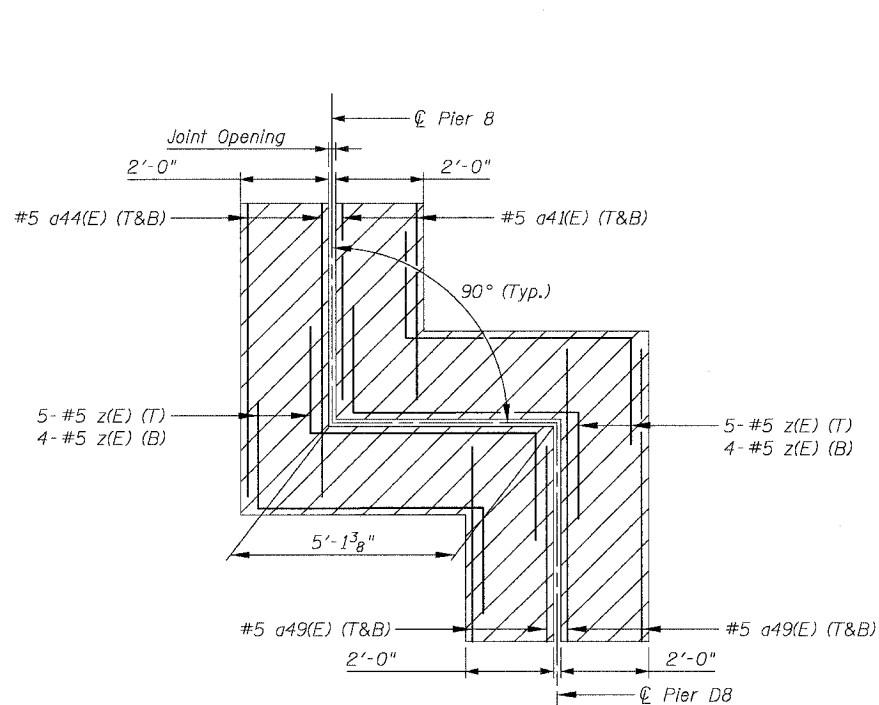
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	170
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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**CROSS SECTION ALONG JOINT RECONSTRUCTION**  
(TYP)  
(NTS)

\* Match Existing

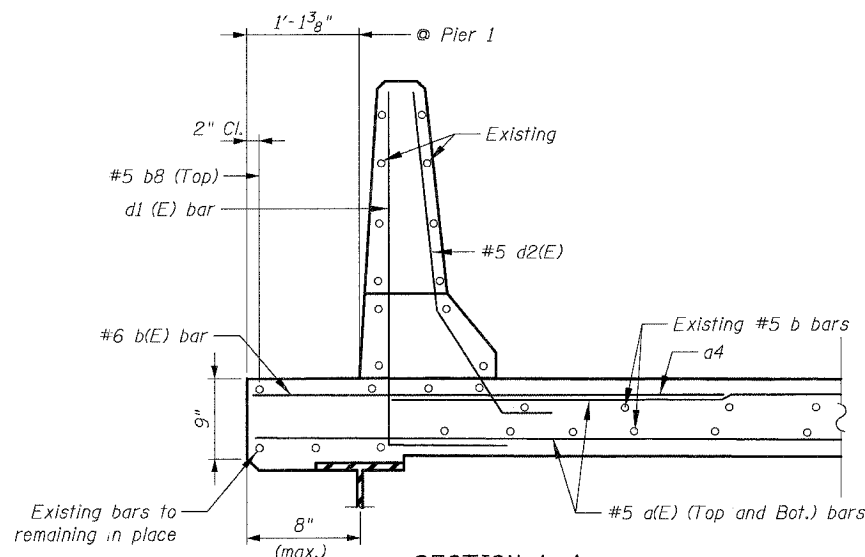


**DETAIL "A"**

(SN 016-1113, Joint detail at Piers 8 & D8)

**REINFORCEMENT FOR DETAIL "A" BAR SCHEDULE**

STRUCTURE NUMBER	PIER	BAR	NO.	SIZE	LENGTH	SHAPE
016-1113	8 D8	z(E)	18	#5	12'-1"	L



**SECTION A-A**

(SN 016-1113, Spans C1 & C2)  
(NTS)

**BILL OF MATERIAL**

ITEM DESCRIPTION	UNIT	QUANTITY
REINFORCEMENT BARS EPOXY COATED	POUND	230

**Notes:**

Existing longitudinal reinforcement in slab and barriers shall be cleaned, straightened and incorporated into new construction.

Bend #4d1 bars over fascia girder to clear the top flange as needed.

4" φ PVC Surveillance conduit to remain Contractor shall take care not to damage existing conduit. Any damaged conduit shall be repaired or replaced by the Contractor to the satisfaction of the Engineer at no additional cost to the Department

Remove existing rails, posts and anchors as required for the partial removal of barriers for the joint reconstruction. Reinstall anchors and rail posts. Cost included with "Concrete Superstructure".

Longitudinal joint between barriers will be sealed by others in a future contract.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
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REPAIR FROM 15TH TO 28TH STREETS  
TYPICAL DECK SLAB  
CROSS SECTIONS

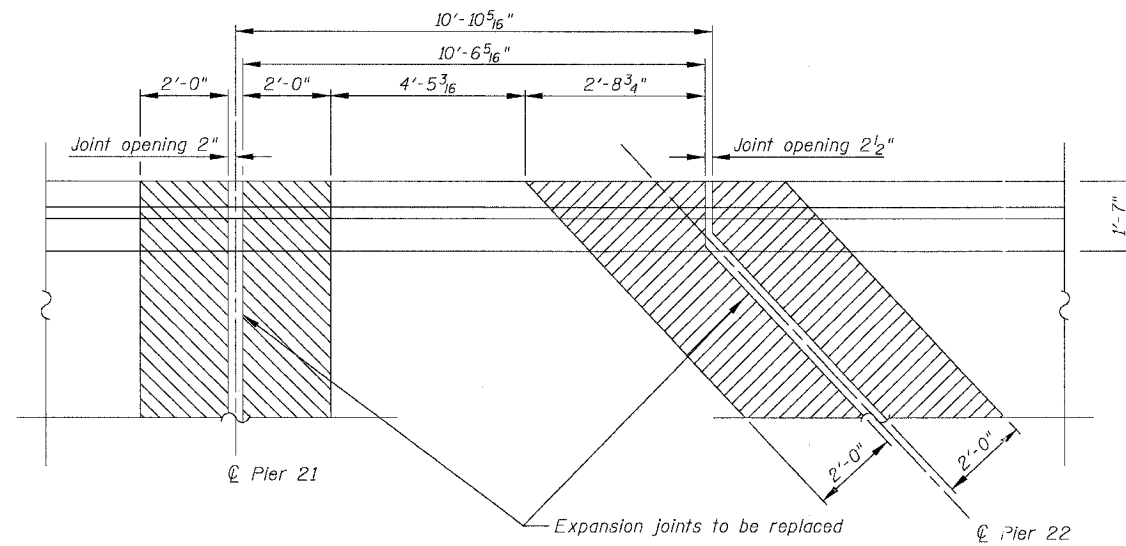
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DATE: 8/12/2005

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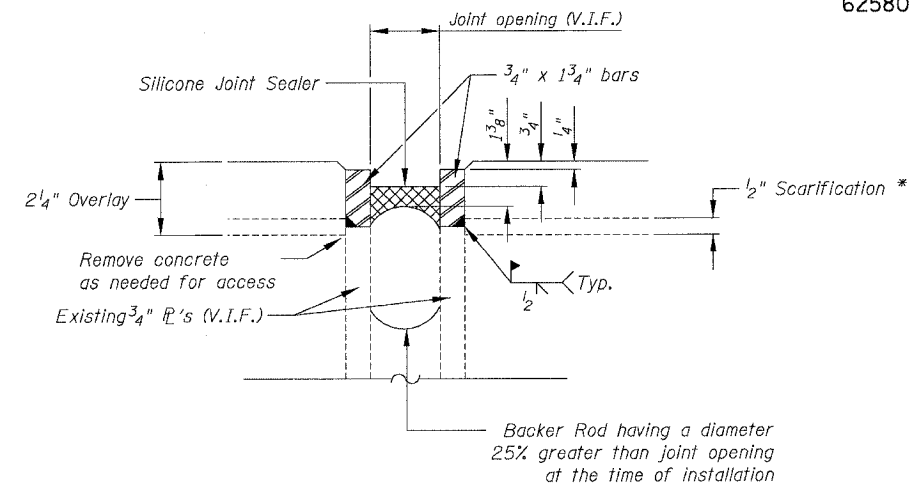
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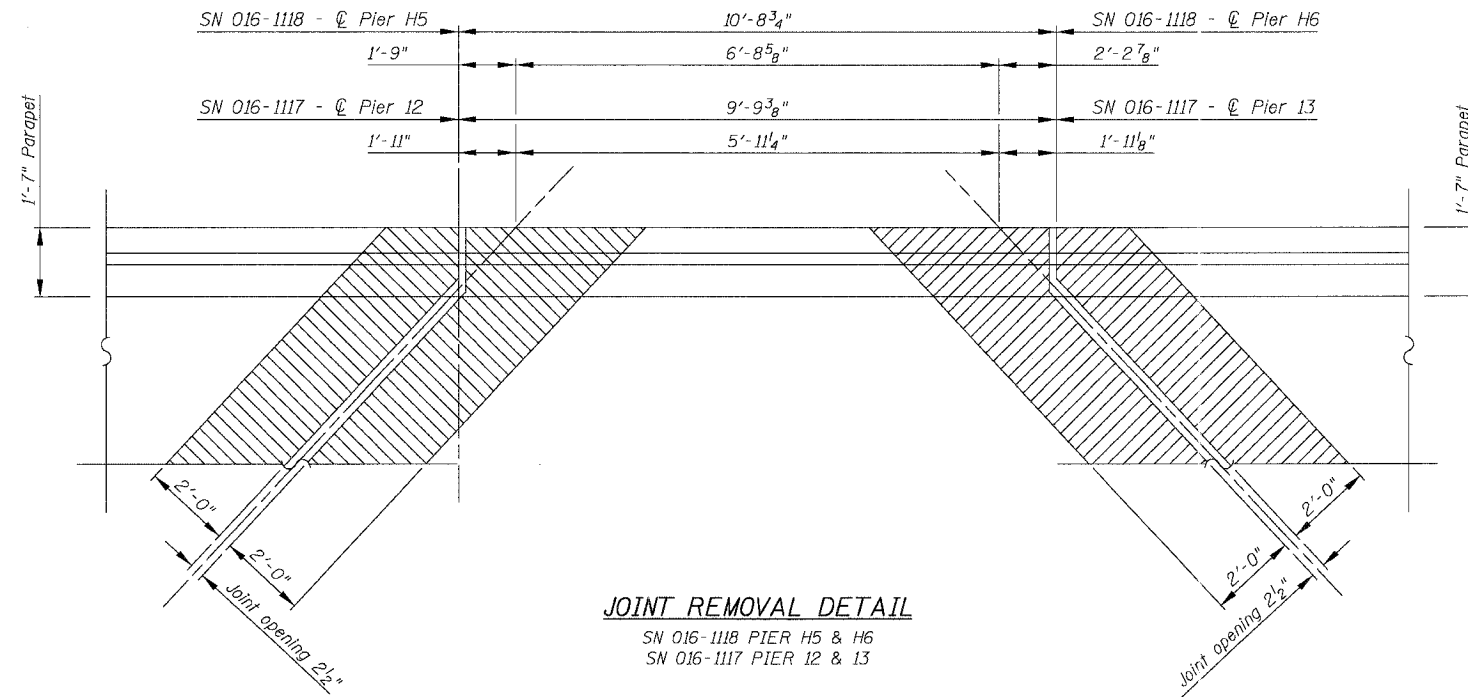


**JOINT REMOVAL DETAIL**  
SN 016-1112 PIER 21 & PIER 22

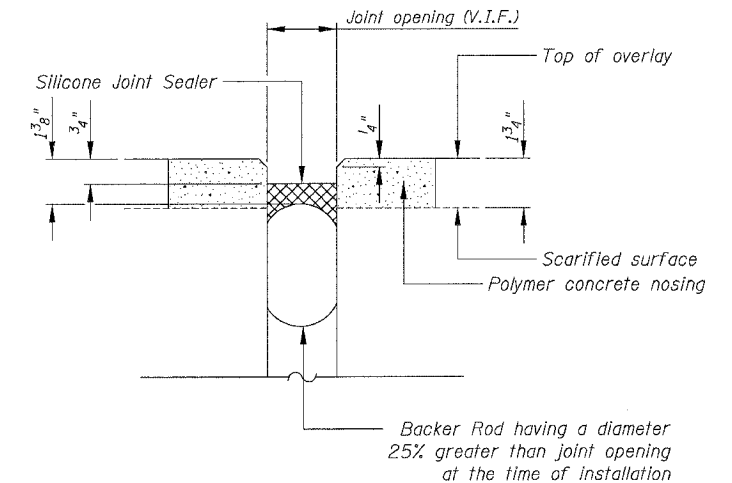


**SILICONE JOINT SEALER DETAIL**

\* Care shall be taken not to damage existing R's during Hydroscarification.  
V.I.F. = Verify in field  
If existing joint does not have steel plates see alternate Silicone Joint Sealer Detail.  
Cost of existing joint removal included with "Hydroscarification (1/2)".



**JOINT REMOVAL DETAIL**  
SN 016-1118 PIER H5 & H6  
SN 016-1117 PIER 12 & 13

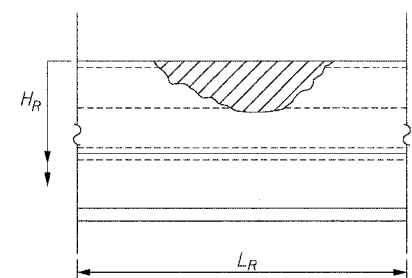


**ALTERNATE SILICONE JOINT SEALER DETAIL**

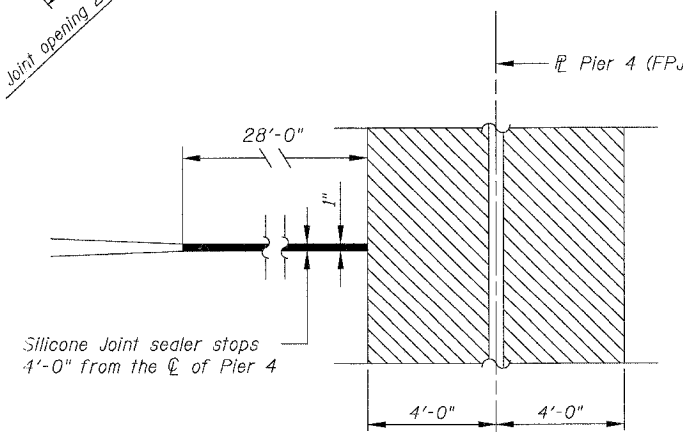
Note:  
For locations of silicone joint sealer see sheets 150 and 158.

**PARAPET REPAIR DIMENSIONS AND BILL OF MATERIALS**

	016-1115 LOCATION 1	016-1114 LOCATION 2	016-1112 LOCATION 3
L <sub>R</sub>	8'-0"	6'-0"	5'-0"
H <sub>R</sub>	3'-6"	3'-6"	3'-6"
Concrete Removal Cu. Yd.	1.1	0.82	0.70
Concrete Superstructure Cu. Yd.	1.1	0.82	0.70



**PARAPET REPAIRS - DETAIL "B"**  
(Front face of Parapet)



**SILICONE JOINT SEALER - DETAIL "C"**













F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	176
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62580

**SN 016-1118 SLAB - BAR DETAILS**

LOCATION	BAR	SIZE	LENGTH/NUMBER/STAGES			BAR	SIZE	LENGTH/NUMBER/STAGES			BAR	SIZE	LENGTH/NUMBER/STAGES		
			STAGE II	STAGE II	STAGE II			STAGE II	STAGE II	STAGE II			STAGE II	STAGE II	STAGE II
S. ABUT.	a87	#5(E)	28' 7"	12	28	X4	#5(E)	3' 9"	-	57	b1	#6(E)	4' 0"	2	5
PIER H1	a88	#5(E)	27' 5"	18	18	X1	#5(E)	2' 3"	54	34	b1	#6(E)	4' 0"	6	6
PIER H2	a89	#5(E)	24' 1"	18	28	X1	#5(E)	2' 3"	47	-	b1	#6(E)	4' 0"	6	10
PIER H3	a90	#5(E)	22' 8"	18	28	X1	#5(E)	2' 3"	45	-	b1	#6(E)	4' 0"	6	10
PIER H4	a91	#5(E)	23' 4"	18	28	X1	#5(E)	2' 3"	46	-	b1	#6(E)	4' 0"	6	10
PIER H5	a92	#5(E)	24' 0"	18	18	X1	#5(E)	2' 3"	47	47	b1	#6(E)	4' 0"	6	6
PIER H6	a93	#5(E)	23' 2"	18	18	X1	#5(E)	2' 3"	60	60	b1	#6(E)	4' 0"	6	6
PIER H9	a94	#5(E)	26' 1"	18	18	X1	#5(E)	2' 3"	50	50	b1	#6(E)	4' 0"	6	6
PIER H12	a95	#5(E)	24' 1"	18	18	X1	#5(E)	2' 3"	46	46	b1	#6(E)	4' 0"	6	6

**SN 016-1118 PARAPET- BAR DETAILS**

LOCATION	BAR	SIZE	LENGTH/NUMBER/STAGES			BAR	SIZE	LENGTH/NUMBER/STAGES		
			STAGE II	STAGE II	STAGE II			STAGE II	STAGE II	STAGE II
S. ABUT.	d6	#4(E)	4' 10"	4	10	d2	#5(E)	4' 7"	4	10
PIER H1	d4	#4(E)	6' 4"	6	6	d2	#5(E)	4' 7"	6	6
PIER H2	d4	#4(E)	6' 4"	6	10	d2	#5(E)	4' 7"	6	10
PIER H3	d7	#4(E)	8' 7"	6	6	d2	#5(E)	4' 7"	6	10
PIER H4	d7	#4(E)	8' 7"	6	6	d2	#5(E)	4' 7"	6	10
PIER H5	d7	#4(E)	8' 7"	6	6	d2	#5(E)	4' 7"	6	6
PIER H6	d3	#4(E)	6' 10"	6	-	d2	#5(E)	4' 7"	6	6
PIER H9	d8	#4(E)	5' 8"	6	6	d2	#5(E)	4' 7"	6	6
PIER H12	d1	#4(E)	5' 10"	2	-	d2	#5(E)	4' 7"	6	6
	d8	#4(E)	5' 8"	6	6	d2	#5(E)	4' 7"	2	-

**SN 016-1059 SLAB - BAR DETAILS**

LOCATION	BAR	SIZE	LENGTH/NUMBER/STAGES			BAR	SIZE	LENGTH/NUMBER/STAGES			BAR	SIZE	LENGTH/NUMBER/STAGES		
			STAGE IA	STAGE IA	STAGE IA			STAGE IA	STAGE IA	STAGE IA			STAGE IA	STAGE IA	
PIER D33	a96	#5(E)	28' 1"	9	9	X1	#5(E)	2' 3"	29	29	b1	#6(E)	4' 0"	6	6
PIER D35	a97	#5(E)	28' 0"	9	9	X1	#5(E)	2' 3"	28	28	b1	#6(E)	4' 0"	6	6
PIER D37	a98	#5(E)	27' 10"	9	9	X1	#5(E)	2' 3"	29	29	b1	#6(E)	4' 0"	6	6
PIER D39	a99	#5(E)	31' 7"	9	9	X2	#5(E)	2' 8"	40	40	b1	#6(E)	4' 0"	6	6
PIER D41	a100	#5(E)	29' 10"	9	9	X1	#5(E)	2' 3"	30	30	b1	#6(E)	4' 0"	6	6
PIER D43	a101	#5(E)	36' 1/2"	9	9	X1	#5(E)	2' 3"	37	37	b1	#6(E)	4' 0"	6	6

**SN 016-1059 PARAPET- BAR DETAILS**

LOCATION	BAR	SIZE	LENGTH/NUMBER/STAGES			BAR	SIZE	LENGTH/NUMBER/STAGES		
			STAGE IA	STAGE IA	STAGE IA			STAGE IA	STAGE IA	STAGE IA
PIER D33	d1	#4(E)	5' 10"	6	6	d2	#5(E)	4' 7"	6	6
PIER D35	d1	#4(E)	5' 10"	6	6	d2	#5(E)	4' 7"	6	6
PIER D37	d1	#4(E)	5' 10"	6	6	d2	#5(E)	4' 7"	6	6
PIER D39	d1	#4(E)	5' 10"	6	6	d2	#5(E)	4' 7"	6	6
PIER D41	d1	#4(E)	5' 10"	6	6	d2	#5(E)	4' 7"	6	6
PIER D43	d1	#4(E)	5' 10"	6	6	d2	#5(E)	4' 7"	6	6

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Notes:  
1. The number of a(E) bars shown indicate the total number of bars required.  
2. Refer to table "BAR a(E) DETAILS" for specifics. 1x5 indicates 1 length of bar and 5 total bars is required (T or B).

**BAR a(E) DETAILS**

NUMBER OF a BARS SHOWN IN TABLE	9	18	14
INDICATES	1x5 (T) 1x4 (B)	2x5 (T) 2x4 (B)	1x8 (T) 1x6 (B)

REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
BAR DETAILS SN 016-1118,  
016-1059, 016-1140 & 016-1047  
SCALE: N/A  
DATE: 8/12/2005  
DRAWN BY: CS  
CHECKED BY: BLU

11/5/05 AM 8/17/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	177
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62580				

**SN 016-1140 SLAB - BAR DETAILS**

LOCATION	BAR STAGE	SIZE	LENGTH	NUMBER/STAGES		BAR STAGE	SIZE	LENGTH	NUMBER/STAGES		BAR STAGE	SIZE	LENGTH	NUMBER/STAGES	
				STAGE IIA	STAGE IIA				STAGE IIA	STAGE IIA				STAGE IIA	STAGE IIA
PIER B4	a111	#5(E)	28' 3"	9	-	X1	#5(E)	2' 3"	28	28	b1	#6(E)	4' 0"	5	10
	a112	#5(E)	27' 11"	-	9	-	-	-	-	-	-	-	-	-	-
PIER B5	a103	#5(E)	28' 0"	9	9	X1	#5(E)	2' 3"	32	32	b1	#6(E)	4' 0"	6	6
PIER B11	a104	#5(E)	39' 4"	9	9	X1	#5(E)	2' 8"	40	40	b1	#6(E)	4' 0"	6	6
PIER B15	a105	#5(E)	38' 8"	9	9	X2	#5(E)	2' 8"	40	40	b1	#6(E)	4' 0"	6	6
PIER B16	a106	#5(E)	27' 10"	9	9	X1	#5(E)	2' 3"	29	29	b1	#6(E)	4' 0"	6	6
B18 ABUT	a106	#5(E)	27' 10"	9	6	X1	#5(E)	2' 3"	29	-	b1	#6(E)	4' 0"	4	10
	-	-	-	-	-	u2	#5(E)	2' 2"	-	29	-	-	-	-	-

**SN 016-1140 PARAPET- BAR DETAILS**

LOCATION	BAR STAGE	SIZE	LENGTH	NUMBER/STAGES		BAR STAGE	SIZE	LENGTH	NUMBER/STAGES	
				STAGE IIA	STAGE IIA				STAGE IIA	STAGE IIA
PIER B4	d1	#4(E)	5' 10"	3	6	d2	#5(E)	4' 7"	2	-
	d1	#4(E)	5' 10"	2	-	-	-	-	-	-
	d9	#5(E)	5' 6"	4	-	-	-	-	-	-
PIER B5	d1	#5(E)	5' 10"	6	6	d2	#5(E)	4' 7"	6	6
PIER B11	d1	#5(E)	5' 10"	6	6	d2	#5(E)	4' 7"	6	6
PIER B15	d1	#5(E)	5' 10"	6	6	d2	#5(E)	4' 7"	6	6
PIER B16	d1	#5(E)	5' 10"	6	6	d2	#5(E)	4' 7"	6	6
B18 ABUT	d1	#5(E)	5' 10"	4	10	d2	#5(E)	4' 7"	4	10

**SN 016-1047 SLAB - BAR DETAILS**

LOCATION	BAR STAGE	SIZE	LENGTH	NUMBER/STAGES				BAR STAGE	SIZE	LENGTH	NUMBER/STAGES				BAR STAGE	SIZE	LENGTH	NUMBER/STAGES							
				STAGE I		STAGE IA					STAGE I		STAGE IA					STAGE I		STAGE IA		STAGE I		STAGE IA	
				STAGE I	STAGE IA	STAGE I	STAGE IA				STAGE I	STAGE IA	STAGE I	STAGE IA				STAGE I	STAGE IA	STAGE I	STAGE IA	STAGE I	STAGE IA	STAGE I	STAGE IA
PIER E30	a106	-	#5(E) 27' 10"	-	9	9	-	X1	-	#5(E) 2' 3"	-	29	29	-	-	b1	-	#6(E) 4' 0"	-	6	6	-	-		
PIER E28	a106	-	#5(E) 27' 10"	-	9	9	-	X1	-	#5(E) 2' 3"	-	29	29	-	-	b1	-	#6(E) 4' 0"	-	6	6	-	-		
PIER E26	a106	-	#5(E) 27' 10"	-	9	9	-	X1	-	#5(E) 2' 3"	-	29	29	-	-	b1	-	#6(E) 4' 0"	-	6	6	-	-		
PIER E24	a107	-	#5(E) 29' 11"	-	9	9	-	X1	-	#5(E) 2' 3"	-	32	32	-	-	b1	-	#6(E) 4' 0"	-	6	6	-	-		
PIER E23	a108	-	#5(E) 26' 11"	-	9	9	-	X1	-	#5(E) 2' 3"	-	27	27	-	-	b1	-	#6(E) 4' 0"	-	6	6	-	-		
PIER E22	a35	a122	#5(E) 20' 5"	29' 5"	9	9	9	9	X1	X1	#5(E) 2' 3"	2' 3"	21	21	29	29	b1	b1	#6(E) 4' 0"	4' 0"	3	3	3	3	
PIER E1	a35	a109	#5(E) 20' 5"	25' 9"	9	9	9	9	X1	X1	#5(E) 2' 3"	2' 3"	21	21	25	25	b1	b1	#6(E) 4' 0"	4' 0"	3	3	3	3	
PIER E2	a35	a110	#5(E) 20' 5"	22' 4"	9	9	9	9	X1	X1	#5(E) 2' 3"	2' 3"	21	21	31	31	b1	b1	#6(E) 4' 0"	4' 0"	3	3	3	3	

**SN 016-1047 PARAPET- BAR DETAILS**

LOCATION	BAR STAGE	SIZE	LENGTH	NUMBER/STAGES				BAR STAGE	SIZE	LENGTH	NUMBER/STAGES					
				STAGE I		STAGE IA					STAGE I		STAGE IA			
				STAGE I	STAGE IA	STAGE I	STAGE IA				STAGE I	STAGE IA	STAGE I	STAGE IA		
PIER E30	d1	-	#4(E) 5' 10"	-	6	6	-	d2	-	#5(E) 4' 7"	-	6	6	-	-	
PIER E28	d1	-	#4(E) 5' 10"	-	6	6	-	d2	-	#5(E) 4' 7"	-	6	6	-	-	
PIER E26	d1	-	#4(E) 5' 10"	-	6	6	-	d2	-	#5(E) 4' 7"	-	6	6	-	-	
PIER E24	d1	-	#4(E) 5' 10"	-	6	6	-	d2	-	#5(E) 4' 7"	-	6	6	-	-	
PIER E23	d1	-	#4(E) 5' 10"	-	6	6	-	d2	-	#5(E) 4' 7"	-	6	6	-	-	
	d8	-	#4(E) 3' 0"	-	6	-	-	-	-	-	-	-	-	-	-	
PIER E22	d1	d1	#4(E) 5' 10"	5' 10"	3	3	3	3	d2	d2	#5(E) 4' 7"	4' 7"	3	3	3	3
PIER E1	d1	d1	#4(E) 5' 10"	5' 10"	3	3	3	3	d2	d2	#5(E) 4' 7"	4' 7"	3	3	3	3
PIER E2	d1	d1	#4(E) 5' 10"	5' 10"	3	3	3	3	d2	d2	#5(E) 4' 7"	4' 7"	3	3	3	3

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Notes:  
1. The number of d(E) bars shown indicate the total number of bars required.  
2. Refer to table "BAR d(E) DETAILS" for specifics. 1x5 indicates 1 length of bar and 5 total bars is required (T or B).

**BAR d(E) DETAILS**

NUMBER OF d BARS SHOWN IN TABLE	9
INDICATES	1x5 (T) 1x4 (B)

REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
BAR DETAILS  
SN 016-1140 & 016-1047  
SCALE: N/A  
DATE: 8/12/2005  
DRAWN BY: CS  
CHECKED BY: BLU

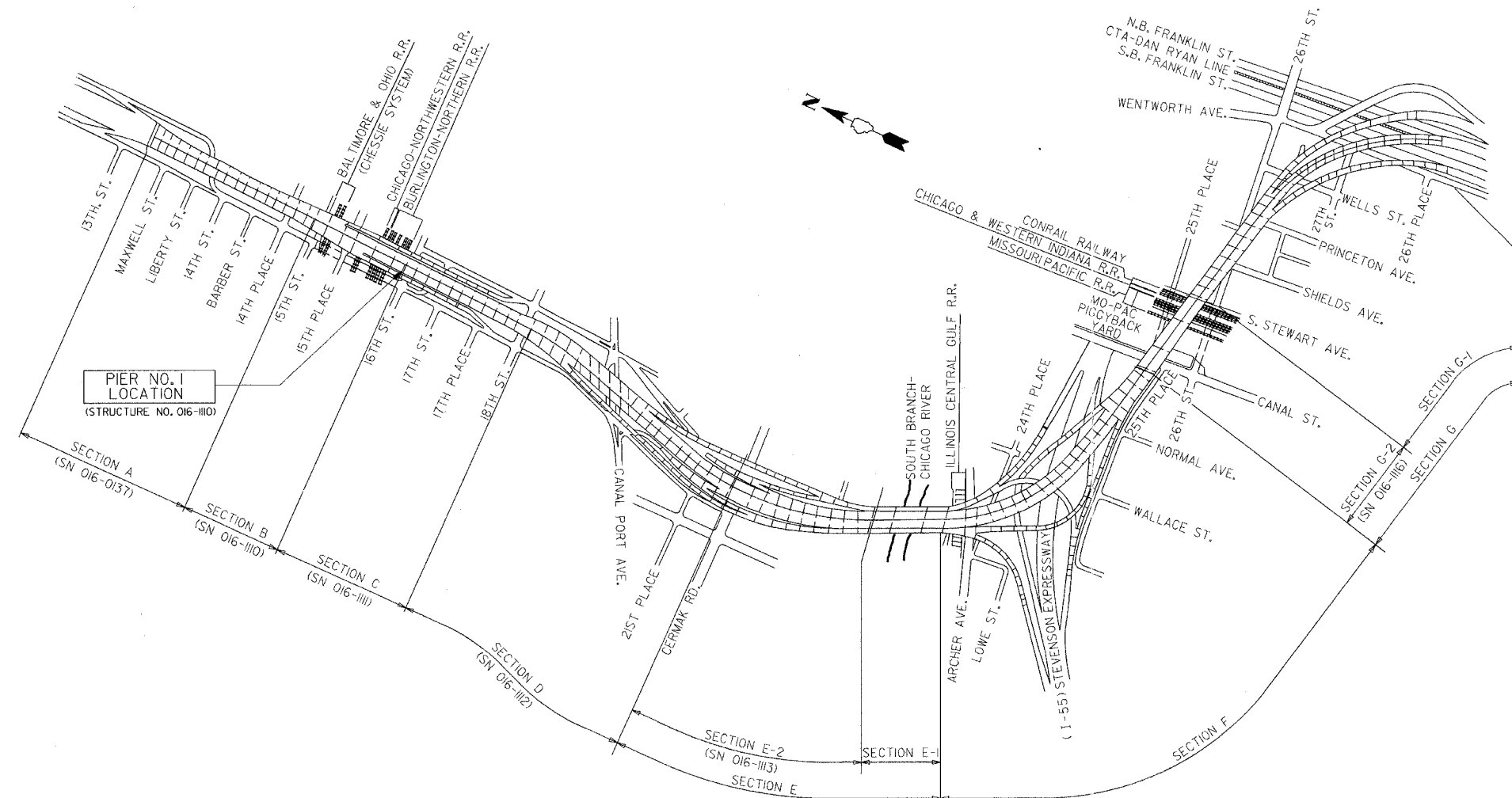
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	*	COOK	419	179
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		
* 2005-008F CONTRACT #62580				

Sheet No 1  
of 8 Sheets



**KEY PLAN**  
DAN RYAN EXPRESSWAY (I-90/I-94) VIADUCT  
COOK COUNTY, ILLINOIS

**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 for the work.

The slab is to be removed in stages. Before starting the concrete removal, the Contractor is required to submit to the Engineer for approval his staging plans and method of removal.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.

Field welding of construction accessories will not be permitted to beams or girders.

Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint.

The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications

Finger plate expansion joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F

Fasteners shall be high strength bolts. Bolts 3/4" φ, open holes 13/16" φ unless otherwise noted.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.

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

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

All Construction joints shall be bonded.

Traffic to be maintained during construction, see Roadway Plans for Stage Construction Details.

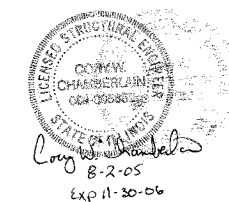
Existing design and fabrication plans are available upon request.

All structural steel shall be AASHTO M270 Grade 50 unless noted otherwise. Calculated weight = 26,210 lbs.

BILL OF MATERIAL		
ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	17.3
Concrete Superstructure	Cu Yd	20.1
Erecting Structural Steel	L.S.	0.10
Reinforcement Bars, Epoxy Coated	Pound	2450
Mechanical Splice	Each	132
Bar Splicer	Each	24
Erecting Fabric Reinforced Elastomeric Trough	Foot	65

**DESIGN STRESSES**

$f'_c = 3500$  psi  
 $f_y = 60,000$  psi (Reinf)  
 $f_y = 50,000$  psi (M270 Grade 50)



**PIER NO. 1**

**KEY PLAN**

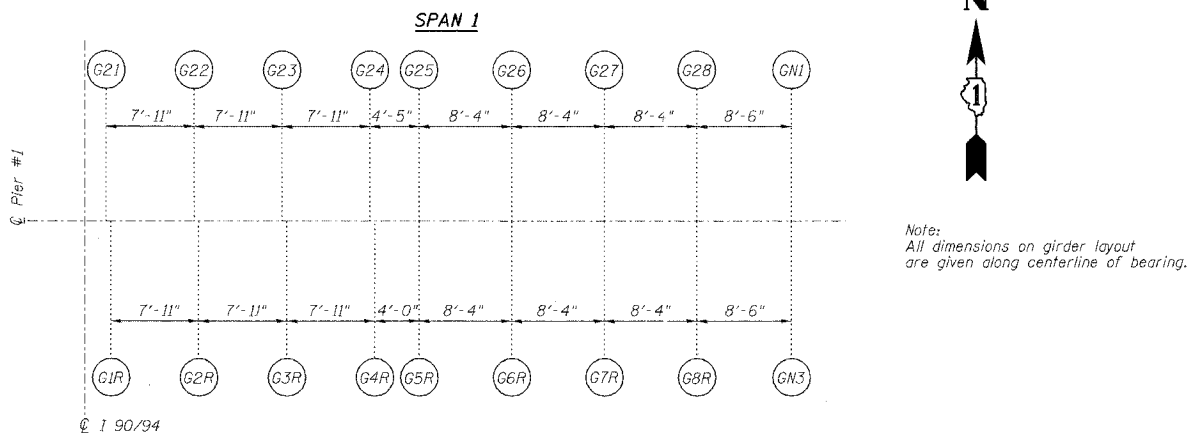
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HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS 8668 W. BRYN MAWR AVENUE SUITE 204 CHICAGO, ILLINOIS 60631 312-714-0000 FAX 312-714-0055			

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

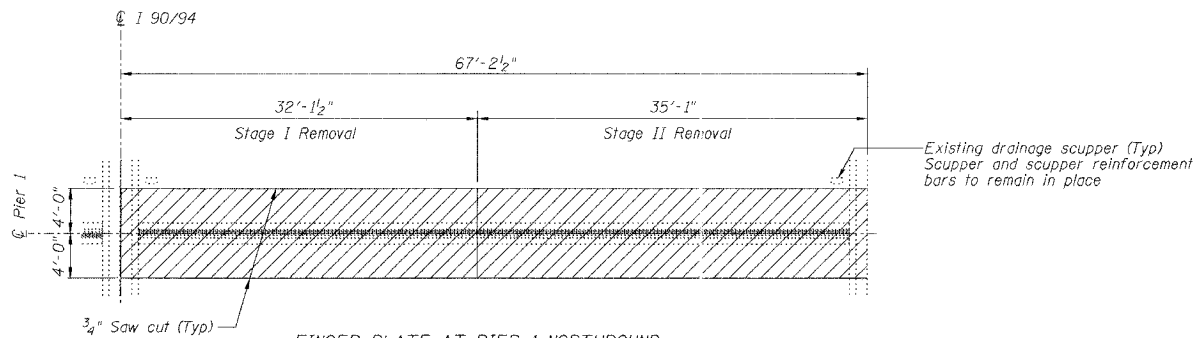
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	*	COOK	419	180
FED. ROAD DIST. NO.		ILLINOIS PROJECT		

Sheet No 2  
of 8 Sheets

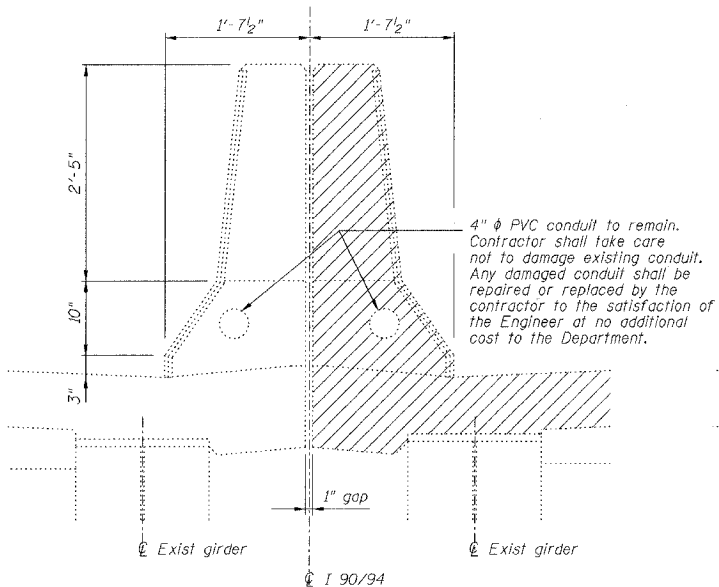
• 2005-008F  
CONTRACT #62580



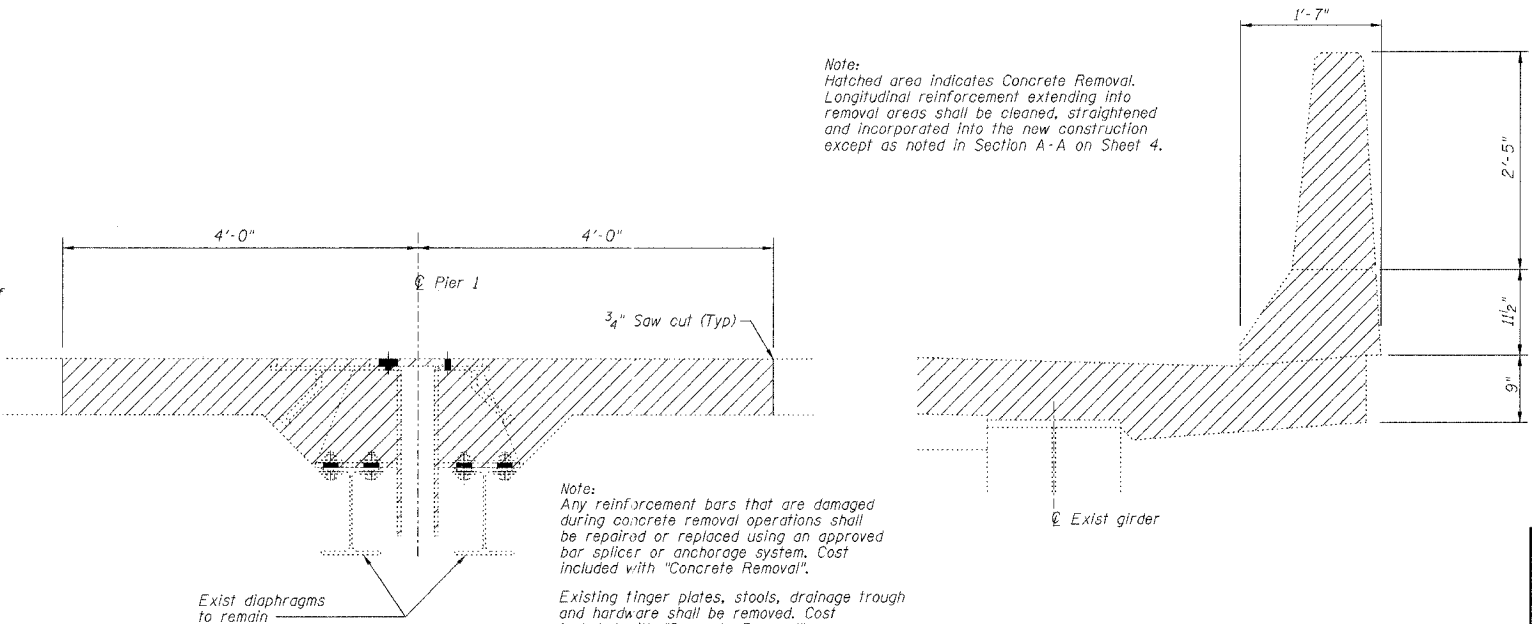
SPAN II  
(SN 016-1111)  
GIRDER LAYOUT AT PIER 1



FINGER PLATE AT PIER 1 NORTHBOUND  
JOINT REMOVAL PLAN AT PIER 1

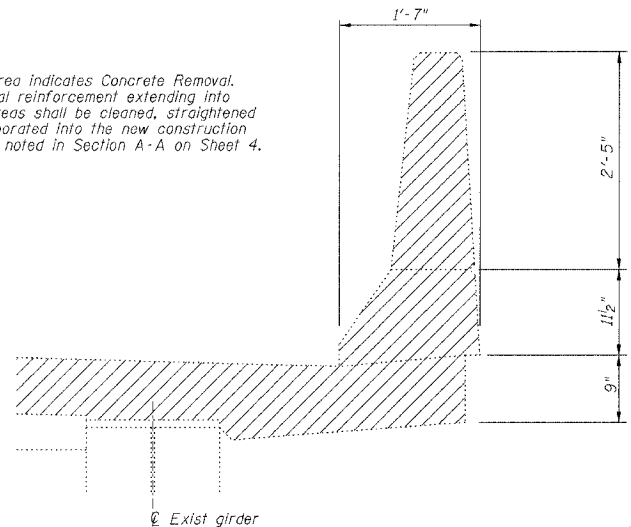


DETAIL AT EXISTING MEDIAN PARAPET



SECTION AT EXISTING FINGER PLATE AT PIER 1

Note:  
Hatched area indicates Concrete Removal. Longitudinal reinforcement extending into removal areas shall be cleaned, straightened and incorporated into the new construction except as noted in Section A-A on Sheet 4.



DETAIL AT EXISTING OUTSIDE PARAPET

PIER NO. 1

FINGER PLATE EXPANSION JOINT REMOVAL DETAILS

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY RLK	DATE 5/03
1				CREATED BY SDS	DATE 5/03
2				BOOK NUMBER	
3		FAI RTE 90/94	DAN RYAN EXPRESSWAY	PROJECT No.	4222-3
4			SN 016-1110 (NORTHBOUND)	SHEET No.	
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FAX: 774-0088

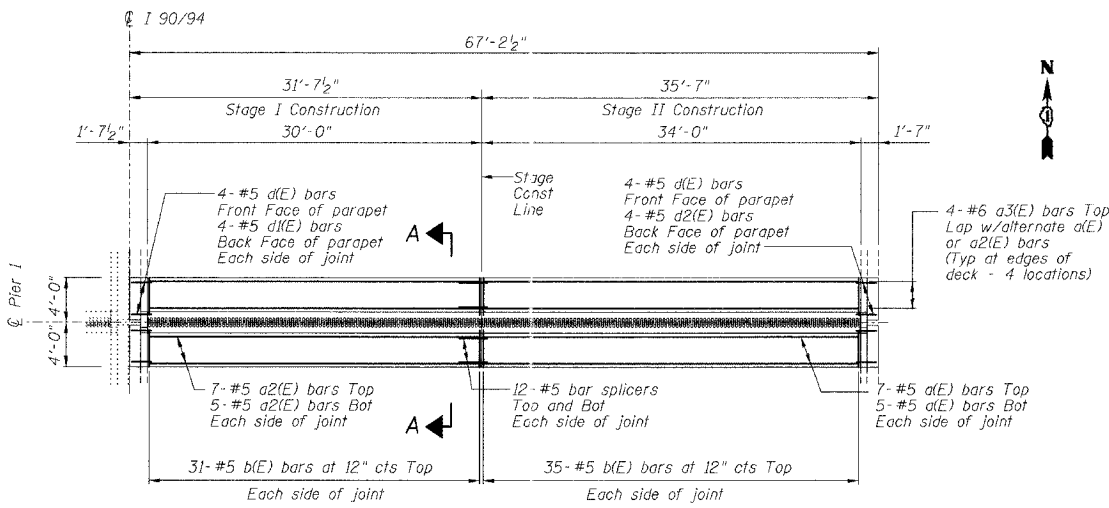


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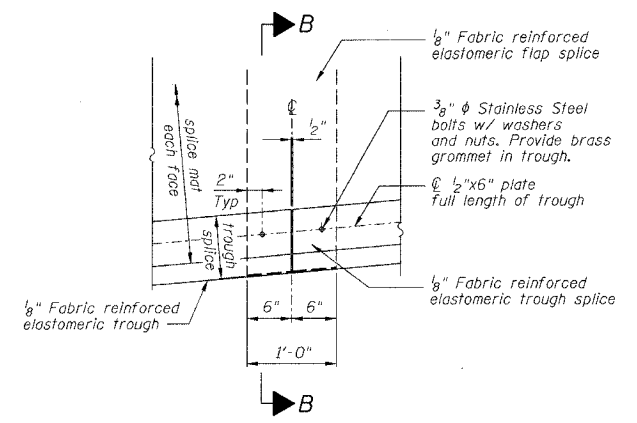
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FAI 90/94		COOK	419	184
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

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of 8 Sheets

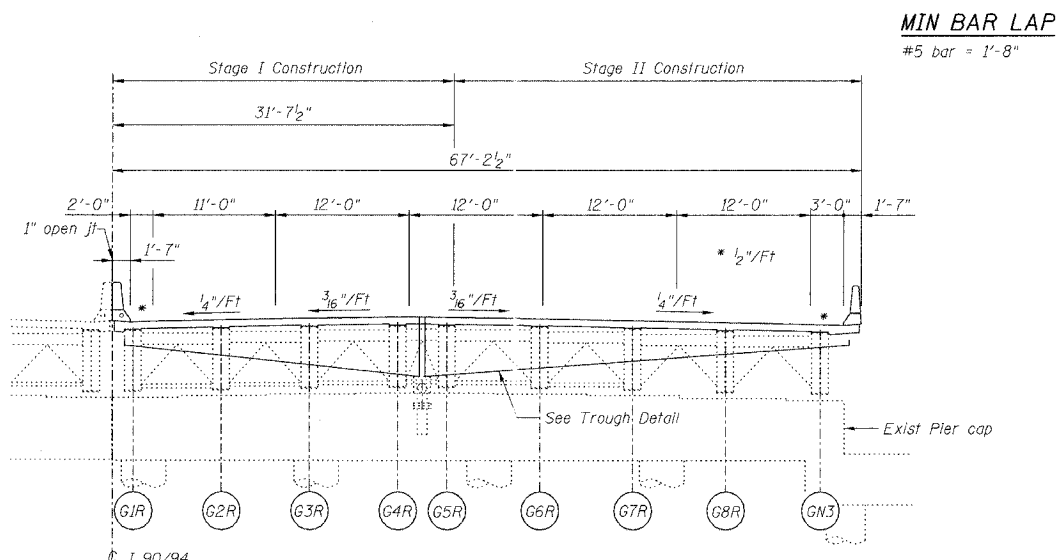
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FINGER PLATE AT PIER 1 NORTHBOUND  
JOINT RECONSTRUCTION PLAN AT PIER 1

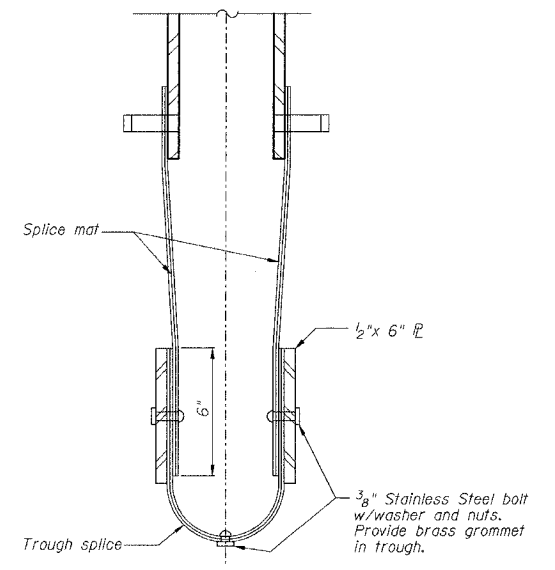


TROUGH SPLICE DETAIL

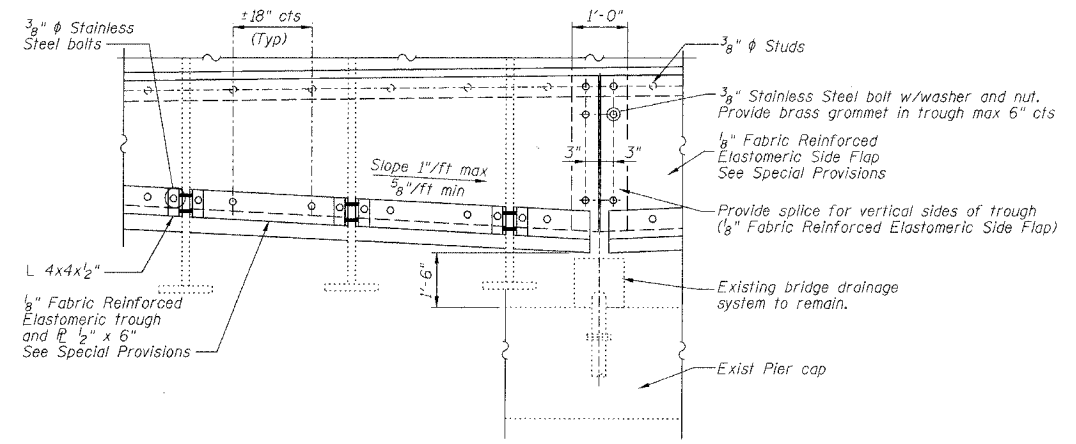


PIER 1 NORTHBOUND  
ELEVATION AT PIER 1 (LOOKING NORTH)

MIN BAR LAP  
#5 bar = 1'-8"



SECTION B-B



TROUGH DETAIL

NOTES  
For Section A-A see Sheet 4 of 8.

**PIER NO. 1**  
**FINGER PLATE EXPANSION JOINT DETAILS**

REVISIONS NO. DATE INITIALS 1 2 3 4 5 6 7 8 9 10		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS FAI RTE 90/94 DAN RYAN EXPRESSWAY SN 016-1110 (NORTHBOUND) SEC 2005-008F COOK COUNTY	DRAWN BY DATE RLK 5/03 CHECKED BY DATE SDS 5/03 BOOK NUMBER PROJECT NO. 4222-3 SHEET NO.
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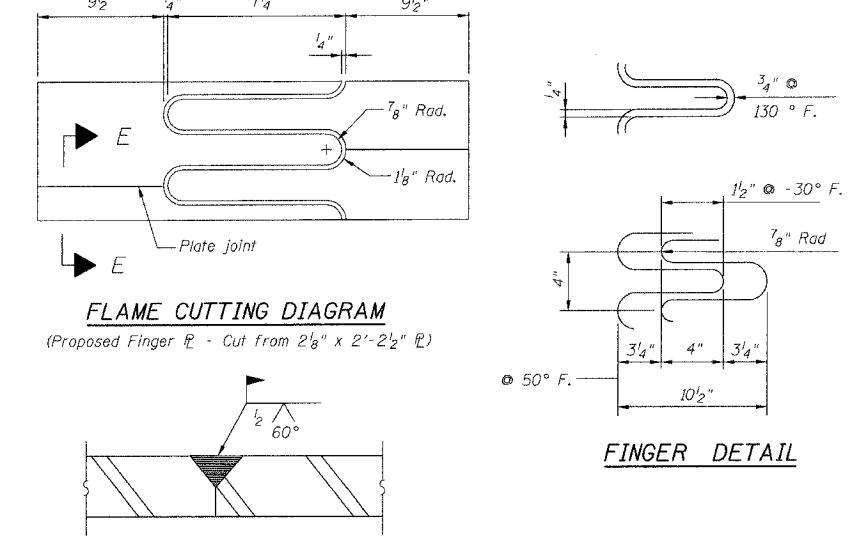
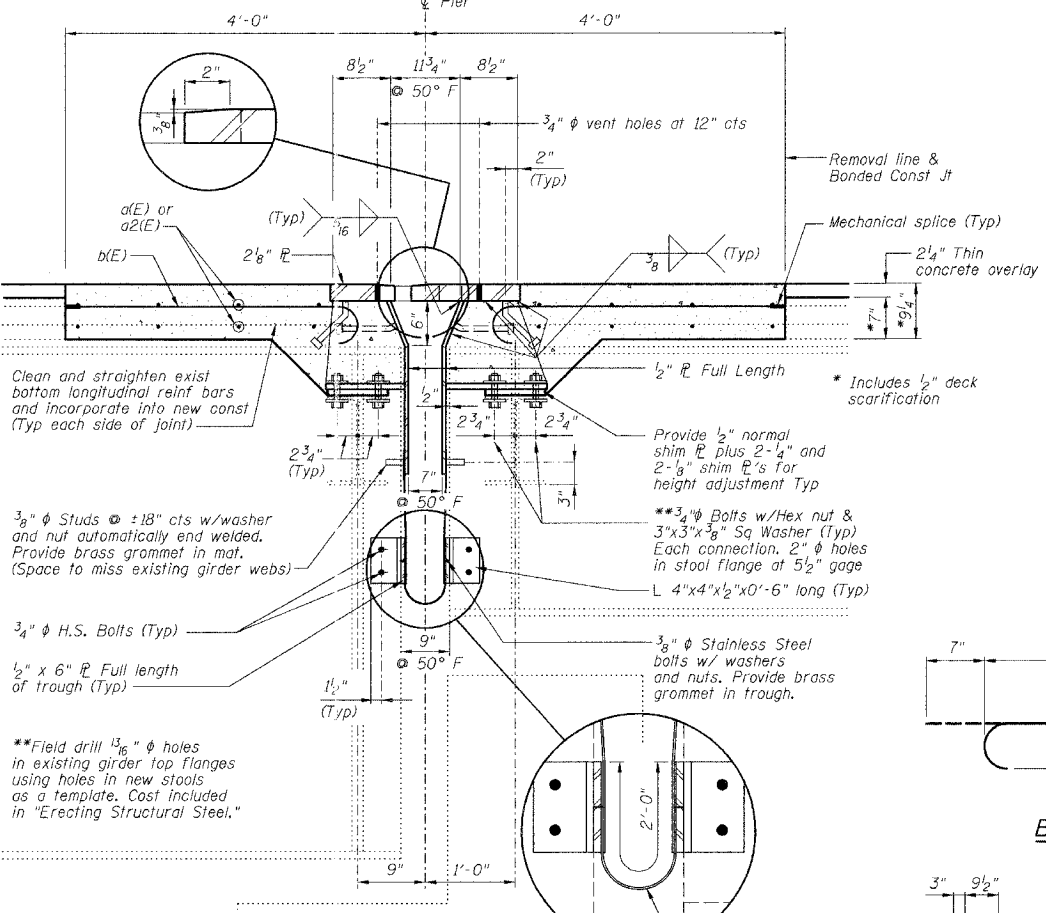
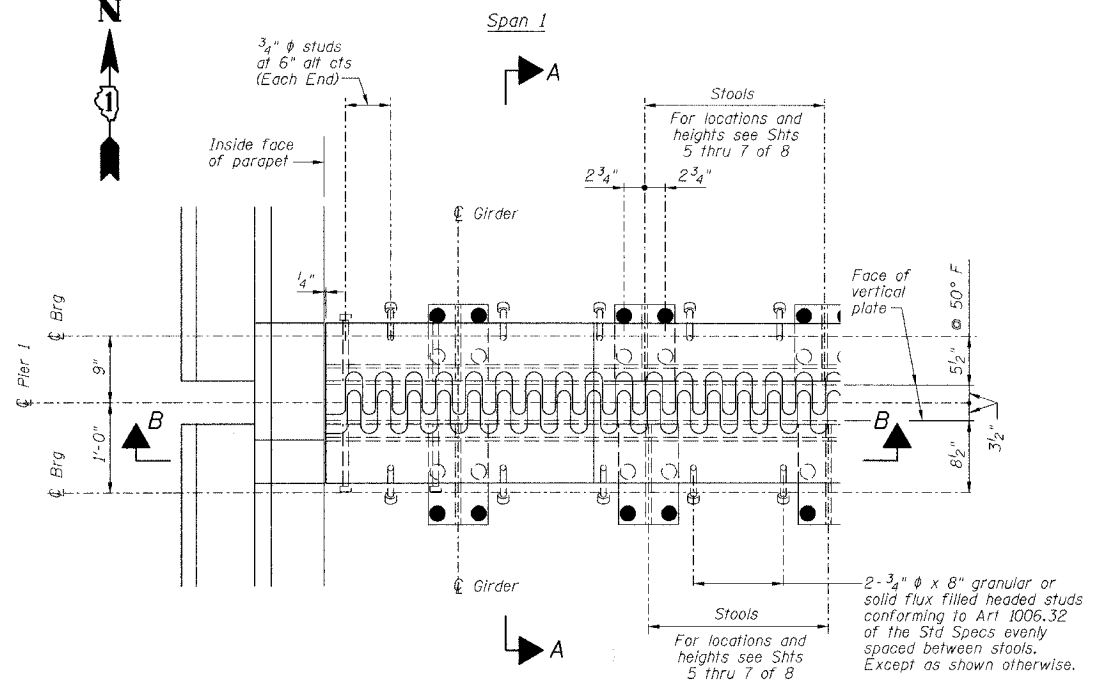
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	419	182
FED. ROAD DIST. NO.		ILLINOIS PROJECT		

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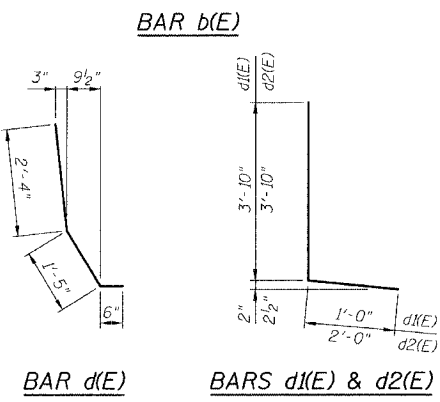
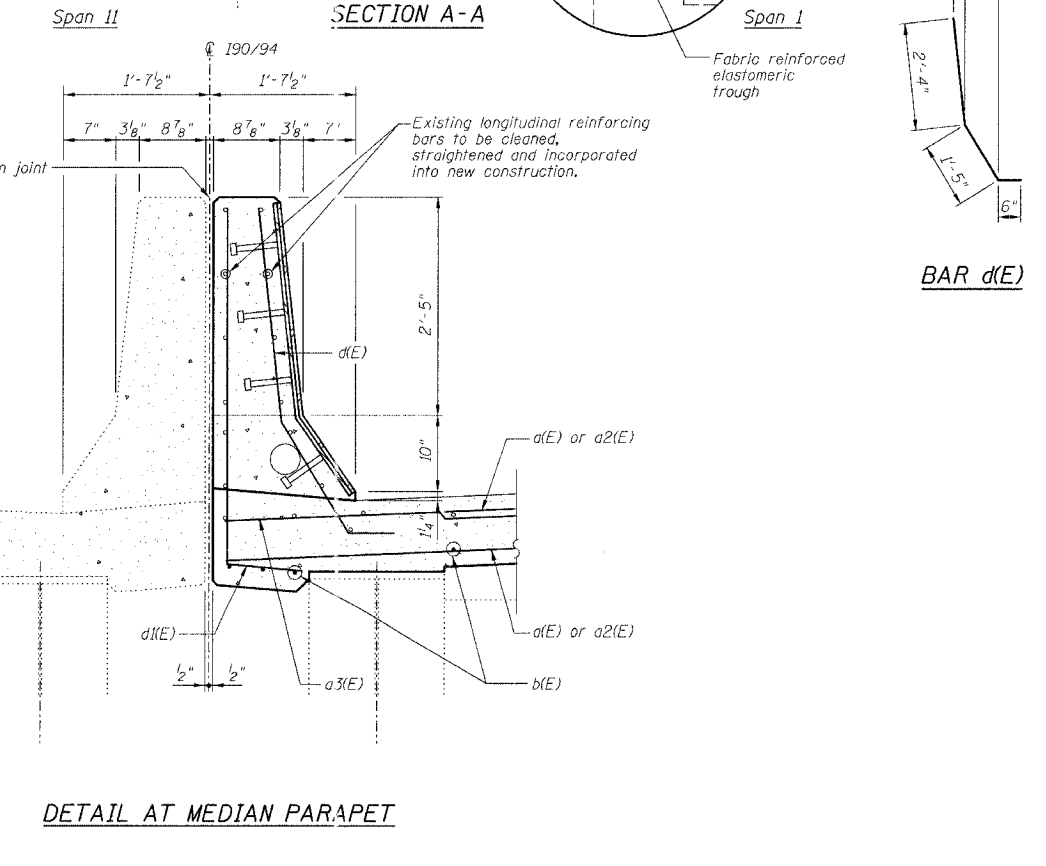
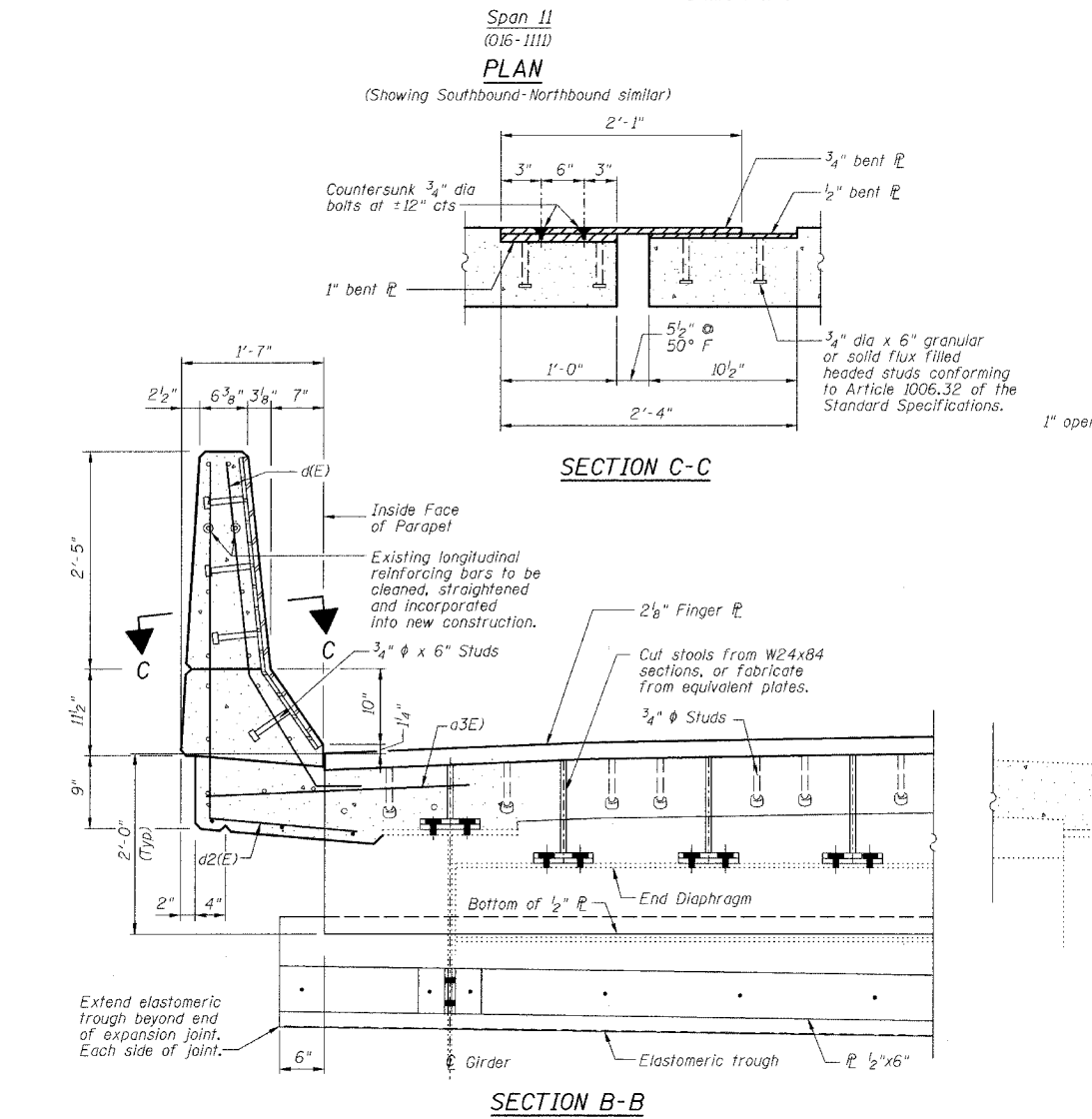
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BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	24	#5	35'-0"	
a2(E)	24	#5	31'-0"	
a3(E)	16	#6	4'-6"	
b(E)	132	#5	3'-10"	U
d(E)	16	#5	4'-3"	L
d(E)	8	#5	4'-10"	L
a2(E)	8	#5	5'-10"	L
Reinforcement Bars, Epoxy Coated		Pound	2450	
Concrete Removal		Cu Yd	17.3	
Concrete Superstructure		Cu Yd	20.1	
Bar Splicers		Each	24	
Mechanical Splice		Each	132	

Reinforcing bars designated (E) shall be epoxy coated.



- NOTES
- The Contractor shall bolt the Stools of the Fingerplate Joint Assembly to the top of existing End Cross Frames and to the top of the existing girders, as shown in Section A-A of this drawing.
  - Stainless steel bolts, washers and nuts shall meet the requirements of ASTM A193.
  - The installation of all necessary hardware, stainless steel bolts, studs and washers, plates and angles shall be included with "Erecting Structural Steel".
  - Expansion Length = 403.6'

PIER NO. 1  
FINGER PLATE EXPANSION JOINT DETAILS

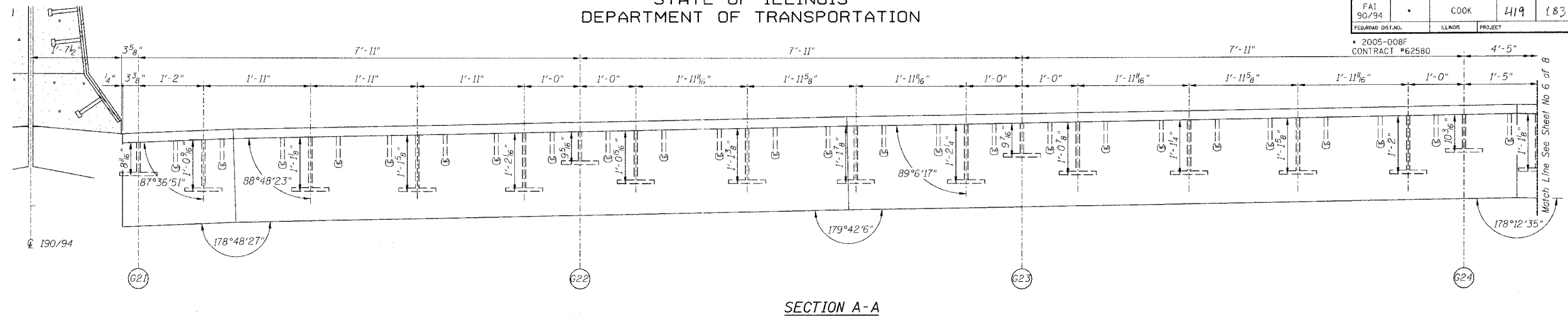
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NO. DATE INITIALS	FAI RTE 90/94 DAN RYAN EXPRESSWAY	CHECKED BY DATE SDS 5/03
1	SN 016-1110 (NORTHBOUND)	BOOK NUMBER
2	SEC 2005-008F COOK COUNTY	PROJECT No. 4222-3
3		SHEET No.
4		
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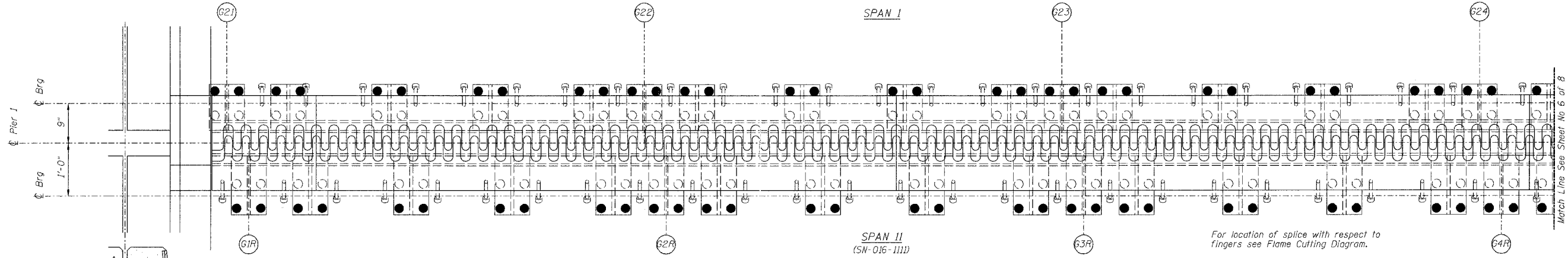
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FEDORAD DIST. NO.	ILLINOIS	PROJECT		
2005-008F				

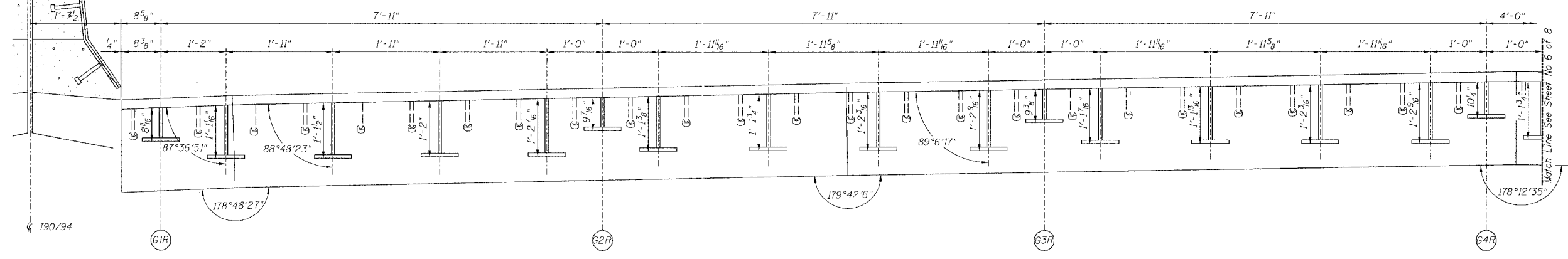
Sheet No 5  
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SECTION A-A



PLAN OF FINGER PLATE AT PIER 1 (NORTHBOUND)



SECTION B-B

PIER NO. 1

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE RLK 5/03
No.	DATE	INITIALS		CHECKED BY DATE SDS 5/03
1				BOOK NUMBER
2				
3				
4				
5				
6				
7				
8				
9				
10				

Note:  
For optional splice detail see  
Flame cutting diagram on Sheet No. 4

FAI RTE 90/94 DAN RYAN EXPRESSWAY  
SN 016-1110 (NORTHBOUND)  
SEC 2005-008F COOK COUNTY

PROJECT No.  
4222-3

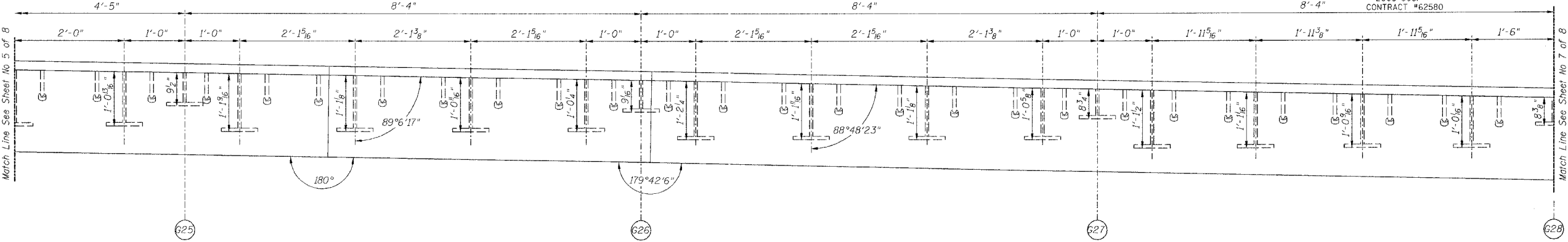
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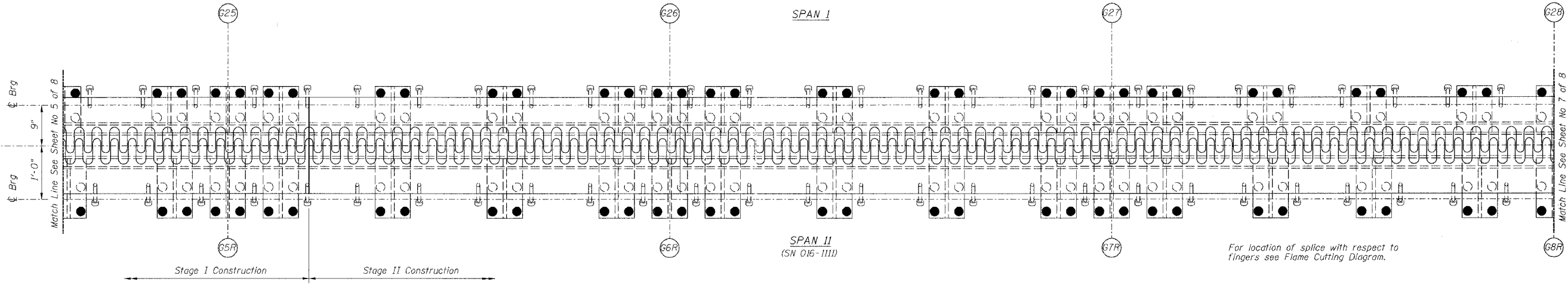
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	*	COOK	419	184
FEDERAL DIST.		ILLINOIS	PROJECT	

Sheet No 6  
of 8 Sheets

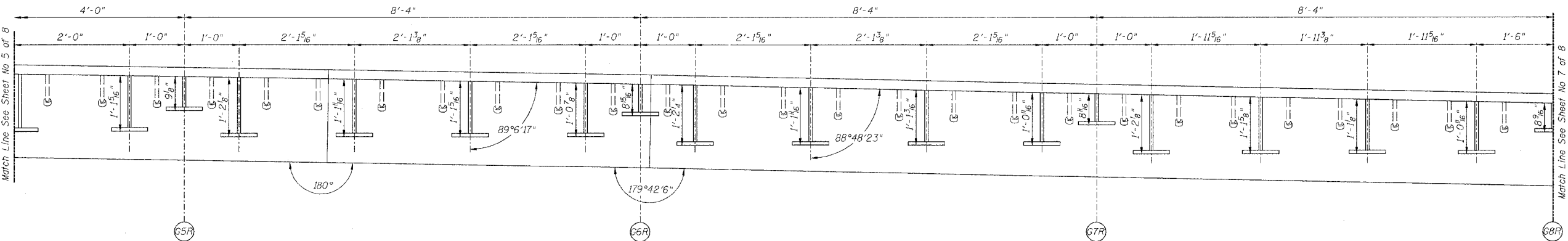
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CONTRACT #62580



SECTION A-A



PLAN OF FINGER PLATE AT PIER 1 (NORTHBOUND)



SECTION B-B

PIER NO. 1

FINGER PLATE PLAN AND ELEVATION DETAILS

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY	DATE
1			RLK	5/03
2		FAI RTE 90/94 DAN RYAN EXPRESSWAY SN 016-1110 (NORTHBOUND)	CHECKED BY	DATE
3			SDS	5/03
4		SEC 2005-008F COOK COUNTY	PROJECT NO.	
5			4222-3	
6		HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS	SHEET NO.	
7				
8		800 W. DREW MARSH AVENUE SUITE 204 CHICAGO, ILLINOIS 60631 312-714-0000		
9				
10				

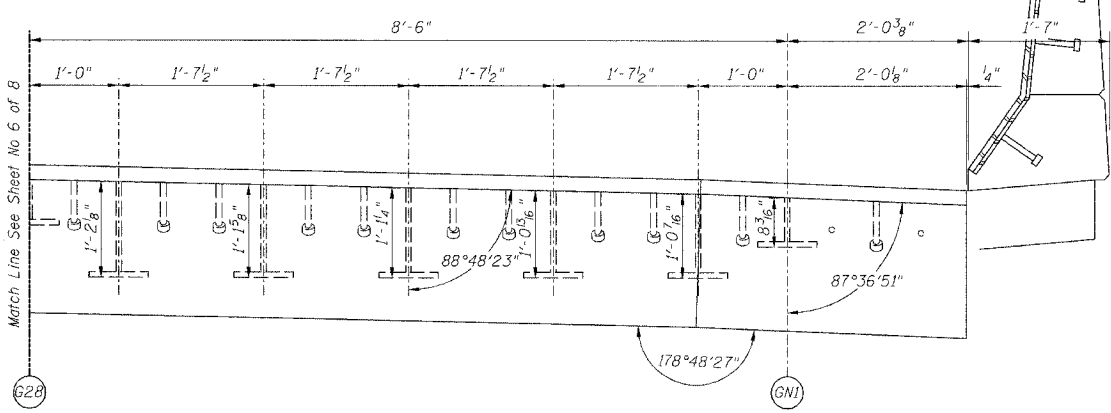
Note:  
For optional splice detail see  
Flame cutting diagram on Sheet No. 4

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

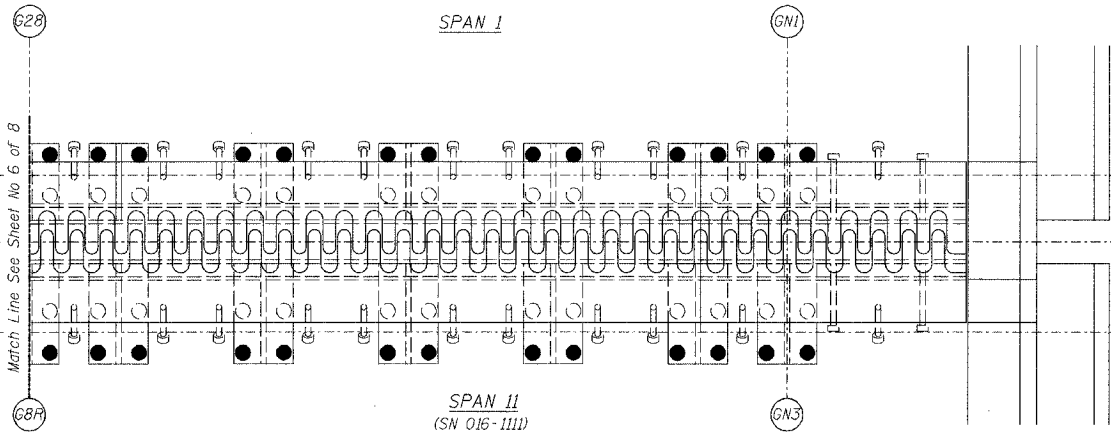
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	*	COOK	419	185
FED. ROAD DIST. NO.	ILLINOIS PROJECT			
2005-008F				

Sheet No 7  
of 8 Sheets

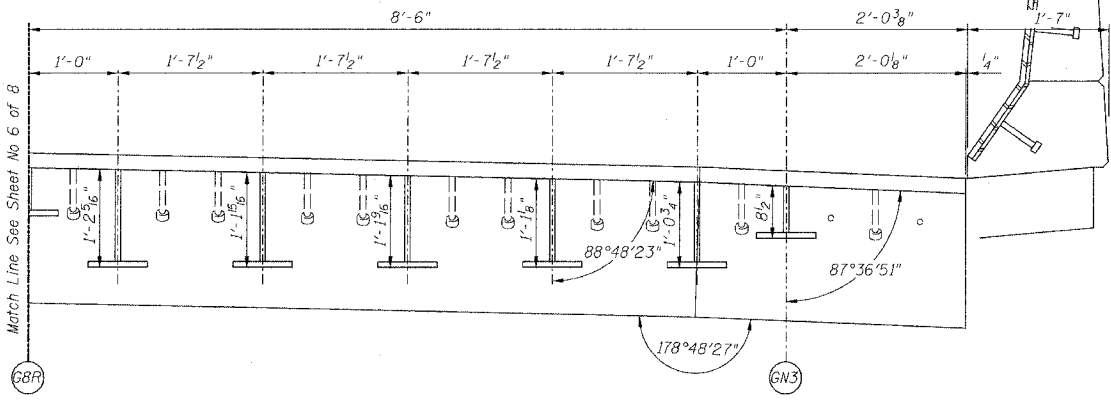
CONTRACT #62560



SECTION A-A



PLAN OF FINGER PLATE AT PIER 1 (NORTHBOUND)



SECTION B-B

For location of splice with respect to fingers see Flame Cutting Diagram.

Note:  
For optional splice detail see  
flame cutting diagram on Sheet No. 4

PIER NO. 1

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE
No.	DATE	INITIALS	FAI RTE 90/94	DAN RYAN EXPRESSWAY	RLK 5/03
1			SN 016-1110 (NORTHBOUND)	COOK COUNTY	CHECKED BY DATE SDS 5/03
2			SEC 2005-008F		PROJECT No. 4222-3
3					BOOK NUMBER
4					SHEET No.
5					
6					
7					
8					
9					
10					

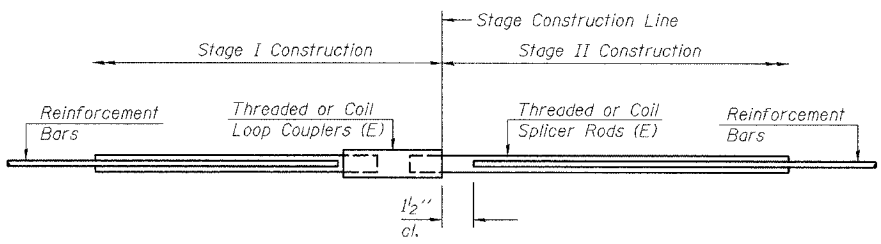
HOMER L.  
**CHASTAIN & ASSOCIATES**  
CONSULTING ENGINEERS  
6800 W. BEECH MAINT. AVENUE  
SUITE 204  
CHICAGO, ILLINOIS 60631  
312-734-0000  
FAX 312-734-0005

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	*	COOK	419	186
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		
2005-008F				

Sheet No 8  
of 8 Sheets

CONTRACT #62580



**SPLICER DETAIL**

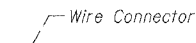
Bar Size	No. Assemblies Required	Location
#5	24	At Stage Construction Line in N.B. Deck

The diameter of this part is the same as the diameter of the bar spliced.

**ROLLED THREAD DOWEL BAR**



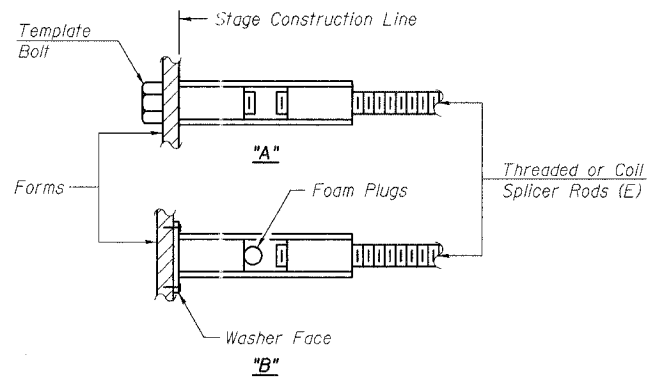
**\*\* ONE PIECE**



**WELDED SECTIONS**

**BAR SPLICER ASSEMBLY ALTERNATIVES**

\*\* Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



**INSTALLATION AND SETTING METHODS**

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

**NOTES**

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.  
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.  
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.  
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

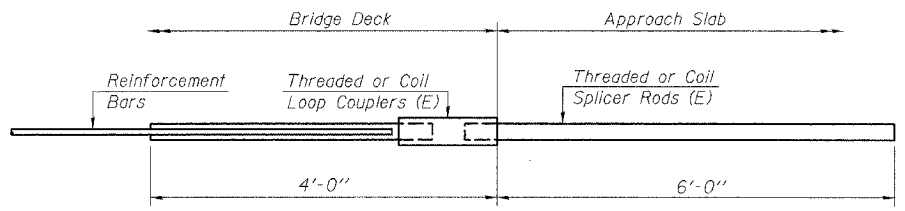
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) =  $1.25 \times f_y \times A_t$
- ② Minimum \*Pull-Out Strength (Tension in kips) =  $1.25 \times f_{s_{allow}} \times A_t$

Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $f_{s_{allow}}$  = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
\* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



**INTEGRAL ABUTMENT  
BAR SPLICER ASSEMBLY DETAIL  
FOR #5 BAR**

Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =

BSD-1 4-30-99

PIER NO. 1

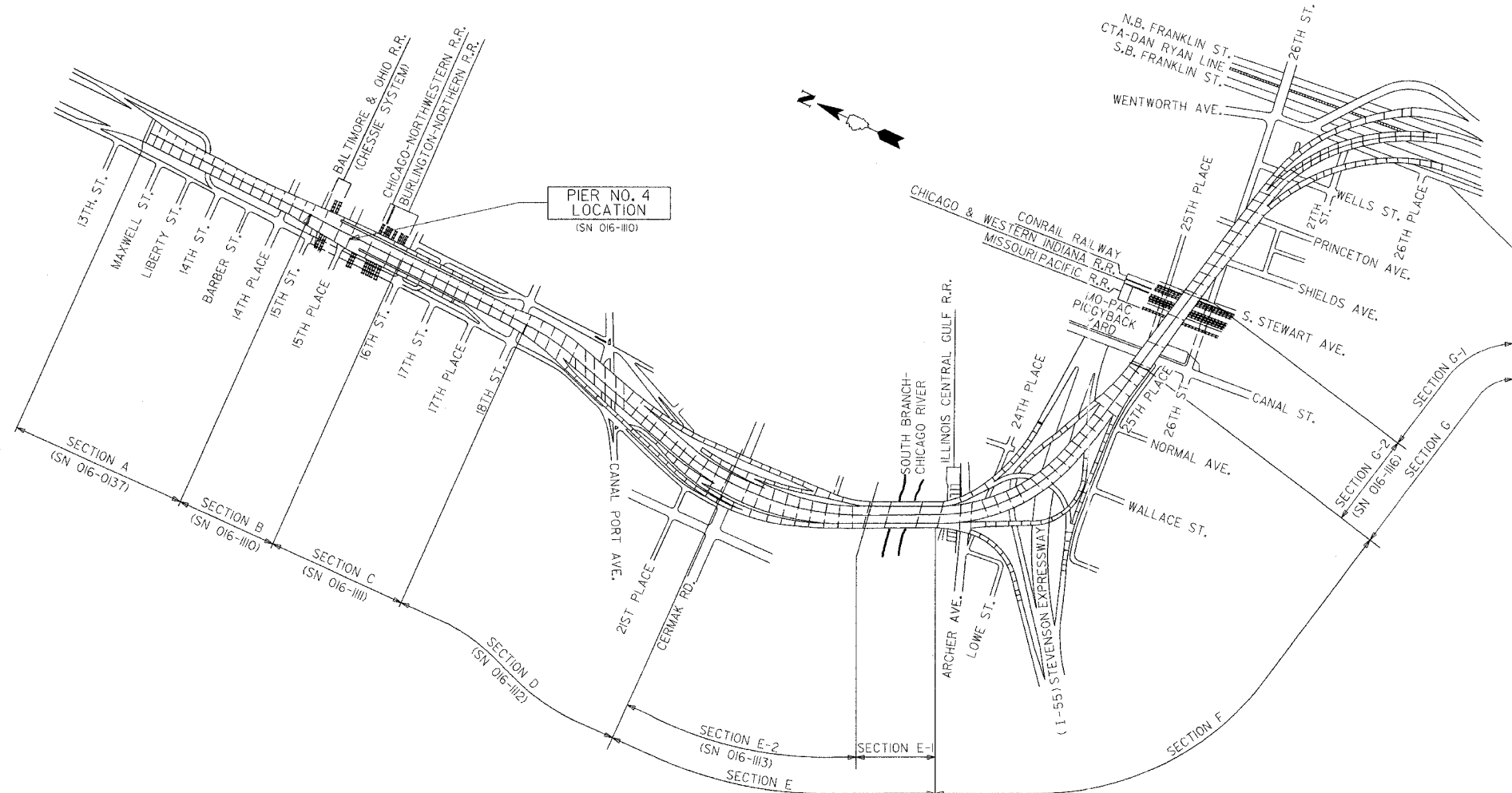
REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE RLK 5/03
No.	DATE	INITIALS	FAI RTE 90/94	DAN RYAN EXPRESSWAY	CHECKED BY DATE SDS 5/03
1			SN 016-1110 (NORTHBOUND)		BOOK NUMBER
2			SEC 2005-008F	COOK COUNTY	PROJECT No. 4222-3
3					SHEET No.
4					
5					
6					
7					
8					
9					
10					

**CHASTAIN & ASSOCIATES**  
CONSULTING ENGINEERS  
6000 W. HEYEN MAWR AVENUE  
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CHICAGO, ILLINOIS 60681  
312-714-0900  
FAX 312-714-0905

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	*	COOK	429	187
FEDROAD DIST.NO.		ALINGS	PROJECT	
* 2005-008F		CONTRACT #62580		

Sheet No 1  
of 8 Sheets



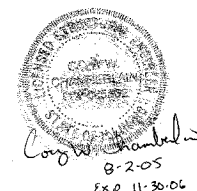
**KEY PLAN**  
DAN RYAN EXPRESSWAY (I-90/I-94) VIADUCT  
COOK COUNTY, ILLINOIS

**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 for the work.
- The slab is to be removed in stages. Before starting the concrete removal, the Contractor is required to submit to the Engineer for approval his staging plans and method of removal.
- Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.
- Field welding of construction accessories will not be permitted to beams or girders.
- Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint.
- The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications
- Finger plate expansion joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.
- Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F
- Fasteners shall be high strength bolts. Bolts 3/4"  $\phi$ , open holes 13/16"  $\phi$  unless otherwise noted.
- Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.
- Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
- The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.
- All Construction joints shall be bonded.
- Traffic to be maintained during construction, see Roadway Plans for Stage Construction Details.
- Existing design and fabrication plans are available upon request.
- All structural steel shall be AASHTO M270 Grade 50 unless noted otherwise. Calculated weight = 38,150 lbs.

**DESIGN STRESSES**  
 $f'_c = 3500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50)

BILL OF MATERIAL		
ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	23.0
Concrete Superstructure	Cu Yd	26.7
Erecting Structural Steel	L.S.	0.14
Reinforcement Bars, Epoxy Coated	Pound	3320
Mechanical Splice	Each	180
Bar Splicer	Each	24
Erecting Fabric Reinforced Elastomeric Trough	Foot	90



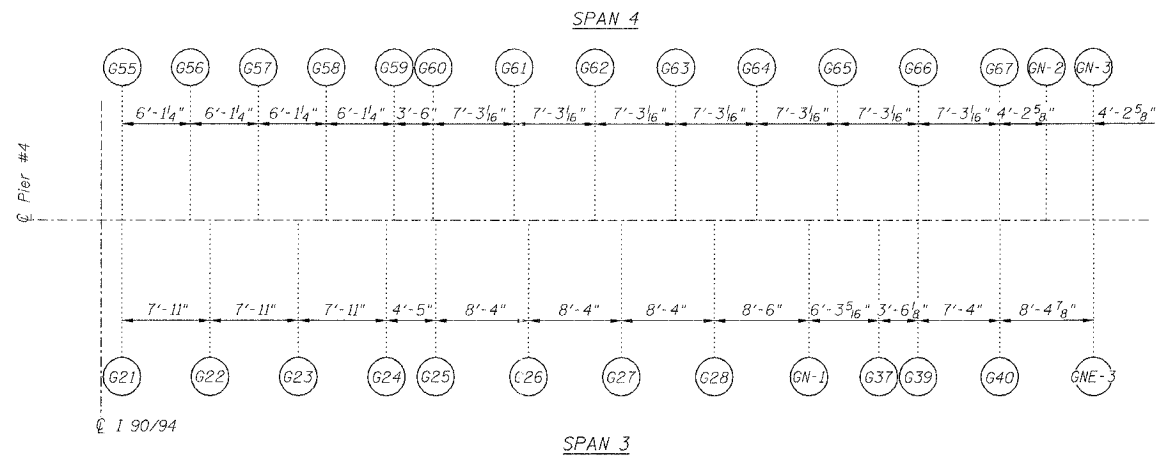
**PIER NO. 4**  
**KEY PLAN**

REVISIONS No. DATE INITIALS 1 2 3 4 5 6 7 8 9 10		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS FAI RTE 90/94 DAN RYAN EXPRESSWAY SN 016-1110 (NORTHBOUND) SEC 2005-008F COOK COUNTY	DRAWN BY DATE RLK 5/03 CHECKED BY DATE SDS 5/03 PROJECT No. 4222-3 SHEET No.
HOMER L. CHASTAIN CHASTAIN & ASSOCIATES CONSULTING ENGINEERS 8600 W. BERRY MANOR AVENUE SUITE 204 CHICAGO, ILLINOIS 60631 312-774-0000 FAX 312-774-0005		PROJECT No. 4222-3 SHEET No.	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

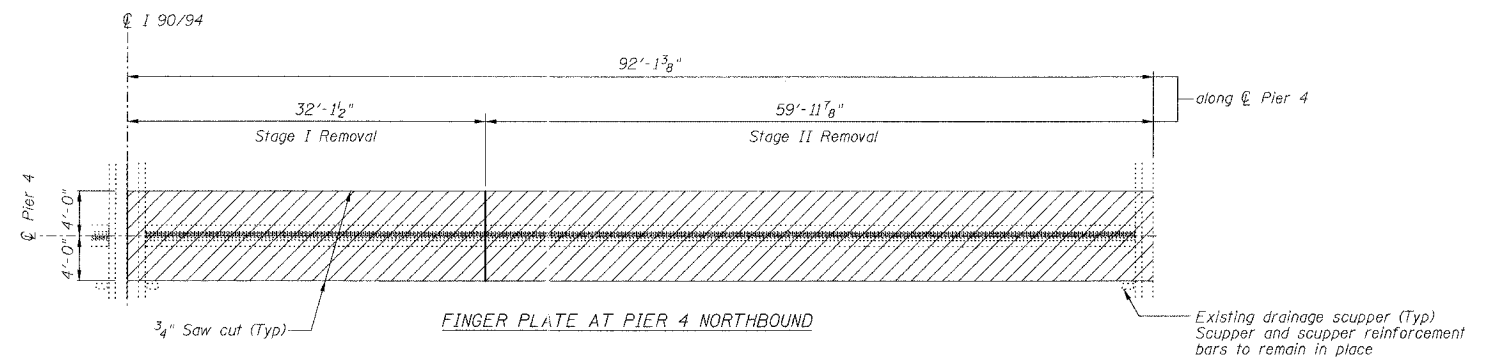
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	419	188
FEDERAL DISTRICT		ILLINOIS	PROJECT	
CONTRACT #62580				

Sheet No 2  
of 8 Sheets



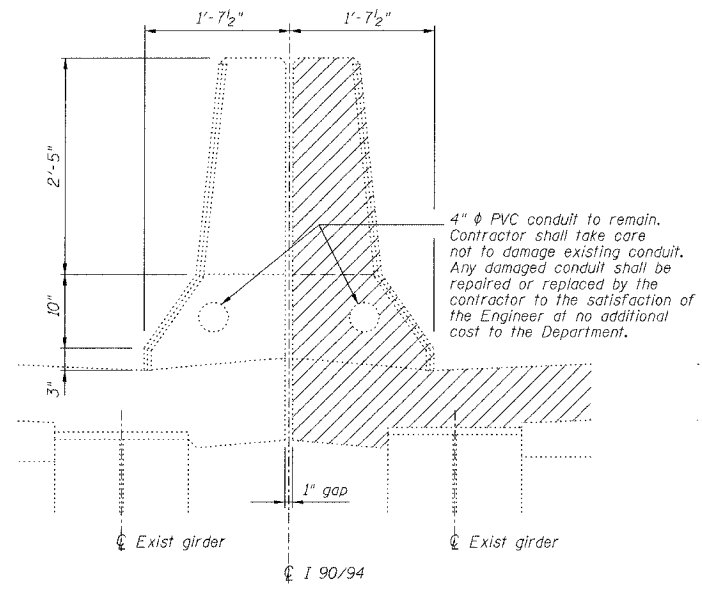
Note:  
All dimensions on girder layout  
are given along centerline of bearing.

GIRDER LAYOUT AT PIER 4

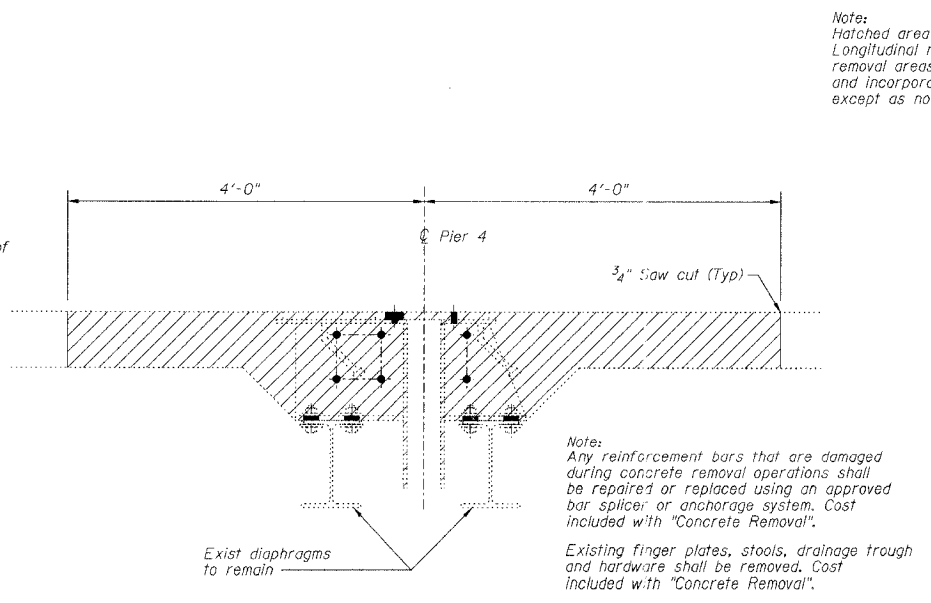


FINGER PLATE AT PIER 4 NORTHBOUND

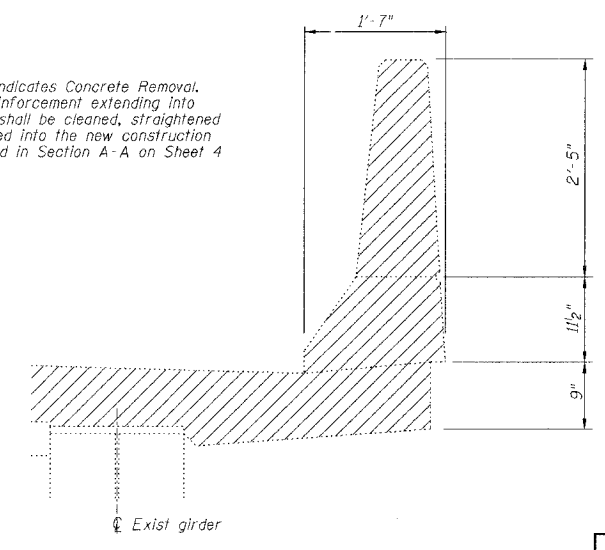
JOINT REMOVAL PLAN AT PIER 4



DETAIL AT EXISTING MEDIAN PARAPET



SECTION AT EXISTING FINGER PLATE AT PIER 4



DETAIL AT EXISTING OUTSIDE PARAPET

Note:  
Hatched area indicates Concrete Removal.  
Longitudinal reinforcement extending into  
removal areas shall be cleaned, straightened  
and incorporated into the new construction  
except as noted in Section A-A on Sheet 4

Note:  
Any reinforcement bars that are damaged  
during concrete removal operations shall  
be repaired or replaced using an approved  
bar splicer or anchorage system. Cost  
included with "Concrete Removal".  
Existing finger plates, stools, drainage trough  
and hardware shall be removed. Cost  
included with "Concrete Removal".

PIER NO. 4

FINGER PLATE EXPANSION JOINT REMOVAL DETAILS

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY RLK	DATE 5/03
1				CHECKED BY SDS	DATE 5/03
2				BOOK NUMBER	
3				PROJECT NO.	
4				4222-3	
5				SHEET NO.	
6					
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FAI RTE 90/94 DAN RYAN EXPRESSWAY  
SN 016-1110 (NORTHBOUND)  
SEC 2005-008F COOK COUNTY

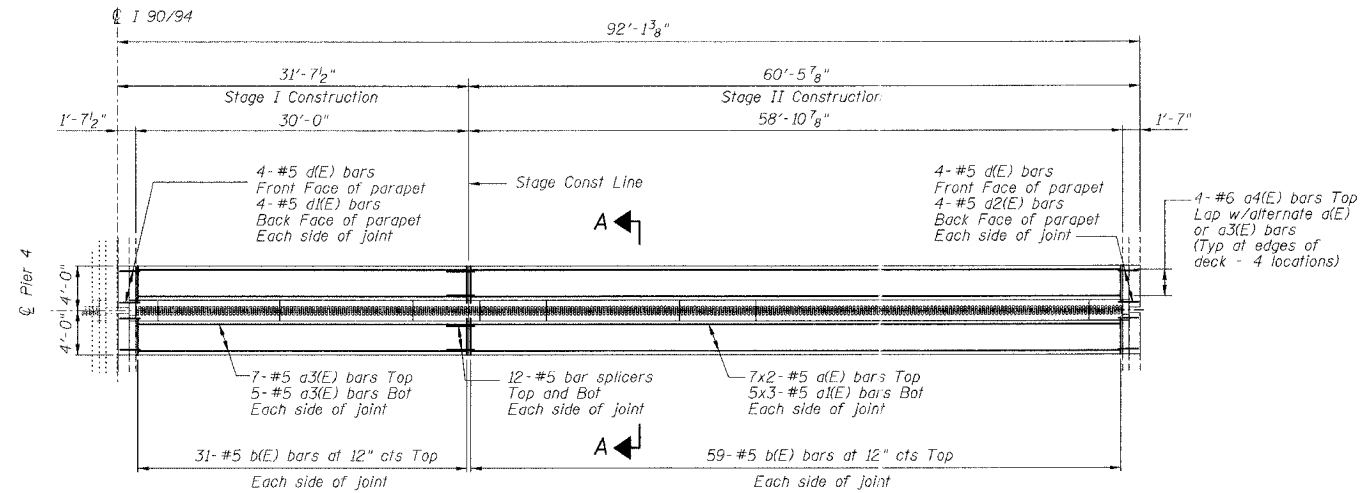
HOMER L.  
**CHASTAIN & ASSOCIATES**  
CONSULTING ENGINEERS  
9000 W. BRYN MAWR AVENUE  
SUITE 204  
CHICAGO, ILLINOIS 60631  
312-774-0986  
FAX 312-774-0085



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DEPARTMENT OF TRANSPORTATION

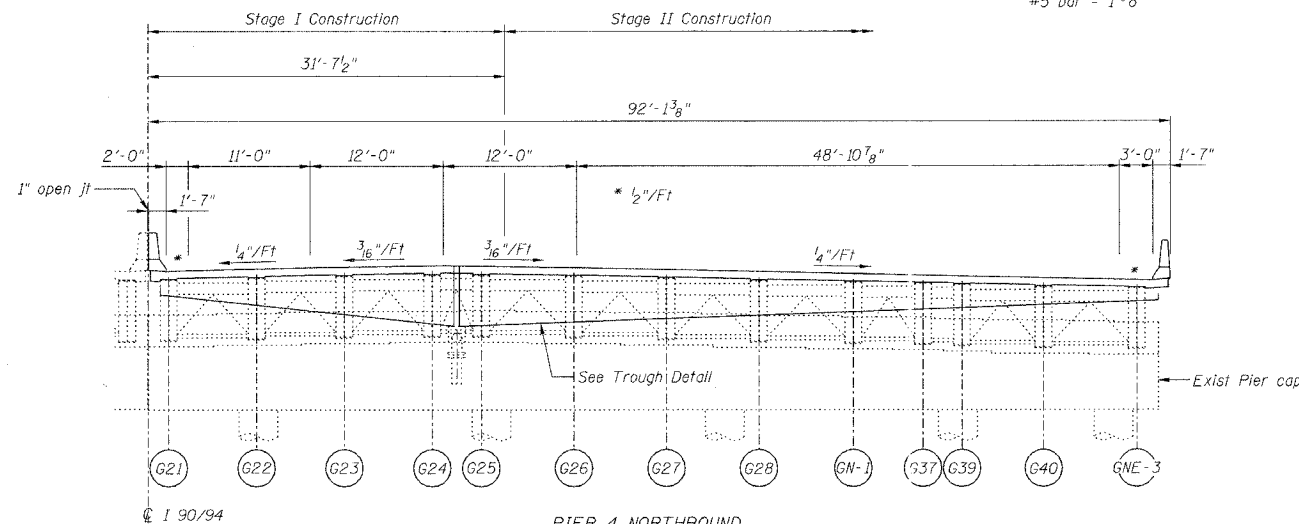
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FAI 90/94		COOK	419	187
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		
2005-008F				
CONTRACT #62580				

Sheet No 3  
of 8 Sheets

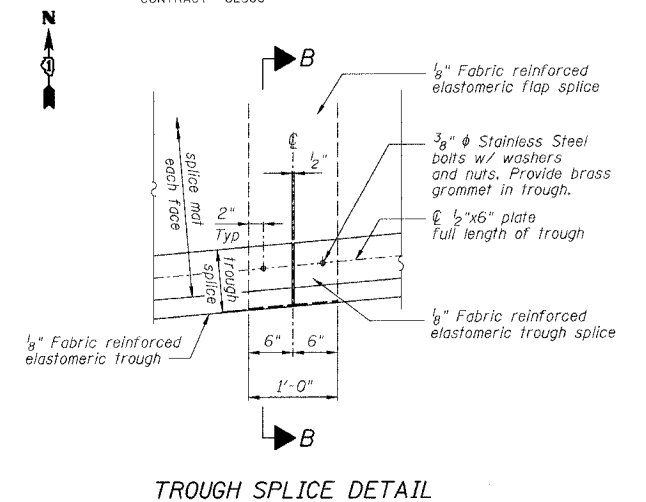


FINGER PLATE AT PIER 4 NORTHBOUND  
JOINT RECONSTRUCTION PLAN AT PIER 4  
(Dimensions along  $\bar{C}$  Pier)

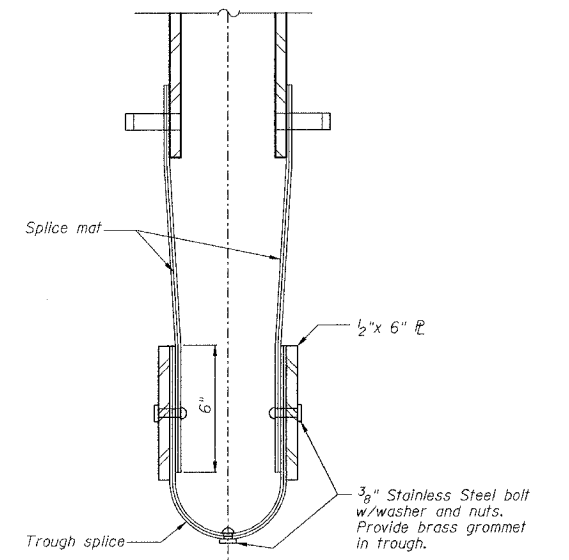
MIN BAR LAP  
#5 bar = 1'-8"



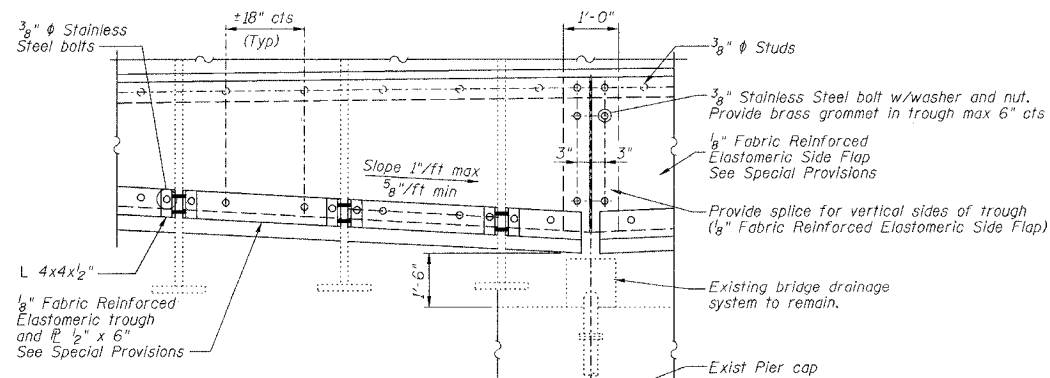
PIER 4 NORTHBOUND  
ELEVATION AT PIER 4 (LOOKING NORTH)  
(Dimensions along  $\bar{C}$  Pier)



TROUGH SPLICE DETAIL



SECTION B-B



TROUGH DETAIL

NOTES

Bars indicated thus 4x2-#5 etc indicates 4 lines of bars with 2 lengths per line.  
For Section A-A see Sheet 4 of 8.

PIER NO. 4

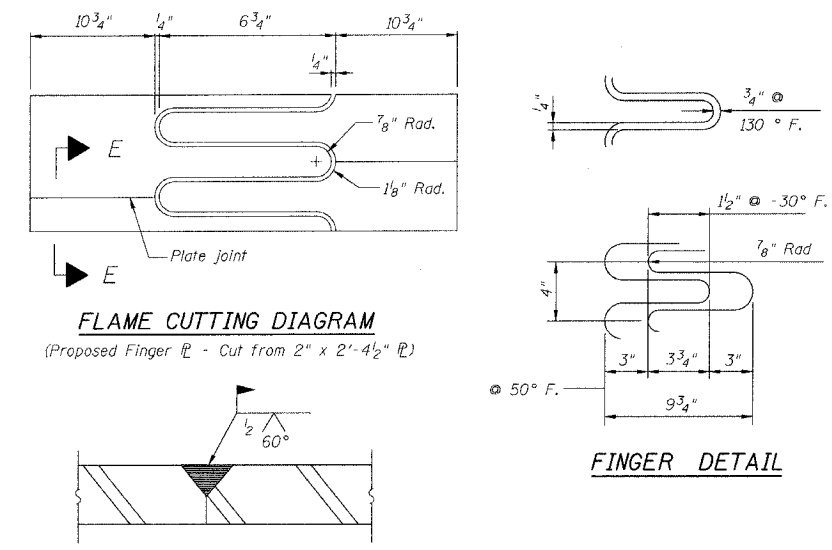
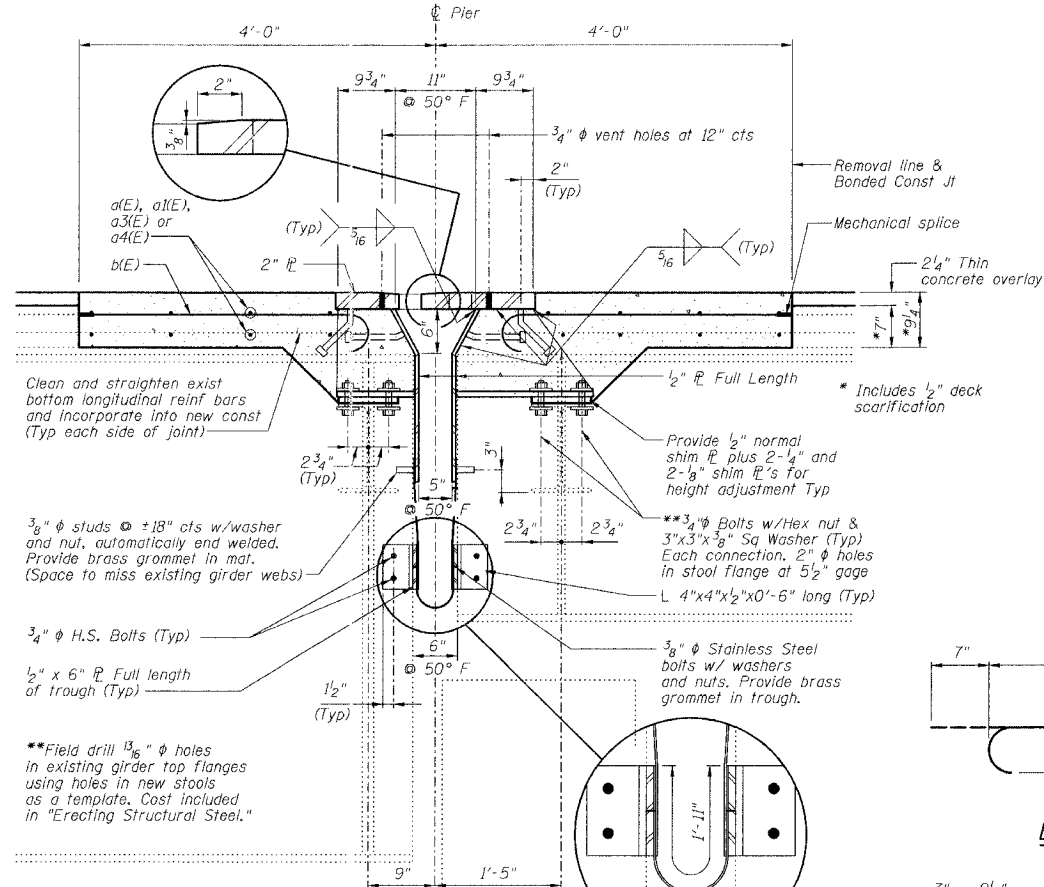
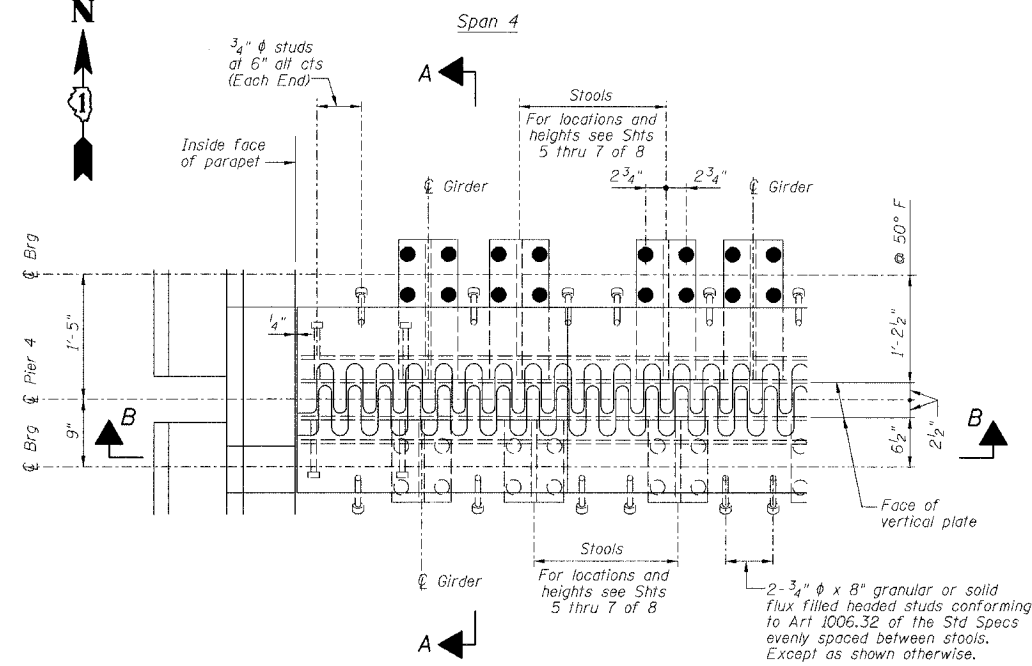
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1	DATE	INITIALS		CHECKED BY	DATE
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3				BOOK NUMBER	
4				PROJECT NO.	
5				4222-3	
6				SHEET NO.	
7					
8					
9					
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA1		COOK	419	190
FEDERAL DIST. NO. ILLINOIS PROJECT				
* 2005-008F CONTRACT #62580				

Sheet No 4  
of 8 Sheets

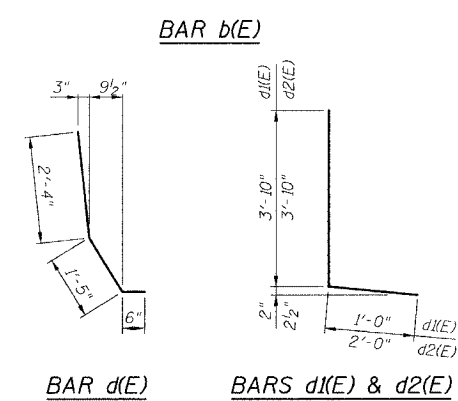
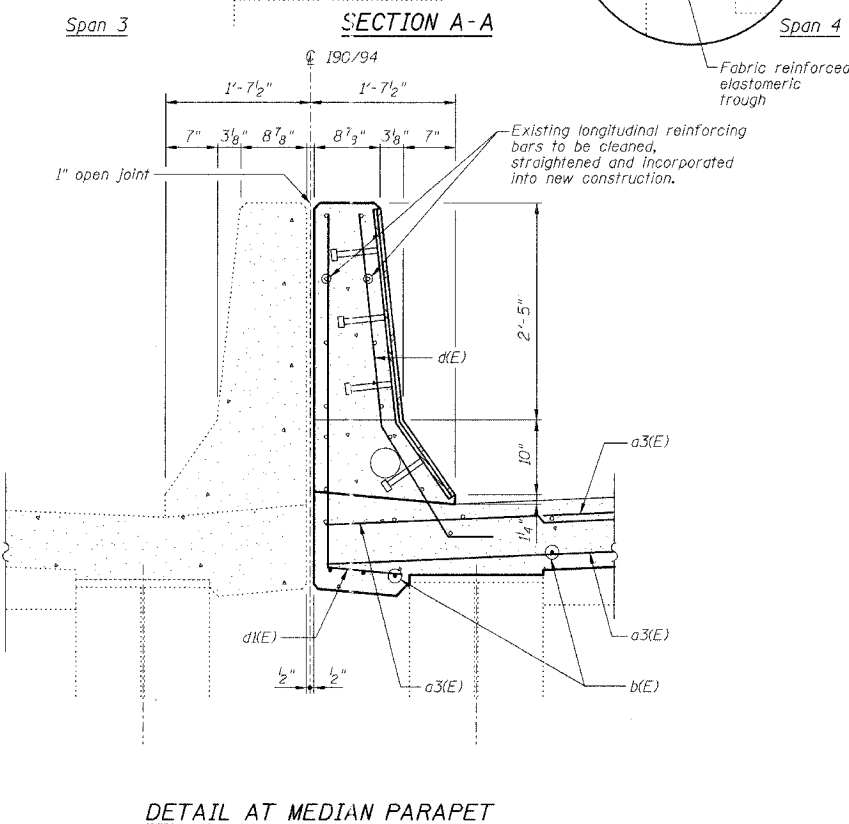
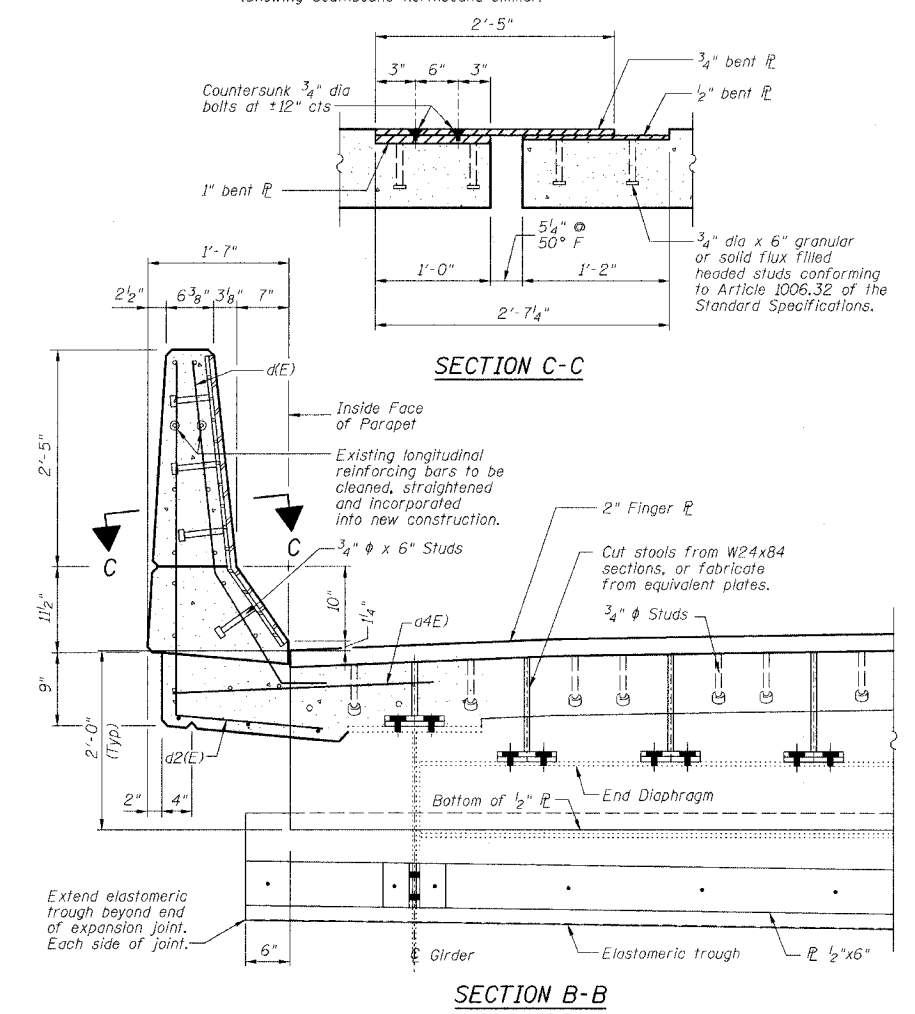


**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
a(E)	28	#5	30'-9"	—	
a1(E)	30	#5	21'-0"	—	
a3(E)	24	#5	31'-0"	—	
a4(E)	16	#6	4'-6"	—	
b(E)	180	#5	3'-10"	—	
d(E)	16	#5	4'-3"	—	
d1(E)	8	#5	4'-10"	—	
d2(E)	8	#5	5'-10"	—	
Reinforcement Bars, Epoxy Coated				Pound	3320
Concrete Removal				Cu Yd	23.0
Concrete Superstructure				Cu Yd	26.7
Bar Splicers				Each	24
Mechanical Splice				Each	180

Reinforcing bars designated (E) shall be epoxy coated.

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



- NOTES**
- The Contractor shall bolt the Stools of the Fingerplate Joint Assembly to the top of existing End Cross Frames and to the top of the existing girders, as shown in Section A-A of this drawing.
  - Stainless steel bolts, washers and nuts shall meet the requirements of ASTM A193.
  - The installation of all necessary hardware, stainless steel bolts, studs and washers, plates and angles shall be included with "Erecting Structural Steel".
  - Expansion Length = 348.5'

PIER NO. 4

**FINGER PLATE EXPANSION JOINT DETAILS**

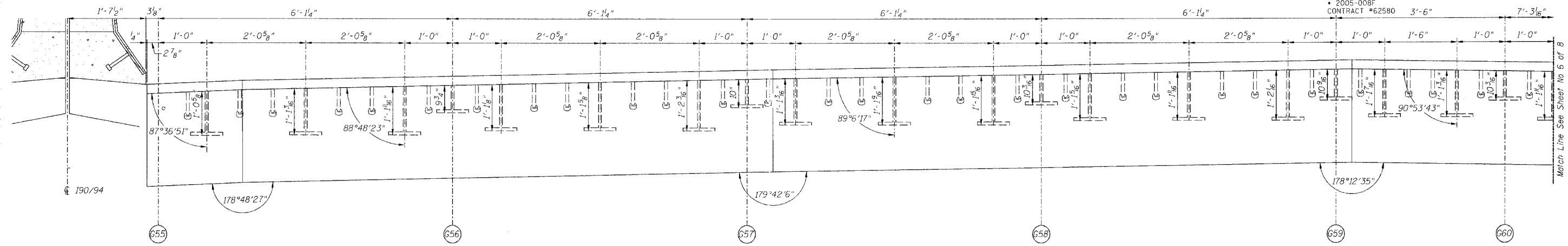
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No.	DATE			INITIALS
1				
2				
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8600 W. RUSTY MANOR AVENUE  
SUITE 204  
CHICAGO, ILLINOIS 60631  
312-714-6000  
FAX 312-714-0065

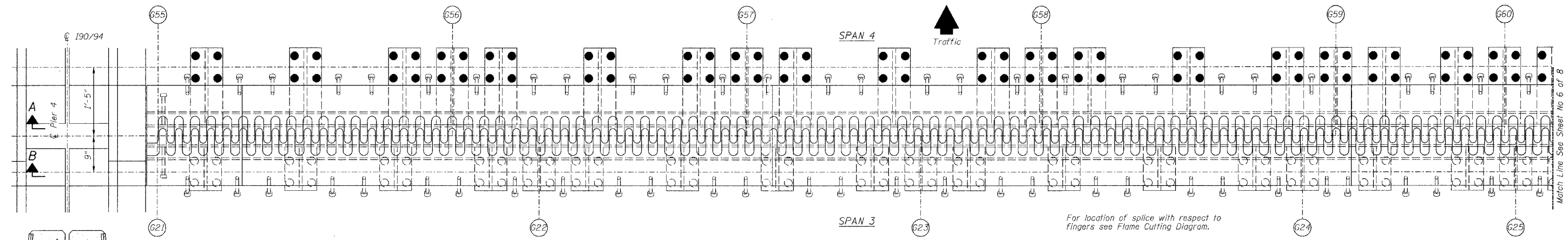
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	419	171
FEDERAL DIST. NO.		ILLINOIS PROJECT		
2005-008F		CONTRACT #62580		

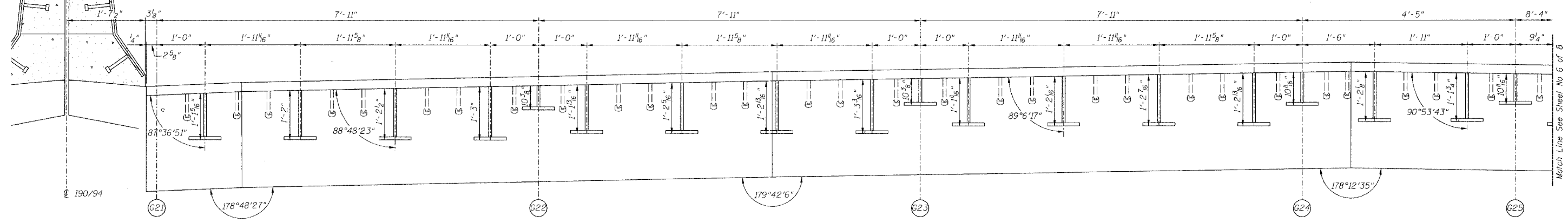
Sheet No 5  
of 8 Sheets



SECTION A-A



PLAN OF FINGER PLATE AT PIER 4 (NORTHBOUND)



SECTION B-B

PIER NO. 4

FINGER PLATE PLAN AND ELEVATION DETAILS

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY	DATE
1			RLK	5/03
2		CHECKED BY	DATE	
3		SDS	5/03	
4		BOOK NUMBER		
5		PROJECT NO.	4222-3	
6		SHEET NO.		
7		FAI RTE 90/94 DAN RYAN EXPRESSWAY SN 016-1110 (NORTHBOUND) SEC 2005-008F COOK COUNTY		
8		HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS 800 W. BIRNIE MARSH AVENUE SUITE 204 CHICAGO, ILLINOIS 60611 312-734-0000 FAX 312-734-0055		

Note:  
For optional splice detail see  
flame cutting diagram on Sheet No. 4  
All dimensions, except stool heights  
are given along centerline of bearing.

Match Line See Sheet No 6 of 8

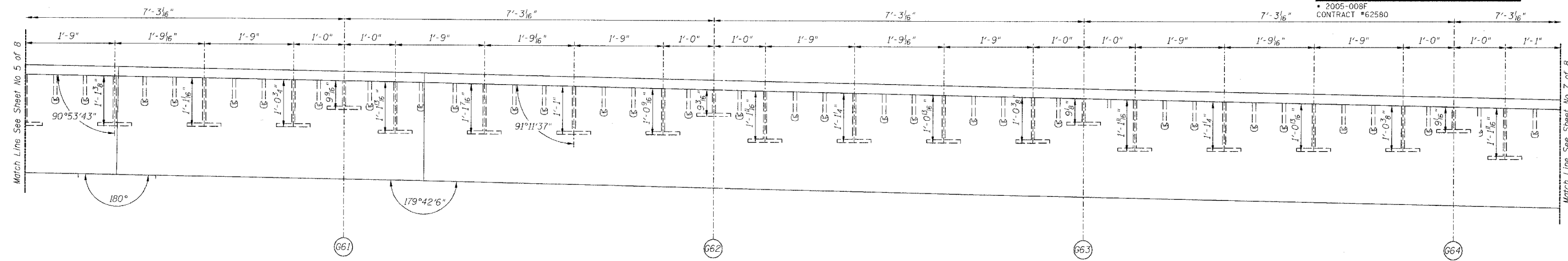
Match Line See Sheet No 6 of 8

Match Line See Sheet No 6 of 8

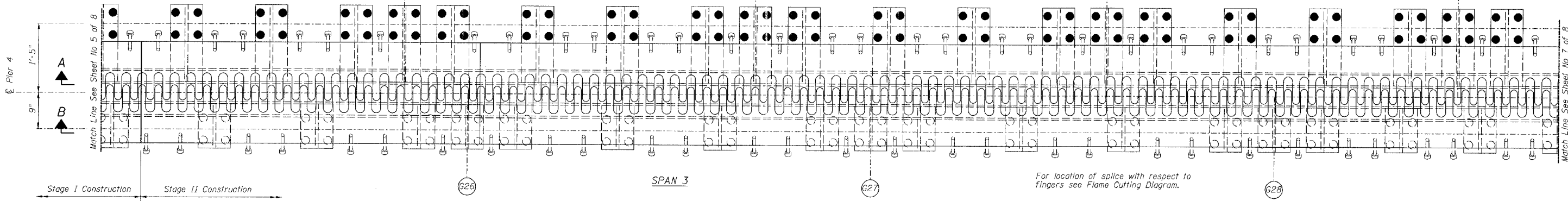
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	419	192
FED. ROAD DIST. NO.	ILLINOIS PROJECT			
2005-008F	CONTRACT #62580			

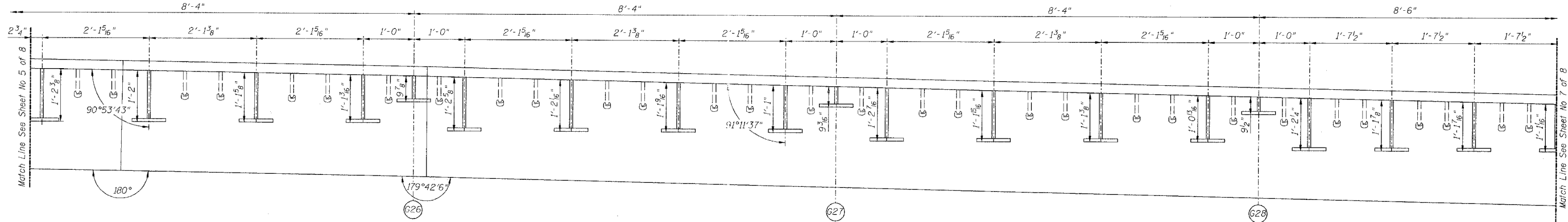
Sheet No 6  
of 8 Sheets



SECTION A-A



PLAN OF FINGER PLATE AT PIER 4 (NORTHBOUND)



SECTION B-B

PIER NO. 4

FINGER PLATE PLAN AND ELEVATION DETAILS

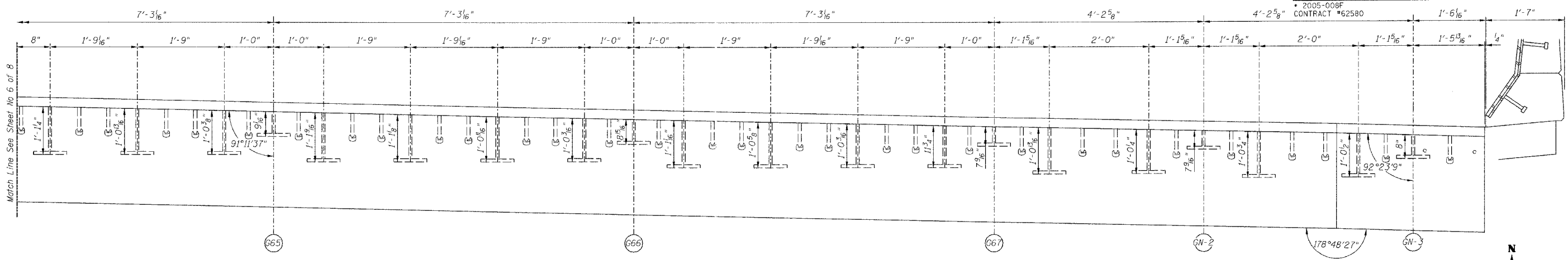
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		SEC 2005-008F COOK COUNTY		PROJECT No. 4222-3
		CHASTAIN & ASSOCIATES CONSULTING ENGINEERS 9600 W. BRYAN MAWES AVENUE SUITE 204 CHICAGO, ILLINOIS 60631 312-714-0000 FAX 312-714-0005		SHEET No.

Note:  
For optional splice detail see  
Flame cutting diagram on Sheet No. 4  
All dimensions, except stool heights  
are given along centerline of bearing.

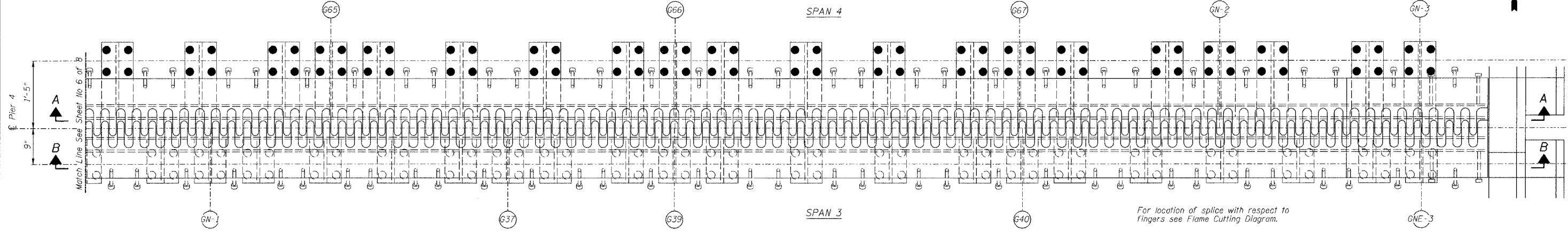
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FEDERAL DISTRICT		ILLINOIS	PROJECT	
2005-008F		CONTRACT #62580		

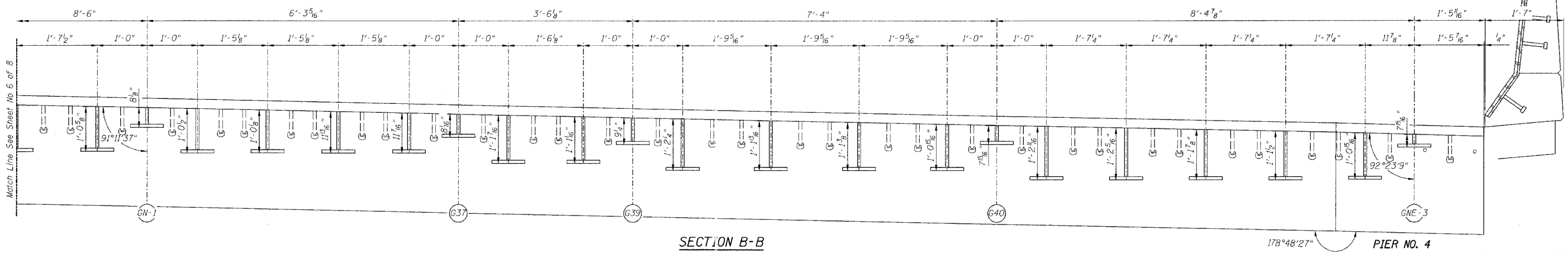
Sheet No 7  
of 8 Sheets



SECTION A-A



PLAN OF FINGER PLATE AT PIER 4 (NORTHBOUND)



SECTION B-B

For location of splice with respect to fingers see Flame Cutting Diagram.

Note:  
For optional splice detail see flame cutting diagram on Sheet No. 4  
All dimensions, except stool heights are given along centerline of bearing.

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FAI RTE 90/94	DAN RYAN EXPRESSWAY
SN 016-1110 (NORTHBOUND)	
SEC 2005-008F	COOK COUNTY

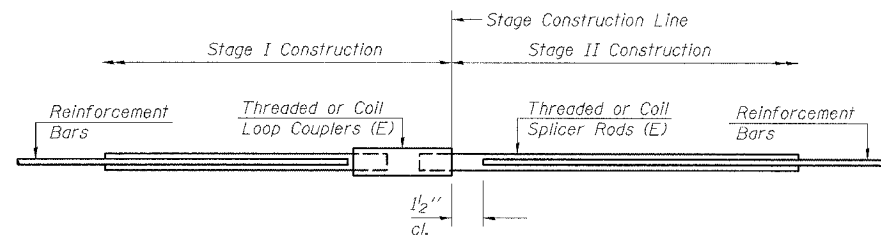
PROJECT NO. 4222-3	SHEET NO.
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FED. ROAD DIST. NO.		ILLINOIS PROJECT		
* 2005-008F		CONTRACT *62580		

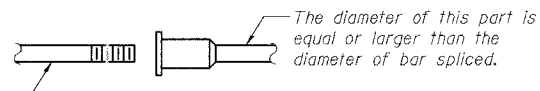
Sheet No 8  
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**SPLICER DETAIL**

Bar Size	No. Assemblies Required	Location
#5	24	At Stage Construction Line in N.B. Deck

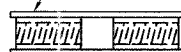
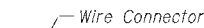
The diameter of this part is the same as the diameter of the bar spliced.



**ROLLED THREAD DOWEL BAR**



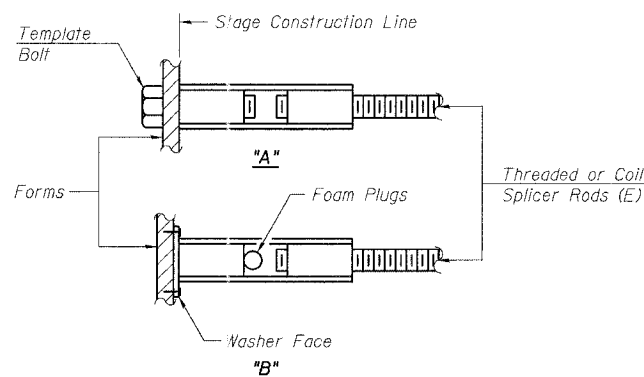
**\*\* ONE PIECE**



**WELDED SECTIONS**

**BAR SPLICER ASSEMBLY ALTERNATIVES**

\*\* Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



**INSTALLATION AND SETTING METHODS**

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

**NOTES**

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to 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 bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity =  $1.25 \times f_y \times A_t$   
(Tension in kips)
- ② Minimum \*Pull-out Strength =  $1.25 \times f_{s_{allow}} \times A_t$   
(Tension in kips)

Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.

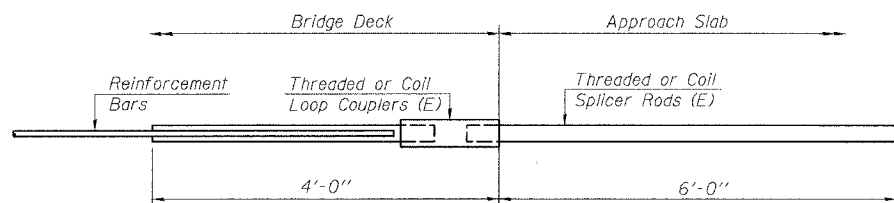
$f_{s_{allow}}$  = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)

$A_t$  = Tensile stress area of lapped reinforcement bars.

\* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



**INTEGRAL ABUTMENT  
BAR SPLICER ASSEMBLY DETAIL  
FOR #5 BAR**

Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =

BSD-1 4-30-99

PIER NO. 4

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY RLK	DATE 5/03
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2			SN 016-1110 (NORTHBOUND)	COOK COUNTY	BOOK NUMBER	
3			SEC 2005-008F		PROJECT NO.	4222-3
4					SHEET NO.	
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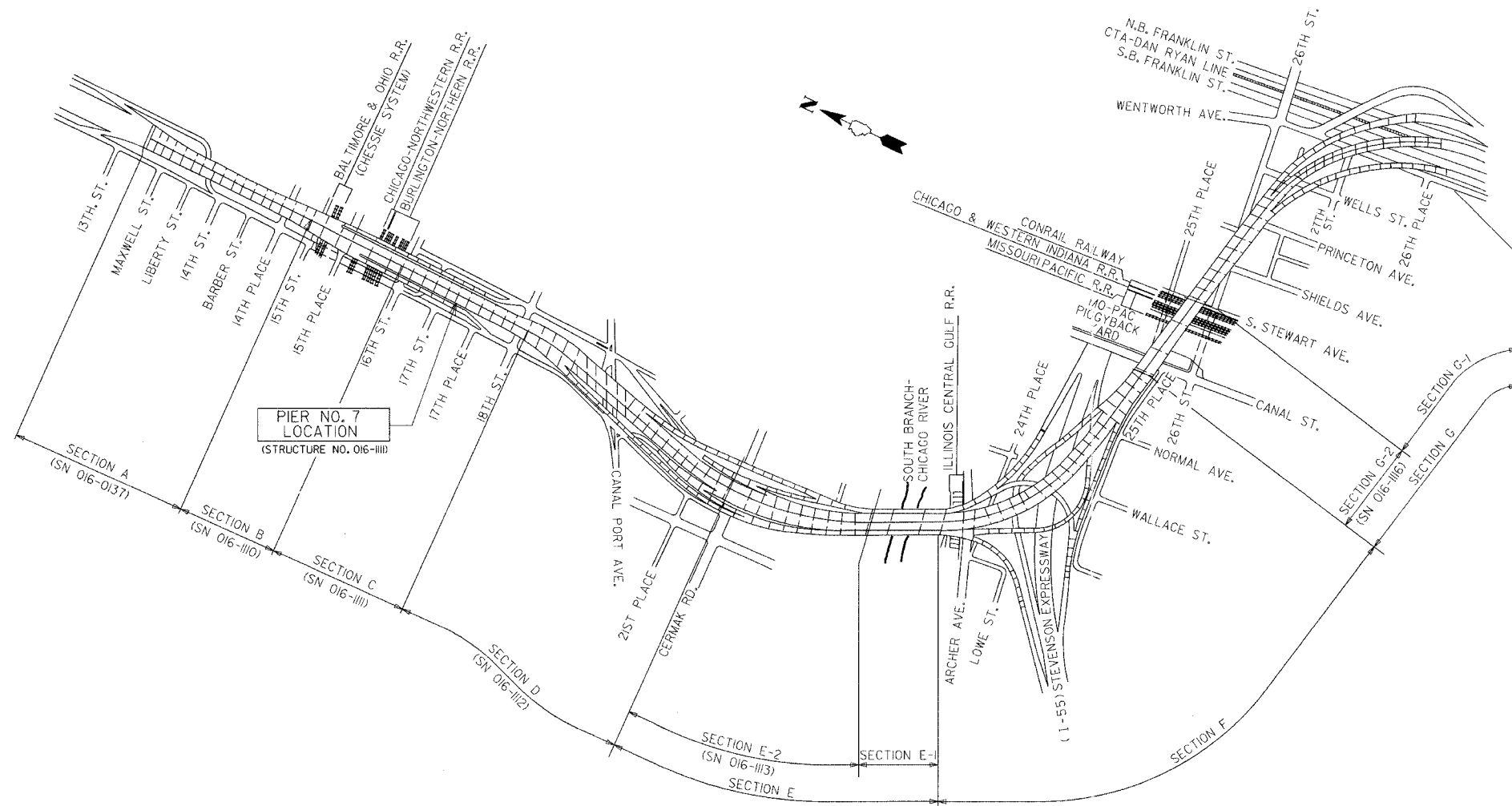
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	*	COOK	419	195
FEDERAL DIST. NO.		ILLINOIS	PROJECT	

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\* 2005-008F  
CONTRACT #62580



PIER NO. 7  
LOCATION  
(STRUCTURE NO. 016-1111)

**KEY PLAN**  
DAN RYAN EXPRESSWAY (I-90/I-94) VIADUCT  
COOK COUNTY, ILLINOIS

**DESIGN STRESSES**

$f'_c = 3500$  psi  
 $f_y = 60,000$  psi (Reinf)  
 $f_y = 50,000$  psi (M270 Grade 50)

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	17.3
Concrete Superstructure	Cu Yd	20.1
Erecting Structural Steel	L.S.	0.10
Reinforcement Bars, Epoxy Coated	Pound	2460
Mechanical Splice	Each	132
Bar Splicer	Each	24
Erecting Fabric Reinforced Elastomeric Trough	Foot	65

**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 for the work.

The slab is to be removed in stages. Before starting the concrete removal, the Contractor is required to submit to the Engineer for approval his staging plans and method of removal.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.

Field welding of construction accessories will not be permitted to beams or girders.

Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint.

The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications

Finger plate expansion joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F

Fasteners shall be high strength bolts. Bolts  $\frac{3}{4}$ "  $\phi$ , open holes  $\frac{13}{16}$ "  $\phi$  unless otherwise noted.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.

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

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

All Construction joints shall be bonded.

Traffic to be maintained during construction, see Roadway Plans for Stage Construction Details.

Existing design and fabrication plans are available upon request.

All structural steel shall be AASHTO M270 Grade 50 unless noted otherwise. Calculated weight = 25,910 lbs.

**PIER NO. 7**

**KEY PLAN**

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FAI RTE 90/94 DAN RYAN EXPRESSWAY  
SN 016-1111 (NORTHBOUND)  
SEC 2005-008F COOK COUNTY

**CHASTAIN & ASSOCIATES**  
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PROJECT No.  
**4222-3**  
SHEET No.

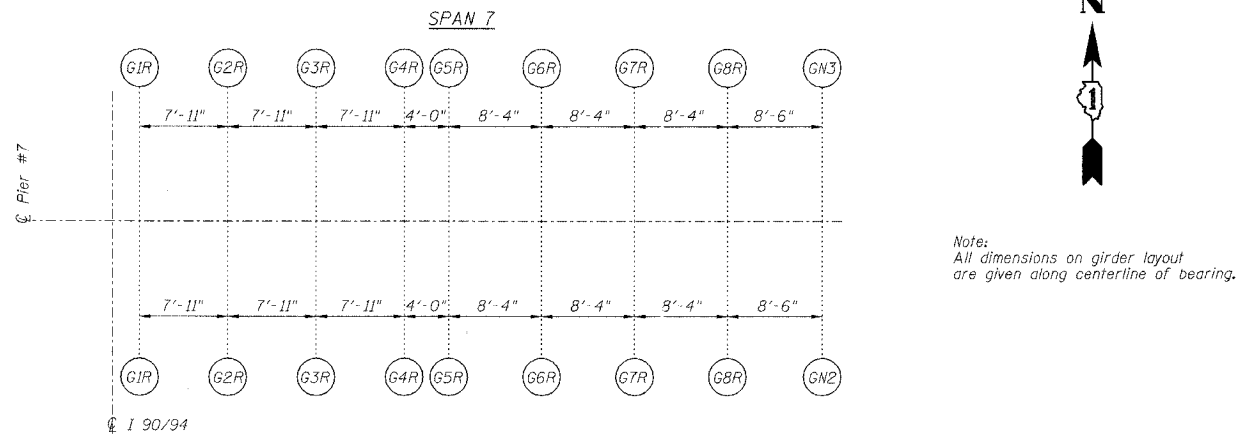
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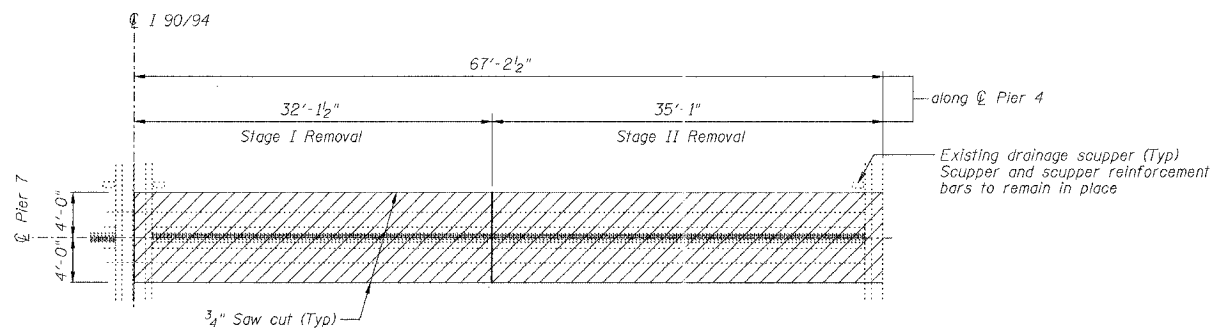
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Sheet No 2  
of 8 Sheets

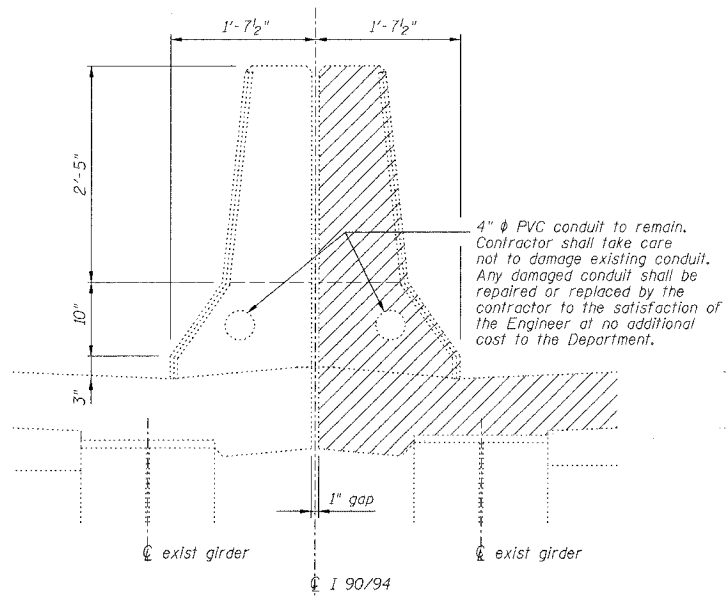
• 2005-008F  
CONTRACT #62580



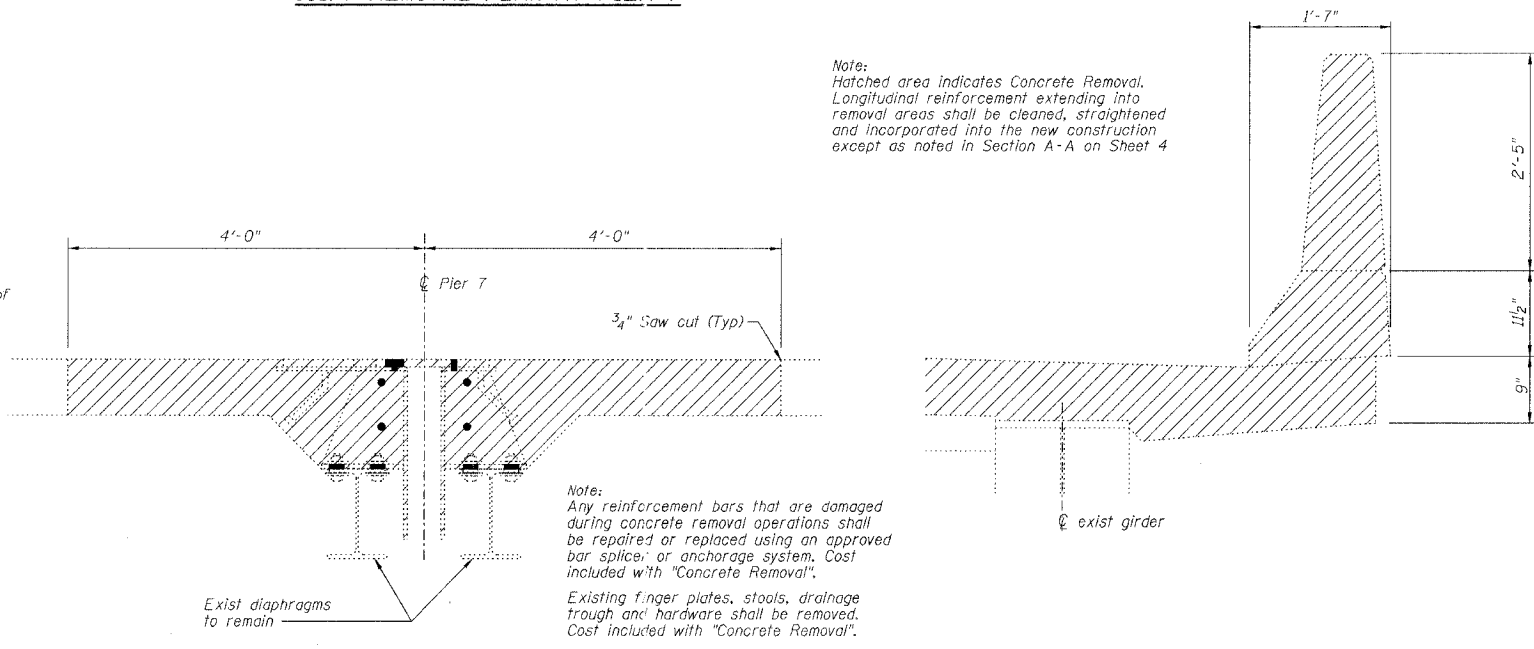
SPAN 6  
GIRDER LAYOUT AT PIER 7



FINGER PLATE AT PIER 7 NORTHBOUND  
JOINT REMOVAL PLAN AT PIER 7



DETAIL AT EXISTING MEDIAN PARAPET



SECTION AT EXISTING FINGER PLATE AT PIER 7

DETAIL AT EXISTING OUTSIDE PARAPET

PIER NO. 7

**FINGER PLATE EXPANSION JOINT REMOVAL DETAILS**

REVISIONS No. DATE INITIALS 1 2 3 4 5 6 7 8 9 10		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS FAI RTE 90/94 DAN RYAN EXPRESSWAY SN 016-1111 (NORTHBOUND) SEC 2005-008F COOK COUNTY	DRAWN BY DATE RLK 5/03 CHECKED BY DATE SDS 5/03 PROJECT No. 4222-3 SHEET No.
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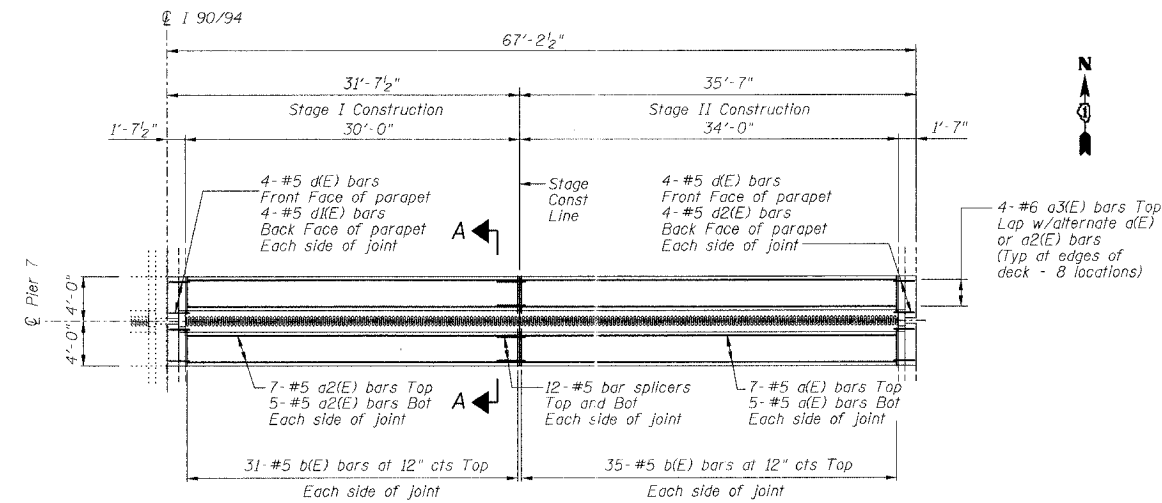


STATE OF ILLINOIS  
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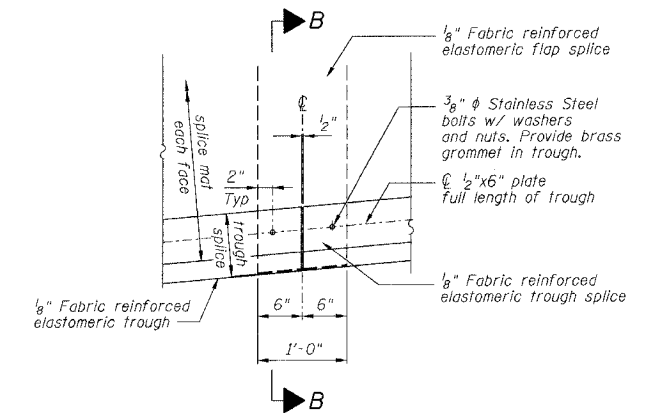
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FAI 90/94	*	COOK	419	177
FEDERAL DIST. NO.	ILLINOIS	PROJECT		

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of 8 Sheets

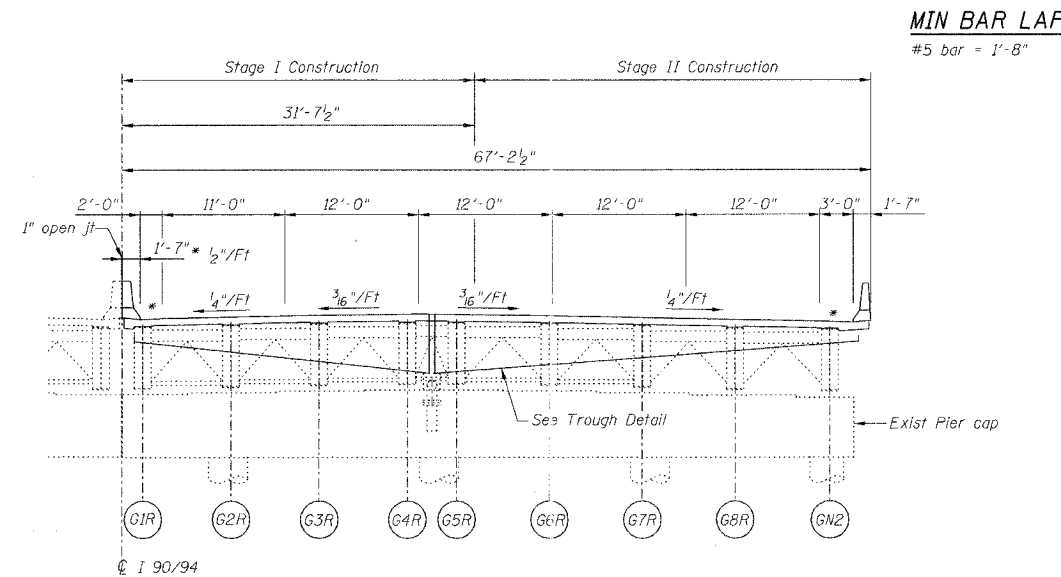
\* 2005-008F  
CONTRACT #62580



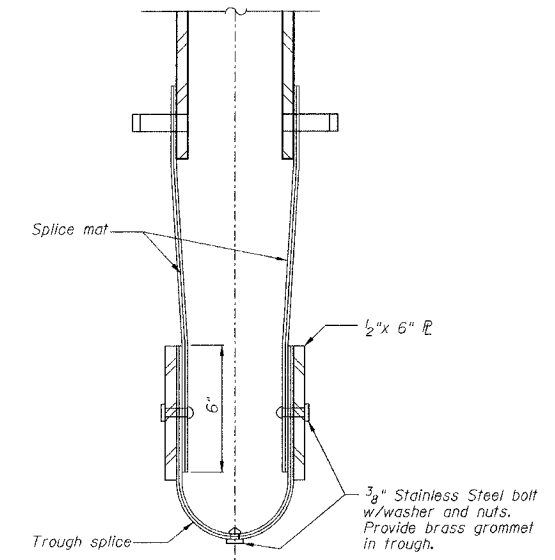
FINGER PLATE AT PIER 7 NORTHBOUND  
JOINT RECONSTRUCTION PLAN AT PIER 7



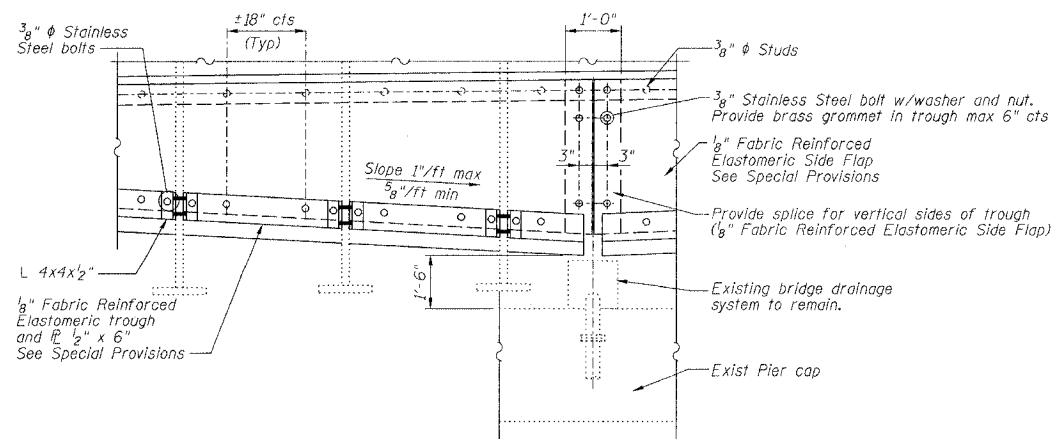
TROUGH SPLICE DETAIL



PIER 7 NORTHBOUND  
ELEVATION AT PIER 7 (LOOKING NORTH)



SECTION B-B



TROUGH DETAIL

NOTES  
For Section A-A see Sheet 4 of 8.

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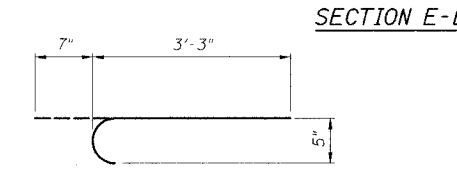
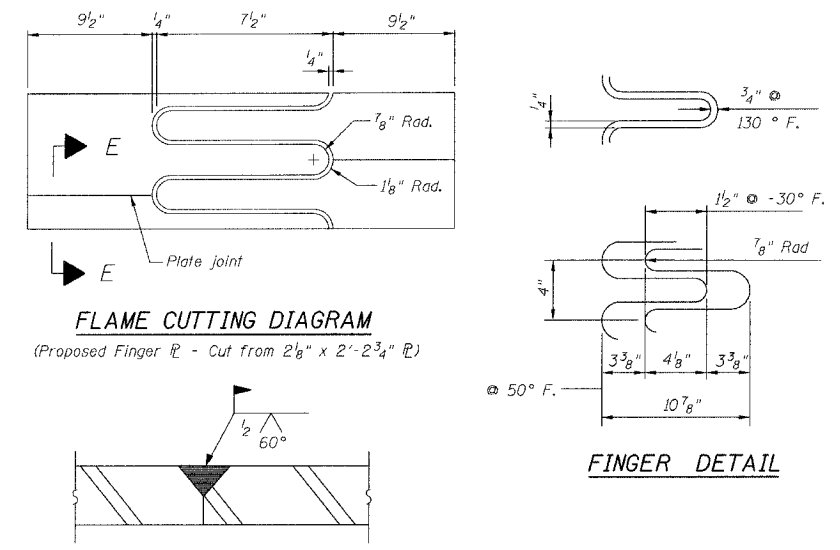
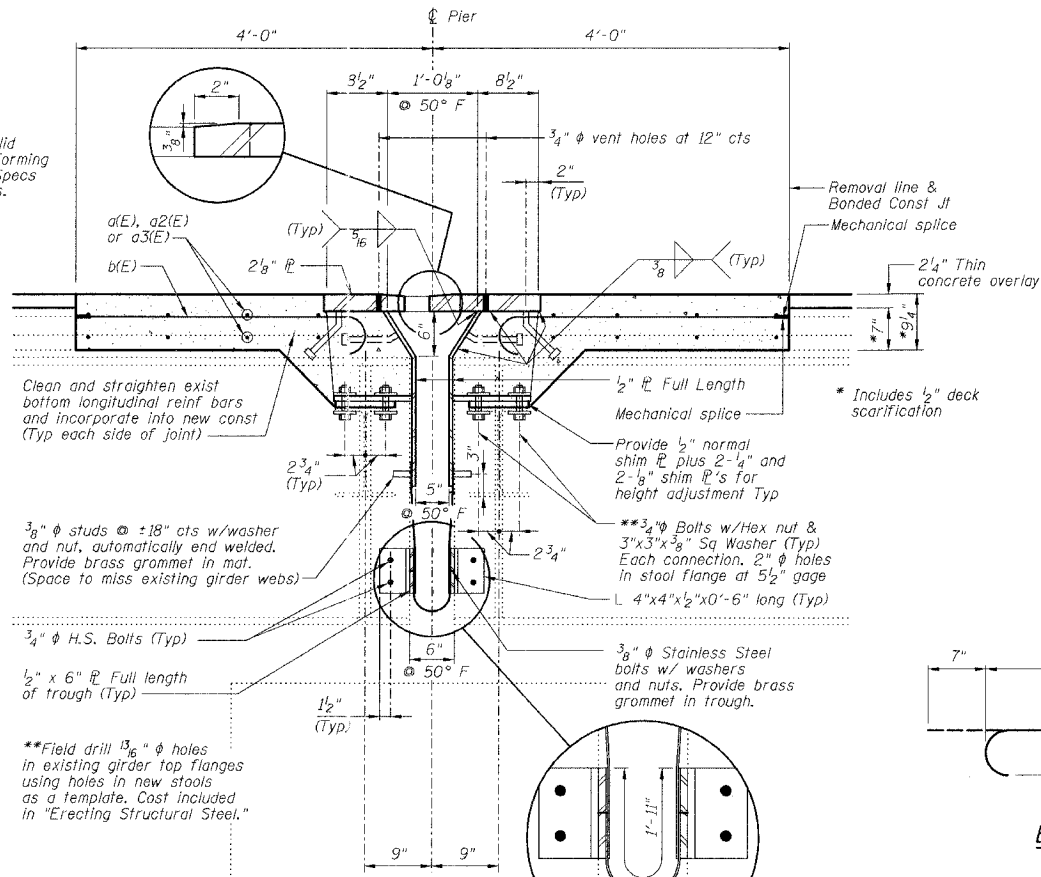
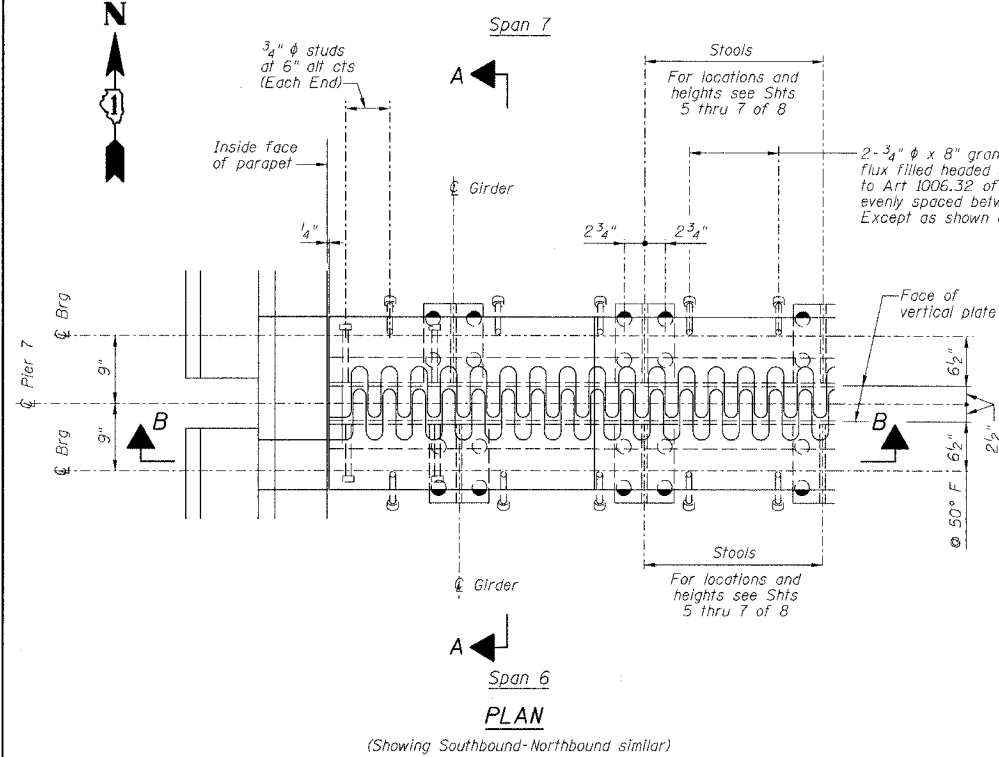
FAI RTE 90/94		DAN RYAN EXPRESSWAY	
SN 016-1111 (NORTHBOUND)		COOK COUNTY	
SEC 2005-008F		PROJECT No. 4222-3	
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FAI 90/94		COOK	419	198
FEDERAL DISTRICT		ILLINOIS	PROJECT	

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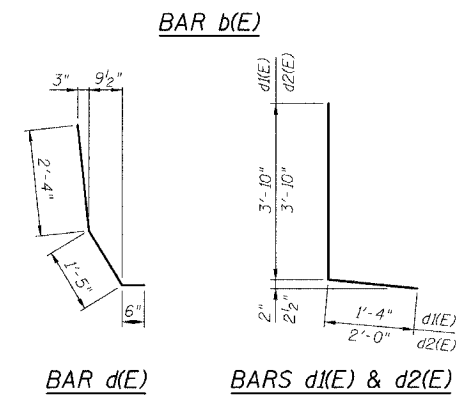
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CONTRACT #62580



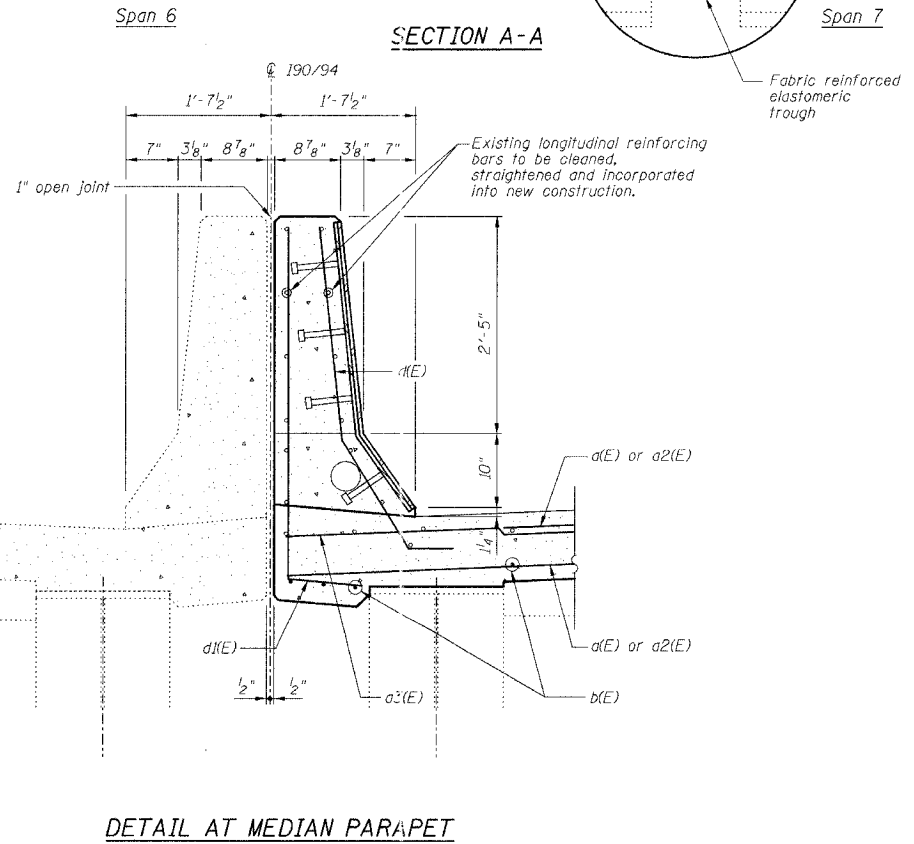
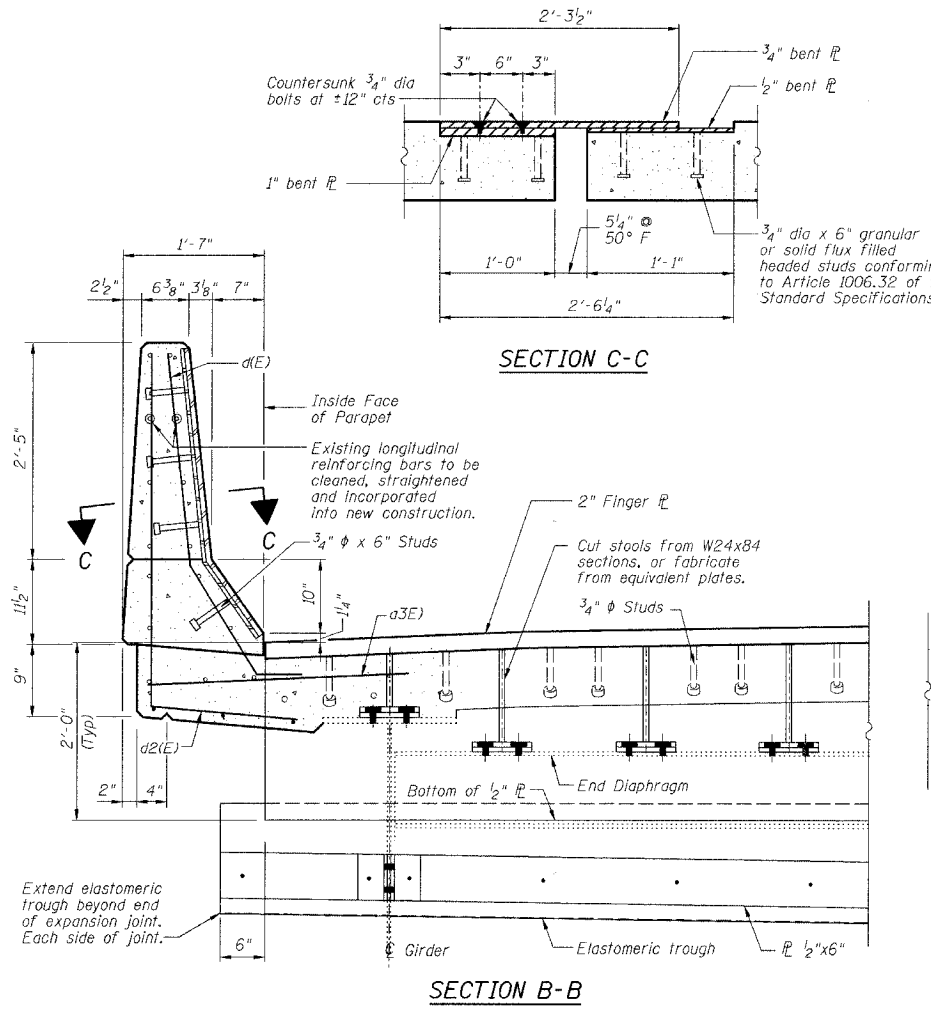
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	24	#5	35'-0"	—
a2(E)	24	#5	31'-0"	—
a3(E)	16	#6	4'-6"	—
b(E)	132	#5	3'-10"	—
d(E)	16	#5	4'-3"	—
d1(E)	8	#5	5'-2"	—
d2(E)	8	#5	5'-10"	—
Reinforcement Bars, Epoxy Coated		Pound	2460	
Concrete Removal		Cu Yd	17.3	
Concrete Superstructure		Cu Yd	20.1	
Bar Splicers		Each	24	
Mechanical Splice		Each	132	

Reinforcing bars designated (E) shall be epoxy coated.



- NOTES**
- The Contractor shall bolt the Stools of the Fingerplate Joint Assembly to the top of existing End Cross Frames and to the top of the existing girders, as shown in Section A-A of this drawing.
  - Stainless steel bolts, washers and nuts shall meet the requirements of ASTM A193.
  - The installation of all necessary hardware, stainless steel bolts, studs and washers, plates and angles shall be included with "Erecting Structural Steel".
  - Expansion Length = 418.6'



PIER NO. 7

**FINGER PLATE EXPANSION JOINT DETAILS**

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FAI RTE 90/94 SEC 2005-008F	DAN RYAN EXPRESSWAY SN 016-1111 (NORTHBOUND) COOK COUNTY	PROJECT No. <b>4222-3</b> SHEET No.

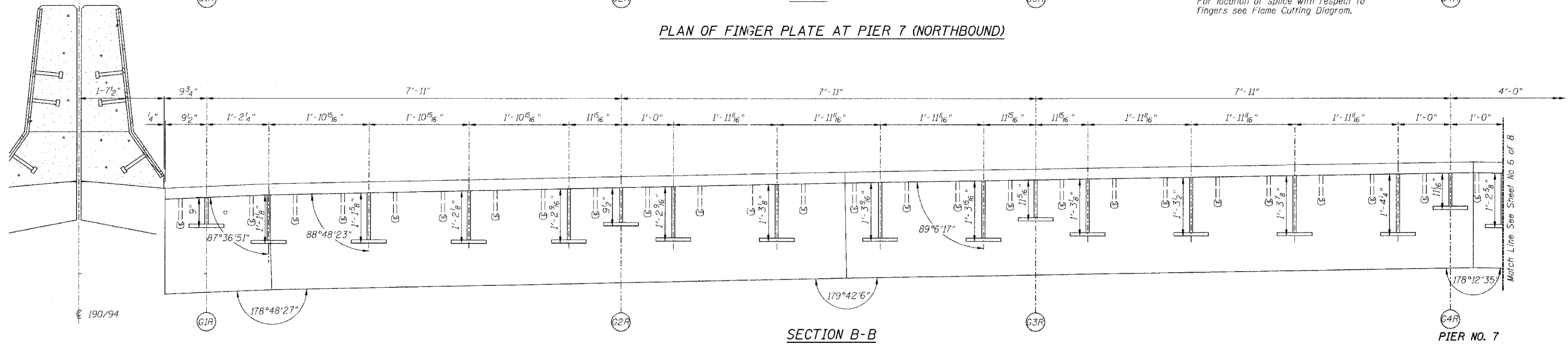
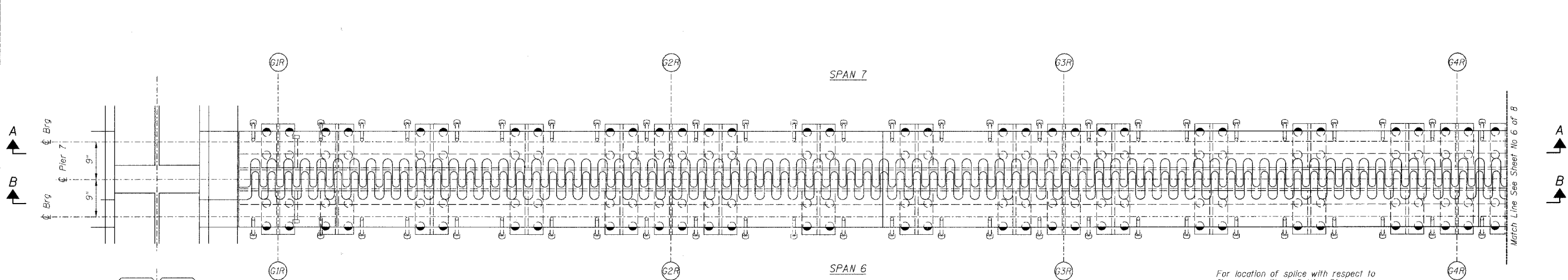
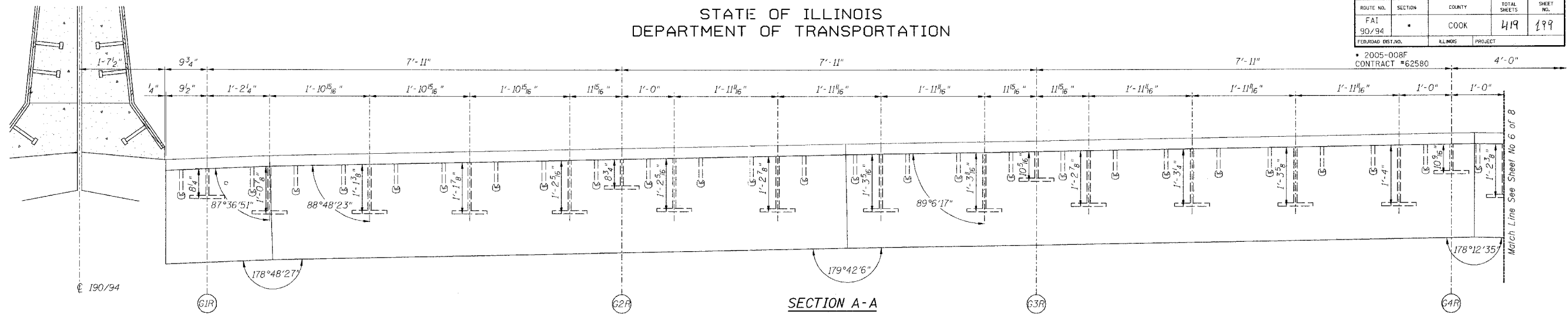
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	419	199
FEDERAL DIST. NO.	ILLINOIS	PROJECT		

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Note:  
For optional splice detail see  
Flame cutting diagram on Sheet No. 4

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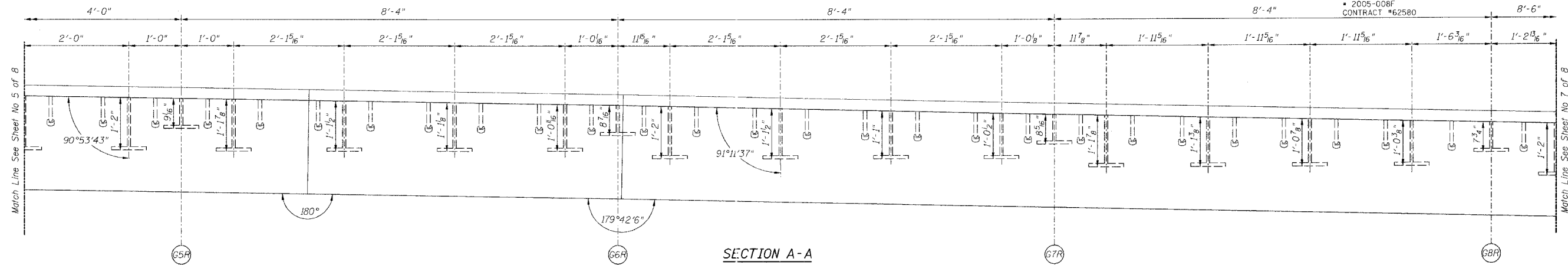
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**4222-3**  
SHEET No.

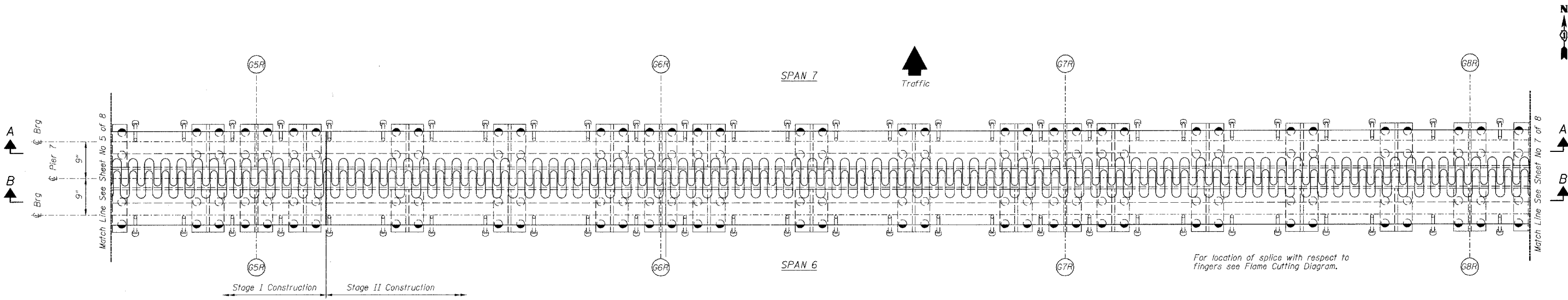
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	419	200
FEDROAD DIST.NO.	ILLNOIS PROJECT			
* 2005-008F CONTRACT #62580				

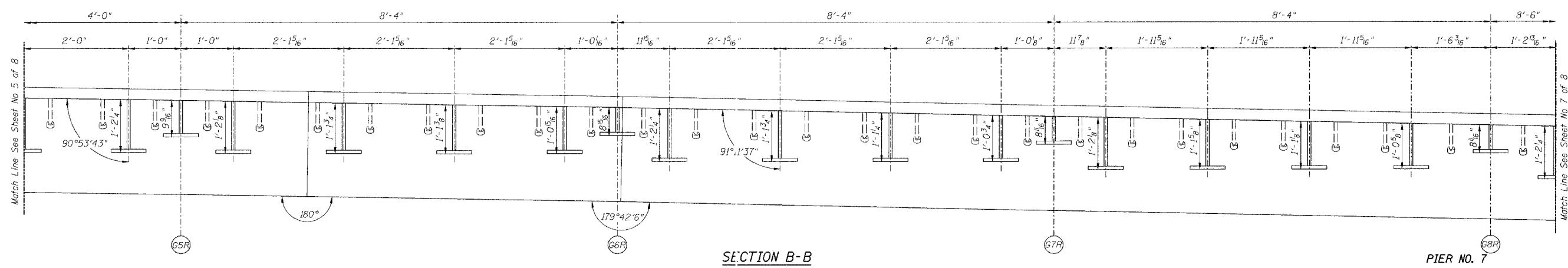
Sheet No 6  
of 8 Sheets



SECTION A-A



PLAN OF FINGER PLATE AT PIER 7 (NORTHBOUND)



SECTION B-B

For location of splice with respect to fingers see Flame Cutting Diagram.

Note:  
For optional splice detail see flame cutting diagram on Sheet No. 4

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY RLK	DATE 5/03
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2			SN 016-1111 (NORTHBOUND)	COOK COUNTY	BOOK NUMBER	
3			SEC 2005-008F		SHEET NO.	
4			<b>CHASTAIN &amp; ASSOCIATES</b> CONSULTING ENGINEERS 8009 W. BRYAN MAWR AVENUE SUITE 204 CHICAGO, ILLINOIS 60611 312-744-0050 FAX 312-744-0055			
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