

ELEVATION

NOTES

- All piles shall be 10 BP42 steel piles
- Vertical piles \odot Battered piles 4:1
- Superstructure Ground shall be embedded according to Standard Dwg HL-4
- For additional notes and details see Sheet 26/54

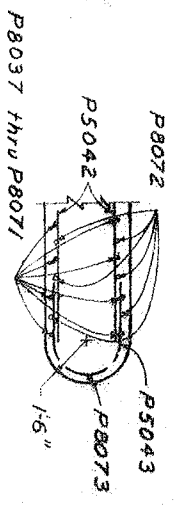
STANDARD DRAWN	FTJ RWF
CHECKED	JP TLU
REVIEWED	5/14/10
DATE	25/54

COLUMBUS ENGINEERING CONSULTANTS, LTD
 Consulting Civil Engineers
 Columbus, Ohio
 SUCCESSORS TO
 ATKINS MERCER UNDERWOOD, LTD

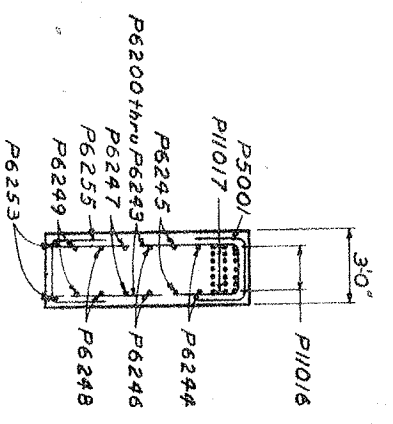
PIER 2 S.B.
 BRIDGE N° ATH-33-15B4 L
 U.S. 33 OVER RELOCATED Hocking RIVER
 ATHENS COUNTY
 STA 752+21.94 NB
 STA 756+42.50 NB

REV 02	DATE	2	OHIO
PROJECT			

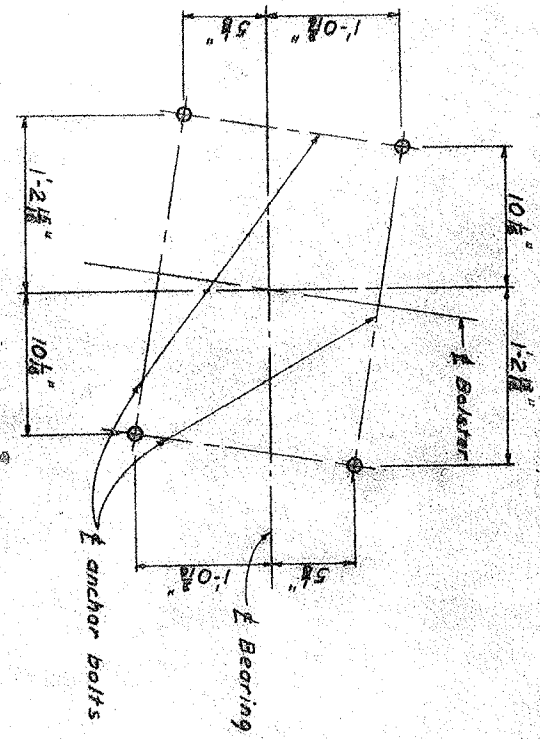
ATHENS COUNTY
 ATH-33-15.62



SECT. P₄-P₄



SECT. P₁-P₁

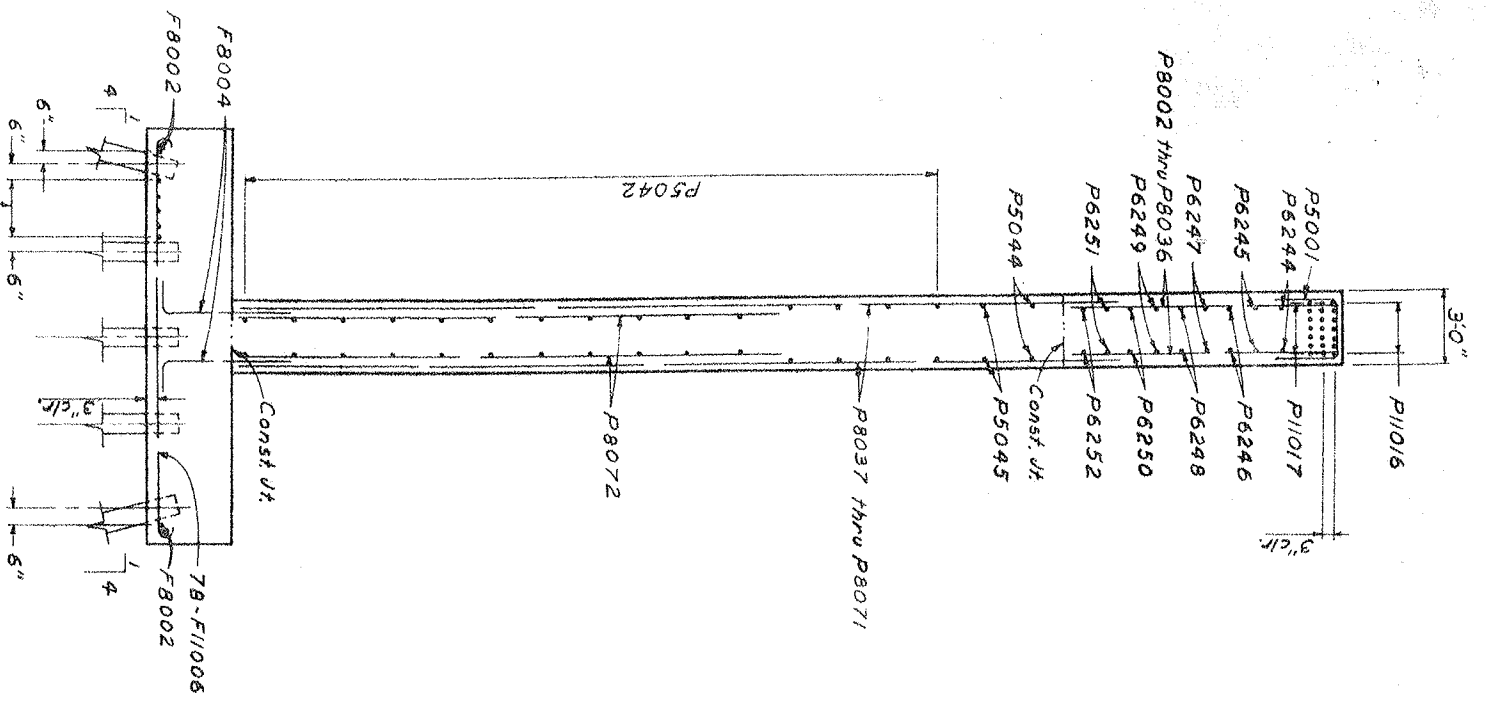


ANCHOR BOLT LOCATION DETAILS

NOTE

Bridge Seat Reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.

For additional notes and details see sheet 25/54

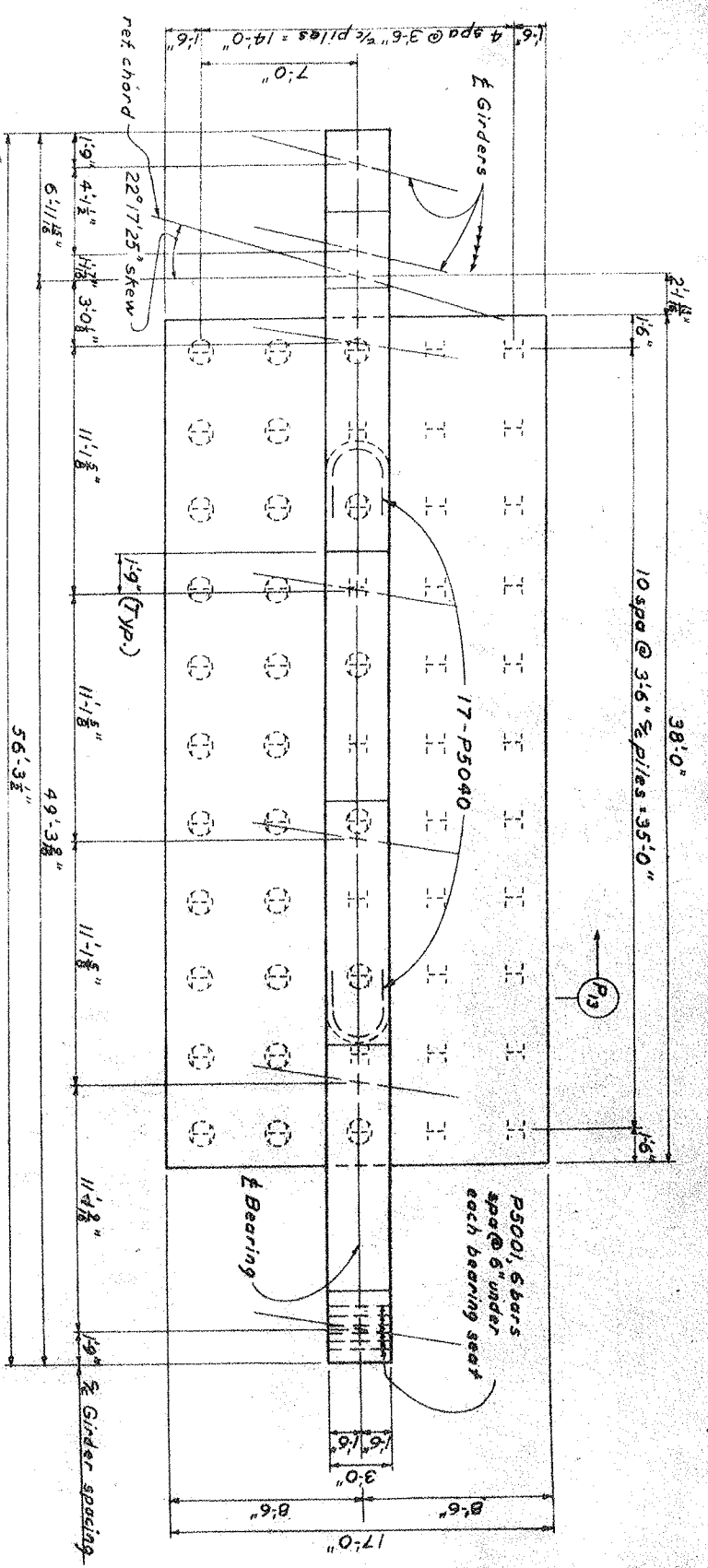


SECT. P₆-P₆

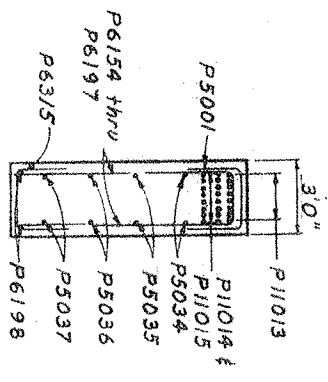
DESIGNED	DATE	REVIEWED
FTJ R.W.	JP	7/20 2/14/70
TRACED	CHECKED	REVIEWED
FTJ R.W.	JP	7/20 2/14/70
ATHENS COUNTY		
BRIDGE N ^o 33 OVER RELOCATED HOCKING RIVER		
PIER 2 S.B.		
ATHENS COUNTY		
STN 752+21.94 N.B.		
STN 756+42.50 N.B.		
COLUMBUS ENGINEERING CONSULTANTS, LTD.		
SUCCEEDORS TO		
ATKINS KERCER UNDERWOOD, LTD.		
Columbus, Ohio		
26/54		

2	OHIO
97	127

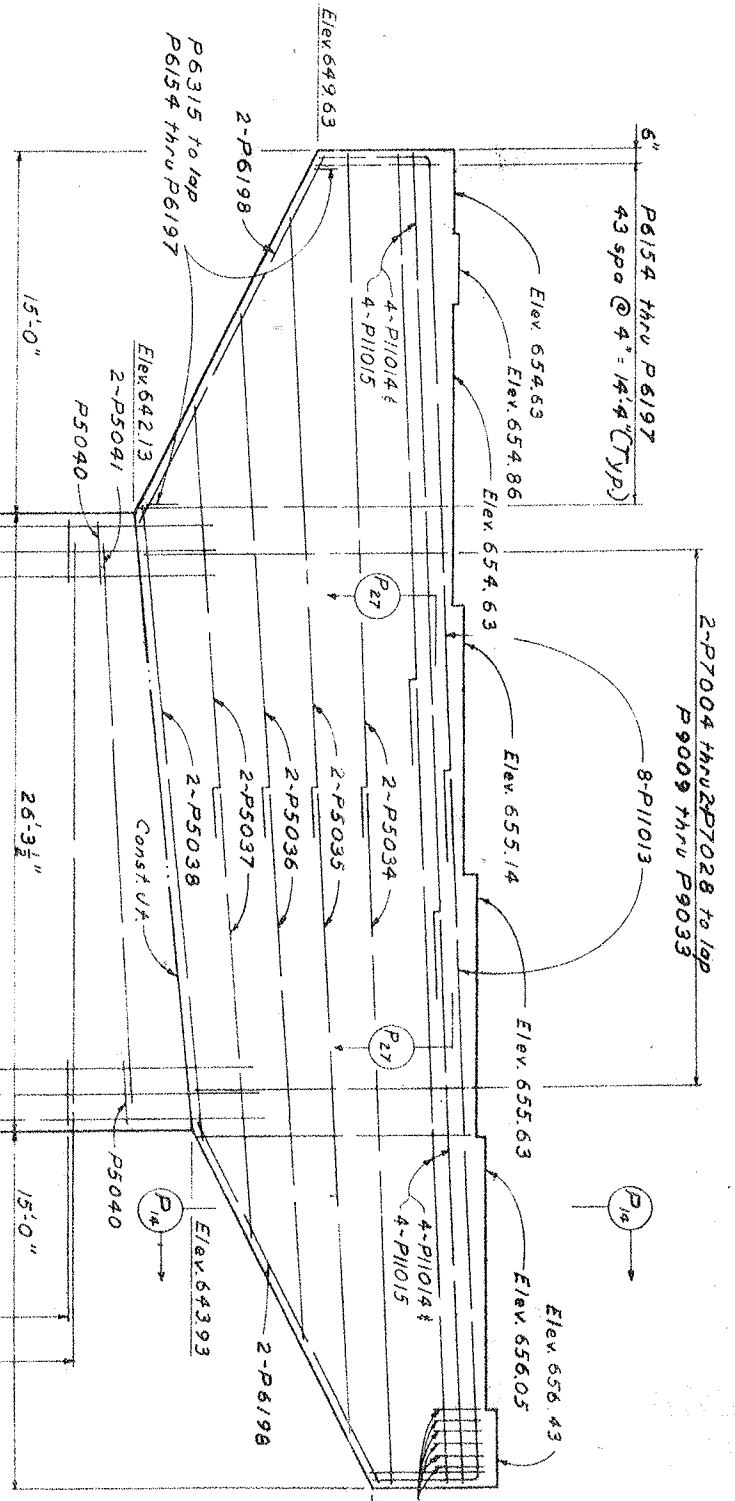
ATHENS COUNTY
ATH ~ 33 ~ 15.62



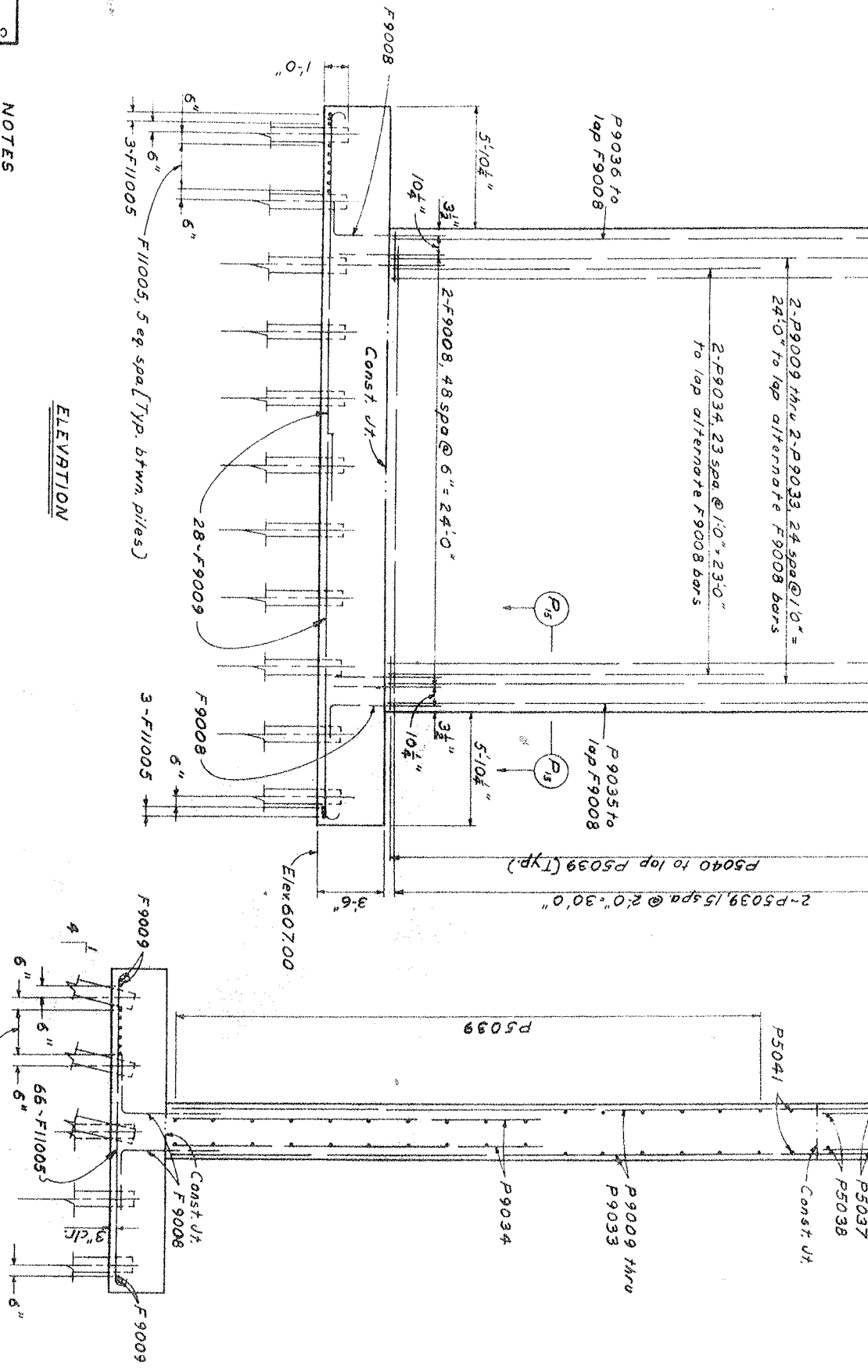
PLAN



SECT P₁-P₃

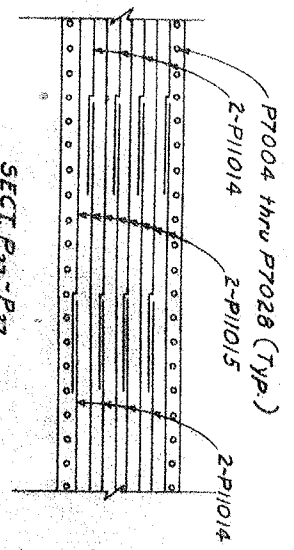


ELEVATION

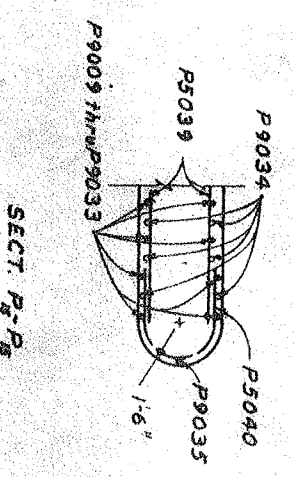


NOTES

All piles shall be 10 BP 42 steel piles
 Vertical piles \odot Battered piles 1:4

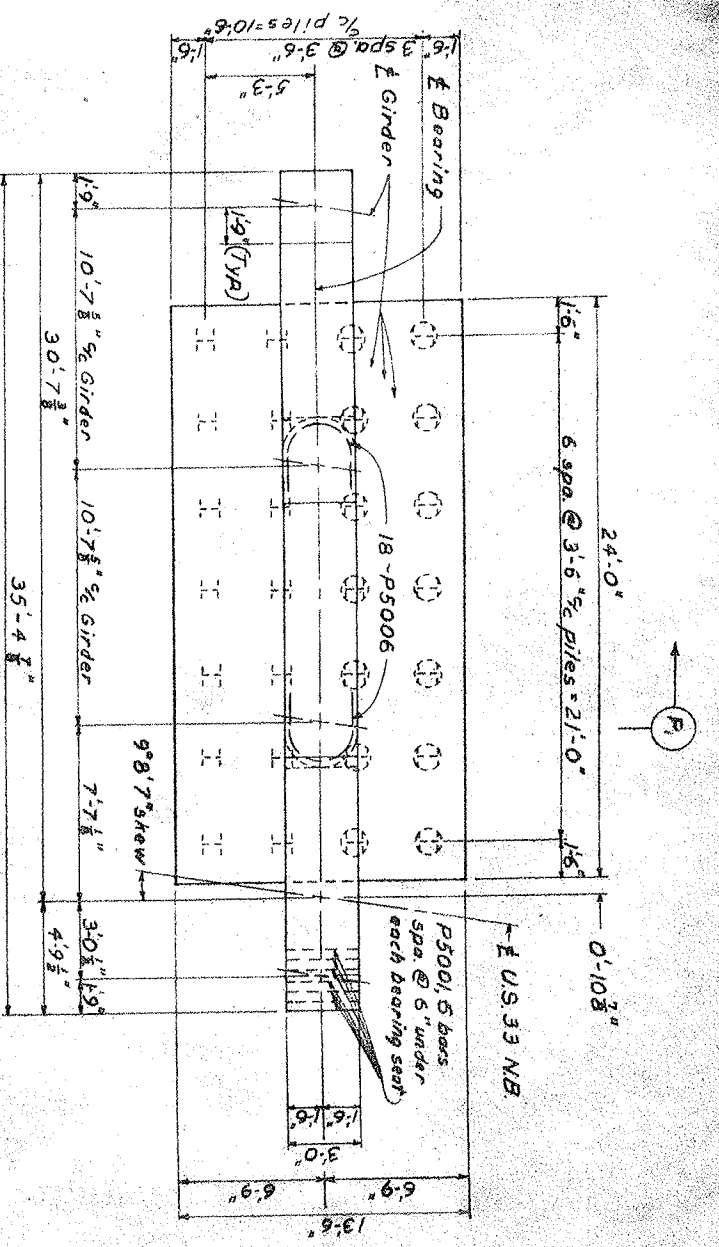


SECT P₁-P₂

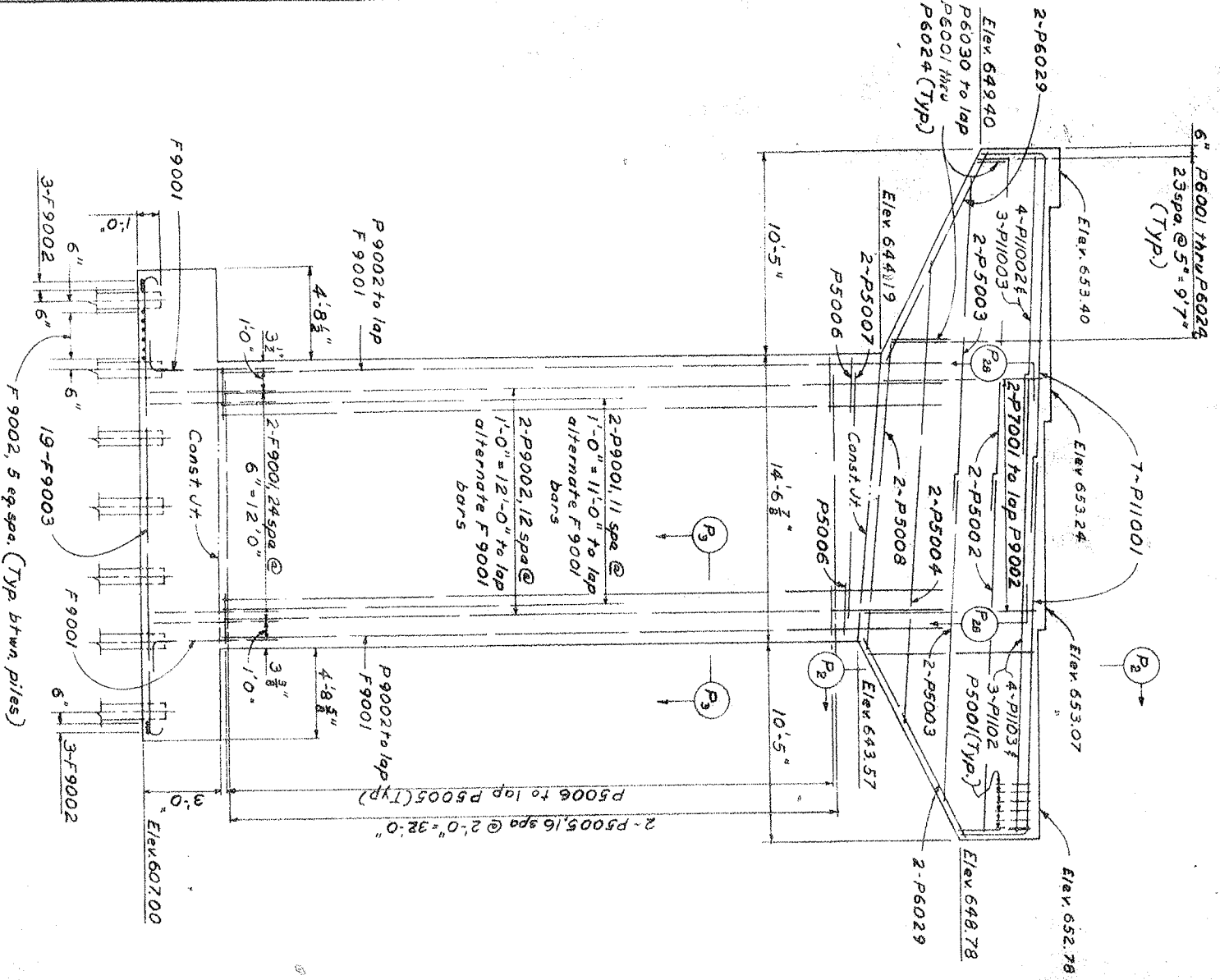
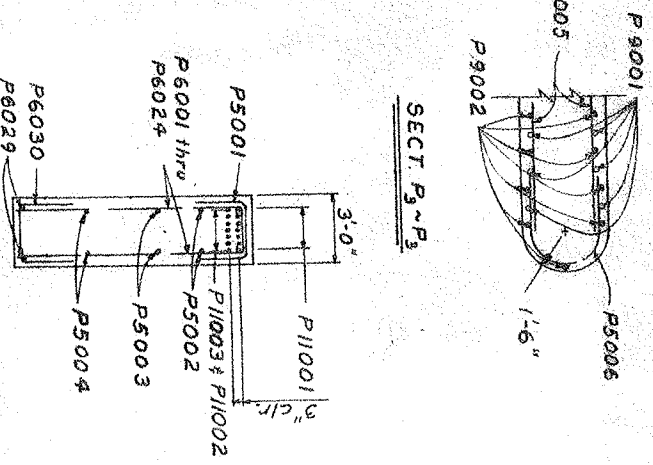


SECT P₃-P₅

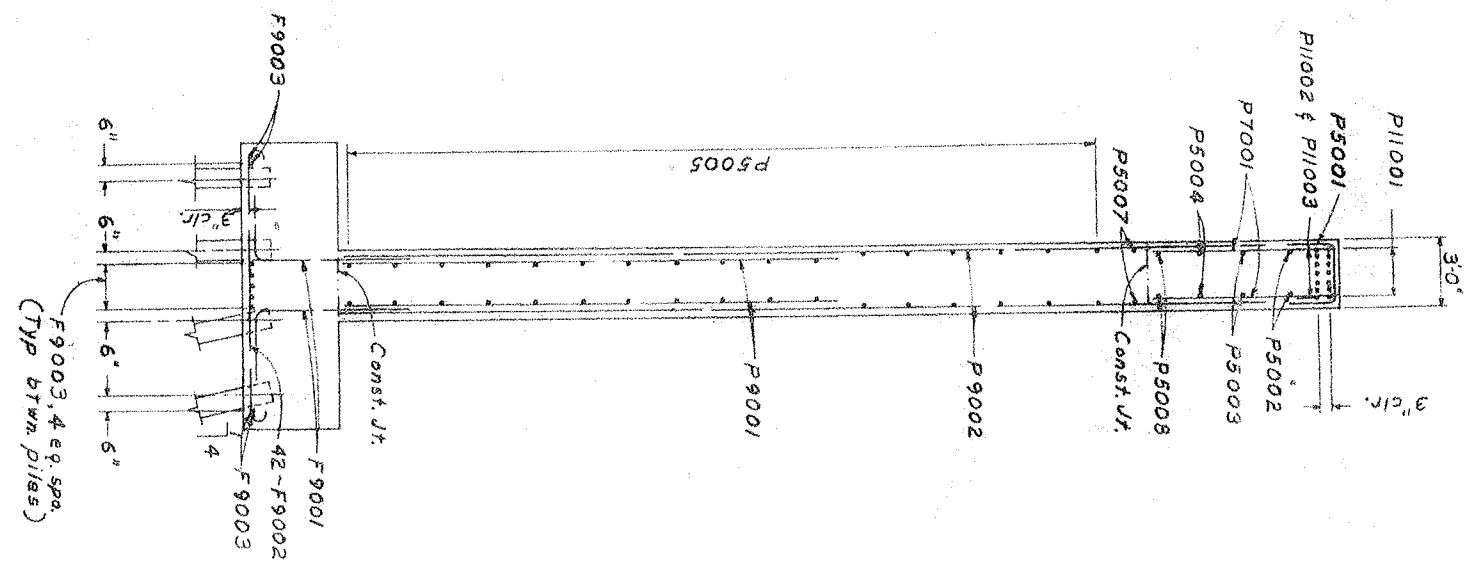
PIER 3 SB.
 BRIDGE N^o ATH-33-1584 L
 U.S. 33 OVER RELOCATED HOEKING RIVER
 ATHENS COUNTY
 STA 752+21.94 NB
 STA 756+42.50 NB
 COLUMBUS ENGINEERING CONSULTANTS, LTD.
 3000 WOODLAND BLVD.
 COLUMBUS, OHIO
 SUCCESSORS TO
 ATKINS MENCHER UNDERWOOD, LTD.
 DESIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISION
 FTJ R.W.
 JP 7.0 5/14/10
 27/59



PLAN
P



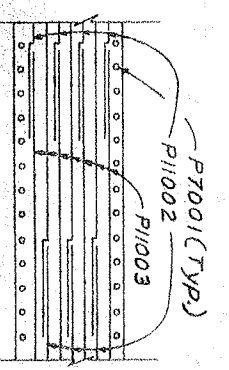
ELEVATION



SECT. P1-P1

NOTES

- All piles shall be 108P42 steel piles
- Vertical piles
- Battered piles 1:4

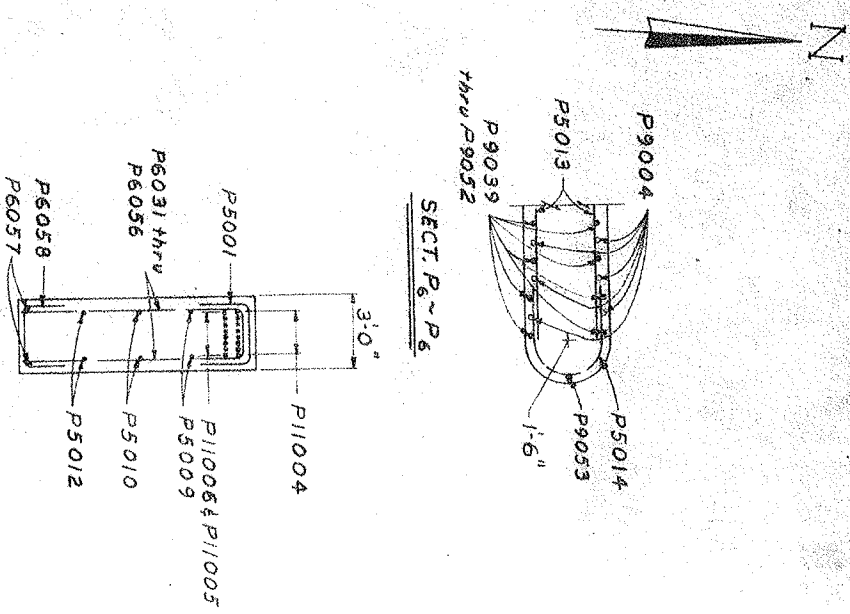
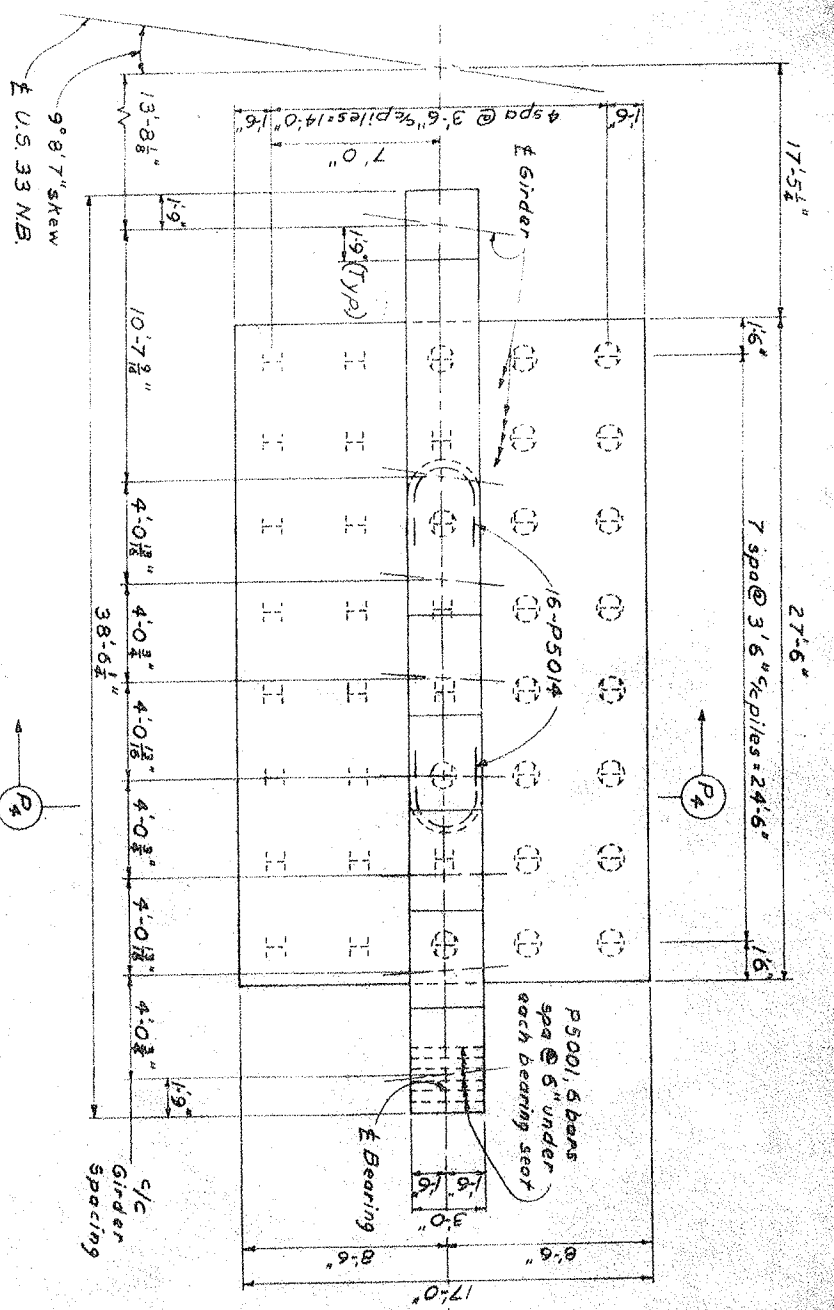


SECT. P2-P2
(P11002 & P11003 to lap vertically)

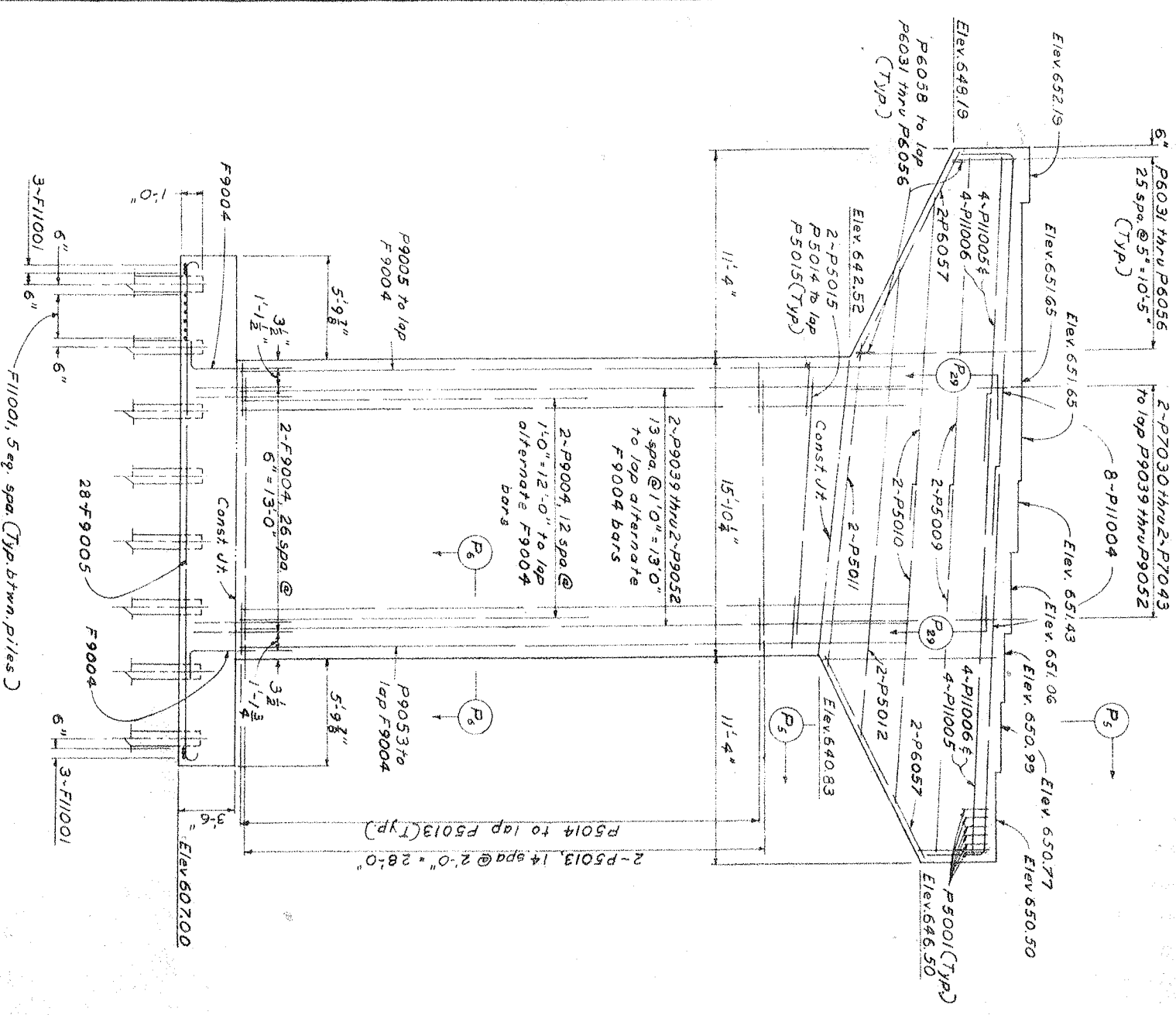
COLUMBUS ENGINEERING CONSULTANTS, LTD.
 Consulting Civil Engineers
 Columbus, Ohio
 SUCCESSION TO
 ATOMS MERCER UNDERWOOD, LTD.
 28/54
 PIER 1A N.B.
 BRIDGE N° ATH-33-1584 R.
 U.S. 33 OVER REDUCED HOCHKING RIVER
 ATHENS COUNTY
 STA 752+21.94 N.B.
 STA 758+42.50 N.B.
 FTJ R.W.
 J.P. 720 5/11/70

FIG. NO.	2
DIVISION	6122
PROJECT	

ATHENS COUNTY
ATH-33-1562

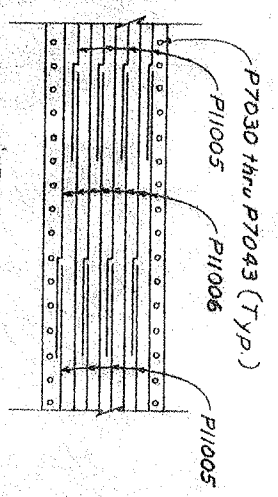


SECT. P₃-P₅

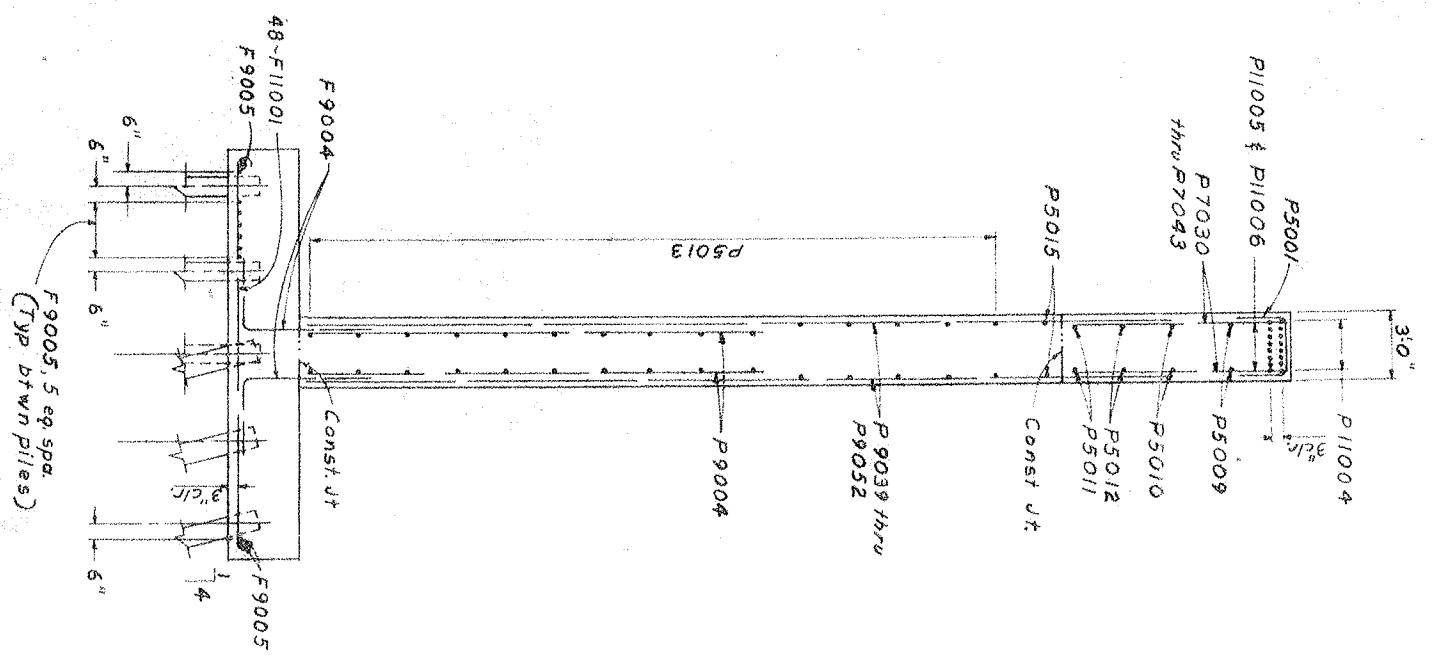


ELEVATION

SECT. P₄-P₄



SECT. P₂-P₂
(P11005 & P11006 to lap vertically)



SECT. P₄-P₄

- NOTES
- All piles shall be 10 BP 42 steel piles
 - Vertical piles
 - Bartered piles 1:4

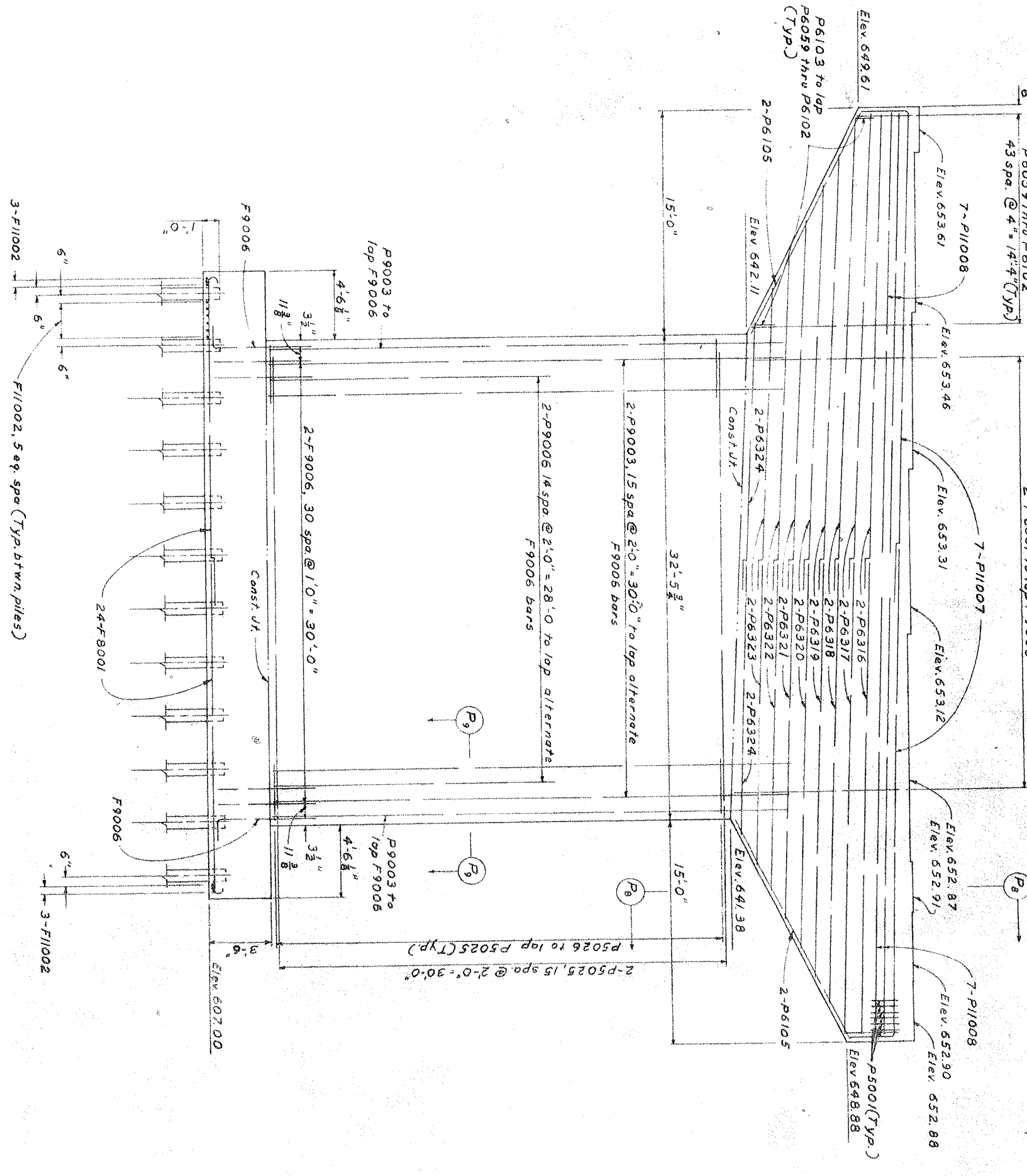
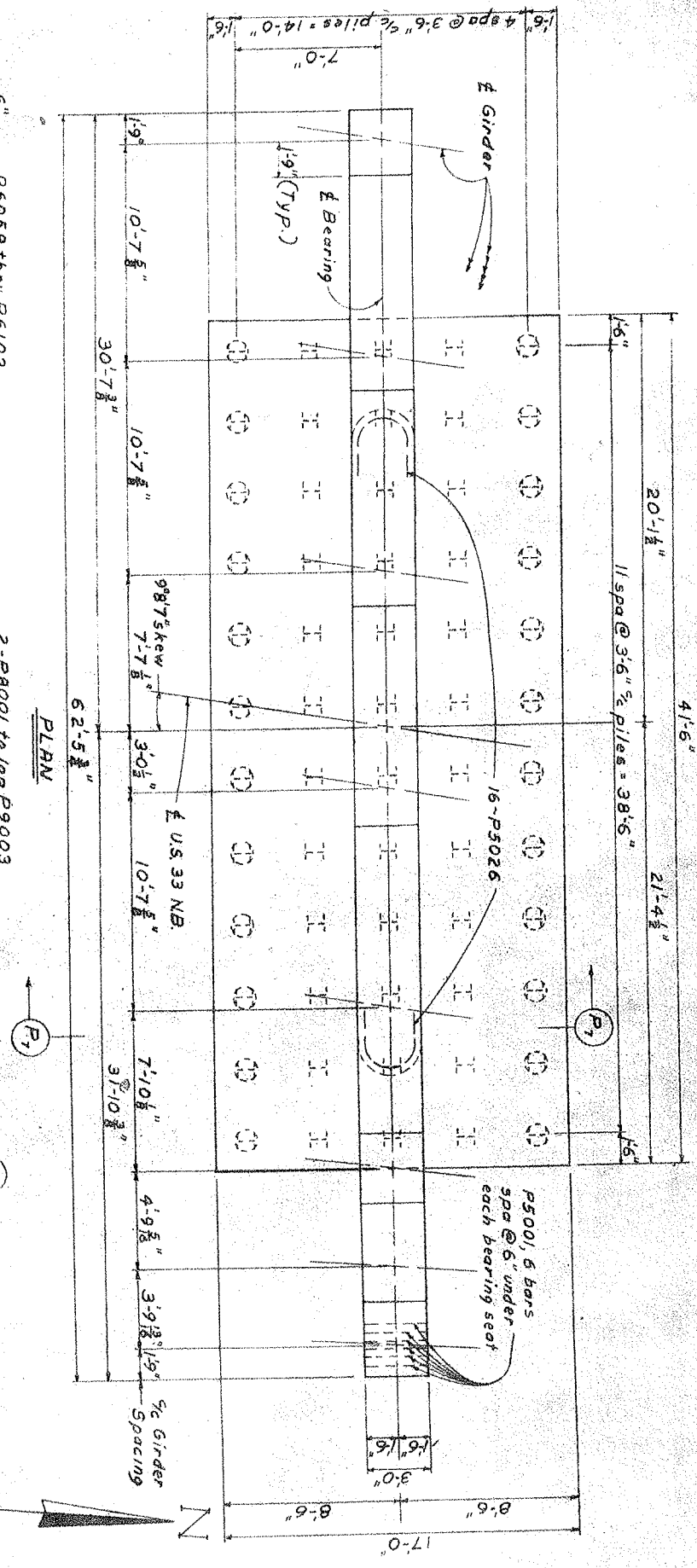
COLUMBUS ENGINEERING CONSULTANTS, LTD.
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 Columbus, Ohio
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 ATKINS MERCER UNDERWOOD, LTD.

PER 1B NB
 BRIDGE NO. ATH-33-1504 R
 U.S. 33 OVER REALIGNED HOCKING RIVER
 ATHENS COUNTY
 STA 752+21.94 NB
 STA 756+42.50 NB

DESIGNED: BRANK
 CHECKED: REVIEWED: DATE: REVISED: 29/54

FTJ RWF
 JP 720 3/14/70

NO.	DATE	PROJECT
2	OHIO	
100	127	



NOTES

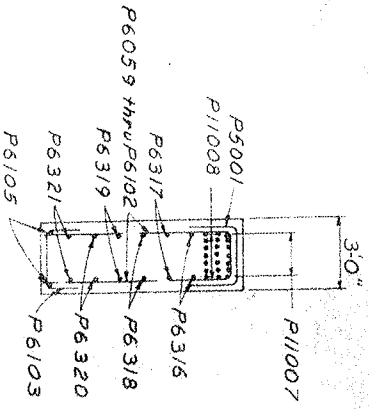
- All piles shall be 10 BP 42 steel piles
- Vertical piles 1/4 Battered piles 1/4
- Superstructure Ground shall be embedded according to Standard Dwg HL-4.
- For additional notes and details see sheet 31/54

ELEVATION

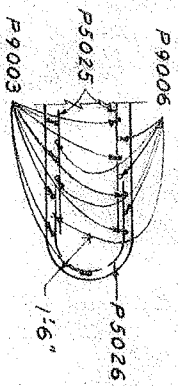
PROJECT	DATE	REVISION
PIER 2 NB	5/14/70	
BRIDGE N° ATH-33~1584 R		
US 33 OVER RELOCATED HOCKING RIVER		
STN 752+21.94 NB		
ATHENS COUNTY		
STA 756+42.50 NB		
CHECKED	DATE	REVISION
JP	5/14/70	
DESIGNED BY	DATE	REVISION
FTJ RWF		

COLUMBUS ENGINEERING CONSULTANTS, LTD
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 ATKINS MERCER UNDERWOOD, LTD
 30/54

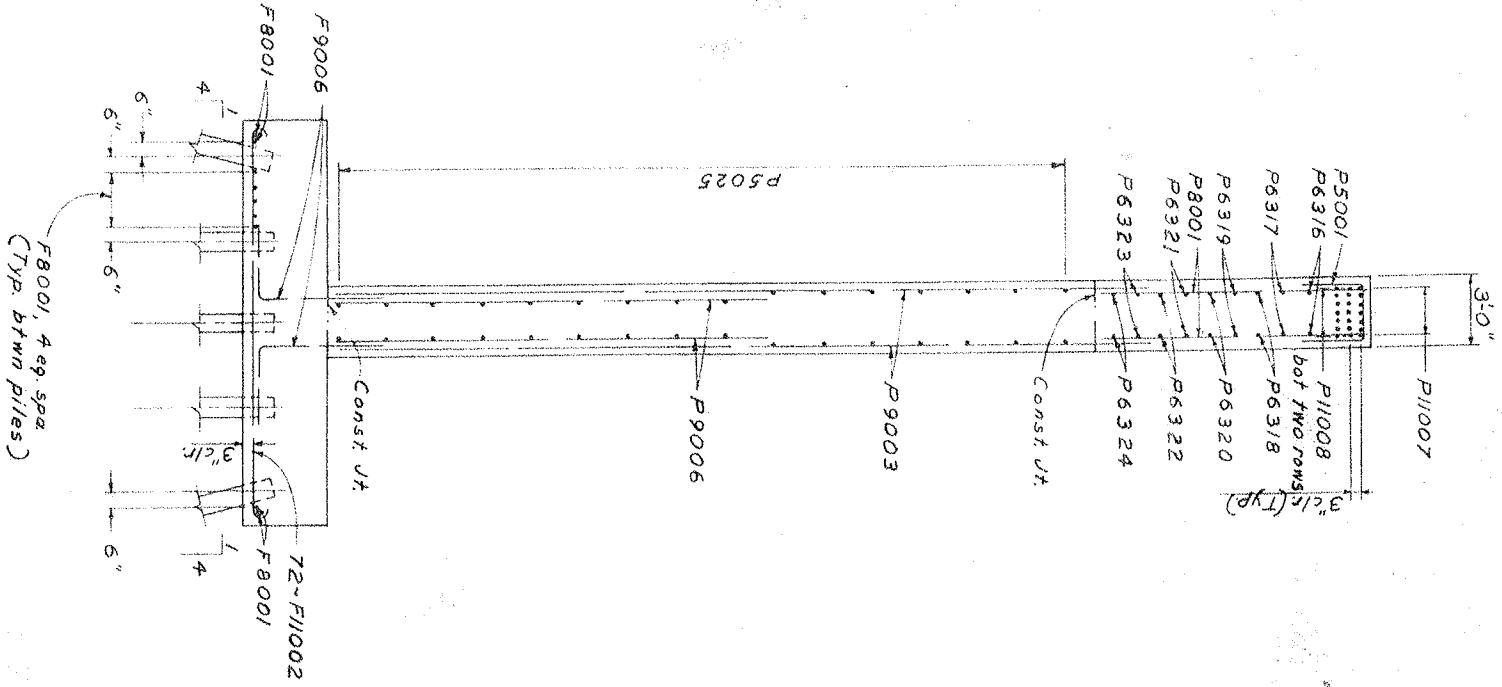
PROJECT	DATE	REVISION
ATHENS COUNTY		
PIER 2 NB		
BRIDGE N° ATH-33~1584 R		
US 33 OVER RELOCATED HOCKING RIVER		
STN 752+21.94 NB		
ATHENS COUNTY		
STA 756+42.50 NB		
CHECKED	DATE	REVISION
JP	5/14/70	
DESIGNED BY	DATE	REVISION
FTJ RWF		



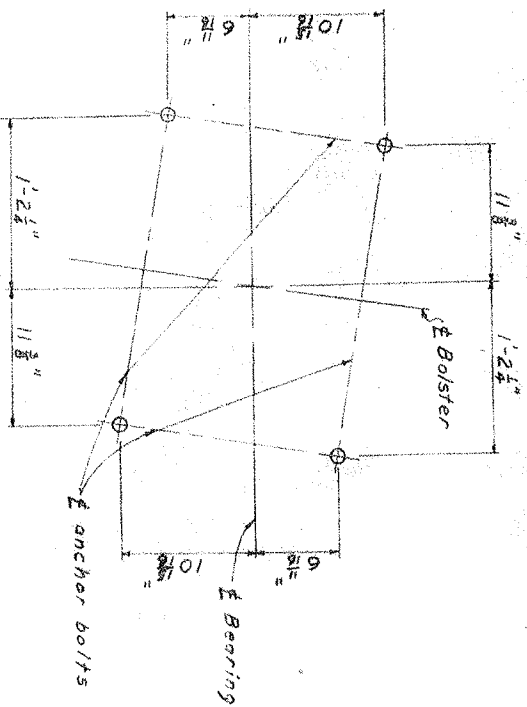
SECT. P₈-P₈



SECT. P₉-P₉



SECT. P₁-P₁



ANCHOR BOLT
LOCATION DETAIL

NOTE

Bridge Seat Reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.

For additional notes and details see sheet **30/54**



DESIGNER	DATE	REVISIONS
FTJ R.W.F.	5/14/70	
CHECKED	DATE	REVISIONS
JP	7/2	5/14/70

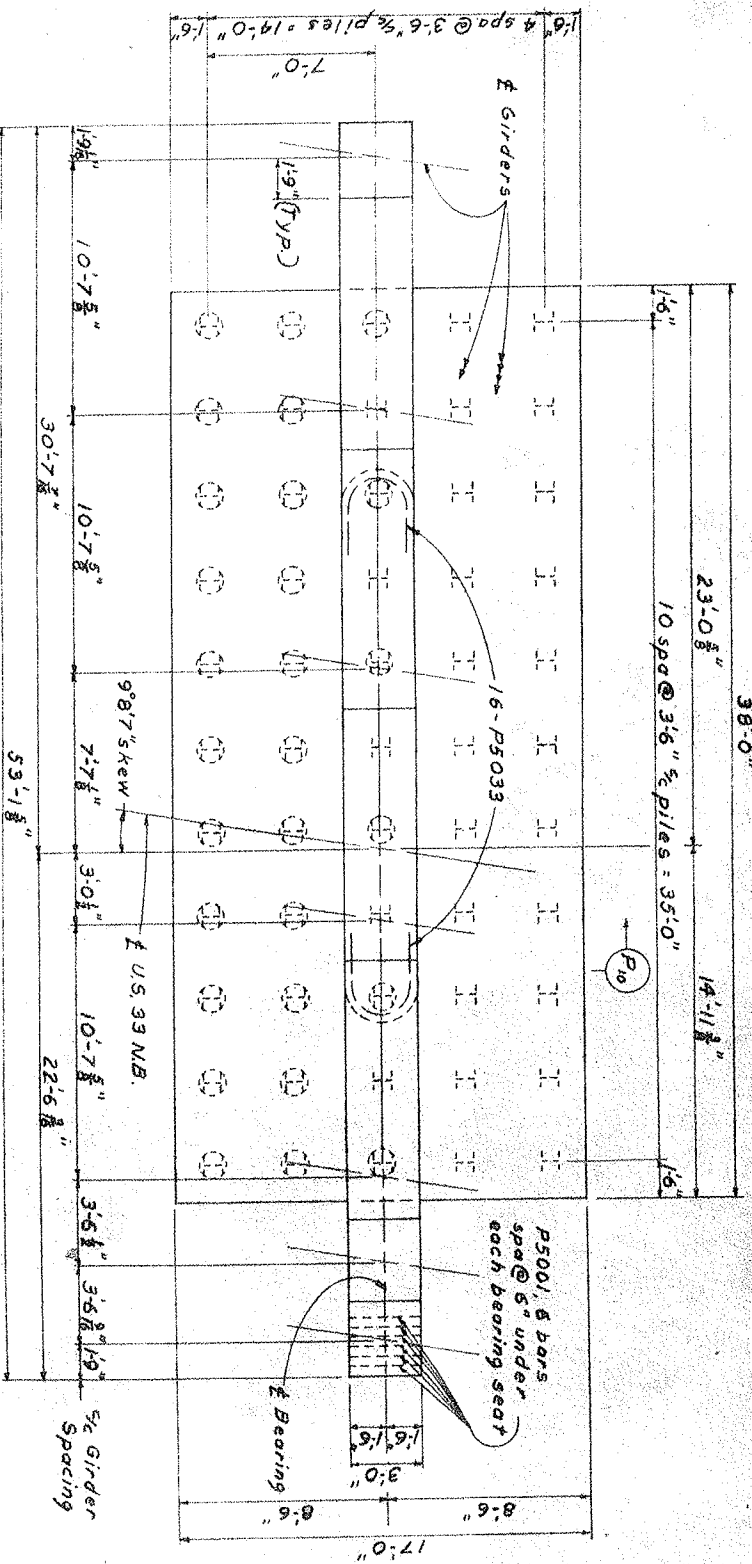
ATHENS COUNTY
BRIDGE No. RTH-33-1584 R
PIER 2 N.B.
US 33 OVER RELOCATED HOCHING RIVER
STN. 752+21.94 NB
STN. 756+42.50 NB

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Columbus, Ohio
SUCCESSION TO
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31/54

ATHENS COUNTY
RTH-33-15.62

PROJECT	DATE	NO.
		2
		OHIO

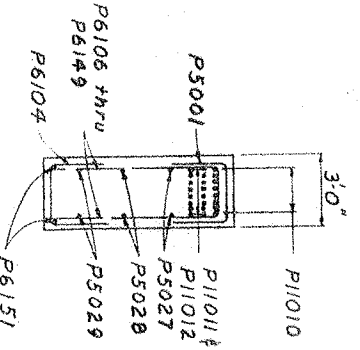




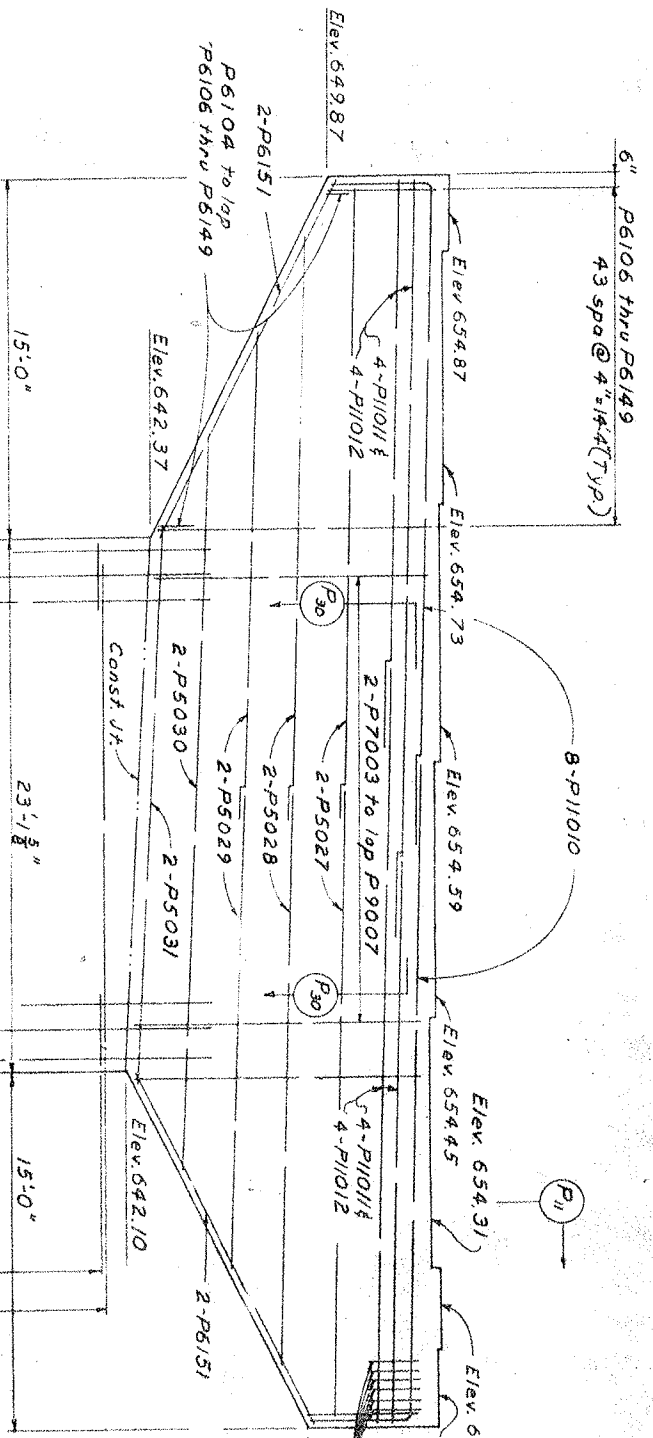
PLAN

P₀

P₁₁



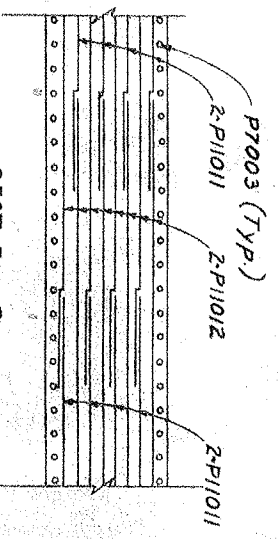
SECT. P₀-P₁₁



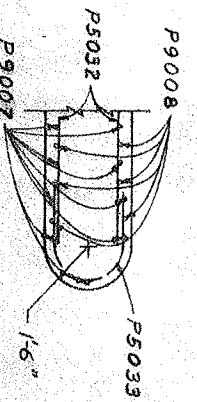
ELEVATION

NOTES

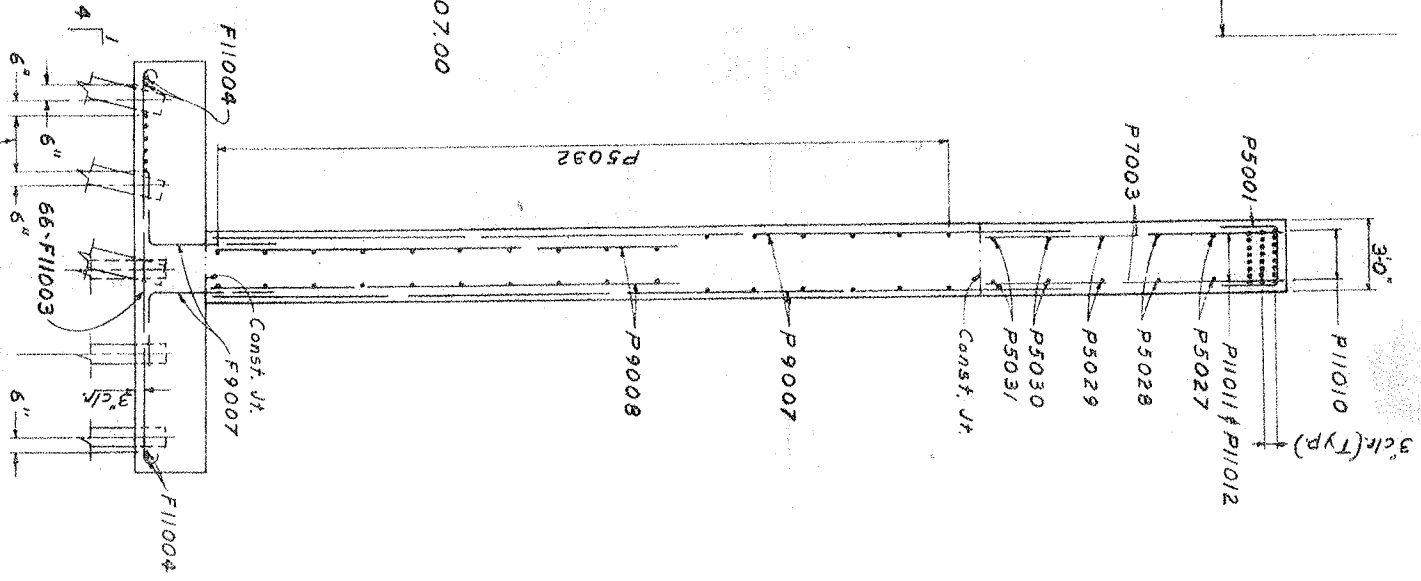
- All piles shall be 10BP42 steel piles
- Vertical piles Battered piles 1:4



SECT. P₀-P₀



SECT. P₂-P₂



SECT. P₅-P₅

COLUMBUS ENGINEERING CONSULTANTS, LTD
 Consulting Civil Engineers
 Columbus, Ohio
 SUCCESSORS TO
 ATKINS MERCER UNDERWOOD, LTD
 32/54

PIER 3 N.B.
 U.S. 33 OVER RELOCATED Hocking River
 STA 752+21.94 NB
 STA 756+42.50 NB
 ATHENS COUNTY

DESIGNED	DATE	REVIEWED
FTJ	5/14/70	JP
RWF		

DIVISION	2	OHIO
STATE		
PROJECT		

ATHENS COUNTY
 RTH~33~15.62

Girder No	A	B	C	D	E	F	G	α	β	Δ	φ	ρ	
Girder 1	68'-4 1/2"	25'-0 1/2"	71'-6 3/8"	25'-8 7/8"	79'-6 1/2"	24'-8 8/8"	78'-0 3/8"	3°19'51"	3°30'21"	3°17'24"	3°38'30"	3°07'07"	3°11'45"
Girder 2	65'-3 1/2"	24'-9 1/8"	67'-5 1/2"	24'-10 1/8"	77'-11 1/2"	24'-3 7/8"	78'-0 3/8"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 3	63'-5 1/8"	24'-0 1/8"	61'-9 1/2"	23'-5 3/8"	69'-3 3/8"	25'-3 3/8"							
Girder 4	60'-8 3/8"	23'-0 3/8"	60'-8 3/8"	23'-0 3/8"	67'-5 1/2"	24'-10 3/8"	78'-10 3/8"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 5	59'-9 1/8"	22'-8 1/8"	59'-9 1/8"	22'-8 1/8"	66'-11 1/2"	24'-7 1/2"	77'-11 1/2"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 6	59'-9 1/8"	22'-8 1/8"	59'-9 1/8"	22'-8 1/8"	66'-11 1/2"	24'-7 1/2"	77'-11 1/2"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 7-11	58'-0"	22'-0"	58'-0"	22'-0"	65'-0"	24'-0"	76'-0"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 12-16	58'-0"	22'-0"	58'-0"	22'-0"	65'-0"	24'-0"	76'-0"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 17	58'-0"	22'-0"	58'-0"	22'-0"	65'-0"	24'-0"	76'-0"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 18	57'-4 3/8"	21'-10 3/8"	57'-4 3/8"	21'-10 3/8"	64'-4 3/8"	23'-9 3/8"	75'-6 1/2"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 19	57'-3 3/8"	21'-9 3/8"	57'-3 3/8"	21'-9 3/8"	64'-4 3/8"	23'-9 3/8"	75'-6 1/2"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 20	57'-9 1/8"	21'-8 1/8"	57'-9 1/8"	21'-8 1/8"	64'-4 3/8"	23'-9 3/8"	75'-6 1/2"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 21	58'-10 7/8"	21'-8 1/8"	58'-10 7/8"	21'-8 1/8"	64'-4 3/8"	23'-9 3/8"	75'-6 1/2"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 22	60'-6 1/2"	21'-9 1/8"	60'-6 1/2"	21'-9 1/8"	64'-4 3/8"	23'-9 3/8"	75'-6 1/2"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	
Girder 23	62'-7 3/8"	21'-10 1/8"	62'-7 3/8"	21'-10 1/8"	64'-4 3/8"	23'-9 3/8"	75'-6 1/2"	0°52'55"	0°52'55"	2°45'16"	3°13'7"	1°36'37"	

ROCKERS AND BOLSTERS *

Girder No	Rear Abut #3	Pier #2	Pier #1	Abut #1
Girder 1	R-100 R-225	B-250R R-250	R-250 R-150	
Girder 2-3	R-100 R-200			
Girder 4	R-100 R-275	B-300R		
Girder 5	R-100 R-225			
Girder 6	R-125 R-300	B-275R R-250		
Girder 7-11	R-125 R-325	B-350 R-375	R-150	
Girder 12-16	R-125 R-300	B-350 R-375	R-150	
Girder 17	R-125 R-275	B-275R R-250		
Girder 18-19	R-100 R-200			
Girder 20	R-100 R-250	B-250R		
Girder 21-22	R-100 R-200			
Girder 23	R-100 R-225	B-225R R-250	R-150	

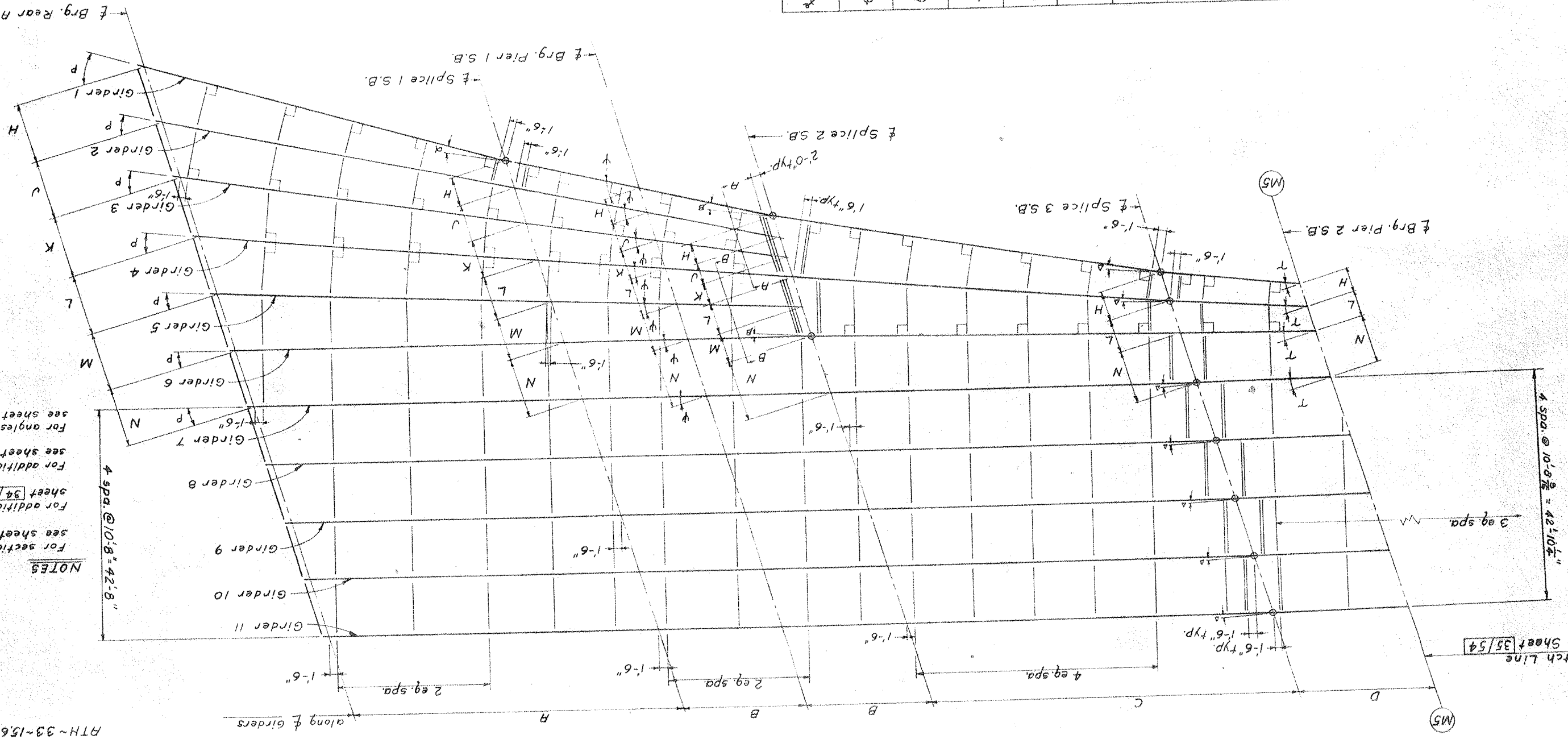
* For details of Rockers and Bolsters see sheet 38/54 and Standard Drawing R B-1-55

FRAMING PLAN I
BRIDGE No ATH-33-15B4 L
U.S. 33 OVER RELOCATED HOCKING RIVER
ATHENS COUNTY
STA. 752+21.94 N.B.
STA. 756+42.50 N.B.

COLUMBUS ENGINEERING CONSULTANTS, LTD.
SUCCESSION TO
ATKINS MERCHER UNDERWOOD, LTD.
Columbus, Ohio

DESIGNED BY: J.P. R.W.F.
CHECKED BY: J.P. R.W.F.
DATE: 5/14/70

33/54



NOTES

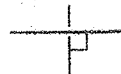
- For sections A-A, B-B see sheet 38/54
- For additional notes see sheet 34/54
- For additional dimensions see sheet 34/54
- For angles normal to Brg see sheet 34/54

NOTES

Intermediate crossframes shall be placed normal to girder 11 in the Southbound structure, except as indicated.

Intermediate crossframes shall be placed normal to girder 12 in the Northbound structure, except as indicated.

90° angles indicated thus

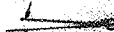


Bearing devices shall be placed normal to girder 11 in the Southbound structure and normal to girder 12 in the Northbound structure.

For additional dimensions see sheet 33/54

For deflection angles see sheet 33/54

Girder deflection points indicated thus



Crossframes indicated by a single line are intermediate crossframes. For details see sheet 45/54

Crossframes indicated by double lines are deflection crossframes. For details see sheet 45/54

These crossframes shall be placed immediately upon completion of all bolting of the adjacent field splices before stress is induced into these splices.

Crossframes indicated with triple lines are support diaphragms. For details see sheet 38/54

For sections C-C & D-D see sheet 38/54

For size of bearing units see sheet 33/54

Girder deflection points indicated thus

Match Line

See sheet 35/54

± Brg. Pier 2 NB

± Splice 3 NB

± Brg. Pier 1 NB

± Splice 2 NB

± Splice 1 NB

± Brg. Pier 3 NB

± Splice 3 NB

± Splice 2 NB

± Splice 1 NB

± Brg. Pier 2 NB

± Splice 3 NB

± Brg. Pier 1 NB

± Splice 2 NB

± Splice 1 NB

± Brg. Pier 3 NB

± Splice 3 NB

± Splice 2 NB

± Splice 1 NB

± Brg. Pier 2 NB

± Splice 3 NB

± Brg. Pier 1 NB

± Splice 2 NB

± Splice 1 NB

± Brg. Pier 3 NB

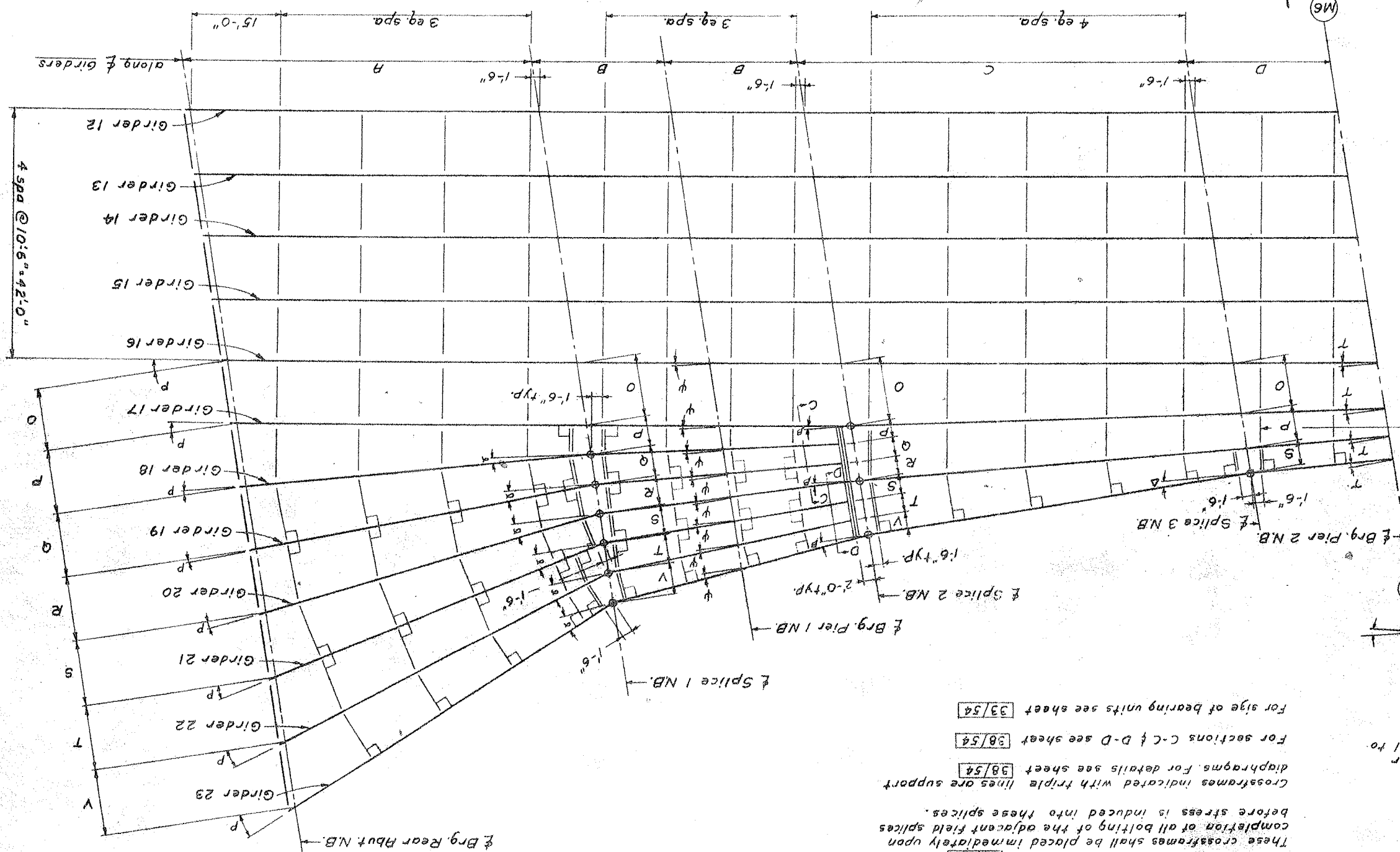
± Splice 3 NB

± Splice 2 NB

± Splice 1 NB

ANGLES NORMAL TO ± BEARING

Girder 1	93° 6' 11"	29° 46' 20"	22° 58' 35"	16° 12' 58"	13° 1' 13"
Girder 2	28° 40' 9"	28° 40' 9"	28° 40' 9"	28° 40' 9"	28° 40' 9"
Girder 3	25° 27' 26"	25° 27' 28"	22° 3' 56"	22° 27' 19"	20° 27' 19"
Girder 4	22° 3' 56"	22° 3' 56"	22° 3' 56"	22° 3' 56"	22° 3' 56"
Girder 5	19° 24' 21"	19° 24' 21"	19° 24' 21"	19° 24' 21"	19° 24' 21"
Girder 6	16° 39' 23"	16° 39' 23"	16° 39' 23"	16° 39' 23"	16° 39' 23"
Girder 7 thru 11	15° 46' 29"	13° 1' 13"	13° 1' 13"	13° 1' 13"	13° 1' 13"
Girder 12 thru 16	9° 8' 7"	9° 8' 7"	9° 8' 7"	9° 8' 7"	9° 8' 7"
Girder 17	9° 8' 7"	9° 8' 7"	9° 8' 7"	9° 8' 7"	9° 8' 7"
Girder 18	3° 27' 3"	6° 38' 55"	6° 38' 55"	6° 38' 55"	6° 38' 55"
Girder 19	2° 18' 7"	4° 0' 12"	4° 0' 12"	4° 0' 12"	4° 0' 12"
Girder 20	8° 0' 32"	1° 36' 31"	4° 25' 40"	4° 25' 40"	4° 25' 40"
Girder 21	13° 33' 39"	0° 55' 32"	0° 55' 32"	0° 55' 32"	0° 55' 32"
Girder 22	18° 51' 56"	3° 27' 22"	3° 27' 22"	3° 27' 22"	3° 27' 22"
Girder 23	23° 51' 19"	5° 58' 25"	3° 47' 00"	9° 8' 7"	9° 8' 7"



Center Line	H	J	K	L	M	N	O	P	Q	R	S	T	V
± Brg. Rear Abut.	10° 11' 2"	10° 11' 2"	10° 11' 2"	10° 11' 2"	10° 11' 2"	10° 11' 2"	10° 11' 2"	10° 11' 2"	10° 11' 2"	10° 11' 2"	10° 11' 2"	10° 11' 2"	10° 11' 2"
± Splice #1	4° 11' 2"	6° 11' 2"	6° 11' 2"	7° 11' 2"	7° 11' 2"	11° 1' 2"	10° 7' 2"	5° 0' 2"	5° 0' 2"	5° 0' 2"	5° 0' 2"	5° 0' 2"	5° 0' 2"
± Brg. Pier #1	4° 4' 2"	5° 4' 2"	5° 4' 2"	6° 9' 2"	6° 9' 2"	11° 1' 2"	10° 7' 2"	4° 0' 2"	4° 0' 2"	4° 0' 2"	4° 0' 2"	4° 0' 2"	4° 0' 2"
± Splice #2	3° 10' 2"	3° 10' 2"	3° 10' 2"	5° 7' 2"	5° 7' 2"	10° 7' 2"	3° 1' 2"	3° 1' 2"	3° 1' 2"	3° 1' 2"	3° 1' 2"	3° 1' 2"	3° 1' 2"
± Splice #3	5° 11' 2"	5° 11' 2"	5° 11' 2"	9° 8' 2"	9° 8' 2"	8° 7' 2"	6° 0' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"
± Brg. Pier #2	4° 8' 2"	4° 8' 2"	4° 8' 2"	8° 8' 2"	8° 8' 2"	7° 10' 2"	4° 9' 2"	3° 9' 2"	3° 9' 2"	3° 9' 2"	3° 9' 2"	3° 9' 2"	3° 9' 2"
± Splice #4	3° 6' 2"	3° 6' 2"	3° 6' 2"	7° 9' 2"	7° 9' 2"	7° 1' 2"	3° 6' 2"	3° 6' 2"	3° 6' 2"	3° 6' 2"	3° 6' 2"	3° 6' 2"	3° 6' 2"
± Splice #5	4° 10' 2"	4° 10' 2"	4° 10' 2"	4° 10' 2"	4° 10' 2"	4° 10' 2"	4° 10' 2"	4° 10' 2"	4° 10' 2"	4° 10' 2"	4° 10' 2"	4° 10' 2"	4° 10' 2"
± Brg. Pier #3	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"	4° 1' 2"
± Splice #6	3° 5' 2"	3° 5' 2"	3° 5' 2"	3° 5' 2"	3° 5' 2"	3° 5' 2"	3° 5' 2"	3° 5' 2"	3° 5' 2"	3° 5' 2"	3° 5' 2"	3° 5' 2"	3° 5' 2"

COLUMBUS ENGINEERING CONSULTANTS, LTD.
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 Consulting Civil Engineers
 Columbus, Ohio

FRAMING PLAN 2
 BRIDGE N° ATH-33-1584 R
 U.S. 33 OVER RELOCATED HOCKING RIVER
 ATHENS COUNTY
 STA. 752+21.94 N.B.
 STA. 756+42.50 N.B.

DESIGNED DRAWN
 CHECKED REVIEWED
 DATE 5/4/70

JP RWF
 LWT
 34/54

105	127
2	OHIO
ATH-33-15.62	PROJECT

NOTES

For section E-E, F-F, G-G & H-H see sheet 38/54

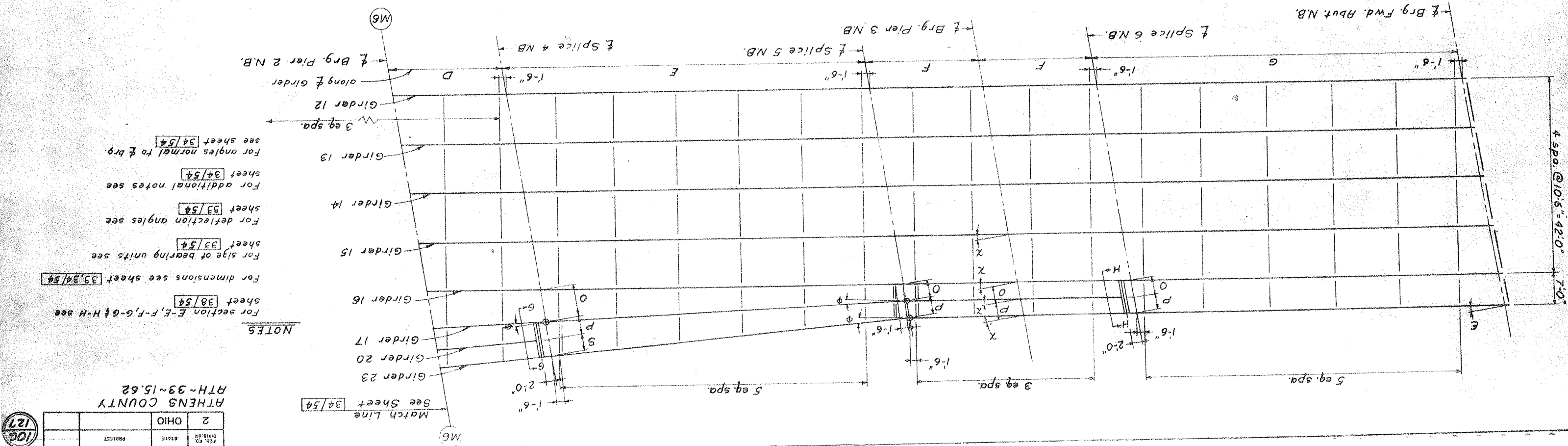
For dimensions see sheet 33, 34/56

For size of bearing units see sheet 33/54

For deflection angles see sheet 33/54

For additional notes see sheet 34/54

For angles normal to brg. see sheet 34/54

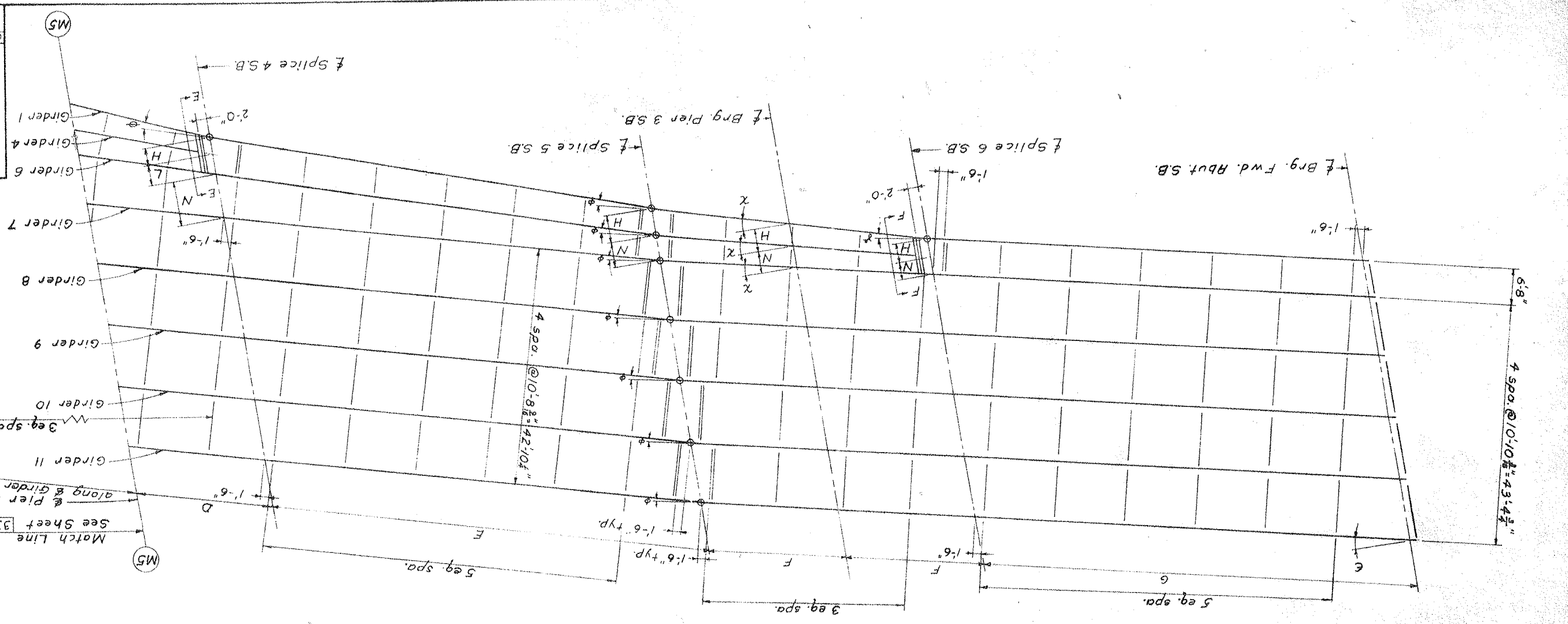


FRAMING PLAN 3
BRIDGE N° ATH-39-15.62 L.R.
U.S. 39 OVER RELOCATED HOCKING RIVER
ATHENS COUNTY
STA. 752+21.94 NB
STA. 756+42.50 NB

COLUMBUS ENGINEERING CONSULTANTS, LTD.
COLUMBUS, OHIO
CONSULTING CIVIL ENGINEERS
SUCCESSORS TO
ATKINS, NICHOLS AND COMPANY, LTD.

35/54

DESIGNED	DATE	REVIEWED	DATE	REVISION
J.P. R.W.F.	5/14/70	P.W.T.	7/20	5/14/70



ATHENS COUNTY
 ATH-33-15.62

WELD SIZES

Girder	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
Girder 1	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 2	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 3	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 4	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 5	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 6	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 7 thru 16	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 17	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 18	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 19	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 20	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 21	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 22	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 23	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8

BEARING STIFFENER THICKNESS

Girder	to P1	to P2	to P3	to P4	to P5	to P6	to P7	to P8	to P9	to P10	to P11	to P12
Girder 1	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 2	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 3	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 4	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 5	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 6	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 7 thru 16	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 17	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 18	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 19	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 20	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 21	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 22	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Girder 23	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8

For additional dimensions see sheet 37/54
 For additional notes see sheet 37/54

COLUMBUS ENGINEERING CONSULTANTS, LTD.
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 Columbus, Ohio

GIRDER DETAILS 1
 BRIDGE N° ATH-33-15.62 L1R
 U.S. 33 OVER RELOCATED Hocking RIVER
 ATHENS COUNTY
 STA. 752+21.94 NB
 STA. 756+42.50 NB
 J.P. R.W. 5/14/70
 DATE REVISIONS

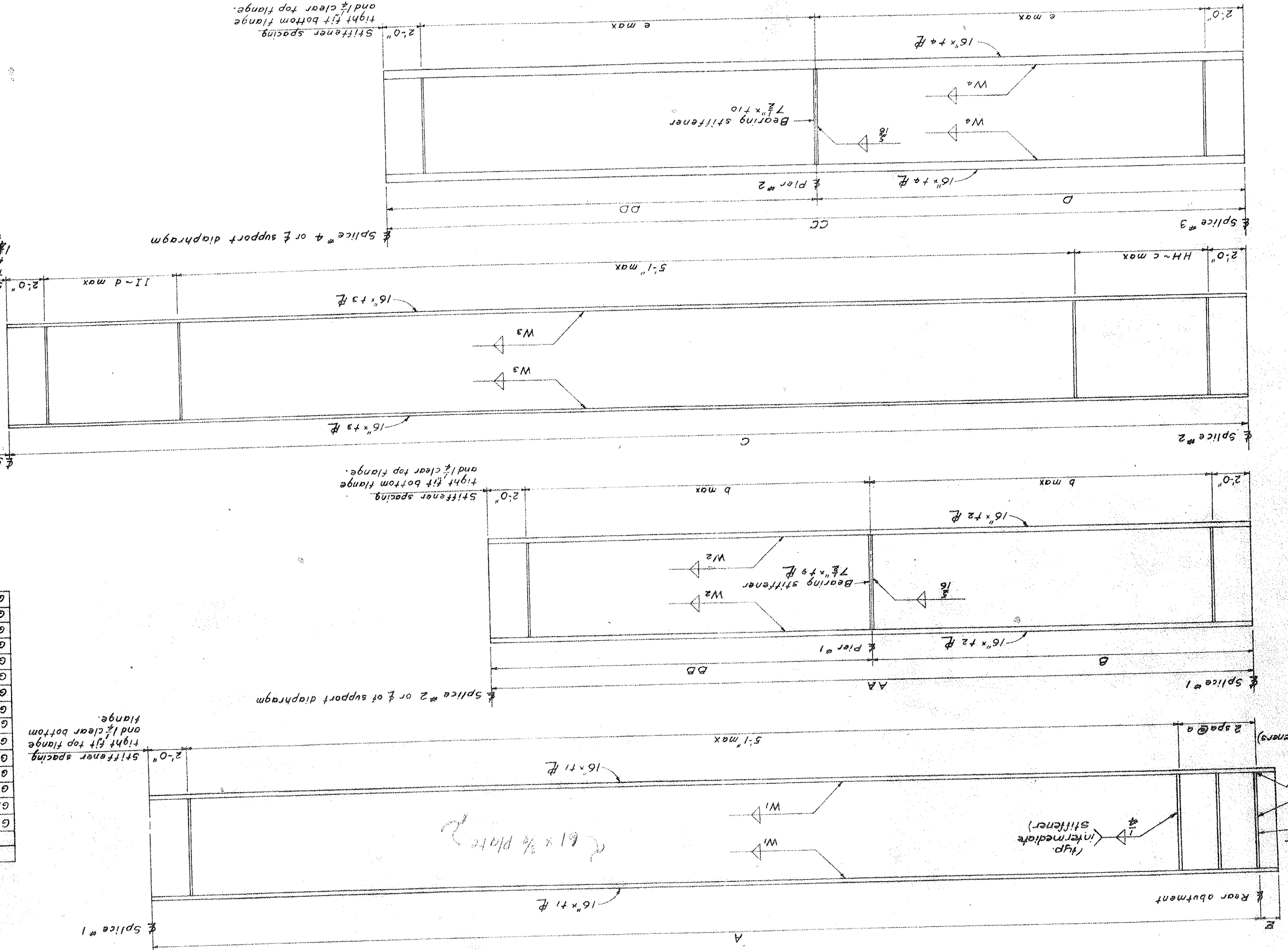
Stiffener spacing
 tight fit top flange
 and 1/2" clear bottom
 flange.

Splice # 2 or # of support diaphragm

Stiffener spacing
 tight fit bottom flange
 and 1/2" clear top flange.

Splice # 4 or # of support diaphragm

Stiffener spacing
 tight fit bottom flange
 and 1/2" clear top flange.



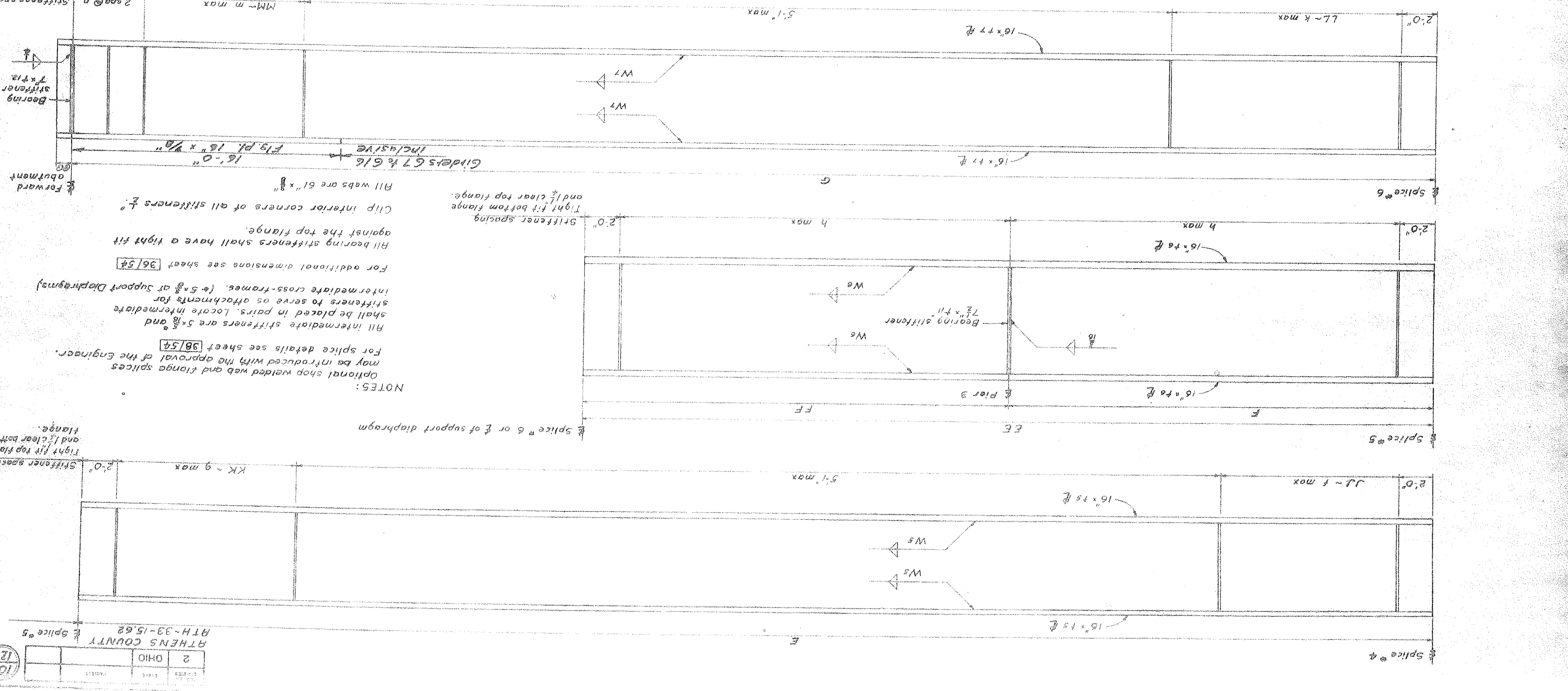
ATHENS COUNTY
 U.S. 33 OVER RAILROAD Hocking River
 BRIDGE No. ATH-33-1504 LR
 STA. 756+21.94 NB
 STA. 756+42.50 NB

GIRDER DETAILS 2
 37/54

COLUMBUS ENGINEERING CONSULTANTS, LTD.
 Consulting Civil Engineers
 Columbus, Ohio
 SUCCESSORS TO
 ATHENS BRIDGE ENGINEERS LTD

DESIGNED BY: J.P. R.W.F.
 CHECKED BY: F.W.F.
 DATE: 5/14/70

GIRDER	A	AA	B	BB	C	CC	D	DD	E	EE	F	FF	GG	HH	II	JJ	KK	LL	MM	a	b	c	d	e	f	g	h	i	j	k	m	n	t	FLANGE THICKNESS	
																																		t ₁	t ₂
Girder 1	0'-10 1/2"	68'-4 1/8"	50'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	25'-0 1/2"	2'-6"	4'-9"	5'-0"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-6"	1 1/8"	1 1/2"	
Girder 2	0'-10 1/2"	65'-3 1/8"	47'-2 3/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	24'-9 1/8"	2'-6"	4'-9"	5'-0"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-6"	1 1/8"	1 1/2"		
Girder 3	0'-9 1/2"	63'-5 1/8"	45'-10 1/8"	23'-0 1/2"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	2'-6"	4'-9"	5'-0"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-6"	1 1/8"	1 1/2"		
Girder 4	0'-9 1/2"	61'-9 1/8"	46'-10 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	23'-5 1/8"	2'-6"	4'-9"	5'-0"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-6"	1 1/8"	1 1/2"		
Girder 5	0'-9 1/2"	60'-0 1/2"	43'-11 1/8"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	23'-0 1/2"	2'-6"	4'-9"	5'-0"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-6"	1 1/8"	1 1/2"		
Girder 6	0'-9 1/2"	59'-9 1/8"	45'-4 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	2'-3"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-3"	1 1/8"	1 1/2"		
Girder 7 thru 11	0'-9 1/2"	59'-9 1/8"	45'-4 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	22'-8 1/8"	2'-3"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-3"	1 1/8"	1 1/2"		
Girder 12 thru 16	0'-9 1/2"	58'-0"	44'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	2'-3"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-3"	1 1/8"	1 1/2"		
Girder 17	0'-9 1/2"	58'-0"	44'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	2'-3"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-3"	1 1/8"	1 1/2"		
Girder 18	0'-9"	57'-4 1/8"	41'-8 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	2'-6"	4'-9"	5'-0"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-6"	1 1/8"	1 1/2"		
Girder 19	0'-9"	57'-3 1/8"	41'-6 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	2'-6"	4'-9"	5'-0"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-6"	1 1/8"	1 1/2"		
Girder 20	0'-9"	57'-9 1/8"	43'-5 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	2'-6"	4'-9"	5'-0"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-6"	1 1/8"	1 1/2"		
Girder 21	0'-9"	58'-10 1/8"	41'-5 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	21'-8 1/8"	2'-6"	4'-9"	5'-0"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-6"	1 1/8"	1 1/2"		
Girder 22	0'-9 1/2"	60'-6 1/8"	41'-6 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	21'-9 1/8"	2'-6"	4'-9"	5'-0"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-6"	1 1/8"	1 1/2"		
Girder 23	0'-9 1/2"	62'-7 1/8"	49'-8 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	21'-10 1/8"	2'-6"	4'-9"	5'-0"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	4'-6"	4'-0"	4'-0"	2'-6"	1 1/8"	1 1/2"		



ATHENS COUNTY
 ATH-33-15.02
 Splice #5

NO. OF SHEETS	2	OHIO	27
DRAWN BY		DATE	



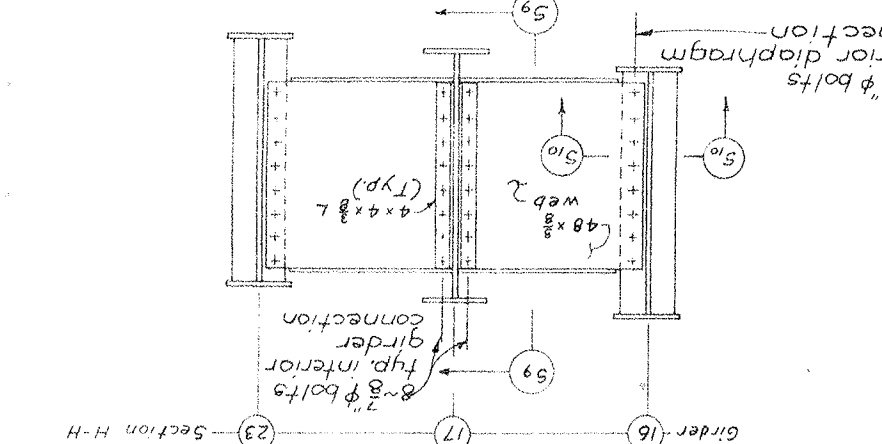
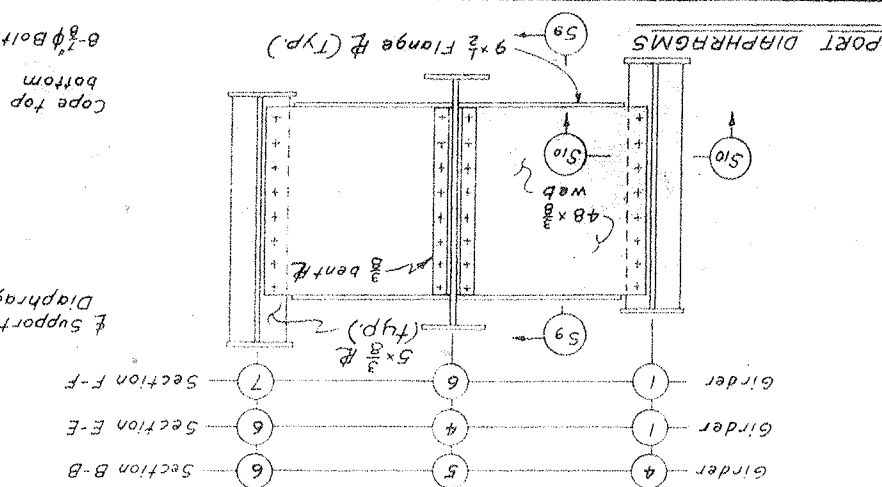
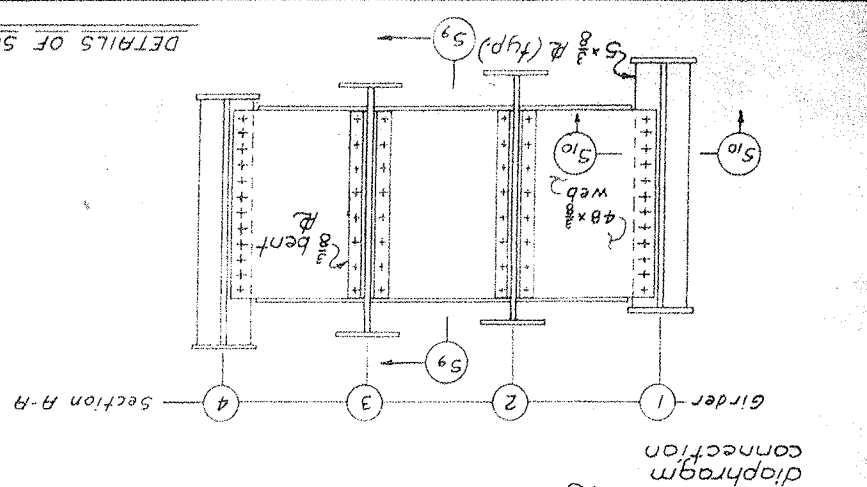
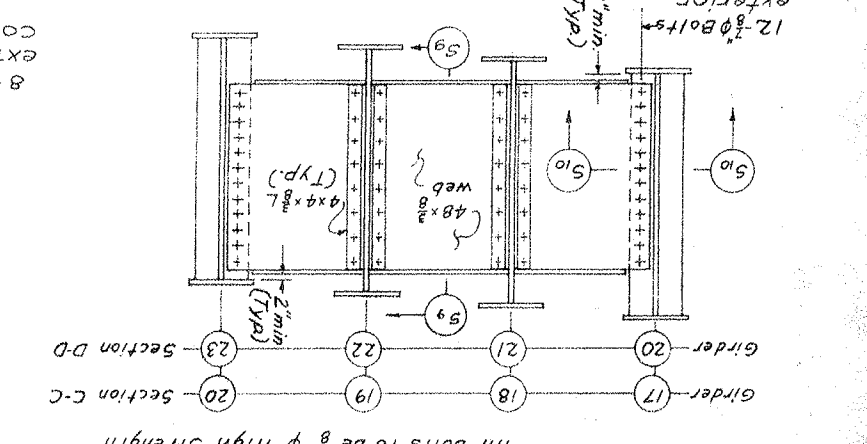
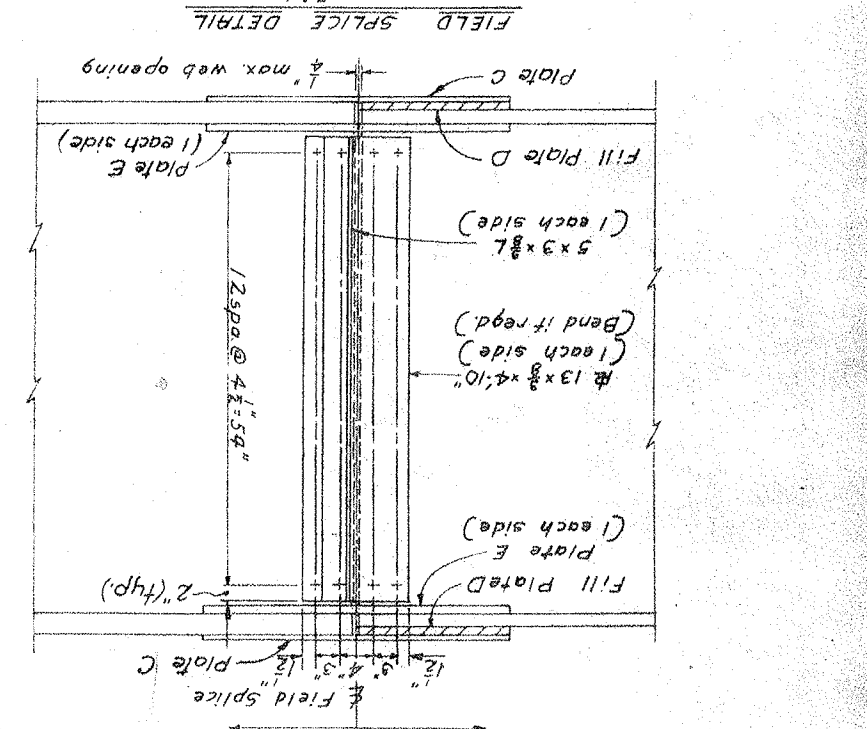
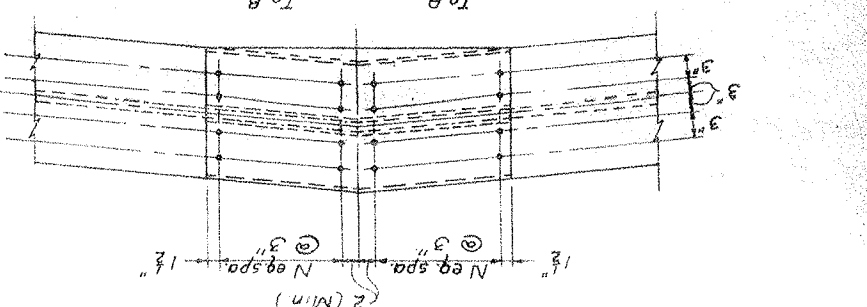
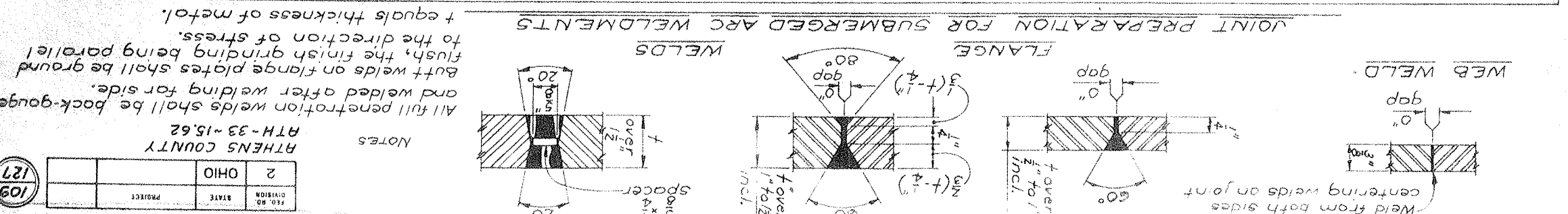
Bolster Rocker No.	Weight each (lb)	Dimensions (inches)															
		A	B	C	D	F	G	H	K	L	M	R	T	Y			
B-225H	225,000	3	22	3 1/2	2 1/8	2 1/8	13	16 1/2	9	16 1/2	13	30	22	11	2 1/2	1 7/8	740
B-250H	250,000	3 1/2	22	3 1/2	2 1/8	2 1/8	10	17 1/8	13	30	23	11 1/2	2 1/2	1 7/8	1 1/2	815	
B-275H	275,000	3 1/2	22	3 1/2	3 1/4	3 1/4	12	18 3/8	14	30	24	12	2 3/4	1 7/8	2 1/8	895	
B-300H	300,000	3 1/2	22	3 1/2	3 1/4	3 1/4	12	19 3/8	14	30	25	12 1/2	3	1 7/8	3	960	
R-325	325,000	3 1/2	21	3 3/4	3 1/4	3 1/4	13	19 3/8	15	29	26	13	3	1 7/8	3	1205	
B-350	350,000	3 1/2	22	3 3/4	3 1/2	3 1/2	13	20 3/8	16	30	27	13 1/2	3 1/2	1 7/8	3 1/2	1115	
R-375	375,000	4	23	3 3/4	3 1/2	3 1/2	14	21 3/8	17	31	28	14	3 1/2	1 7/8	3 1/2	1425	

ROCKERS AND BOLSTERS *

* For additional dimensions and details see Standard Drawing R-B-1-55

FIELD SPICES	Splice N° 1			Splice N° 2			Splice N° 3			Splice N° 4			Splice N° 5			Splice N° 6		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Girder 23	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 22	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 21	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 20	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 19	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 18	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 17	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 7 thru 16	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 6	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 5	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 4	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 3	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 2	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8
Girder 1	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8	16 x 8

JOINT PREPARATION FOR SUBMERGED ARC WELDMENTS



FIELD SPLICE DETAIL
 All bolts to be 7/8" High strength
 8-7/8" bolts exterior diaphragm connection
 5x8/8 bolts exterior diaphragm connection

DETAILS OF SUPPORT DIAPHRAGMS
 9x2 Flange F (Typ)
 48x8 web
 8 bent
 5x8/8 (Typ)



ATHENS COUNTY
ATH-33-15.62

SPANN 1

Girder	Section	Notes	Remarks
Girder 1	$\frac{1}{2}$ Pt A	Splice Pt C	fil. due to wt. of steel
Girder 2	$\frac{1}{2}$ Pt B	Splice Pt C	fil. due to remaining D.L.
Girder 3	$\frac{1}{2}$ Pt A	Splice Pt C	required shop camber
Girder 4	$\frac{1}{2}$ Pt B	Splice Pt C	
Girder 5	$\frac{1}{2}$ Pt A	Splice Pt C	
Girder 6	$\frac{1}{2}$ Pt B	Splice Pt C	
Girder 7	$\frac{1}{2}$ Pt A	Splice Pt C	
Girder 8	$\frac{1}{2}$ Pt B	Splice Pt C	
Girder 9	$\frac{1}{2}$ Pt A	Splice Pt C	
Girder 10	$\frac{1}{2}$ Pt B	Splice Pt C	
Girder 11	$\frac{1}{2}$ Pt A	Splice Pt C	
Girder 12	$\frac{1}{2}$ Pt B	Splice Pt C	
Girder 13	$\frac{1}{2}$ Pt A	Splice Pt C	
Girder 14	$\frac{1}{2}$ Pt B	Splice Pt C	
Girder 15	$\frac{1}{2}$ Pt A	Splice Pt C	
Girder 16	$\frac{1}{2}$ Pt B	Splice Pt C	
Girder 17	$\frac{1}{2}$ Pt A	Splice Pt C	
Girder 18	$\frac{1}{2}$ Pt B	Splice Pt C	
Girder 19	$\frac{1}{2}$ Pt A	Splice Pt C	
Girder 20	$\frac{1}{2}$ Pt B	Splice Pt C	
Girder 21	$\frac{1}{2}$ Pt A	Splice Pt C	
Girder 22	$\frac{1}{2}$ Pt B	Splice Pt C	
Girder 23	$\frac{1}{2}$ Pt A	Splice Pt C	

SPANN 2

Girder	Section	Notes	Remarks
Girder 1	$\frac{1}{2}$ Pt A	Splice Pt E	fil. due to wt. of steel
Girder 2	$\frac{1}{2}$ Pt B	Splice Pt E	fil. due to remaining D.L.
Girder 3	$\frac{1}{2}$ Pt A	Splice Pt E	required shop camber
Girder 4	$\frac{1}{2}$ Pt B	Splice Pt E	
Girder 5	$\frac{1}{2}$ Pt A	Splice Pt E	
Girder 6	$\frac{1}{2}$ Pt B	Splice Pt E	
Girder 7	$\frac{1}{2}$ Pt A	Splice Pt E	
Girder 8	$\frac{1}{2}$ Pt B	Splice Pt E	
Girder 9	$\frac{1}{2}$ Pt A	Splice Pt E	
Girder 10	$\frac{1}{2}$ Pt B	Splice Pt E	
Girder 11	$\frac{1}{2}$ Pt A	Splice Pt E	
Girder 12	$\frac{1}{2}$ Pt B	Splice Pt E	
Girder 13	$\frac{1}{2}$ Pt A	Splice Pt E	
Girder 14	$\frac{1}{2}$ Pt B	Splice Pt E	
Girder 15	$\frac{1}{2}$ Pt A	Splice Pt E	
Girder 16	$\frac{1}{2}$ Pt B	Splice Pt E	
Girder 17	$\frac{1}{2}$ Pt A	Splice Pt E	
Girder 18	$\frac{1}{2}$ Pt B	Splice Pt E	
Girder 19	$\frac{1}{2}$ Pt A	Splice Pt E	
Girder 20	$\frac{1}{2}$ Pt B	Splice Pt E	
Girder 21	$\frac{1}{2}$ Pt A	Splice Pt E	
Girder 22	$\frac{1}{2}$ Pt B	Splice Pt E	
Girder 23	$\frac{1}{2}$ Pt A	Splice Pt E	

SPANN 3

Girder	Section	Notes	Remarks
Girder 1	$\frac{1}{2}$ Pt J	Splice Pt L	fil. due to wt. of steel
Girder 2	$\frac{1}{2}$ Pt K	Splice Pt L	fil. due to remaining D.L.
Girder 3	$\frac{1}{2}$ Pt J	Splice Pt L	required shop camber
Girder 4	$\frac{1}{2}$ Pt K	Splice Pt L	
Girder 5	$\frac{1}{2}$ Pt J	Splice Pt L	
Girder 6	$\frac{1}{2}$ Pt K	Splice Pt L	
Girder 7	$\frac{1}{2}$ Pt J	Splice Pt L	
Girder 8	$\frac{1}{2}$ Pt K	Splice Pt L	
Girder 9	$\frac{1}{2}$ Pt J	Splice Pt L	
Girder 10	$\frac{1}{2}$ Pt K	Splice Pt L	
Girder 11	$\frac{1}{2}$ Pt J	Splice Pt L	
Girder 12	$\frac{1}{2}$ Pt K	Splice Pt L	
Girder 13	$\frac{1}{2}$ Pt J	Splice Pt L	
Girder 14	$\frac{1}{2}$ Pt K	Splice Pt L	
Girder 15	$\frac{1}{2}$ Pt J	Splice Pt L	
Girder 16	$\frac{1}{2}$ Pt K	Splice Pt L	
Girder 17	$\frac{1}{2}$ Pt J	Splice Pt L	
Girder 18	$\frac{1}{2}$ Pt K	Splice Pt L	
Girder 19	$\frac{1}{2}$ Pt J	Splice Pt L	
Girder 20	$\frac{1}{2}$ Pt K	Splice Pt L	
Girder 21	$\frac{1}{2}$ Pt J	Splice Pt L	
Girder 22	$\frac{1}{2}$ Pt K	Splice Pt L	
Girder 23	$\frac{1}{2}$ Pt J	Splice Pt L	

SPANN 4

Girder	Section	Notes	Remarks
Girder 1	$\frac{1}{2}$ Pt M	Splice Pt N	fil. due to wt. of steel
Girder 2	$\frac{1}{2}$ Pt O	Splice Pt N	fil. due to remaining D.L.
Girder 3	$\frac{1}{2}$ Pt M	Splice Pt N	required shop camber
Girder 4	$\frac{1}{2}$ Pt O	Splice Pt N	
Girder 5	$\frac{1}{2}$ Pt M	Splice Pt N	
Girder 6	$\frac{1}{2}$ Pt O	Splice Pt N	
Girder 7	$\frac{1}{2}$ Pt M	Splice Pt N	
Girder 8	$\frac{1}{2}$ Pt O	Splice Pt N	
Girder 9	$\frac{1}{2}$ Pt M	Splice Pt N	
Girder 10	$\frac{1}{2}$ Pt O	Splice Pt N	
Girder 11	$\frac{1}{2}$ Pt M	Splice Pt N	
Girder 12	$\frac{1}{2}$ Pt O	Splice Pt N	
Girder 13	$\frac{1}{2}$ Pt M	Splice Pt N	
Girder 14	$\frac{1}{2}$ Pt O	Splice Pt N	
Girder 15	$\frac{1}{2}$ Pt M	Splice Pt N	
Girder 16	$\frac{1}{2}$ Pt O	Splice Pt N	
Girder 17	$\frac{1}{2}$ Pt M	Splice Pt N	
Girder 18	$\frac{1}{2}$ Pt O	Splice Pt N	
Girder 19	$\frac{1}{2}$ Pt M	Splice Pt N	
Girder 20	$\frac{1}{2}$ Pt O	Splice Pt N	
Girder 21	$\frac{1}{2}$ Pt M	Splice Pt N	
Girder 22	$\frac{1}{2}$ Pt O	Splice Pt N	
Girder 23	$\frac{1}{2}$ Pt M	Splice Pt N	

NOTE:
for camber locations see sheet 40/54

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5555 WOODBURN, OHIO
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39/54

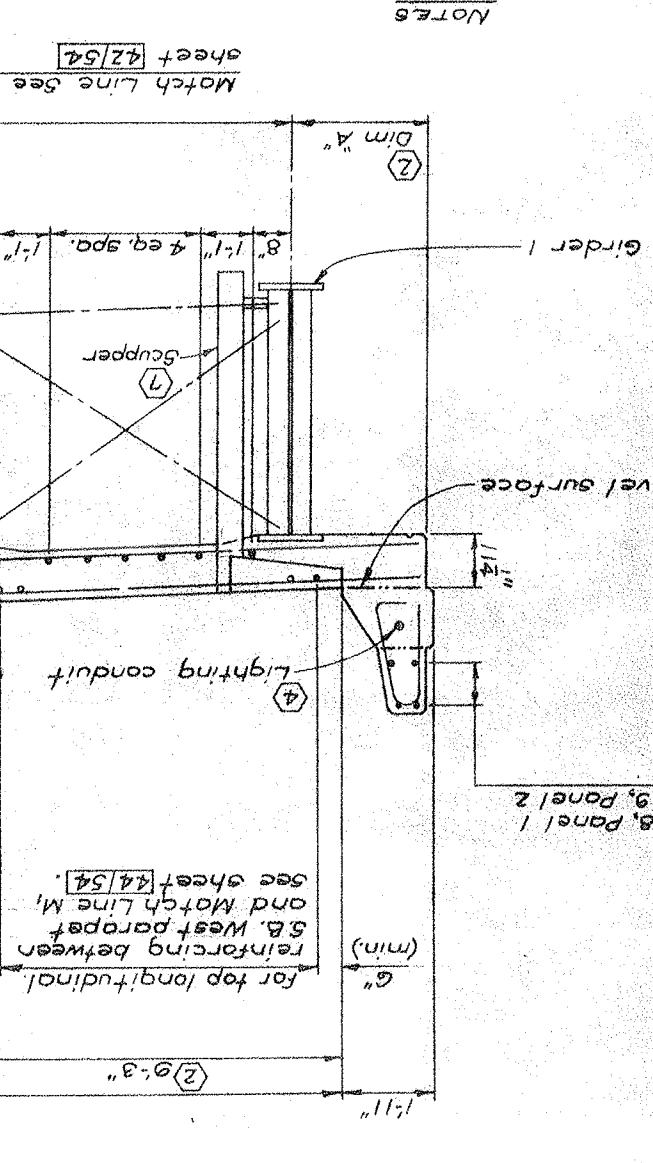
BRIDGE # ATH-33-15B4 LFR
U.S. 33 OVER RELOCATED HOCKING RIVER
ATHENS COUNTY
STA. 752+219.4 N.B.
STA. 756+42.50 N.B.

DESIGNED: R.W.F.
CHECKED: R.W.F.
DATE REVISED: 5/14/70

TABLE OF S.B. SLAB CANTILEVERS									
4	3	2	1	1	2	2	2	2	2
Splice 4	Splice 3	Splice 2	Splice 1	Splice 1	Splice 1	Splice 1	Splice 1	Splice 1	Splice 1
2 pt.	2 pt.	2 pt.	2 pt.	2 pt.	2 pt.	2 pt.	2 pt.	2 pt.	2 pt.
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1'-10"	1'-11"	1'-8"	1'-10"	1'-11"	1'-8"	1'-10"	1'-11"	1'-8"	1'-10"
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

ATHENS COUNTY
ATH-33-15-G2

112	127
OHIO	2
STATE	PROJECT



SECTION 5~5, TRANSVERSE SECTION U.S. 33 S.B.

- ① Radial to W.B. Stimson Ave.
Radial to E.U.S. 33 S.B.
- ② Slab thickness shown includes 1" for monolithic wearing surface.
- ③ For Bridge Railing details not shown see Section 5~5 sheet 45/54.
- ④ Field bend transverse bars to fit break in slab. Field bending to be included in Item 509 for payment.
- ⑤ Longitudinal reinforcing steel shall be field cut as necessary to avoid interference with scuppers.
- ⑥ Lap longitudinal reinforcing 1.7" min. Lap transverse reinforcing 2.3" min.
- ⑦ Lighting conduit shall be placed a minimum of 1" clear above construction joint of top of slab.
- ⑧ A HAUNCH WIDTH OF 12" shall be used for computing quantity of concrete. However, the haunch width may vary between 9" and 15" provided that the slope shall be not more than 1:4 for a haunch less than 12" in width.
- ⑨ This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.19. (*Except in the region of the Drainage Dam).
- ⑩ All longitudinal reinforcing in bridge railings and between S.B. East parapet and Match Line M1 (except parapet panel reinforcing and stagger bars) shall be 55194 and 55195, or 55367. Use one 55195 per line of longitudinal reinforcing from East parapet to Match Line M1. Use one 55367 per line of longitudinal reinforcing in the West parapet.
- ⑪ For additional details see sheet 45/54. For location of panels see General Elevation sheet 4/54. Slab thickness as shown except in region of Drainage Dam.
- ⑫ For additional information on placement of bottom longitudinal reinforcing between girders 1 and 7 see sheet 43/54.

NOTES

① Radial to W.B. Stimson Ave.
Radial to E.U.S. 33 S.B.

② Slab thickness shown includes 1" for monolithic wearing surface.

③ For Bridge Railing details not shown see Section 5~5 sheet 45/54.

④ Field bend transverse bars to fit break in slab. Field bending to be included in Item 509 for payment.

⑤ Longitudinal reinforcing steel shall be field cut as necessary to avoid interference with scuppers.

⑥ Lap longitudinal reinforcing 1.7" min. Lap transverse reinforcing 2.3" min.

⑦ Lighting conduit shall be placed a minimum of 1" clear above construction joint of top of slab.

⑧ A HAUNCH WIDTH OF 12" shall be used for computing quantity of concrete. However, the haunch width may vary between 9" and 15" provided that the slope shall be not more than 1:4 for a haunch less than 12" in width.

⑨ This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.19. (*Except in the region of the Drainage Dam).

⑩ All longitudinal reinforcing in bridge railings and between S.B. East parapet and Match Line M1 (except parapet panel reinforcing and stagger bars) shall be 55194 and 55195, or 55367. Use one 55195 per line of longitudinal reinforcing from East parapet to Match Line M1. Use one 55367 per line of longitudinal reinforcing in the West parapet.

COLUMBUS ENGINEERING CONSULTANTS, LTD.
Consulting Civil Engineers
Columbus, Ohio
SUCCESSION TO
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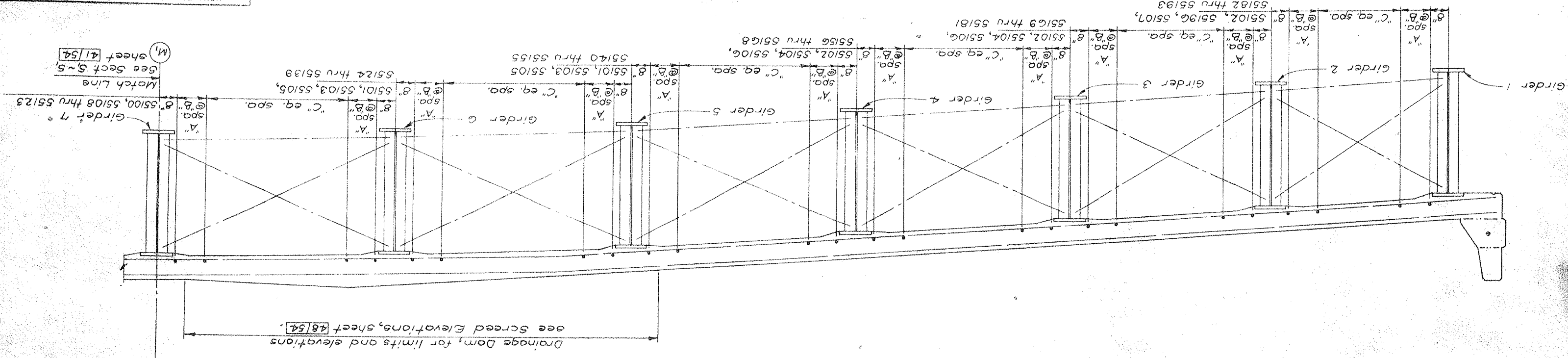
DESIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISIONS
JP GTR
FTJ 7/10 5/14/70

ATHENS COUNTY
STATION 752+21.94 U.B.
STA. 750+42.50 U.B.
U.S. 33 OVER RELOCATED HOCKING RIVER
BRIDGE N° ATH-33-1584 L
TRANSVERSE SECTION
4/54

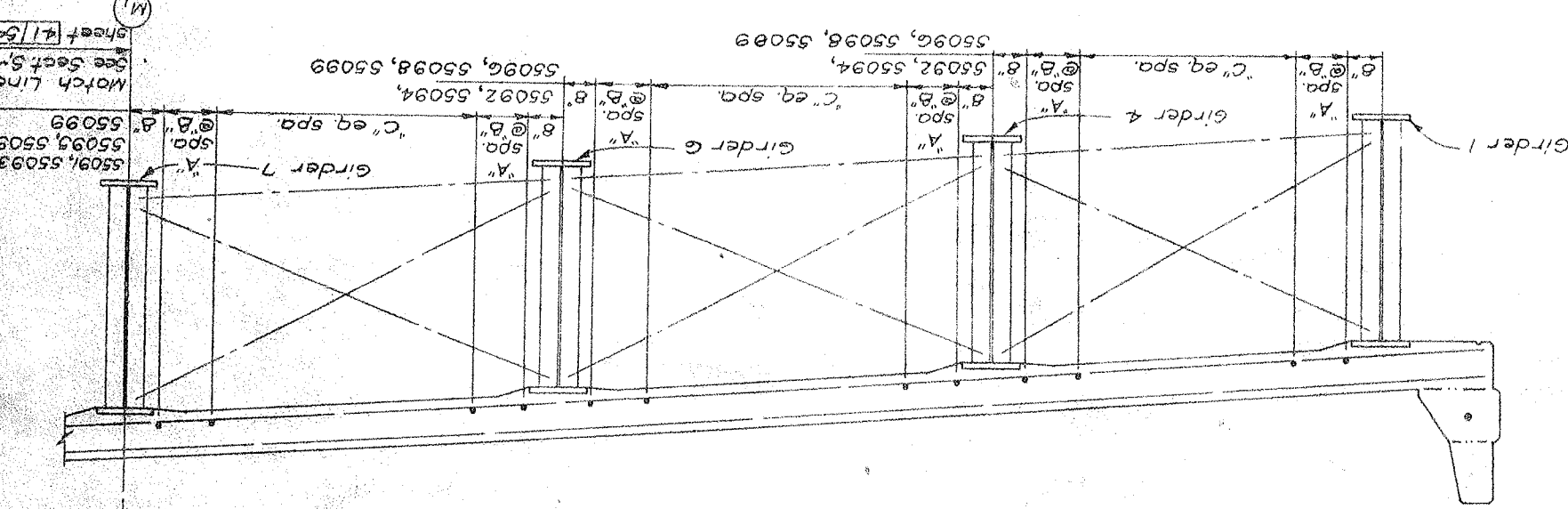
Bar No	"A" spa	"B" spacing	"C" eq. spa.
55100	2	1'-0"	11
55101	1	1'-1"	4
55102	-	-	2
55103	1	1'-4"	5
55104	1	1'-1"	4
55105	2	0'-10 1/2"	8
55106	1	1'-4"	5
55107	1	1'-1"	4
55108 thru 55112	2	1'-0"	11
55113 thru 55119	2	1'-0"	11
55120 thru 55126	2	1'-0"	11
55127 thru 55133	2	0'-10 1/2"	8
55134 thru 55140	2	0'-9 1/2"	7
55196	-	-	2

SECTION 54~54

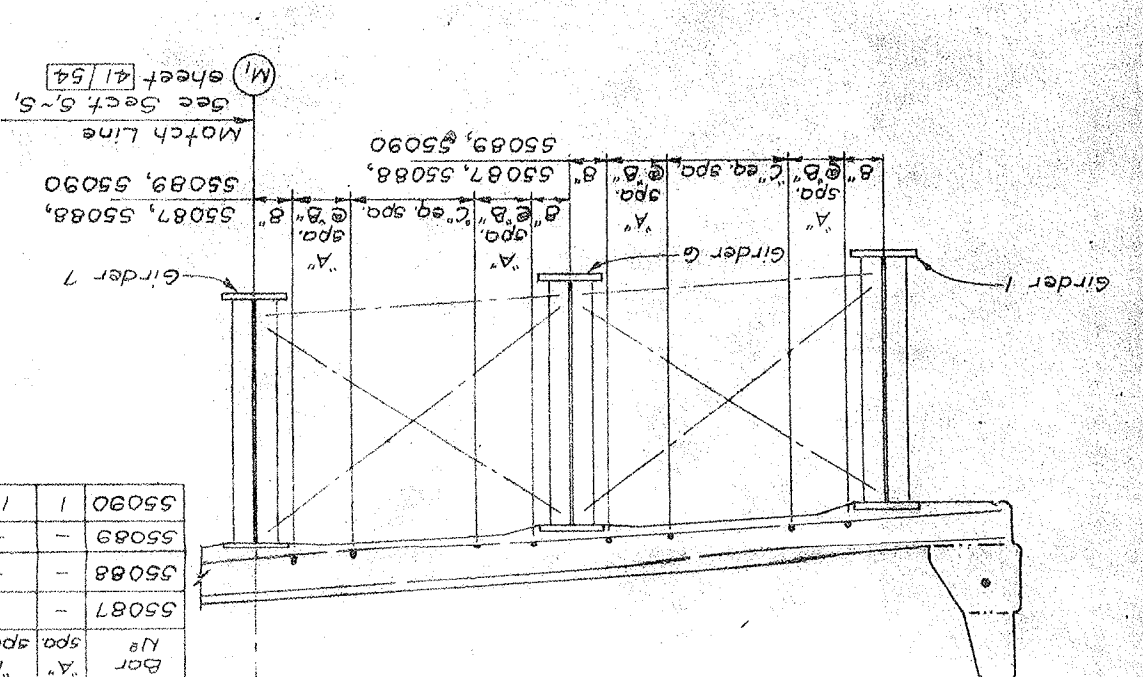
LOMBAS ENGINEERING CONSULTANTS, LTD.
 SUCCESSORS TO
 J.P. GTR
 FTJ TLU 5/14/70
 DATE REVISION
 CHECKED
 PROJECT
 ATHENS COUNTY
 STA. 752+21.94 N.B.
 U.S. 33 OVER RELOCATED HOCKING RIVER
 BRIDGE N° ATH-33-1584 L
 TRANSVERSE SECTION
 12/54



SECTION 53~53



SECTION 52~52



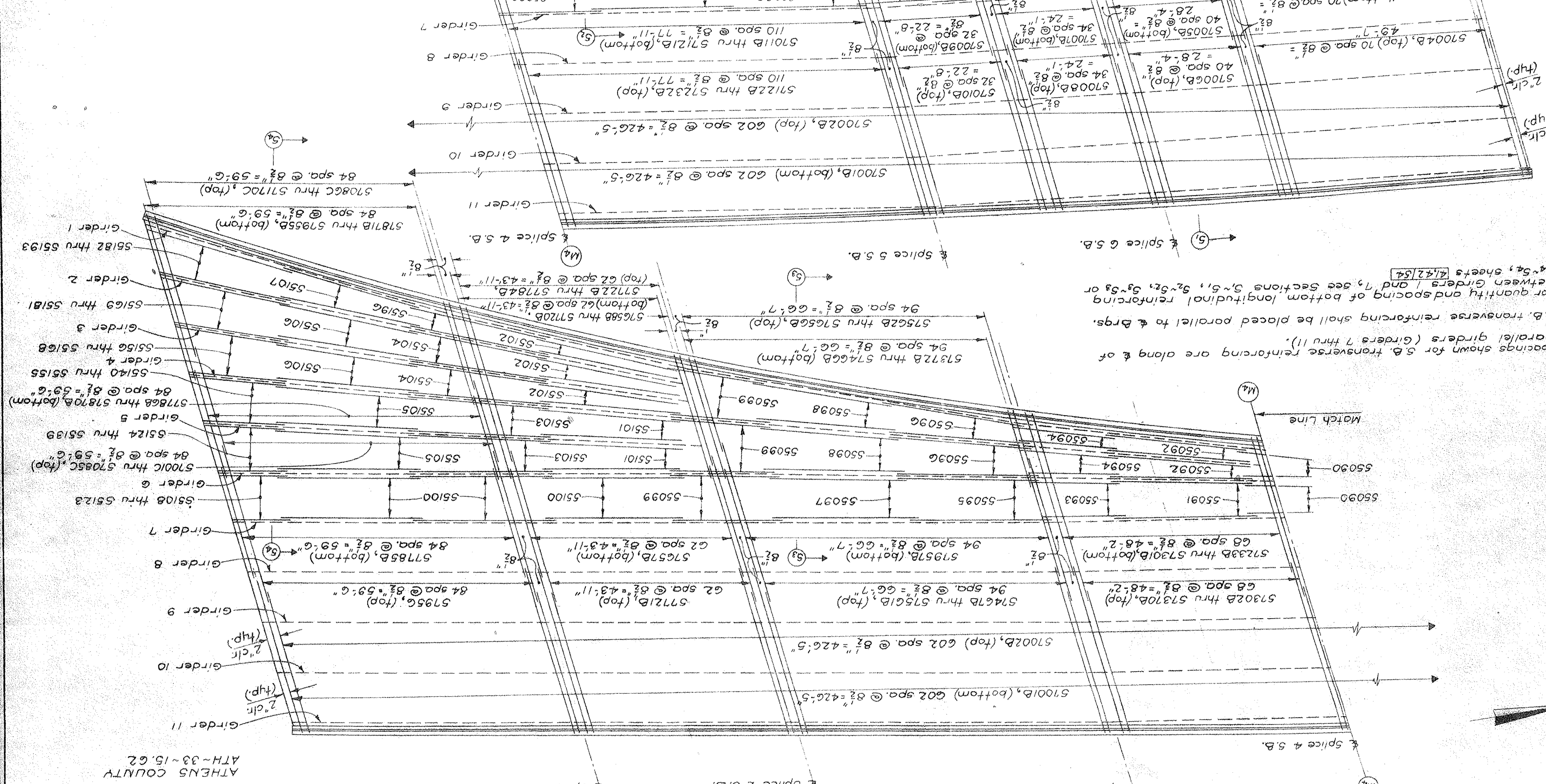
Bar No	"A" spa	"B" spacing	"C" eq. spa.
55096	2	1'-0"	11
55097	1	1'-1"	4
55098	2	0'-10 1/2"	8
55099	-	-	2
55094	2	0'-9 1/2"	7
55095	-	-	3
55096	1	1'-1"	4
55097	2	1'-0"	11
55098	2	0'-9 1/2"	7
55099	-	-	11

Bar No	"A" spa	"B" spacing	"C" eq. spa.
55087	-	-	2
55088	-	-	2
55089	-	-	3
55090	1	1'-1"	4

ATHENS COUNTY
 ATH-33-15.62
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 2
 DATE
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 Consulting Civil Engineers
 13000 N. High School Rd.
 Columbus, Ohio 43240
 SUCCESSORS TO
 ATHENS MERCER UNDERWOOD, LTD.

5 B. SLAB PLAN
 BRIDGE N^o ATH-33-15B4 L
 U.S. 33 OVER RELOCATED HOCKING RIVER
 ATHENS COUNTY STA. 756+42.50 N.B.
 STA. 752+21.94 N.B.
 DATE 5/14/70
 FTJ
 J.P. GTR
 REVISIONS TO



Showing bottom longitudinal reinforcing between girders 1 and 7, and top and bottom transverse reinforcing.

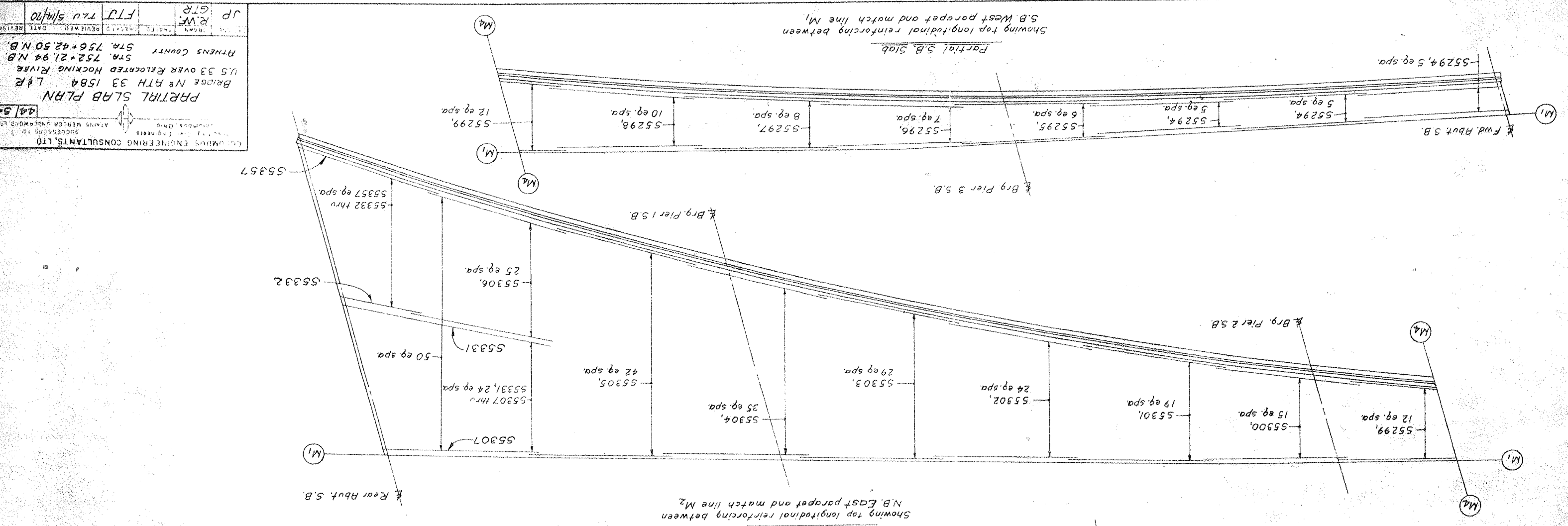
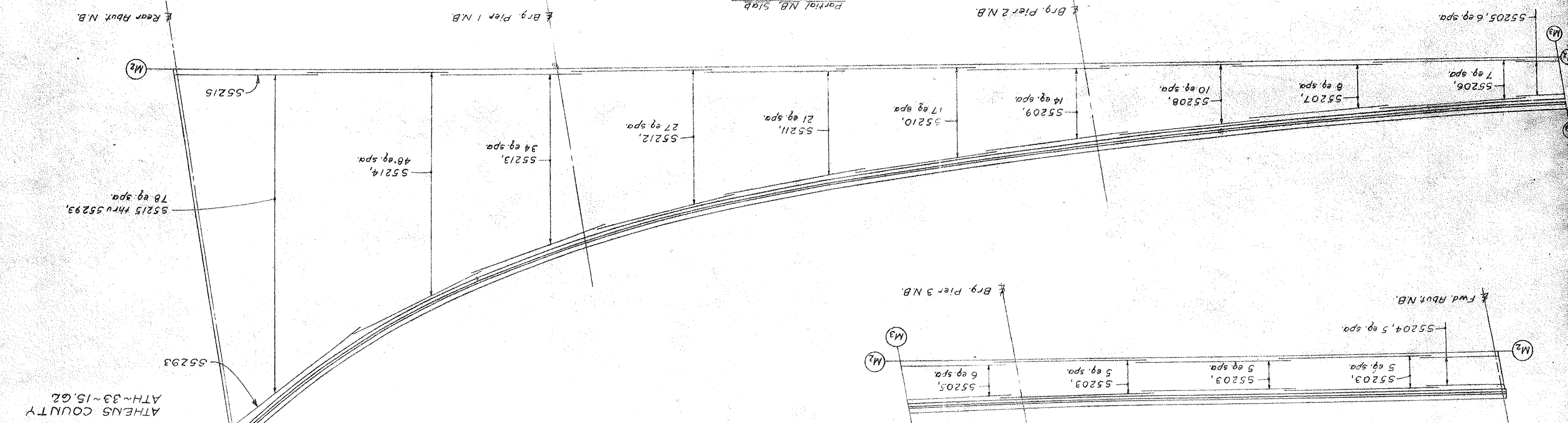
5 B. SLAB PLAN

Spacings shown for 5 B. transverse reinforcing are along & of parallel girders (Girders 7 thru 11).
 5 B. transverse reinforcing shall be placed parallel to & Brgs.
 For quantity and spacing of bottom longitudinal reinforcing between Girders 1 and 7, see Sections 5-5, 5-5₁, 5-5₂, 5-5₃ or 5-5₄, sheets 41, 42, 54

114	127
NO. 50	PROJECT
2	OHIO

COLONY'S ENGINEERING CONSULTANTS, LTD.
 3000 SHEPPARD AVENUE EAST, SUITE 100
 SCARBOROUGH, ONTARIO M1S 1T7
 TEL: (416) 291-1111
 FAX: (416) 291-1112
 PROJECT: PARTIAL SLAB PLAN
 BRIDGE # RTH 33 1584 L&R
 U.S. 33 OVER RELOCATED HOCKING RIVER
 ATHENS COUNTY STR. 752+21.94 N.B.
 STR. 756+42.50 N.B.
 DATE RECEIVED: 5/14/10
 REVIEWED: FTJ
 DRAWN: J.P. GTR

115	DATE	PROJECT
2	OHIO	
1271		

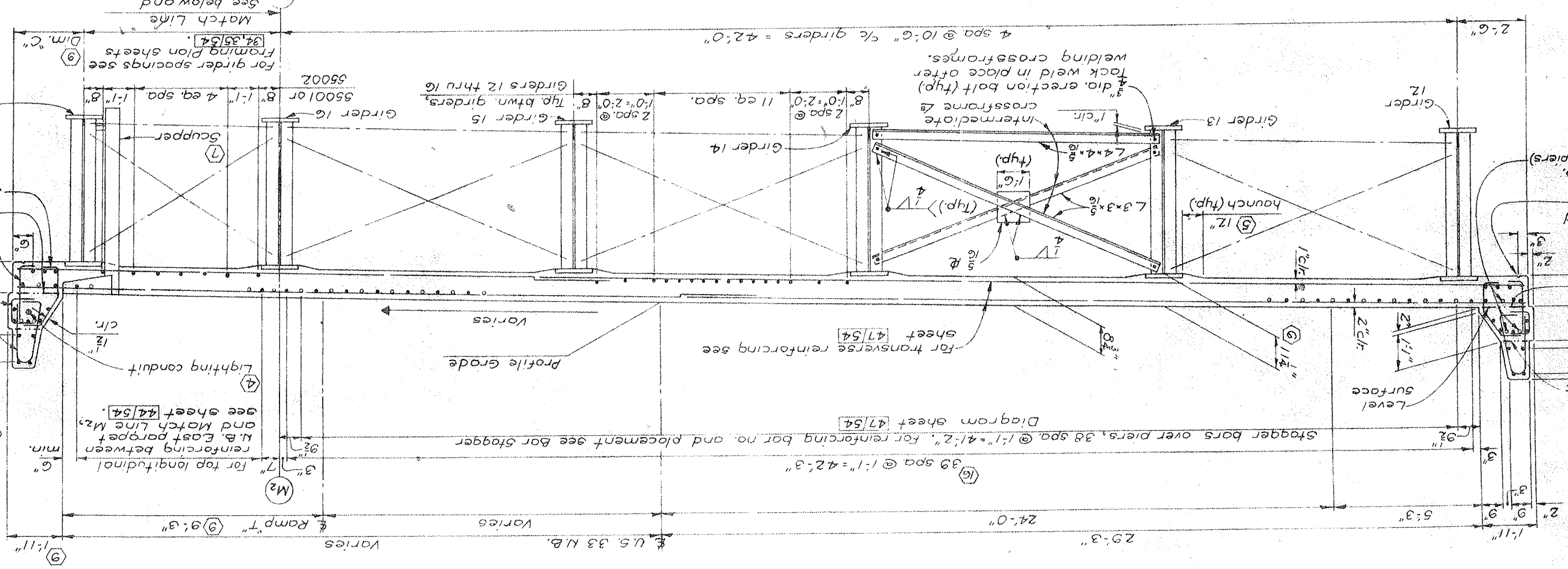


116	
127	
PROJECT	
OHIO	2
STATE	

TABLE OF N.B. SLAB CANTILEVERS

ft. Brq	4 pt	1.0
ft. Brq	1 pt	1.85
Splice 1	ft. Brq	1.10
Splice 2	ft. Brq	2.75
Splice 3	ft. Brq	2.75
Splice 4	ft. Brq	1.85
Splice 5	ft. Brq	2.25
Pier 3	ft. Brq	3.85
Pier 5	ft. Brq	2.05
Pier 6	ft. Brq	2.65
ft. Brq	4 pt	2.6
ft. Brq	4 pt	2.6

ATHENS COUNTY
ATH-33-15.62



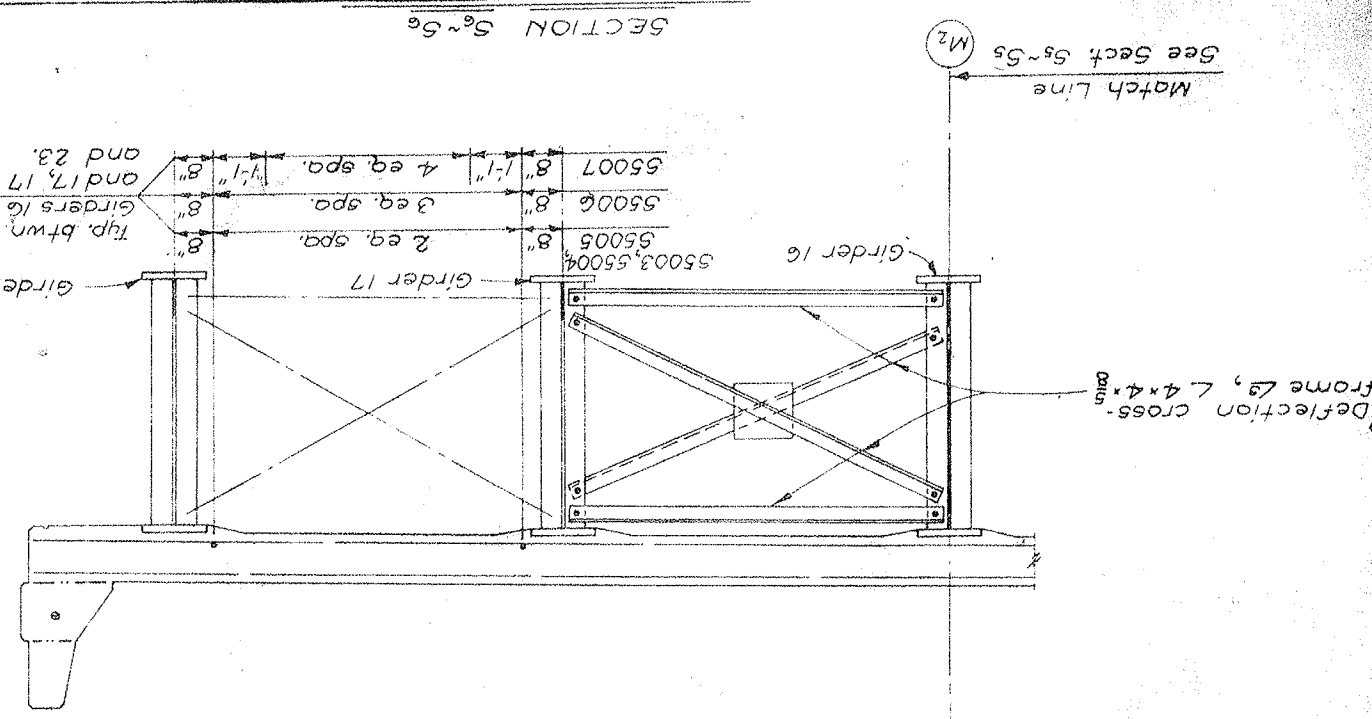
SECTION 5^a-5^b, TRANSVERSE SECTION U.S. 33 N.B.

116	DATE	FTT	7/10	DATE	5/14/70
PROJECT					
OHIO	2				
STATE					

ENGINEERING CONSULTANTS, LTD.
1812 OXFORD ST. CLEVELAND, OHIO
REGISTERED PROFESSIONAL ENGINEERS UNDER OHIO LAWS

Bridge rolling details typical for both sides of structure.
welded to the stiffener.
have the bottom side of the horizontal leg
exception that the top horizontal angle shall
on intermediate crossframes with the
on the framing plan. Welding shall be as indicated

- for additional notes see sheet 41/54.
Dimension is radial to E Ramp "T".
- 55202 to lap 55200 except to miss parapet joints.
- N.B. East parapet. Field bend when required.
Use one 55366 per line of longitudinal reinforcing in
reinforcing from N.B. West parapet to Match Line M₂.
55198, or 55366. Use one 55198 per line of longitudinal
panel reinforcing and stager bars shall be 55197 and
N.B. West parapet and Match Line M₂ (except parapet
- All longitudinal reinforcing in bridge rollings and between
longitudinal reinforcing between Girders 16 and 23
see sheet 47/54.
- for additional information on placement of bottom
longitudinal reinforcing between Girders 16 and 23
see sheet 47/54.



SECTION 5^a-5^b
See Sect 5^a-5^b
Match Line
M₂

13'-6" to E
U.S. 33 N.B.
M₂

see below and
M₂ sheet 46/54
Match Line

For girder spacings see
Framing Plan sheets
34, 35, 34
Dim. "C"

reinforcing between
min. N.B. East parapet
and Match Line M₂.
see sheet 44/54.
55360, Panel 1
55361, Panel 2
55199
55200 to lap
55201 to lap
55200
55200 spa. @ 1'-0"
55199 spa. @ 1'-0"
Level surface
Scupper

Diagram sheet 47/54
sheet 47/54
for transverse reinforcing see

Intermediate crossframe L 4x4x3/8
3" dia. erection bolt (typ)
Tack weld in place after
welding crossframes.
4 spa @ 10'-0" c/c girders = 42'-0"

55364, Panel 1
55361, Panel 2
Const Jt
Level surface
1/2" dia half round
drip groove
Stagger bars (typ)
in parapet over piers

Varies
Varies
Varies
Varies
Varies

29'-3"
24'-0"
5'-3"
9'-9"
1'-11"

Varies
Ramp "T" @ 9'-3"
9'-9"

U.S. 33 N.B.

9'-9"

U.S. 33 N.B. M2

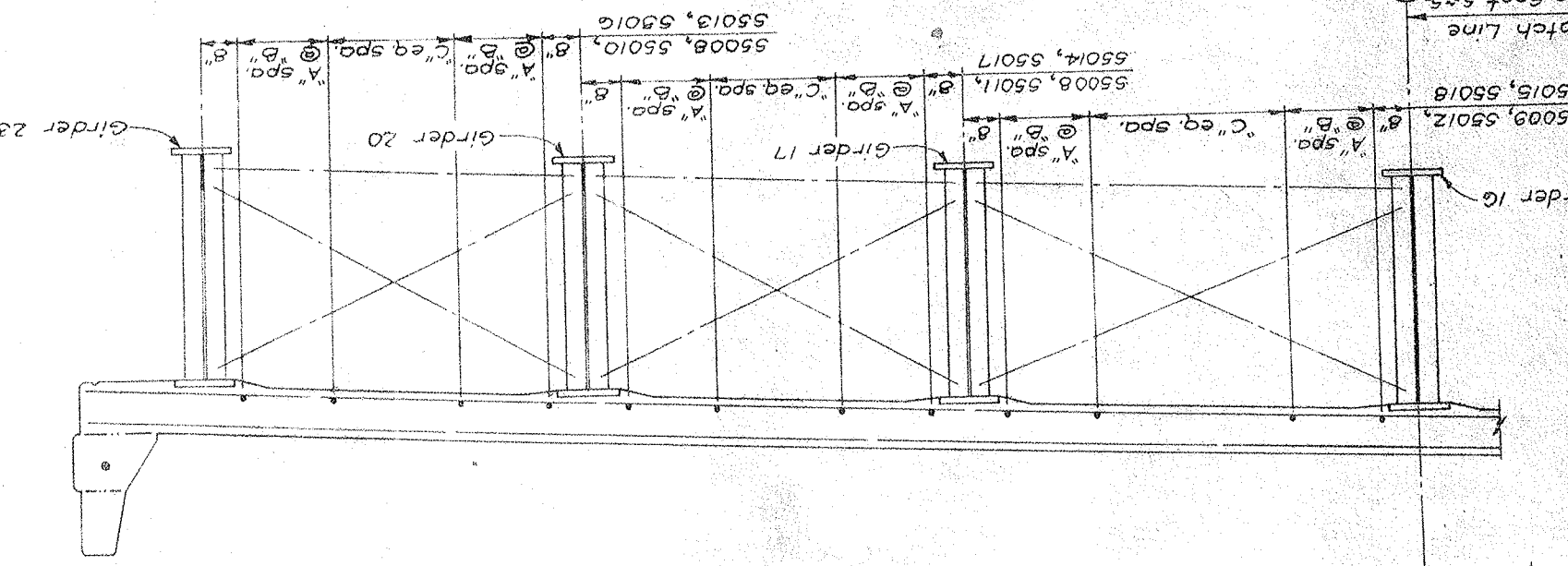
13'-6" to E M2

Match Line

See Sect 57-58

Sheet 45/54 M2

U.S. 33 N.B. M2

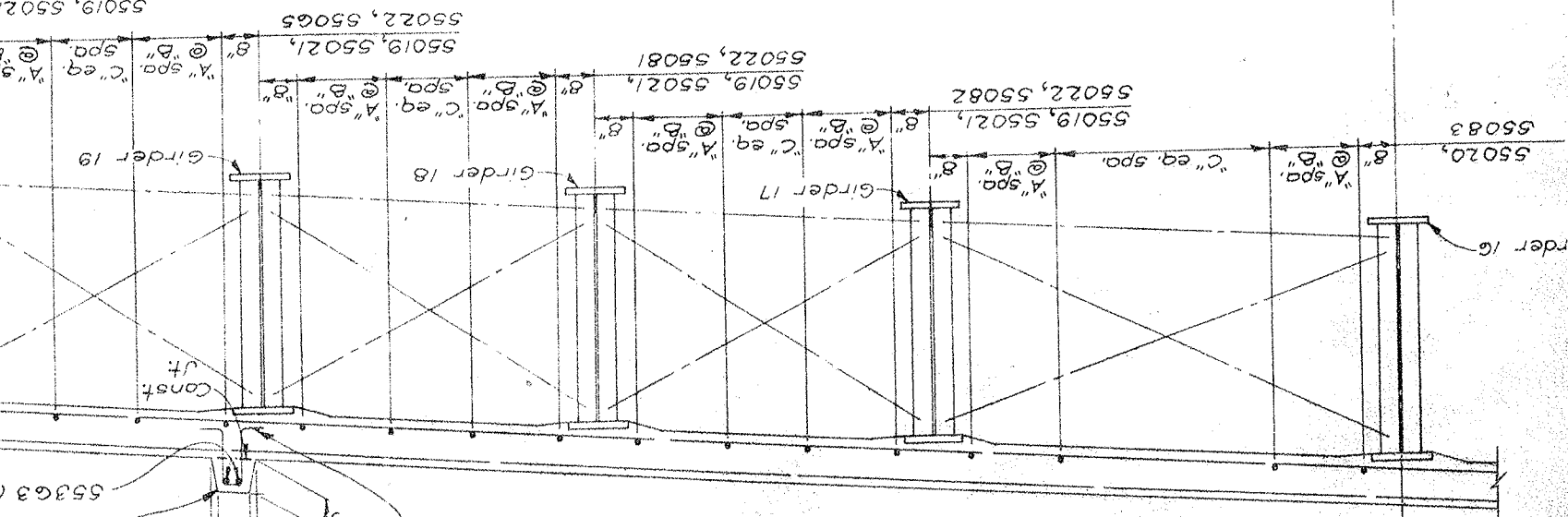


SECTION 57-58

BAR N°	"A" "eq"	"B" spa.	spacing
55008	2	-	-
55009	1	1'-4"	5
55010	-	-	2
55011	-	-	3
55012	2	0'-9 3/4"	7
55013	-	-	3
55014	1	1'-4"	5
55015	2	0'-10 1/2"	8
55016	2	0'-10 1/2"	8
55017	2	0'-9 3/4"	7
55018	2	1'-0"	11

All dimensions for curb are radial to E Ramp T

553G2, spa @ 1'-5"
Const
1.0" 1/2" 9" 1/2"



SECTION 58-58

BAR N°	"A" "eq"	"B" spacing	"C" "eq" spa.
55019	2	-	2
55020	2	1'-0"	11
55021	-	-	2
55022	1	1'-4"	5
55023 thru 55035	2	0'-10 1/2"	8
55036 thru 55048	2	0'-10 1/2"	8
55049 thru 55064	2	1'-0"	11
55065	2	1'-0"	11
55081	2	1'-0"	11
55082, 55083	2	1'-0"	11

NOTE

For location of curb see Site Plan, sheet 1/54

ATHENS COUNTY ATH-33-15.62

177	PROJECT	2	OHIO
-----	---------	---	------

26/54	DATE	FTJ	REVISED	DATE	REVISED	FTJ	REVISED	DATE	REVISED	J.P. GTR
TRANSVERSE SECTION										
BRIDGE N° ATH-33-15.62										
U.S. 33 OVER RELOCATED HOCKING RIVER										
ATHENS COUNTY STA. 752+21.94 N.B.										
STA. 756+42.50 N.B.										

COLUMBUS ENGINEERING CONSULTANTS, LTD.
 Consulting Civil Engineers
 10000 Lakeside Blvd., Columbus, Ohio 43240
 47154

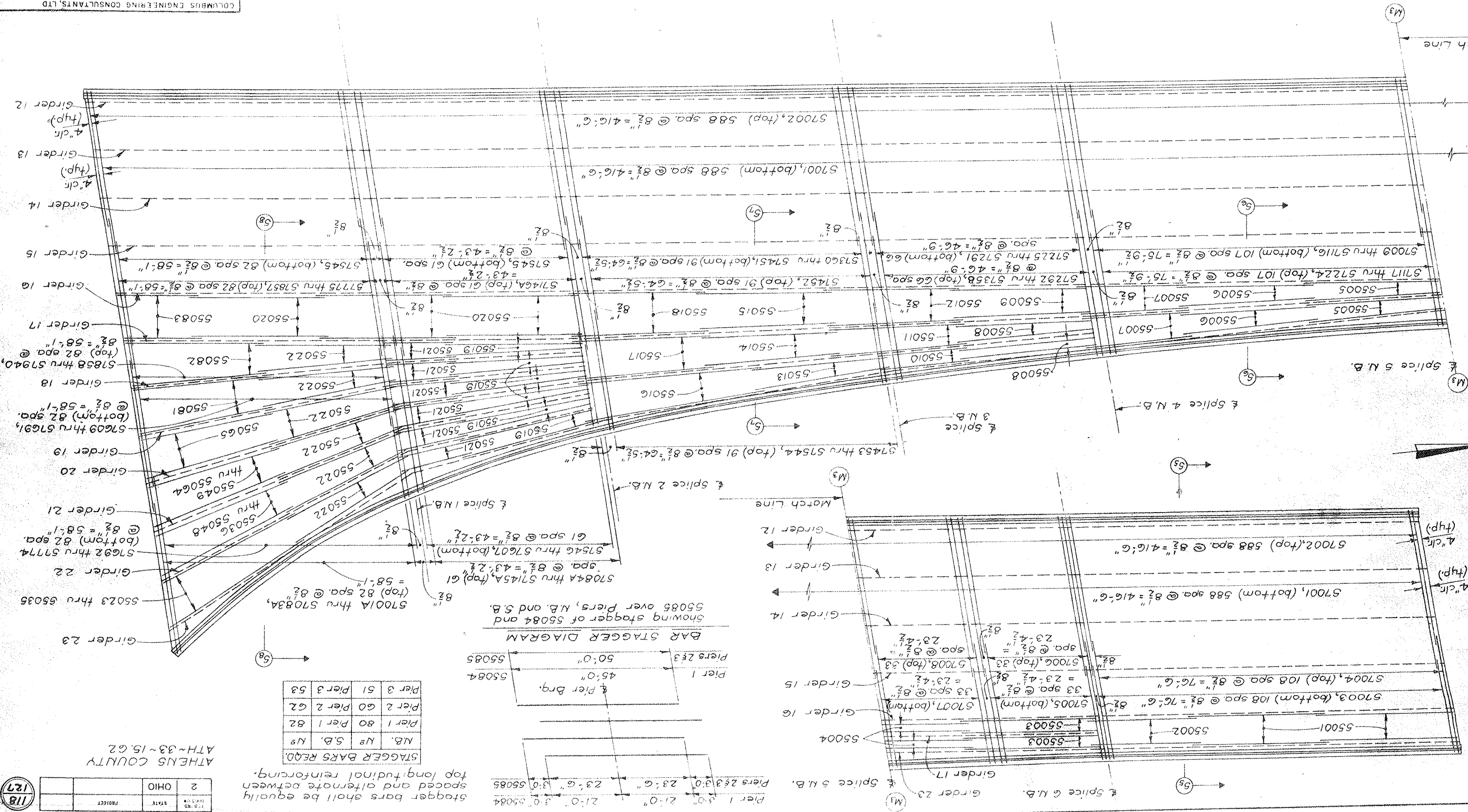
N.B. SLAB PLAN
 BRIDGE No ATH-33-1584 R
 U.S. 33 OVER RELOCATED HOOKING RIVER
 ATHENS COUNTY STA. 752+21.94 N.B.
 STA. 756+42.50 N.B.

J.P. GTR
 F.T.J. 7/20 5/14/70
 DATE REVISIONS

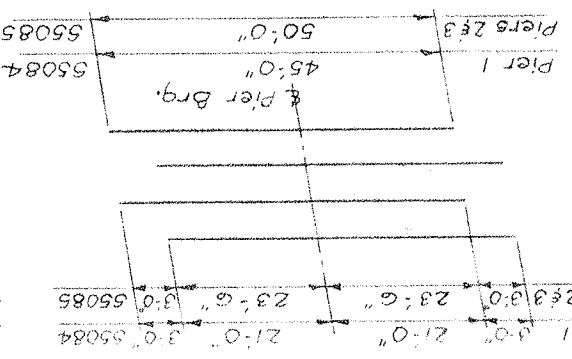
N.B. transverse reinforcing shall be
 placed parallel to & Brgs.

Showing bottom longitudinal reinforcing between
 girders 16 and 23, and top and bottom transverse
 reinforcing.
 For quantity and spacing of bottom longitudinal reinforcing
 between girders 16 and 23, see Sections 53-53, 54-54,
 55-55 or 56-56, sheets 45, 46, 54

N.B. SLAB PLAN



BAR STAGGER DIAGRAM



Stagger bars shall be equally
 spaced and alternate between
 top and bottom longitudinal reinforcing.

N.B. No	S.B. No	Pier
57001A thru 57083A	55023 thru 55035	Pier 1 80 Pier 1 82
57001A thru 57083A	55023 thru 55035	Pier 2 60 Pier 2 62
57001A thru 57083A	55023 thru 55035	Pier 3 51 Pier 3 53

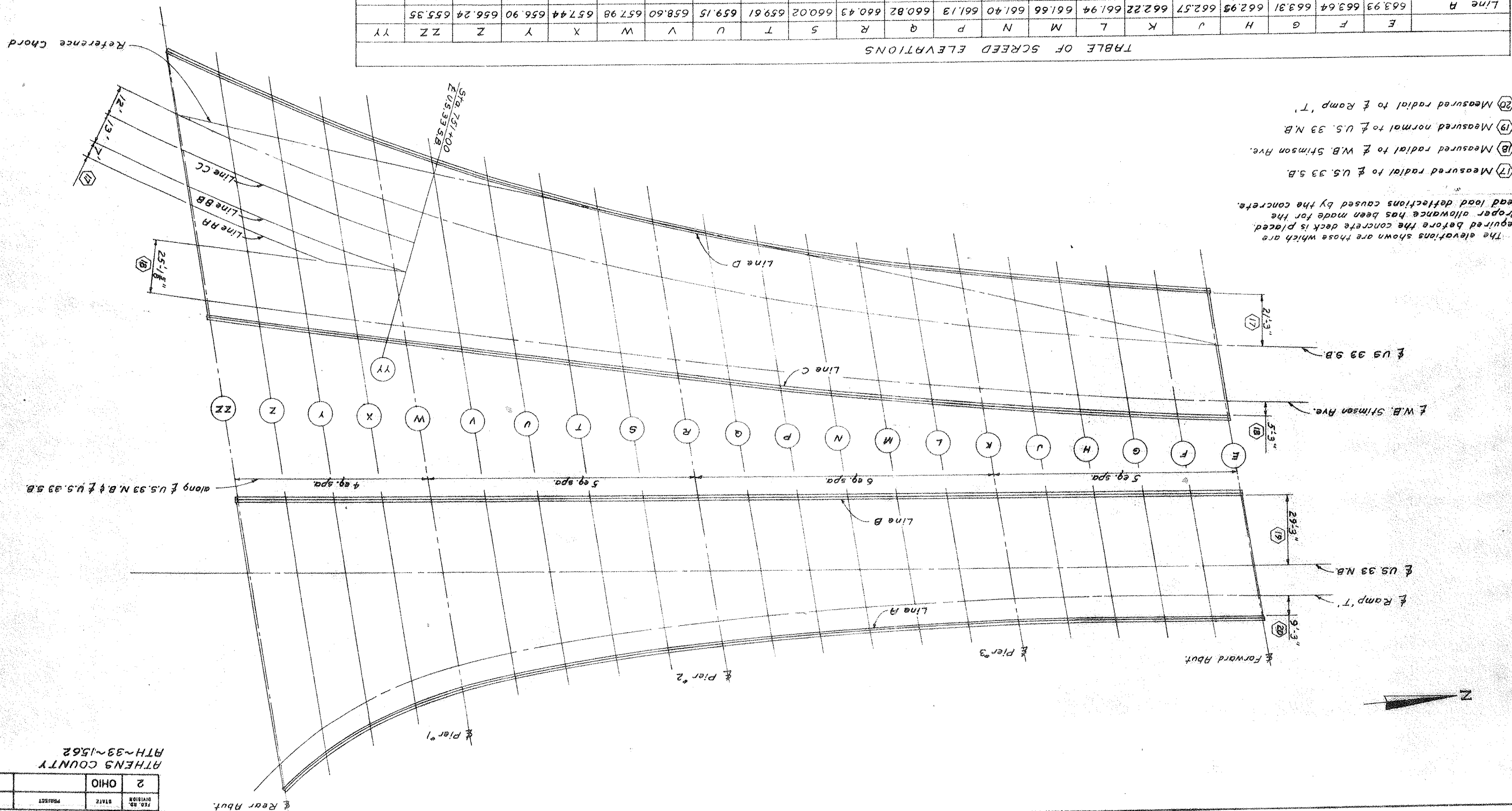
ATHENS COUNTY
 ATH-33-15.62

NO.	DATE	PROJECT
2	OHIO	118

DESIGNED DRAWN TRACED CHECKED REVISIONS DATE REVISIONS
 J.P. R.W.F. PWT T.V. 5/14/70
 COLUMBUS ENGINEERING CONSULTANTS, LTD.
 CONSULTING CIVIL ENGINEERS
 COLUMBUS, OHIO
 SUCCESSORS TO
 ATMS MERCE UNDERWOOD, LTD.
 48/58
 BRIDGE NO. ATH-33-1564 L&R
 US 33 OVER RELOCATED HOCKING RIVER
 ATHENS COUNTY
 STA. 752+21.94 NB
 STN. 758+48.50 NB

TABLE OF SCREED ELEVATIONS

Line A	663.93	663.64	663.31	662.98	662.57	662.22	661.94	661.66	661.40	661.13	660.82	660.43	660.02	659.61	659.15	658.60	657.98	657.44	656.90	656.24	655.35
Line B	664.57	664.28	663.94	663.59	663.23	662.89	662.62	662.39	662.17	661.94	661.74	661.55	661.43	661.35	661.27	661.20	661.17	661.20	661.25	661.30	661.37
Line C	665.13	665.07	664.96	664.84	664.67	664.49	664.37	664.24	664.11	663.95	663.74	663.48	663.25	663.02	662.77	662.49	662.21	662.03	661.89	661.75	661.60
Line D	663.86	663.61	663.29	662.97	662.61	662.26	661.97	661.65	661.34	661.04	660.75	660.45	660.20	659.95	659.67	659.37	658.80	658.57	658.29	657.98	
Line RA	661.61	660.69	660.97	661.23	661.42	661.56	661.56	661.42	661.23	660.97	660.69	660.54	660.23	661.40							
Line BB	661.51	660.92	661.21	661.42	661.52	661.57	661.57	661.42	661.21	660.92	660.54	660.23	661.40								
Line CC	661.61	660.69	660.97	661.23	661.42	661.56	661.56	661.42	661.23	660.97	660.69	660.54	660.23	661.40							



The elevations shown are those which are required before the concrete deck is placed. Proper allowance has been made for the dead load deflections caused by the concrete.

- (17) Measured radial to U.S. 33 S.B.
- (18) Measured radial to W.B. Stimson Ave.
- (19) Measured normal to U.S. 33 N.B.
- (20) Measured radial to Ramp 'T'

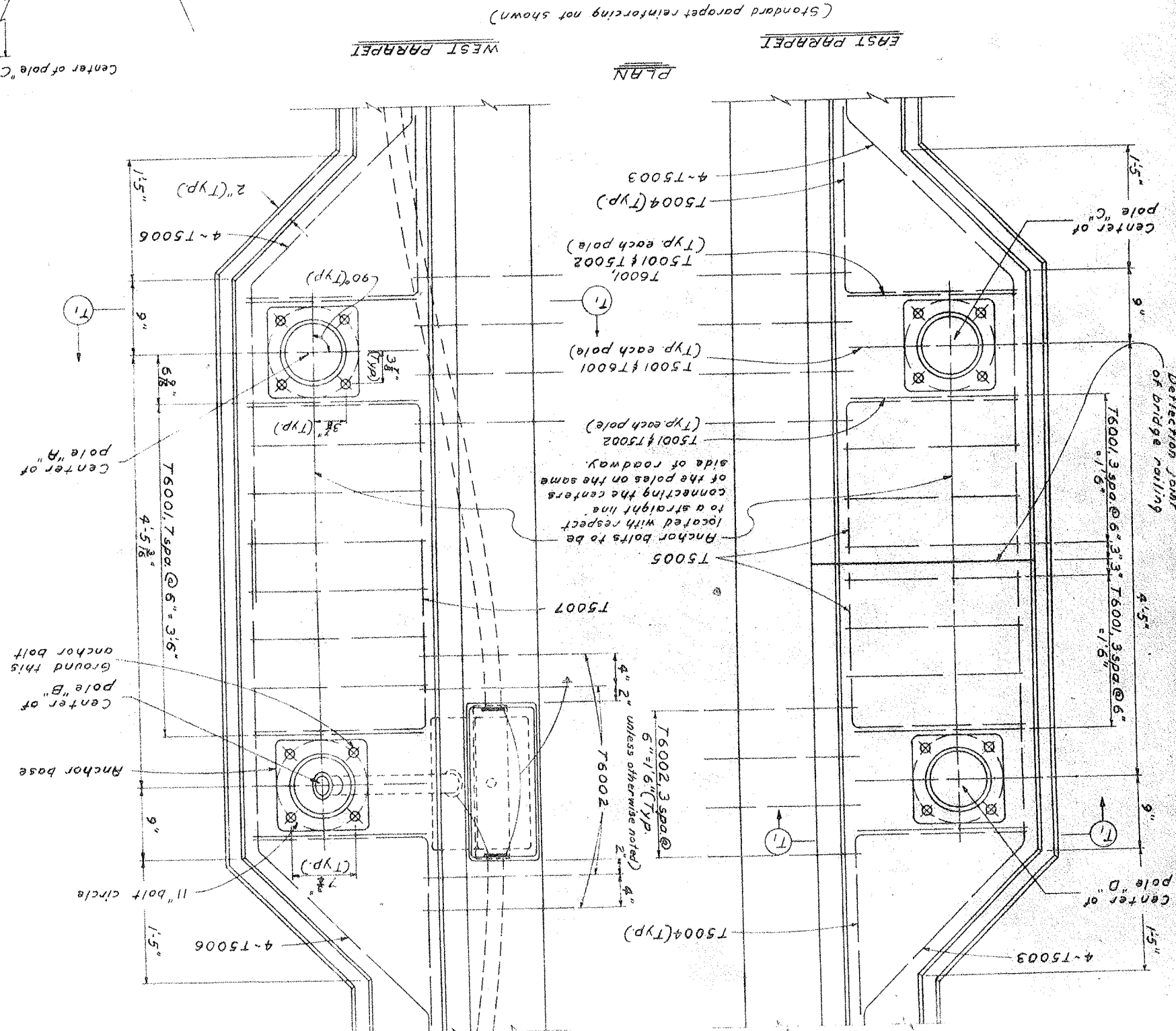
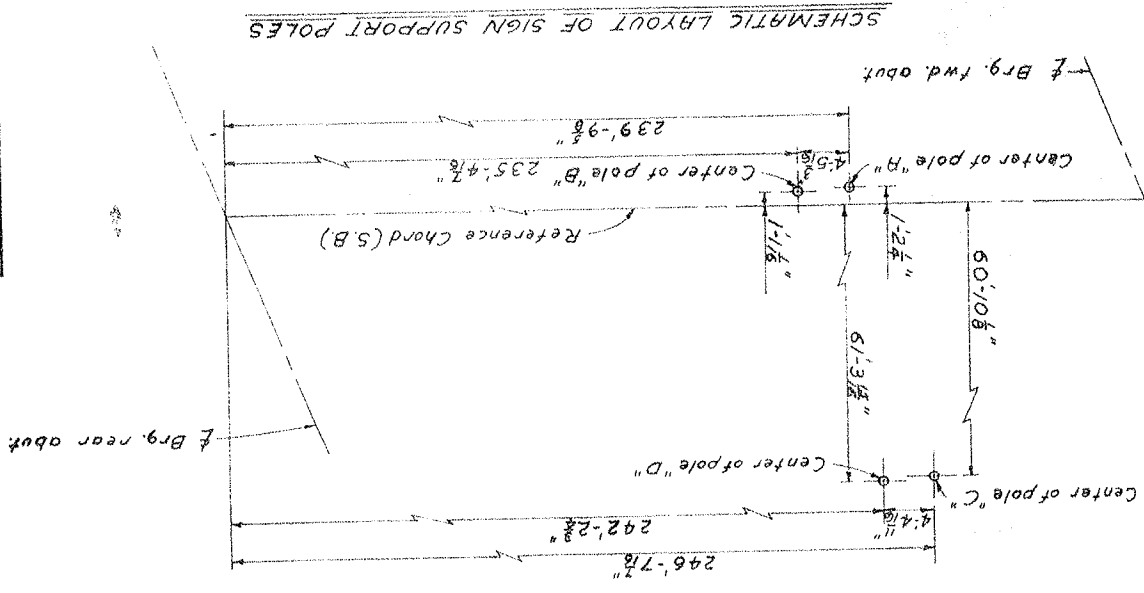
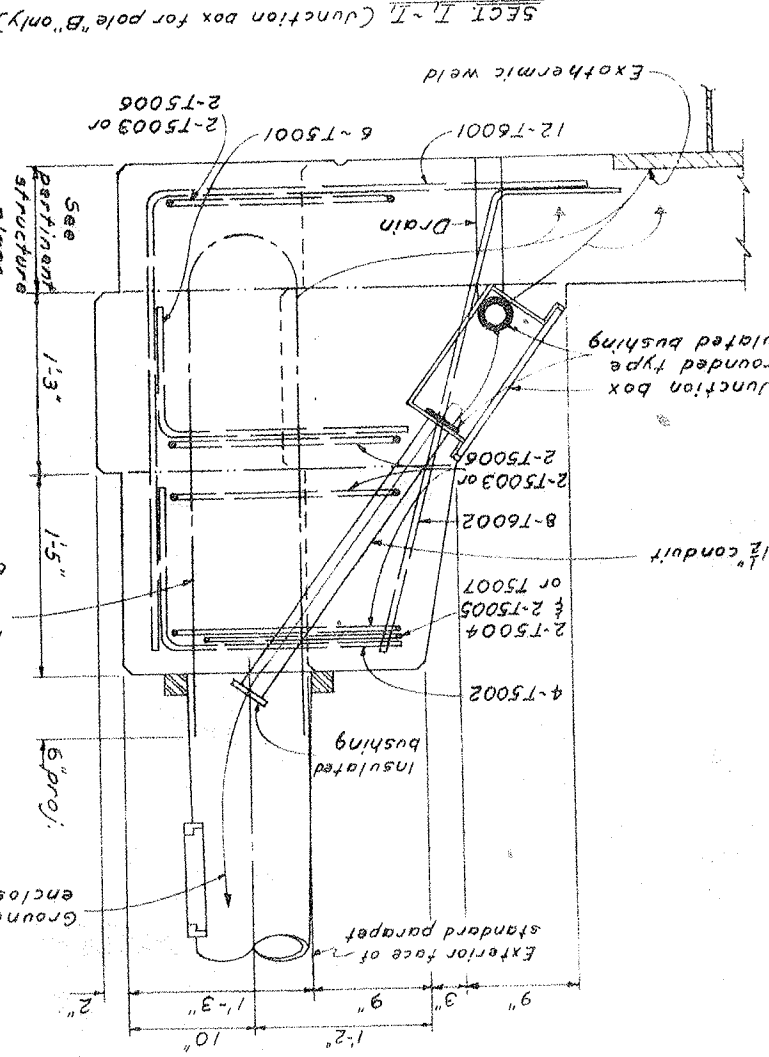
ATHENS COUNTY
 ATH-33-1562
 DIVISION STATE PROJECT
 2 OHIO
 119 127

NOTE
See Lighting Sheet 127 for details of junction box.
Anchor "U" bolts, 1/2" dia x 9" long (developed length) 6/8" min.
Anchor "U" bolts to be included with Traffic Control quantities, Item 616, for payment. Installations of anchor bolts is to be included with Item 511, Class C, Superstructure Concrete. The reinforcing steel for the supports is included in the bar list and is included with the structure quantities for payment.
See Overhead Sign Details, sheet 38 for details of sign truss. Sign truss included with Traffic Control quantities for payment.

NOTE
See Lighting Sheet 127 for details of junction box.
Conduit: All conduit shall be steel, galvanized inside and out in accordance with 711.02. Quantities: structure junction box is included with lighting quantities for payment.
Anchor "U" bolts to be included with Traffic Control quantities, Item 616, for payment. Installations of anchor bolts is to be included with Item 511, Class C, Superstructure Concrete. The reinforcing steel for the supports is included in the bar list and is included with the structure quantities for payment.
See Overhead Sign Details, sheet 38 for details of sign truss. Sign truss included with Traffic Control quantities for payment.

NOTE
See Overhead Sign Details, sheet 38 for details of sign truss. Sign truss included with Traffic Control quantities for payment.
See Overhead Sign Details, sheet 38 for details of sign truss. Sign truss included with Traffic Control quantities for payment.
See Overhead Sign Details, sheet 38 for details of sign truss. Sign truss included with Traffic Control quantities for payment.

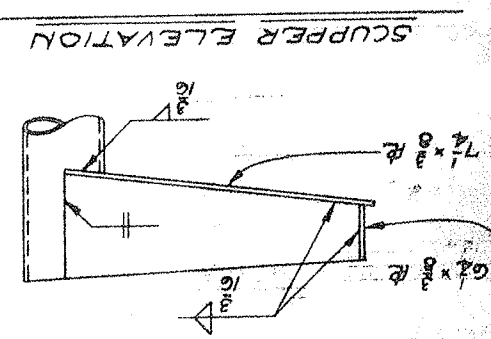
DESIGNED	DATE	REVISION
FTJ RVT	5/14/70	
CHECKED		
TRACED		
DRAWN		
COLUMBUS ENGINEERING CONSULTANTS, LTD. COLUMBUS, OHIO ATTN: MR. J. W. UNDERWOOD, LTD.		
BRIDGE SIGNING DETAILS BRIDGE No ATH-33-15.62 U.S. 33 OVER RELOCATED HOCKING RIVER ATHENS COUNTY Sta. 752+21.94 N.B. Sta. 756+42.50 N.B.		



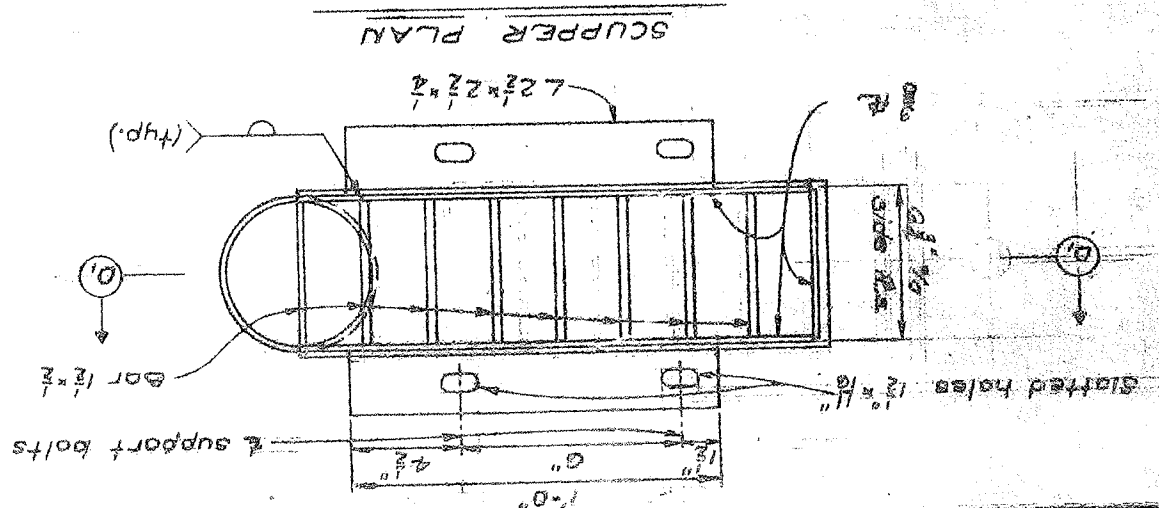
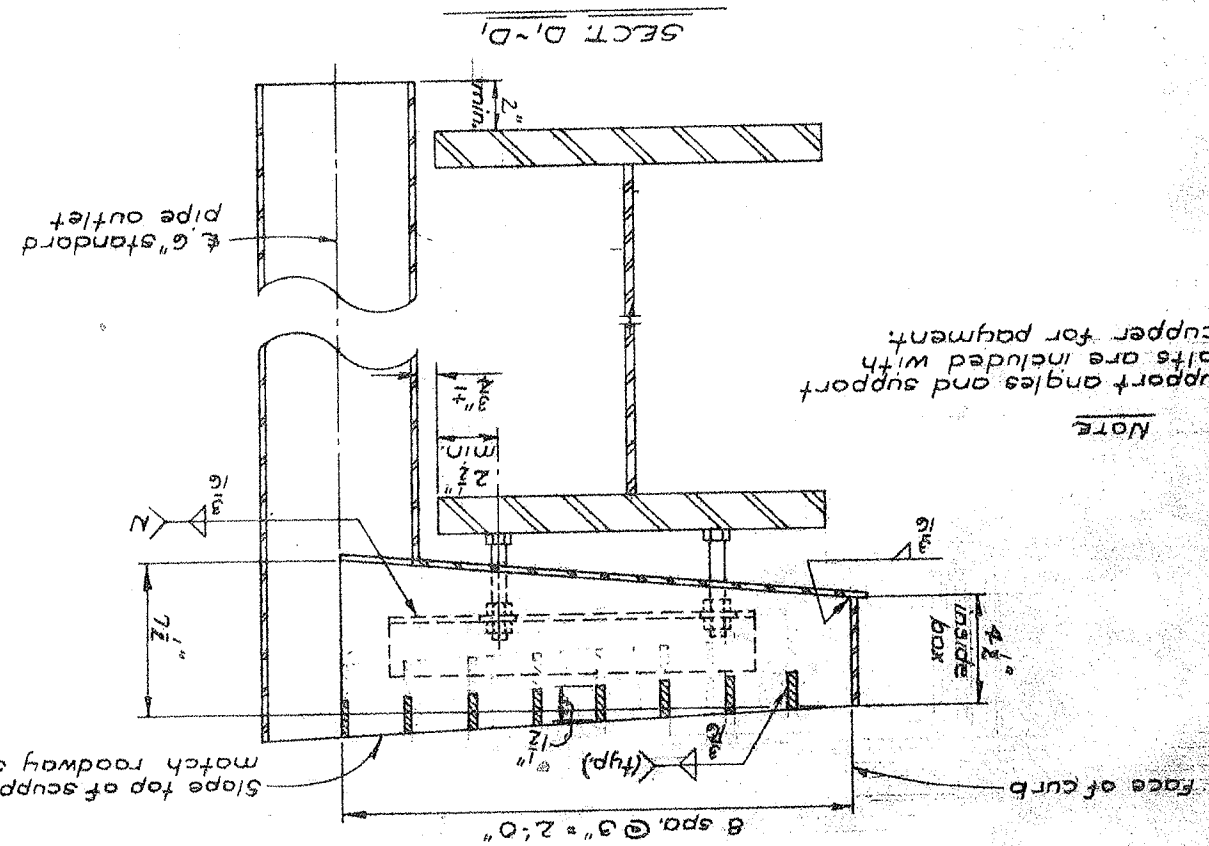
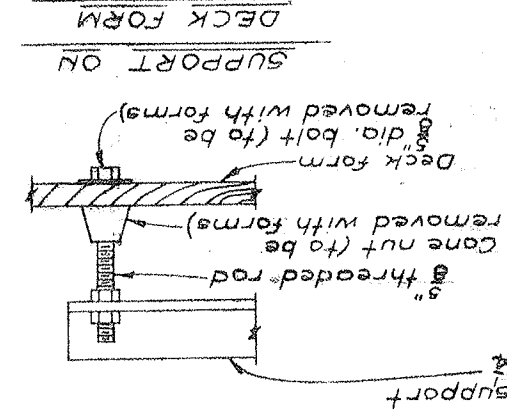
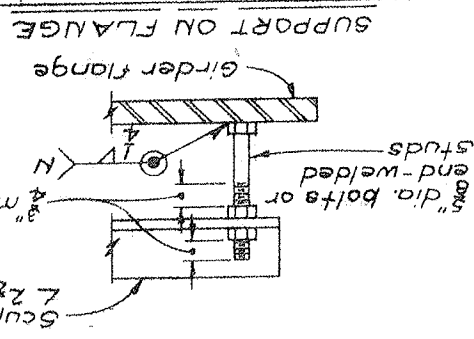
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.P. GTR					5/14/70	PLATE 7.0

SPECIAL DETAILS
BRIDGE NO. ATH-33-15B4 L&R
U.S. 33 OVER RELOCATED HOCKING RIVER
ATHENS COUNTY
STA. 752+21.94 A.B.
STA. 750+42.50 N.B.

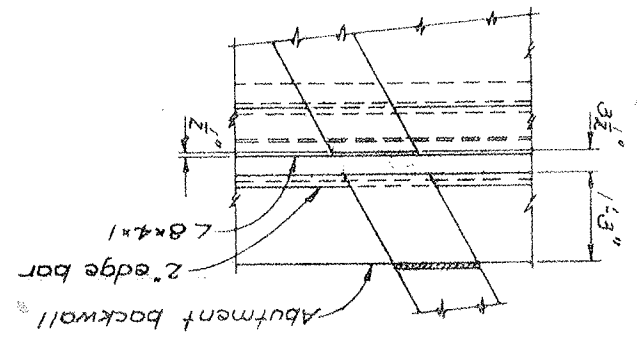
COLUMBUS ENGINEERING CONSULTANTS, LTD.
COLUMBUS, OHIO
CONSULTING CIVIL ENGINEERS
ALFRED C. HENNINGER, INC.
ALFRED H. UNDERWOOD, LTD.



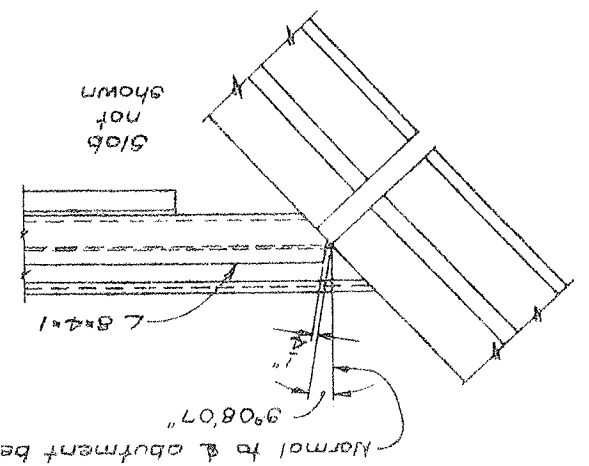
NOTE
Support angles and support bolts are included with scupper for payment.



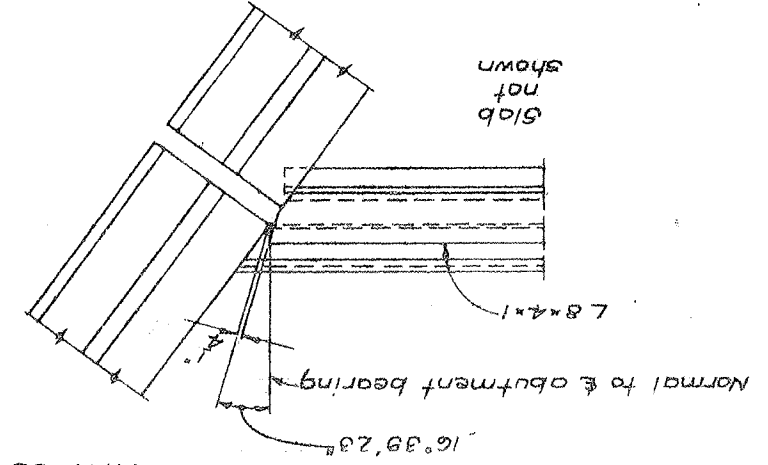
N.B. REAR ABUTMENT END DAM
UNDER RAMP "T" CURB



N.B. REAR ABUTMENT END DAM
AT RAMP "T" PARAPET



S.B. REAR ABUTMENT END DAM
AT U.S. 33 S.B. PARAPET



ATHENS COUNTY
ATH-33-15.02

2	OHIO	
STA.	PROJECT	
NO.		

127

• indicates length varies by fabricated amount

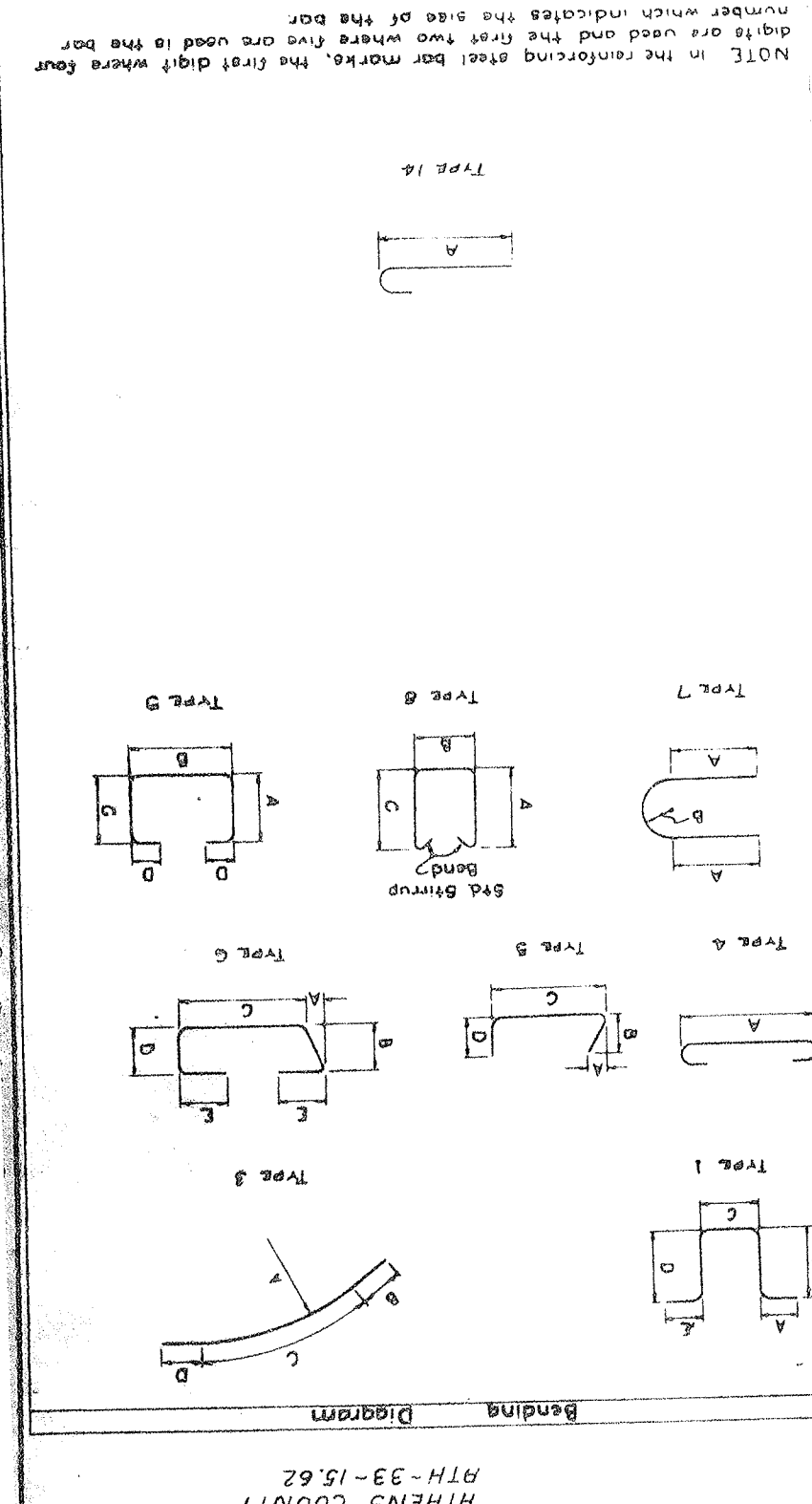
REINFORCING

STEEL

LIST

Mark	No	Length	Weight	Type	Mark	No	Length	Weight	Type
P5001	2	10-0	1051	PIER	P7001	26	8-9	485	PIER
P5002	2	10-0	1051	PIER	P7002	26	8-9	485	PIER
P5003	2	10-0	1051	PIER	P7003	26	8-9	485	PIER
P5004	2	10-0	1051	PIER	P7004	26	8-9	485	PIER
P5005	2	10-0	1051	PIER	P7005	26	8-9	485	PIER
P5006	2	10-0	1051	PIER	P7006	26	8-9	485	PIER
P5007	2	10-0	1051	PIER	P7007	26	8-9	485	PIER
P5008	2	10-0	1051	PIER	P7008	26	8-9	485	PIER
P5009	2	10-0	1051	PIER	P7009	26	8-9	485	PIER
P5010	2	10-0	1051	PIER	P7010	26	8-9	485	PIER
P5011	2	10-0	1051	PIER	P7011	26	8-9	485	PIER
P5012	2	10-0	1051	PIER	P7012	26	8-9	485	PIER
P5013	2	10-0	1051	PIER	P7013	26	8-9	485	PIER
P5014	2	10-0	1051	PIER	P7014	26	8-9	485	PIER
P5015	2	10-0	1051	PIER	P7015	26	8-9	485	PIER
P5016	2	10-0	1051	PIER	P7016	26	8-9	485	PIER
P5017	2	10-0	1051	PIER	P7017	26	8-9	485	PIER
P5018	2	10-0	1051	PIER	P7018	26	8-9	485	PIER
P5019	2	10-0	1051	PIER	P7019	26	8-9	485	PIER
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P5081	2	10-0	1051	PIER	P7081	26	8-9	485	PIER
P5082	2	10-0	1051	PIER	P7082	26	8-9	485	PIER
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P5084	2	10-0	1051	PIER	P7084	26	8-9	485	PIER
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P5086	2	10-0	1051	PIER	P7086	26	8-9	485	PIER
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P5089	2	10-0	1051	PIER	P7089	26	8-9	485	PIER
P5090	2	10-0	1051	PIER	P7090	26	8-9	485	PIER
P5091	2	10-0	1051	PIER	P7091	26	8-9	485	PIER
P5092	2	10-0	1051	PIER	P7092	26	8-9	485	PIER
P5093	2	10-0	1051	PIER	P7093	26	8-9	485	PIER
P5094	2	10-0	1051	PIER	P7094	26	8-9	485	PIER
P5095	2	10-0	1051	PIER	P7095	26	8-9	485	PIER
P5096	2	10-0	1051	PIER	P7096	26	8-9	485	PIER
P5097	2	10-0	1051	PIER	P7097	26	8-9	485	PIER
P5098	2	10-0	1051	PIER	P7098	26	8-9	485	PIER
P5099	2	10-0	1051	PIER	P7099	26	8-9	485	PIER
P5100	2	10-0	1051	PIER	P7100	26	8-9	485	PIER

NOTE: In the reinforcing steel bar marker, the first digit where four digits are used and the first two where five are used is the bar number which indicates the size of the bar.



COLUMBUS ENGINEERING CONSULTANTS, LTD.
 Consulting Civil Engineers
 Successors to
 Columbus, Ohio

ATHENS COUNTY
 BRIDGE No ATH 33 1584 L&R
 U.S. 33 OVER RELOCATED HOCKING RIVER
 ATHENS COUNTY
 STA. 752+21.94 N.B.
 STA. 756+42.50 N.B.

DATE REVISIONS CHECKED DRAWN
 5/14/70 J.P. R.M.F. F.T.T.

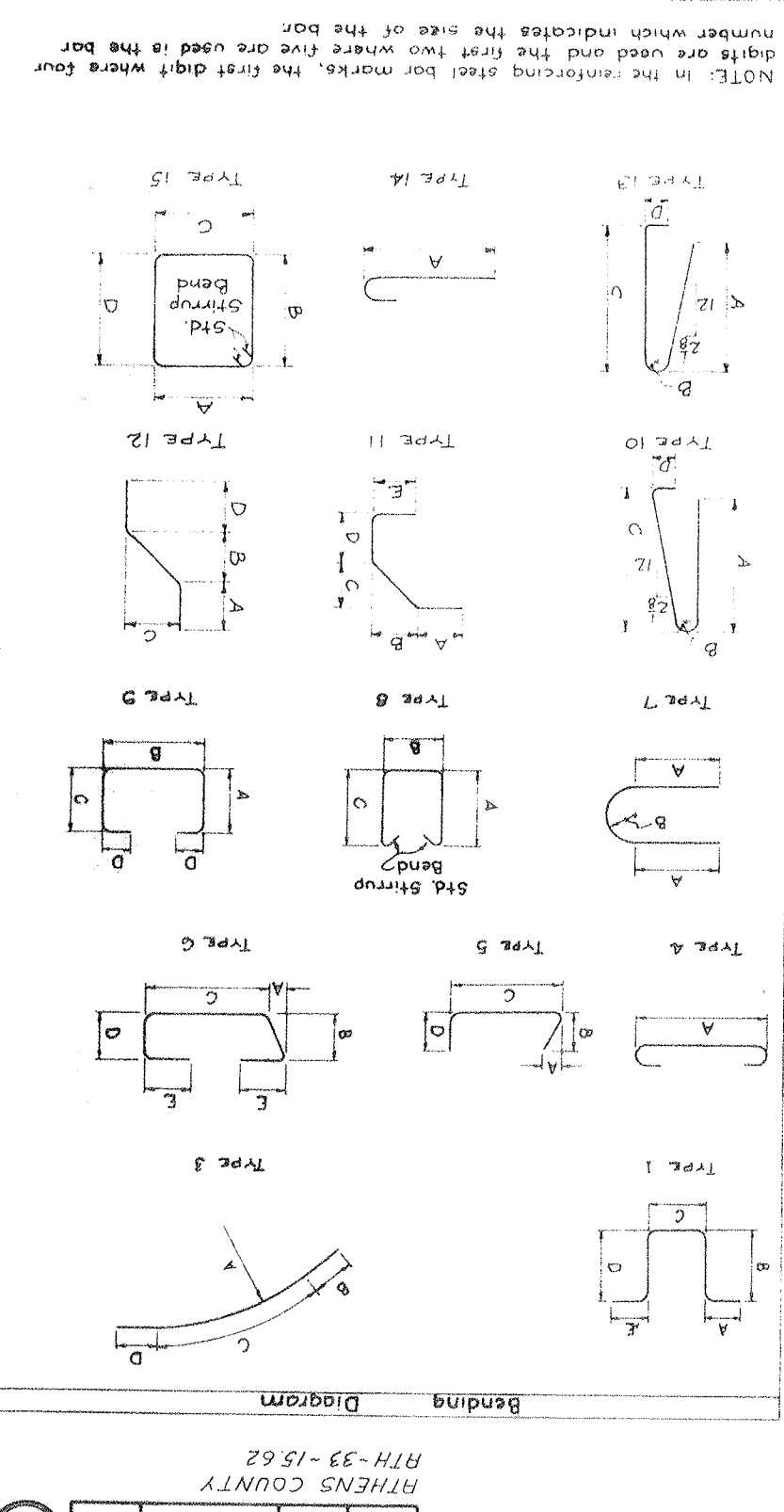
REINFORCING

STEEL

LIST

Mark	N ^o	Length	Weight	Type	A	B	C	D	E	SHP
H75001	90	4-11	462	1	1-6	2-2	1-6			BT
H75002	27	6-0	169							ST
H75003	40	7-8	320	1	2-3	3-5	2-3			BT
H75004	20	30-0	626							ST
H5505	20	25-8	535							BT
H5506	4	36-0	38							ST
H5007	4	17-8	74							BT
H5008	4	17-8	74							ST
H5509	38	2-0	79	1	0-7 $\frac{1}{2}$	1-0	0-7 $\frac{1}{2}$			BT
H5510	2	19-3	40							ST
H5511	4	7-3	30							BT
H5512	6	4-9	30							ST
H5513	2	5-4	11							BT
H5514	2	5-11	12							ST
H5015	1	6-4	7							BT
H5016	4	5-11	25							ST
H5017	4	5-4	22							BT
H5018	12	4-9	59							ST
H5019	87	2-0	181	1	0-7 $\frac{1}{2}$	1-0	0-7 $\frac{1}{2}$			BT
H5020	51	6-5	341	13	2-5	0-2 $\frac{1}{2}$	3-3	0-7 $\frac{1}{2}$		BT
H5021	30	3-0	94							ST
H5022	6	17-5	109							BT
H5023	4	15-8	65							ST
H5024	2	17-9	37							BT
H5025	14	23-8	346							ST
H5026	2	18-0	38							BT
H5027	12	8-5	105							ST
H5028	1	6-3	7							BT
H5029	2	7-0	15							ST
H5030	24	10-0	250	1	3-5	3-5	3-5			BT
H5031	26	32-2	872							ST
H5032	1	24-0	25							BT
H5033	24	31-8	793							ST
H5034	2	4-2	9							BT
H5035	22	32-0	734							ST
H5036	2	2-0	2							BT
H5037	1	2-0	2							ST
H5038	19	8-10	175	1	2-10	3-5	3-10			BT
H5039	20	27-1	565							ST
H5040	1	16-8	17							BT
H5041	2	22-0	46							ST
H5042	2	24-0	54							BT
H5043	2	26-0	54							ST
H5044	2	7-0	15							BT
H5045	14	29-8	433							ST
H5046	2	24-0	50							BT
H5047	16	7-1	118							ST
H5048	1	7-0	7							BT
H5049	22	8-3	189							ST
H5050	1	6-3	7							BT
H5051	6	5-5	34							ST
H5052	6	17-5	109							BT
H5053	2	31-8	66							ST
H5054	2	34-2	71							BT
H5055	2	36-8	76							ST
H5056	14	39-8	579							BT
H5057	2	34-0	71							ST
H5558	2	34-0	71							BT
H5559	2	7-3	15							ST
H5560	19	7-8	152							BT
H5561	1	6-3	7							ST
H5562	4	6-0	25							BT
H5563	4	28-0	117							ST
H5564	16	11-0	184	11	7-0	2-6	3-3			BT
H5565	2	26-8	56							ST
H5566	2	28-0	58							BT

NOTE: In the reinforcing steel bar marks, the first digit where four digits are used and the first two where five are used is the bar number which indicates the size of the bar.



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 Consulting Civil Engineers
 Columbus, Ohio
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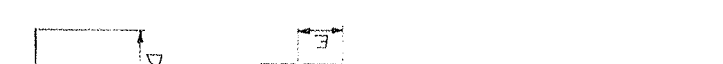
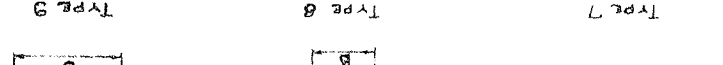
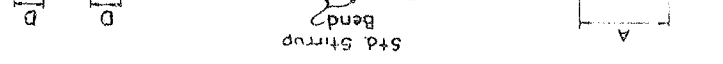
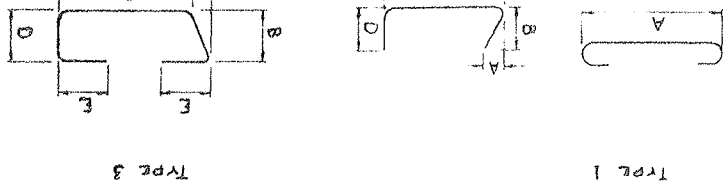
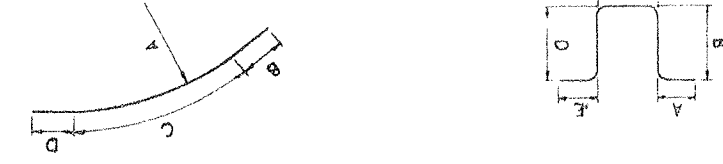
REINFORCING STEEL LIST
 BRIDGE No. RTH-33-1584 L&R
 U.S. 33 OVER RELOCATED HOCKING RIVER
 ATHENS COUNTY
 STA. 752 + 21.94 N.B.
 STA. 756 + 42.50 N.B.

DESIGNED BY: R.M.F.
 CHECKED BY: J.P.
 DATE: 5/14/70

125	127
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ATHENS COUNTY
ATH-33-15.62

Bending Diagram



NOTE: In the reinforcing steel bar marks, the first digit where four digits are used and the first two where five are used is the bar number which indicates the size of the bar.

DESIGNED	FTJ RWF	DATE	7-20-61/4/70
CHECKED	JP	REVIEWED	
COLUMBUS ENGINEERING CONSULTANTS, LTD.			
5458			
REINFORCING STEEL LIST			
BRIDGE No ATH-33-15.62 LFR			
US 33 OVER RELOCATED HOCKING RIVER			
ATHENS COUNTY			
STR. 752+21.94 N.B			
STR. 756+42.50 N.B			

REINFORCING STEEL LIST

Mark	No	Length	Weight	Type	Shop	Mark	No	Length	Weight	Type	Shop
ST	RE9001	5	8-6			ST	RE9001	4	7-10		
ST	RE8001	3	7-6			ST	RE8001	3	7-6		
BT	RE7001	18	7-2			BT	RE7001	18	7-2		
BT	RE6001	3	6-11			BT	RE6001	3	6-11		
BT	RE5001	13	6-7			BT	RE5001	13	6-7		
BT	F8027	2	23-1	123	16-4-7-0	BT	F8027	2	23-1	123	16-4-7-0
BT	F8028	2	25-5	136	12-4-1-2-12-4	BT	F8028	2	25-5	136	12-4-1-2-12-4
BT	F8029	3	30-3	242	14-9-1-2-14-9	BT	F8029	3	30-3	242	14-9-1-2-14-9
BT	F8030	8	21-7	461	10-5-1-2-10-5	BT	F8030	8	21-7	461	10-5-1-2-10-5
BT	F8032	4	16-4	174		BT	F8032	4	16-4	174	
BT	F8501	7	29-2	548		BT	F8501	7	29-2	548	
BT	F8502	28	30-0	2243		BT	F8502	28	30-0	2243	
BT	F8503	12	16-11	542	8-1-1-2-8-1	BT	F8503	12	16-11	542	8-1-1-2-8-1
BT	F8504	2	12-3	65	5-9-1-2-5-9	BT	F8504	2	12-3	65	5-9-1-2-5-9
BT	F8505	6	20-9	332		BT	F8505	6	20-9	332	
BT	F8506	14	19-1	713	9-2-1-2-9-2	BT	F8506	14	19-1	713	9-2-1-2-9-2
BT	F8507	2	14-9	79	7-0-1-2-7-0	BT	F8507	2	14-9	79	7-0-1-2-7-0
BT	F8508	6	22-3	356		BT	F8508	6	22-3	356	
BT	F8509	2	12-1	65		BT	F8509	2	12-1	65	
BT	F8510	4	22-6	240	12-6-7-0-7-0	BT	F8510	4	22-6	240	12-6-7-0-7-0
BT	F8511	2	21-7	115	15-2-6-8	BT	F8511	2	21-7	115	15-2-6-8
BT	F8512	4	16-4	174		BT	F8512	4	16-4	174	
BT	F8513	2	23-2	124	16-4-7-1	BT	F8513	2	23-2	124	16-4-7-1
BT	F8514	3	30-4	243	14-10-1-2-14-10	BT	F8514	3	30-4	243	14-10-1-2-14-10
BT	F8515	8	22-2	473	10-9-1-2-10-9	BT	F8515	8	22-2	473	10-9-1-2-10-9
BT	F8516	2	25-6	137	12-6-1-2-12-6	BT	F8516	2	25-6	137	12-6-1-2-12-6
BT	F8517	4	17-4	185	10-0-5-2-5-2	BT	F8517	4	17-4	185	10-0-5-2-5-2
BT	F8518	2	12-2	65		BT	F8518	2	12-2	65	
BT	F8519	4	22-5	239		BT	F8519	4	22-5	239	
BT	F8520	2	27-4	146	5-2-22-5	BT	F8520	2	27-4	146	5-2-22-5
BT	F8521	4	24-0	256	11-8-1-2-11-8	BT	F8521	4	24-0	256	11-8-1-2-11-8
BT	F8522	15	18-10	754	9-1-1-2-9-1	BT	F8522	15	18-10	754	9-1-1-2-9-1
BT	F8523	1	18-8	50	9-0-1-2-9-0	BT	F8523	1	18-8	50	9-0-1-2-9-0
BT	F8524	4	19-4	206	11-9-11-6-8-6-8	BT	F8524	4	19-4	206	11-9-11-6-8-6-8
BT	F8525	7	37-0	692		BT	F8525	7	37-0	692	
BT	SIGN	12	2-11	37	1-2-0-1-1	BT	SIGN	12	2-11	37	1-2-0-1-1
BT	SUPPORT	8	2-9	23	1-8-1-3	BT	SUPPORT	8	2-9	23	1-8-1-3
BT	SUPPORT	4	3-0	13	1-1-1-1-1	BT	SUPPORT	4	3-0	13	1-1-1-1-1
BT	SUPPORT	2	3-1	6	1-1-7-1-8	BT	SUPPORT	2	3-1	6	1-1-7-1-8
BT	SUPPORT	2	7-2	60	12-3-8-1-8-1-8-1-4	BT	SUPPORT	2	7-2	60	12-3-8-1-8-1-8-1-4
BT	SUPPORT	1	6-5	7	1-7-3-6-1-7	BT	SUPPORT	1	6-5	7	1-7-3-6-1-7
BT	T6001	24	6-1	219	1-3-2-3-1	BT	T6001	24	6-1	219	1-3-2-3-1
BT	T6002	16	4-11	118	12-1-11-0-7-3-1	BT	T6002	16	4-11	118	12-1-11-0-7-3-1
BT	LIGHT	48	4-10	242	12-1-4-1-8-1-8-1-4	BT	LIGHT	48	4-10	242	12-1-4-1-8-1-8-1-4
BT	LIGHT	12	2-9	34	1-8-1-3	BT	LIGHT	12	2-9	34	1-8-1-3
BT	LIGHT	18	6-0	113	1-3-1-3-1	BT	LIGHT	18	6-0	113	1-3-1-3-1
BT	LIGHT	18	2-11	55	1-2-0-1-1	BT	LIGHT	18	2-11	55	1-2-0-1-1
BT	LIGHT	12	3-0	38	1-1-7-1-7	BT	LIGHT	12	3-0	38	1-1-7-1-7

125	127
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