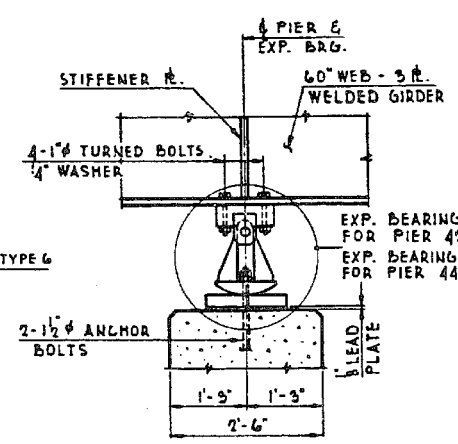
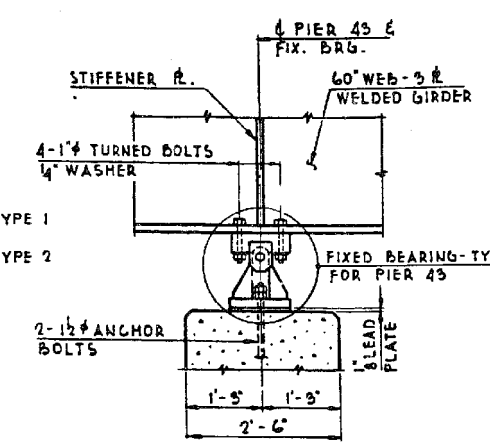


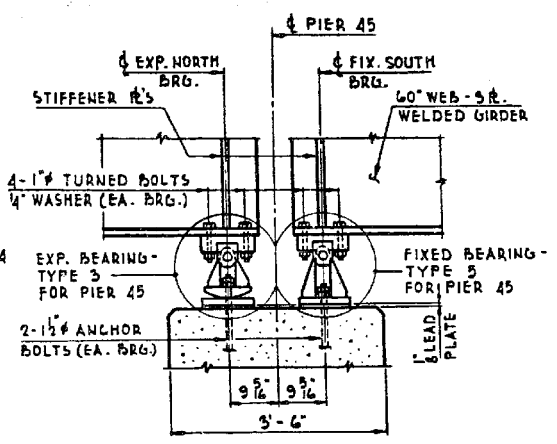
BRG. TYPE 6 AT PIER 41
SCALE: 3/4" = 1'-0"



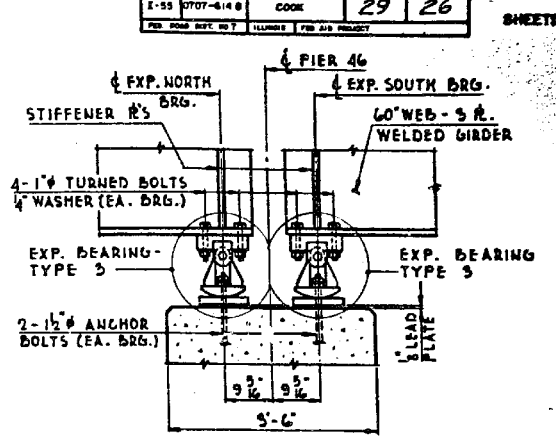
BRG. TYPE 1 & 2
AT PIERS 42 & 44
SCALE: 3/4" = 1'-0"



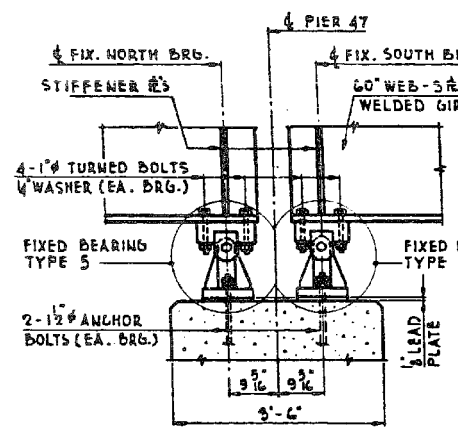
BRG. TYPE 4 AT PIER 43
SCALE: 3/4" = 1'-0"



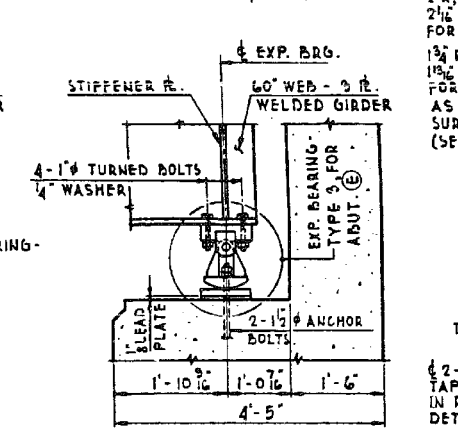
BRG. TYPE 3 & 5 AT PIER 45
SCALE: 3/4" = 1'-0"



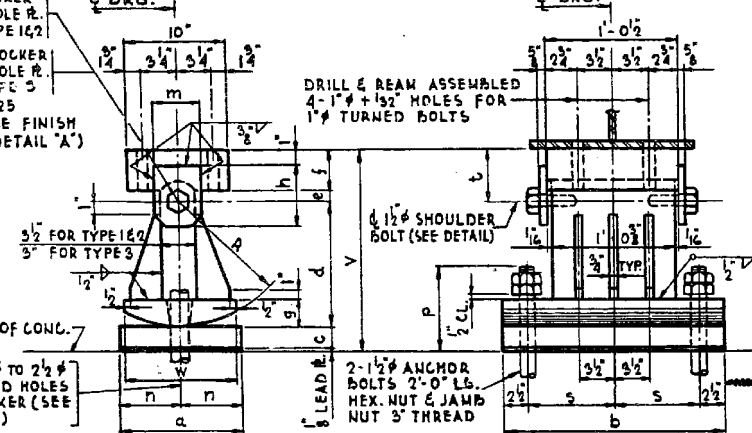
BRG. TYPE 3 AT PIER 46
SCALE: 3/4" = 1'-0"



BRG. TYPE 5 AT PIER 47
SCALE: 3/4" = 1'-0"

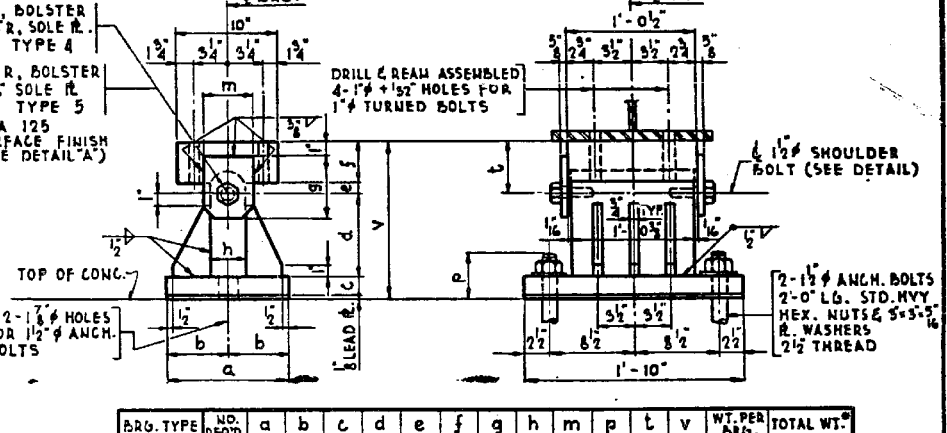


BRG. TYPE 3 AT ABUT. (E)
SCALE: 3/4" = 1'-0"



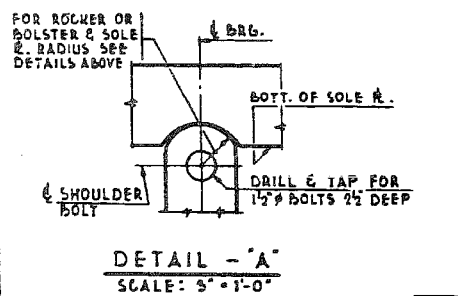
BRG. TYPE	NO. REQ'D	a	b	c	d	e	f	g	h	m	n	p	r	s	t	v	w	WT. PER BRG.	TOTAL WT.
1	4	1'-0"	1'-0"	7 1/2"	1'-0"	3 1/2"	3 1/2"	2 1/2"	4 1/2"	5"	6"	8 1/2"	1'-0"	8 1/2"	4 1/2"	11'-6"	10"	749	2,996
2	4	1'-0"	2'-2"	2 1/2"	1'-0"	1"	3 1/2"	3 1/2"	6"	5"	6"	9"	1'-0"	10 1/2"	4 1/2"	11'	908	3,632	
3	22	10'	1'-10"	1 1/2"	8"	3 1/2"	3"	2 1/2"	4 1/2"	4"	5"	7 1/2"	8"	8 1/2"	3 1/2"	11'-1 1/2"	9"	549	11,946

* DOES NOT INCLUDE FILL R'S EXCEPT @ PIER 46-612, USE P=8 1/2"

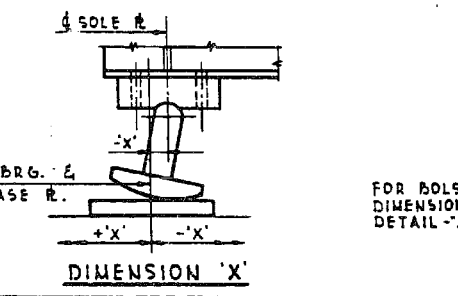


BRG. TYPE	NO. REQ'D	a	b	c	d	e	f	g	h	m	p	t	v	WT. PER BRG.	TOTAL WT.
4	4	1'-0"	6"	1 1/2"	8"	1"	3 1/2"	6"	3 1/2"	5"	4"	4 1/2"	11'-2 1/2"	594	2,196
5	18	10'	5"	1 1/2"	8"	3 1/2"	3"	4 1/2"	3"	4"	4"	3 1/2"	11'-1 1/2"	495	7,850

* DOES NOT INCLUDE FILL R'S EXCEPT @ PIER 45-66 & 69 USE P=4 1/2"

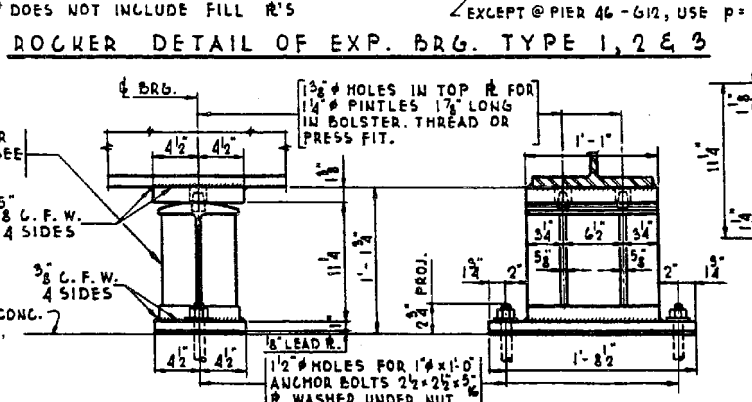


SHOULDER BOLT DETAIL
SCALE: 3" = 1'-0"

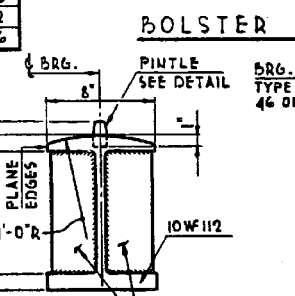


TEMPERATURE F	110°	90°	70°	50°	30°	10°
BRG'S @ PIER 42	+2"	+3 1/2"	+5 1/2"	0	-3 1/2"	-5 1/2"
BRG'S @ PIER 44	-1 1/2"	-3 1/2"	-5 1/2"	0	+3 1/2"	+5 1/2"
NO. BRG'S @ PIER 45	-1 1/2"	-3 1/2"	-5 1/2"	0	+3 1/2"	+5 1/2"
NO. BRG'S @ PIER 46	-1 1/2"	-3 1/2"	-5 1/2"	0	+3 1/2"	+5 1/2"
SO. BRG'S @ PIER 46	+1 1/2"	+3 1/2"	+5 1/2"	0	-3 1/2"	-5 1/2"
BRG'S @ ABUT. (E)	-1 1/2"	-3 1/2"	-5 1/2"	0	+3 1/2"	+5 1/2"

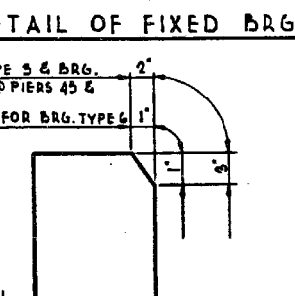
MINUS SIGN INDICATES SOLE PLATE SOUTH OF BEARING.
PLUS SIGN INDICATES SOLE PLATE NORTH OF BEARING.



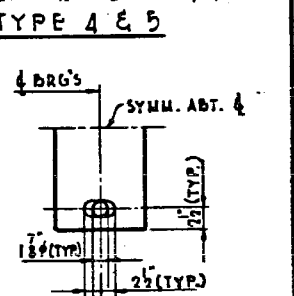
BOLSTER DETAIL OF FIXED BRG. TYPE 6 (4REQ'D)
SCALE: 1 1/2" = 1'-0"



PINTLE DETAIL
NO SCALE



BEARING PLATE DETAIL
NOTE: FOR ORIENTATION OF BEARING PLATES SEE PIER DWGS SHEETS 12-18



DETAIL OF HOLE IN ROCKERS

DE LEHM, CATHAR & CO. ENGINEERS
DESIGNED BY V.K. BURKEVICS
DRAWN BY F. BOBINAS
CHECKED BY M. BOBINAS
IN CHARGE F.S. MARTINS
APPROVED L.M. RIAN

LOCATION	PIER 41	PIER 45	PIER 46	PIER 47
GIRDER	G5	G6	G8, G9, G10, G11, G12, G13, G14, G15, G16, G17, G18, G19, G20, G21, G22	G23
FILL R.	3'6"	1'10"	3'6"	1'4"

TOTAL WEIGHT OF FILL PLATES = 505 LBS

BILL OF MATERIAL **		UNIT	QUANTITY
FURNISHING & ERECTING	STRUCTURAL STEEL	POUND	50,181

** WEIGHT OF ALL MATERIAL SHOWN ON THIS SHEET, INCL. FILL R'S

ILLINOIS DIVISION OF HIGHWAYS
SOUTHWEST EXPRESSWAY
RAMP E
OVER DES PLAINES RIVER
BEARING DETAILS
SCALE: AS NOTED DATE: 8-28-63