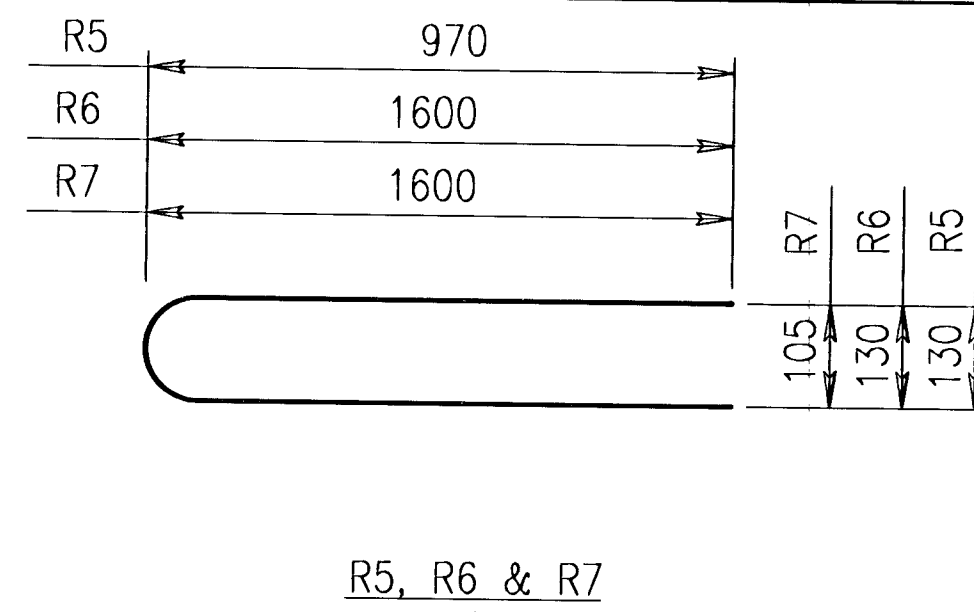
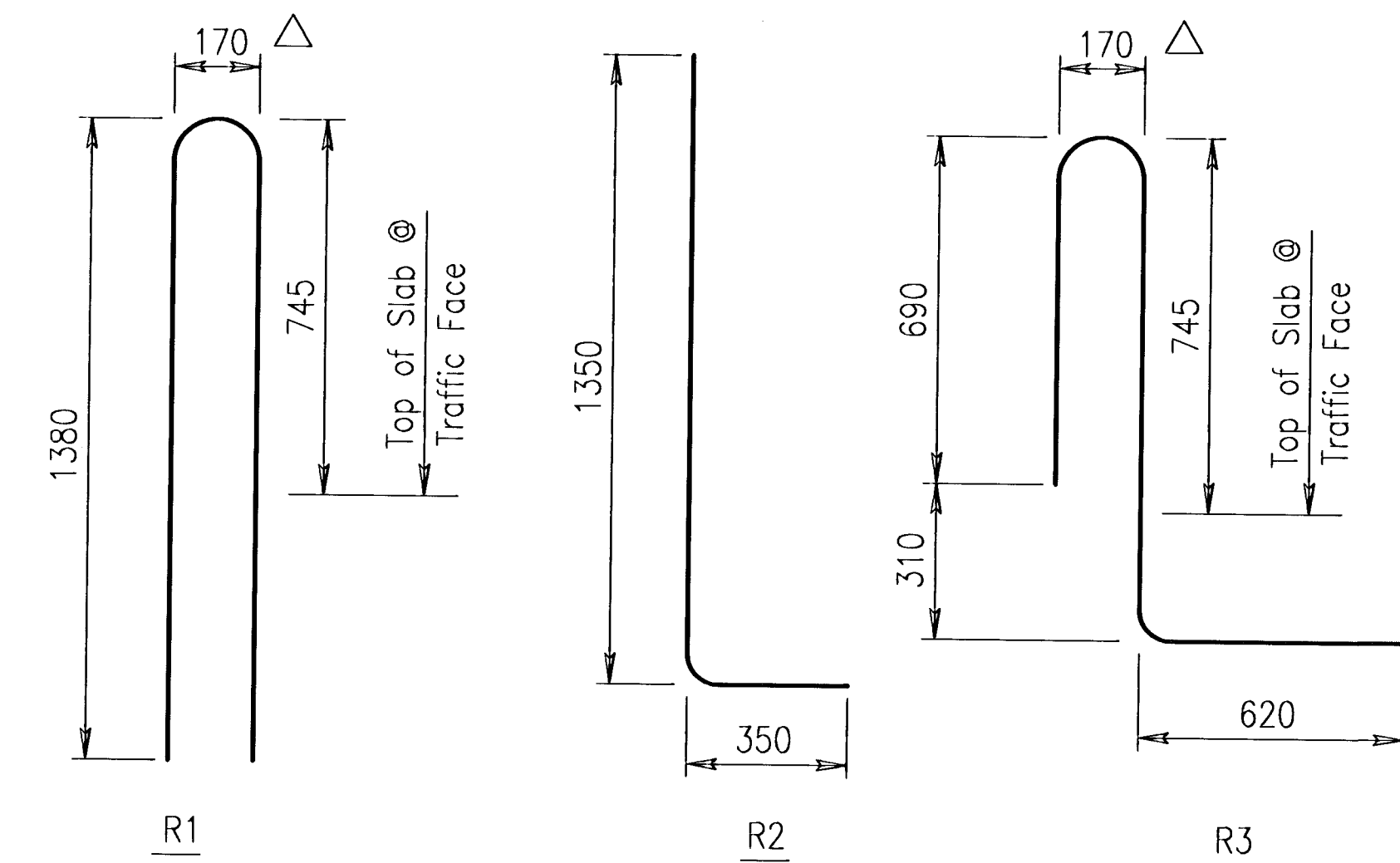


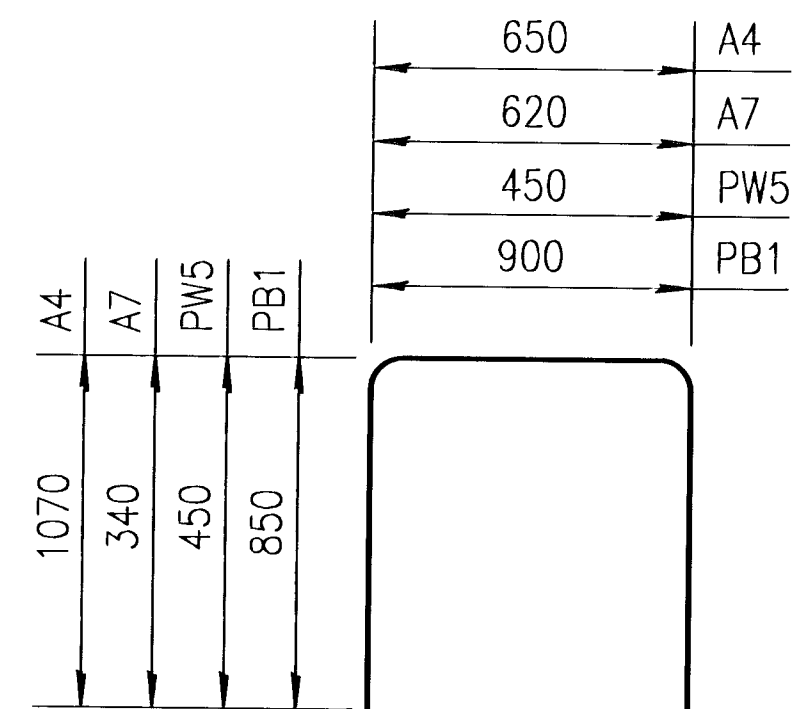
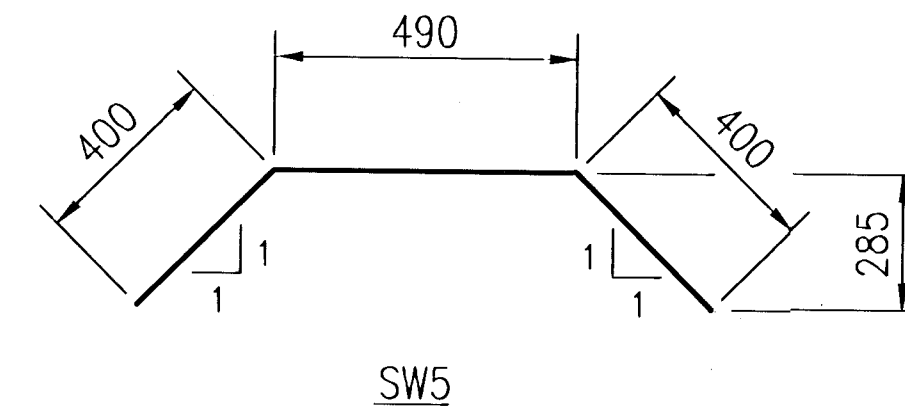
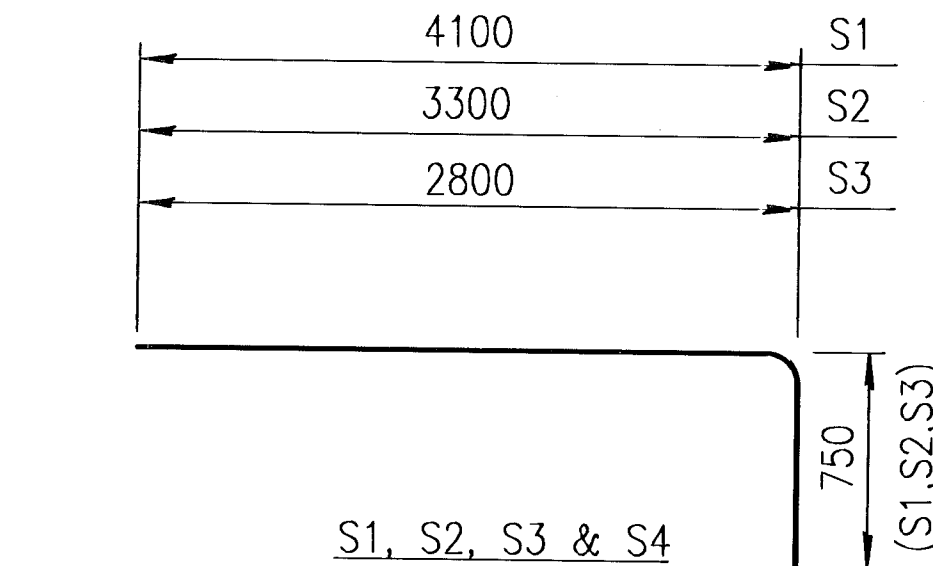
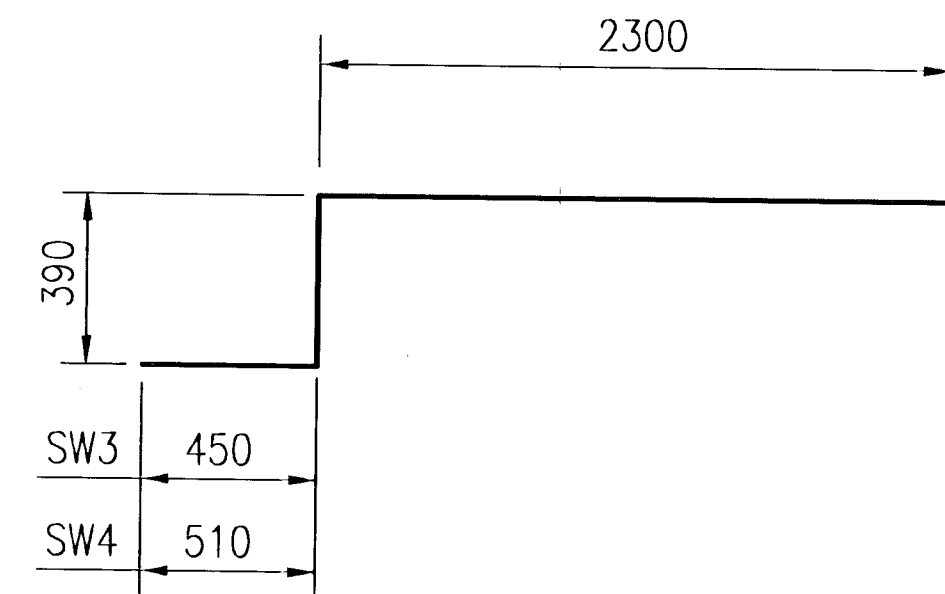
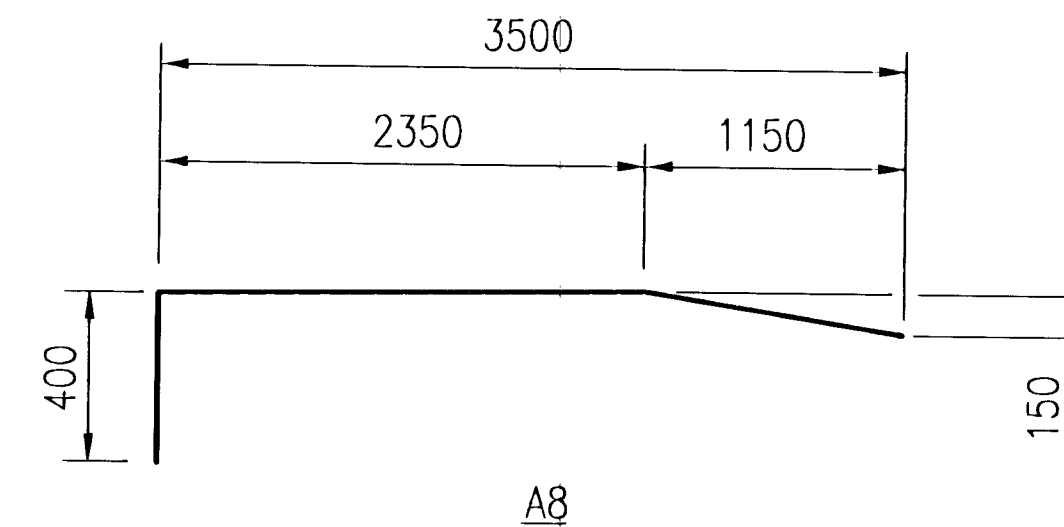
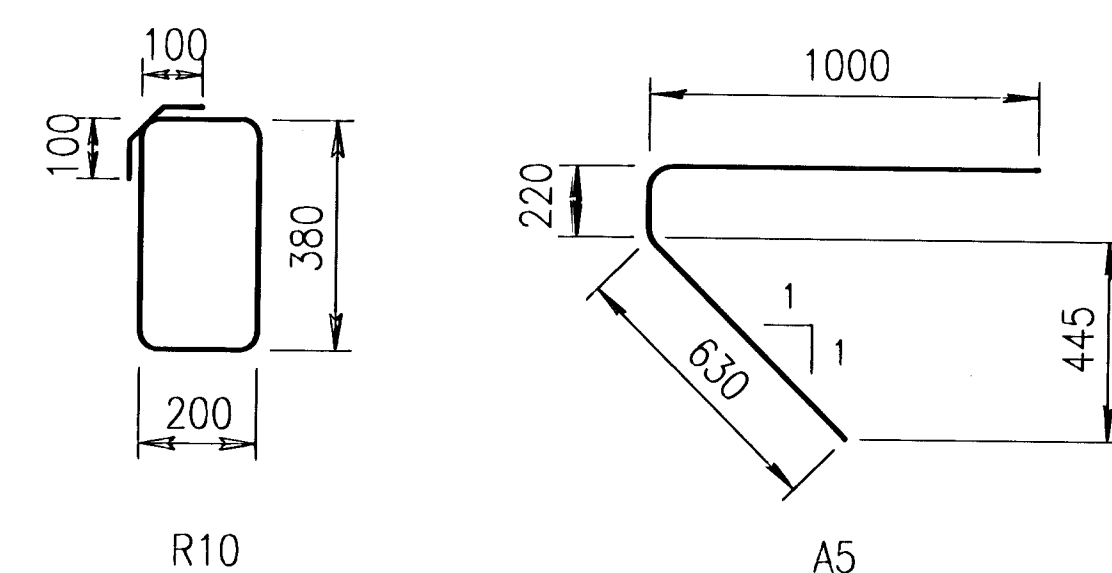
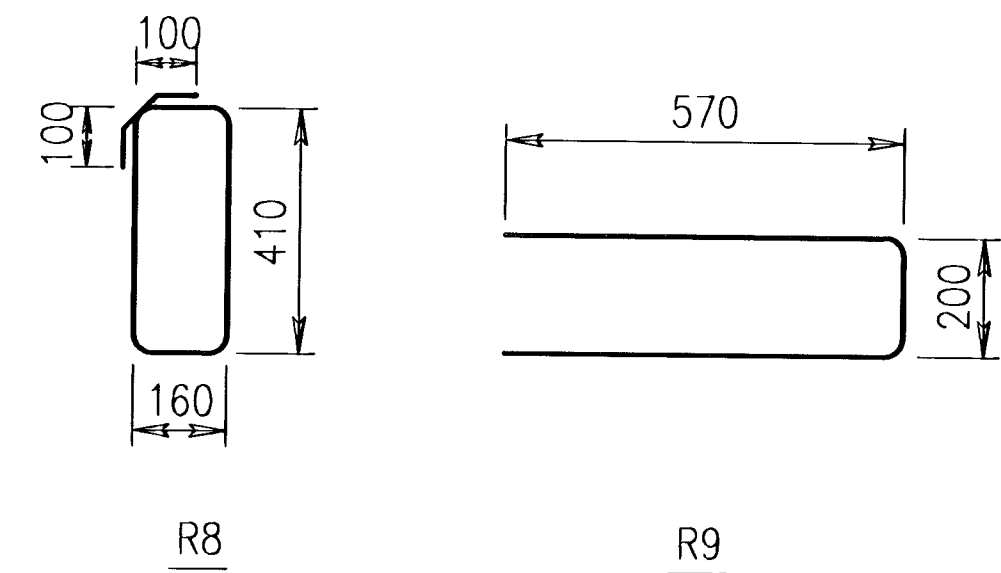
R:\CIVIL\00142\BRIDGE\00142REN.DWG Wed Nov 21 14:21:48 2001



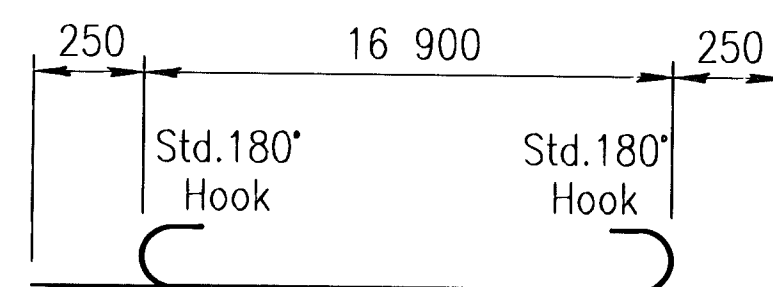
Non-Epoxy - Grade 420							
Straight Bars				Bent Bars			
Mark	Size	Number	Length	Mark	Size	Number	Length
PW4	19	4	14 300	PW3	13	82	1350
PW1	13	168	3400	PW5	13	40	1550
PW2	13	36	14 300	PW6	10	78	680

See Bending Diagram

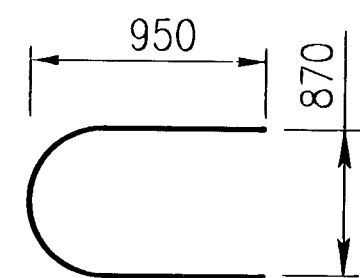
Nonstandard Hook
Plus 0, Minus 10 mm.



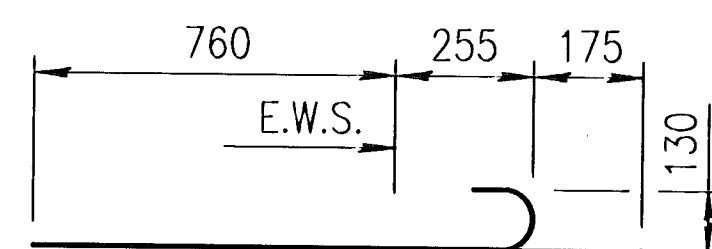
A4, A7, PW5 & PB1



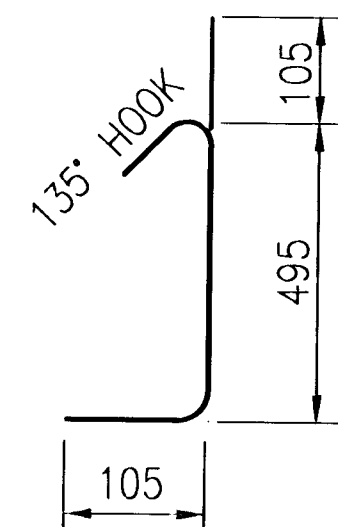
PB3



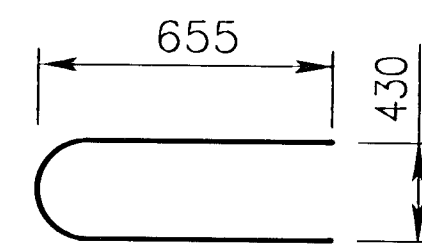
PB7



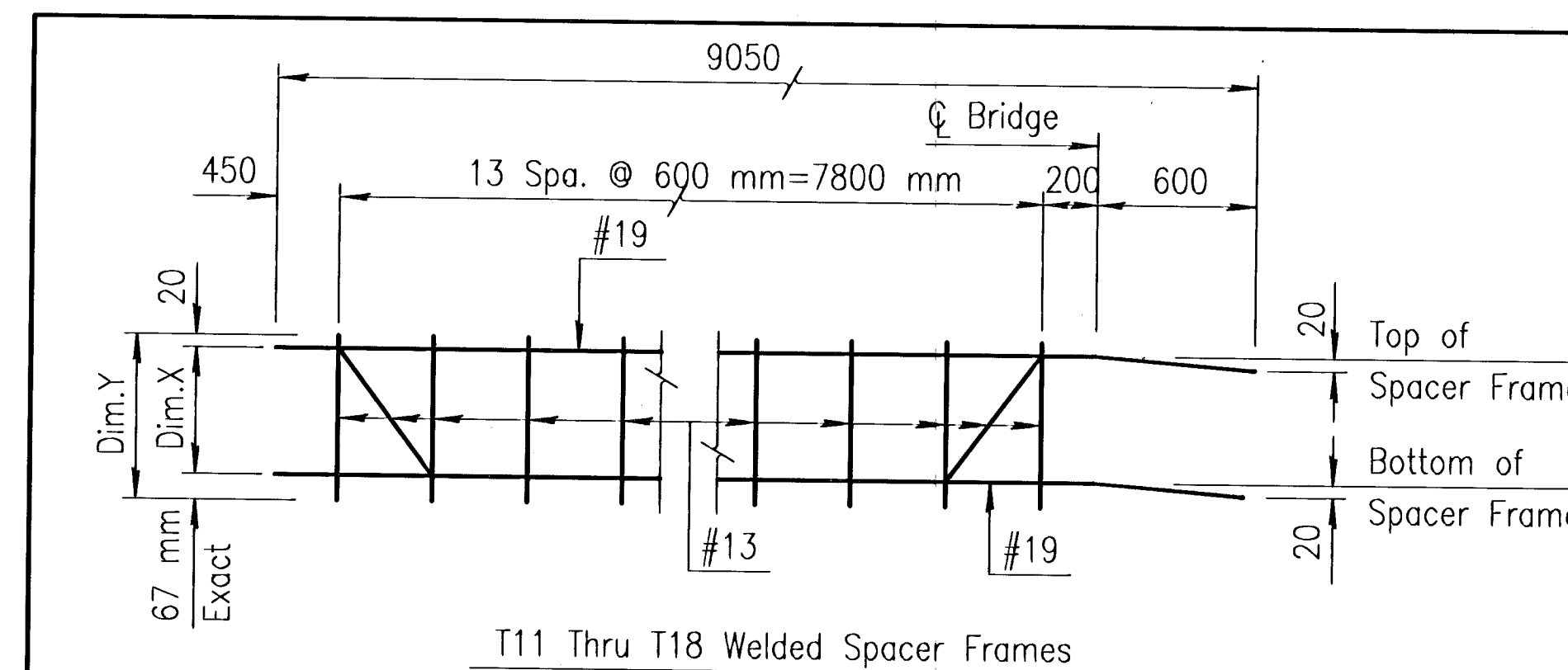
A9



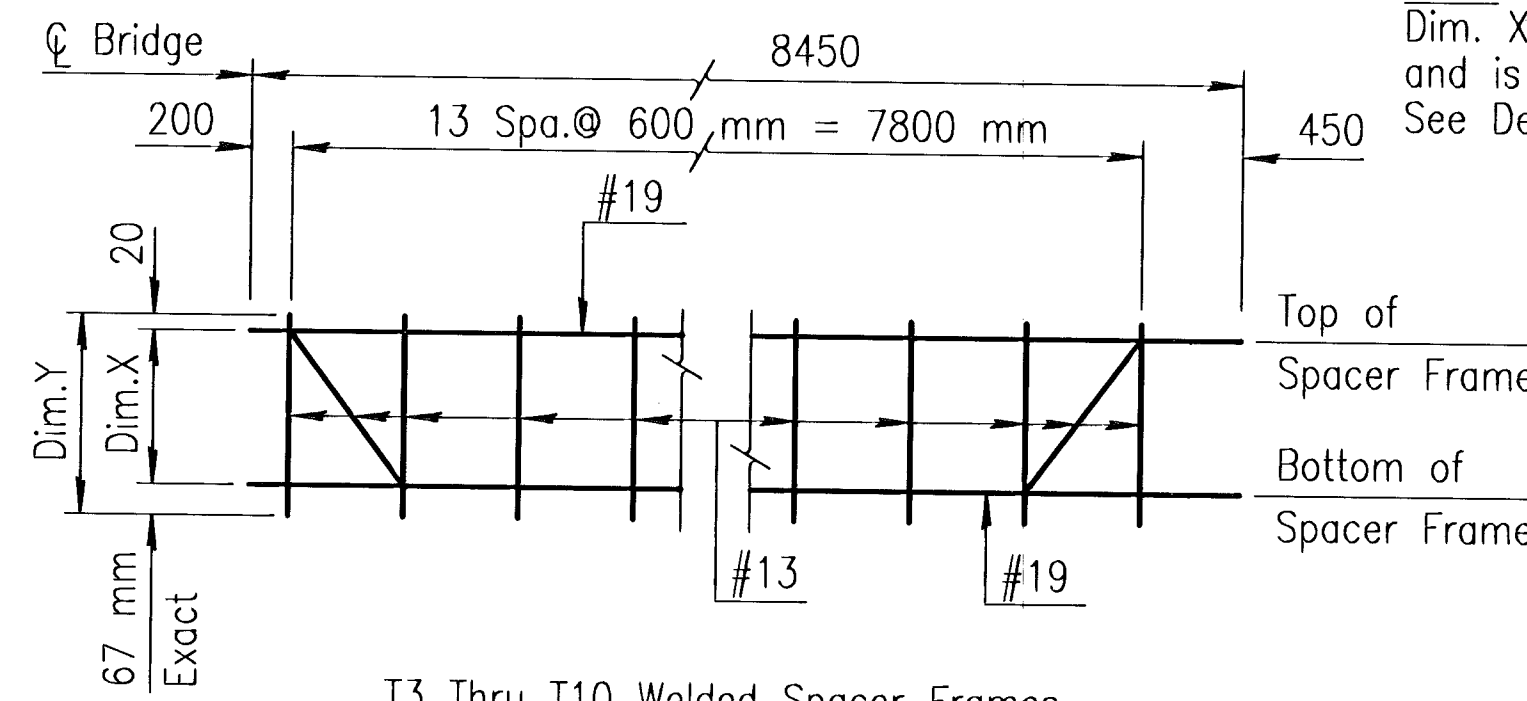
PW4



PW3



T11 Thru T18 Welded Spacer Frames

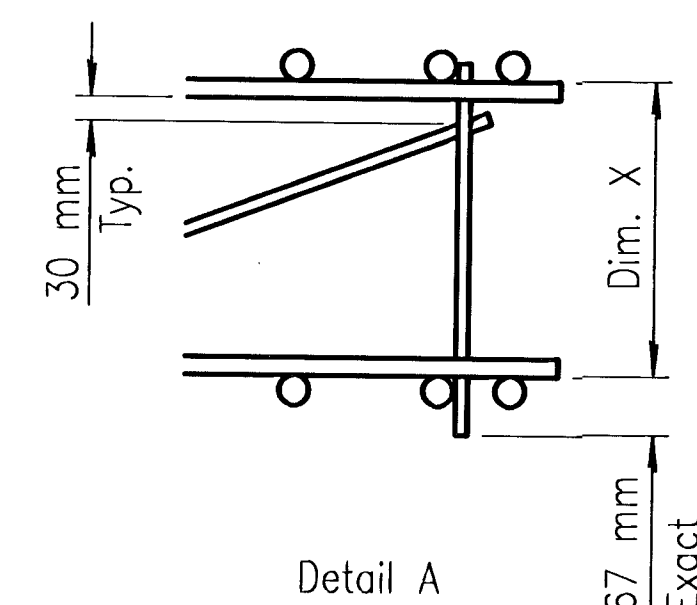


T3 Thru T10 Welded Spacer Frames

Note:
Dim. X is out to out
and is an exact dim.
See Detail A.

SPACER FRAMES (Epoxy Coated)				
Mark	No.	Ea.	Dim. X	Dim. Y
T3, T11	9		231	318
T4, T12	4		235	322
T5, T13	4		246	333
T6, T14	4		265	352
T7, T15	4		291	378
T8, T16	4		325	412
T9, T17	4		366	453
T10, T18	4		415	502

Mass of spacer frames included
in the mass of reinforcing steel.



BENDING DIAGRAMS

(All dimensions are out to out of bars.)

FHWA REG NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	Kansas	87N-0195-01	2001	39	127

BILL OF REINFORCING STEEL Epoxy Coated - Grade 420

Straight Bars				Bent Bars			
Mark	Size	Number	Length	Mark	Size	Number	Length
S4	32	80	16 900	S1	25	80	4850
S5	32	72	9500	S2	25	72	4050
S7	32	64	12 600				
S8	32	56	9500	PB3	22	10	17 400
S13	32	32	16 600	R1	22	24	2830
				R2	22	4	1700
S6	29	76	4300	R3	22	220	2380
S9	29	52	7200	S3	22	76	3550
S10	29	56	5100				
S14	29	28	9600				
S15	29	26	8400	A8	16	16	3910
S16	29	28	6000	A9	16	140	1190
				PB7	16	4	2370
A1	25	16	18 280	R5	16	8	1990
A2	25	16	6130	R6	16	8	3250
				SW3	16	488	3140
R11	19	24	1470	SW4	16	40	3200
R12	19	144	2900				
A10	19	20	900	A4	13	312	2790
				A5	13	140	1850
A3	16	40	12 000	A7	13	28	1300
PB2	16	24	16 900	PB1	13	172	2600
PB4	16	4	16 200	R4	13	220	1020
PB5	16	4	16 060	R7	13	4	3240
PB6	16	4	15 300	SW5	13	20	1290
SW1	16	60	8700				
SW2	16	40	8300	R8	10	372	1340
T1	16	110	16 900	R9	10	104	1340
				R10	10	52	1360
S11	13	56	3600				
S12	13	56	4000	T3-T18			
A6	13	2	16 900				
A10	13	4	2000				
C1	13	12	8700				
C2	13	8	8300				
SC1	13	78	2000				
T2	13	78	16 900				

SRB

924 NORTH MAIN
WICHITA, KANSAS 67203

316-264-8008
FAX 264-4621

SAVOY, RUGGLES & BOHM, P. A.
ENGINEERING & SURVEYING

MKEC
ENGINEERING CONSULTANTS

411 N. WEBB ROAD
WICHITA, KS. 67208
316-684-9600

MAPLE STREET BRIDGE
(OVER CALFSKIN CREEK)

BILL OF REINFORCING STEEL
AND BENDING DIAGRAM

SHEET TITLE

MDK

DESIGN BY:

NOVEMBER 2001

DATE

DPG

DRAWN BY:

00142REN

DRAWING NAME

KJS

CHECKED BY:

39 / 127

SHEET / OF