8' X 7'

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	10	11		
A2	5	2	19	6		
B1	5	4	3	6		
B2	5	4	4	0		
B3	5	4	4	7		
B4	5	4	5	1		
B5	5	4	5	8		
B6	5	4	6	2		
B7	5	4	6	9		
B8	5	4	7	3		
B9	5	4	7	10		
B10	5	30	8	2		
C1	4	2	16	1		
C2	4	2	19	9		
C3	4	2	23	5		
C4	4	2	27	1		
C5	4	2	30	8		
C6	4	6	33	0		
E1	5	2	23	3	18	3
E2	5	2	24	0	19	0
F	4	19	1	5	0	6
G1	4	2	18	10		
G2	4	2	21	9		
G3	4	2	24	6		
G4	4	2	27	3		
G5	4	3	30	0		
H	4	16	12	2	10	0
J1	5	4	3	7		
J2	5	4	4	8		
J3	5	4	5	8		
J4	5	4	6	9		
J5	5	4	7	9		
K1	4	2	2	10		
K2	4	2	4	8		
K3	4	2	6	7		
K4	4	2	8	6		
K5	4	6	9	8		
M1	4	1	2	5		
M2	4	42	3	9		
N1	4	7	9	8		
N2	4	5	30	2		
N3	4	2	33	3		
P	5	43	5	9	4	0
Q	5	5	9	0		
R	5	10	3	8		
S1	5	2	1	11		
S2	5	2	3	4		
S3	5	2	4	9		
S4	5	2	6	2		
S5	5	2	7	7		

8' X 7' (CONTINUED)

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
S6	5	2	9	0		
S7	5	2	10	5		
S8	5	2	11	10		
S9	5	2	13	3		
S10	5	2	14	1		
T1	5	2	1	2		
T2	5	2	1	11		
T3	5	2	2	7		
T4	5	2	3	4		
T5	5	2	4	0		
T6	5	2	4	8		
T7	5	2	5	5		
T8	5	2	6	1		
T9	5	2	6	10		
T10	5	2	7	7		
T11	5	2	8	3		
T12	5	2	9	0		
T13	5	2	9	8		
T14	5	2	9	10		

8' X 8'

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	12	1		
A2	5	2	21	7		
B1	5	4	3	11		
B2	5	4	4	5		
B3	5	4	5	0		
B4	5	4	5	6		
B5	5	4	6	1		
B6	5	4	6	7		
B7	5	4	7	1		
B8	5	4	7	8		
B9	5	4	8	3		
B10	5	4	8	9		
B11	5	30	9	1		
C1	4	2	15	11		
C2	4	2	19	8		
C3	4	2	23	4		
C4	4	2	27	0		
C5	4	2	30	9		
C6	4	2	34	6		
C7	4	6	35	1		
E1	5	2	23	3	18	3
E2	5	2	24	0	19	0
F	4	19	1	5	0	6
G1	4	1	18	0		
G2	4	2	20	9		
G3	4	2	23	7		
G4	4	2	26	4		

8' X 8' (CONTINUED)

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
G5	4	2	29	2		
G6	4	3	32	0		
H	4	17	13	8	11	0
J1	5	4	4	0		
J2	5	4	5	1		
J3	5	4	6	2		
J4	5	4	7	2		
J5	5	4	8	2		
J6	5	2	9	3		
K1	4	2	2	10		
K2	4	2	4	10		
K3	4	2	6	10		
K4	4	2	8	9		
K5	4	2	10	7		
K6	4	6	10	9		
M1	4	1	2	11		
M2	4	45	4	9		
N1	4	8	10	8		
N2	4	5	31	3		
N3	4	3	35	2		
P	6	46	6	9	4	6
Q	5	5	9	0		
R	5	10	4	2		
S1	5	2	1	11		
S2	5	2	3	4		
S3	5	2	4	9		
S4	5	2	6	2		
S5	5	2	7	7		
S6	5	2	9	0		
S7	5	2	10	5		
S8	5	2	11	10		
S9	5	2	13	3		
S10	5	2	14	1		
T1	5	2	1	2		
T2	5	2	1	11		
T3	5	2	2	7		
T4	5	2	3	4		
T5	5	2	4	0		
T6	5	2	4	8		
T7	5	2	5	5		
T8	5	2	6	1		
T9	5	2	6	10		
T10	5	2	7	7		
T11	5	2	8	3		
T12	5	2	9	0		
T13	5	2	9	8		
T14	5	2	9	10		
X1	4	1	2	5	1	0
X2	4	1	2	11	1	3
X3	4	1	3	3	1	5
X4	4	1	3	9	1	8

8' X 8' (CONTINUED)

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
X5	4	1	4	1	1	10
X6	4	1	4	7	2	1
X7	4	1	4	11	2	3
Z	4	2	9	2	8	2

9' X 5'

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	9	0		
A2	5	2	16	1		
C1	4	1	17	7		
C2	4	1	21	4		
C3	4	1	25	0		
C4	4	1	28	8		
C5	4	2	31	2		
E1	5	2	23	6	20	6
E2	5	2	24	1	21	1
F	4	21	1	3	0	6
G1	4	2	21	7		
G2	4	2	24	4		
G3	4	2	27	2		
G4	4	3	30	0		
H	4	16	9	10	8	2
K1	4	1	3	0		
K2	4	1	4	11		
K3	4	1	6	9		
K4	4	2	7	11		
N1	4	3	7	11		
N2	4	3	31	1		
Q	4	2	10	2		
R	4	11	1	6		
S1	5	2	1	8		
S2	5	2	3	1		
S3	5	2	4	6		
S4	5	2	5	11		
S5	5	2	7	3		
S6	5	2	8	9		
S7	5	2	10	2		
S8	5	2	11	7		
S9	5	2	13	0		
S10	5	2	14	4		
S11	5	2	15	5		
T1	5	2	1	2		
T2	5	2	2	0		
T3	5	2	2	8		
T4	5	2	3	4		
T5	5	2	4	1		
T6	5	2	4	10		
T7	5	2	5	6		
T8	5	2	6	3		

9' X 5' (CONTINUED)

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
T9	5	2	6	11		
T10	5	2	7	8		
T11	5	2	8	4		
T12	5	2	9	1		
T13	5	2	9	9		
T14	5	2	10	6		
T15	5	2	10	10		
V1	5	2	4	2	2	11
V2	5	2	4	8	3	5
V3	5	2	5	3	4	0
V4	5	2	5	10	4	7
V5	5	2	6	4	5	1
V6	5	2	6	11	5	8
V7	5	2	7	5	6	2
V8	5	17	7	11	6	8
W1	5	2	4	3	3	0
W2	5	2	5	4	4	1
W3	5	2	6	5	5	2
W4	5	2	7	5	6	2

9' X 6'

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	10	0		
A2	5	2	17	10		
B1	5	4	2	11		
B2	5	4	3	6		
B3	5	4	4	1		
B4	5	4	4	8		
B5	5	4	5	2		
B6	5	4	5	8		
B7	5	4	6	3		
B8	5	4	6	9		
B9	5	34	7	3		
C1	4	2	18	0		
C2	4	2	21	9		
C3	4	2	25	3		
C4	4	2	28	11		
C5	4	2	32	6		
C6	4	4	33	0		
E1	5	2	25	6	20	6
E2	5	2	26	3	21	3
F	4	21	1	5	0	6
G1	4	1	20	6		
G2	4	2	23	4		
G3	4	2	26	3		
G4	4	2	29	2		
G5	4	3	32	0		
H	4	17	11	4	9	2
J1	5	4	3	1		

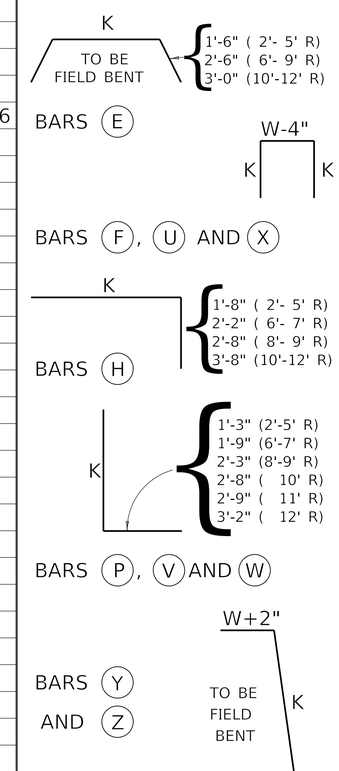
9' X 6' (CONTINUED)

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
J2	5	4	4	2		
J3	5	4	5	2		
J4	5	4	6	3		
J5	5	2	7	4		
K1	4	2	3	0		
K2	4	2	4	10		
K3	4	2	6	9		
K4	4	2	8	7		
K5	4	4	8	10		
M1	4	1	2	4		
M2	4	41	3	9		
N1	4	7	8	10		
N2	4	5	30	1		
N3	4	2	33	2		
P	5	42	5	3	3	6
Q	5	5	10	2		
R	5	11	3	9		
S1	5	2	2	2		
S2	5	2	3	7		
S3	5	2	5	0		
S4	5	2	6	5		
S5	5	2	7	10		
S6	5	2	9	3		
S7	5	2	10	8		
S8	5	2	12	1		
S9	5	2	13	6		
S10	5	2	14	11		
S11	5	2	15	9		
T1	5	2	1	8		
T2	5	2	2	4		
T3	5	2	3	0		
T4	5	2	3	9		
T5	5	2	4	6		
T6	5	2	5	2		
T7	5	2	5	11		
T8	5	2	6	7		
T9	5	2	7	4		
T10	5	2	8	0		
T11	5	2	8	9		
T12	5	2	9	5		
T13	5	2	10	2		
T14	5	2	10	10		
T15	5	2	11	0		

NOTES

1. NUMBER OF BARS IN ONE HEADWALL.
2. DIMENSIONS ARE 0. TO 0. OF BARS.
3. ALL BARS ARE STRAIGHT EXCEPT THOSE SHOWN BELOW.
4. R = BOX OR PIPE RISE
5. W = WING WALL WIDTH

BENT BAR SHAPES



KENTUCKY DEPARTMENT OF HIGHWAYS

BILL OF REINFORCEMENT
8' X 7' – 9' X 6' HEADWALLS
PRECAST BOX CULVERTS
45° SKEW

STANDARD DRAWING NO. RDH-1356-03

SUBMITTED _____ DIRECTOR DIVISION OF DESIGN _____ DATE

APPROVED _____ STATE HIGHWAY ENGINEER _____ DATE