5' X 5'

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	8	1		
A2	5	2	10	11		
C1	4	1	5	8		
C2	4	1	8	2		
C3	4	1	10	10		
C4	4	1	13	5		
C5	4	2	15	0		
E1	5	2	11	6	8	6
E2	5	2	11	11	8	11
F	4	9	1	3	0	6
G1	4	2	8	6		
G2	4	2	10	4		
G3	4	2	12	1		
G4	4	3	14	0		
H	4	8	9	4	7	8
K1	4	1	2	5		
K2	4	1	4	2		
K3	4	1	6	1		
K4	4	2	7	2		
N1	4	3	7	2		
N2	4	3	15	0		
Q	4	2	5	8		
R	4	6	1	1		
S1	5	2	1	4		
S2	5	2	2	1		
S3	5	2	2	9		
S4	5	2	3	6		
S5	5	2	4	2		
S6	5	2	4	8		
T1	5	2	1	3		
T2	5	2	2	8		
T3	5	2	4	1		
T4	5	2	5	6		
T5	5	2	6	5		
V1	5	2	4	3	3	0
V2	5	2	5	0	3	9
V3	5	2	5	9	4	6
V4	5	2	6	7	5	4
V5	5	2	7	4	6	1
V6	5	5	7	9	6	6
W1	5	2	4	4	3	1
W2	5	2	5	5	4	2
W3	5	2	6	6	5	3
W4	5	1	7	7	6	4

6' X 3'

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	6	1		
A2	5	2	8	2		
C1	4	1	6	8		
C2	4	1	9	2		
C3	4	1	11	9		
C4	4	1	13	3		
E1	5	2	13	1	10	1
E2	5	2	13	6	10	6
F	4	11	1	3	0	6
G1	4	2	10	4		
G2	4	2	12	2		
G3	4	3	14	0		
H	4	8	7	6	5	10
K1	4	1	2	6		
K2	4	1	4	3		
K3	4	1	5	4		
N1	4	3	5	4		
N2	4	3	13	3		
Q	4	2	6	10		
R	4	8	1	2		
S1	5	2	1	5		
S2	5	2	2	2		
S3	5	2	2	10		
S4	5	2	3	7		
S5	5	2	4	3		
S6	5	2	5	0		
S7	5	2	5	6		
T1	5	2	1	0		
T2	5	2	2	5		
T3	5	2	3	10		
T4	5	2	5	3		
T5	5	2	6	8		
T6	5	2	7	7		
V1	5	2	3	3	2	0
V2	5	2	4	0	2	9
V3	5	2	4	10	3	7
V4	5	2	5	8	4	5
V5	5	5	5	10	4	7
W1	5	2	3	4	2	1
W2	5	2	4	5	3	2
W3	5	1	5	7	4	4

6' X 4'

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	7	3		
A2	5	2	9	8		
C1	4	1	6	7		
C2	4	1	9	2		
C3	4	1	11	9		
C4	4	1	14	4		

6' X 4' (CONTINUED)

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
C5	4	1	14	8		
E1	5	2	13	1	10	1
E2	5	2	13	6	10	6
F	4	11	1	3	0	6
G1	4	1	10	0		
G2	4	2	12	0		
G3	4	2	14	0		
G4	4	3	16	0		
H	4	9	8	6	6	10
K1	4	1	2	6		
K2	4	1	4	4		
K3	4	1	6	2		
K4	4	1	6	4		
N1	4	3	6	4		
N2	4	3	14	8		
Q	4	2	6	10		
R	4	8	1	2		
S1	5	2	1	5		
S2	5	2	2	2		
S3	5	2	2	10		
S4	5	2	3	7		
S5	5	2	4	3		
S6	5	2	5	0		
S7	5	2	5	6		
T1	5	2	1	0		
T2	5	2	2	5		
T3	5	2	3	10		
T4	5	2	5	3		
T5	5	2	6	8		
T6	5	2	7	7		
V1	5	2	3	9	2	6
V2	5	2	4	6	3	3
V3	5	2	5	3	4	0
V4	5	2	6	1	4	10
V5	5	7	6	10	5	7
W1	5	2	3	9	2	6
W2	5	2	4	11	3	8
W3	5	2	6	0	4	9

6' X 5'

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	8	4		
A2	5	2	11	2		
C1	4	1	6	8		
C2	4	1	9	3		
C3	4	1	11	10		
C4	4	1	14	6		
C5	4	2	16	1		
E1	5	2	13	1	10	1

6' X 5' (CONTINUED)

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
E2	5	2	13	6	10	6
F	4	11	1	3	0	6
G1	4	2	10	4		
G2	4	2	12	3		
G3	4	2	14	1		
G4	4	3	16	0		
H	4	9	9	6	7	10
K1	4	1	2	6		
K2	4	1	4	4		
K3	4	1	6	2		
K4	4	2	7	4		
N1	4	3	7	4		
N2	4	3	16	1		
Q	4	2	6	10		
R	4	8	1	2		
S1	5	2	1	5		
S2	5	2	2	2		
S3	5	2	2	10		
S4	5	2	3	7		
S5	5	2	4	3		
S6	5	2	5	0		
S7	5	2	5	6		
T1	5	2	1	0		
T2	5	2	2	5		
T3	5	2	3	10		
T4	5	2	5	3		
T5	5	2	6	8		
T6	5	2	7	7		
V1	5	2	4	3	3	0
V2	5	2	5	0	3	9
V3	5	2	5	9	4	6
V4	5	2	6	6	5	3
V5	5	2	7	4	6	1
V6	5	6	7	10	6	7
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	7	6	4

6' X 6'

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	9	3		
A2	5	2	12	5		
B1	5	4	3	0		
B2	5	4	3	9		
B3	5	4	4	6		
B4	5	4	5	4		
B5	5	4	6	1		
B6	5	4	6	10		

6' X 6' (CONTINUED)

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
B7	5	12	7	1		
C1	4	2	6	9		
C2	4	2	9	4		
C3	4	2	11	11		
C4	4	2	14	7		
C5	4	2	17	1		
C6	4	4	17	5		
E1	5	2	15	1	10	1
E2	5	2	15	9	10	9
F	4	11	1	5	0	6
G1	4	1	9	11		
G2	4	2	11	11		
G3	4	2	13	11		
G4	4	2	15	11		
G5	4	3	18	0		
H	4	10	11	0	8	10
J1	5	4	3	1		
J2	5	4	4	2		
J3	5	4	5	3		
J4	5	4	6	4		
K1	4	2	2	6		
K2	4	2	4	3		
K3	4	2	6	2		
K4	4	2	7	11		
K5	4	4	8	2		
M1	4	25	3	9		
M2	4	1	2	4		
N1	4	7	8	2		
N2	4	5	15	6		
N3	4	2	17	7		
P	5	26	5	3	3	6
Q	5	5	6	10		
R	5	8	3	5		
S1	5	2	1	1		
S2	5	2	1	10		
S3	5	2	2	6		
S4	5	2	3	3		
S5	5	2	4	0		
S6	5	2	4	8		
S7	5	2	5	4		
S8	5	2	5	8		
T1	5	2	1	6		
T2	5	2	3	0		
T3	5	2	4	4		
T4	5	2	5	9		
T5	5	2	7	2		
T6	5	2	7	9		

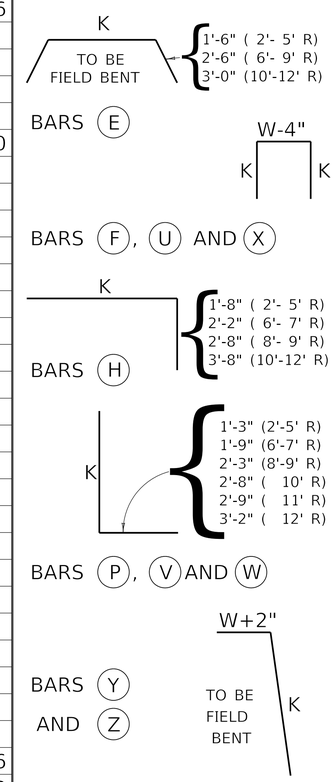
7' X 4'

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	7	5		
A2	5	2	9	11		
C1	4	1	7	8		
C2	4	1	10	3		
C3	4	1	12	10		
C4	4	1	15	4		
C5	4	1	15	9		
E1	5	2	14	8	11	8
E2	5	2	15	0	12	0
F	4	12	1	3	0	6
G1	4	1	10	7		
G2	4	2	12	5		
G3	4	2	14	2		
G4	4	3	16	0		
H	4	9	8	8	7	0
K1	4	1	2	8		
K2	4	1	4	6		
K3	4	1	6	3		
K4	4	1	6	6		
N1	4	3	6	6		
N2	4	3	15	9		
Q	4	2	8	0		
R	4	9	1	3		
S1	5	2	1	7		
S2	5	2	2	3		
S3	5	2	3	0		
S4	5	2	3	8		
S5	5	2	4	5		
S6	5	2	5	1		
S7	5	2	5	10		
S8	5	2	6	4		
T1	5	2	2	2		
T2	5	2	3	7		
T3	5	2	5	1		
T4	5	2	6	6		
T5	5	2	7	10		
T6	5	2	8	10		
V1	5	2	3	9	2	6
V2	5	2	4	6	3	3
V3	5	2	5	3	4	0
V4	5	2	6	1	4	10
V5	5	2	6	10	5	7
V6	5	6	6	11	5	8
W1	5	2	3	9	2	6
W2	5	2	4	11	3	8
W3	5	2	6	0	4	9
W4	5	1	7	1	5	10

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
5' X 5' – 7' X 4' HEADWALLS
PRECAST BOX CULVERTS
30° SKEW

STANDARD DRAWING NO. RDH-1330-03

SUBMITTED _____ DIRECTOR DIVISION OF DESIGN _____ DATE

APPROVED _____ STATE HIGHWAY ENGINEER _____ DATE