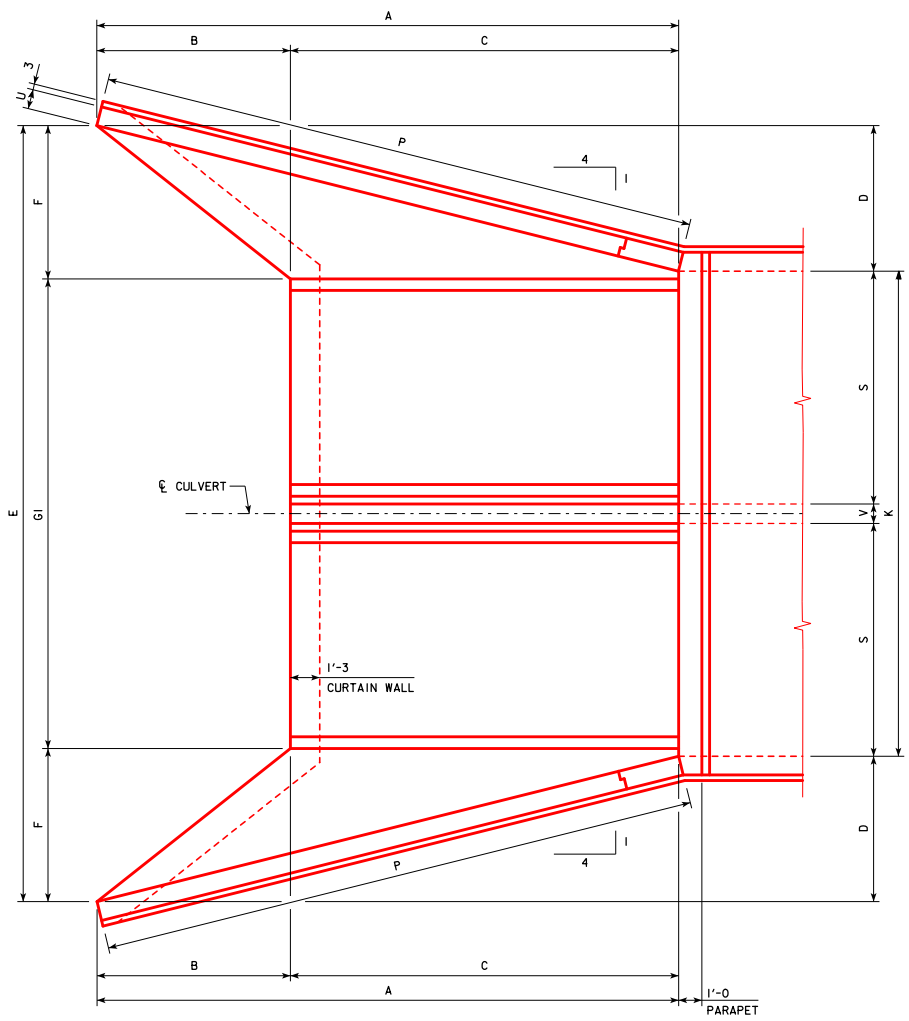


REVISED 12-2016; REMOVED NOTE STATING LOCATION FOR HEADWALL NOTES. ENGLISH DESIGNING INCULVERTS.DGN - TWH 0-1-12 - THIS SHEET ISSUED 04-12.



PLAN VIEW

DIMENSION TABLE																			
S	X	H	12' X 12'	12' X 11'	12' X 10'	12' X 9'	12' X 8'	12' X 7'	12' X 6'	12' X 5'	12' X 4'	10' X 12'	10' X 11'	10' X 10'	10' X 9'	S	X	H	
A	37'-0		34'-0	31'-0	28'-0	25'-0	22'-0	19'-0	16'-0	13'-0	10'-0	37'-0	34'-0	31'-0	28'-0		A		
B	12'-4		11'-4	10'-4	9'-4	8'-4	7'-4	6'-4	5'-4	4'-4	12'-4	11'-4	10'-4	9'-4		B			
C	24'-8		22'-8	20'-8	18'-8	16'-8	14'-8	12'-8	10'-8	8'-8	24'-8	22'-8	20'-8	18'-8		C			
D	9'-3		8'-6	7'-9	7'-0	6'-3	5'-6	4'-9	4'-0	3'-3	9'-3	8'-6	7'-9	7'-0		D			
E	43'-6		41'-11	40'-4	38'-10	37'-4	35'-9	34'-3	32'-9	31'-3	39'-6	37'-11	36'-4	34'-10		E			
F	9'-7		8'-10	8'-1	7'-4	6'-7	5'-10	5'-1	4'-4	3'-7	9'-7	8'-10	8'-1	7'-4		F			
G1	24'-4		24'-3	24'-2	24'-2	24'-2	24'-1	24'-1	24'-1	24'-1	24'-1	20'-4	20'-3	20'-2		G1			
G2	25'-6 1/2		25'-5 3/8	25'-4 5/8	25'-4 1/2	25'-4 1/2	25'-3 1/2	25'-3 1/2	25'-3 1/2	25'-3 1/2	25'-3 1/2	21'-6 3/4	21'-5 5/8	21'-4 5/8		G2			
G3	15'-7 1/2		14'-4 3/8	13'-1 3/8	11'-10 3/8	10'-7 3/8	9'-4 1/2	8'-1 1/2	6'-10 1/2	5'-7 1/2	15'-7 1/2	14'-4 3/8	13'-1 3/8	11'-10 3/8		G3			
G4	16'-5 1/2		15'-0 1/2	13'-7	12'-4	11'-1	9'-7 3/8	8'-4 1/2	7'-1 1/2	5'-11	16'-5 1/2	15'-0 1/2	13'-7	12'-4		G4			
G5	0'-3 1/2		0'-5 3/8	0'-7 3/8	0'-7 3/8	0'-7 3/8	0'-9 3/8	0'-9 3/8	0'-9 3/8	0'-9 3/8	0'-9 3/8	0'-9 3/8	0'-5 3/8	0'-7 3/8		G5			
K	25'-0		24'-11	24'-10	24'-10	24'-10	24'-9	24'-9	24'-9	24'-9	24'-9	21'-0	20'-11	20'-10		K			
P	38'-1 1/2		35'-0 1/2	31'-11 1/2	28'-10 3/8	25'-9 1/4	22'-8 1/4	19'-7	16'-5 1/2	13'-4 3/8	38'-1 1/2	35'-0 1/2	31'-11 1/2	28'-10 3/8		P			
RI	40'-1		36'-10	33'-7	30'-4	27'-1	23'-10	20'-7	17'-4	14'-1	40'-1	36'-10	33'-7	30'-4		RI			
R2	27'-0 1/2		24'-9 1/4	22'-6 1/2	20'-3 1/2	18'-0 1/2	15'-10 1/4	13'-7 3/8	11'-4 1/2	9'-2	27'-0 1/2	24'-9 1/4	22'-6 1/2	20'-3 1/2		R2			
T	1'-2		1'-2	1'-2	1'-2	1'-2	1'-2	1'-2	1'-2	1'-2	1'-2	1'-1	1'-1	1'-1		T			
U	1'-0		0'-11	0'-10	0'-10	0'-10	0'-9	0'-9	0'-9	0'-9	1'-0	0'-11	0'-10	0'-10		U			
V	1'-0		0'-11	0'-10	0'-10	0'-10	0'-9	0'-9	0'-9	0'-9	1'-0	0'-11	0'-10	0'-10		V			
W	5'-0		4'-9	4'-6	4'-3	4'-0	3'-9	3'-6	3'-6	3'-6	5'-0	4'-9	4'-6	4'-3		W			

S	X	H	10' X 8'	10' X 7'	10' X 6'	10' X 5'	10' X 4'	8' X 10'	8' X 9'	8' X 8'	8' X 7'	8' X 6'	8' X 5'	8' X 4'	S	X	H
A	25'-0		22'-0	19'-0	16'-0	13'-0	11'-0	25'-0	22'-0	19'-0	16'-0	13'-0	11'-0		A		
B	8'-4		7'-4	6'-4	5'-4	4'-4	10'-4	9'-4	8'-4	7'-4	6'-4	5'-4	4'-4		B		
C	16'-8		14'-8	12'-8	10'-8	8'-8	20'-8	18'-8	16'-8	14'-8	12'-8	10'-8	8'-8		C		
D	6'-3		5'-6	4'-9	4'-0	3'-3	7'-9	7'-0	6'-3	5'-6	4'-9	4'-0	3'-3		D		
E	33'-4		31'-9	30'-3	28'-9	27'-3	32'-4	30'-10	29'-4	27'-9	26'-3	24'-9	23'-3		E		
F	6'-7		5'-10	5'-1	4'-4	3'-7	8'-1	7'-4	6'-7	5'-10	5'-1	4'-4	3'-7		F		
G1	20'-2		20'-1	20'-1	20'-1	20'-1	16'-2	16'-2	16'-2	16'-1	16'-1	16'-1	16'-1		G1		
G2	21'-4 1/2		21'-3 1/2	21'-3 3/8	21'-3 1/4	21'-3 1/8	17'-4 5/8	17'-4 1/2	17'-3 3/4	17'-3 1/2	17'-3 1/4	17'-3 1/8	17'-3 1/4		G2		
G3	10'-7 1/2		9'-4 1/2	8'-1 1/2	6'-10 1/2	5'-7 1/2	13'-1 3/8	11'-10 3/8	10'-7 3/8	9'-4 1/2	8'-1 1/2	6'-10 1/2	5'-7 1/2		G3		
G4	11'-1		9'-7 3/8	8'-4 3/8	7'-1 1/2	5'-11	13'-7	12'-4	11'-1	9'-7 3/8	8'-4 3/8	7'-1 1/2	5'-11		G4		
G5	0'-7 3/8		0'-9 3/8	0'-9 3/8	0'-9 3/8	0'-9 3/8	0'-7 3/8	0'-7 3/8	0'-7 3/8	0'-9 3/8	0'-9 3/8	0'-9 3/8	0'-9 3/8		G5		
K	20'-10		20'-9	20'-9	20'-9	20'-9	16'-10	16'-10	16'-10	16'-9	16'-9	16'-9	16'-9		K		
P	25'-9 1/4		22'-8 1/4	19'-7	16'-5 3/4	13'-4 1/4	31'-11 1/2	28'-10 3/8	25'-9 1/4	22'-8 1/4	19'-7	16'-5 3/4	13'-4 1/4		P		
RI	27'-1		23'-10	20'-7	17'-4	14'-1	33'-7	30'-4	27'-1	23'-10	20'-7	17'-4	14'-1		RI		
R2	18'-0 1/2		15'-10 1/4	13'-7 3/8	11'-4 3/8	9'-2	22'-6 1/2	20'-3 1/2	18'-0 1/2	15'-10 1/4	13'-7 3/8	11'-4 3/8	9'-2		R2		
T	1'-1		1'-1	1'-1	1'-1	1'-1	1'-0	1'-0	1'-0	1'-0	1'-0	1'-0	1'-0		T		
U	0'-10		0'-9	0'-9	0'-9	0'-9	0'-10	0'-10	0'-10	0'-9	0'-9	0'-9	0'-9		U		
V	0'-10		0'-9	0'-9	0'-9	0'-9	0'-10	0'-10	0'-10	0'-9	0'-9	0'-9	0'-9		V		
W	4'-0		3'-9	3'-6	3'-6	3'-6	4'-6	4'-3	4'-0	3'-9	3'-6	3'-6	3'-6		W		

NOTES:

- SEE SHEET TWRCB G1-12 FOR GENERAL INFORMATION, SPECIFICATIONS, AND DESIGN STRESSES.
- SEE SHEETS TWH 0-2-12 & TWH 0-3-12 FOR LOCATION OF CERTAIN DIMENSIONS TABULATED

12-2016 LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 Iowa Department of Transportation Highway Division
		STANDARD DESIGN TWIN REINFORCED CONCRETE BOX CULVERTS APRIL, 2012
		FLARED WING HEADWALLS 0° SKEW

TWH 0-1-12