

NO.	DESCRIPTION OF REVISIONS	MADE BY	DATE
1	Original Issue	S.U.H.	2-12
2	Added 3'-4.5' height for existing box extensions only	D.B.B.	5-15
3			
4			

Note to Designer:  
The information presented in this Standard Detail has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

Span 'S'	Height 'H'	Top Slab 'T'	Walls 'W'	aa			bb			cc	ee			ff			gg	hh				
				Bar Size	Spacing	Length	Bar Size	Spacing	Length		Number	Bar Size	Spacing	Length	Bar Size	Spacing		Length	Number	D	Bar Size	Spacing
6'	3'	9 1/2"	8"	5	12"	4'-4"	5	12"	8'-9"	128	5	7"	41'-4"	5	7"	41'-4"	48	3'-0"	4	7"	5'-1"	2'-5"
	4'	9 1/2"	8"	5	12"	5'-4"	5	12"	10'-9"	142	5	7"	41'-4"	5	7"	41'-4"	48	3'-0"	4	7"	5'-7"	2'-5"
	5'	9 1/2"	8"	5	12"	6'-4"	5	12"	12'-9"	142	5	7"	41'-4"	5	7"	41'-4"	48	3'-0"	4	7"	6'-1"	2'-5"
	6'	9 1/2"	8"	5	12"	7'-4"	5	12"	14'-9"	156	5	7"	41'-4"	5	7"	41'-4"	48	3'-0"	4	7"	6'-7"	2'-5"
	7'	9 1/2"	8"	5	10"	8'-4"	5	12"	16'-9"	170	5	7"	41'-4"	5	6"	41'-4"	48	3'-0"	4	6"	7'-1"	2'-5"
8'	3'	12"	9"	5	12"	4'-9"	5	12"	9'-7"	128	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	4	7"	5'-5"	2'-6"
	4'	12"	9"	5	12"	5'-9"	5	12"	11'-7"	142	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	4	7"	5'-11"	2'-6"
	5'	12"	9"	5	12"	6'-9"	5	12"	13'-7"	142	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	4	7"	6'-5"	2'-6"
	6'	12"	9"	5	12"	7'-9"	5	12"	15'-7"	156	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	4	7"	6'-11"	2'-6"
	7'	12"	9"	5	12"	8'-9"	5	12"	17'-7"	170	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	5	7"	7'-5"	2'-6"
8'	12"	9"	5	10"	9'-9"	5	12"	19'-7"	170	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	5	7"	7'-11"	2'-6"	
10'	3'	15"	11"	5	12"	5'-3"	5	12"	10'-5"	128	6	8"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	6'-0"	2'-8"
	4'	15"	11"	5	12"	6'-3"	5	12"	12'-5"	142	6	8"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	6'-6"	2'-8"
	5'	15"	11"	5	12"	7'-3"	5	12"	14'-5"	142	6	8"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	7'-0"	2'-8"
	6'	15"	11"	5	12"	8'-3"	5	12"	16'-5"	156	6	8"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	7'-6"	2'-8"
	7'	15"	11"	5	12"	9'-3"	5	12"	18'-5"	170	6	8"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	8'-0"	2'-8"
	8'	15"	11"	5	12"	10'-3"	5	12"	20'-5"	170	6	8"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	8'-6"	2'-8"
12'	8'	18"	13"	5	12"	10'-9"	5	12"	21'-1"	170	6	6"	78'-2"	7	6"	78'-2"	84	6'-0"	5	6"	9'-6"	3'-5"
	9'	18"	13"	5	12"	11'-9"	5	12"	23'-1"	184	6	6"	78'-2"	7	6"	78'-2"	84	6'-0"	5	6"	10'-0"	3'-5"
	10'	18"	13"	5	10"	12'-9"	5	12"	25'-1"	198	6	6"	78'-2"	7	6"	78'-2"	84	6'-0"	5	6"	10'-7"	3'-5"
	11'	18"	13"	5	10"	13'-9"	5	12"	27'-1"	198	6	6"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	11'-1"	3'-5"
	12'	18"	13"	5	10"	14'-9"	5	12"	29'-1"	212	6	6"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	11'-7"	3'-5"

‡ Total number of bars in the cross-section. \* Includes lap splice length.

Span 'S'	Height 'H'	Top Slab 'T'	Walls 'W'	aa			bb			cc	ee			ff			gg	hh				
				Bar Size	Spacing	Length	Bar Size	Spacing	Length		Number	Bar Size	Spacing	Length	Bar Size	Spacing		Length	Number	D	Bar Size	Spacing
6'	3'	12 1/2"	8"	5	12"	4'-10"	5	12"	9'-10"	128	5	7"	41'-4"	5	6"	41'-4"	48	3'-0"	4	6"	5'-4"	2'-5"
	4'	12 1/2"	8"	5	12"	5'-10"	5	12"	11'-10"	142	5	7"	41'-4"	5	6"	41'-4"	48	3'-0"	4	6"	5'-10"	2'-5"
	5'	12 1/2"	8"	5	12"	6'-10"	5	12"	13'-10"	142	5	7"	41'-4"	5	6"	41'-4"	48	3'-0"	4	6"	6'-4"	2'-5"
	6'	12 1/2"	8"	5	12"	7'-10"	5	12"	15'-10"	156	5	7"	41'-4"	5	6"	41'-4"	48	3'-0"	4	6"	6'-10"	2'-5"
	7'	12 1/2"	8"	5	10"	8'-10"	5	12"	17'-10"	170	5	7"	41'-4"	5	6"	41'-4"	48	3'-0"	5	6"	7'-4"	2'-5"
8'	3'	16"	9"	5	12"	5'-5"	5	12"	10'-11"	128	5	6"	53'-6"	6	6"	53'-6"	60	4'-0"	4	6"	5'-9"	2'-6"
	4'	16"	9"	5	12"	6'-5"	5	12"	12'-11"	142	5	6"	53'-6"	6	6"	53'-6"	60	4'-0"	4	6"	6'-3"	2'-6"
	5'	16"	9"	5	12"	7'-5"	5	12"	14'-11"	142	5	6"	53'-6"	6	6"	53'-6"	60	4'-0"	4	6"	6'-9"	2'-6"
	6'	16"	9"	5	12"	8'-5"	5	12"	16'-11"	156	5	6"	53'-6"	6	6"	53'-6"	60	4'-0"	4	6"	7'-3"	2'-6"
	7'	16"	9"	5	10"	9'-5"	5	12"	18'-11"	170	5	6"	53'-6"	6	6"	53'-6"	60	4'-0"	5	6"	7'-9"	2'-6"
8'	16"	9"	5	10"	10'-5"	5	12"	20'-11"	170	5	6"	53'-6"	6	6"	53'-6"	60	4'-0"	5	6"	8'-3"	2'-6"	
10'	3'	19"	11"	5	12"	5'-11"	5	12"	11'-6"	128	6	6"	65'-10"	7	6"	65'-10"	72	5'-0"	5	6"	6'-6"	2'-9"
	4'	19"	11"	5	12"	6'-11"	5	12"	13'-6"	142	6	6"	65'-10"	7	6"	65'-10"	72	5'-0"	5	6"	7'-0"	2'-9"
	5'	19"	11"	5	12"	7'-11"	5	12"	15'-6"	142	6	6"	65'-10"	7	6"	65'-10"	72	5'-0"	5	6"	7'-6"	2'-9"
	6'	19"	11"	5	12"	8'-11"	5	12"	17'-6"	156	6	6"	65'-10"	7	6"	65'-10"	72	5'-0"	5	6"	8'-0"	2'-9"
	7'	19"	11"	5	12"	9'-11"	5	12"	19'-6"	170	6	6"	65'-10"	7	6"	65'-10"	72	5'-0"	5	6"	8'-6"	2'-9"
	8'	19"	11"	5	12"	10'-11"	5	12"	21'-6"	170	6	6"	65'-10"	7	6"	65'-10"	72	5'-0"	5	6"	9'-0"	2'-9"
12'	8'	23"	13"	5	12"	11'-7"	5	12"	22'-7"	170	7	7"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	10'-0"	3'-5"
	9'	23"	13"	5	10"	12'-7"	5	12"	24'-7"	184	7	7"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	10'-6"	3'-5"
	10'	23"	13"	5	10"	13'-7"	5	12"	26'-7"	198	7	7"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	11'-0"	3'-5"
	11'	23"	13"	5	10"	14'-7"	5	12"	28'-7"	198	7	7"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	11'-6"	3'-5"
	12'	23"	13"	5	7"	15'-7"	5	12"	30'-7"	212	7	7"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	12'-0"	3'-5"

New box culverts shall not be constructed using 3' or 4' heights without special approval from ADOT Bridge Group. Tables referencing these sizes are provided for extension of existing box culverts only.

Span 'S'	Height 'H'	Top Slab 'T'	Walls 'W'	aa			bb			cc	ee			ff			gg	hh				
				Bar Size	Spacing	Length	Bar Size	Spacing	Length		Number	Bar Size	Spacing	Length	Bar Size	Spacing		Length	Number	D	Bar Size	Spacing
6'	3'	11"	8"	5	12"	4'-7"	5	12"	9'-2"	128	5	7"	41'-4"	5	7"	41'-4"	48	3'-0"	4	7"	5'-3"	2'-5"
	4'	11"	8"	5	12"	5'-7"	5	12"	11'-2"	142	5	7"	41'-4"	5	7"	41'-4"	48	3'-0"	4	7"	5'-9"	2'-5"
	5'	11"	8"	5	12"	6'-7"	5	12"	13'-2"	142	5	7"	41'-4"	5	7"	41'-4"	48	3'-0"	4	7"	6'-3"	2'-5"
	6'	11"	8"	5	12"	7'-7"	5	12"	15'-2"	156	5	7"	41'-4"	5	7"	41'-4"	48	3'-0"	4	7"	6'-9"	2'-5"
	7'	11"	8"	5	10"	8'-7"	5	12"	17'-2"	170	5	7"	41'-4"	5	7"	41'-4"	48	3'-0"	5	7"	7'-3"	2'-5"
8'	3'	14"	9"	5	12"	5'-1"	5	12"	10'-1"	128	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	4	7"	5'-7"	2'-6"
	4'	14"	9"	5	12"	6'-1"	5	12"	12'-1"	142	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	4	7"	6'-1"	2'-6"
	5'	14"	9"	5	12"	7'-1"	5	12"	14'-1"	142	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	4	7"	6'-7"	2'-6"
	6'	14"	9"	5	12"	8'-1"	5	12"	16'-1"	156	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	4	7"	7'-1"	2'-6"
	7'	14"	9"	5	10"	9'-1"	5	12"	18'-1"	170	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	5	7"	7'-7"	2'-6"
8'	14"	9"	5	10"	10'-1"	5	12"	20'-1"	170	5	7"	53'-6"	6	7"	53'-6"	60	4'-0"	5	7"	8'-1"	2'-6"	
10'	3'	17"	11"	5	12"	5'-7"	5	12"	10'-11"	128	6	7"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	6'-3"	2'-9"
	4'	17"	11"	5	12"	6'-7"	5	12"	12'-11"	142	6	7"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	6'-9"	2'-9"
	5'	17"	11"	5	12"	7'-7"	5	12"	14'-11"	142	6	7"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	7'-3"	2'-9"
	6'	17"	11"	5	12"	8'-7"	5	12"	16'-11"	156	6	7"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	7'-9"	2'-9"
	7'	17"	11"	5	12"	9'-7"	5	12"	18'-11"	170	6	7"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	8'-3"	2'-9"
	8'	17"	11"	5	12"	10'-7"	5	12"	20'-11"	170	6	7"	65'-10"	7	7"	65'-10"	72	5'-0"	5	7"	8'-9"	2'-9"
12'	8'	20 1/2"	13"	5	12"	11'-2"	5	12"	22'-1"	170	6	6"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	9'-3"	2'-11"
	9'	20 1/2"	13"	5	12"	12'-2"	5	12"	24'-1"	184	6	6"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	9'-9"	2'-11"
	10'	20 1/2"	13"	5	10"	13'-2"	5	12"	26'-1"	198	6	6"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	10'-3"	2'-11"
	11'	20 1/2"	13"	5	10"	14'-2"	5	12"	28'-1"	198	6	6"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	11'-3"	3'-5"
	12'	20 1/2"	13"	5	9"	15'-2"	5	12"	30'-1"	212	6	6"	78'-2"	7	6"	78'-2"	84	6'-0"	6	6"	11'-9"	3'-5"