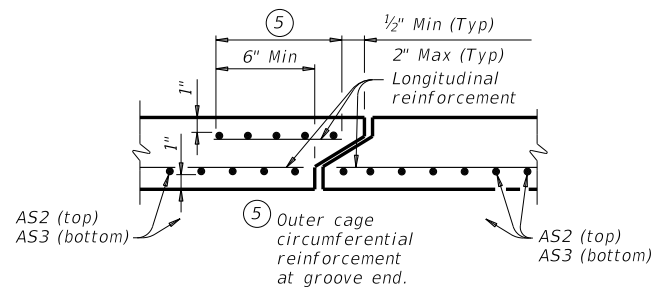


DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act." No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

BOX DATA

SECTION DIMENSIONS					Fill Height (ft.)	M (Min) (in.)	REINFORCING (sq. in. / ft.) ^②							① Lift Weight (tons)
S (ft.)	H (ft.)	TT (in.)	TB (in.)	TS (in.)			AS1	AS2	AS3	AS4	AS5	AS7	AS8	
12	4	12	12	12	< 2	-	0.38	0.31	0.29	0.29	0.29	0.29	22.8	
12	4	12	12	12	2 < 3	73	0.44	0.37	0.30	0.29	-	-	22.8	
12	4	12	12	12	3 - 5	66	0.37	0.30	0.29	0.29	-	-	22.8	
12	4	12	12	12	10	66	0.44	0.34	0.35	0.29	-	-	22.8	
12	4	12	12	12	15	59	0.60	0.46	0.48	0.29	-	-	22.8	
12	4	12	12	12	20	59	0.78	0.60	0.61	0.29	-	-	22.8	
12	4	12	12	12	25	59	0.97	0.74	0.75	0.29	-	-	22.8	
12	5	12	12	12	< 2	-	0.34	0.33	0.29	0.29	0.29	0.29	24.0	
12	5	12	12	12	2 < 3	66	0.41	0.40	0.33	0.29	-	-	24.0	
12	5	12	12	12	3 - 5	61	0.34	0.33	0.30	0.29	-	-	24.0	
12	5	12	12	12	10	59	0.41	0.38	0.39	0.29	-	-	24.0	
12	5	12	12	12	15	59	0.55	0.51	0.52	0.29	-	-	24.0	
12	5	12	12	12	20	59	0.71	0.66	0.67	0.29	-	-	24.0	
12	5	12	12	12	25	59	0.88	0.81	0.82	0.29	-	-	24.0	
12	6	12	12	12	< 2	-	0.32	0.36	0.32	0.29	0.29	0.29	25.2	
12	6	12	12	12	2 < 3	66	0.38	0.43	0.36	0.29	-	-	25.2	
12	6	12	12	12	3 - 5	59	0.32	0.36	0.33	0.29	-	-	25.2	
12	6	12	12	12	10	59	0.38	0.41	0.42	0.29	-	-	25.2	
12	6	12	12	12	15	53	0.51	0.55	0.57	0.29	-	-	25.2	
12	6	12	12	12	20	53	0.65	0.71	0.72	0.29	-	-	25.2	
12	6	12	12	12	25	53	0.81	0.87	0.89	0.29	-	-	25.2	
12	7	12	12	12	< 2	-	0.30	0.39	0.35	0.29	0.29	0.29	26.4	
12	7	12	12	12	2 < 3	66	0.35	0.46	0.39	0.29	-	-	26.4	
12	7	12	12	12	3 - 5	59	0.29	0.38	0.36	0.29	-	-	26.4	
12	7	12	12	12	10	59	0.36	0.43	0.45	0.29	-	-	26.4	
12	7	12	12	12	15	53	0.47	0.58	0.61	0.29	-	-	26.4	
12	7	12	12	12	20	53	0.61	0.75	0.77	0.29	-	-	26.4	
12	8	12	12	12	< 2	-	0.29	0.41	0.38	0.29	0.29	0.29	27.6	
12	8	12	12	12	2 < 3	66	0.33	0.49	0.42	0.29	-	-	27.6	
12	8	12	12	12	3 - 5	59	0.29	0.41	0.38	0.29	-	-	27.6	
12	8	12	12	12	10	59	0.34	0.46	0.48	0.29	-	-	27.6	
12	8	12	12	12	15	53	0.44	0.61	0.64	0.29	-	-	27.6	
12	8	12	12	12	20	53	0.57	0.78	0.81	0.29	-	-	27.6	
12	8	12	12	12	25	53	0.69	0.96	0.99	0.29	-	-	27.6	

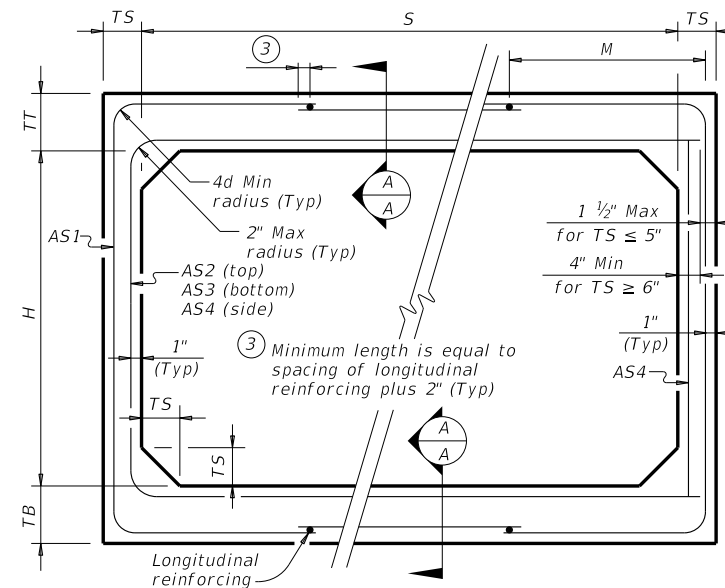


SECTION A-A
(Showing top and bottom slab joint reinforcement.)

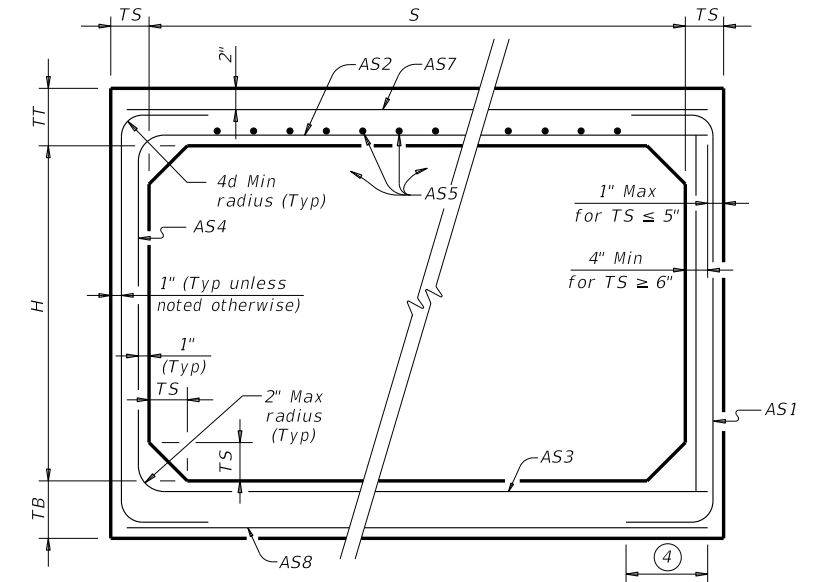
- ① For box length = 8'-0"
- ② AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.

BOX DATA

SECTION DIMENSIONS					Fill Height (ft.)	M (Min) (in.)	REINFORCING (sq. in. / ft.) ^②							① Lift Weight (tons)
S (ft.)	H (ft.)	TT (in.)	TB (in.)	TS (in.)			AS1	AS2	AS3	AS4	AS5	AS7	AS8	
12	9	12	12	12	< 2	-	0.29	0.43	0.40	0.29	0.29	0.29	28.8	
12	9	12	12	12	2 < 3	66	0.30	0.51	0.45	0.29	-	-	28.8	
12	9	12	12	12	3 - 5	66	0.29	0.43	0.41	0.29	-	-	28.8	
12	9	12	12	12	10	59	0.32	0.47	0.51	0.29	-	-	28.8	
12	9	12	12	12	15	53	0.42	0.63	0.67	0.29	-	-	28.8	
12	9	12	12	12	20	53	0.53	0.81	0.85	0.29	-	-	28.8	
12	9	12	12	12	25	53	0.69	0.96	0.99	0.29	-	-	28.8	
12	10	12	12	12	< 2	-	0.29	0.45	0.43	0.29	0.29	0.29	30.0	
12	10	12	12	12	2 < 3	73	0.29	0.54	0.48	0.29	-	-	30.0	
12	10	12	12	12	3 - 5	66	0.29	0.45	0.43	0.29	-	-	30.0	
12	10	12	12	12	10	59	0.31	0.49	0.53	0.29	-	-	30.0	
12	10	12	12	12	15	53	0.40	0.65	0.70	0.29	-	-	30.0	
12	10	12	12	12	20	53	0.51	0.84	0.88	0.29	-	-	30.0	
12	10	12	12	12	25	53	0.62	1.03	1.07	0.29	-	-	30.0	
12	11	12	12	12	< 2	-	0.29	0.47	0.45	0.29	0.29	0.29	31.2	
12	11	12	12	12	2 < 3	80	0.29	0.56	0.51	0.29	-	-	31.2	
12	11	12	12	12	3 - 5	73	0.29	0.47	0.46	0.29	-	-	31.2	
12	11	12	12	12	10	66	0.29	0.51	0.55	0.29	-	-	31.2	
12	11	12	12	12	15	59	0.38	0.67	0.72	0.29	-	-	31.2	
12	11	12	12	12	20	53	0.48	0.85	0.91	0.29	-	-	31.2	
12	11	12	12	12	25	53	0.59	1.05	1.10	0.29	-	-	31.2	
12	12	12	12	12	< 2	-	0.29	0.49	0.48	0.33	0.29	0.29	32.4	
12	12	12	12	12	2 < 3	93	0.29	0.59	0.53	0.29	-	-	32.4	
12	12	12	12	12	3 - 5	80	0.29	0.49	0.48	0.29	-	-	32.4	
12	12	12	12	12	10	73	0.29	0.52	0.58	0.29	-	-	32.4	
12	12	12	12	12	15	59	0.37	0.69	0.74	0.29	-	-	32.4	
12	12	12	12	12	20	59	0.46	0.87	0.93	0.29	-	-	32.4	



CORNER OPTION "A" CORNER OPTION "B"
FILL HEIGHT 2 FT AND GREATER



CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT

- ④ Length is equal to spacing of longitudinal reinforcing plus 2". (10" Min) (Typ)

MATERIAL NOTES:

Provide 0.03 sq. in./ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.
Provide Class H concrete (f'c = 5,000 psi).

GENERAL NOTES:

Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.
See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.
In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with Item "Precast Concrete Structural Members (Fabrication)."

HL93 LOADING



**SINGLE BOX CULVERTS
PRECAST
12'-0" SPAN**

SCP-12

FILE: CD-SCP12-20.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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