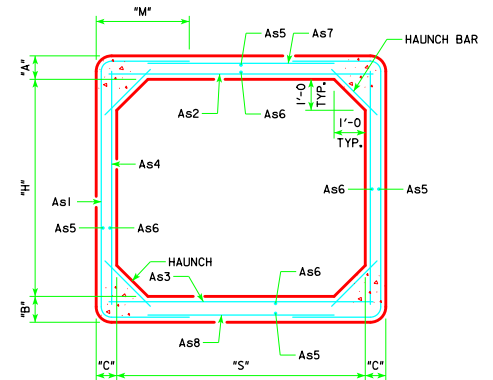
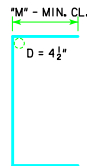


## VARIABLE DIMENSIONS AND QUANTITIES FOR 8' SPAN BARREL SECTIONS

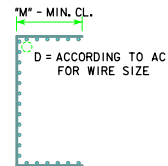
DIMENSIONS									REINFORCEMENT REQUIREMENTS (IN <sup>2</sup> /FT)								WEIGHT (LB/FT)			
SIZE	CLASS	f'c (ksi)	FILL	S	H	A	B	C	As1		As2		As3		As4			As7/As8		
									AREA	LENGTH	M	AREA	LENGTH	AREA	LENGTH	AREA	LENGTH	AREA	LENGTH	
8x4	1	5.0	2-9	8	4	9	10	8	0.47	10'-9"	2'-10"	0.42	8'-6"	0.40	8'-6"	0.20	4'-6"	0.24	5'-4"	3320
	2	5.0	10-19	8	4	9	10	8	0.65	10'-9"	2'-10"	0.66	8'-6"	0.67	8'-6"	0.20	4'-6"	0.24	5'-4"	3320
	3	5.0	20-25	8	4	9	10	8	0.85	10'-9"	2'-10"	0.83	8'-6"	0.85	8'-6"	0.20	4'-6"	0.24	5'-4"	3320
8x5	1	5.0	2-9	8	5	9	10	8	0.41	11'-9"	2'-10"	0.46	8'-6"	0.46	8'-6"	0.20	5'-6"	0.24	5'-4"	3520
	2	5.0	10-19	8	5	9	10	8	0.57	11'-9"	2'-10"	0.72	8'-6"	0.74	8'-6"	0.20	5'-6"	0.24	5'-4"	3520
	3	5.0	20-25	8	5	9	10	8	0.74	11'-9"	2'-10"	0.91	8'-6"	0.94	8'-6"	0.20	5'-6"	0.24	5'-4"	3520
8x6	1	5.0	2-9	8	6	9	10	8	0.37	12'-9"	2'-10"	0.50	8'-6"	0.50	8'-6"	0.20	6'-6"	0.24	5'-4"	3720
	2	5.0	10-19	8	6	9	10	8	0.51	12'-9"	2'-10"	0.76	8'-6"	0.79	8'-6"	0.20	6'-6"	0.24	5'-4"	3720
	3	5.0	20-25	8	6	9	10	8	0.66	12'-9"	2'-10"	0.96	8'-6"	0.99	8'-6"	0.20	6'-6"	0.24	5'-4"	3720
8x7	1	5.0	2-10	8	7	9	10	8	0.34	13'-9"	2'-10"	0.53	8'-6"	0.54	8'-6"	0.20	7'-6"	0.24	5'-4"	3920
	2	5.0	11-19	8	7	9	10	8	0.47	13'-9"	2'-10"	0.79	8'-6"	0.82	8'-6"	0.20	7'-6"	0.24	5'-4"	3920
	3	5.0	20-25	8	7	9	10	8	0.60	13'-9"	2'-10"	1.00	8'-6"	1.02	8'-6"	0.20	7'-6"	0.24	5'-4"	3920
8x8	1	5.0	2-10	8	8	9	10	8	0.31	14'-9"	2'-10"	0.56	8'-6"	0.57	8'-6"	0.20	8'-6"	0.24	5'-4"	4120
	2	5.0	11-19	8	8	9	10	8	0.43	14'-9"	2'-10"	0.81	8'-6"	0.84	8'-6"	0.20	8'-6"	0.24	5'-4"	4120
	3	5.0	20-25	8	8	9	10	8	0.56	14'-9"	2'-10"	1.01	8'-6"	1.04	8'-6"	0.20	8'-6"	0.24	5'-4"	4120
8x9	1	5.0	2-11	8	9	9	10	8	0.30	15'-9"	2'-10"	0.59	8'-6"	0.60	8'-6"	0.20	9'-6"	0.24	5'-4"	4320
	2	5.0	12-19	8	9	9	10	8	0.42	16'-1"	3'-0"	0.81	8'-6"	0.85	8'-6"	0.22	9'-6"	0.24	5'-0"	4320
	3	5.0	20-25	8	9	9	10	8	0.54	16'-5"	3'-2"	1.01	8'-6"	1.05	8'-6"	0.26	9'-6"	0.24	5'-0"	4320
8x10	1	5.0	2-11	8	10	9	10	8	0.31	17'-1"	3'-0"	0.61	8'-6"	0.63	8'-6"	0.25	10'-6"	0.24	5'-0"	4520
	2	5.0	12-20	8	10	9	10	8	0.48	17'-1"	3'-0"	0.84	8'-6"	0.88	8'-6"	0.34	10'-6"	0.24	5'-0"	4520
	3	5.0	21-25	8	10	9	10	9	0.51	17'-5"	3'-2"	0.94	8'-6"	0.99	8'-6"	0.34	10'-6"	0.24	5'-0"	4810



**TYPICAL BARREL SECTION**



**REINFORCEMENT BARS**



**WELDED WIRE REINFORCEMENT**

### BENT BAR DETAILS

ALL DIMENSIONS ARE OUT TO OUT.  
D = PIN DIAMETER (MIN.).  
PIN DIAMETER MAY BE INCREASED IF NEEDED TO MAINTAIN CLEAR COVER.

### NOTES:

1. DIMENSIONS "A", "B" & "C" LISTED IN THE BAR LIST ARE IN INCHES.
2. LONGITUDINAL REINFORCEMENT DENOTED AS As5 AND As6 MUST BE PLACED IN SLAB, FLOOR, AND WALLS AND MUST BE 0.06 IN<sup>2</sup>/FT MINIMUM.
3. ALL REINFORCEMENT LENGTHS AND AREAS ARE MINIMUM REQUIREMENTS.
4. IF REINFORCING BARS ARE SUBSTITUTED FOR WELDED WIRE REINFORCING, DIMENSION "M" AND/OR LENGTH OF THE As7/As8 REINFORCEMENT SHALL BE ADJUSTED TO ENSURE ADEQUATE LAP LENGTH IS PROVIDED.
5. WEIGHT OF SECTIONS ASSUMES A DENSITY OF 150 PCF AND SQUARED CORNERS.
6. SEE PRCB G1-13 AND G2-13 FOR ADDITIONAL INFORMATION AND NOTES.

ENGL\SHSIGN\PRECAST\CULVERTS.DGN - PRCB 8-13 - THIS SHEET ISSUED 01-13.

LATEST REVISION DATE	APPROVED BY BRIDGE ENGINEER	STANDARD DESIGN <b>SINGLE PRECAST REINFORCED CONCRETE BOX CULVERTS</b> JANUARY, 2013
<b>CULVERT BARREL DETAILS</b> 8' SPAN BARREL SECTIONS		<b>PRCB 8-13</b>