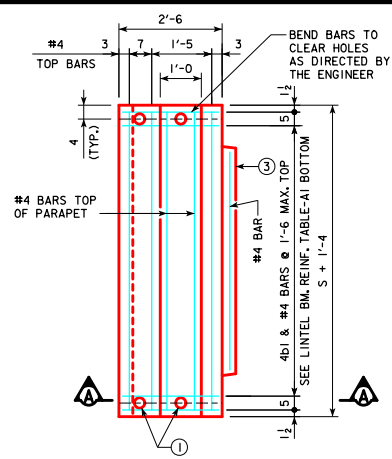
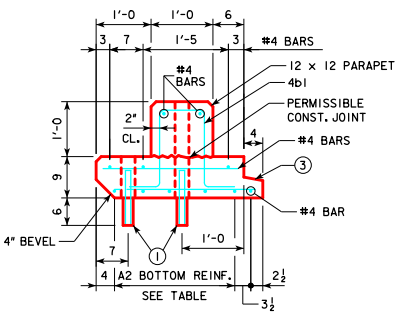


REVISED 07-2016 - CORRECTED TYPES. ADDED DIM. C-C ALONG CENTERLINE OF SKEWED LINTEL BEAM. ADDED TABLE FOR LENGTH "G".
 ENGINEER: JASON DEPRECAST/CULVERTS/DON - PES 3-13-T3 - THIS SHEET ISSUED 01-13

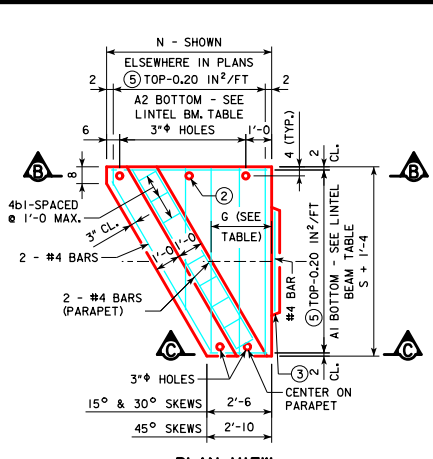


PLAN OF SQUARE LINTEL BEAM
(TONGUE OPTION SHOWN)

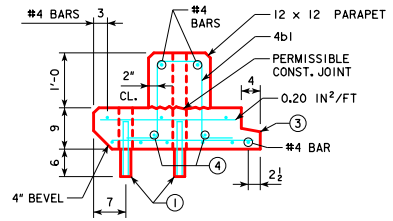


SECTION A-A
(TONGUE OPTION SHOWN)

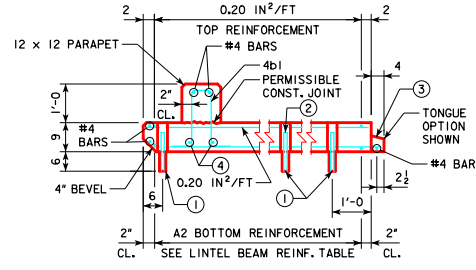
0° SKEW LINTEL BEAM
(FOR SKEWS UP TO 7°30')



PLAN VIEW



SECTION C-C
(TONGUE OPTION SHOWN)



SECTION B-B

SKEWED LINTEL BEAM
(FOR SKEWS OF 7°30' TO 45°)

LENGTH G ALONG BARREL C/L OF SKEWED LINTEL BM.			
SPAN S (FT)	15° SKEW	30° SKEW	45° SKEW
6	1'-4 1/8"	2'-3 1/8"	3'-8 1/8"
8	1'-8 3/8"	2'-10 3/8"	4'-8 3/8"
10	1'-11 3/8"	3'-5 3/8"	5'-8 3/8"
12	2'-2 3/8"	4'-0 3/8"	6'-8 3/8"

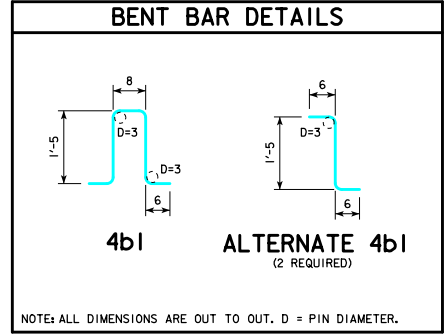
SPAN S (FT)	LINTEL BEAM REINFORCEMENT TABLE			
	BOTTOM REINFORCEMENT			
	WWR OPTION		REBAR OPTION	
	A1 (IN ² /FT)	A2 (IN ² /FT)	A1	A2
6	0.13	0.26	#4 @ 12	3 - #4 @ 12
8	0.16	0.32	#4 @ 12	4 - #4 @ 8
10	0.20	0.40	#4 @ 12	3 - #5 @ 12
12	0.25	0.49	#5 @ 12	4 - #5 @ 8

SPAN S (FT)	LINTEL BEAM REINFORCEMENT TABLE			
	BOTTOM REINFORCEMENT			
	WWR OPTION		REBAR OPTION	
	A1 (IN ² /FT)	A2 (IN ² /FT)	A1	A2
6	0.25	0.50	#5 @ 12	#5 @ 6
8	0.36	0.72	#6 @ 12	#6 @ 6
10	0.49	0.98	#7 @ 12	#7 @ 6
12	0.65	1.30	#8 @ 12	#8 @ 6

SPAN S (FT)	SKEWED PARAPET REINFORCEMENT TABLE		
	15° SKEW	30° SKEW	45° SKEW
6	3 - #4	2 - #5	2 - #6
8	2 - #6	2 - #6	2 - #7
10	2 - #7	2 - #7	3 - #7
12	2 - #7	2 - #8	3 - #8

NOTES:

- PRECAST LINTEL BEAMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH PRECAST BARREL AND END SECTION DETAILS AND NOTES, EXCEPT AS MODIFIED BELOW.
- REINFORCING FOR PRECAST LINTELS AND PARAPETS SHALL BE EITHER WELDED WIRE REINFORCING (WWR) MEETING THE REQUIREMENTS OF AASHTO LRFD SECTION 5 OR REINFORCING BARS MEETING THE REQUIREMENTS OF ASTM A615 (60 KSI). WIRE SPACING FOR WWR SHALL NOT EXCEED 2 INCHES FOR PRIMARY STEEL AND 8 INCHES FOR DISTRIBUTION STEEL.
- PLACE #8 DOWEL, 1'-0" LONG INTO 2 INCH DIA. HOLE IN THE TOP OF THE WALL SECTION AND 3 INCH DIA. HOLE IN THE LINTEL BEAM. FILL HOLES WITH GROUT.
 - CAST ADDITIONAL 3 INCH HOLES TO MAINTAIN A 4 FOOT MAXIMUM HOLE SPACING
 - CHECK THE LOCATION TO DETERMINE WHETHER A TONGUE OR A GROOVE IS USED. TONGUE AND GROOVE TO TERMINATE AT CULVERT RADIUS.
 - SEE SKEWED PARAPET REINFORCEMENT TABLE.
 - AREAS SHOWN ARE FOR WELDED WIRE FABRIC. IF REBAR IS USED, #4 AT A MAX. OF 11 INCH SPACING SHOULD BE USED.



NOTE: ALL DIMENSIONS ARE OUT TO OUT. D = PIN DIAMETER.

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER



STANDARD DESIGN
SINGLE PRECAST REINFORCED CONCRETE BOX CULVERTS
 JANUARY, 2013

TYPE 3 LINTEL BEAM DETAILS
 FOR SKEWS 0° TO 45°

PES 3-13-T3