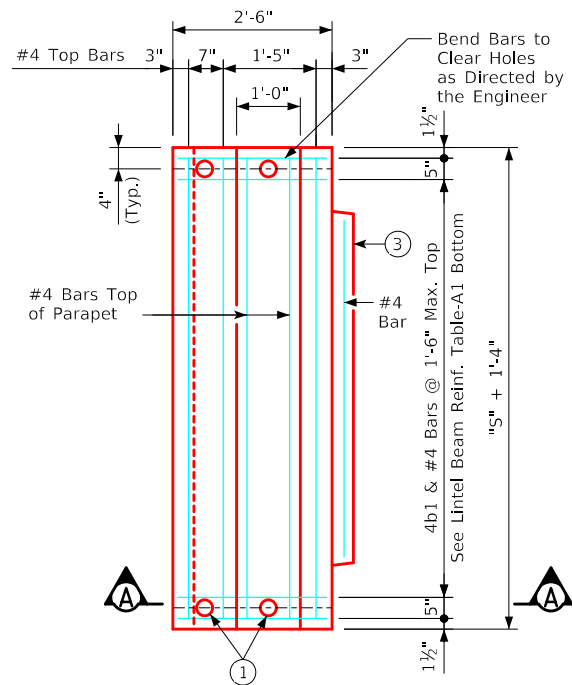
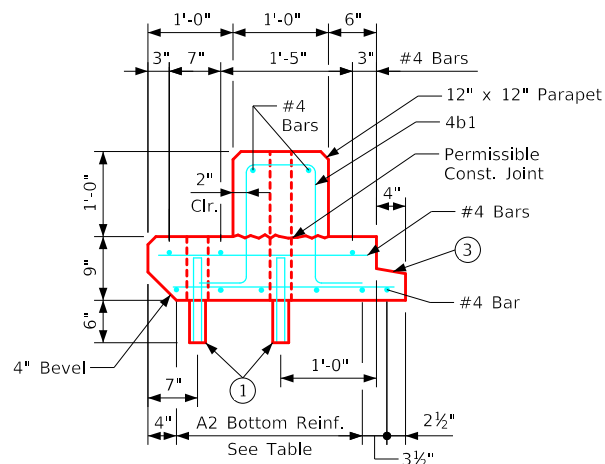


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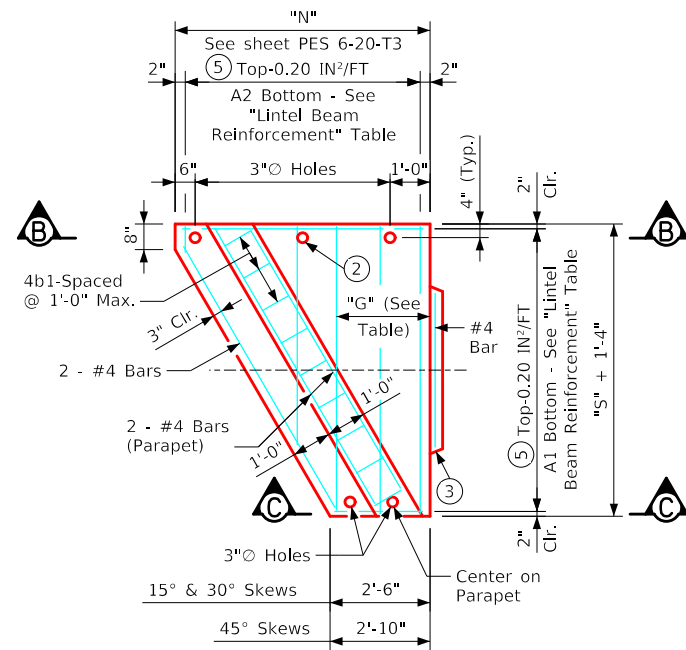
Plan of Square Lintel Beam
(Tongue Option Shown)



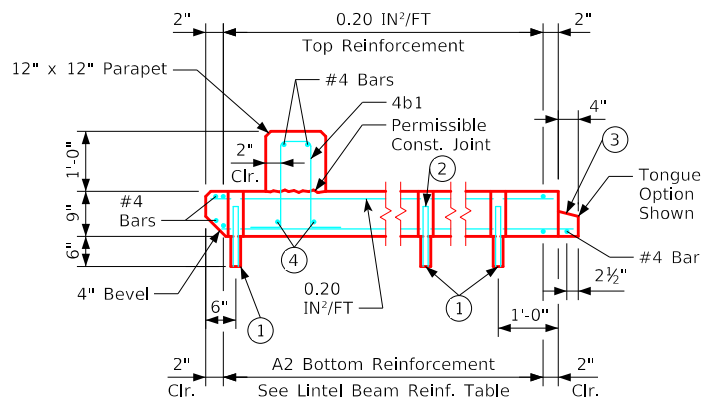
Section A-A
(Tongue Option Shown)

0° Skew Lintel Beam
(For Skews up to 7°30')

Lintel Beam Reinforcement				
Span S (FT)	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"



Plan View



Section B-B

Skewed Lintel Beam
(For Skews of 7°30' to 45°)

Length G Along Barrel Q of Skewed Lintel Beam			
Span S (FT)	15° Skew	30° Skew	45° Skew
6	1'-4 ¹ / ₁₆ "	2'-3 ¹ / ₁₆ "	3'-8 ¹ / ₁₆ "
8	1'-8 ³ / ₁₆ "	2'-10 ³ / ₁₆ "	4'-8 ¹ / ₁₆ "
10	1'-11 ³ / ₁₆ "	3'-5 ⁹ / ₁₆ "	5'-8 ¹ / ₁₆ "
12	2'-2 ¹ / ₁₆ "	4'-0 ¹ / ₂ "	6'-8 ¹ / ₁₆ "

Lintel Beam Reinforcement				
Span S (FT)	Bottom Reinforcement			
	WWR Option		Rebar Option	
	A1 (IN ² /FT)	A2 (IN ² /FT)	A1	A2
6	0.28	0.55	#5 @ 12"	#5 @ 6"
8	0.38	0.76	#6 @ 12"	#6 @ 6"
10	0.50	1.00	#7 @ 12"	#7 @ 6"
12	0.65	1.30	#8 @ 12"	#8 @ 6"

Skewed Parapet Reinforcement				
Span S (FT)	15° Skew	30° Skew	45° Skew	
6	2 - #5	2 - #6	2 - #6	
8	2 - #6	2 - #6	2 - #7	
10	2 - #7	2 - #7	2 - #8	
12	2 - #7	2 - #8	3 - #8	

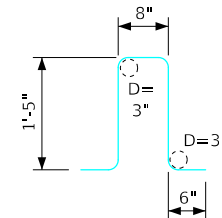
Notes:

Precast lintel beams shall be constructed in accordance with precast barrel and end section details and notes, except as modified below:

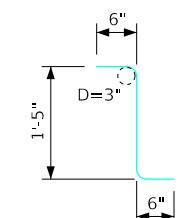
Reinforcing for precast lintels and parapets shall be either welded wire reinforcing (WWR) meeting the requirements of AASHTO LRFD Section 5 or reinforcing bars meeting the requirements of ASTM A615 (60 KSI). Wire spacing for WWR shall not exceed 4 inches for primary steel and 8 inches for distribution 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.

Bent Bar Details



4b1



Alternate 4b1
(2 Required)

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
December, 2020

Type 3 Lintel
Beam Details

For Skews 0° to 45°; 6' - 12' Spans

PES 9-20-T3