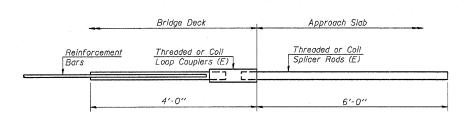
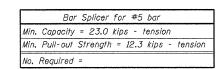


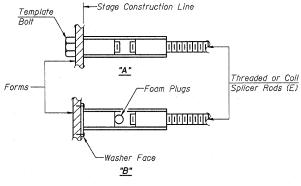
BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



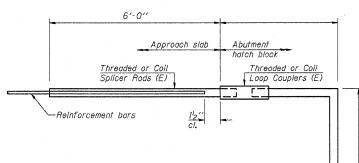
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS





INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt. "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms. (E): Indicates epoxy coating.



FOR STUB **ABUTMENTS**

Bar Splicer for #5 bar Min. Capacity = 23.0 kips - tension Min. Pull-out Strength = 12.3 kips - tension No. Required =

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

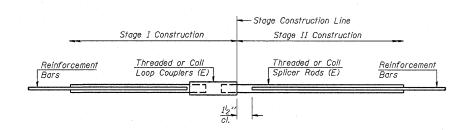
 Minimum Capacity = 1.25 x fy x A_t
 (Tension in kips) = 0.66 x fy x A_t
 (Tension in kins) = 0.66 x fy x A_t (Tension in kips)

Where fy = Yield strength of lapped reinforcement bars in ksi.

A_t = Tensile stress area of lapped reinforcement bars.

* = 28 day concrete

	BAR SPLICER ASSEMBLIES					
	Splicer Rod or Dowel Bar Length	Strength Requirements				
Bar Size to be Spliced			Min. Pull-Out Strength kips - tension			
#4	1'-8''	14.7	7.9			
#5	2'-2"	23.0	12.3			
#6	2'-7"	33.1	17.4			
#7	3′-5″	45.1	23.8			
#8	4′-6′′	58.9	31.3			
#9	5′-9″	75.0	39.6			
#10	7′-3″	95.0	50.3			
#11	9'-0"	117.4	61.8			



STANDARD

Bar Size	No. Assemblies Required	Location		
#5	32	Deck		
#6	6	Abutments		

BAR SPLICER ASSEMBLY DETAILS US 30 OVER ELKHORN CREEK FAS 1197 (US 30) SECTION (110BR-1)M-1 WHITESIDE COUNTY STRUCTURE NUMBER 098-0033

BSD-1

10-1-08

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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	Bar Splicers		F.A.S. SECTION		COUNTY	TOTAL	SHEET NO.
			1197	(110BR-1)M-1	Whiteside	13	11
				ILLINOIS	CONTRAC	T NO.	64E91
	SCALE: NODE FED. ROAD DIST. NO ILLINOIS FED. AID PROJECT						