* 04-00166-00-BR

NOTES:

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
(Tension in kips) = 1.25 x fy x A_t

Minimum *Pull-out Strength
(Tension in kips) = 1.25 x fs_{allow} x A_t

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

fs_{allow} = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load) A₁ = Tensile stress area of lapped reinforcement bars. * = 28 day concrete

	BAR SPLIC	ER ASSEMBLI	ES			
	Splicer Rod or Dowel Bar Length	Strength Requirements				
			Min. Pull-Out Strength kips - tension			
#4	1'-8''	14.7	5.9			
#5	2'-0"	23.0	9.2			
#6	2'-7''	33.1	13.3			
#7	3′-5″	45.1	18.0			
#8	4'-6''	58 . 9	23.6			
#9	5′-9′′	75.0	30.0			
#10	7′-3′′	95.0	38.0			
#11	9'-0''	117.4	46.8			

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

- Stage Construction Line Templale Forms -- Foam Plugs

BAR SPLICER ASSEMBLY ALTERNATIVES

WELDED SECTIONS

ROLLED THREAD DOWEL BAR

** ONE PIECE

— Wire Connector

The diameter of this part

of the bar spliced.

is the same as the diameter

--The diameter of this part is

🚣 equal or larger than the

— diameter of bar spliced.

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

Threaded or Coil Splicer Rods (E) Washer Face <u>"B"</u>

INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template boll. "B" : Set bar splicer assembly by nailing to wood forms or

cementing to steel forms. (E): Indicates epoxy coating.

Bridge Deck Approach Slab Threaded or Coil Splicer Rods (E) Reinforcement Threaded or Coil Bars Loop Couplers (E) 4'-0" 6'-0"

FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

	Bai	Splice	r for	#5	bar		
Min.	Capacity	= 23.) kips	s -	tensk	on	
Min.	Pull-out	Streng	th =	9.2	kips	-	tension
No.	Required	= 128					

Corporate License Number 184-001-084

BAR SPLICER ASSEMBLY DETAILS

FAIRVIEW DRIVE BRIDGE OVER SOUTH BRANCH OF KISHWAUKEE RIVER FAU 5345 SECTION 04-00166-00-BR DEKALB, ILLINOIS STRUCTURE NUMBER 019-6106 STATION 18+34.34

> 06R1555 11/05/07