ROUTE NO.	SECTION	COI	UNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8
F.A.S. 317	36-BR	IROQ	UOIS	21	16	10 SHEETS
FED. ROAD DIST.	NQ. 7	ILLINOIS	FED. AID PR	DJECT-		

CONTRACT NO. 66171

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.

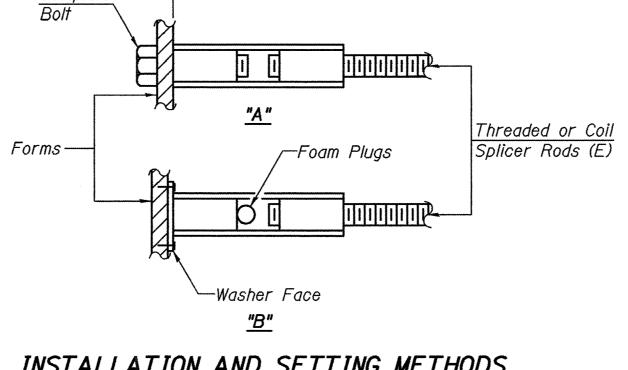
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

Minimum *Pull-out Strength = $0.66 \times fy \times A_t$ (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				
6 6: /		Strength Requirements		
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Min. Capacity kips - tension	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	<i>23.8</i>	
#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	



Stage Construction Line

BAR SPLICER ASSEMBLY ALTERNATIVES

Min. Pull-out Strength = 12.3 kips - tension

WELDED SECTIONS

ROLLED THREAD DOWEL BAR

** ONE PIECE

- Wire Connector

The diameter of this part is

equal or larger than the

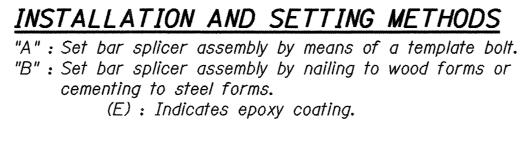
diameter of bar spliced.

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

The diameter of this part is the same as the diameter

Reinforcement Bars

of the bar spliced.

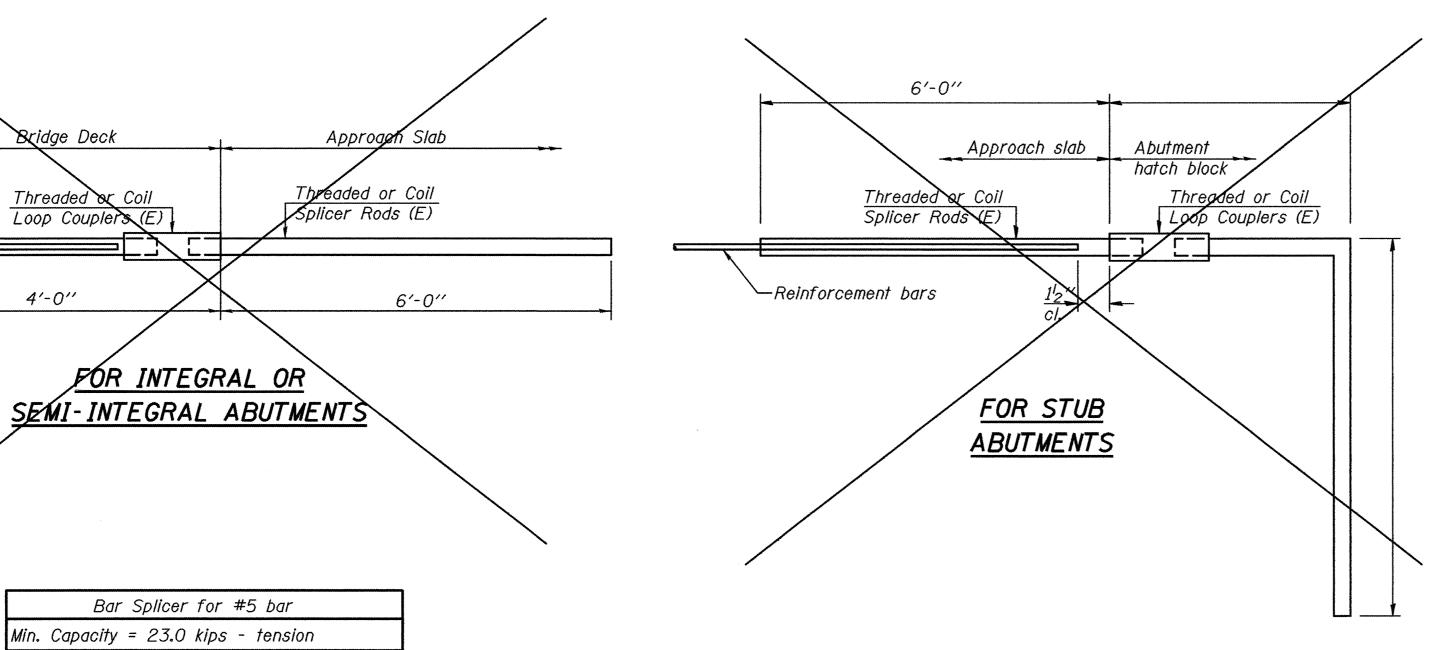


Bar Splicer for #5 bar

Min. Pull-out Strength = 12.3 kips - tension

Min. Capacity = 23.0 kips - tension

No. Required =



	Stage I Construction	Stage Construction Line Stage II Construction	
Reinforcement Bars	Threaded or Coil Loop Couplers (E)	Threaded or Coil Splicer Rods (E)	Reinforcement Bars
	$\frac{1_2^{\prime\prime}}{cl}$		

<u>STANDARD</u>

Bar Size	No. Assemblies Required	Location
#5	48	Top Slab
#5	52	Walls
#5	54	Bottom Slab

BAR SPLICER ASSEMBLY DETAILS F.A.S. ROUTE 317 (US 45) OVER TRIBUTARY TO SPRING CREEK SECTION 36-BR IROQUOIS COUNTY STA. 1250+85.00 SN-038-2015

DESIGNED	-	
CHECKED	-	
DRAWN	MV	
CHECKED	JKC	

BSD-1 10-1-08

No. Required =

1 - Sheet inserted by Chamlin & Associates

Bar Size	No. Assemblies Required	Location
#5	48	Top Slab
#5	52	Walls
#5	54	Bottom Slab