

ROUTE NO.	SECTION	COUNTY	DISTRICT	SHEET NO.
SBI Rt. 15B	(17C)B	WAYNE	17	11
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 5
6 SHEET

NOTES

CONTRACT NO. 74092

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.

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:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	36

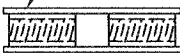
The diameter of this part is equal or larger than the diameter of bar spliced.
 The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR

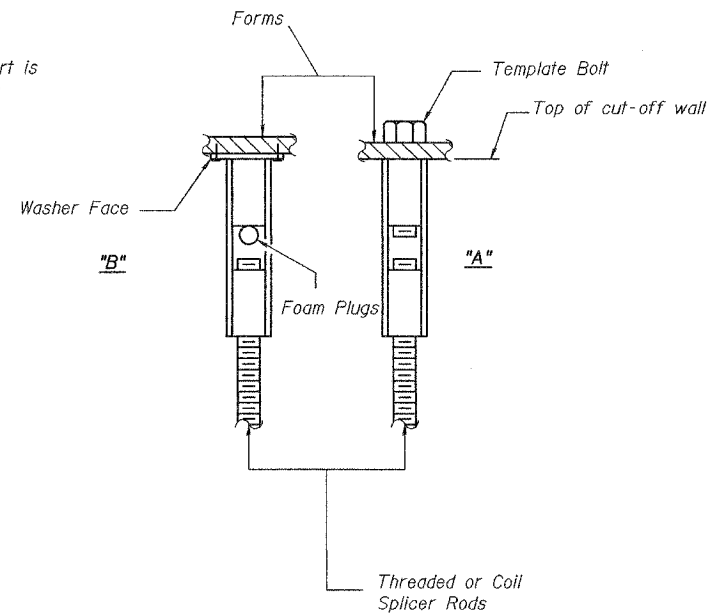


**** ONE PIECE**

Wire Connector

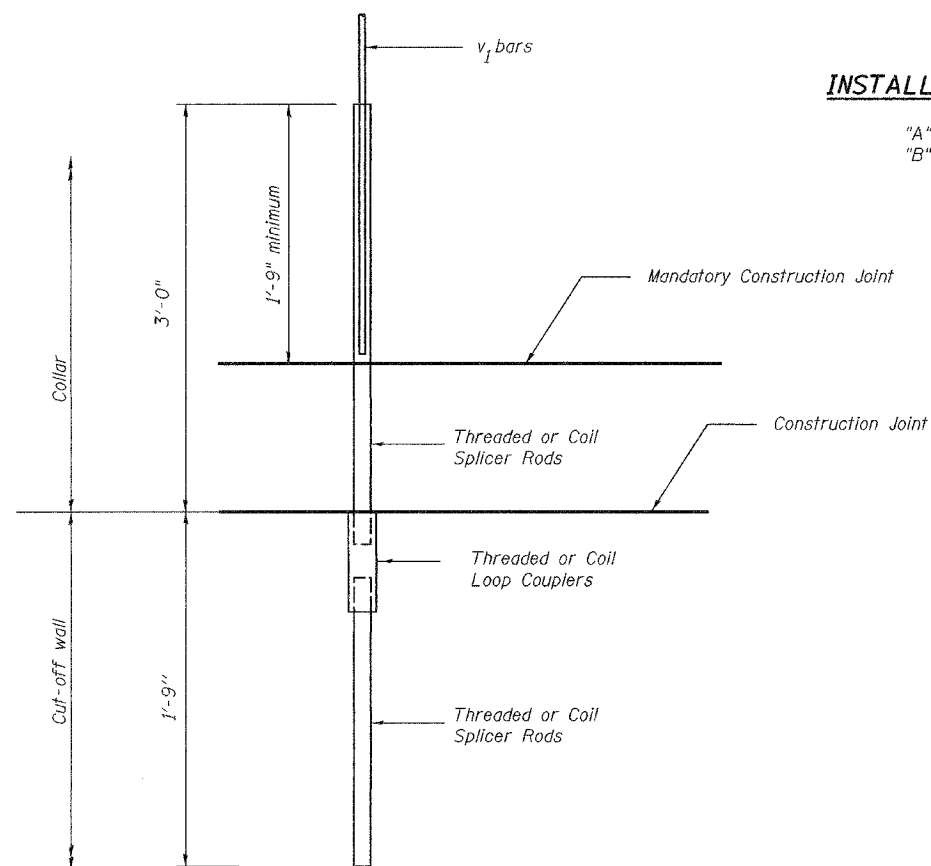


WELDED SECTIONS



BAR SPLICER ASSEMBLY ALTERNATIVES

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



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.

FOR BOX CULVERT END SECTIONS

DESIGNED	D. Greifzu
CHECKED	S. Ryan
DRAWN	D. Greifzu
CHECKED	S. Ryan

OCTOBER 10, 2007
 EXAMINED *Thomas J. Demagala*
 PASSED *Ralph E. Anderson*
 ENGINEER OF BRIDGE DESIGN
 ENGINEER OF BRIDGES AND STRUCTURES

BAR SPLICER ASSEMBLY DETAILS
SBI ROUTE 15B - SECTION (17C)B
WAYNE COUNTY
STATION 1011+86.00
STRUCTURE NO. 096-2009