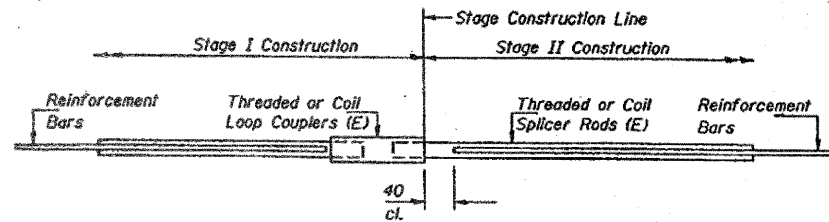


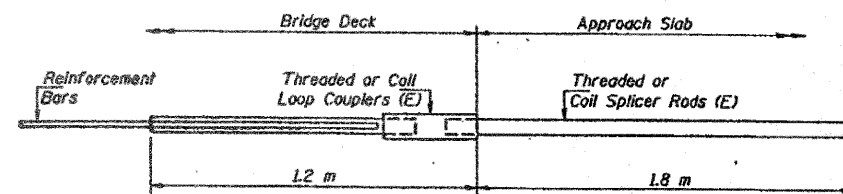
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74		HENRY	177	126
FED. ROAD DIST. NO. ILLINOIS PROJECT				
*(37-3)RS-1, (37-4)RS & 37-4B-D				



BAR SPLICER ASSEMBLY DETAIL

Bar Size	No. Assemblies Required	Location
#15	12	DECK
#20	16	ABUTMENTS



INTEGRAL ABUTMENT
BAR SPLICER ASSEMBLY DETAIL
FOR #15 BAR

Min. Capacity = 100 kN - tension
Min. Pull-out Strength = 40 kN - tension
No. Required =

The diameter of this part is the same as the diameter of the bar spliced.

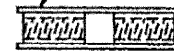
The diameter of this part is equal or larger than the diameter of bar spliced.

ROLLED THREAD DOWEL BAR



ONE PIECE

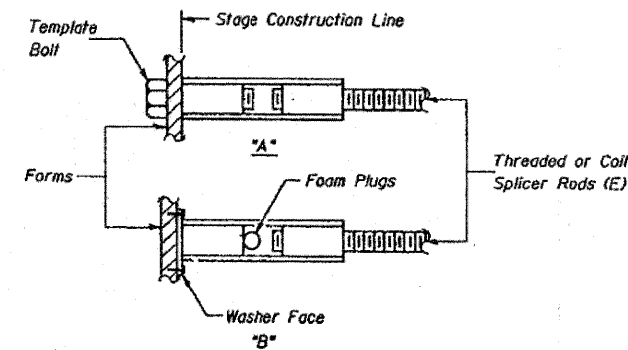
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563M, 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.
(E) : Indicates epoxy coating.

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 400 MPa 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:

- ① Minimum Capacity (Tension in kN) = $1.25 \times 10^{-3} \times f_y \times A_s$
- ② Minimum Pull-out Strength (Tension in kN) = $1.25 \times 10^{-3} \times f_{sallow} \times A_s$

Where f_y = Yield strength of lapped reinforcement bars in MPa.
 f_{sallow} = Allowable tensile stress in lapped reinforcement bars in MPa (Service Load)
 A_s = Tensile stress area of lapped reinforcement bars (mm²).
* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kN - tension	Min. Pull-Out Strength kN - tension
#15	610 mm	100	40
#20	790 mm	150	60
#25	1.04 m	250	100
#30	1.37 m	350	140

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." All dimensions are in millimeters (mm) except as noted.

EXISTING BRIDGE PLANS
FOR REFERENCE ONLY

I-74 OVER OPHIEM ROAD
F.A.I. ROUTE 74 - SECTION 37-4HB
HENRY COUNTY
STATION 43+338.313
STRUCTURE NO. 037-0015 (W. STRUCT.)
037-0016 (E. STRUCT.)

BAR SPLICER ASSEMBLY DETAIL:

DESIGNED	19
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	ENGINEER OF BRIDGES AND STRUCTURES

BSD-1 (M) 4-30-97

REVISED 11-20-97

FILE NAME =	USER NAME = parkindr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS (FOR REFERENCE ONLY)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\DOT\PERKINS\DR\dms26777\d	08298-sht-details.dgn	DRAWN -	REVISED -			74	37-(4HB,4HB-1,4HB-2)D	HENRY	148	126	
	PLOT SCALE = 50.0000 / IN.	CHECKED -	REVISED -			CONTRACT NO. 64264					
	PLOT DATE = Wed Aug 05 07:35:12 2009	DATE -	REVISED -			SCALE:	SHEET NO.	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT