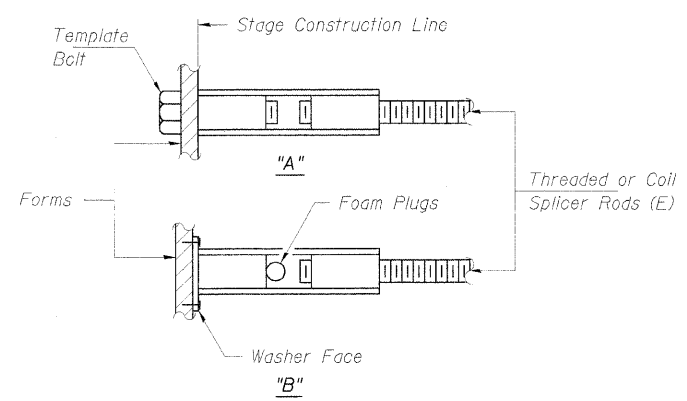


**BAR SPLICER ASSEMBLY ALTERNATIVES**

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



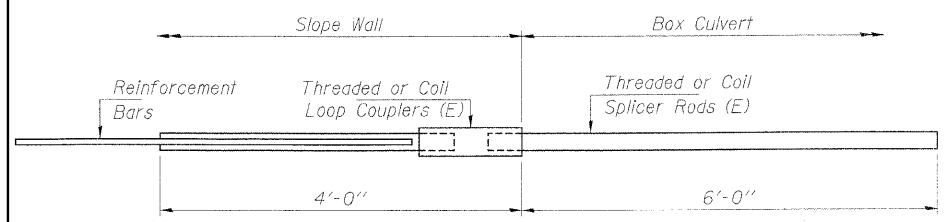
**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms and 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 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:  
 ① Minimum Capacity =  $1.25 \times f_y \times A_t$   
 (Tension in kips)  
 ② Minimum Pull-out Strength =  $1.25 \times f_{sallow} \times A_t$   
 (Tension in kips)  
 Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $f_{sallow}$  = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
 \* = 28 day concrete

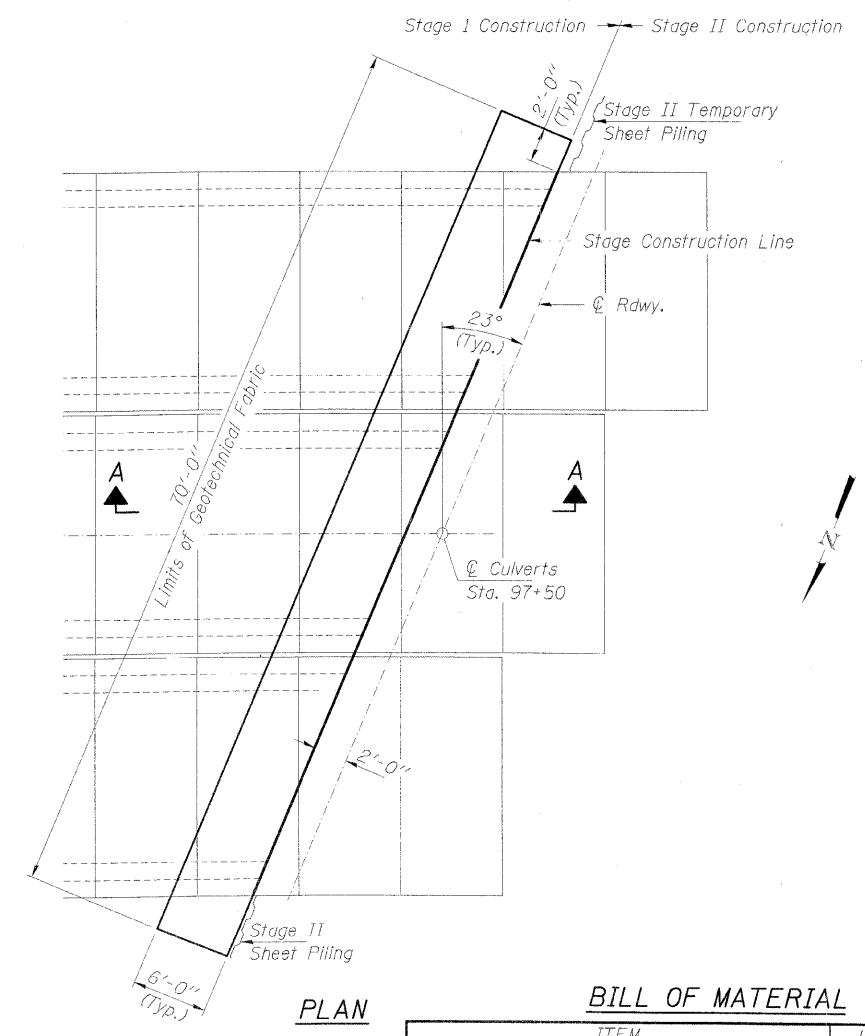
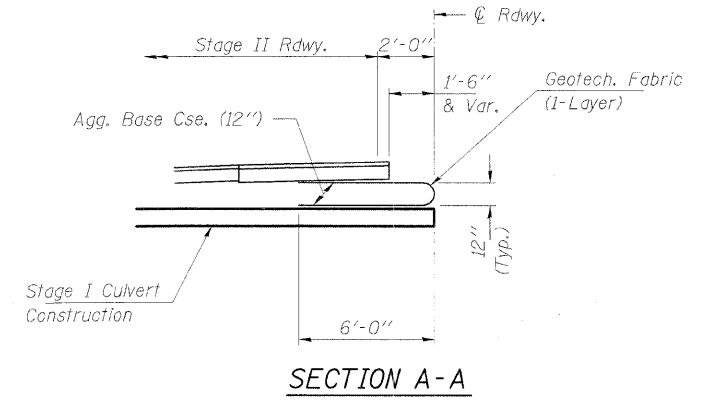
**INTEGRAL ABUTMENT  
 BAR SPLICER ASSEMBLY DETAIL  
 FOR #5 BAR**



Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 30

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#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

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."



**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Geotechnical Fabric for Ground Stabilization	Sq. Yd.	96

**HLR**

Rice, Berry and Associates  
 A Division of Hampton, Lenzini and Renwick, Inc.  
 Civil & Structural Engineers

3085 Stevenson Drive  
 Suite 201  
 Springfield, Illinois 62703  
 217-546-3400

Account Number: 03-03-0167-x  
 Date: 12/29/05  
 DESIGNED: S.M.S. CHECKED: S.W.M. DRAWN: D.T.M.

**GEOTEXTILE RETAINING WALL**  
 F.A.U. ROUTE 5348 / ANNIE GLIDDEN ROAD  
 SECTION 05-00160-00-WR  
 CITY OF DEKALB  
 STATION 97+50