

CONTRACT NO. 68468 COUNTY TOTAL SHEETS NO. RTE. SECTION FULTON 50 26 317 (188)] STA. 252+75 TO STA. 262+40 FED. ROAD DIST. NO. ILLINDIS FED. AID PROJECT SHEET NO. 16 OF 16 SHEETS 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 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) = $1.25 \times fy \times A_i$ (Tension in Kipe) Minimum *Pull-out Strength = 0.66 x fy x A₁ Where fy = Yield strength of lapped reinforcement bars in ksi. A₁ = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete BAR SPLICER ASSEMBLIES Strength Requirements Splicer Rod or Min. Capacity Min. Pull-Out Strength Dowel Bar Length kips - tension kips - tension 14.7 7.9 1'-8' 12.3 23.0 2'-0" 17.4 33.1 21.71 23.8 45.1 3'-5" 58.9 31.3 4'-6" 75.0 5'-9" 39.6 95.0 50.3 7'-3" 9'-0" 117.4 61.8 -Stage Construction Line Stage II Construction Threaded or Coll Splicer Rods (E) Reinforcement Bars $\frac{l'_2}{cl}$ STANDARD No. Assemblies Location Required 308 Conc. Wearing Surface Pier 1 3 6 Pler 2 3 Pler 3 8 Pier 4 328 BAR SPLICER ASSEMBLY DETAILS F.A.P. ROUTE 317 - (U.S. 24) OVER OTTER CREEK SECTION (18B)I FULTON COUNTY <u>STA. 257+54.33</u> STRUCTURE NO. 029-0005