

ALABAMA DEPARTMENT OF TRANSPORTATION

General Application Special Provision

DATE: October 28, 2022

GASP No. 22-GA0024

EFFECTIVE DATE: May 1, 2023

SUBJECT: Prestressed Concrete Bridge Members.

Alabama Standard Specifications, 2022 Edition, SECTION 513 shall be amended as follows:

SECTION 513 PRESTRESSED CONCRETE BRIDGE MEMBERS

513.02 Materials.

(c) Concrete Mixture Requirements.

5. Special Requirements for Piles constructed in Severe Exposure Conditions.

Item 513.02(c)5 shall be replaced by the following:

5. Special Requirements for Piles constructed in Severe Exposure Conditions.

Piles constructed in a marine environment, within 10 miles {16 kilometers} from coastline, completely or partially submerged in seawater, located within the tidal and splash zones, exposed to seawater spray, exposed to brackish water, or as shown on the plans shall meet the requirements of this Item.

Cement for piles shall be Type II and thus low in tricalcium aluminate content. If requested by the Contractor and approved by the Materials and Tests Engineer, Type I, Type IL, Type IP, Type IS or Type III cement containing a maximum of 8 % tricalcium aluminate may be used.

Concrete mixtures used in piles shall have a maximum permeability of 2,000 coulombs.

The concrete for piles shall contain Class "F" fly ash and microsilica as components of the cementitious material. The required percentage of fly ash and microsilica by weight {mass} of the total cementitious material content shall be as follows:

CEMENTITIOUS MATERIAL CONTENT IN PILES	
Cement (Type II)	70 %
Fly Ash (Class "F")	20 %
Microsilica	10 %
Total Cementitious Materials Content	100 %