



Florida Department of Transportation

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SECRETARY

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MATERIALS BULLETIN NO. 14-19

DCE MEMORANDUM NO. 22-19

(FHWA Approved: 12/13/2019)

**TO: DISTRICT MATERIALS AND RESEARCH ENGINEERS
DISTRICT CONSTRUCTION ENGINEERS**

FROM: Timothy Ruelke P.E., Director, Office of Materials
Dan L. Hurtado P.E., Director, Office of Construction

COPIES: Will Watts, Scott Arnold, Ananth Prasad, Chad Thompson, Patrick Upshaw, Jose Armenteros

SUBJECT: LEHIGH– CAPE CANAVERAL, FL (SLAG08)

In order to prevent concrete placement delays on ongoing construction projects due to the shortage of slag cement from the Lehigh – Cape Canaveral, FL (SLAG08), concrete producers may request the Department to implement a modified concrete mix design approval process. This is only applicable for replacing Lehigh – Cape Canaveral, FL (SLAG08) slag cement incorporated in currently approved concrete mix designs assigned to current projects. The Contractor/Producer assumes all risks involved for ensuring that concrete plastic and hardened properties are in compliance with the specifications at the time of placement.

The modified concrete mix shall meet the following requirements:

1. The latest mill test report shall be provided for both the slag source Lehigh – Cape Canaveral, FL (SLAG08) and the proposed replacement slag source to compare the following properties:
 - a. The percent alumina oxide content (Al_2O_3) shall not be more than 1.0% greater than the original slag.
 - b. The Blaine fineness shall not be more than 50 m^2/kg greater than original slag.
2. District Materials Office personnel will ensure the replacement mix contains the same component materials and quantities as the replaced mix and only slag substitution is permitted. The new concrete mix must meet the same requirements as the old concrete mix. Adjustments to component weights, due to a difference in specific gravity of the replacement slag chosen, will be permitted as long as the

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- replacement mix equals the original concrete mix regarding application and environmental conditions. All materials must be from an approved source.
3. District Materials Office personnel will review and submit the replacement mix design to the State Materials Office following the material substitution procedure found in Materials Manual, Section 9.2, Vol. II.
 4. If the slag substitution request is approved, the State Materials Office will assign a new concrete mix design number.
 5. Submit to the District Materials Office the 28-day compressive strength results from the first job-site placement of the new concrete mix design, for each project. District Materials Office personnel will submit the 28-day compressive strength results to the State Materials Office.

This memorandum does not waive any specification requirements but simply allows an expedient means to approve concrete mix designs. It is in effect until **January 11, 2020**. After that date, the normal concrete mix design approval process will be in effect.

Should you have any questions please contact Jose Armenteros, State Materials Office at 352-955-6666, or Pat Carlton, State Materials Office at 352-955-6676.

TR/ja