



**Arizona Department of Transportation
Intermodal Transportation Division**

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janice K. Brewer
Governor

John S. Halikowski
Director

Floyd Roehrich Jr.
State Engineer

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TO: ALL ADOT Consultants

THRU: ADOT Engineering Consultants Services

RE: Drainage Design – n-values for Pavement Drainage Analysis

This communiqué overrides a previous announcement on this subject that was issued in an email on August 3rd, 2010, but which reached only a small number of consultants. It addresses pavement drainage analysis in the instances with 1 inch of AR-ACFC overlay present in the cross-section; common on various freeway capacity improvement projects. We are requiring that the concrete n-value = .013 occurring within 4 ft of the curb and gutter should not be ignored. The rest of the cross-section n = .016. This means that within the 4 feet the reduction in n-value should be accounted for accordingly in calculations by more detailed hydraulic modeling.

If modeled as above we are finding that we are reducing the number of catch basins in total and driving savings in the cost of project. This is significant. Please adhere to this policy and implement it on all on-going and future ADOT projects.

Please feel free to contact the Drainage Office with any questions you may have.

Ken Akoh-Arrey, PE

*Chief Drainage Engineer, Manager
Arizona Dept. of Transportation
Roadway Engineering Group
205 S. 17th Ave. Phoenix, AZ 85007, MD 634E
Tel (602) 712-8660
Fax (602) 712-3161*