ALLEN

ROADWAY DESIGN UNIT
RECEIVED FILE_____

SEP 10 2004

___ALLEN ___SYKES
___BREW ___HOUSER
___LOVERING ___GOODNIGHT
___J. MOORE ___SPEER
___MOORE ___THOMAS
___MUMFORD ___WALLS
___ ___POLLARD

___PREPARE REPLY FOR___SIGNATURE
___F.Y.I.
___REVIEW/DISCUSS WITH_____

STATE OF NORTH CAROLINA
# DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

MEMORADUM TO: Jay A. Bennett, PE
State Roadway Design Engineer

FROM: Art McMillan, PE
State Highway Design Engineer

DATE: September 9, 2004

SUBJECT: Superelevation Guidelines

In an effort to establish the appropriate superelevation treatment for different classification of roadways within the context of their location, the attached guidelines for superelevation will be implemented. These guidelines are intended to direct the designer to the appropriate superelevation table in the AASHTO "Green Book".

The date of implementation will be on a project by project basis. As a general rule, if the project has already been sent to the Hydraulics Unit, changes related to these guidelines are not necessary.

If a superelevation table is used other than those listed, it shall be discussed with the appropriate Roadway Design Assistant Unit Head.

If you have any questions, please contact me at 250-4001.

AM/rda

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Division Engineers
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Scott Blevins, PE
Dewayne Sykes, PE
Roadway Design Project Engineers
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ENTRANCE A1
1000 BIRCH RIDGE DRIVE
RALEIGH NC

# SUPERELEVATION GUIDELINES

| TYPE OF ROADWAY | LOCATION & CONDITIONS | SUPERELEVATION (1) |
|---|---|---|
| Interstates & Freeways | Statewide | .08 or .10 (2) |
| Ramps & Loops | Statewide | .08 |
| Flyovers<br>(Directional ramps with bridges) | Statewide | .06 |
| Arterials & Rural Collectors | • Statewide<br>• Limited Access | .08 |
| Arterials & Urban Collectors with 60 mph design speed or greater | • Statewide<br>• Partial or no control of access | .06 |
| Urban Collectors with 50 mph or less design speed | • Statewide<br>• Curb & gutter or shoulders with driveways | .04 |
| Bridge replacement projects, Locals, & Secondary Roads | Statewide | .04 or .06<br>*Choose table that fits characteristics of area* |

(1) Refers to the particular design superelevation table shown in the 2001 AASHTO "Green Book" (pages 156 to 165) that the designer should use.

(2) Don't use in locations susceptible to icy conditions.

Bridges - it is desirable to use a degree of curve that the superelevation will not exceed 0.06 on any bridge.