GENERAL NOTES:
1. REMOVE TREES OUTSIDE THE CLEARING LIMIT WHEN, IN THE OPINION OF THE ENGINEER, THE UTILITY OF A TREE WILL BE DESTROYED BY THE CONSTRUCTION OR THE CLEARING OPERATION.
2. CLEAR IN ACCORDANCE WITH THIS STANDARD EXCEPT WHERE ADDITIONAL CLEARING IS REQUIRED FOR SAFETY AS SHOWN ON THE PLANS.
3. FOR SECTIONS WITH WIDE MEDIANS WHERE TREES ARE TO REMAIN, CLEAR THE MEDIAN SIDE IN THE SAME MANNER AS ON THE OUTSIDE.

CLEAR TO SLOPE STAKE LINE OR CONSTRUCTION LIMITS
METHOD III CLEARING LIMITS

(A) CUTS -- CLEAR TO 10' BEYOND CONSTRUCTION LIMITS.

(B) FILLS -- CLEAR TO 10' BEYOND CONSTRUCTION LIMITS, UNLESS SPECIFIED OTHERWISE BY WETLAND PERMIT.

(C) CUTS AND FILLS -- WHEN THE CLEARING LIMITS (A AND B) EXCEED THE PROPOSED R/W OR PROPOSED CONSTRUCTION EASEMENTS, THEN CLEAR ONLY TO THE R/W OR CONSTRUCTION EASEMENT WHICHEVER IS GREATER.

GENERAL NOTES:
1. REMOVE TREES OUTSIDE THE CLEARING LIMIT WHEN, IN THE OPINION OF THE ENGINEER, THE UTILITY OF A TREE WILL BE DESTROYED BY THE CONSTRUCTION OR THE CLEARING OPERATION.
2. CLEAR IN ACCORDANCE WITH THIS STANDARD EXCEPT WHERE ADDITIONAL CLEARING IS REQUIRED FOR SAFETY AS SHOWN ON THE PLANS.
1. **See typical section for lateral location of rollover.**
2. **See plans for method of constructing cut and fill slopes.**
3. **Subgrade line will not undercut ditch grade at any point.**
4. **Outside shoulder subgrades are the same rate of slope as the adjacent travel lane subgrades unless constructed on the high side of superelevation or consist of 10° and wider full depth pavement (see STDS. 560.01 and 560.02).**

**Typical Normal Crown Section**

**Typical Superelevated Section**
TYPICAL NORMAL CROWN SECTION

TYPICAL SUPERELEVATED SECTION

*SEE PLANS FOR METHOD OF CONSTRUCTING CUT AND FILL SLOPES.

** TRENCH OR GRADED SECTION, SEE PLANS.
GENERAL NOTES:

1. THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS WILL BE LOCATED AS DENOTED BY THE DASHED LINES.

2. FORM THE TRANSVERSE CONSTRUCTION JOINT IN LINE WITH THE NEAREST EXISTING TRANSVERSE CONTRACTION JOINT IN THE THROUGH LANE PAVEMENT. THE DISTANCE ALONG THIS CONSTRUCTION JOINT WILL BE NO LESS THAN TWO FEET AND NO GREATER THAN FOUR FEET.

PARALLEL EXIT

FLEXIBLE OR RIGID PAVEMENT

INTERSTATE

ANGULAR EXIT

FLEXIBLE OR RIGID PAVEMENT

INTERSTATE

INSET "A"

DETAIL OF CONCRETE TAPER CONSTRUCTION
PARALLEL ENTRANCE
FLEXIBLE OR RIGID PAVEMENT
INTERSTATE

ANGULAR ENTRANCE
FLEXIBLE OR RIGID PAVEMENT
INTERSTATE

GENERAL NOTES:

1. THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS WILL BE LOCATED AS DENOTED BY THE DASHED LINES.

2. FORM THE TRANSVERSE CONSTRUCTION JOINT IN LINE WITH THE NEAREST EXISTING TRANSVERSE CONTRACTION JOINT IN THE THROUGH LANE PAVEMENT. THE DISTANCE ALONG THIS CONSTRUCTION JOINT WILL BE NO LESS THAN TWO FEET AND NO GREATER THAN FOUR FEET.
PARALLEL EXIT
FLEXIBLE PAVEMENT
NON-INTERSTATE

ANGULAR EXIT
FLEXIBLE PAVEMENT
NON-INTERSTATE
PARALLEL ENTRANCE
FLEXIBLE PAVEMENT
NON-INTERSTATE

ANGULAR ENTRANCE
FLEXIBLE PAVEMENT
NON-INTERSTATE

"1200' MINIMUM UNIFORM TAPER
UNLESS OTHERWISE SHOWN ON PLANS"
GENERAL NOTES:

1. THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS WILL BE LOCATED AS DENOTED BY THE DASHED LINES.

2. FORM THE TRANSVERSE CONSTRUCTION JOINT IN LINE WITH THE NEAREST EXISTING TRANSVERSE CONTRACTION JOINT IN THE THROUGH LANE PAVEMENT. THE DISTANCE ALONG THIS CONSTRUCTION JOINT WILL BE NO LESS THAN TWO FEET AND NO GREATER THAN FOUR FEET.

PARALLEL EXIT

RIGID PAVEMENT

NON-INTERSTATE

ANGULAR EXIT

RIGID PAVEMENT

NON-INTERSTATE

500' MINIMUM UNIFORM TAPER
UNLESS OTHERWISE SHOWN ON PLANS
GENERAL NOTES:

1. IF PAVEMENT IS PORTLAND CEMENT CONCRETE:
   1. THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS
      WILL BE LOCATED AS DENOTED BY THE DASHED LINES.
   2. FORM THE TRANSVERSE CONSTRUCTION JOINT IN LINE
      WITH THE NEAREST EXISTING TRANSVERSE CONTRACTION JOINT
      IN THE THROUGH LANE PAVEMENT. THE DISTANCE ALONG THIS
      CONSTRUCTION JOINT WILL BE NO LESS THAN TWO FEET AND NO
      GREATER THAN FOUR FEET.

225.03
FIGURE 1 SPIRAL CURVE
2-LANE PAVEMENT PROFILE GRADE ON € OF PAVEMENT. CROWN BOTH WAYS FROM € ROTATE ABOUT €.

FIGURE 2 - SIMPLE CURVE
2-LANE PAVEMENT WITHOUT TRANSITION PROFILE GRADE ON € OF PAVEMENT. SLOPE BOTH WAYS FROM € ROTATE ABOUT €.

NOTE:
SHORT VERTICAL CURVES 100' OR LESS MAY BE INSERTED AT POINTS C & D WHEN DIRECTED DURING CONSTRUCTION.

GENERAL NOTES:
SPECIAL CARE MUST BE USED TO PREVENT DITCH SUMPS WHICH MIGHT BE INDUCED BY SUPERELEVATION.
TANGENT RUNOFF DISTANCE WILL VARY WITH NORMAL CROWN OF PAVEMENT WITHIN TANGENT RUNOUT-DISTANCE.
SUPERELEVATION TO BE AS PROVIDED IN "A POLICY ON GEOMETRIC DESIGN ON HIGHWAYS AND STREETS".

METHOD OF OBTAINING SUPERELEVATION

ENGLISH STANDARD DRAWING FOR SHEET 1 OF 1
SHEET 1 OF 1
STATE OF NORTH CAROLINA
RALEIGH, N.C.

METHOD OF OBTAINING SUPERELEVATION FOR TWO LANE PAVEMENT

DEPT. OF TRANSPORTATION
DIvision of Highways
Raleigh, N.C.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
RALEIGH, N.C.
FIGURE 1  SPIRAL CURVE
A 4 LANE PAVEMENT  
PROFILE GRADE MEDIAN EDGE OF PAVEMENT.  CROWNED ABOUT CENTER OF PAVEMENTS, ROTATE ABOUT MEDIAN EDGES

FIGURE 2  SIMPLE CURVE OR SPIRAL CURVE
A 4 LANE PAVEMENT  
PROFILE GRADE MEDIAN EDGE OF PAVEMENT.  CROWNED ABOUT CENTER OF PAVEMENTS, ROTATE ABOUT MEDIAN EDGES

GENERAL NOTES:

- SUPERELEVATION TO BE AS PROVIDED IN "A POLICY ON GEOMETRIC DESIGNS OF HIGHWAYS AND STREETS".
- SPECIAL CARE MUST BE USED TO PREVENT DITCH SLUMPS WHICH MIGHT BE INDUCED BY SUPERELEVATION.
- PROFILE GRADE WILL BE MEDIAN EDGE OF PAVEMENT ON BOTH TANGENTS AND CURVES.
- IN WIDE MEDIANS, WHERE INDIVIDUAL ALIGNMENT IS USED, PROFILE GRADE WILL REMAIN ON MEDIAN EDGE OF PAVEMENT.

SHORT VERTICAL CURVES 100’ OR LESS MAY BE INSERTED AT POINTS C AND D WHEN DIRECTED ON CONSTRUCTION
SHORT VERTICAL CURVES 100’ OR LESS MAY BE INSERTED AT POINT D WHEN DIRECTED ON CONSTRUCTION

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

METHOD OF OBTAINING SUPERELEVATION
ENGLISH STANDARD DRAWING FOR DIVIDED HIGHWAYS

METHOD OF OBTAINING SUPERELEVATION
ENGLISH STANDARD DRAWING FOR DIVIDED HIGHWAYS

SHEETS: 1 OF 1

METHOD OF OBTAINING SUPERELEVATION
ENGLISH STANDARD DRAWING FOR DIVIDED HIGHWAYS

METHOD OF OBTAINING SUPERELEVATION
ENGLISH STANDARD DRAWING FOR DIVIDED HIGHWAYS

SHEETS: 1 OF 1

METHOD OF OBTAINING SUPERELEVATION
ENGLISH STANDARD DRAWING FOR DIVIDED HIGHWAYS
GENERAL NOTES:

USE THIS GRADING GUIDE AT GRADE SEPARATIONS WITH FALSE CUT APPROACH.
 IF STRUCTURE HAS OUTSIDE PIERS, ELIMINATE THE 6' VERTICAL CURVE.

D - TYPICAL DITCH WIDTH
* - SEE ROADWAY TYPICAL SECTIONS FOR NORMAL SHOULDER WIDTHS, SHOULDER SLOPES, AND DITCH WIDTHS.
** - SEE ROADWAY PLANS AND/OR STRUCTURE PLANS FOR VARIABLE OFFSET.

SECTION A

SECTION B

SECTION C

SECTION D

SECTION E

SECTION F

SECTION G
GENERAL NOTES:

1. GRADING
   


2. CONCRETE SLOPE PROTECTION
   
   PLACE THE 4" CONCRETE SLOPE PROTECTION IN ACCORDANCE WITH THESE DETAILS AS PART OF THE PAVING CONTRACT. PROPERLY SHAPE AND FIRMLY COMPACT EARTH MATERIAL BEFORE PLACING SLOPE PROTECTION REINFORCING AND CONCRETE. FINISH THE CONCRETE SURFACE WITH A WOODEN FLOAT.

   TRANSVERSE JOINTS: FORM A GROOVED JOINT 1" DEEP WITH 1/8" RADIUS AT APPROXIMATELY 10' INTERVALS. LOCATE A GROOVED JOINT OR A CONSTRUCTION JOINT SO AS TO INTERSECT THE EXPANSION JOINT MATERIAL PLACED AROUND EACH PIER. NO SEALING OF THESE JOINTS IS REQUIRED. WIRE MESH TO BE LAPPED 6" AT ALL CONSTRUCTION JOINTS. SPACE CONTRACTION JOINTS AT 25' INTERVALS.
NOTES:
1. IF OUTSIDE PIER IS USED (A-3), ELIMINATE 6'/V CURVE ON B-1.
2. USE 100'-300' TRANSITION ON THE TRAILING SIDE OF CUT SECTION.
* SEE ROADWAY TYPICAL SECTIONS FOR NORMAL SHOULDER WIDTHS, SHOULDER SLOPES, AND DITCH WIDTHS.
** SEE ROADWAY PLANS AND/OR STRUCTURE PLANS FOR OFFSET.
NOTE: USE THIS DRAWING AS A GUIDE ONLY. THE SLOPES AND DIMENSIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO FIT EXISTING TERRAIN. CONSTRUCT THE DITCH PROTECTIVE TREATMENT WITH CONCRETE, RIP RAP, OR FIBERGLASS ROVING DITCH LINER AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER. DITCH WIDTH AND LENGTH AS DIRECTED BY THE ENGINEER.