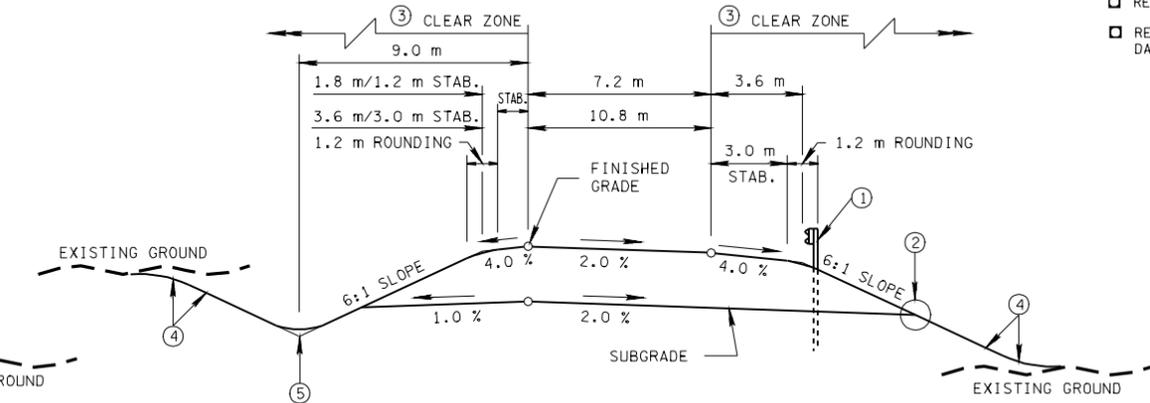
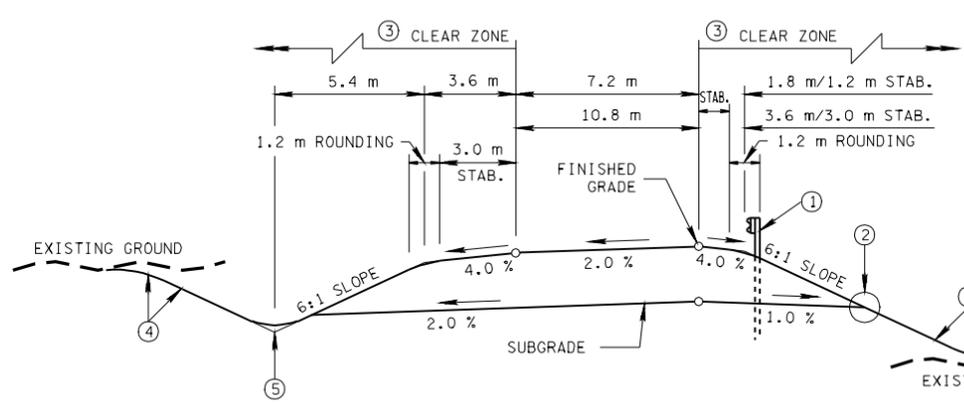
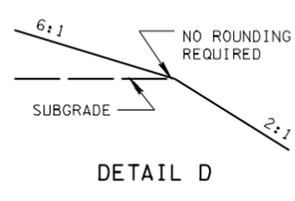
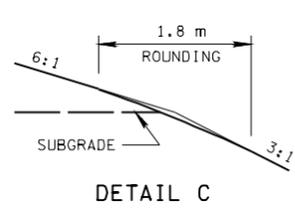
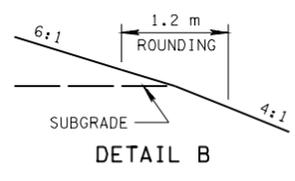
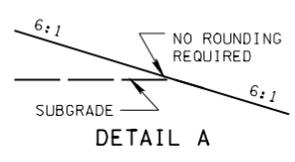
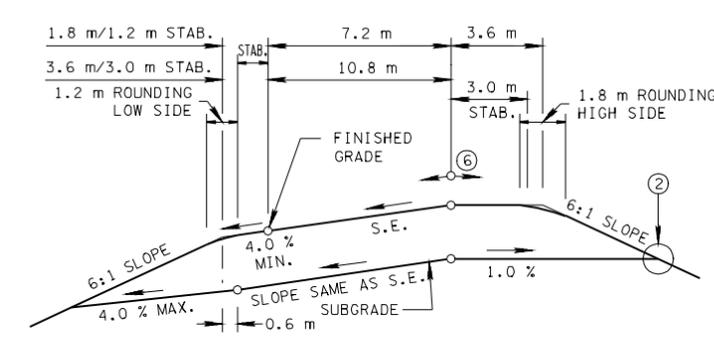
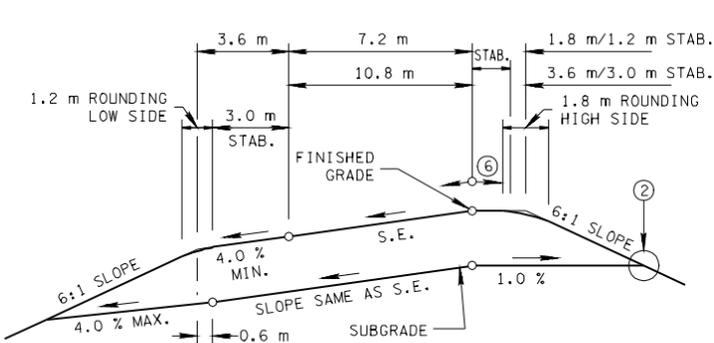


REV. 11-1-95: CHANGED TO METRIC.
 REV. 3-20-02: ADDED SPECIAL NOTE.
 REV. 3-31-03: CHANGED EFFECTIVE DATE IN SPECIAL NOTE.



TANGENT SECTIONS



SUPERELEVATED SECTIONS

GENERAL NOTES

(A) FOR SPECIFIC CONDITIONS NOT COVERED ON THIS SHEET, REFERENCE SHOULD BE MADE TO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" 1994.

(B) PAGE NUMBERS REFERRED TO ON THIS DRAWING ARE FROM THE ABOVE REFERENCE.

(C) REFERENCE SHOULD ALSO BE MADE TO THE AASHTO "ROADSIDE DESIGN GUIDE".

(D) MINIMUM RIGHT-OF-WAY IS THAT REQUIRED TO ACCOMMODATE SLOPES. (4.5 m TO 6.0 m OUTSIDE THE SLOPE LINES IS DESIRABLE IN RURAL AREAS).

(E) ALL NEW AND REHABILITATED BRIDGES SHALL BE DESIGNED FOR MS-18 LOADING. THE MINIMUM CLEAR WIDTH FOR NEW AND REHABILITATED BRIDGES SHALL BE EQUAL TO THE FULL WIDTH OF THE APPROACH ROADWAY, CURB-TO-CURB OR FULL SHOULDER WIDTH AS APPLICABLE.

(F) BRIDGES TO REMAIN IN PLACE SHOULD HAVE ADEQUATE STRENGTH AND AT LEAST THE WIDTH OF THE TRAVELED WAY PLUS 0.6 m CLEARANCE ON EACH SIDE, BUT SHOULD BE CONSIDERED FOR ULTIMATE WIDENING OR REPLACEMENT IF THEY DO NOT PROVIDE AT LEAST 1.0 m CLEARANCE ON EACH SIDE OR ARE NOT CAPABLE OF MS-18 LOADINGS. AS AN INTERIM MEASURE, ALL BRIDGES THAT ARE LESS THAN FULL WIDTH SHOULD BE CONSIDERED FOR SPECIAL NARROW BRIDGE TREATMENTS SUCH AS SIGNING AND PAVEMENT MARKING.

(G) FOR INTERSTATE, SEE AASHTO'S "A POLICY ON DESIGN STANDARDS-INTERSTATE SYSTEM" JULY 1991.

SPECIAL NOTE

THIS DRAWING IS NOT TO BE UTILIZED FOR NEW DESIGN PROJECTS BEGUN AFTER OCTOBER 1, 2002.

⑨ DESIGN SPEED (km/h)	
LEVEL TOPO	110
ROLLING TOPO	100
MOUNTAINOUS TOPO	80

FOOTNOTES

① SEE GUARDRAIL STANDARD DRAWINGS FOR TYPICAL GUARDRAIL PLACEMENT.

② SEE DETAIL A, B, C, OR D ON THIS SHEET FOR ROUNDING.

③ CLEAR ZONE WIDTHS SHALL BE DETERMINED FROM STANDARD DRAWING RDM-S-11.

④ SEE STANDARD DRAWING RDM-S-11 FOR FILL AND CUT SLOPE TABLES, ROUNDING ON TOP OF CUT SLOPES AND TOE OF FILL SLOPES, AND SPECIAL ROCK CUT TREATMENT.

⑤ SEE STANDARD DRAWING RDM-S-11A FOR ROUNDING OF ROADSIDE DITCH SLOPES.

⑥ THE SLOPES OF THE SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7.0 %.

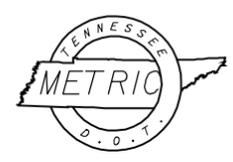
⑦ "K" VALUE IS A COEFFICIENT BY WHICH THE ALGEBRAIC DIFFERENCE IN GRADE MAY BE MULTIPLIED TO DETERMINE THE LENGTH IN METERS OF THE VERTICAL CURVE.

⑧ ANY LENGTH OF STOPPING SIGHT DISTANCE WITHIN THE RANGE OF VALUES ESTABLISHED ON PAGE 490, TABLE VII-3 IS ACCEPTABLE FOR A SPECIFIC SPEED. HOWEVER, VALUES APPROACHING OR EXCEEDING THE UPPER LIMIT OF THE RANGE SHOULD BE USED AS THE BASIS FOR DESIGN WHEREVER CONDITIONS PERMIT.

⑨ IN URBAN AREAS, THE DESIGN SPEED SHALL BE AT LEAST 80 km/h.

⑩ GRADES ONE PER CENT STEEPER THAN THE VALUE SHOWN MAY BE USED FOR EXTREME CASES IN URBAN AREAS WHERE DEVELOPMENT PRECLUDES THE USE OF FLATTER GRADES AND FOR ONE-WAY DOWNGRADES EXCEPT IN MOUNTAINOUS TERRAIN.

DESIGN STANDARDS (FOR GIVEN DESIGN SPEED)	DESIGN SPEEDS (km/h)					
	80	90	100	110	120	
MINIMUM RADIUS (m) 4.0 % MAX. S.E.	280	375	490	635	870	
MINIMUM RADIUS (m) 6.0 % MAX. S.E.	250	335	435	560	755	
MINIMUM RADIUS (m) 8.0 % MAX. S.E.	230	305	395	500	655	
MINIMUM RADIUS (m) 10.0 % MAX. S.E.	210	275	360	455	595	
⑧ MINIMUM STOPPING SIGHT DISTANCE (m)	112.8-139.4	131.2-168.7	157.0-205.0	179.5-246.4	202.9-285.6	
⑦ MINIMUM "K" VALUE	CREST VERTICAL CURVE	32-49	43-71	62-105	80-151	-
	SAG VERTICAL CURVE	25-32	30-40	37-51	43-62	-
⑩ MAXIMUM GRADES (%) (PAGE 559; TABLE VIII-1)	LEVEL TOPO	4	4	3	3	3
	ROLLING TOPO	5	5	4	4	4
	MOUNTAINOUS TOPO	6	6	6	5	-
SUPERELEVATION	SEE STANDARD DRAWINGS RDM-SE-2 & RDM-SE-3					



ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS
FREeways WITH
INDEPENDENT
ROADWAYS
 11-1-95 RDM-TS-5A