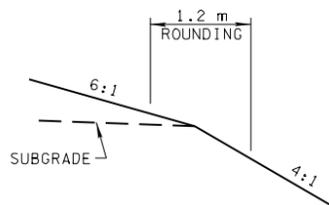
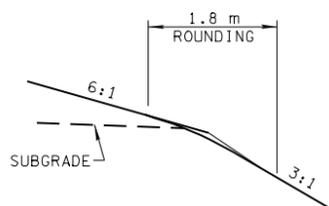


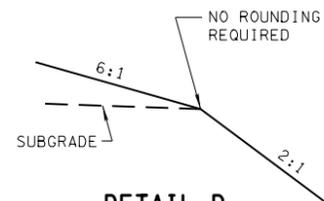
DETAIL A



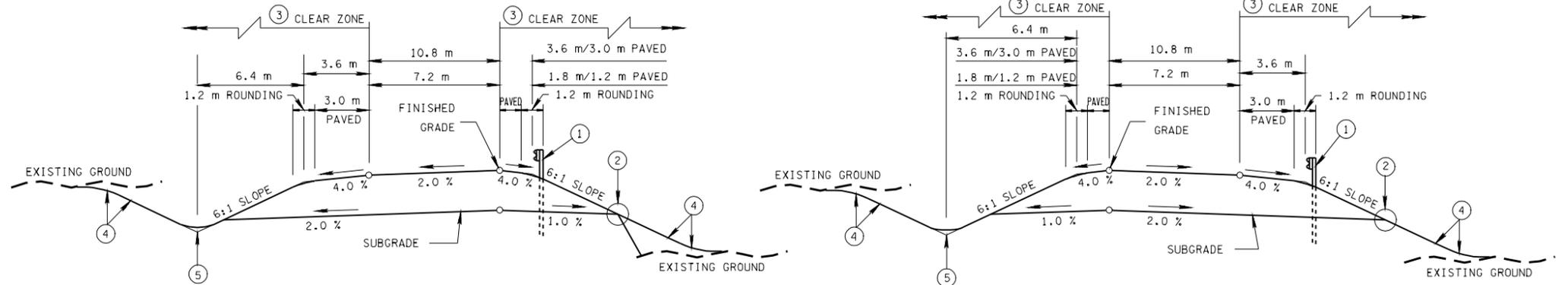
DETAIL B



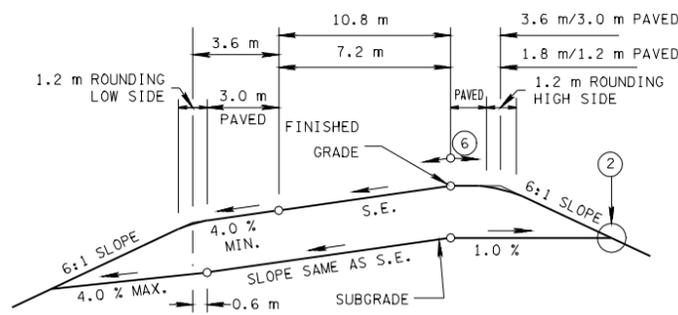
DETAIL C



DETAIL D



TANGENT SECTIONS



SUPERELEVATED SECTIONS

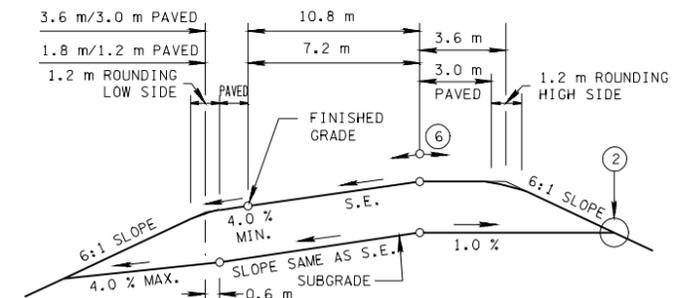


TABLE II. FREEWAY - DESIGN STANDARDS (8)

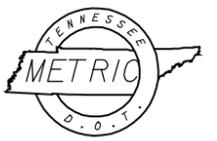
DESIGN STANDARDS (FOR GIVEN DESIGN SPEED)	DESIGN SPEEDS (km/h)					
	80	90	100	110		
MINIMUM RADIUS (m) 8.0 % MAX. S.E.	230	305	395	500	SEE PAGE 145	
MINIMUM STOPPING SIGHT DISTANCE (m)	130	160	185	220	SEE PAGE 112	
MINIMUM "K" VALUE	CREST VERTICAL CURVE	26	39	52	74	SEE PAGE 274
	SAG VERTICAL CURVE	30	38	45	55	SEE PAGE 280
MAXIMUM GRADES (%)	LEVEL TERRAIN	4	4	3	3	SEE PAGE 510
	ROLLING TERRAIN	5	5	4	4	
	MOUNTAINOUS TERRAIN	6	6	6	5	
(7) SUPERELEVATION	SEE STANDARD DRAWINGS RDM01-SE-2 & RDM01-SE-3					

TABLE I. MINIMUM DESIGN SPEEDS FOR FREEWAYS (SEE PAGE 507)

LOCATION	MINIMUM DESIGN SPEED (km/h)
URBAN	80
RURAL	110
MOUNTAINOUS	80

- 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," AASHTO, 2001.
 - (B) PAGE NUMBERS REFERRED TO ON THIS DRAWING ARE FROM "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS," AASHTO, 2001, UNLESS OTHERWISE NOTED.
 - (C) REFERENCE SHOULD ALSO BE MADE TO THE "ROADSIDE DESIGN GUIDE," AASHTO, 2002.
 - (D) DESIRABLE RIGHT-OF-WAY IS SLOPE LINE PLUS 6.1 METERS.
 - (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) FOR EXISTING BRIDGES TO REMAIN IN PLACE, THEY SHOULD HAVE ADEQUATE STRENGTH AND A WIDTH AT LEAST EQUAL TO THE WIDTH OF THE TRAVELED WAY PLUS 0.6 METERS CLEARANCE ON EACH SIDE. BRIDGES SHOULD BE CONSIDERED FOR ULTIMATE WIDENING OR REPLACEMENT IF THEY DO NOT PROVIDE AT LEAST 1.0 METER 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 INTERSTATES, SEE THE CURRENT EDITION OF AASHTO'S "A POLICY ON DESIGN STANDARDS-INTERSTATE SYSTEM."

- FOOTNOTES**
- (1) SEE GUARDRAIL STANDARD DRAWINGS FOR TYPICAL GUARDRAIL PLACEMENT.
 - (2) SEE DETAILS A, B, C, OR D FOR ROUNDING.
 - (3) CLEAR ZONE WIDTH SHALL BE DETERMINED FROM STANDARD DRAWING RDM01-S-12. SEE THE "ROADSIDE DESIGN GUIDE," AASHTO, 2002, FOR FURTHER INFORMATION ON CLEAR ZONES.
 - (4) SEE STANDARD DRAWINGS RDM01-S-11 AND RDM01-S-11B 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 RDM01-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) GRADES ONE PERCENT 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.
 - (8) ALTHOUGH THE SELECTED DESIGN SPEED ESTABLISHES THE LIMITING VALUES OF CURVE RADIUS AND MINIMUM SIGHT DISTANCE THAT SHOULD BE USED IN DESIGN, THERE SHOULD BE NO RESTRICTION ON THE USE OF FLATTER HORIZONTAL CURVES OR GREATER SIGHT DISTANCES WHERE SUCH IMPROVEMENTS CAN BE PROVIDED AS A PART OF AN ECONOMICAL DESIGN (SEE PAGE 69).



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

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