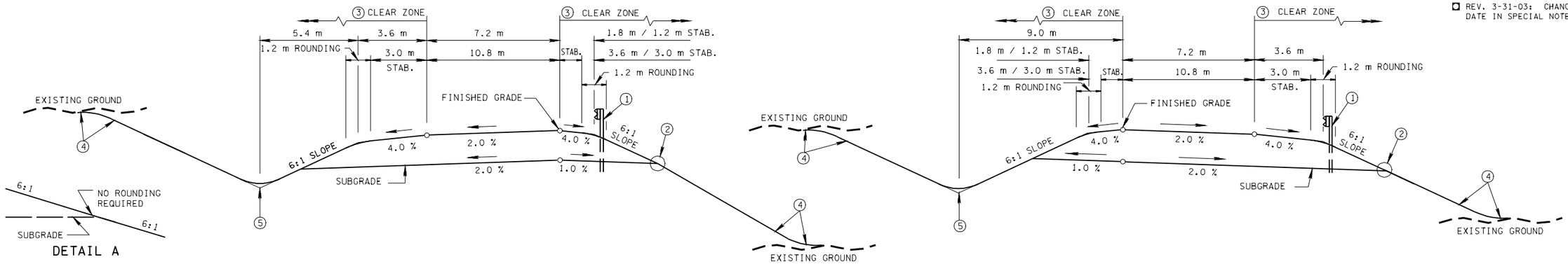
- REV. 11-1-95: CHANGED TO METRIC.
- REV. 3-20-02: ADDED SPECIAL NOTE.
- REV. 3-31-03: CHANGED EFFECTIVE DATE IN SPECIAL NOTE.



SPECIAL NOTE

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

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 WIDTH SHALL BE DETERMINED FROM STANDARD DRAWING RDM-S-11. FOR URBAN DESIGN SEE PAGE 525.

(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 DETERMINED 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) RURAL ONLY SEE PAGE 484. FOR URBAN DESIGN SEE PAGE 513.

(9) DESIGN SPEED (km/h)	
LEVEL TOPO	110
ROLLING TOPO	100
MOUNTAINOUS TOPO	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" 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 AND UTILITIES (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 TREATMENT SUCH AS SIGNING AND PAVEMENT MARKING.

DESIGN STANDARDS (FOR GIVEN DESIGN SPEED)		DESIGN SPEEDS (km/h)							
		50	60	70	80	90	100	110	120
MINIMUM RADIUS (m) 4.0 % MAX. S.E.		100	150	215	280	375	490	635	870
MINIMUM RADIUS (m) 6.0 % MAX. S.E.		90	135	195	250	335	435	560	755
MINIMUM RADIUS (m) 8.0 % MAX. S.E.		80	125	175	230	305	395	500	655
MINIMUM RADIUS (m) 10.0 % MAX. S.E.		75	115	160	210	275	360	455	595
MAXIMUM RURAL GRADES (%) (PAGE 486, TABLE VII-1)	LEVEL TOPO	-	5	5	4	4	3	3	3
	ROLLING TOPO	-	6	6	5	5	4	4	4
	MOUNTAINOUS TOPO	-	8	7	7	6	6	5	5
MAXIMUM URBAN GRADES (%) (PAGE 514, TABLE VII-4)	LEVEL TOPO	8	7	6	6	5	5	-	-
	ROLLING TOPO	9	8	7	7	6	6	-	-
	MOUNTAINOUS TOPO	11	10	9	9	8	8	-	-
(8) MINIMUM STOPPING SIGHT DISTANCE (m)		57.4-62.8	74.3-84.6	94.1-110.8	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	9-10	14-18	22-31	32-49	43-71	62-105	80-151	-
	SAG VERTICAL CURVE	11-12	15-18	20-25	25-32	30-40	37-51	43-62	-
SUPERELEVATION		SEE STANDARD DRAWINGS RDM-SE-2 & RDM-SE-3							

TENNESSEE METRIC D.O.T.

ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DESIGN STANDARDS 4-6 LANE ARTERIALS WITH INDEPENDENT ROADWAYS

11-1-95 RDM-TS-3B