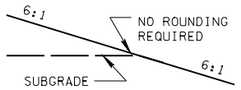
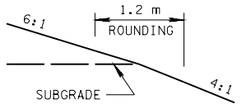
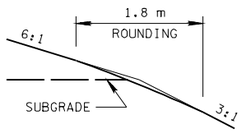
- ☐ REV. 11-1-95: CHANGED TO METRIC.
- ☐ REV. 3-20-02: ADDED SPECIAL NOTE.
- ☐ REV. 3-31-03: CHANGED EFFECTIVE DATE IN SPECIAL NOTE.



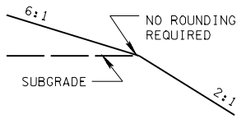
DETAIL A



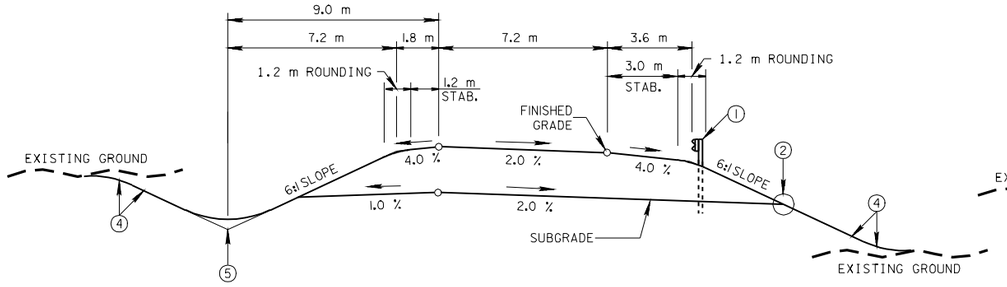
DETAIL B



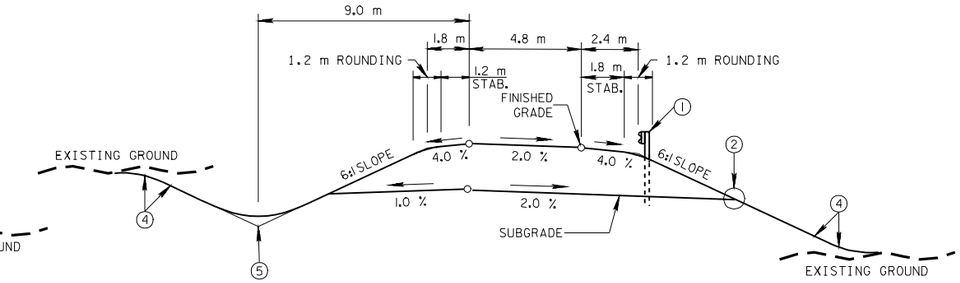
DETAIL C



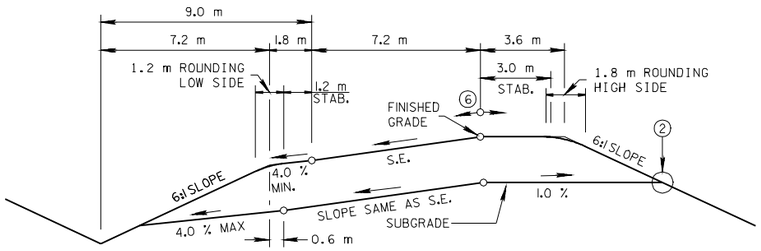
DETAIL D



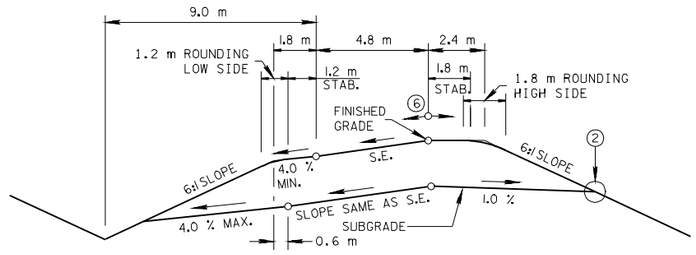
TANGENT SECTION
FOR TWO LANE RAMP



TANGENT SECTION
FOR ONE LANE RAMP



SUPERELEVATED SECTION
FOR TWO LANE RAMP



SUPERELEVATED SECTION
FOR ONE LANE RAMP

SPECIAL NOTE

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

GUIDE VALUES FOR RAMP DESIGN SPEED AS RELATED TO HIGHWAY DESIGN SPEED
(PAGE 918, TABLE X-1)

③ HIGHWAY ⑧ DESIGN SPEEDS, km/h	50	60	70	80	90	100	110	120
RAMP DESIGN SPEED, km/h								
UPPER RANGE (85 %)	40	50	60	70	80	90	100	110
MIDDLE RANGE (70 %)	30 ⑦	40	50	60	60	70	80	90
LOWER RANGE (50 %)	20 ⑦	30 ⑦	40	40	50	50	60	70
CORRESPONDING MINIMUM RADIUS	SEE STANDARD DRAWINGS RDM-SE-2 & RDM-SE-3							

⑨ STOPPING SIGHT DISTANCE FOR RAMPS (PAGE 722, TABLES IX-10 & IX-11)

DESIGN SPEEDS, km/h	15	20	30	40	50	60	70	80	90	100	110	120
MINIMUM, (m)	20	20	30	50	60	80	100	120	140	160	180	210
DESIRABLE, (m)	20	20	30	50	70	90	120	140	170	210	250	290

FOOTNOTES

1. SEE GUARDRAIL STANDARD DRAWINGS FOR TYPICAL GUARDRAIL PLACEMENT.
2. SEE DETAIL A, B, C, OR D ON THIS SHEET FOR ROUNDING.
3. THE HIGHER HIGHWAY DESIGN SPEED SHOULD BE THE CONTROL.
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. LOOP DESIGN SPEED SHOULD NOT BE LESS THAN 40 km/h (50 m RADIUS).
8. DOES NOT PERTAIN TO THE RAMP TERMINALS WHICH SHOULD BE PROPERLY TRANSITIONED AND PROVIDED WITH SPEED CHANGE FACILITIES ADEQUATE FOR THE HIGHWAY SPEED INVOLVED.
9. THE SIGHT DISTANCE ON A FREEWAY PRECEDING THE APPROACH NOSE OF AN EXIT RAMP SHOULD EXCEED THE MINIMUM FOR THE THROUGH TRAFFIC DESIGN SPEED DESIRABLY BY 25 PERCENT OR MORE.

GENERAL NOTES

- Ⓐ FOR SPECIFIC CONDITIONS NOT COVERED ON THIS SHEET, REFERENCE SHOULD BE MADE TO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" 1994.
- Ⓑ PAGE NUMBERS REFERRED TO ON THIS DRAWING ARE FROM THE ABOVE REFERENCE.
- Ⓒ REFERENCE SHOULD ALSO BE MADE TO THE AASHTO "ROADSIDE DESIGN GUIDE".

LENGTHS OF CIRCULAR ARC FOR COMPOUND CURVES ON RAMPS WHEN FOLLOWED BY A CURVE OF ONE-HALF THE RADIUS OR PRECEDED BY A CURVE OF DOUBLE THE RADIUS
(PAGE 200, TABLE III-18)

RADIUS, (m)	30	50	60	75	100	125	150 OR MORE
LENGTH OF CIRCULAR ARC							
MINIMUM, (m)	12	15	20	25	30	35	45
DESIRABLE, (m)	20	20	30	35	45	55	60

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 1 & 2 LANE RAMPS

11-1-95 | RDM-TS-4