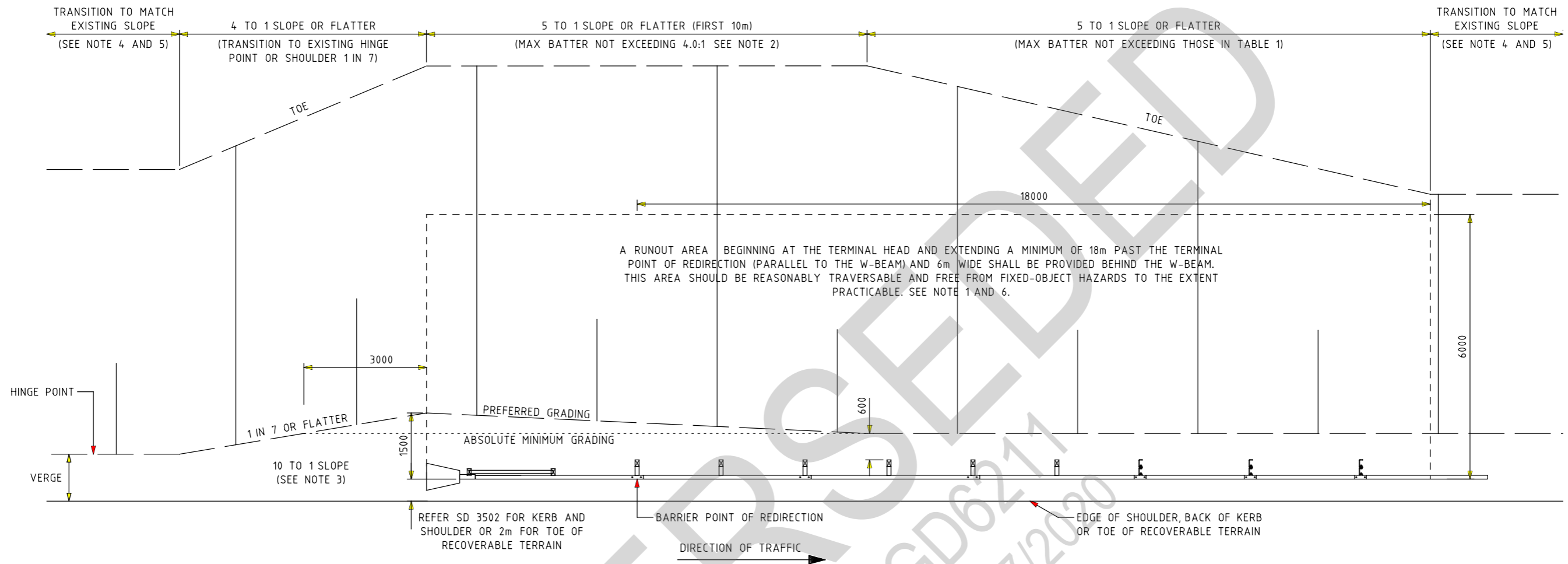


ISSUE	APPROVED BY	DATE	AMENDMENT
C	D.C	5/14	CLARITY, NOTES 4,5 & 6, TABLE 1 AND HINGE POINT



NOTES

1. THE CROSS SLOPE OF THE APPROACH AND RUNOUT AREA PREFERABLY SHOULD BE 10 TO 1 OR FLATTER. THE GRADING DETAILS ON THIS DRAWING ONLY APPLY TO THE SITUATION WHERE THIS IS IMPRACTICAL.
2. THE CROSS SLOPE OF THE FIRST 10m (MEASURED PARALLEL TO THE DIRECTION OF TRAFFIC) OF THE RUNOUT AREA IMMEDIATELY BEHIND THE TERMINAL SHOULD BE 5 TO 1 OR FLATTER. IF THIS IS NOT ACHIEVABLE THIS CROSS SLOPE SHOULD BE NO STEEPER THAN 4 TO 1 WITH THE HEIGHT OF BATTER NOT EXCEEDING THE LIMITS OF TABLE 1.
3. DESIRABLY, THE CROSS SLOPE OF THE GRADING APPROACHING THE GUARD FENCE TERMINAL AND ADJACENT TO IT FOR ITS FULL LENGTH SHOULD BE 10 TO 1. HOWEVER, IF THE EXISTING CROSS SLOPE IS FLAT OR IS A POSITIVE SLOPE DUE TO THE SUPERELEVATION OF THE ROADWAY PAVEMENT, THE MINIMUM OFFSET OF THE GRADING HINGE POINT BEHIND THE GATING SECTION OF TERMINAL IS ESSENTIAL TO PREVENT SNAGGING OF THE VEHICLE.
4. EXISTING SLOPES WHICH CLASSIFY AS HAZARDOUS, IN ACCORDANCE WITH AUSTRROADS GUIDE TO ROAD DESIGN (AGRD) PART 6, AND THAT ARE LOCATED WITHIN THE CLEAR ZONE SHALL BE TREATED AS A HAZARD AND SHIELDED IN ACCORDANCE WITH AGRD PART 6 AND RELEVANT VICROADS SUPPLEMENTS. REFER 'Z' VALUES IN SD 3511 AND 3521 OR THE RUN-OUT METHOD IN AGRD PART 6.
5. THE TRANSITION TO MATCH EXISTING SLOPES SHALL BE AT LEAST THE MINIMUM LENGTH REQUIRED TO PROVIDE A TRAVERSABLE SLOPE IN THE DIRECTION OF TRAFFIC. AGRD PART 6 SPECIFIES A TRAVERSABLE SLOPE IS 6:1 OF FLATTER FOR TRUCKS AND 4:1 OR FLATTER FOR CARS.
6. WHERE THE MINIMUM RUNOUT AREA SPECIFIED IN THIS DRAWING IS NOT ACHIEVABLE, CONSIDERATION IN ORDER OF PRECEDENCE SHALL BE GIVEN TO:
 - (i) EXTENDING THE BARRIER UPSTREAM OF THE PROPOSED LOCATION TO ACHIEVE THE MINIMUM RUNOUT AREA.
 - (ii) PROVIDING THE MAXIMUM ACHIEVABLE RUNOUT AREA GIVEN EXISTING SITE CONSTRAINTS ALSO SUPPORTED WITH A DOCUMENTED RISK EVALUATION; OR
 - (iii) THE AREA SHOULD AT LEAST BE SIMILAR IN CHARACTER TO THE ADJACENT UNSHIELDED ROADSIDE AREA, SUPPORTED WITH A DOCUMENTED RISK EVALUATION.

TABLE 1: MAXIMUM HEIGHT OF FILL BATTER

FILL BATTER SLOPE	1.5:1	2.0:1	2.5:1	3.0:1	3.5:1	4.0:1	4.5:1	5.0:1 OR FLATTER
MAXIMUM FILL HEIGHT (m)	0.5	1.0*	1.0*	1.0*	2.5	3.0	3.5	NO LIMIT

*REFER TO AGRD PART 6, FIGURE 4.6.

VicRoads Drawing No. 720277

REFERENCES AND NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
2. SAFETY BARRIER TERMINOLOGY, SHORTHAND AND GENERAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH SD 3500.
3. SAFETY BARRIER SHALL BE VICROADS ACCEPTED PRODUCTS IN ACCORDANCE WITH RDN 06-04.

VICROADS SUPPLEMENT TO AGRD
 AUSTRROADS GUIDE TO ROAD DESIGN PART 6
 SD 3500 TERMINOLOGY, SHORTHAND AND GENERAL REQUIREMENTS
 SD 3511 AND 3521 SAFETY BARRIER ALIGNMENT DETAILS
 SD 3545 G.R.E.A.T RUNOUT AREA DETAILS
 RDN 06-04 VICROADS ACCEPTED SAFETY BARRIER PRODUCTS
 RDN 06-08 USE OF STEEL GUARD FENCE
 AASHTO 2011 ROADSIDE DESIGN GUIDE

INVESTMENT AND DESIGN SERVICES
 MANAGER
 SAFE SYSTEM DESIGN
 60 DENMARK STREET
 KEW
 VICTORIA 3101
 PHONE (03) 9854 2666



ROAD SAFETY BARRIERS
SAFETY BARRIER
RUNOUT AREA GRADING DETAILS

NOT TO SCALE	APPROVED <i>J. Amis</i>	SD NO. SD 3571	ISSUE D
--------------	-------------------------	----------------	---------