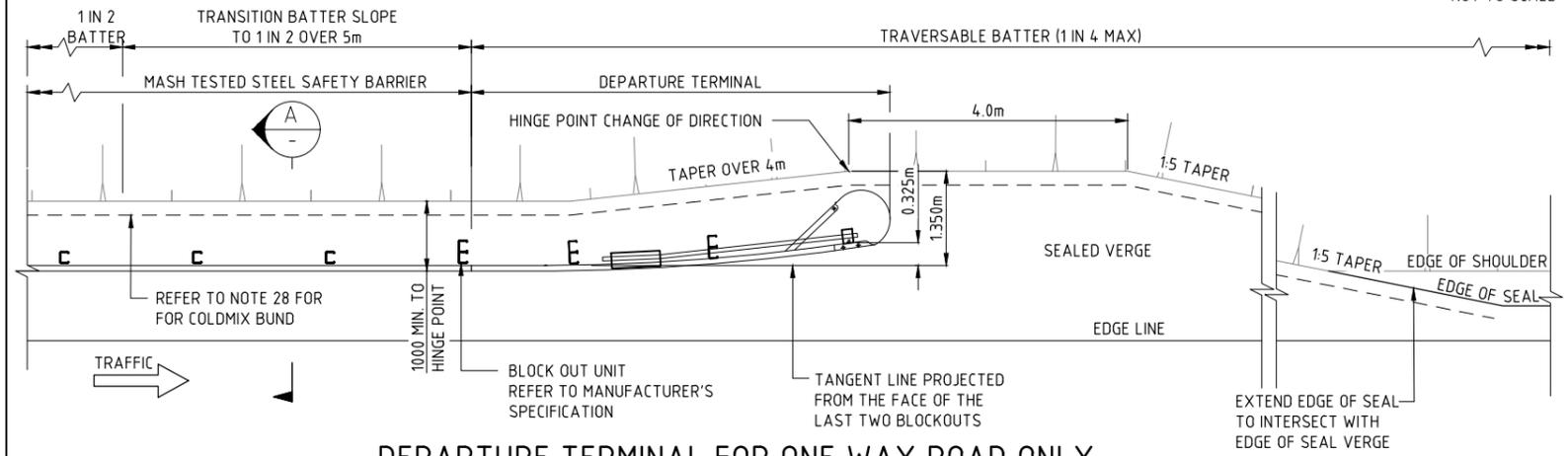


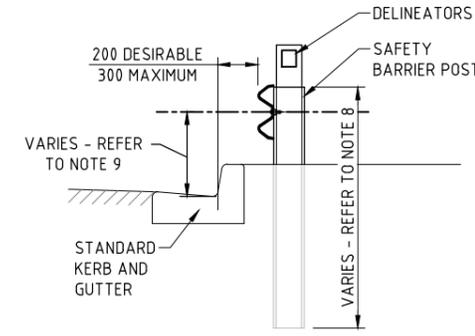
KINETIC ENERGY TERMINAL

NOT TO SCALE



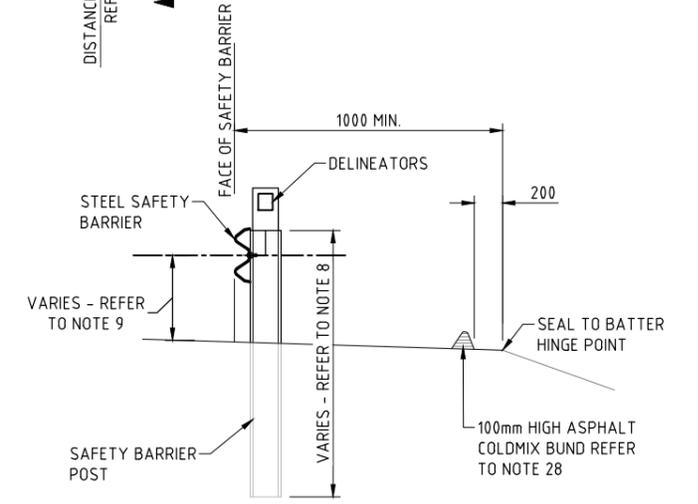
DEPARTURE TERMINAL FOR ONE WAY ROAD ONLY

NOT TO SCALE (REFER TO NOTE 11 FOR DEPARTURE TERMINAL USE FOR TWO WAY ROAD)



SAFETY BARRIER - BEHIND KERB

NOT TO SCALE



SECTION A-A

NOT TO SCALE

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL STEELWORK SHALL BE HOT DIP GALVANISED AFTER FABRICATION OF ALL WELDED COMPONENTS TO AS4680.
- ALL CONCRETE SHALL BE N25 IN ACCORDANCE WITH AS3600.
- DETAILS NOT SPECIFICALLY SHOWN ON THIS DRAWING SHALL BE TO AS3845.1 UNLESS NOTED OTHERWISE ON MANUFACTURER'S DRAWINGS.
- FLAME CUTTING OF GALVANISED POST OR RAIL IS NOT PERMITTED.

SAFETY BARRIER:

- REFER TO AUSTRROADS GUIDE TO ROAD DESIGN, PART 6 FOR SAFETY BARRIER OFFSETS.
- SAFETY BARRIERS TO BE IN ACCORDANCE WITH AS/NZS3845.1.
- REFER TO THE DEPARTMENT'S WEB PAGE FOR DETAILS AND DIMENSION OF ACCEPTED MASH TESTED SAFETY BARRIER INFRASTRUCTURE THAT MAY BE USED IN NORTHERN TERRITORY.
LINK: <https://dipl.nt.gov.au/industry/technical-standards-guidelines-and-specifications/road-safety-barriers>
- SAFETY BARRIER AND TERMINAL INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S DRAWINGS AND SPECIFICATION.
- REFER TO PROJECT DRAWINGS FOR LENGTH, POSITION, OFFSET AND TERMINALS.
- MASH TESTED AND ACCEPTED TERMINALS ARE USED AT BOTH APPROACH AND DEPARTURE SIDES ON TWO-WAY ROADS. USE ONLY ON THE APPROACH SIDE ON ONE-WAY ROADS.
- THE MINIMUM INSTALLED LENGTH OF STEEL BEAM BARRIER SHALL INCLUDE:
 - A MASH TESTED AND ACCEPTED TERMINAL AT BOTH ENDS FOR A TWO WAY CARRIAGEWAY, OR
 - A MASH TESTED AND ACCEPTED TERMINAL AT THE APPROACH END AND A GATING DEPARTURE TERMINAL ON A ONE WAY CARRIAGEWAY
 - AND A MINIMUM LENGTH OF SAFETY BARRIER PER THE PRODUCT TECHNICAL CONDITIONS OF USE.
- SAFETY BARRIER DELINEATORS SHALL BE PROVIDED WITH RED AND WHITE "CLASS 1A" RETROREFLECTIVE SHEETING OR AS DOUBLE SIDED REFLECTORS IN

ACCORDANCE WITH AS/NZS1906.2. USE YELLOW DELINEATORS ON RIGHT HAND SIDE ON ONE WAY TRAFFIC ROADS. RETROREFLECTIVE AREA SHALL BE 100cm² AND NO LESS THAN 60mm WIDE. DELINEATORS ARE TO BE BOLTED TO THE BLOCK OUT PIECES OR TO THE POSTS WHERE BLOCK OUTS ARE NOT USED. THE TOP OF THE DELINEATOR SHALL BE 220mm ABOVE THE TOP OF THE SAFETY BARRIER SO THAT THE APPROACHING DRIVER ALWAYS SEES RED ON HIS LEFT AND WHITE ON HIS RIGHT HAND SIDE. PLACE AT EACH END AND AT 12m CENTRES.

- OBTAIN THE SUPERINTENDENT'S APPROVAL FOR POST SETOUT DIMENSIONS AND ALIGNMENT.
- SAFETY BARRIER LAPS ARE TO BE IN THE DIRECTION OF TRAVEL TO AVOID EXPOSING THE END OF THE RAIL TO ONCOMING VEHICLES.
- POSTS MAY BE DRIVEN INTO THE GROUND PROVIDED THIS CAN BE ACHIEVED WITHOUT DAMAGING THE POST.
- POSTS THAT ARE OUT OF VERTICAL BY MORE THAN 20mm OVER THE PROJECTING LENGTH, OR MORE THAN 25mm OUT OF POSITION, SHALL BE REMOVED AND RE-INSTALLED IN 450mm DIAMETRE HOLES AS PER THE DETAIL ON THIS SHEET.
- PREBORE 450mm DIAMETRE HOLES FOR POSTS THAT ARE TO BE INSTALLED THROUGH:
 - CONCRETE SLAB OR MARGIN,
 - BOUND (STABILISED) PAVEMENT,
 - DEEP LIFT ASPHALT PAVEMENT,
 - WHEN REPLACING DAMAGED POST OR
 - ENCOUNTER ANY OBSTACLE WITHIN THE UNDERLYING FILL

BACKFILL THE HOLES WITH SELECT FILL/TYPE 3 SUB-BASE MATERIAL AND COMPACT MAXIMUM LAYER DEPTH OF 250mm TO 95% MMDD. DRIVE POSTS CENTRALLY INTO COMPACTED HOLES. SEAL THE HOLES WITH COLD-MIX ASPHALT AS INDICATED ON THE DETAILS OR SEAL ONCE POSTS ARE DRIVEN IN.

- DESIRABLE OFFSET OF BARRIER FACE TO HINGE POINT IS 1.0m. ALTERNATIVES MAY BE PERMITTED, INCLUDING THE USE OF LONG POST BARRIERS.

TERMINAL:

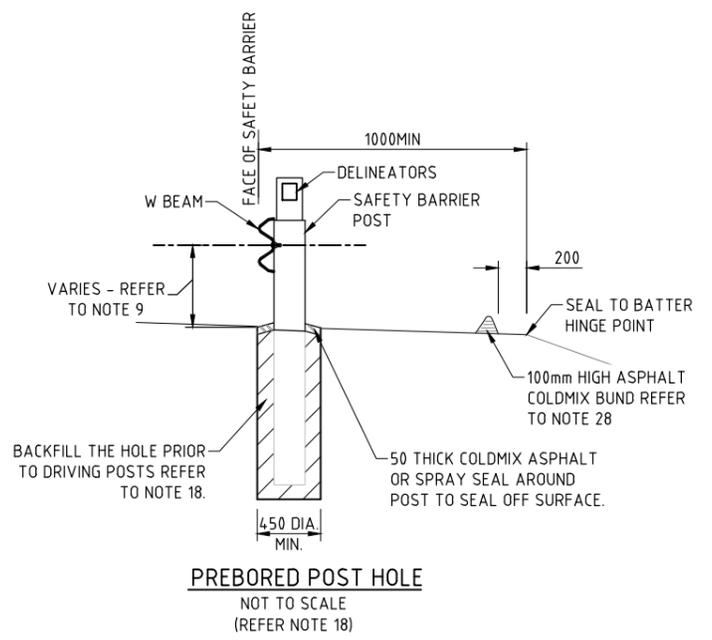
- THE AREA IMMEDIATELY BEHIND THE TERMINAL, FOR THE MINIMUM WIDTH OF RUN OFF ZONE, OVER THE LENGTH DEFINED, SHOULD BE REASONABLY TRAVERSABLE AND FREE FROM FIXED OBJECT HAZARDS. IF A CLEAR RUN-OUT IS NOT POSSIBLE, THIS AREA SHOULD AT LEAST BE SIMILAR TO ADJACENT UNSHIELDED ROADSIDE AREAS.
- PROVIDE A FLARED MASH TESTED AND ACCEPTED TERMINAL ON NEW CARRIAGEWAYS. APPLY FLARE RATE AS PER AUSTRROADS GUIDELINE ROAD DESIGN PART 6 AND MANUFACTURER'S PRODUCT CAPABILITY.
- WIDEN FORMATION ACCORDINGLY TO ACCOMMODATE FLARED TERMINAL.
- IN LINE MASH TESTED AND ACCEPTED TERMINALS MAY BE USED WHERE THE SAFETY BARRIER IS POSITIONED ON AN EXISTING CARRIAGEWAY OR WHERE THERE IS INSUFFICIENT SPACE FOR A FLARED END GATING TERMINAL.
- OBTAIN SUPERINTENDENT'S APPROVAL FOR ACCEPTANCE OF ALTERNATIVE TO FLARED END TERMINALS.
- LENGTH & POST SPACING WILL VARY DEPENDENT ON TESTED TERMINAL USED
- THE DESIGNED LENGTH OF SAFETY BARRIER SHALL ENSURE THAT THE TERMINALS ARE CLEAR OF THE HAZARD.

BARRIER TRANSITIONS:

- FLEXIBLE TO RIGID BARRIER TRANSITIONS SHALL BE PROVIDED BY AN APPROVED TRANSITION SYSTEM LISTED UNDER 'BARRIER TRANSITIONS' ON THE DIPL WEBSITE AND INCLUDES APPROVED SAFETY BARRIER AS DEFINED IN THE BARRIER'S TECHNICAL CONDITIONS OF USE:
<https://dipl.nt.gov.au/industry/technical-standards-guidelines-and-specifications/road-safety-barriers>

BITUMEN WORKS:

- THE WIDTH OF SEAL SHALL EXTEND BEHIND THE SAFETY BARRIER TO THE HINGE POINT OR 1m FROM THE BACK OF KERB, FOR THE FULL LENGTH AND ENCOMPASS THE TERMINALS.
- COLDMIX ASPHALT BUND IS NOT REQUIRED WHEN THE VERGE SLOPES TOWARD THE TRAFFIC LANES.



PREBORED POST HOLE

NOT TO SCALE (REFER NOTE 18)

No.	DESCRIPTION	DATE	NAME	DEPT/COMPANY
7	MINOR CHANGES	JAN 2024	D.LLANO	DIPL
6	BARRIER TRANSITION NOTES UPDATED	OCT 2023	J.COOK	DIPL
5	BLOCK OUT UNIT DETAIL AMENDED	JUN 2020	S.SHI	EES/DIPL
4	SET OUT DETAILS UPDATED	JAN 2020	S.SHI	EES/DIPL
3	DETAILS AND NOTES UPDATED	DEC 2019	S.SHI	EES/DIPL
2	NEW DETAILS ADDED FOR APPROACH TERMINAL	MAY 2019	S.JALIL	EES/DIPL
AMENDMENTS				

WARNING
BEWARE OF UNDERGROUND SERVICES.
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DATE	DESIGN LEADER	DATE	CHECKED
1/09/2017	S.HATZI	1/09/2017	S.HATZI
			S.JACKSON



FILE No.	ASSET No.	SHEET No.	DRAWING No.	AMEND.	SHEET SIZE
-	-	1 OF 1	CS3200	7	A1