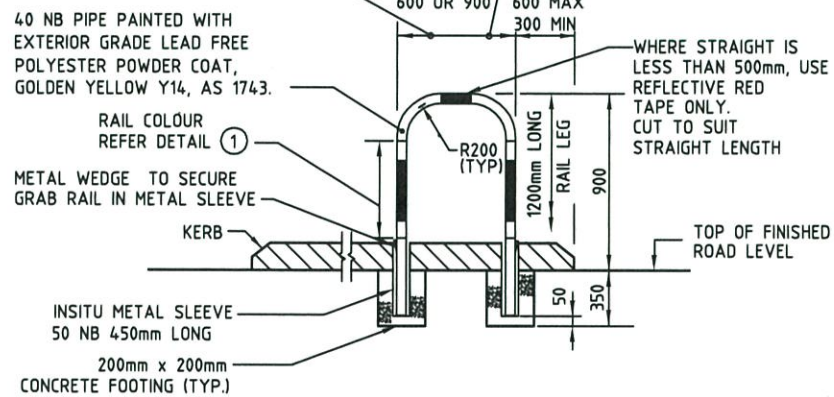
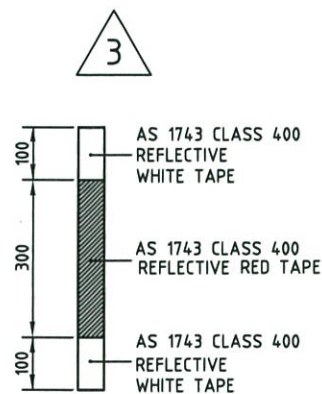


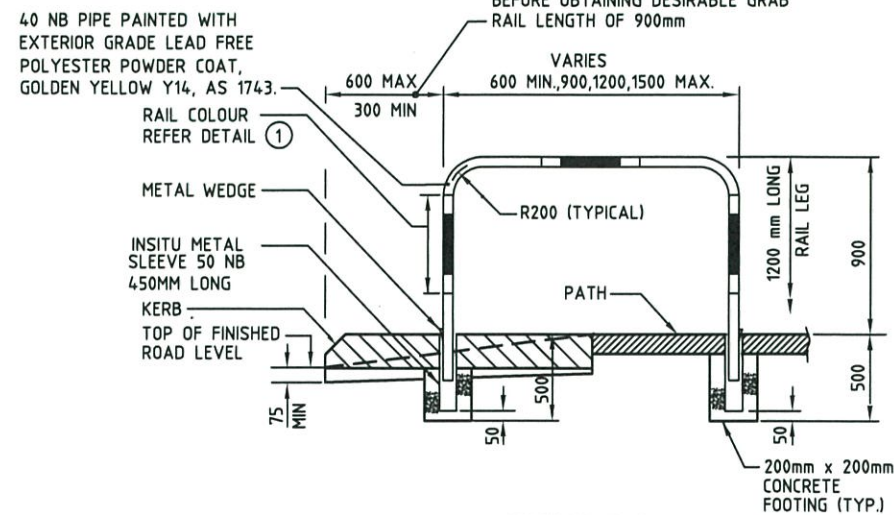
NOTE: IF MEDIAN IS LESS THAN 1.2m WIDE
NO GRAB RAIL IS REQUIRED.
IF MEDIAN IS MORE THAN 1.2m BUT
LESS THAN 2.0m WIDE, GRAB RAIL TO
BE 600mm LONG.
IF MEDIAN IS MORE THAN 2.0m WIDE,
GRAB RAIL TO BE 900mm LONG.



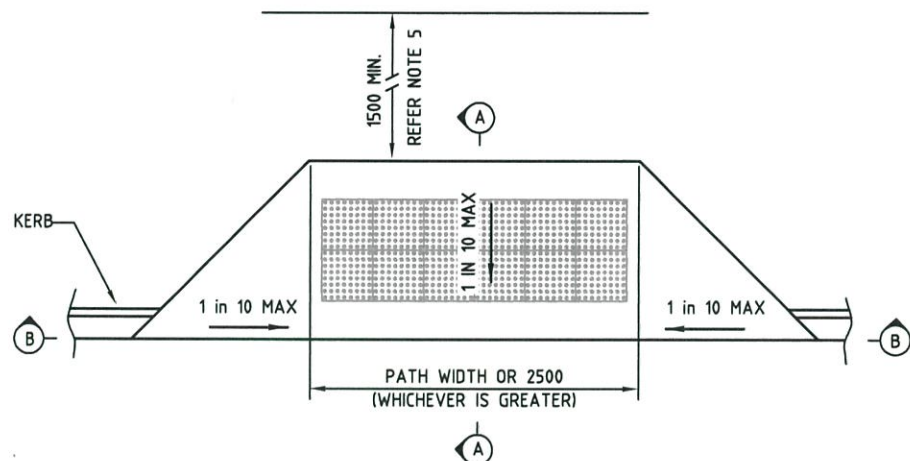
PEDESTRIAN GAP GRAB RAIL
MEDIAN AND MEDIAN ISLAND LOCATION



RAIL COLOUR - DETAIL 1

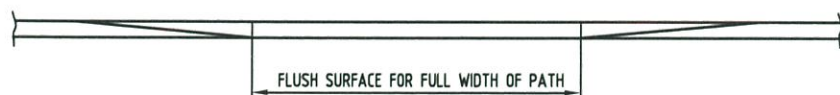


SECTION C-C

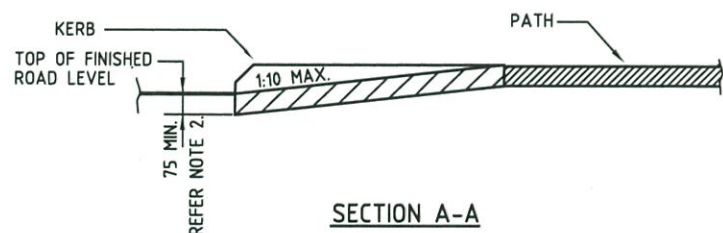


PLAN - KERB RAMP - TYPE A
ROAD VERGE LOCATION
NO GRAB RAIL

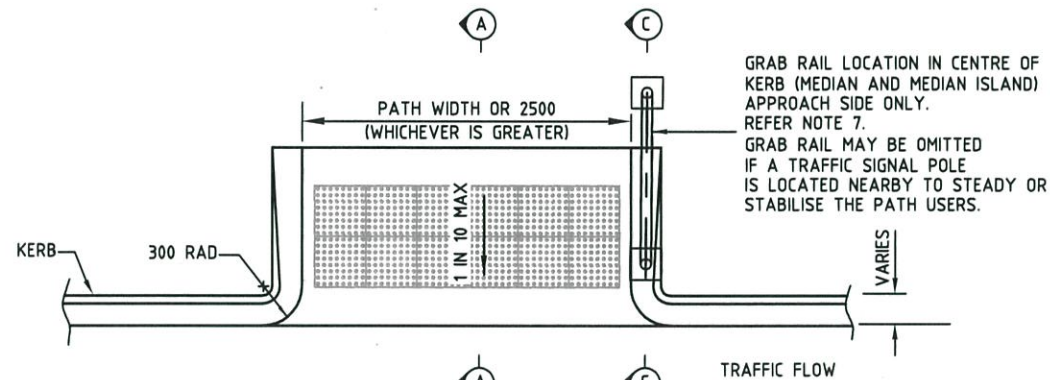
- USED WHEN RAMP CAN BE ACCESSED FROM SIDE (I.E. WINGS ARE ACCESSIBLE FOR PEOPLE WITH DISABILITIES)
- WHEN RAMP CAN BE ACCESSED FROM ONE SIDE ONLY IT IS ACCEPTABLE TO USE THE TYPE A "WING" ON ONE SIDE AND THE TYPE B "KERB RETURN" ON THE OTHER - REFER LEGEND
- USED TO FACILITATE ON-ROAD CYCLISTS TURNING INTO OR OUT OF PATH.



SECTION B-B



SECTION A-A



PLAN - KERB RAMP - TYPE B

MEDIAN AND MEDIAN ISLAND LOCATION

- ALSO MAY BE USED IN ROAD VERGE WHERE RAMP CAN NOT BE ACCESSED FROM SIDE AND ON-ROAD CYCLING IS NOT PERMITTED

LEGEND

- TYPE 'A' ROAD VERGE LOCATION
- TYPE 'B' MEDIAN AND MEDIAN ISLAND LOCATION
- TYPE 'A' + 'B' COMBINED

NOTES

- EDGE OF RAMP SHALL BE FLUSH WITH ROAD PAVEMENT (ASPHALT OR SEAL).
- WHERE ASPHALT IS NOT TO BE APPLIED IN THE CURRENT STAGE, RAMP PAVEMENT DOWN TO ENSURE MINIMUM CONCRETE THICKNESS OF 75mm AT THE LEADING EDGE. WHERE ASPHALT IS APPLIED LATER, IT SHALL OVERLAY THE LOWER SECTION OF THE RAMP.
- ALL CONCRETE SHALL BE BROOM FINISHED ACROSS THE DIRECTION OF PEDESTRIAN TRAFFIC TO PROVIDE A NON-SLIP SURFACE.
- A MINIMUM OF 2500mm OF KERB SHALL BE PROVIDED BETWEEN ADJACENT RAMPS.
- PATHS PARALLEL TO THE KERB SHALL BE REALIGNED OR WIDENED TO PROVIDE A LEVEL SECTION 1.5m MINIMUM WIDTH BEHIND THE RAMP.
- PEDESTRIAN GAPS SHALL BE A MINIMUM WIDTH OF 2.5m AND BE USED INSTEAD OF KERB RAMPS IN MEDIANS, MEDIAN ISLANDS AND ISLANDS WHERE THE DISTANCE BETWEEN KERB FACES IS LESS THAN 4.5m.
- PEDESTRIAN GRAB RAILS SHALL BE PROVIDED AT MEDIANS AND MEDIAN ISLANDS GREATER THAN 1.2m WIDE. GRAB RAILS ARE TO BE PLACED ON THE TRAFFIC APPROACH SIDE OF THE RAMP AS SHOWN IN KERB RAMP - TYPE B DETAIL.
- CONCRETE CLASS SHALL BE N20.
- KERB RAMPS TO BE SKEWED TO MATCH THE DIRECTION OF THE ROAD CROSSING.
- THIS DRAWING SUPERSEDES DRG. 9331-0380.

AMENDMENTS

No.	DESCRIPTION	APPROVED & DATE
1	GRAB RAIL & SLEEVE DETAILS ALTERED, TGS's ADDED. NOTE 4 AMENDED, NOTE 8 REMOVED. NOTES & DETAILS REARRANGED.	R. KOORENLEVEL 7.2.12
2	NOTES FOR RAMP USAGE AMENDED, UPDATED TITLE BLOCK.	R. KOORENLEVEL 14.12.17
3	CLASS 2 CHANGED TO CLASS 400 FOR RETROREFLECTIVE TAPE PROPERTIES.	<i>[Signature]</i> 19/04/18

NOTES

Government of Western Australia
mainroads WESTERN AUSTRALIA
PLANNING AND TECHNICAL SERVICES
ROAD AND TRAFFIC ENGINEERING
WATERLOO CRESCENT EAST PERTH 6004
Telephone (08) 9323 4111 Fax (08) 9323 4449

FILE NUMBER	4-31-5E1
DESIGNED / DRAWN	ROAD & TRAFFIC STANDARDS 9.98
VERIFIED	K. TURNER 15.9.98
APPROVED	GRAEME McLEAN 15.9.98

STANDARD DRAWING

RAMP AND GRAB RAIL DETAILS

LOCAL AUTHORITY	
DRAWING NUMBER	AMENDMENT

9831-5649-3

SCALE N.T.S.
MICROFILM DATE A3