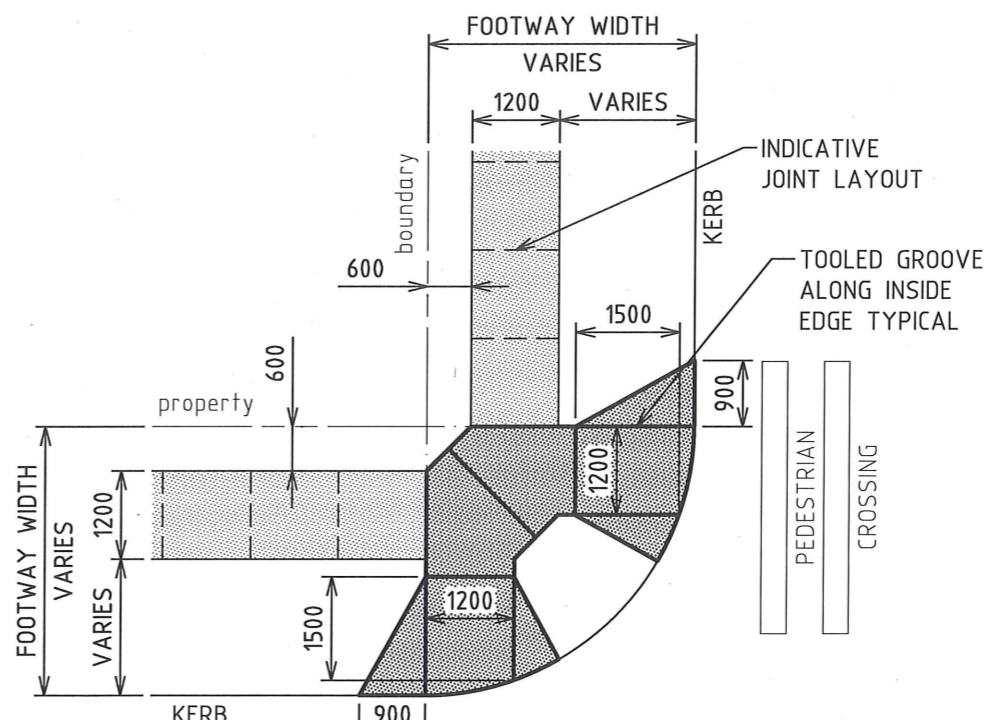
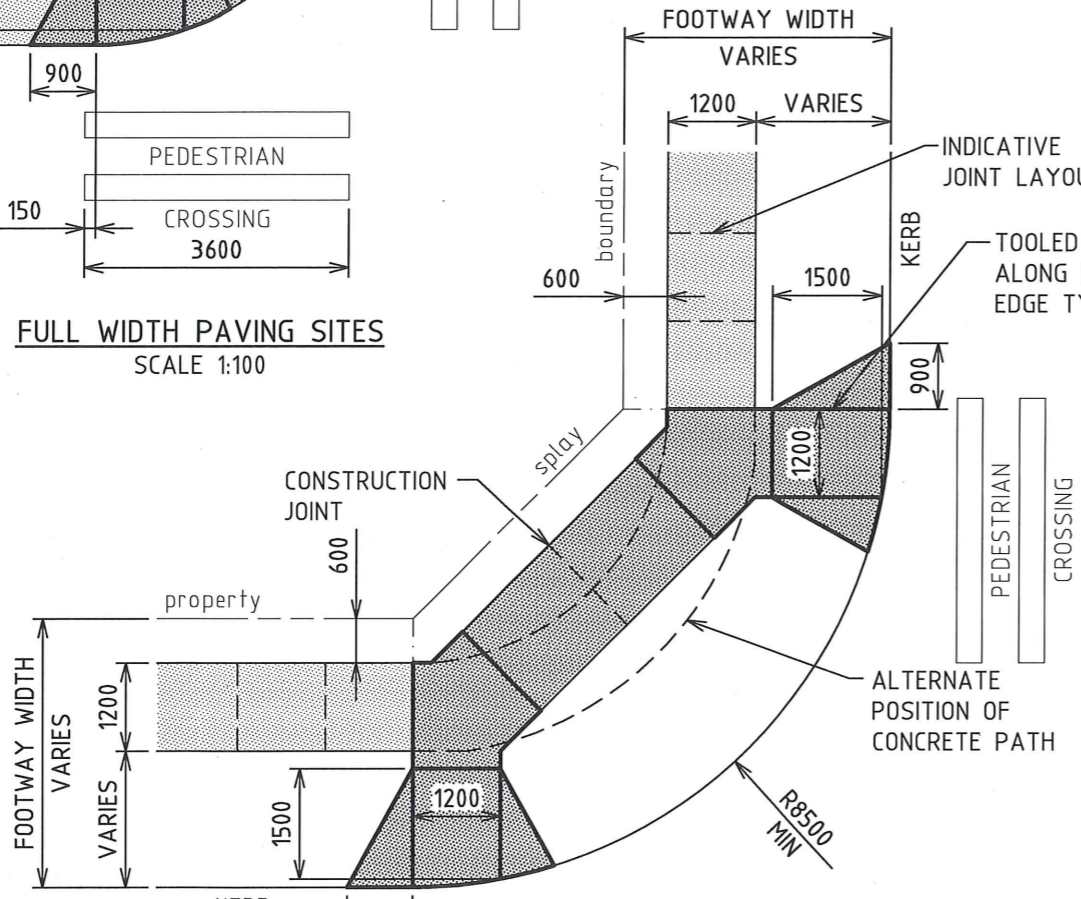


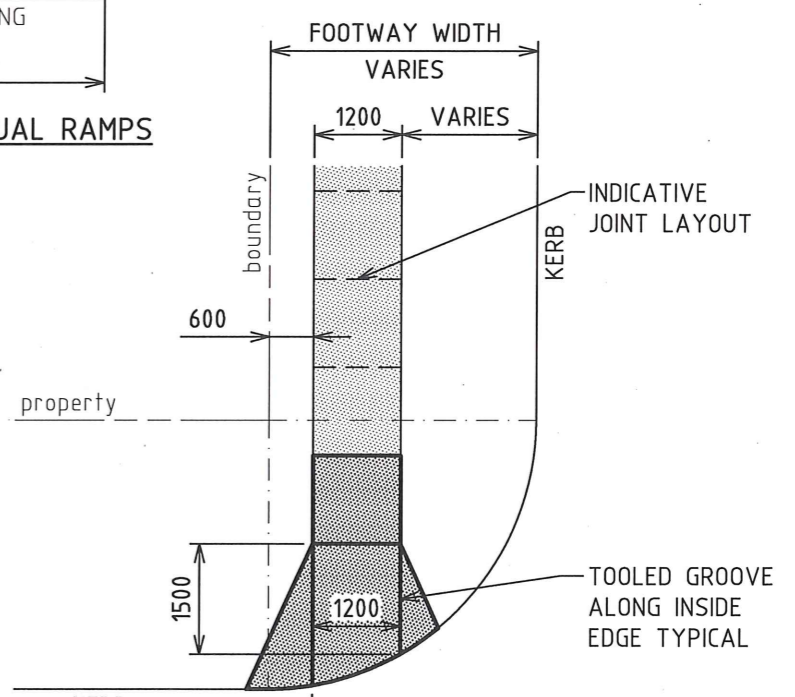
FULL WIDTH PAVING SITES
SCALE 1:100



STRIP PAVING SITES - DUAL RAMPS
SCALE 1:100



SPLAY CORNERS AND ROUNDABOUTS
SCALE 1:100



STRIP PAVING SITES - SINGLE RAMP
SCALE 1:100

REFER TO SHEET 3 FOR NOTES

No.	AMENDMENT DETAILS	DATE	INITIALS
1	GENERAL REVISION	05.07.16	T.A.
0	CONSTRUCTION	29.04.14	T.A.

SCALE
AS SHOWN

COORDINATE SYSTEM:
HEIGHT DATUM: AHD

REVIEWED: J.C.

APPROVED: *[Signature]*

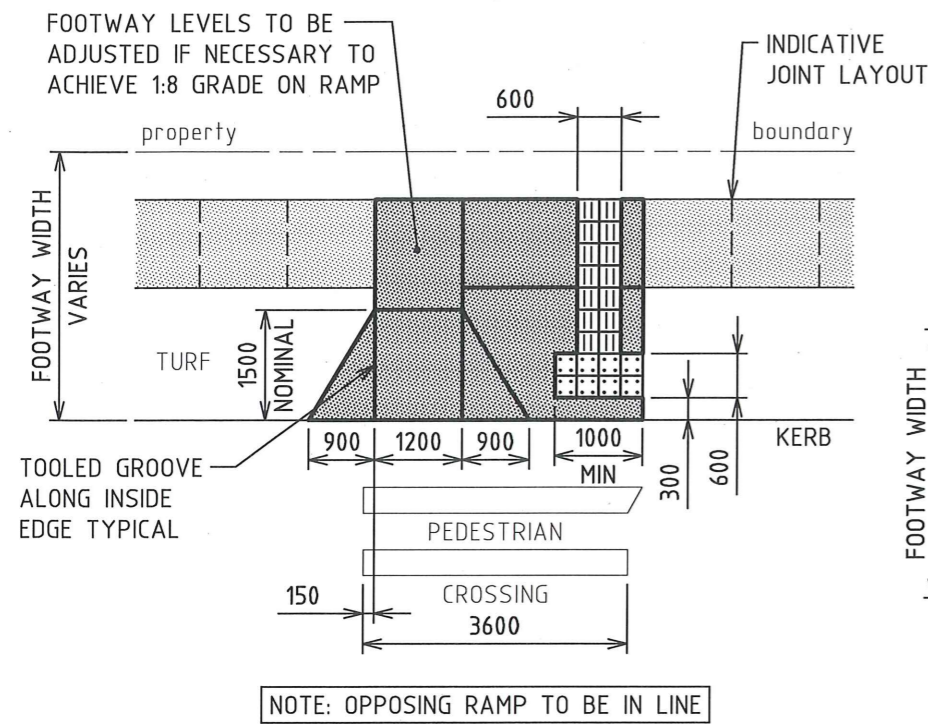
SIGNED: INFRASTRUCTURE/MANAGEMENT SERVICES MANAGER
DATE: 29.09.2016

THE CITY OF NEWCASTLE
FOOTWAY KERB RAMPS

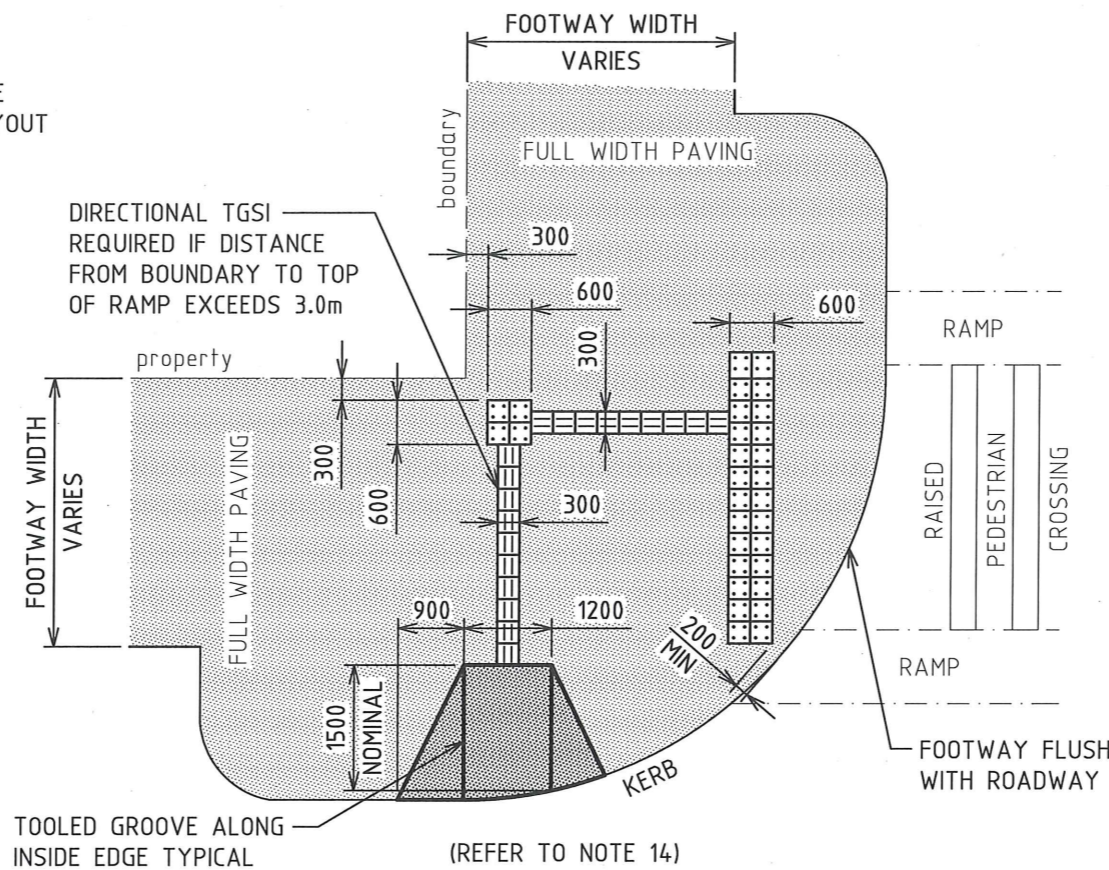
NCC PLAN No.
A1201

AMENDMENT No.

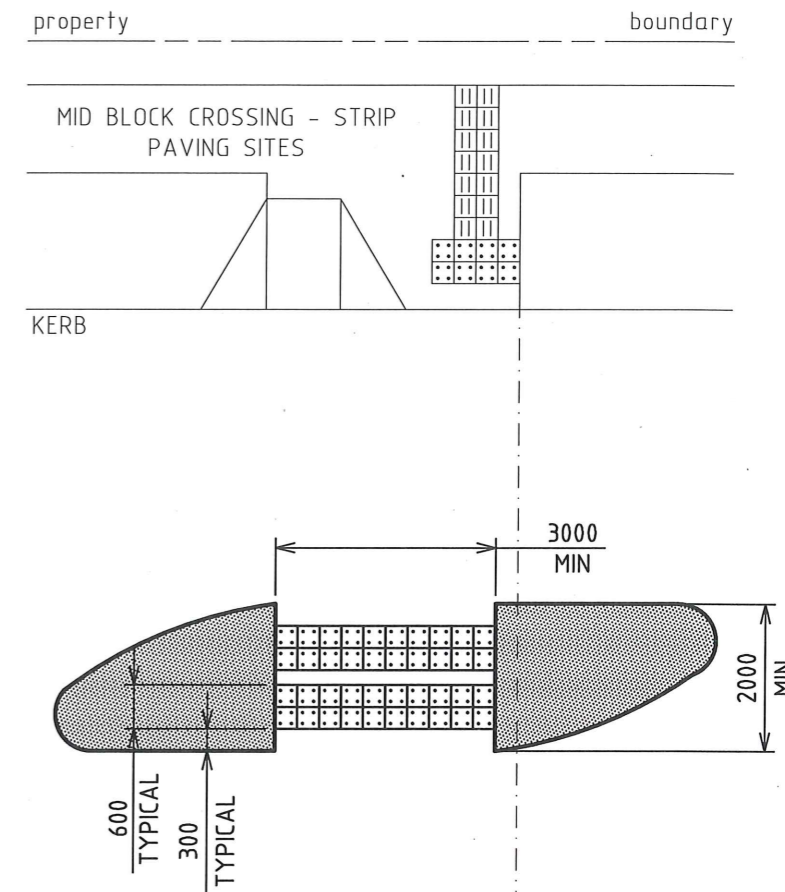
SHEET No.
1
OF
4
SHEETS



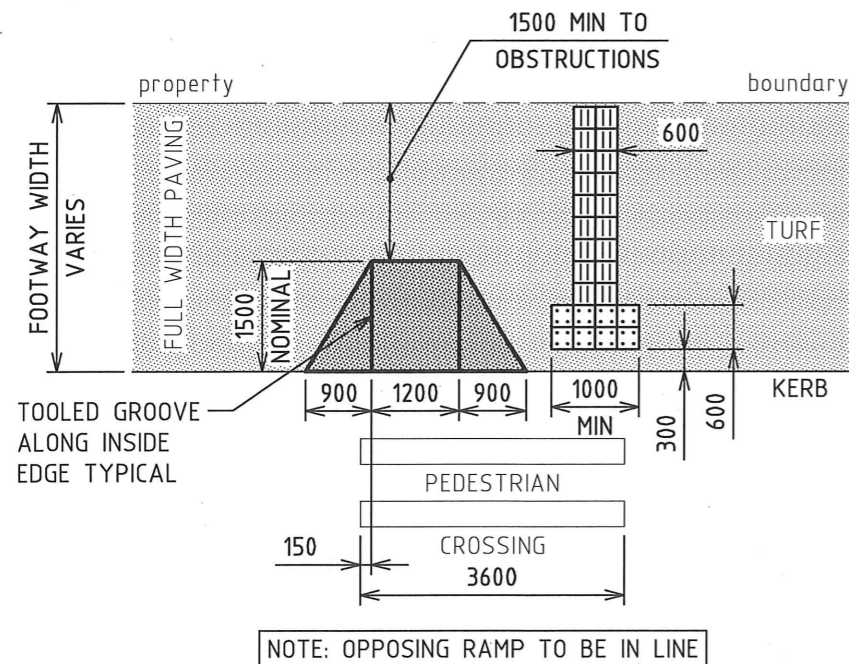
(REFER TO NOTE 16)
MID BLOCK CROSSING - STRIP PAVING SITES
 SCALE 1:100



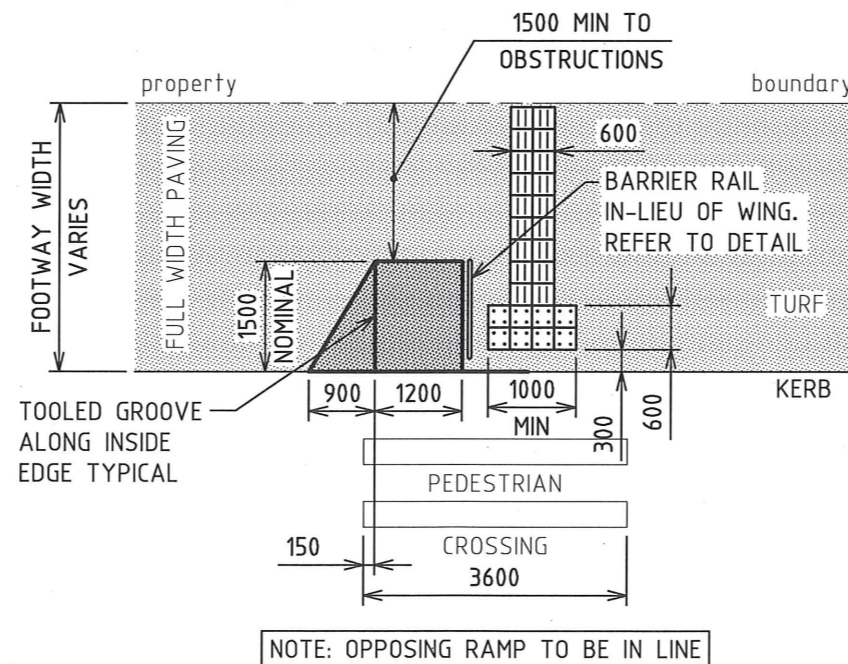
(REFER TO NOTE 14)
RAISED PEDESTRIAN CROSSING
 SCALE 1:100



(REFER TO NOTES 5 & 16)
MEDIAN CUT THROUGH - PEDESTRIAN REFUGE
 SCALE 1:100



(REFER TO NOTES 5 & 16)
MID BLOCK CROSSING - FULL WIDTH PAVING SITES
 SCALE 1:100



(REFER TO NOTES 5 & 16)
MID BLOCK CROSSING WITH BARRIER RAIL - FULL WIDTH PAVING SITES
 SCALE 1:100

LEGEND	
	DENOTES 'DIRECTIONAL' TACTILE GROUND SURFACE INDICATORS
	DENOTES 'WARNING' TACTILE GROUND SURFACE INDICATORS

REFER TO SHEET 3 FOR NOTES

No.	AMENDMENT DETAILS	DATE	INITIALS
1	GENERAL REVISION	05.07.16	T.A.
0	CONSTRUCTION	29.04.14	T.A.

SCALE	AS SHOWN
COORDINATE SYSTEM:	HEIGHT DATUM: AHD

	INFRASTRUCTURE MANAGEMENT SERVICES
REVIEWED:	J.C.

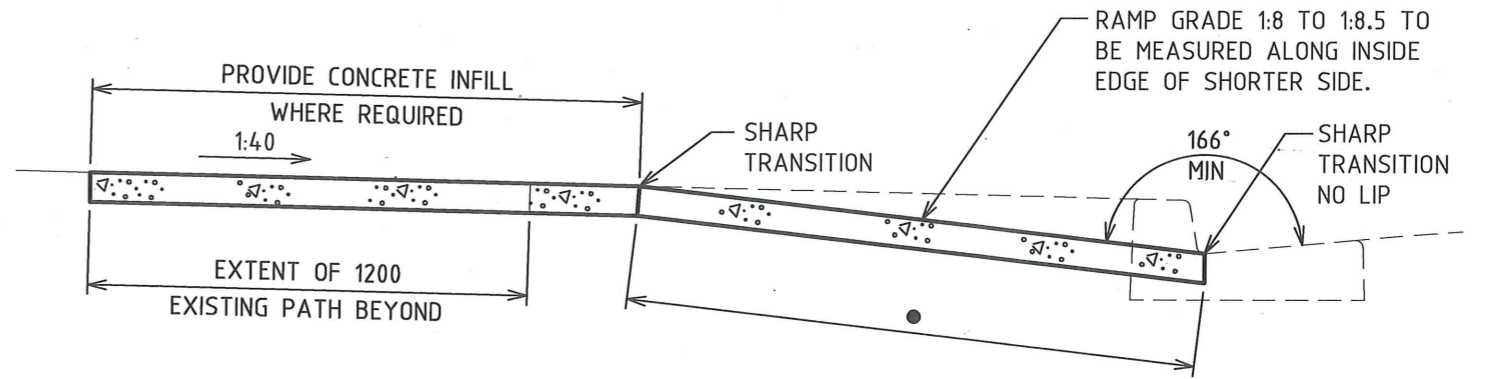
APPROVED:	
SIGNED:	INFRASTRUCTURE MANAGEMENT SERVICES MANAGER
DATE:	29.09.2016

THE CITY OF NEWCASTLE
FOOTWAY KERB RAMPS

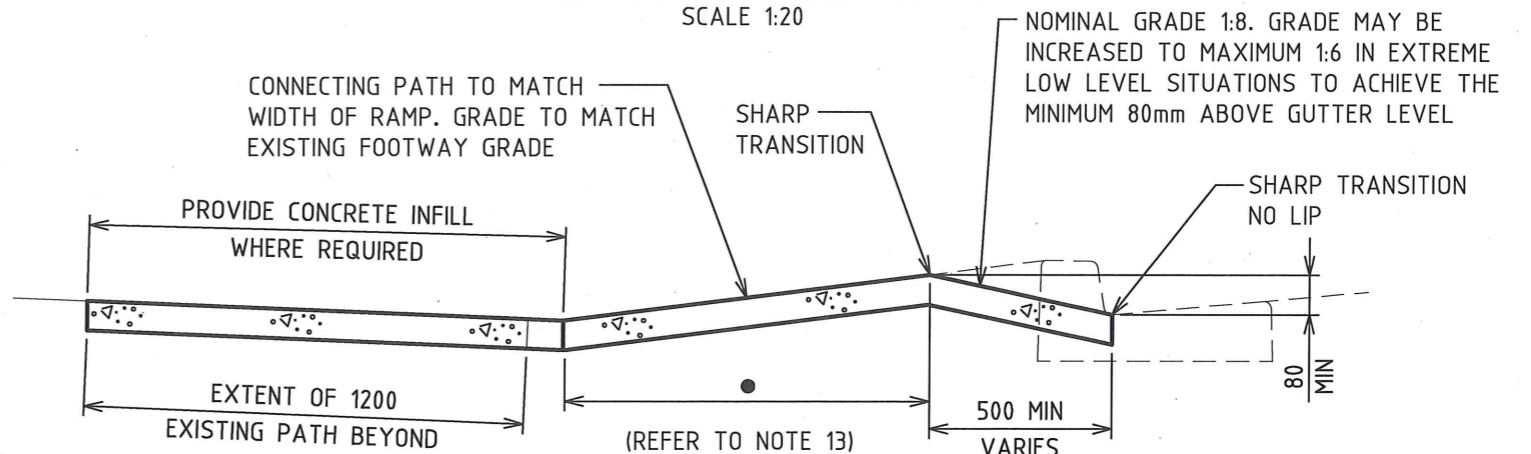
NCC PLAN No.	A1201
AMENDMENT No.	
SHEET No.	2 OF 4 SHEETS

NOTES

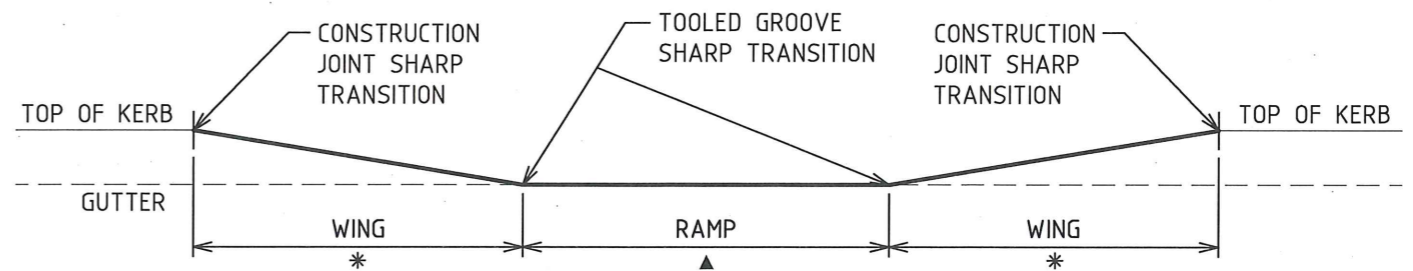
1. KERB RAMPS TO BE CONSTRUCTED IN ACCORDANCE WITH THIS DRAWING AND RELEVANT SECTIONS OF AS1428 - PARTS 1 & 4.1 - 2009.
2. EACH RAMP TO POINT IN THE DIRECTION OF TRAVEL AND TO ALIGN WITH RAMP ON OPPOSITE SIDE OF CARRIAGEWAY.
3. THE POSITION OF A RAMP MAY BE CHANGED FROM THE PREFERRED LOCATION WHERE THERE ARE MAJOR OBSTRUCTIONS (EG. POLES, UTILITY PITS, DRAINAGE PITS ETC) . CHANGES TO BE APPROVED BY COUNCIL'S INFRASTRUCTURE PLANNING BUSINESS UNIT.
4. WIDTH OF RAMP WING MAY BE DECREASED IF NECESSARY TO CLEAR POLES, UTILITY PITS, DRAINAGE PITS ETC. MINIMUM WIDTH 600mm. FOR VERY SHORT RAMPS ADOPT A 45° WING ANGLE.
5. ALL KERB RAMPS TO BE 1200 WIDE
6. A VERTICAL KERB AND BARRIER RAIL MAY BE USED WHERE THERE IS NO SCOPE TO INSTALL A WING DUE TO THE POSITION OF POLES, UTILITY PITS, DRAINAGE PITS ETC. BARRIER RAIL TO COMPLY WITH AUSTRALIAN STANDARD 2312 - 2002 "GUIDE TO THE PROTECTION OF STRUCTURAL STEEL AGAINST ATMOSPHERIC CORROSION BY THE USE OF PROTECTIVE COATINGS". IF REQUIRED AT A SIGNALISED INTERSECTION APPROVAL OF THE ROADS AND TRAFFIC AUTHORITY MUST BE OBTAINED - BARRIER RAIL MUST NOT OBSTRUCT THE CROSSING ACTIVATOR BUTTON.
7. LEVELS OF FIRE HYDRANTS, GAS SYPHONS ETC, THAT FALL WITHIN A RAMP OR RAMP WING, SHOULD BE ADJUSTED TO MATCH THE FINISHED LEVELS OF THE RAMP.
8. A RAMP MUST NOT BE LOCATED OUTSIDE THE LINE OF A MARKED FOOT CROSSING OR ZEBRA CROSSING (WITH THE EXCEPTION OF THE RAMP WING).
9. STREET NAME SIGNS, PARKING SIGNS ETC. TO BE RELOCATED CLEAR OF RAMP.
10. RAMPS TO BE 80mm THICK AND TO BE CONSTRUCTED USING MINIMUM 25 MPA GRADE CONCRETE. RAMPS MUST NOT BE CONSTRUCTED USING ASPHALTIC CONCRETE OR BRICK PAVERS.
11. A RAMP SHALL HAVE A BROOM, WOOD FLOAT OR COVING TROWEL FINISH CARRIED TO THE EDGE OF ALL SLOPED SURFACES PLUS A TOOLED GROOVE ALONG THE TWO INSIDE EDGES.
12. RAMP GRADE TO BE IN THE RANGE 1 IN 8 TO 1 IN 8.5 - MEASURED ALONG SHORTER INSIDE EDGE OF RAMP (GRADE ON LONGER INSIDE EDGE MAY BE FLATTER). NOMINATED GRADE RANGE IS TO ENABLE PEOPLE WITH A VISION IMPAIRMENT TO PHYSICALLY DETECT THE CHANGE IN GRADE BETWEEN FOOTWAY AND RAMP. FLATTER GRADES TO BE AVOIDED IF POSSIBLE AS THIS WOULD REQUIRE THE PLACEMENT OF TACTILE GROUND SURFACE INDICATORS (TGSi) WITHIN THE RAMP - REFER TO NOTE 16.
13. FOOTWAY LEVELS TO BE ADJUSTED WHERE FEASIBLE TO ACHIEVE A RAMP GRADE OF 1 IN 8 TO 1 IN 8.5.
14. USE OF TACTILE GROUND SURFACE INDICATORS (TGSi) IN CONJUNCTION WITH KERB RAMPS: AS1428.4.1 - 2009 SETS OUT REQUIREMENTS FOR THE INSTALLATION OF TGSi.
 - A) TGSi TO BE PROVIDED: i) AT MID-BLOCK PEDESTRIAN CROSSINGS, REFUGES AND MEDIAN CUT-THROUGHS ii) WHERE DISTANCE FROM PROPERTY BOUNDARY TO TOP OF RAMP EXCEEDS 3.0 METERS iii) WHERE RAMPS ARE PLACED "AROUND THE CORNER". iv) WHERE RAMP GRADE IS FLATTER THAN 1 IN 8.5. REFER TO AS1428.4.1 FOR DETAILS.
 - B) FLEXIBLE TGSi WHICH CAN BE GLUED DIRECTLY ONTO FOOTWAY SURFACE TO BE USED. CERAMIC TGSi WHICH NEED TO BE SET INTO THE PAVEMENT ARE NOT RECOMMENDED. TGSi TO BE INSTALLED TO THE MANUFACTURER'S SPECIFICATIONS.
 - C) THE FOLLOWING TGSi COLORS TO BE USED TO ACHIEVE LUMINANCE CONTRAST: "CHARCOAL" ON PLAIN CONCRETE SURFACES AND "IVORY" ON ASPHALTIC CONCRETE OR COLORED PAVER SURFACES.
 - D) WHERE THE LAYOUT OF TGSi NEEDS TO BE VARIED FROM THE EXAMPLES SHOWN DUE TO SITE CONSTRAINTS VARIATIONS TO BE APPROVED BY COUNCIL'S INFRASTRUCTURE PLANNING BUSINESS UNIT.
15. LUMINANCE CONTRAST TO AID PEOPLE WITH A VISION IMPAIRMENT TO BE ACHIEVED BY:
 - A) APPLYING "CHARCOAL" COLOUR HARDENER TO THE RAMP AND WINGS, BY HAND BROADCASTING, AT LOCATIONS WHERE THE EXISTING FOOTWAY IS CONSTRUCTED IN FULL-WIDTH PLAIN CONCRETE.
 - B) RAMP AND WINGS BEING FINISHED IN PLAIN CONCRETE WHERE THE EXISTING FOOTWAY IS PAVED FULL-WIDTH IN ASPHALTIC CONCRETE OR COLORED PAVERS.
 - C) AT STRIP-PAVING SITES RAMP AND WINGS TO BE FINISHED IN PLAIN CONCRETE AS THERE IS LUMINANCE CONTRAST BETWEEN THE RAMP/PATH AND THE ADJACENT TURF.
16. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE.



(REFER TO NOTES 12 & 13)
NORMAL LEVEL FOOTWAY
SCALE 1:20



(REFER TO NOTE 13)
LOW LEVEL FOOTWAY
SCALE 1:20

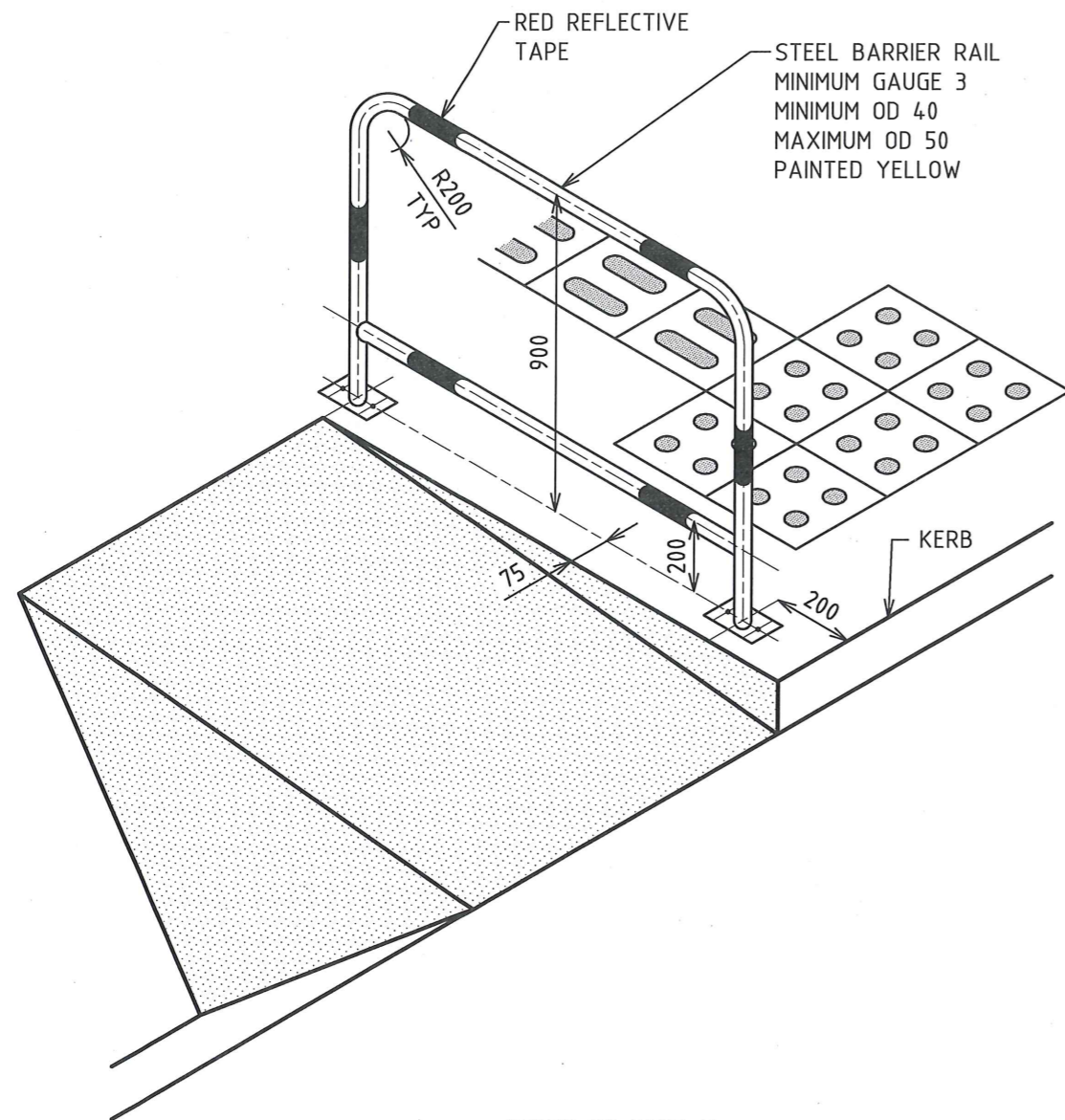


SECTION
SCALE 1:20

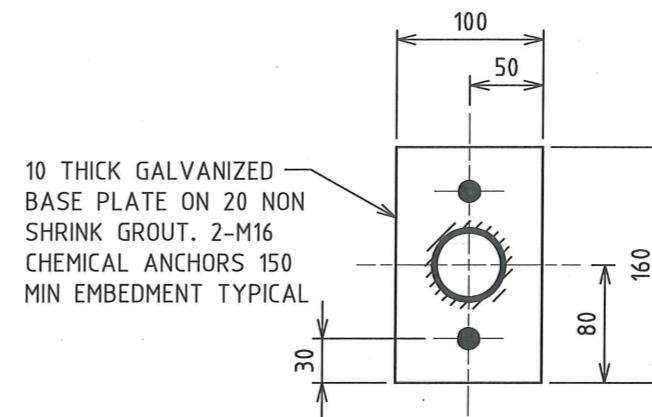
RAMP DIMENSIONS		
DIMENSIONS	INTEGRAL KERB & GUTTER (mm)	
	150 HIGH	200 HIGH
▲ WIDTH	1200	1200
● LENGTH	1500	2000
* WING	900	1200

- ▲ DENOTES REFER TO DIAGRAMS FOR CORRECT WIDTH
- DENOTES LENGTH OF RAMP TO BE DETERMINED ON SITE. LENGTH WILL VARY DEPENDING ON KERB HEIGHT AND FOOTWAY GRADIENT. NOMINATED LENGTHS ARE FOR A FOOTWAY CROSSFALL OF 2.5%.
- * DENOTES WIDTH OF WING FOR NON-STANDARD KERB HEIGHTS TO BE DETERMINED ON SITE. RATIO OF KERB HEIGHT TO SPREAD WIDTH TO BE 1:6. WIDTH MAY BE DECREASED IF NECESSARY (TO 600mm MINIMUM) TO CLEAR PUBLIC UTILITIES, ETC.

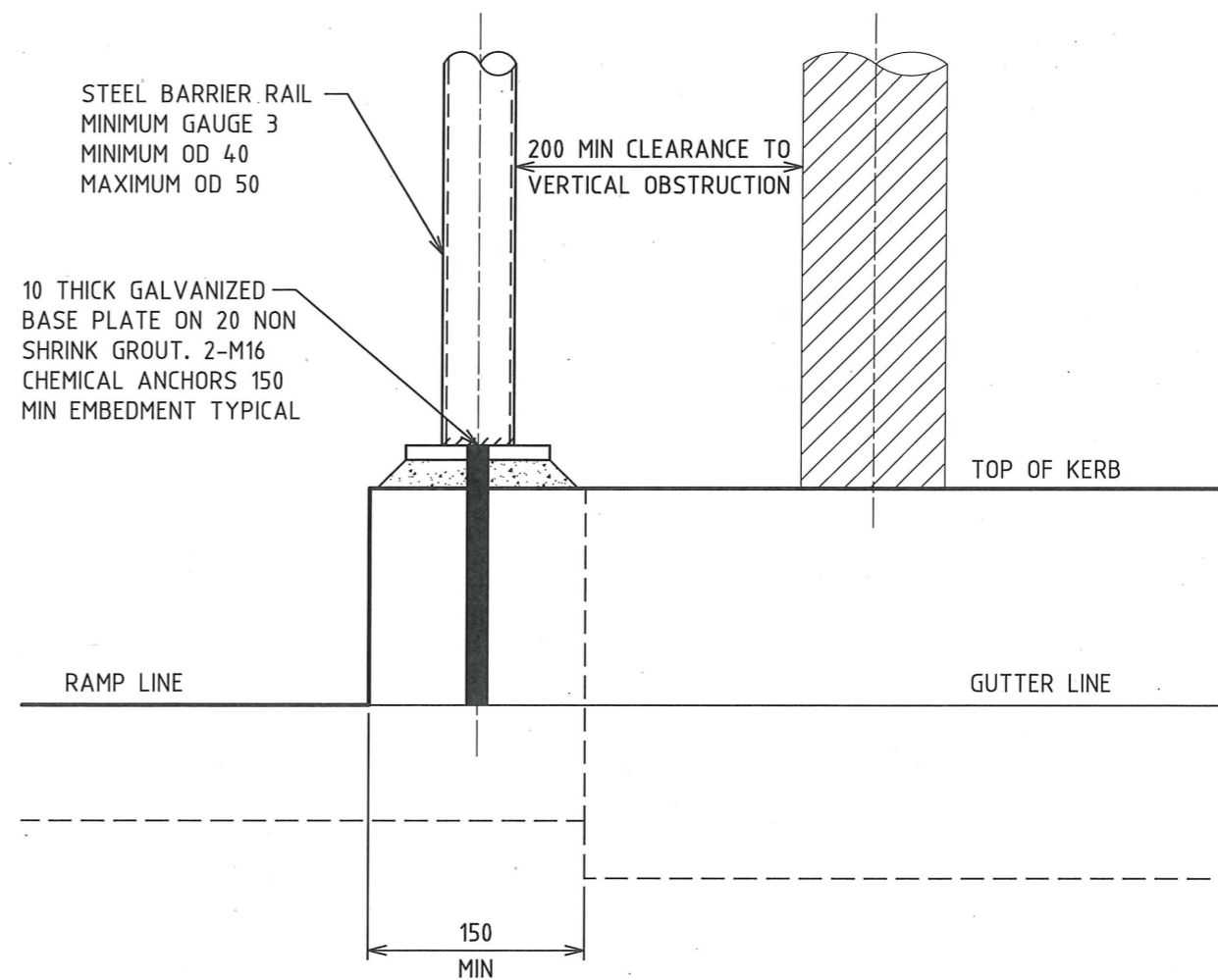
	SCALE AS SHOWN	 INFRASTRUCTURE MANAGEMENT SERVICES REVIEWED: J.C.	APPROVED: SIGNED: INFRASTRUCTURE MANAGEMENT SERVICES MANAGER DATE: 29.09.2016	THE CITY OF NEWCASTLE FOOTWAY KERB RAMPS	NCC PLAN No. A1201	SHEET No. 3 OF 4 SHEETS
1 GENERAL REVISION 05.07.16 T.A. 0 CONSTRUCTION 29.04.14 T.A. No. AMENDMENT DETAILS DATE INITIALS	COORDINATE SYSTEM: HEIGHT DATUM: AHD	A3 ORIGINAL THIS SHEET WAS PREPARED IN COLOUR AND WILL BE INCOMPLETE IF COPIED	AMENDMENT No.			



(REFER TO NOTE 4)
BARRIER RAIL IN-LIEU OF WING
SCALE 1:20



TYPICAL BASEPLATE PLAN DETAIL
SCALE 1:5



TYPICAL BASEPLATE ELEVATION DETAIL
SCALE 1:5

REFER TO SHEET 3 FOR NOTES

				SCALE		APPROVED: SIGNED:..... INFRASTRUCTURE MANAGEMENT SERVICES MANAGER DATE: 29.09.2016	THE CITY OF NEWCASTLE FOOTWAY KERB RAMPS	NCC PLAN No.	SHEET No.
				AS SHOWN				REVIEWED: J.C.	A1201
1	GENERAL REVISION	05.07.16	T.A.					AMENDMENT No.	SHEETS
0	CONSTRUCTION	29.04.14	T.A.						
No.	AMENDMENT DETAILS	DATE	INITIALS						
A3 ORIGINAL THIS SHEET WAS PREPARED IN COLOUR AND WILL BE INCOMPLETE IF COPIED				COORDINATE SYSTEM:	HEIGHT DATUM: AHD				