

NOTE:- WHERE GRADIENT OF FOOTPATH IS STEEPER THAN 1in12 GRITSTONE OR BLAST FURNACE SLAG AGGREGATE MATERIAL MUST BE USED.

50 x150 PRECAST CONCRETE EDGING IN ACCORDANCE WITH BS 7263 1990 REF. 'EF' ON 100mm GRADE C20/25 CONCRETE BED & HAUNCH. REFER TO CCC STANDARD DETAIL HSMHO/PC/1101-030.

BOUNDARY TREATMENT TO BE CONFIRMED

125 x 255 PRECAST CONCRETE KERB TO BS:7263 1994 TYPE HB2 (OR BS 7263 1990, PART 1 FIG. 1D), LAID ON 150mm OF GRADE C20/C25 CONCRETE BED & HAUNCH. MORTAR BED TO CLAUSE 6.2 BS 7263 PART 2 10-40mm THICKNESS. REFER TO CCC STANDARD DETAIL HSMHO/PC/1101-008.

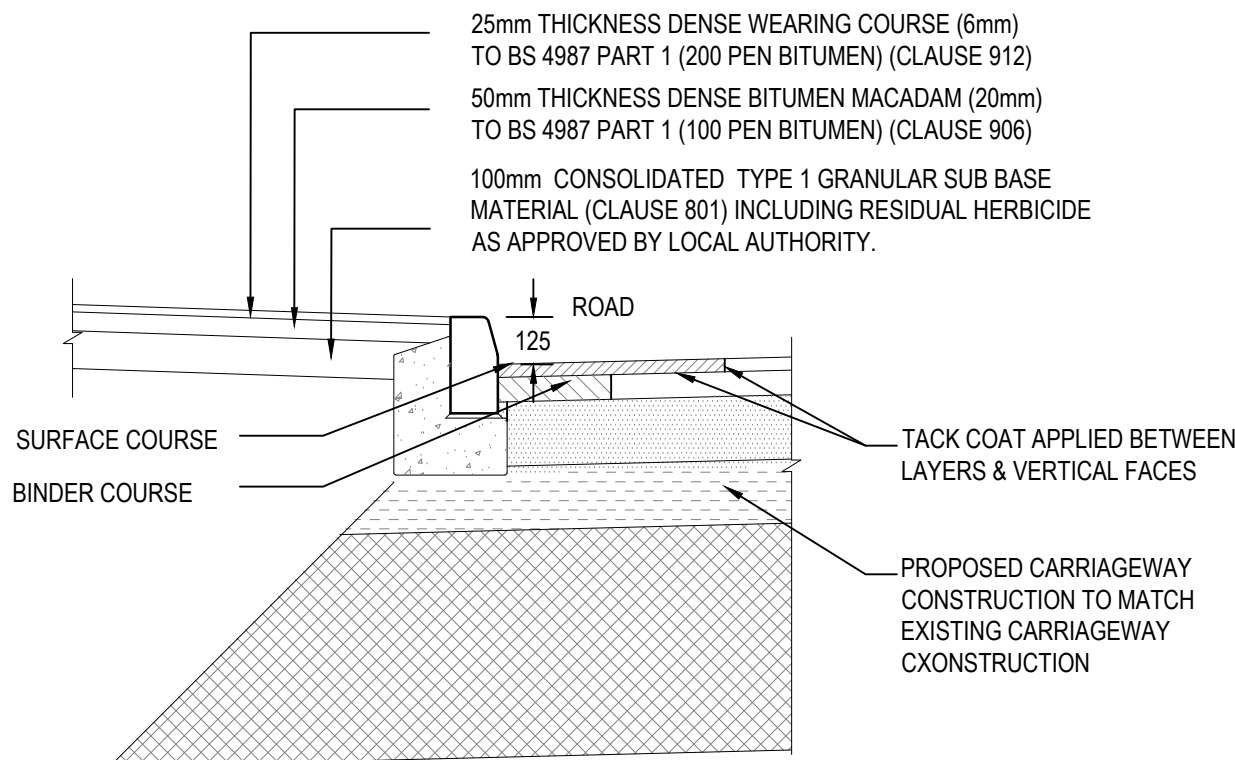
CLASS 1 MORTAR BED VARIABLE THICKNESS

350mm SUB BASE TYPE 1 TO (S.H.W.) CLAUSE 803. CAPPING LAYER, CLASS 8F16F2 MATERIAL IN ACCORDANCE WITH CL.613 S.H.W. THICKNESS OF CAPPING DEPENDS ON ON-SITE C.B.R. TESTS. REFER TO TABLE 1.

NOTE: CONTRACTOR TO CARRY OUT CBR TESTS ALONG PROPOSED PROPOSED NEW ROAD TO DETERMINE SUB-BASE LAYER THICKNESS.

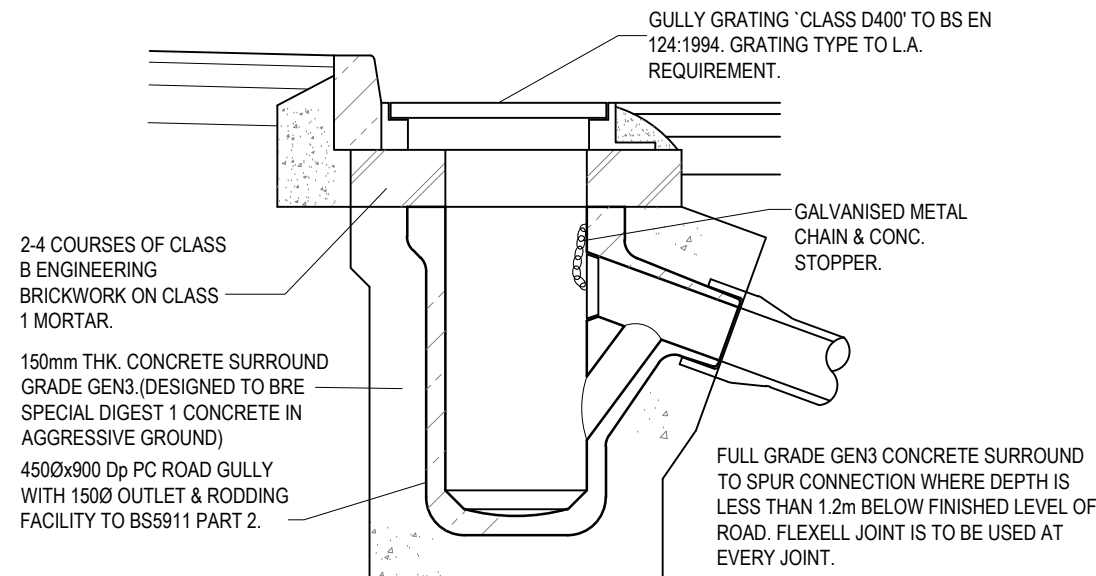
DETAIL 1 SECTION 278 ROAD & FOOTPATH CONSTRUCTION.

SCALE: 1:20



FOOTWAY CONSTRUCTION & REPLACEMENT OF KERBS DETAIL

SCALE 1:20



ROAD GULLY DETAIL

SCALE 1:20

GULLY TOP SHALL COMPLY WITH BS EN 124: 1994 FOR INSTALLATION WITHIN AREAS SUBJECTED TO PEDESTRIAN AND/OR VEHICULAR TRAFFIC. GULLY TOP SHALL BE OF APPROPRIATE CLASS AND BE DEPENDANT UPON THE PLACE OF INSTALLATION WITH THE ADDITIONAL PROVISION THAT ALL GULLY TOPS LOCATED IN AREAS WHERE VEHICLES CAN ACCESS (VERGES ETC.) SHALL BE CLASS D400 MINIMUM. ALL GULLY TOPS SHALL BE SINGLE PIECE, CAPTIVE HINGED, NON-ROCKING AND FREE FROM DEFECTS WHICH MAY IMPAIR THEIR FITNESS FOR USE. THE SLOT DIMENSIONS IN THE GULLY GRATING SHALL BE SELECTED HAVING REGARD OF THE HYDRAULIC CAPACITY AND SHALL BE EVENLY DISTRIBUTED OVER THE CLEAR AREA. THE WATER CLEAR AREA AS GIVEN IN THE MANUFACTURER'S CATALOGUE. NORMAL WIDTH OF GULLY GRATING SHALL BE 450mm MINIMUM AREA OF WATERWAY SHALL BE 1000mm². OF THE TOTAL WATERWAY AREA, THERE SHALL BE A MIN WATERWAY AREA OF 45cm BETWEEN THE KERB FACE OF THE FRAME AND A PARALLEL LINE 50mm DISTANT AND THERE SHALL BE A MIN WATERWAY AREA OF 65cm² BETWEEN THE KERB FACE OF THE FRAME AND A PARALLEL LINE 90mm DISTANT. THE FRAME SHALL BE AT LEAST 100mm DEEP AND SHALL HAVE A BASE FLANGE OF AT LEAST 1400mm². CLEANSING ACCESS - THE OPENED UNIT SHALL PROVIDE A RECTANGULAR CLEAR OPENING 400mm x 250mm. IF SLOT ORIENTATION TO DIRECTION OF TRAFFIC IS BETWEEN 00 & 450 & 1350 TO 1800, THE MAX LENGTH OF SLOT IS WIDER THAN 16mm. ALL COVERS, GRATINGS AND FRAMES SHALL BEAR APPROPRIATE MARKINGS TO COMPLY WITH CLAUSE 9: BS EN 124: 1994 AND SHALL BE CERTIFIED BY CERTIFICATION BODIES APPROVED BY THE AUTHORITY AND SHALL BE BEDDED ON CLASS B ENGINEERING BRICK TO BS 3921 (CLASS 1 MORTAR 12MM THICK) - 2 COURSE MIN - 4 COURSE MAX. BRICKWORK TO BE 225mm THICK ENGLISH BOND. WITHOUT EXCEPTION, GULLY POT SHALL BE PRECAST CONCRETE CONSTRUCTION TO BS 5911: PART 230: 1994. TABLE 2 WITH 150mm DIAMETER TRAPPED OUTLET, HAVING A GALVANISED METAL CHAIN AND CONCRETE STOPPER. GULLY POT TO BE BEDDED AND SURROUNDED WITH 150mm CONCRETE CLASS 20/25. DIMENSION 'A' TO BE 750mm MINIMUM BELOW CARRIAGEWAY TO ALLOW FOR SERVICES TO CLEAR GULLY CONNECTIONS AND REDUCE THE RISK OF DAMAGE TO PIPES USE TO SETTLEMENT. WHERE DEPTH OF RUN IS BELOW 1.2m BELOW FINISHED C/WAY LEVEL A FLEXCELL JOINT IS TO BE USED AT EVERY JOINT.

TABLE 1

CBR%	SUB-BASE LAYER THICKNESS.	
	TYPE 1 THICKNESS CLAUSE 803	CAPPING LAYER THICKNESS CLAUSE 613
>5	300	-
2-5	150	350
<2	150	600

CARRIAGEWAY REINSTATEMENT TO CONSIST OF PLAIN OFF & PREPARE CLEAN SURFACE APPLY TACK COAT AND PROCEED WITH REINSTATEMENT USING 40mm HIGH STONE HOT ROLLED ASPHALT SURFACE COURSE 55/14, MIN. PSV 65, AAV 12, 14mm STONE SIZE, 55% STONE, PENETRATION GRADE BINDER 40/60 (PEN 50) TO BS EN 13108-4

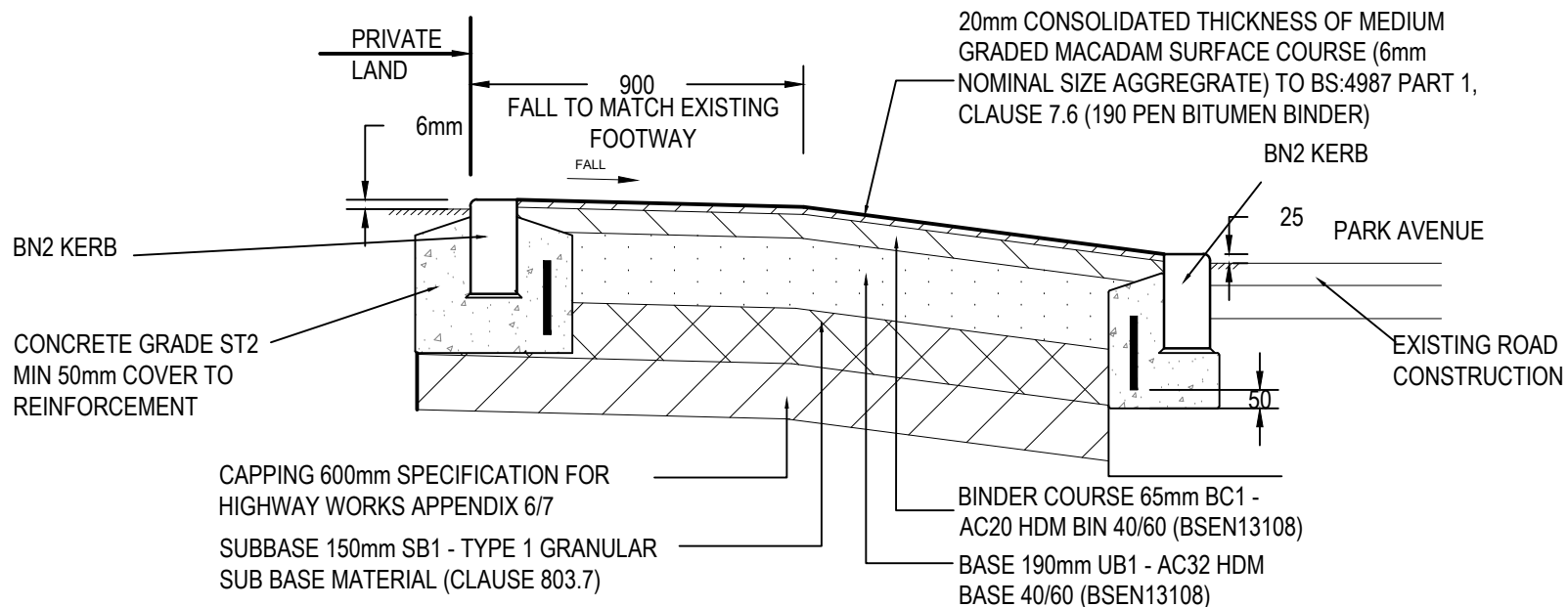
SURFACE COURSE - 40mm HIGH STONE HOT ROLLED ASPHALT SURFACE COURSE 55/14, MIN. PSV 65, AAV 12, 14mm STONE SIZE, 55% STONE, PENETRATION GRADE BINDER 40/60 (PEN 50) TO BS EN 13108-4

BINDER COURSE - 60mm DENSE BINDER COURSE CLAUSE 906 (SPECIFICATION FOR HIGHWAY WORKS 1998), 20mm BNOMINAL SIZE TO BS 59487
BASE - 150mm HEAVY DUTY BASE TO CLAUSE 903 (SPECIFICATION FOR HIGHWAY WORKS 1998), 32mm NOMINAL SIZE TO BS 59487

TYPE 1 SUBBASE TAKEN TO LEVEL OF ADJACENT EXISTING CARRIAGEWAY SUBBASE, 225mm MIN.

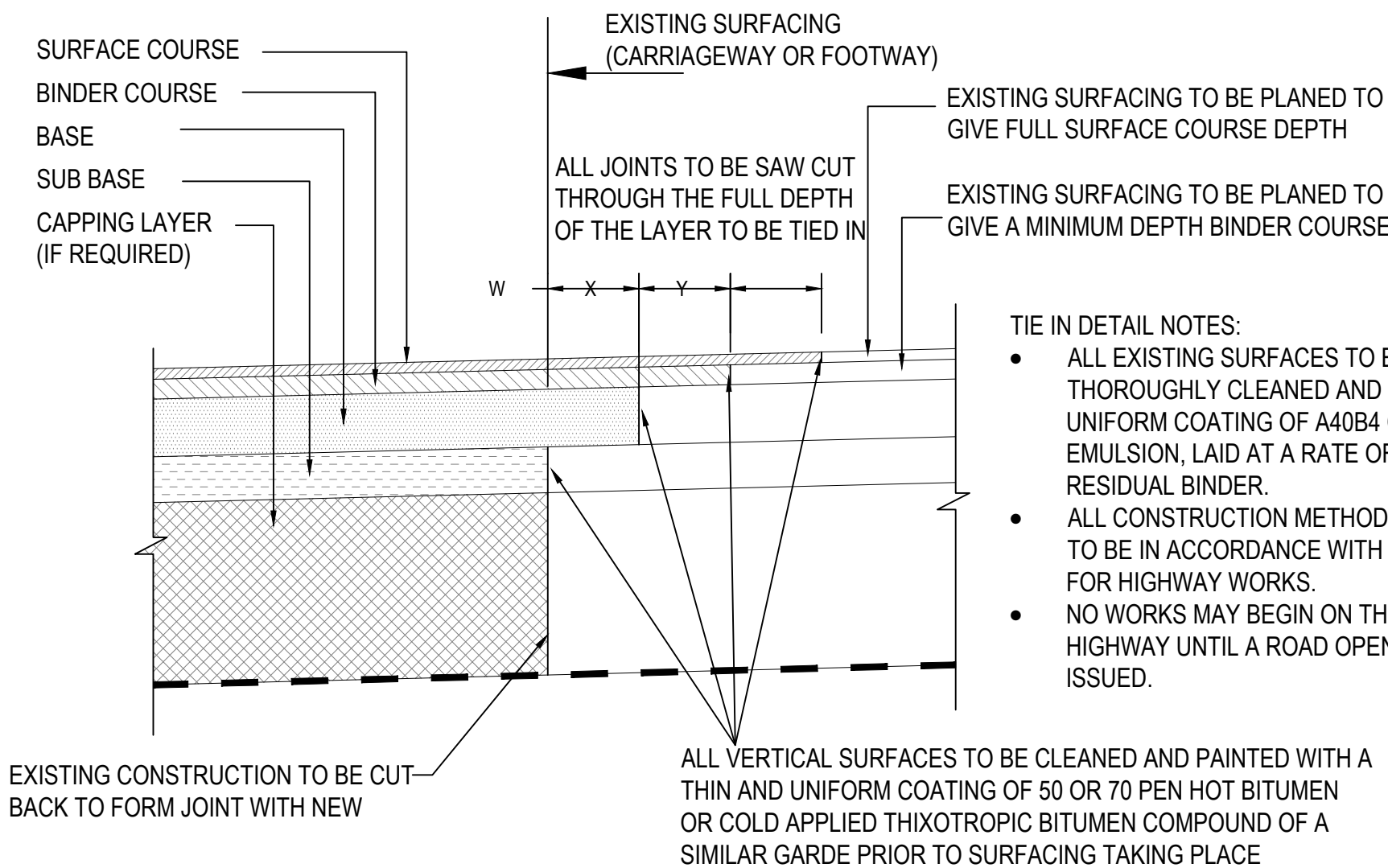
VEHICLE CROSSOVER NOTES

- ROAD CONSTRUCTION BASED ON CBR RESULTS LESS THAN 2%
- WHERE BASE COURSE TO BE TRAFFICKED FOR > 1 MONTH GRITSTONE AGGREGATE TO BE USED WITH BINDER CONTENT OF 5:7 ± 0.80% OR SURFACE DRESSED TO LOCAL AUTHORITY SPECIFICATION (d 919 S.H.W.)
- LIMESTONE, BLAST FURNACE AND STEEL SLAG AGGREGATES NOT PERMITTED IN CARRIAGEWAY/FOOTWAY/CYCLEWAY SURFACING COURSE
- IF THE ROAD BASE OR BASE COURSE MATERIAL IS NOT COVERED IMMEDIATELY WITH THE BASE COURSE OR WEARING COURSE RESPECTIVELY THEN THE ROAD BASE AND/OR BASE COURSE SHALL BE SPRAYED WITH A SEALING COAT OF BITUMINOUS SPRAY TO CLAUSE 920.
- WEED CONTROL GRANULES SUCH AS 'FYDULAN' AT A RATE OF SPREAD OF 18g/m² WILL NEED TO BE PROVIDED TO ALL SUB BASE MATERIAL THAT IS INTENDED FOR ADOPTION.
- IN ACCORDANCE WITH THE DESIGN GUIDE THE SUB BASE MUST BE THICKENED TO 150mm TO FOOTPATHS IN JUNCTION AND TURNING AREAS ABUTTING JUNCTION RADI AND TO TIGHT RADIUS BENDS WHERE THERE IS THE LIKLIHOOD OF VEHICLES OVERRUNNING THE FOOTPATH.
- ALL SUB BASE MATERIALS TO BE COMPACTED IN ACCORDANCE WITH CLAUSE 802 AND TABLE 6/1.
- ALL BEDDING MORTAR SHALL BE CLASS 12 TO BS EN 998-2
- MINIMUM 450mm OF NON-FROST SUSCEPTIBLE MATERIAL REQUIRED IN TOP OF CARRIAGEWAY CONSTRUCTION.



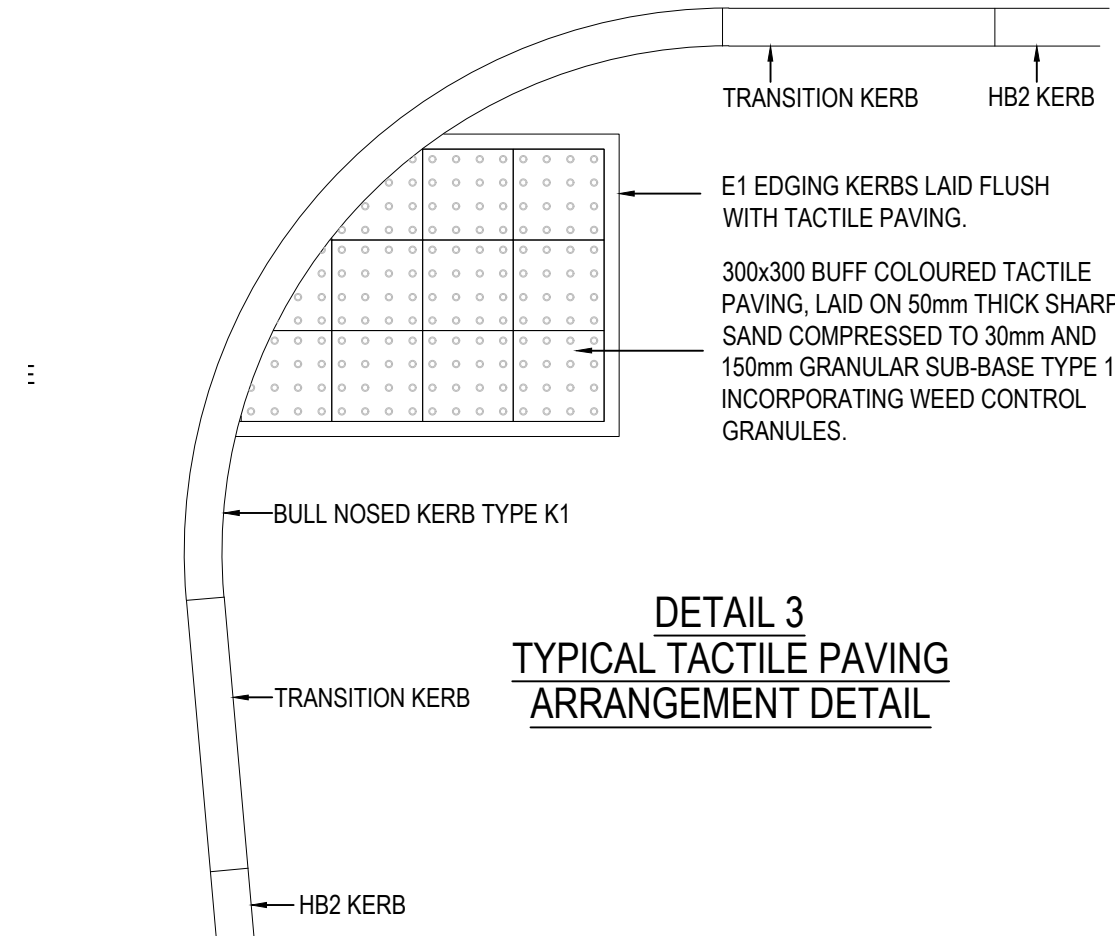
VEHICULAR CROSSOVER DETAIL

SCALE: 1:20



USE	"W"	"X"	"Y"
TRANSVERSE JOINT	1000	1000	1000
LONGITUDINAL JOINT	300	300	300

DETAIL 2 SURFACE AND TIE IN DETAIL (FOR USE AT BOTH CARRIAGEWAY & FOOTWAY TIE-INS)

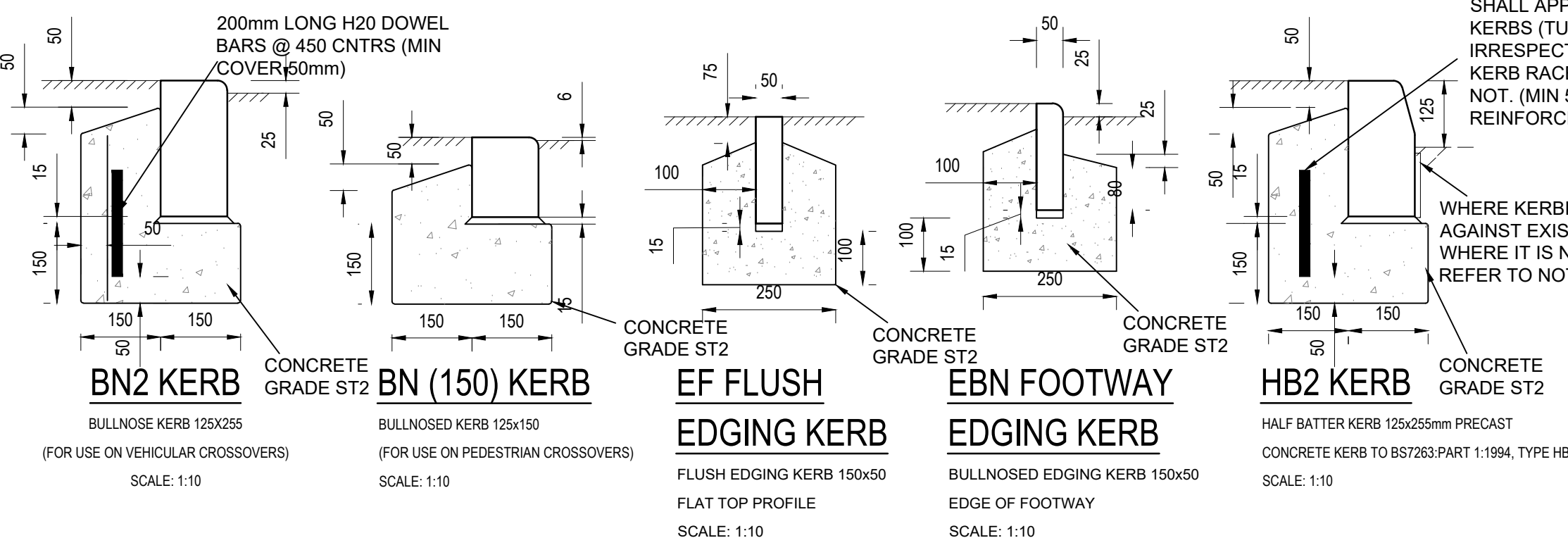


DETAIL 3 TYPICAL TACTILE PAVING ARRANGEMENT DETAIL

KERBING NOTES:
1) ALL DIMENSIONS ARE IN MILLIMETRES

- ALL PRECAST CONCRETE ITEMS SHALL BE PRESSED MANUFACTURED.
- ALL DRAWINGS ARE TO BE CHECKED PRIOR TO CONSTRUCTION OR MANUFACTURE. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
- WHERE KERBING IS TO BE LAID AGAINST EXISTING CARRIAGEWAY, WHICH IS NOT TO BE SURFACED, THE GAP BETWEEN THE CARRIAGEWAY AND THE KERB SHALL BE DEALT WITH AS FOLLOWS:
a) GAPS LESS THAN 25 WIDE - CLEAN OUT TO A MINIMUM OF 20 DEEP AND SEAL TO CLAUSE 10/17.5.
b) GAPS MORE THAN 25 WIDE - CLEAN OUT TO A MINIMUM OF 50 DEEP AND FILL WITH FINE COLD ASPHALT WELL COMPACTED.
- PRECAST CONCRETE KERB'S CHANNELS, EDGINGS AND QUADRANTS SHALL COMPLY WITH BS7263 PART 1 1994.
- ALL CONSTRUCTION METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE LATEST SPECIFICATION FOR HIGHWAY WORKS.
- NO WORKS SHALL BEGIN ON THE EXISTING PUBLIC HIGHWAY UNTIL A ROAD OPENING NOTICE HAS BEEN ISSUED.
- KERB BEDDING AND BACKING TO BE ST2 CONCRETE.

PLAN ON TYPICAL VEHICULAR CROSSOVER



*200mm LONG H20 DOWEL BARS @ 450 CENTERS TO TIE KERB BACKING TO BEDDING IF KERBS ARE BACKED AT A LATER TIME THAN THE KERB BASE IS LAID, AND SHALL APPLY TO SHARP BENDS AND RADIUS KERBS (TURNING HEADS AND JUNCTIONS) IRRESPECTIVE OF WHETHER OR NOT THE KERB RACE IS LAID IN TWO OPERATIONS OR NOT. (MIN 50mm COVER TO REINFORCEMENT)

WHERE KERBING IS TO BE LAID UP AGAINST EXISTING CARRIAGEWAY WHERE IT IS NOT TO BE SURFACED REFER TO NOTE 4.

- DRAWING NOTES:
- DO NOT SCALE FROM THIS DRAWING. WORK TO FIGURED DIMENSIONS ONLY.
 - ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE LATEST ARCHITECT'S LAYOUT. CONTRACTOR TO CROSS CHECK REVISIONS WITH ARCHITECT.
 - MINIMUM LATERAL CLEARANCE TO ALL SIGNS TO BE 450mm.
 - MINIMUM VERTICAL CLEARANCE TO ALL SIGNS TO BE 2400mm.
 - ALL WHITE LINING TO BE HOT PAINTED REFLECTIVE THERMOPLASTIC WITH APPLIED GLASS BEADS.
 - ALL SIGNS TO BE MOUNTED ON NEW PASSIVE SUPPORTS UNLESS STATED OTHERWISE.
 - ALL ROAD MARKINGS TO BE THERMOPLASTIC TO ROAD SAFETY MARKINGS ASSOCIATION STANDARD SPECIFICATION
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DRAWINGS NO. 10741/S278_700 & 701.
 - THE CONTRACTOR IS TO ALLOW FOR THE RELEVANT DROPPER/TRANSITION KERBS AT EACH CROSSING POINT.
 - THE PARKING OF VEHICLES WILL BE ALLOWED ON THE HIGHWAY WILL NOT BE PERMITTED.
 - IT IS NOT USUAL TO ALLOW SUNDAY WORKING, OR WORKING AFTER 13:00 HRS ON SATURDAYS UNLESS WRITTEN APPROVAL OF THE HIGHWAY AUTHORITY HAS BEEN GRANTED BEFORE HAND.
 - MITRED OR SPLAYED SAW CUTS OF KERBS ARE NO PERMITTED.
 - ALL TRAFFIC SIGN FACES SHALL BE MANUFACTURED FROM SHEETING MATERIAL COMPLYING WITH BSEN12899-1:2007. WITH A EUROPEAN TECHNICAL APPROVAL STATING IT MEETS THE REQUIREMENTS OF BOTH CLASS 3A AND 3B SUCH AS 3M DG3 (OR EQUIVALENT) EXCEPT WHERE STATED BELOW:
 - NEIGHBOURHOOD WATCH
 - LOADING, PARKING AND WAITING RESTRICTION PLATES MOUNTED PARALLEL TO THE KERBLINE.
 - SHORT TERM AA/RAC TYPE DIRECTION SIGNS
 - OTHER SIGNS AS MAY BE GIVEN SPECIAL DISPENSATION BY THE LOCAL HIGHWAY AUTHORITY FROM TIME TO TIME THESE SIGNS SHOULD BE MANUFACTURED FROM SHEETING MATERIAL COMPLYING WITH BS EN12899-1:2007 CLASS REF 2
 - IT IS NOT ACCEPTABLE TO USE RETRO-REFLECTIVE SIGN FACE MATERIAL INSTEAD OF ILLUMINATION UNLESS SPECIAL AUTHORISATION HAS BEEN GRANTED BY THE WELSH ASSEMBLY GOVERNMENT. THIS SHOULD ONLY BE SOUGHT WHERE IT IS FELT THAT LIGHTING OF SIGNS IS IMPRACTABLE DUE TO POWER SUPPLY PROBLEMS OR, THAT LIGHTING IS SEEN TO BE VISUALLY OR ENVIRONMENTALLY OBTUSIVE AS IN VILLAGES/CONSERVATION AREAS.
 - ALL TRAFFIC SIGNING AND ROAD MARKINGS, PERMANENT AND TEMPORARY SHALL BE BILINGUAL WITH WELSH PLACED BEFORE ENGLISH.
 - THE MINIMUM SIZE CHS POST TO BE USED SHALL NOT BE LESS THAN 76.1mm
 - ALL POSTS ARE TO BE GALVANISED STEEL AND PAINTED LIGHT GREY UNLESS NOTED OTHERWISE.
 - WHERE TIE IN TO DOUBLE YELLOW MARKINGS IS REQUIRED CONTRACTOR TO REMOVE TERMINATION MARKS AND NOT SIMPLY PAINT OVER.
 - PRIMER IS REQUIRED TO BE USED ON ALL SURFACE COURSES PRIOR TO APPLICATION OF ROAD MARKINGS, EXCEPT NEWLY LAID UNTRAFFICKED BITUMINOUS SURFACES, WHERE NO PRIMER IS REQUIRED.

Issue for Approval

PLANNING ISSUE

description

Client
MANNING CONSTRUCTION
PENCOED

Project
RESIDENTIAL DEVELOPMENT
GLYNNEATH,
NEATH PORT TALBOT

Title
SECTION 278
CONSTRUCTION DETAILS

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27.07.20	RGP	LR	MJ	
scale @ A1	10741			
AS SHOWN	10741			
status	drw. no.	rev.		
A	10741/S278_775	01		

DRAWING STATUS
A - Approval, AB - As-Built, C - Construction, D - Draft, P - Preliminary, T - Tender