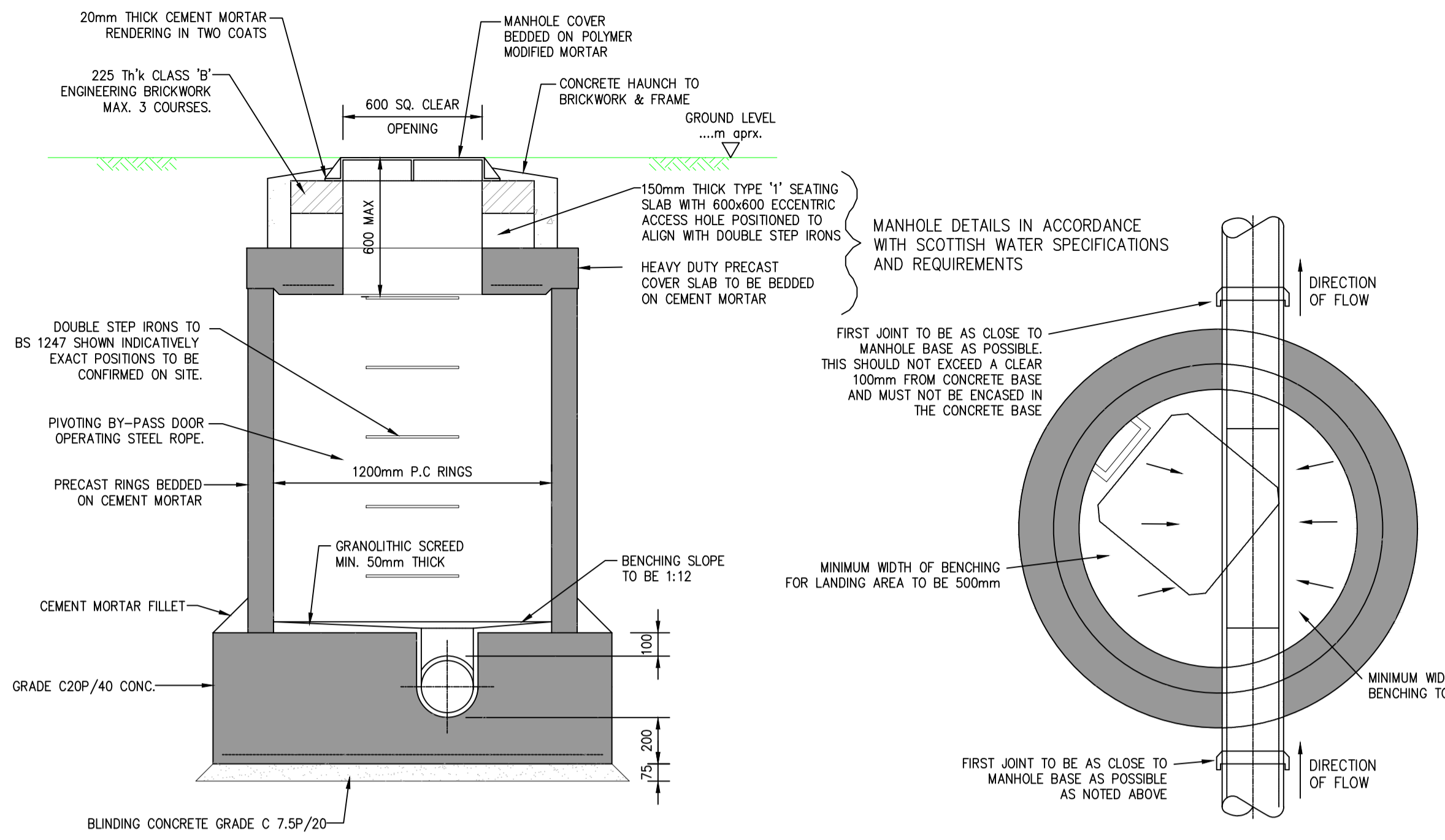


ROAD MARKINGS DETAIL AT GIVE WAY JUNCTION
1:100

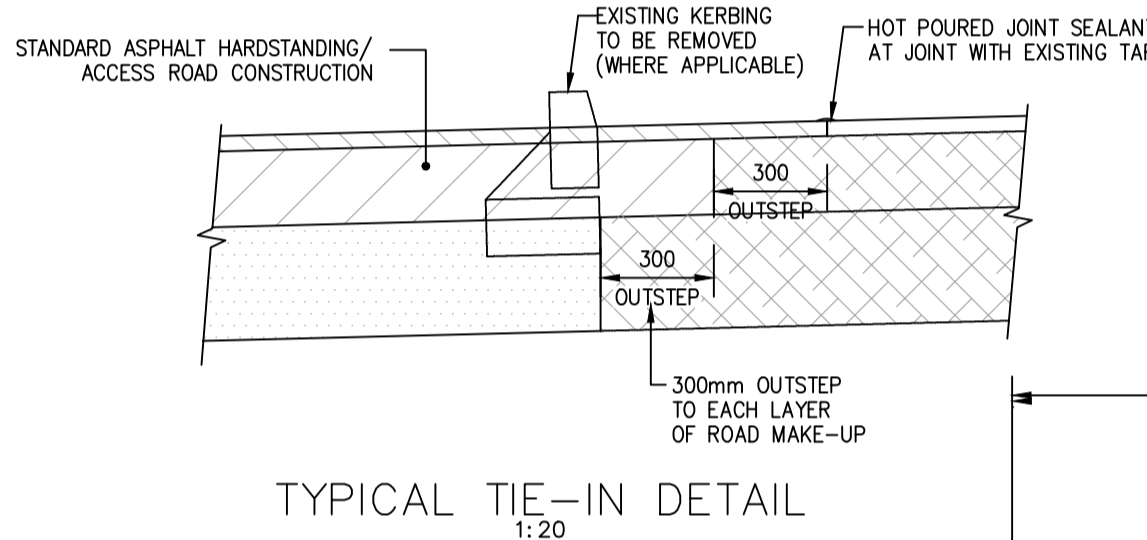
A Layout Updated LM SF 17/09/19



SECTION THROUGH TYPICAL MANHOLE
1:20

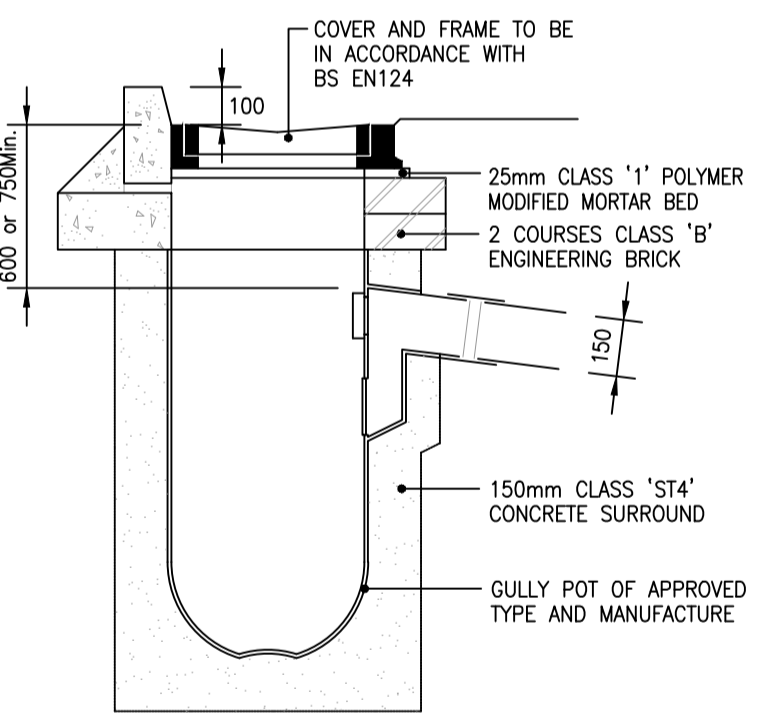
PLAN ON TYPICAL MANHOLE
1:20

- MANHOLE DETAILS
- 1 ALL DIMENSIONS IN MILLIMETRES.
 - 2 PIPELINES AND MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH THE 'SEWERS FOR SCOTLAND' FIRST EDITION W/C PUBLICATION IN CONJUNCTION WITH SCOTTISH WATER, OFFICE SPECIFICATION AND REQUIREMENTS.
 - 3 ROCKER PIPES SHALL BE USED FOR PIPES LESS THAN 750 NOMINAL DIAMETER ENTERING AND LEAVING MANHOLES. MAXIMUM LENGTH NOT TO EXCEED 600mm.
 - 4 ALL PRECAST CONCRETE UNITS TO BE REINFORCED AND CONFORM TO B.S.5911. STEP IRONS TO BS 1247 PART '1'.
 - 5 ALL JOINTS BETWEEN P.C. UNITS TO BE MADE WATER TIGHT BY THE APPLICATION OF CEMENT MORTAR. 'TOKSTRIP' OR OTHER SIMILAR APPROVED EQUAL.
 - 6 THE LOWEST CHAMBER RING BEARING ON THE FOUNDATION AND THE HIGHEST CHAMBER RING RECEIVING THE COVER SLAB SHALL HAVE PLAIN ENDS AND BE BEDDED IN CEMENT MORTAR.
 - 7 MANHOLE ACCESS HOLE AND STEP IRON POSITIONS TO BE LOCATED TO GIVE GREATEST FREE AREA OF BENCHING IMMEDIATELY BELOW.
 - 8 MANHOLE COVERS TO BE GRADE 'A' REF. M.A. 60 TO BS 497 DOUBLE TRIANGULAR COVER & FRAME 150mm DEEP WITH 600mm SQ. OPENING IN DUCTILE IRON. AND BEARING THE REGISTERED CERTIFICATION MARK OF THE BRITISH STANDARDS INSTITUTION.
 - 9 STEP IRONS NOT TO PROTRUDE INTO 600 SQUARE ACCESS OPENING IN SHAFT COVER SLAB.
 - 10 PRECAST CONCRETE COVER SLABS TO BE HEAVY DUTY.
 - 11 TOP STEP IRON TO BE LOCATED NOT LESS THAN 500 AND NOT GREATER THAN 700 FROM THE FINISHED MANHOLE COVER LEVEL.
 - 12 CHANNELS MORE THAN 450mm IN DEPTH TO HAVE ONE OR MORE STEP IRONS IN A RECESS OR TOE HOLES AND A HANDRAIL OR POST WITHIN EASY REACH.
 - 13 CONCRETE FOUNDATION TO BE SCABBLED BEFORE PLACING GRANOLITHIC FINISH.
 - 14 MANHOLES ON SEWERS OF 600 DIAMETER AND OVER TO BE PROVIDED WITH SAFETY CHAINS FOR PLACING ACROSS THE MOUTH OF THE SEWER ON THE DOWNSTREAM SIDE AND 25 DIAMETER SOLID BAR HANDRAIL TO BE PROVIDED ON THE EDGES OF ALL BENCHING ETC.
 - 15 FOR MANHOLES 4.5m TO 6.0m DEEP CHAMBER RINGS ARE TO HAVE A 150mm THICK CONCRETE SURROUND BELOW THE 4.5m DEPTH.
 - 16 ALL METALWORK TO BE HOT-DIP GALVANISED TO B.S. 729 AFTER MANUFACTURE.
 - 17 WHERE DOWNSTREAM PIPE IS LARGER DIAMETER THAN UPSTREAM PIPE IN MANHOLE SOFFITS SOFFITS SHOULD BE KEPT LEVEL.

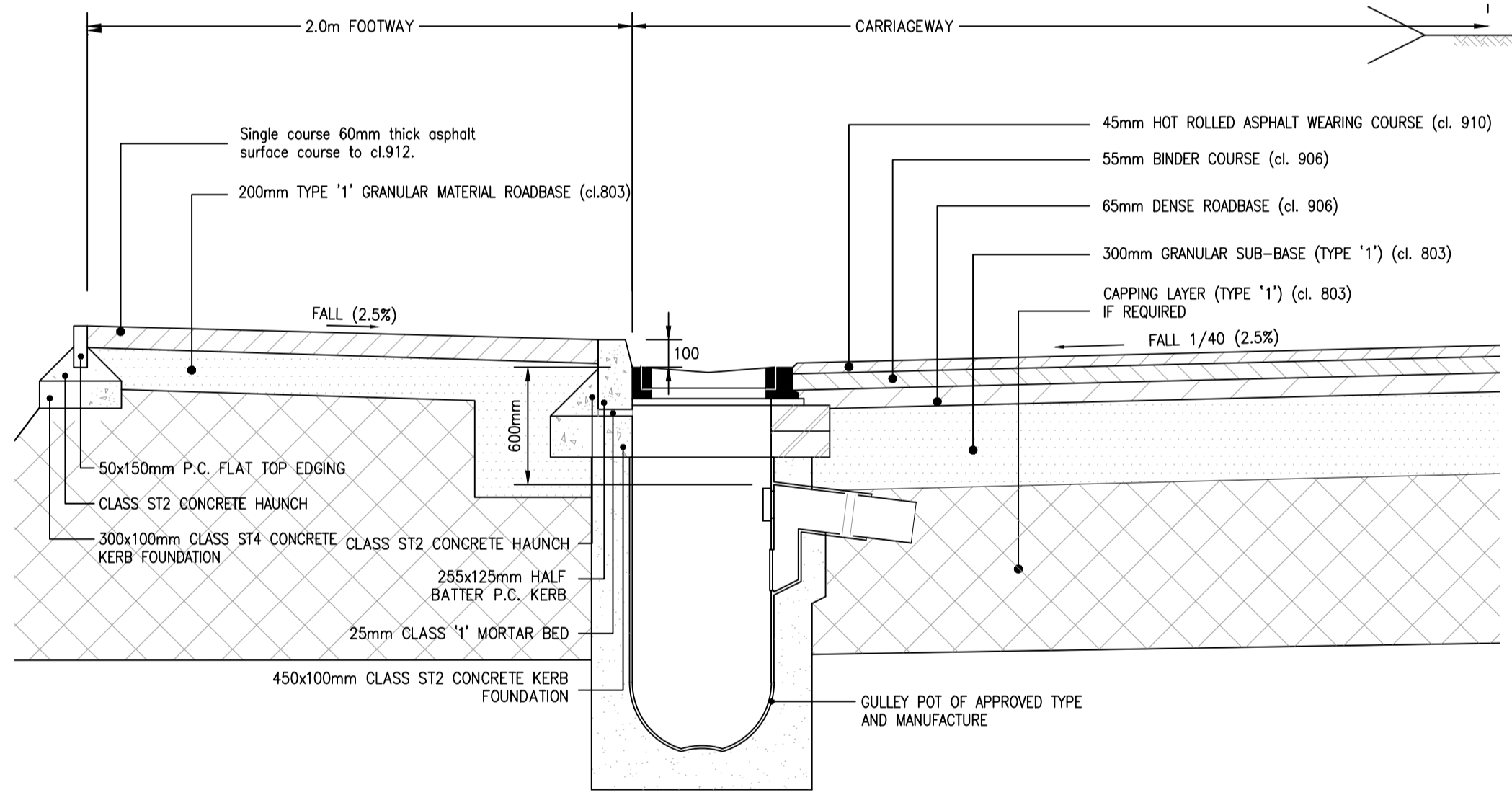


TYPICAL TIE-IN DETAIL
1:20

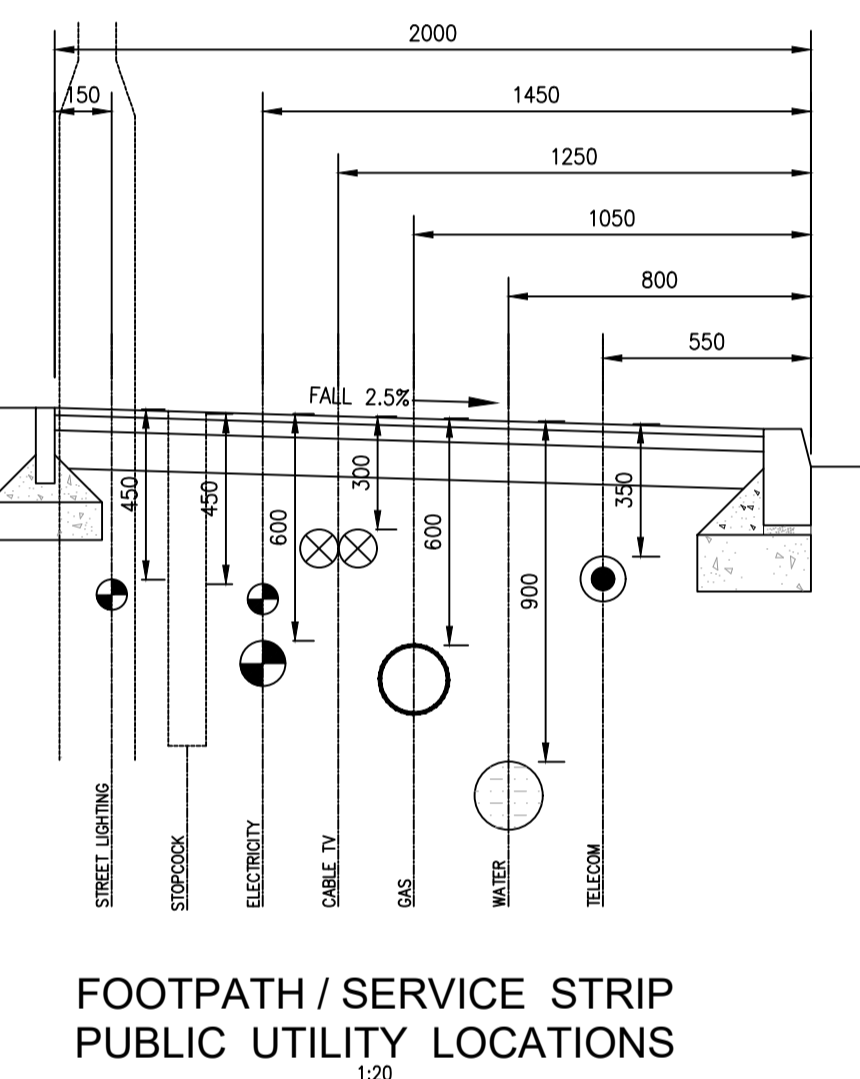
COVER & FRAME TYPE: LOAD CLASS D400 AT CORNERS AND BENDS (MIN. NOMINAL WIDTH 450mm) GULLIES TO BE CONSTRUCTED IN ACCORDANCE TO cl.508



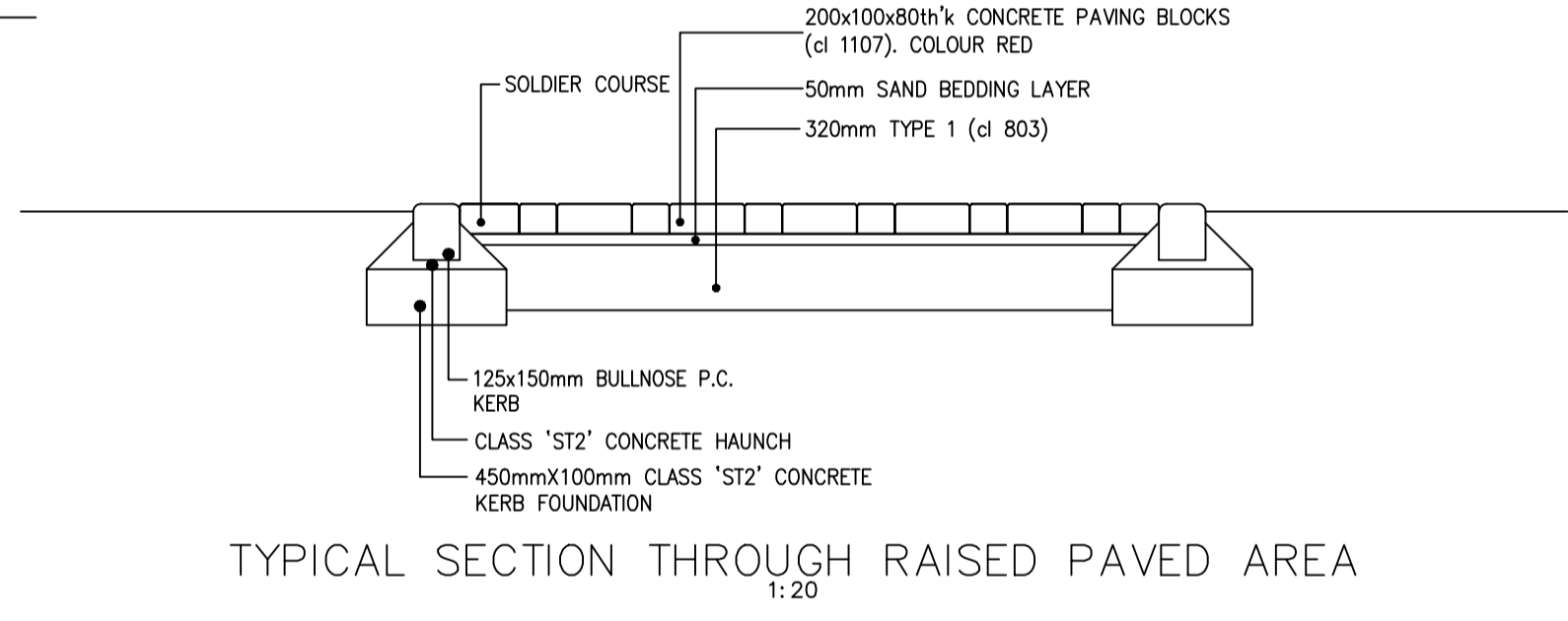
TYPICAL GULLY DETAILS
SCALE 1:20



TYPICAL CARRIAGEWAY FOOTWAY CONSTRUCTION
1:20



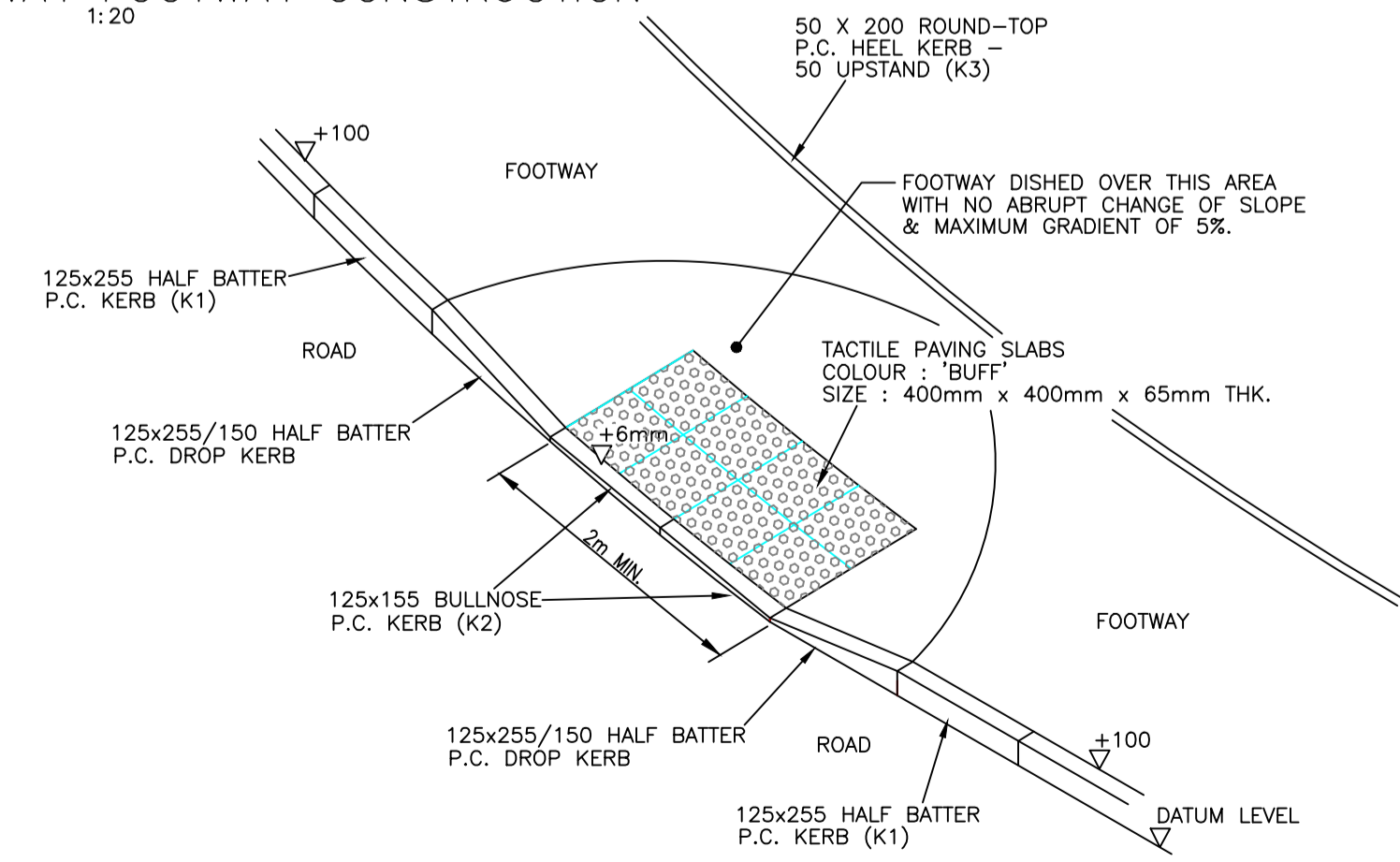
FOOTPATH / SERVICE STRIP
PUBLIC UTILITY LOCATIONS
1:20



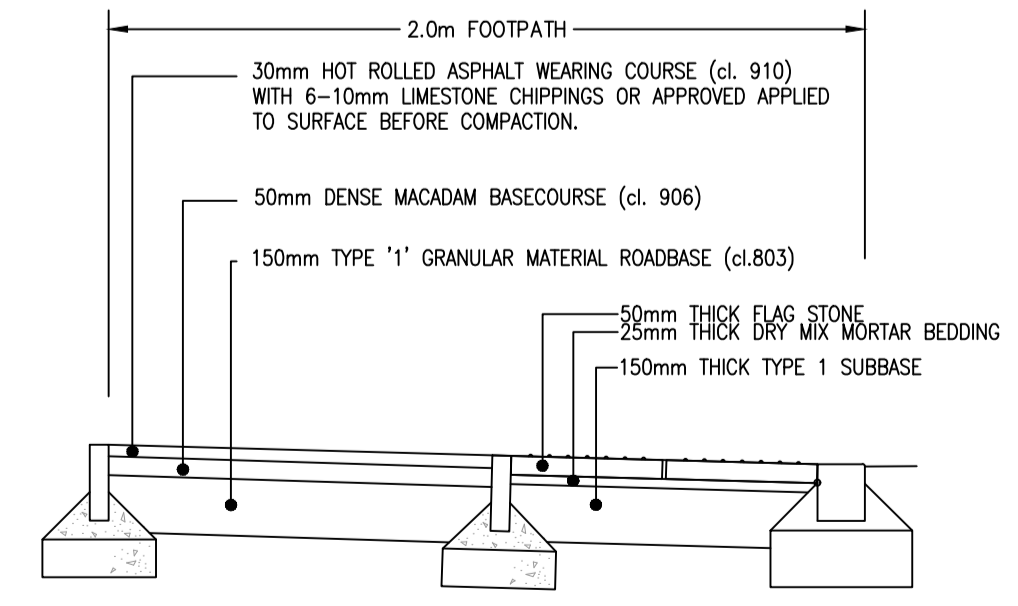
TYPICAL SECTION THROUGH RAISED PAVED AREA
1:20

ALL IRONWORK AND BRICKWORK TO BE CONSTRUCTED WITH POLYMER MODIFIED MORTAR

- NOTES:
1. ALL DIMENSIONS IN MILLIMETRES
 2. PRECAST CONCRETE FLAGS TO COMPLY WITH BS EN 1339:2003
 3. FLAGS SHALL BE 400mm X 400mm X 50mm THICK COLOURED BUFF
 4. FLAGS SHALL ONLY BE CUT 'ON THE SQUARE', AND EQUIDISTANT BETWEEN ROWS OF SURFACE TEXTURING, EXCEPT WHERE AGAINST A BUILDING OR FENCE LINE.
 5. CROSSING WIDTHS SHOULD BE CHOSEN, WHERE POSSIBLE, TO AVOID THE NECESSITY OF CUT FLAGS.
 6. ALL JOINTS SHALL NOT BE LESS THAN 5MM NOR MORE THAN 10MM WIDTH.
 7. JOINTS SHALL BE FILLED WITH M12 MORTAR OF A SIMILAR COLOUR TO THE FLAGS AND KEY POINTED.



PEDESTRIAN CROSSING POINT
SHOWING TACTILE PAVING
1:50



TACTILE PAVING DETAIL
1:20

Rev.	By	App'd	Date
B	SF	NF	02/03/20
A	SF	NF	28/01/20
Client			
Campbell Homes			
Development			
PROPOSED HOUSING DEVELOPMENT			
TIGH ARAN			
SPEAN BRIDGE			
Drawing Title			
Construction Details			
Scale at A1	Date	Drawn	Approved
As Shown	03/07/18	SF	NF
 Civil & Structural Engineering • Development Services Dunoon - 01369 707 692 Glasgow - 0141 406 1688 London - 020 3856 8144 Oban - 01631 571 280 WEB - www.cowaldesign.co.uk Email - info@cowaldesign.co.uk Copyright, Designs and Patents Act 1988 This drawing must not be reproduced without the permission of Cowal Design Consultants Ltd.			
Status			
For Approval			
Drawing No.	J1823/C/05		Rev. B