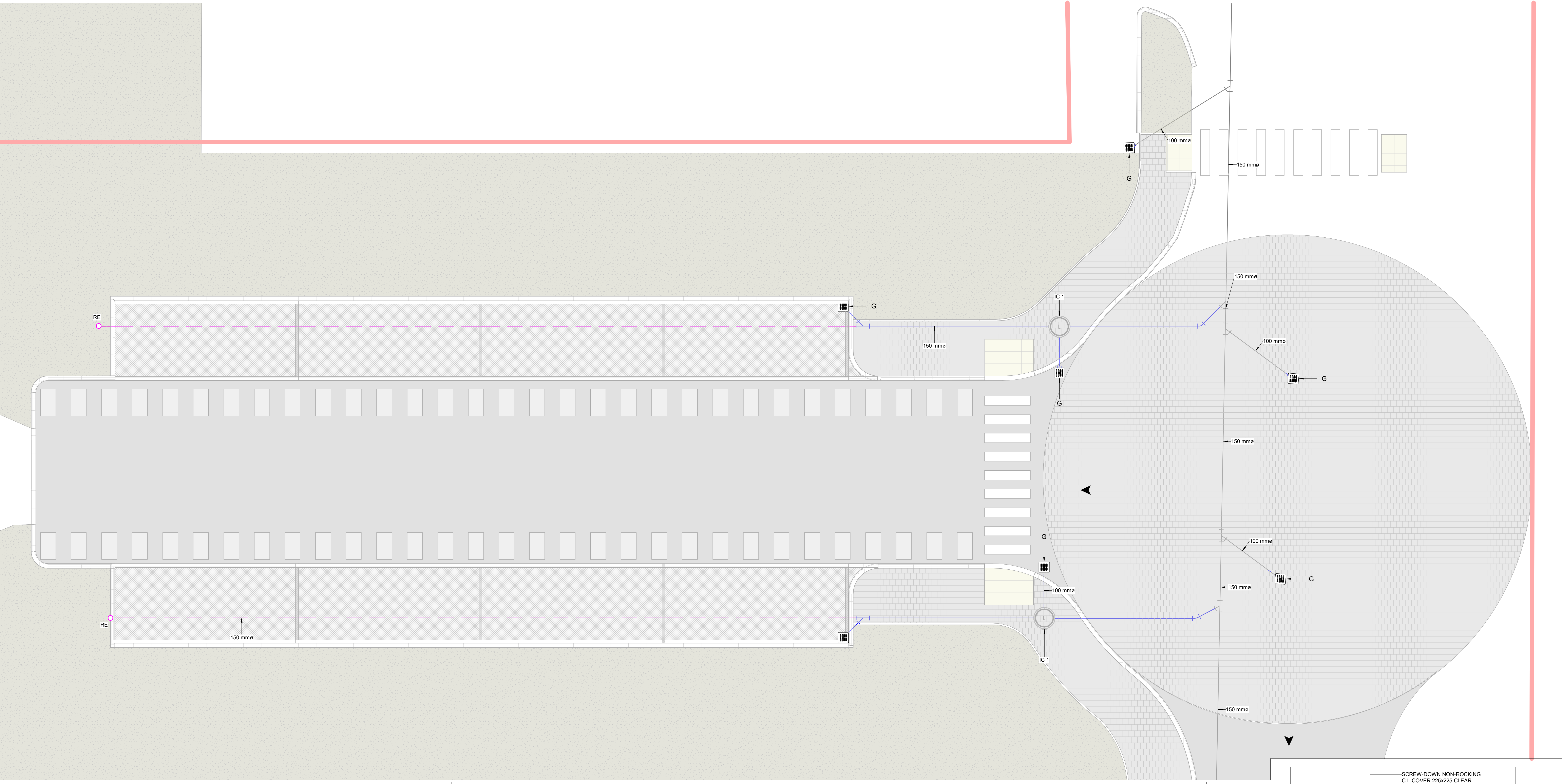


LEGEND

- CARRIER DRAIN
- FILTER DRAIN
- RE
RODDING EYE

NOTES

1. ALL UNITS ARE IN MILLIMETERS UNLESS OTHERWISE STATED
2. ALL PIPELINES WITH LESS THAN 1.2 METRES OF COVER BELOW FINISHED CARRIAGEWAY, OR 0.9 METRES COVER IN NON-TRAFFICKED AREAS, SHALL HAVE TYPE 2 BED UNLESS STATED OTHERWISE.
3. ALL PIPES SHALL HAVE ADEQUATE TEMPORARY PROTECTION BEFORE CONTRACTOR'S PLANT IS ALLOWED OVER THEM.
4. PIPES FOR SURFACE WATER DRAINS AND FOUL DRAINS SHALL COMPLY WITH MCHW SERIES 500 TABLE 5/1.
5. PIPE JOINTS IN THE SURFACE WATER DRAINS SHALL BE WATERTIGHT (CLAUSE 504.3). ALL DRAINS SHALL BE TESTED IN ACCORDANCE WITH CLAUSE 509.1
6. BEFORE INSTALLATION OF NEW DRAINAGE THE EXACT LEVELS OF THE EXISTING PIPES SHALL BE ASCERTAINED. IT MAY BE NECESSARY TO EXCAVATE TRIAL PITS TO CARRY THIS OUT.
7. GULLY GRATINGS AND FRAMES ARE TO BE CLASS D400 MANUFACTURED TO BS EN 124:1994 IN DUCTILE IRON.
8. GULLY CONNECTIONS SHALL BE OF PIPE COMPLYING WITH THE REQUIREMENTS OF CLAUSE 501 AND BE OF A MINIMUM OF 150MM DIAMETER. THE PIPES INCLUDING COLLARS SHALL BE BEDDED AND SURROUNDED WITH CONCRETE MIX S12 TO BS 5328 TO A MINIMUM THICKNESS 150MM, OVER THE FULL LENGTH OF THE CONNECTION, IN ACCORDANCE WITH CLAUSE 503.
9. GULLIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE HIGHWAY CONSTRUCTION DETAILS (F13) AND THE STANDARD DETAILS.



1 Drainage Layout - Proposed
Scale: 1 : 50

SELECTED BACKFILL MATERIAL IN ACCORDANCE WITH CESWI CLAUSE 2.43.2 S.H.W. CI 503.3(v)

BEDDING AND SURROUND MATERIAL: REFER TO TABLE A

TABLE A - FLEXIBLE PIPES- BEDDING AND SURROUND MATERIALS AGGREGATES TO BS EN 13242		
NOMINAL PIPE DIAMETER (mm)	GRADED AGGREGATES (mm) GRADING CATEGORY	SINGLE SIZE AGGREGATE (mm) GRADING CATEGORY
	Gc 85/15	Gc 80/20
< 150	-	4/10
150 TO 400	2/14, 4/20	4/10, 6/14, 10/20
> 400	2/14, 4/20, 4/40	4/10, 6/14, 10/20, 20/40

PIPES UNDER THE ROAD WITH LESS THAN 1.2m COVER TO HAVE CONCRETE SURROUND.

TRENCH SIDES TO BE VERTICAL TO 300mm ABOVE CROWN OF PIPE

TRENCH SIDES TO BE VERTICAL TO 300mm ABOVE CROWN OF PIPE

JOINT IN CONCRETE SUPPORT TO PIPE

FIBREBOARD OR EQUALLY COMPRESSIBLE MATERIAL OF THICKNESS NOT LESS THAN 1% OF THE PIPE LENGTH WITH A MAXIMUM OF 35mm UNLESS OTHERWISE DIRECTED.

TWO LAYERS OF HESSIAN PADDING

PRECAST CONCRETE BLOCK OR ENGINEERING BRICK

NOTES ON CONCRETE BEDDING HAUNCHING & SURROUND

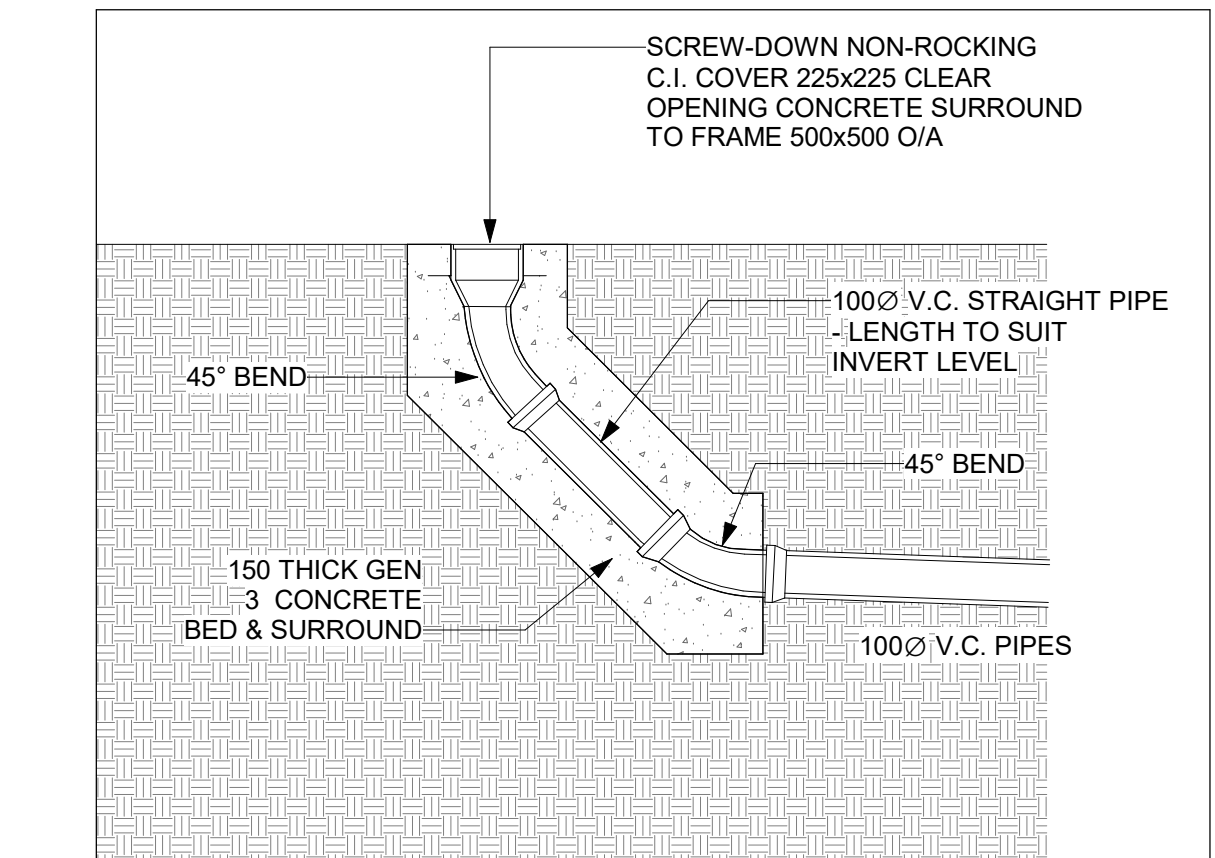
WHERE CONCRETE BEDDING, HAUNCHING OR SURROUND IS USED, BACKFILLING OF THE TRENCH SHALL NOT BE COMMENCED UNTIL THE CONCRETE HAS REACHED A STRENGTH OF 15 N/mm².

BEFORE PLACING CONCRETE, PIPES SHALL BE SUPPORTED NEAR JOINTS ON A PRECAST CONCRETE BLOCK OR ENGINEERING BRICKS WITH A PADDING OF TWO LAYERS OF HESSIAN BASED DAMP PROOF COURSE OR MATERIAL OF SIMILAR YIELD BETWEEN THE BARREL OF THE PIPE AND THE SUPPORTING BLOCK. THE SURFACE OF THE SUPPORT SHALL BE PERFECTLY SMOOTH FOR AT LEAST 75mm BY 75mm UNDER THE PIPE, AND THE SIZE OF THE BLOCK SHALL BE AS REQUIRED BY THE CONTRACT.

CONCRETING OF BEDDING, HAUNCHING OR SURROUNDS SHALL NOT BE DONE UNTIL THE PIPES HAVE BEEN JOINTED AND INSPECTED. THE CONCRETE SHALL BE VIBRATED INTO PLACE UNDER THE PIPE AND SHALL BE IN FULL CONTACT TO FORM A HOMOGENEOUS MASS. THERE SHALL BE NO HORIZONTAL CONSTRUCTION JOINT IN THE CONCRETE BELOW THE LEVEL OF HALF PIPE. THE PIPE SHALL BE CAREFULLY ANCHORED AGAINST FLOTATION.

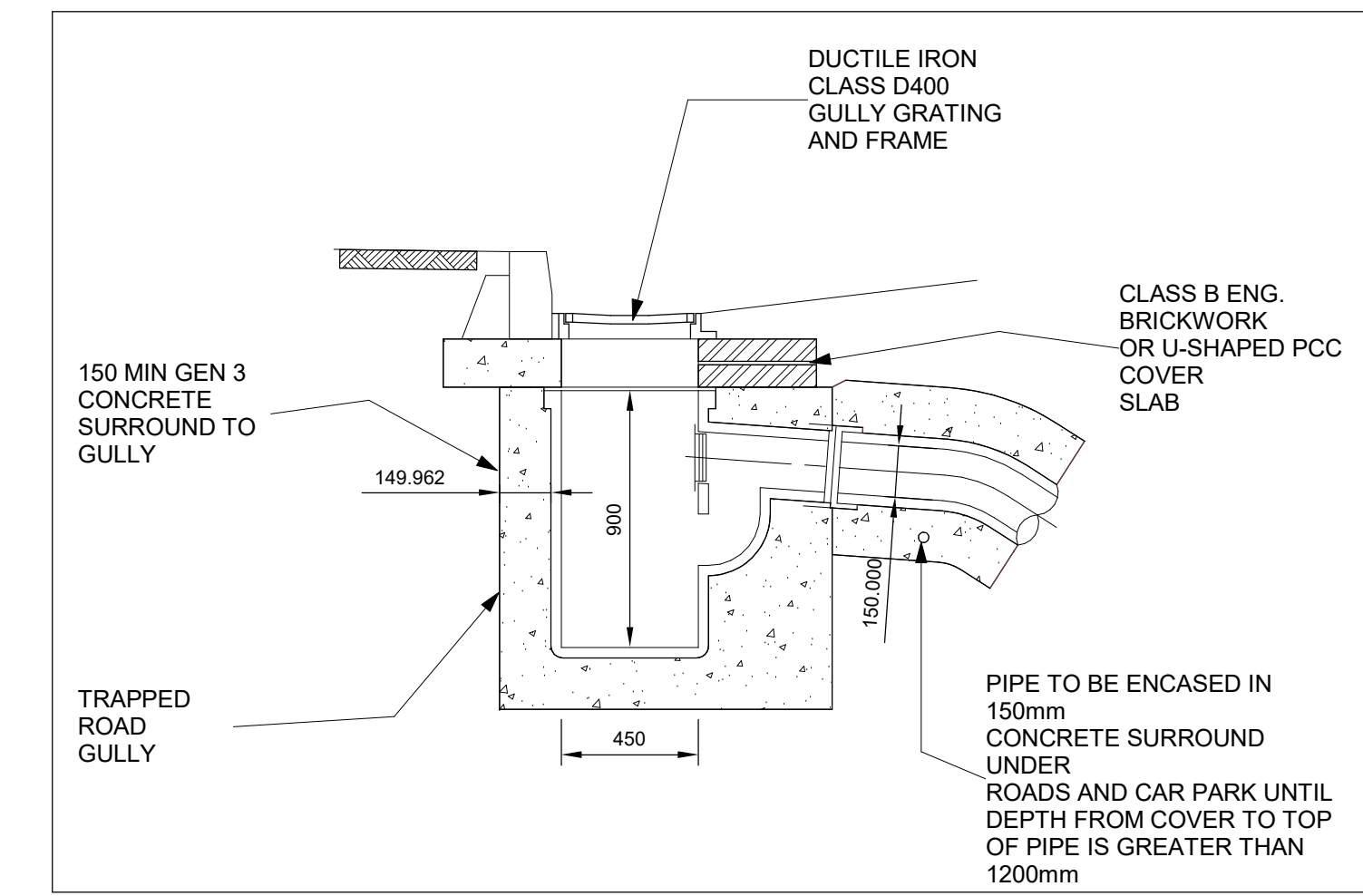
CONCRETE BEDDING, HAUNCHING OR SURROUNDING PIPES SHALL BE DISCONTINUOUS AT FLEXIBLE PIPE JOINTS.

PLASTIC PIPES SHALL BE WRAPPED IN POLYTHENE SHEET OR ROOFING FELT WITH A MINIMUM THICKNESS OF 2mm BEFORE BEING HAUNCHED OR ANCHORED IN CONCRETE.



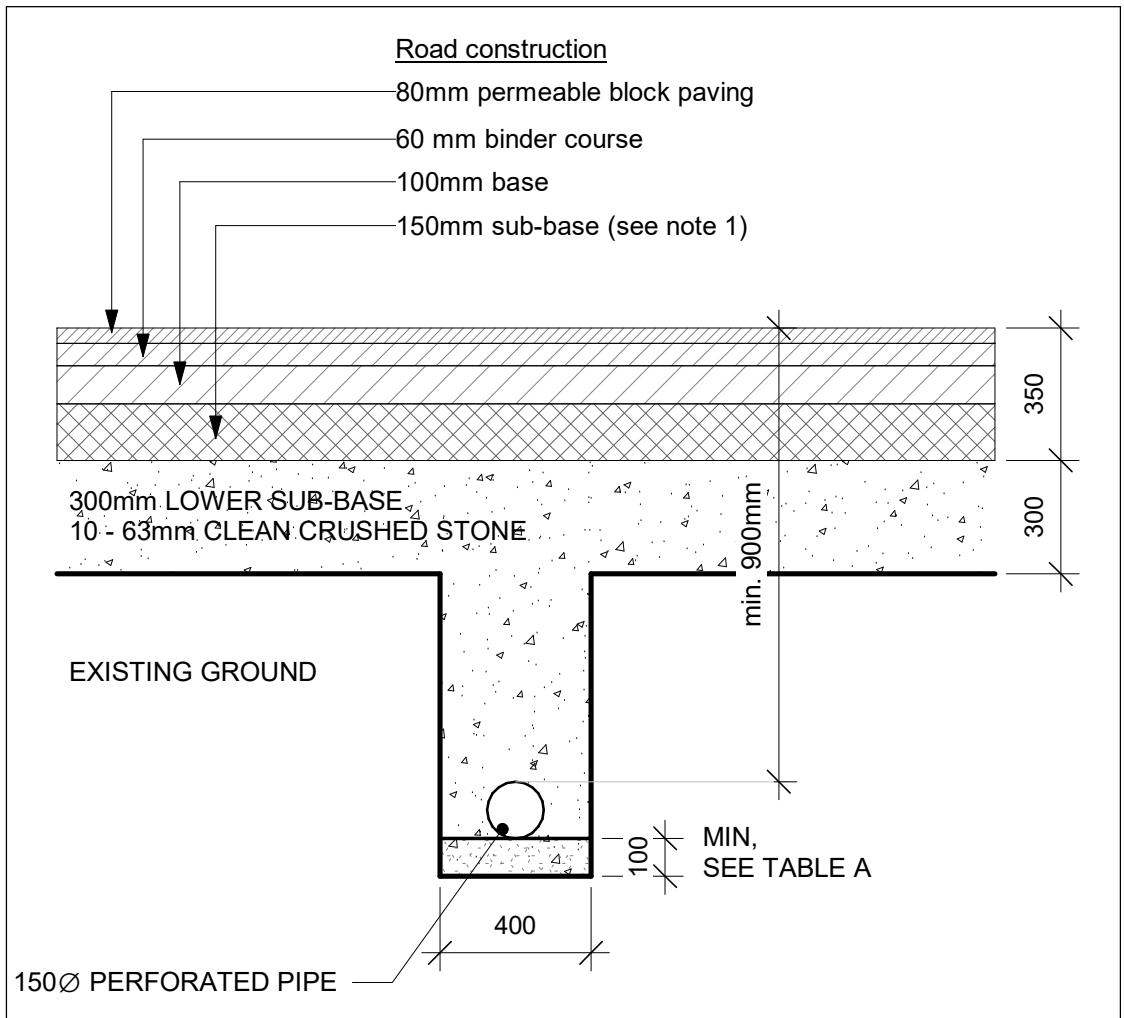
9 RODDING EYE DETAIL
Scale: 1 : 20

7 DR_Typical bedding
Scale: 1 : 20

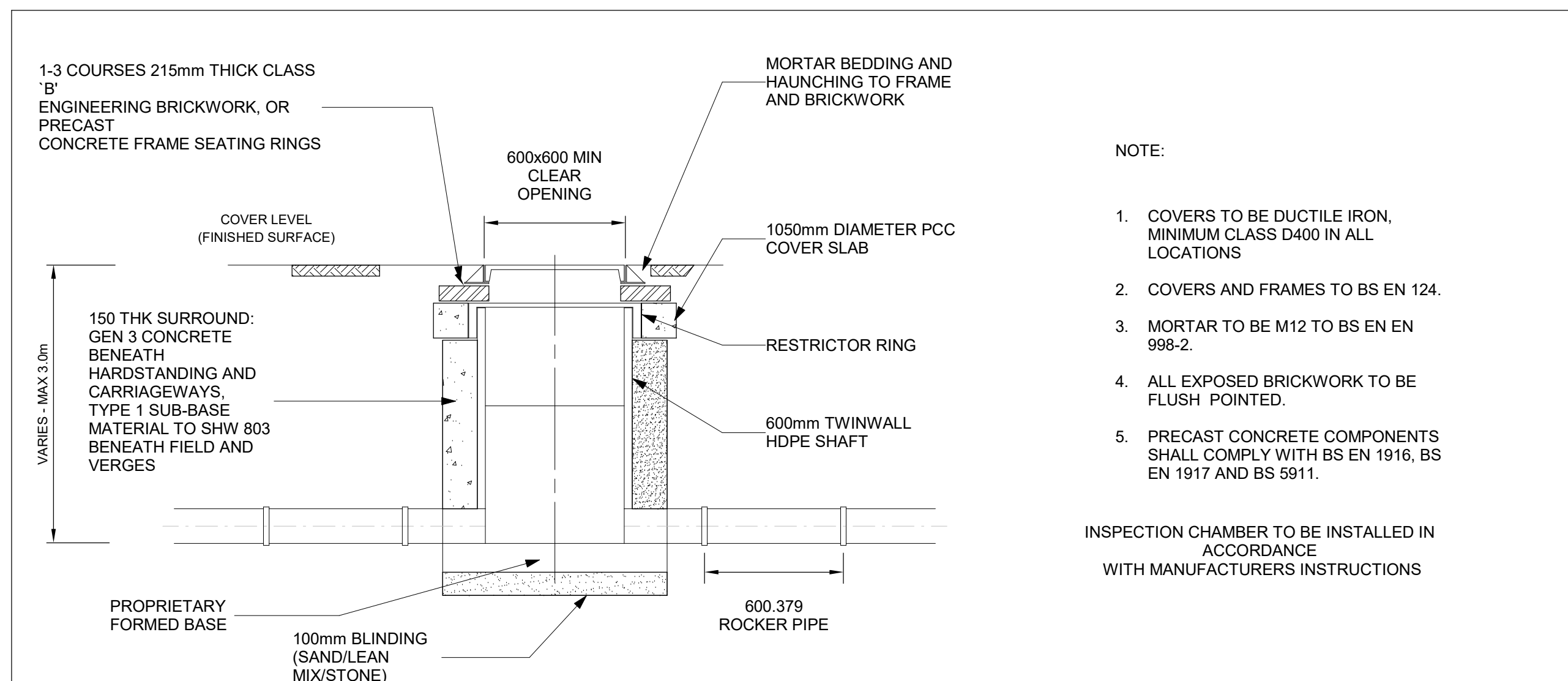


2 DR_Road gully detail
Scale: 1 : 20

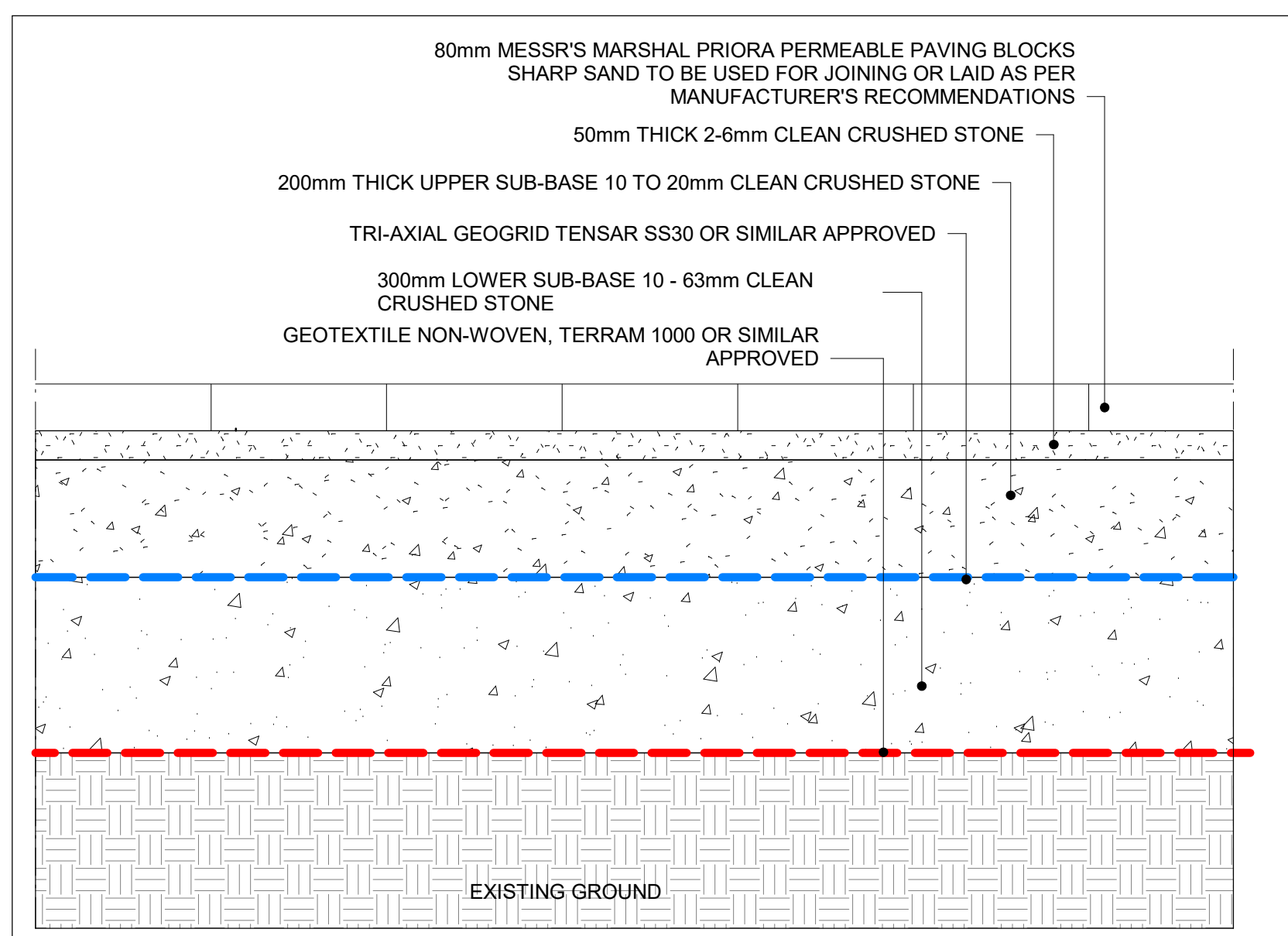
8 DR_Typical bedding concrete surround
Scale: 1 : 20



3 Drainage Detail
Scale: 1 : 20



5 DR_Inspection chamber detail
Scale: 1 : 20



4 DR_Section K-K
Scale: 1 : 10

ISSUE/REVISION

NO	DATE	DESCRIPTION
001	17.08.2023	Update Normal parking layout
002	17.08.2023	Update Normal parking layout
003	17.08.2023	Update Normal parking layout
004	17.08.2023	Update Normal parking layout
005	17.08.2023	Update Normal parking layout
006	17.08.2023	Update Normal parking layout
007	17.08.2023	Update Normal parking layout
008	17.08.2023	Update Normal parking layout
009	17.08.2023	Update Normal parking layout
010	17.08.2023	Update Normal parking layout

PROJECT NUMBER
60695026

SHEET TITLE
Drainage layout

SHEET NUMBER
00000000_ACM_DWG_DWG_DR_AIR_1000_00.0