

FIGURE B10:
TYPE B MANHOLE (PRE-CAST CONCRETE CHAMBER)
DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 1.5m TO 3m

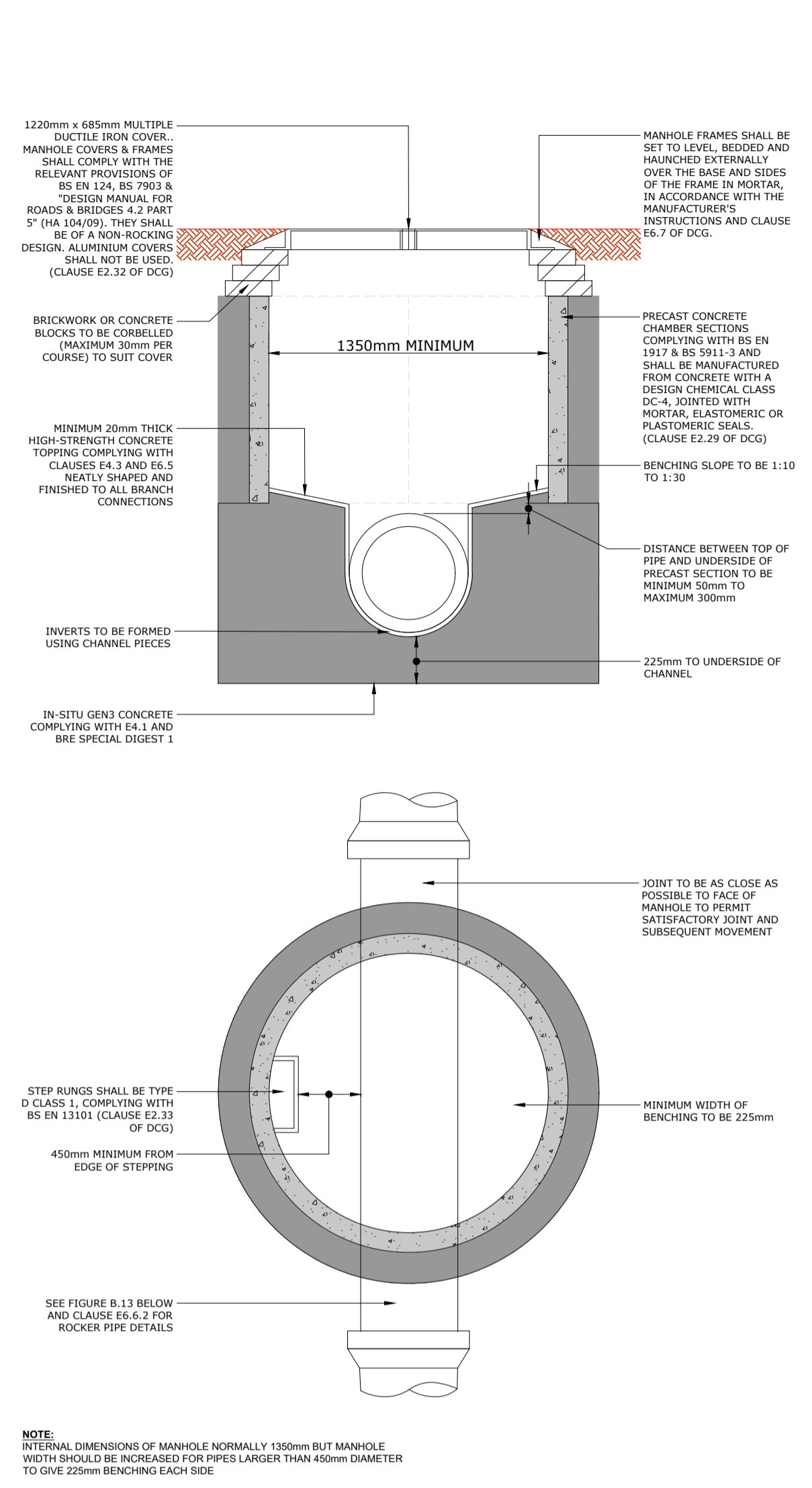
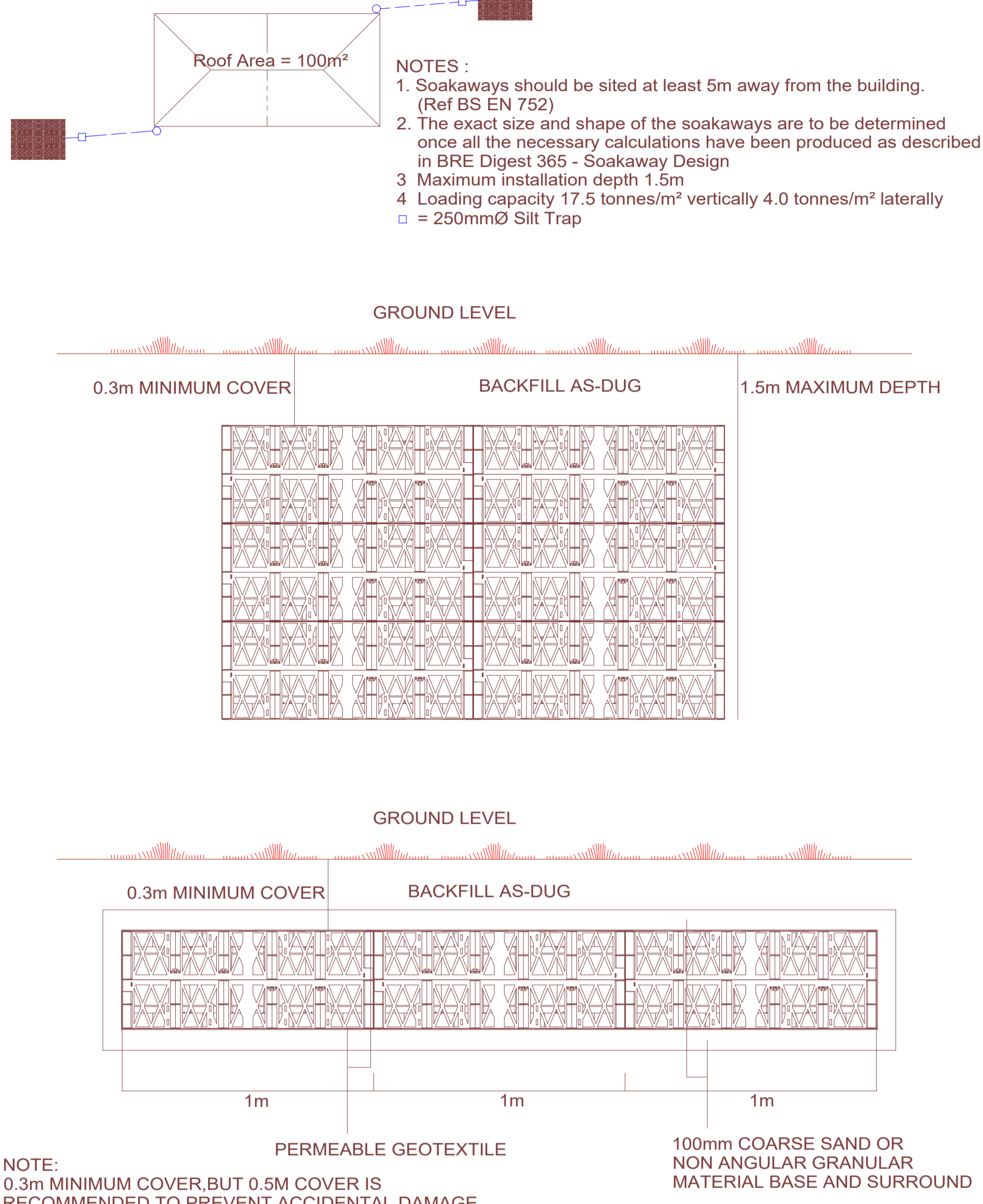


FIGURE B15:
TYPE C CIRCULAR MANHOLE (CONCRETE)
DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE LESS THAN 1.5m
MAXIMUM PIPE SIZE 450mm DIAMETER

TYPICAL SEMI-DETACHED HOUSE



- NOTES :**
1. Soakways should be sited at least 5m away from the building. (Ref BS EN 752)
 2. The exact size and shape of the soakways are to be determined once all the necessary calculations have been produced as described in BRE Digest 365 - Soakaway Design
 3. Maximum installation depth 1.5m
 4. Loading capacity 17.5 tonnes/m² vertically 4.0 tonnes/m² laterally
- = 250mmØ Silt Trap

- NOTES**
1. The contractor shall check all tie-ins for line and level with existing before commencing any works. The Engineer shall be notified immediately, in writing, should any errors be found.
 2. Any discrepancies, of whatever nature, must be reported to the Engineer prior to the commencement or continuance of any further works.
 3. All private drainage works to be in accordance with the requirements of Building Regulations 2010, Part H, "Drainage and waste disposal", (01st October 2015).
 4. All pipes to be bedded and backfilled in accordance with Part H, Diagram 10. Shallow pipes shall be protected in accordance with Part H, Diagram 11.
 5. Unless otherwise stated, all private drainage to be 100mm diameter. Gradients have been shown where there are pipe capacity issues and these should be regarded as minimums. Unless there are constraints dictating otherwise, gradients shall generally be 1 in 60. 100mm diameter pipes shall not be laid flatter than 1 in 80. 150mm diameter pipes shall not be laid flatter than 1 in 150.
 6. All pipes, chambers and fittings to be installed strictly in accordance with the manufacturers instructions.
 7. Pipes which run adjacent to buildings shall be installed in strict accordance with Part H, Clause 2.23 to 2.25 and Diagram 8.
 8. All private manholes, inspection chambers and drainage channels to comply with BS EN124. Cover strengths to be: Class D400 in heavily trafficked areas (access roads, service yards etc.) Class C250 in lightly trafficked areas (car parks, driveways etc) Class B125 in Non-trafficked areas Class A15 in landscaping areas.
 9. All drains in the vicinity of existing or proposed trees to be constructed in accordance with the requirements of NHC Practice Note 3.
 10. Private drainage frames must be tied to manhole risers by use of manufacturers ties (e.g. Polypropylene FRK500 fixing kit and FRK501 black ties). The ground works contractor will be held fully responsible for any accidents due to incorrect fitting or failure to use the correct manufacturers fixing equipment.
 11. All existing land drains encountered on site during construction to be re-connected.
 12. Should any departure from the slab level be considered, agreement shall be sought from the Engineer immediately and prior to commencement or continuance of any works, and should take full account of all restrictions to the slab level.
 13. Garage slabs relate to the finished level of the concrete at the front entrance of the garage.
 14. Where a drive slopes towards a garage there is to be a 75mm ramp up to the garage slab.
 15. Maximum gradients of gardens to be 1 in 6 (unless stated otherwise), except for designed banking works.
 16. All dimensions in metres unless otherwise stated.
 17. As underlying ground conditions may be variable across the site the Contractor shall undertake onsite percolation tests at the location and depth of each soakaway. Tests should be undertaken in accordance with BRE365 and results forwarded to the Engineers to allow verification of designs.
 18. All existing services, sewers and drains indicated on this drawing and any other related drawings are shown only indicatively, and shall have their positions and level confirmed on site by the Contractor.
 19. The invert levels of all existing sewers, drains, ditches, tanks or other features and apparatus where a new connection is to be made shall have their precise position and level confirmed on site by the Contractor prior to commencement of any construction work. The results of the investigations shall be confirmed to MTC Engineering (Cambridge) Ltd so that the design can be verified.

THAMES WATER NOTES

ALL SECTION 104 ADOPTABLE DRAINAGE SHALL CONFORM TO THE DESIGN AND CONSTRUCTION GUIDE (DCG) FOR DEVELOPERS (SEWERAGE SECTOR GUIDANCE APPENDIX C, MARCH 2020) CURRENT AT THE TIME OF EXECUTION.

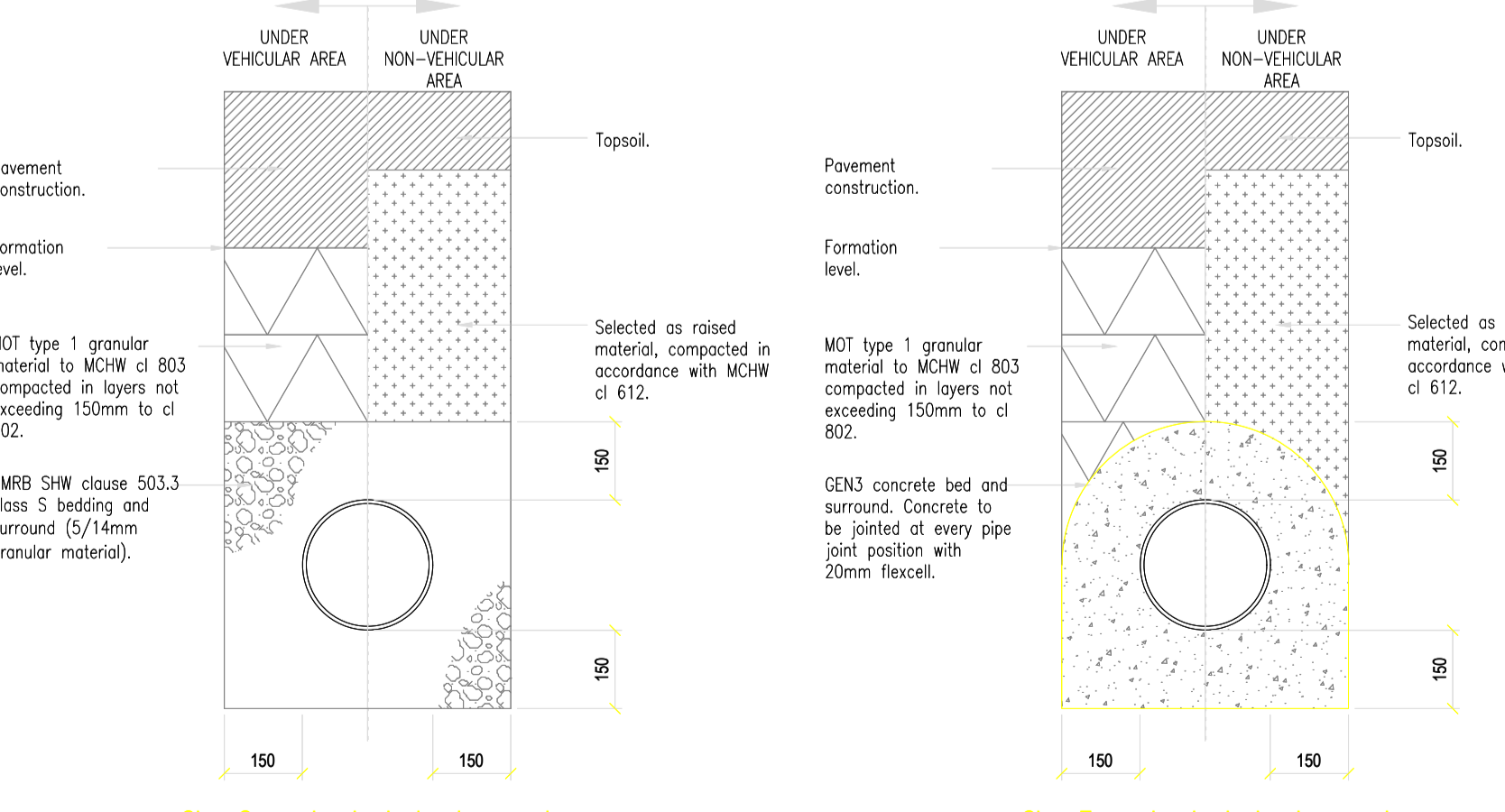
ALL COVERS AND FRAMES ON ADOPTABLE AV SEWERS ARE TO BE D400, KITEMARKED AND BE BACKED FILL OR SIF ACCORDINGLY. SUPPLIERS SHALL BE STANTON, PAUL SAVAGE, NORRICO OR WREKIN.

ADOPTABLE PIPEWORK SHALL BE TO THE FOLLOWING SPECIFICATION:

- CLAYWARE: BS EN 295-1:1991 #150 DIA. CRUSHING STRENGTH 34kN/M #225 DIA. CLASS 160
- CONCRETE: BS EN 591-1:2002 #300 DIA. CLASS 120
- PLASTIC: BS EN 13476-1 FUNKLE HS PIPEWORK 1600/MF
- FOUL WATER: POLYPIPE POLYSEWER (#150 - #300mm)
- SURFACE WATER: HOPE TWIN WALL PIPEWORK S98 - POLYPIPE RIDGISEWER (#400 - #900mm) - POLYPIPE RIDGISEWER (#400 - #900mm) - POLYPIPE RIDGISTORM-XL (#750 - #3000mm) - VEHICLE APPROVED PIPEWORK.

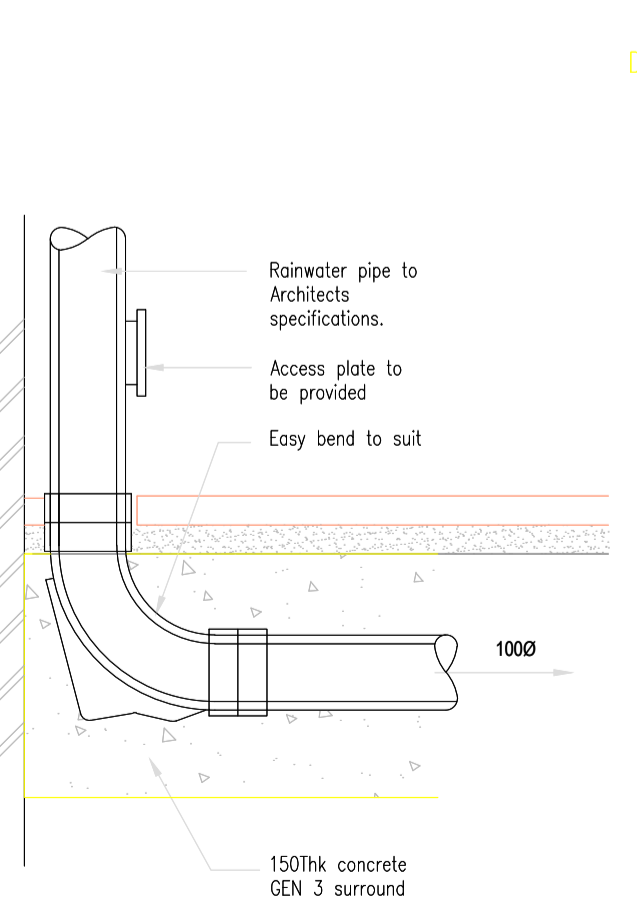
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH "MTC STANDARD DETAIL 1: ADOPTABLE DRAINAGE CONSTRUCTION DETAILS (DCG APPENDIX C 2020)".

FOR APPROVAL

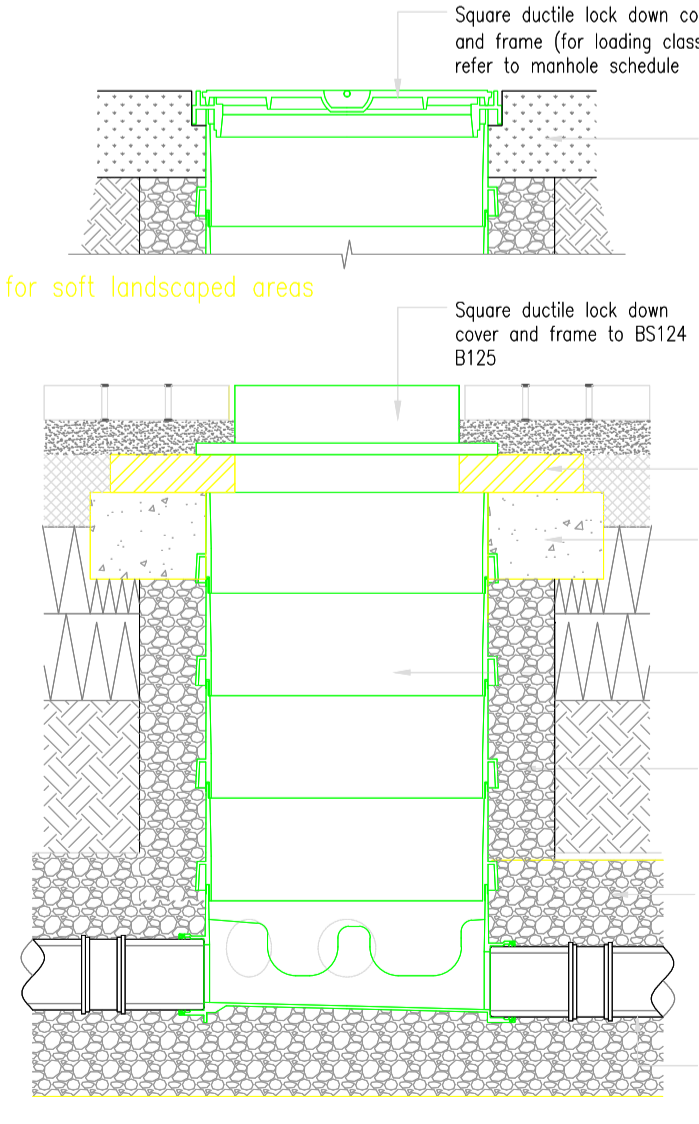


Class 8 granular pipe bed and surround
To be used for plastic, vitreous and concrete pipework where cover to crown is greater than 900mm.

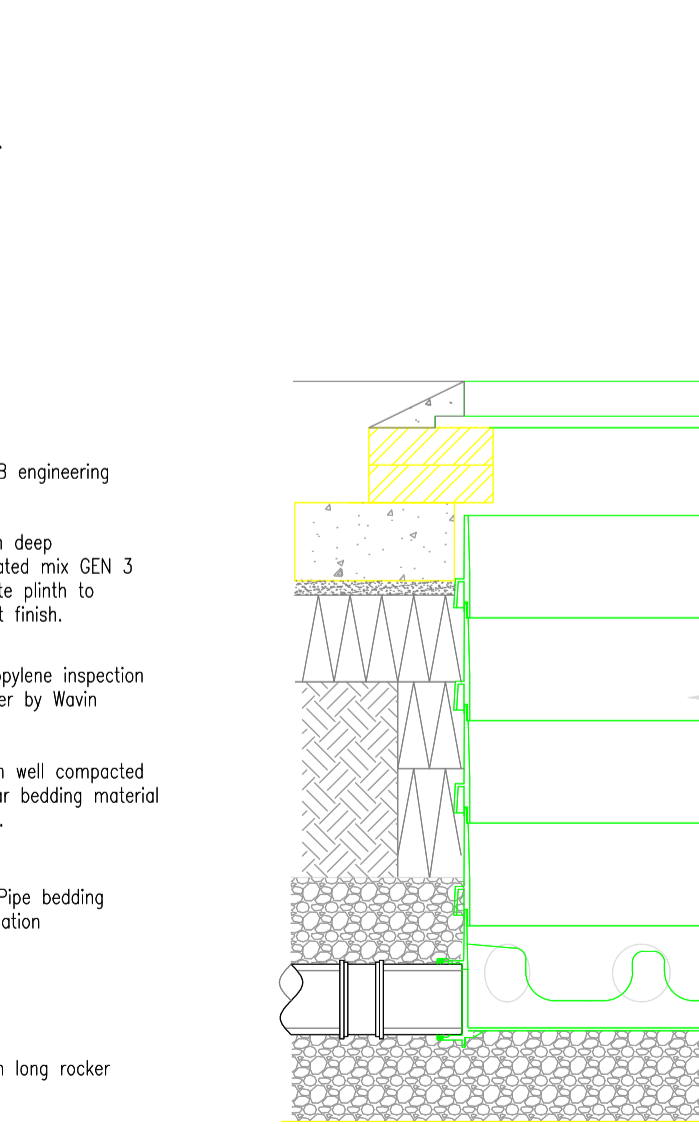
Class 5 granular pipe bed and surround
To be used for plastic, vitreous and concrete pipework where cover to crown is less than 900mm.



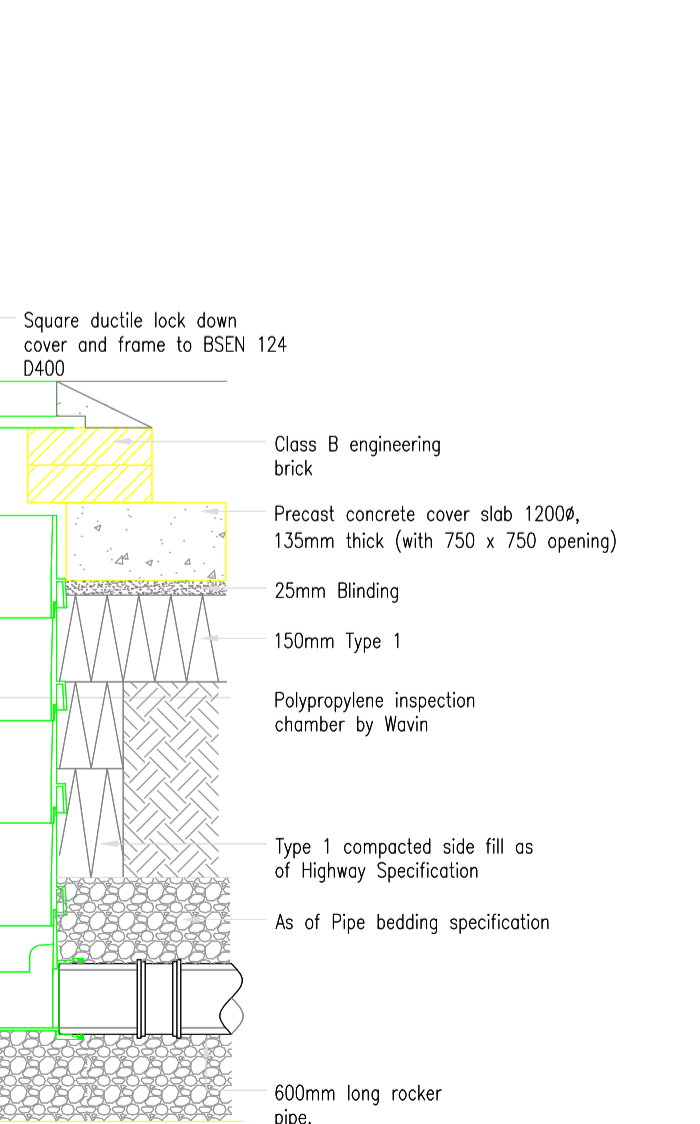
RWP Detail (1:10)



Typical Wavin PPIC Manhole Detail



Detail for soft landscaped areas



Detail for Trafficked Overrun Areas

REV	DATE	DESCRIPTION/REASON FOR ISSUE	APPR

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TITLE
Drainage Specification

ORIG	JTC	DATE	23.03.23
CHKD	SCALE	Not to Scale @ A1	
APPR	DRAWING NO	3017-98	

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