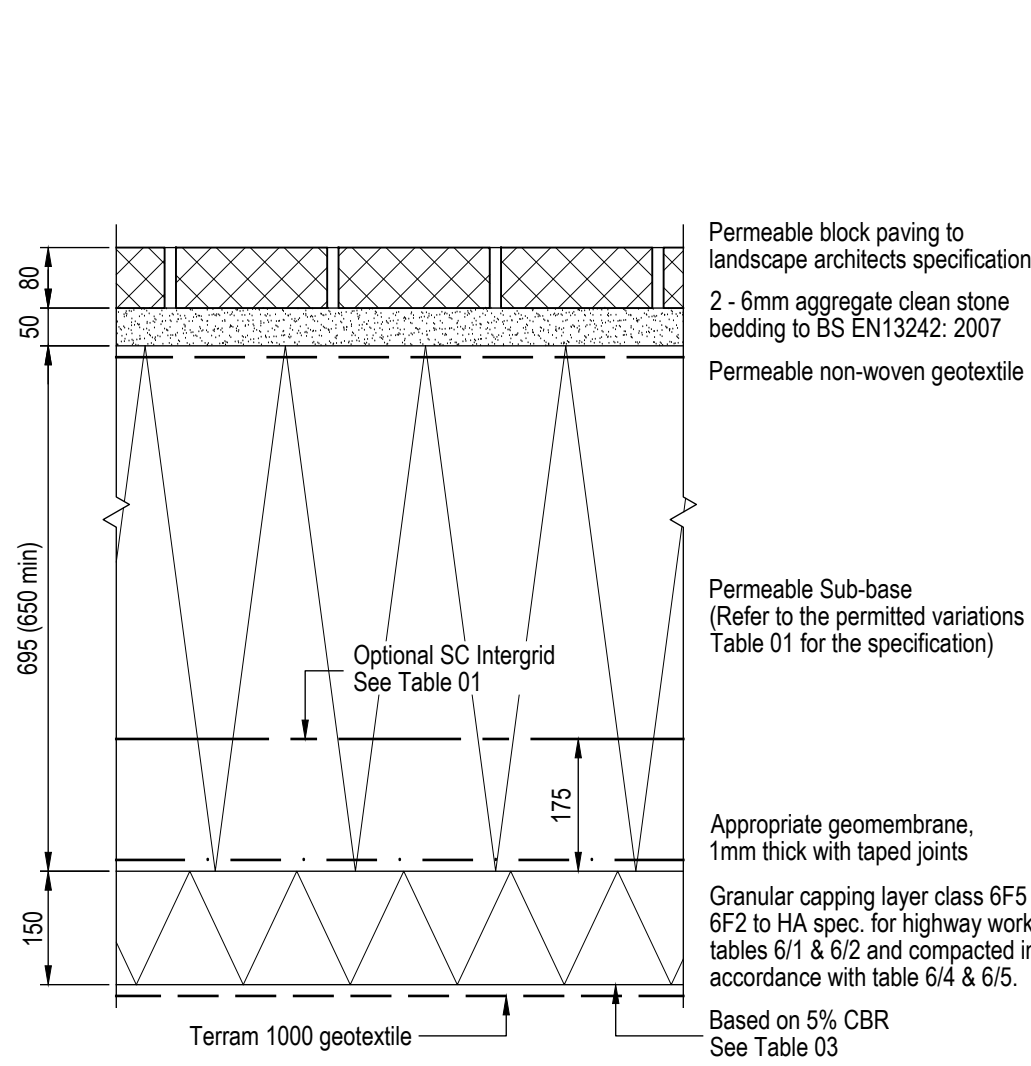




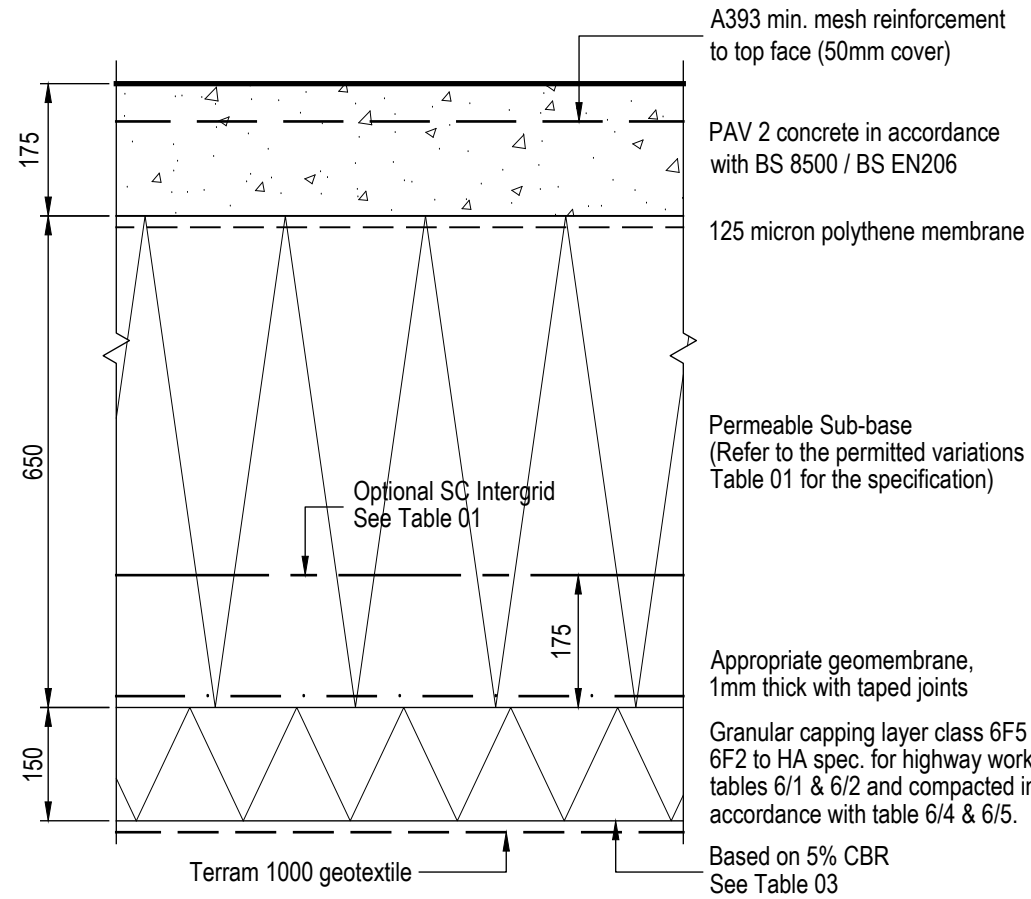
Type C - Permeable Block Paved Parking

Construction Detail 01

SCALE = 1:10

Notes:

1. The permeable blocks should not be laid until the building construction is finished to avoid damage by construction vehicles and activity.
2. The contractor should ensure that there is a level base course for the permeable blocks and clean stone bedding before the surfacing is laid to correct line and level.



Impermeable Concrete Over Permeable Sub-base

Construction Detail 02

SCALE = 1:10

Permeable Sub-base - Permitted Variations			
Option No.	Description	SC Intergrid	Permitted
1	(100mm) of 5-20mm aggregate upper sub-base to BS EN13242: 2002 + (250mm min) of 10-63mm aggregate lower sub-base to BS EN13242: 2002	Required (Located between the 2 sub-base layers)	✓
2	'Superflow SUDSaggi' by 'Aggregate Industries' (All supplier in South Rgn)	Not required	✓
3	Type-3 granular sub-base to SHW CL 805 (See Note below)	Not required	✗
4	Graded crushed aggregate 4-20mm to BS EN13242: 2002	Required (Located centrally)	✓
Note: If the Type-3 granular sub-base option is selected, it is essential that the material used is certificated to comply fully with all Type-3 MCHW specifications.			

Permeable Sub-base Permitted Variations Table 01

Note:

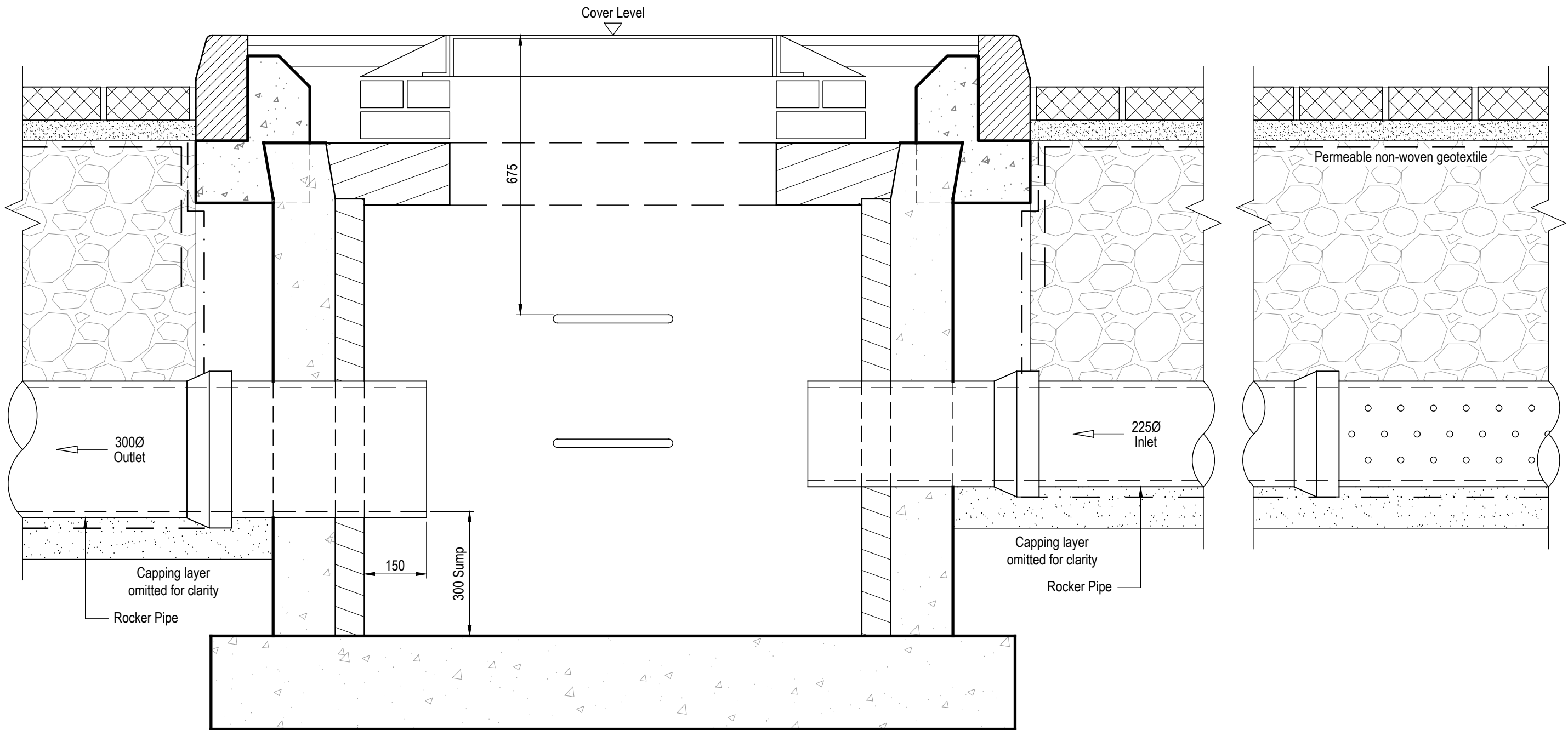
1. Refer to construction details for the sub-base depths.

Permeable Paving - System Types	
Type	Description
A	A permeable pavement system that is fully infiltrating to the ground.
B	A permeable pavement system partially infiltrating to the ground. Any additional flows are picked up by perforated collector pipes and disposed of elsewhere.
C	A permeable pavement system acting as a collection method and attenuation only. All flow are picked up by perforated collector pipes and disposed of elsewhere.

Permeable Paving System Types Definitions Table 02

Note:

1. Refer to construction details for the sub-base depths.



SWMH-03 Catchpit

Catchpit Serving Perforated Pipes within Permeable Paving

Construction Detail

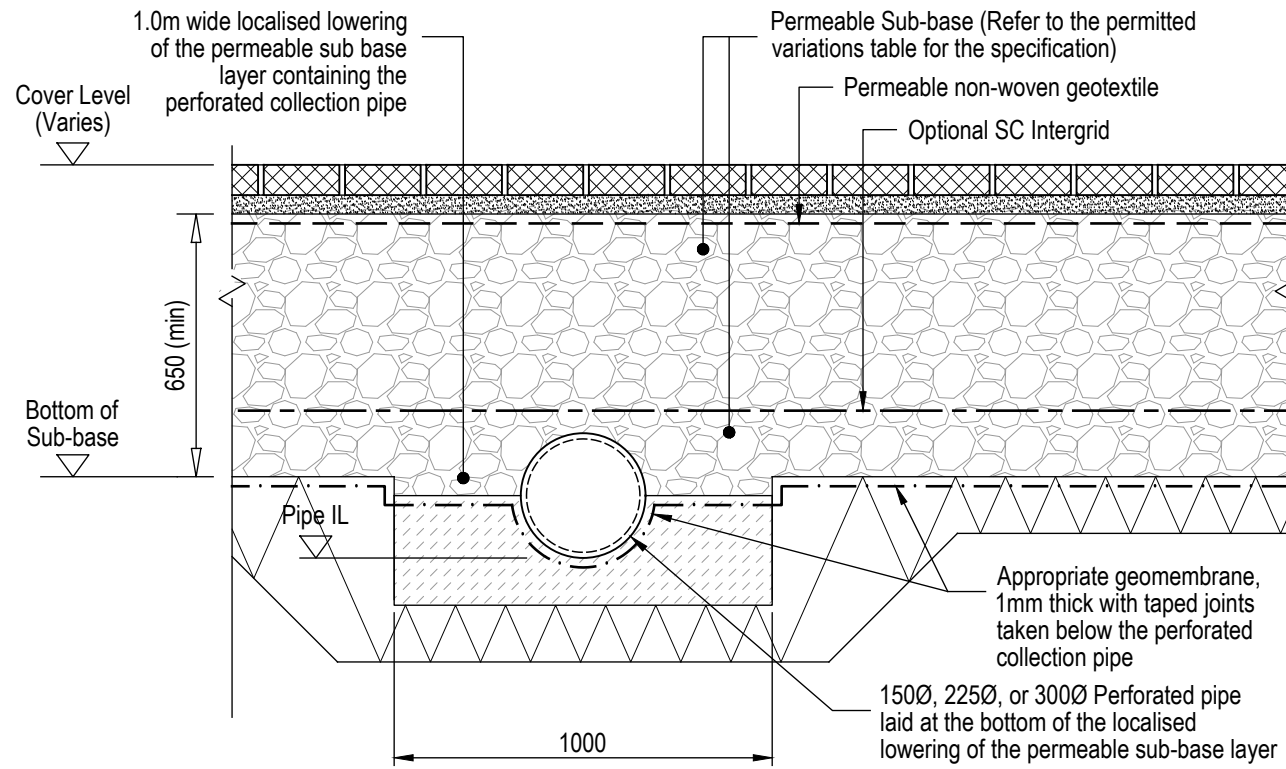
SCALE = 1:10

Notes:

1. The Permeable blocks should not be laid until the building construction is finished to avoid damage by construction vehicles and activity.
2. The contractor should ensure that there is a level base course for the Permeable blocks and clean stone bedding before the surfacing is laid to correct line and level.
3. A suitable impermeable geo-membrane is to be laid at the base of the permeable sub-base layer to protect the sub-base from any migrating silts permeating from the layers below (1mm thick with taped joints).

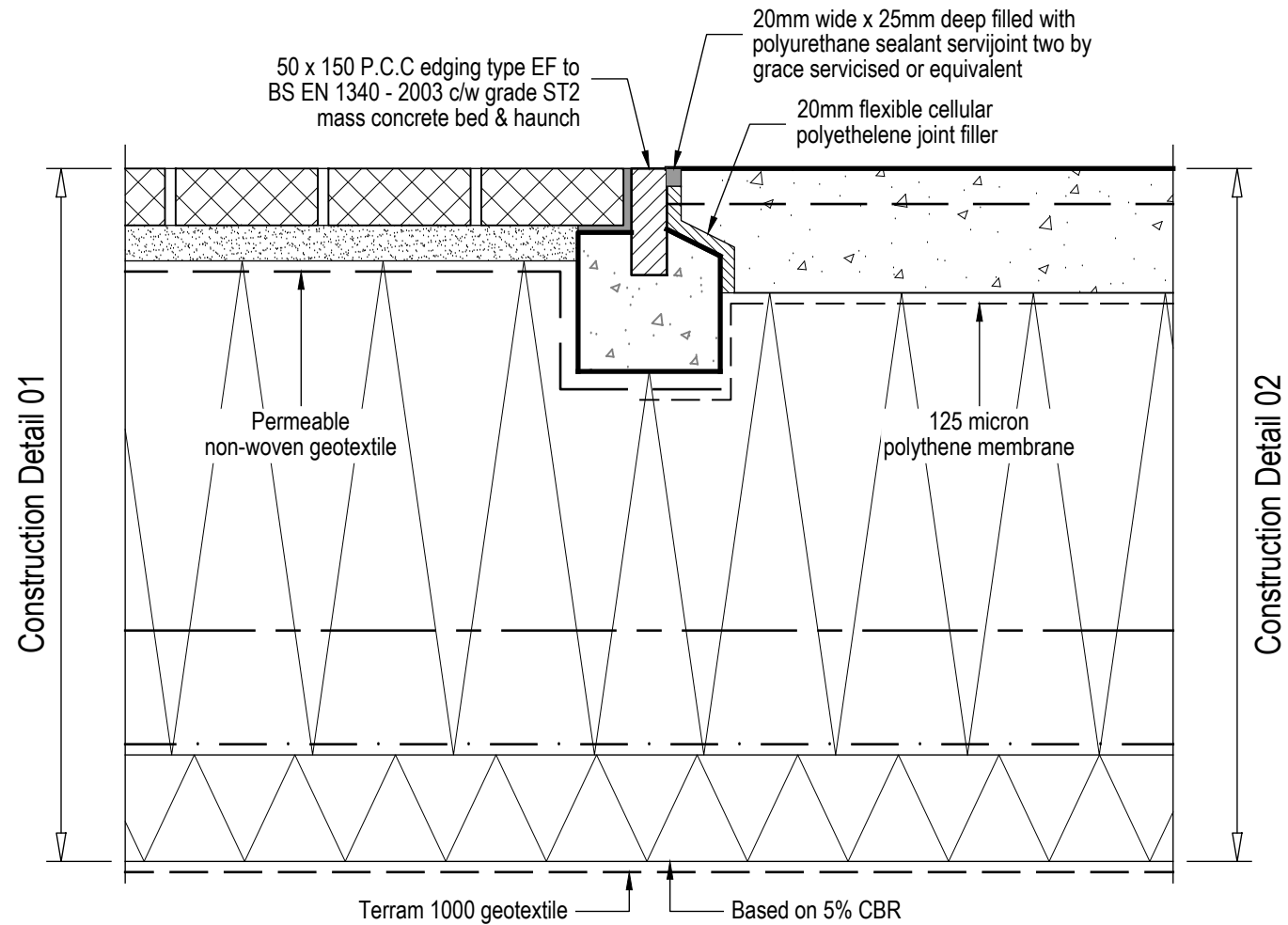
Sub-Grade Improvement Table	
Type C - Attenuation System	
CBR Value	Thickness (min)
0 - 1%	350mm
1.1 - 2%	300mm
2.1 - 3%	250mm
3.1 - 4%	200mm
4.1 - 15%	150mm
Material Specification: Class 6F5 / 6F2 to HA spec. for highway works, tables 6/1 & 6/2 and compacted in accordance with table 6/4 & 6/5.	

Permeable Macadam / Paving Sub-Grade Improvements Table 03



Section Through 1500Ø, 2250Ø and 3000Ø Perforated Pipes Within the Permeable Sub-base Layer

SCALE = 1:20



EF Kerbline separating the Permeable parking spaces and the Impermeable Concrete Isles Construction Detail

SCALE = 1:10

Notes:

1. This drawing is to be read in conjunction with all of the relevant architects, engineers and specialist sub-contractor drawings and specifications.
2. Any discrepancies between the engineers and the architects drawings to be referred to the architect before proceeding. Drawings must not be scaled.
3. All private drainage is to be in accordance with BS EN 752-1-2-3-4, BS EN 1295-1, BS EN 1610 and all relevant sections of approved document H of the building regulations (2015 Edition).
4. All adoptable drainage is to be in accordance with 'Design and construction guidelines for foul & surface water sewers offered for adoption', where appropriate.
5. All adopted foul drainage to be laid with a minimum of 1.2m cover depth to soffit. Unless specifically identified otherwise with relevant protective measures.
6. Pipework Type - Flexibly jointed extra strength vitrified clay, to BS EN 295-1, Hepworth 'Superseve' or equivalent.
7. Pipework Type - Plastic i.e. PVC-U, to BS EN 1401-1 Osma or equivalent. (Private pipework to be type SN4 and all adoptable pipework to be type SN8.)
8. Precast concrete manholes and fittings shall be to BS 5911 parts 3 and 4 and BS EN 1917.
9. Whenever pipework passes through foundations, walls or connects to manholes, flexible pipe joints are to be provided within 150mm of the face of the structure. 600mm pipe length to then be used to form a rocker pipe.
10. Whenever pipework passes through screen walls, footings or retaining walls, lintels are to be provided.
11. Where pipelines pass within 1.0m of buildings or walls the foundations are to be taken down below the bottom of the trench. Where pipelines are more than 1.0m away from foundations the trench shall be backfilled with concrete up to a point that meets a 45° angle line taken from the bottom corner of the nearest foundation.
12. The contractors attention is drawn to the need to ensure that any trenches excavated through previously compacted or filled areas, in particular under the building footprint and immediately around the outside, are re-compacted to ensure that localised differential settlement does not occur.
13. Where pipelines cross with less than 300mm of clearance, each is to be surrounded with grade ST4 mass concrete for a distance not less than 1.0m centred on the crossing point. The length of surround should be extended as necessary to within 150mm of the next nearest flexible joints.
14. For private drainage, concrete protection is to be provided where the effective cover to the crown of the pipe(s) is less than 1.2m in trafficked areas and 0.6m in soft landscaped or pedestrianised areas. (Applies during and after construction).
15. The contractor is to ensure that suitable protective measures are taken to ensure that the drainage pipework and fittings are not damaged by site traffic prior to any over-site filling operations being completed.
16. Chamber annotation references are as follows:
AC - Denotes a polypropylene or vitrified clay access chamber, depth not exceeding 600mm, diameter not exceeding 300mm.
IC - Denotes a polypropylene inspection chamber, depth not exceeding 3.0m, diameter not exceeding 600mm. Standard diameter 450mm, unless specified otherwise.
MH - Denotes a manholes constructed from either brick or P.C.C. sections. Chamber depth to be in excess of 1.2m unless specified otherwise.

17. The top run of each private foul drainage network is to be laid to falls no steeper than 1:40, the head of each run is to be vented to atmosphere in accordance with approved document H.
18. All foul and surface water drainage pipelines are to be 100mm dia min and laid at a gradient no steeper than 1:80, unless stated otherwise.
19. The contractor is to ensure that all pipework connections are arranged to direct flows down or into the main channel in the direction of the main flow. Any oblique or perpendicular chamber connections are to be directed into the mainline channel via appropriate benching. All chambers must include a connection via the main channel to ensure that a flush through is achieved.
20. The contractor is to ensure that when preformed polypropylene manhole bases are used, they are orientated such that the main flow is directed through the main channel of the base. This should be achieved by using long radius bends outside of the manhole when necessary.
21. Where new connections are to be made into existing manholes or sewers, all invert levels, pipe orientation and sizes should be checked on-site prior to the commencement of the works, with any variance reported to the engineer once identified. Where new connections are to be made either on or off-site, the contractor is to check the line and level of any existing services / mains, to ensure that no clashes exist prior to the works commencing.
22. Any and all new connections into a public sewer are to be inspected by the local water authority and carried out fully in accordance with their requirements. The contractor is to allow for obtaining the appropriate 'Section Applications' as well as paying all necessary fees.
23. Drainage channel(s) to be 'Aco S100' or equivalent. For installation guidance refer to the manufacturer's specification. Refer to landscape architects details for surface treatments around units where applicable. All drainage channels are to be constructed with in-built falls where possible. Relevant units are to be incorporated to provide the necessary length of channel gradient from the head of the run to the sump unit.
24. Permeable paving surface finish 'to the architects spec'. Any alteration to the extents of the permeable paving may have an adverse affect upon the Surface water drainage design and must therefore be discussed with the engineer

A 10.10.25 Drawn - Issued Detailed Design
Rev. Date Description



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Client

Faircloth Construction Ltd

Project Title

Royal Mail Delivery Office, Salisbury

Drawing Title

Proposed Drainage
Construction Details
Sheet 4 of 4

Drawing Status

Detailed Design

Originator No.	Rev by	Chk by	Scale
115154	SH	GEB	Varies @A1

PROJECT | ORIGINATOR | ZONE | LEVEL | TYPE | ROLE | NO.
115154-CAL-XX-XX-DR-D-0053

Revision
A