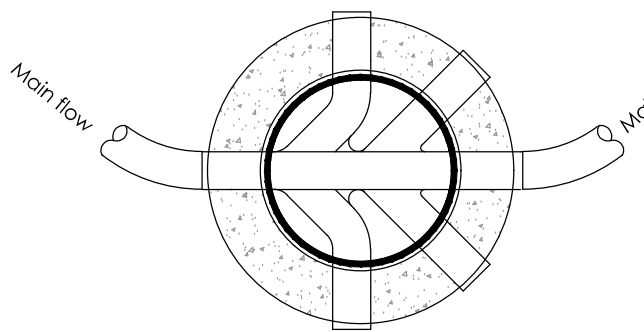


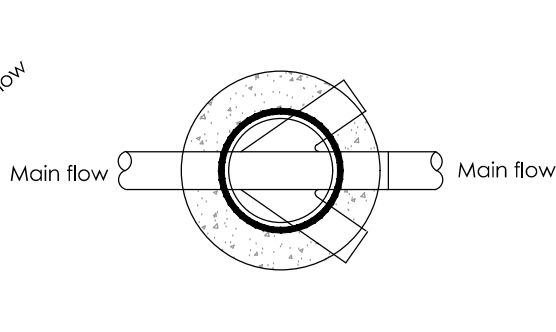
DRAINAGE NOTES

- All private drainage must comply with the current edition of DTLR Building Regulations approved document H.
- Drainage design to be to BS EN 752-3
- Any intended changes to the drainage design must be discussed with the Engineer. If changes are made the Engineer must be supplied with as-constructed information to enable drawings to be suitably updated for the Health & safety file.
- Before works commence the contractor should satisfy themselves that the details of the drainage system to be connected into are correct i.e. cover, invert levels, line, condition and type of sewer.
- Private access chambers are to be appropriate to the depths and loadings as follows:
Access size
Up to 600mm Mini access chamber 300mmØ
Up to 1200mm Inspection chamber 475mm Ø (PPIC)
1200 to 1500mm 600mmx450mm Brick/P.C.C. units
1500 to 3000mm P.C.C. ring manhole 1050mmØ
(ring diameter increased if sewer greater than 475mmØ).
- All manholes shall have a flexible joint within 150mm of the face of the structure and a "rocker pipe" which should not exceed 600mm in length.
- Pipe materials shall be -
Vitrified clayware to BS EN 295
Cast iron to BS EN 545:2010
UPVC - BS EN 1401 PP - BS EN 1852
Structure wall-BS EN 13476
- For private sewers having 900mm or less cover beneath carriageways & hardstanding or 600mm in landscape areas then they shall have concrete surround or slab protection. Slab protection to be 100mm thick C20concrete slab with mesh reinforcement and a bearing of 150mm each side of the trench. Concrete surround to be 150mm C20 with flexible joints.
- Trenches within 1.2m of load bearing walls should be filled with concrete at least to the underside of the foundation. Where the distance is more than 1.2m from the foundations the concrete should be taken at least up to a 45degree line from the bottom of the foundations. Alternatively, the foundations could be taken to a deeper level to avoid undermining by the drainage trench (check with the Engineer where this is required).
- Pipe bed and surround to be granular Type S unless otherwise noted.
- Drains passing through walls or foundations should have either an arched or lintelled opening to give 50mm clearance around the pipe. The opening shall be masked both sides with a rigid non-perishable material, or alternatively a short length of pipe may be built in solid if it is connected within 150mm to rocker pipes (max 600mm long) with flexible joints.
- Drainage under buildings should be bedded and surrounded by at least 100mm of granular material.
- Unless otherwise stated on the drawings or in the schedules then all private drainage shall be 100mmØ.
- Covers shall be to B.S. EN 124
Class A15 - areas where only pedestrians have access.
Class B125 - for use in car parks and pedestrian areas where occasional vehicular access is likely.
Class C250 - areas where not extending more than 500mm from kerb face into the carriageway
Class D400 - areas where cars and lorries have access including carriageways, hard shoulders.
Cover and frames to be 150mm deep except residential cut-de-sacs
- It is recommended that drainage works should be constructed from the outfall particularly where the outfall depth is relatively shallow. If it is not possible to commence works from the outfall the contractor should satisfy themselves that the invert, line, position and type of existing outfall are correct.
- Drainage works should be protected from possible damage by construction traffic loadings during the construction period. Protection may be provided by barriers, materials should not be stored over drainage works.
- Buildings up to 3 storeys shall have a rest bend at the base of the soil stack 450mm min below the invert of the lowest incoming drain.

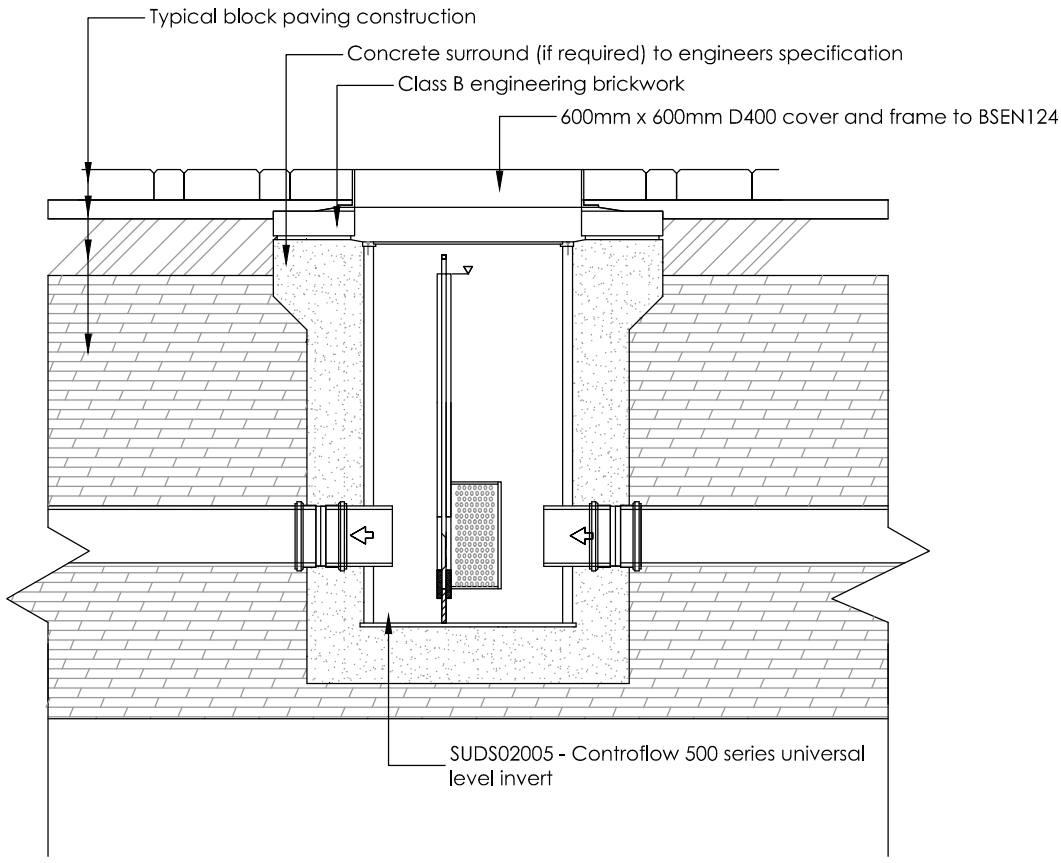
POLYPROPYLENE INSPECTION CHAMBER - PPIC



MINI ACCESS CHAMBER

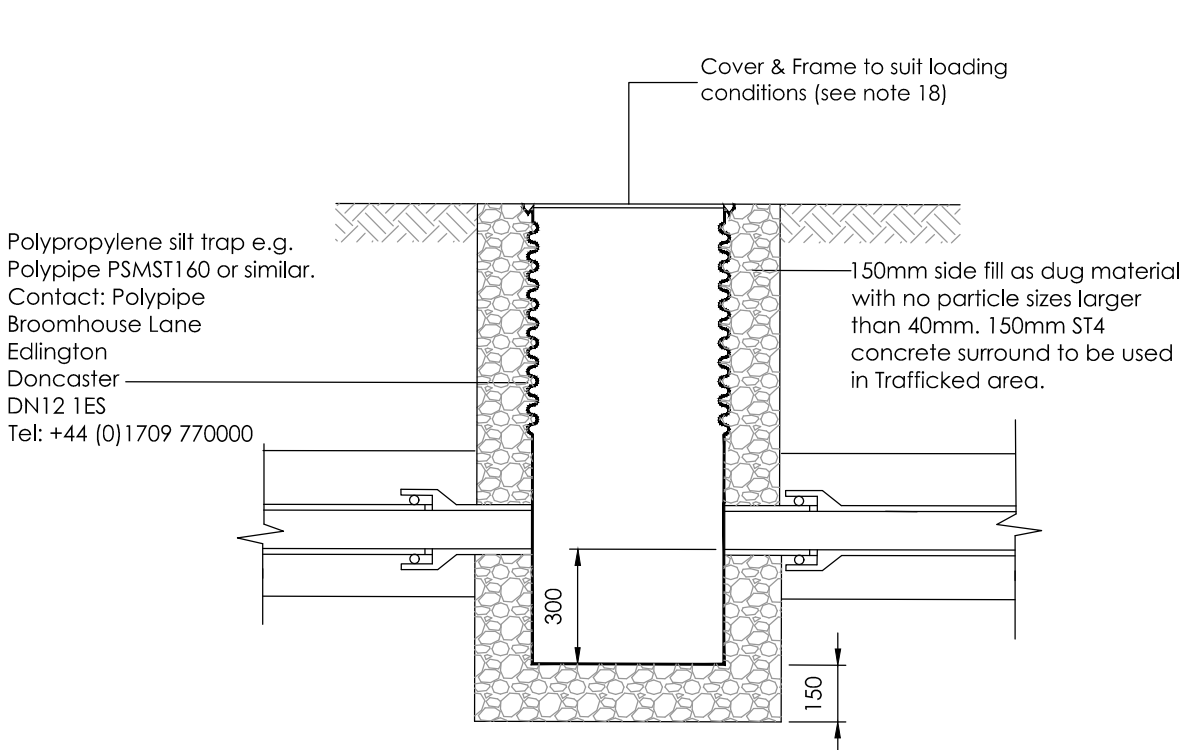


Chamber Type	Internal Diameter (mm)	Max. No. Inlets	Max. Depth (mm)
Polypropylene Mini Access Chamber (mac)	300	3	600
Polypropylene Inspection Chamber (PPIC)	475	5	1200

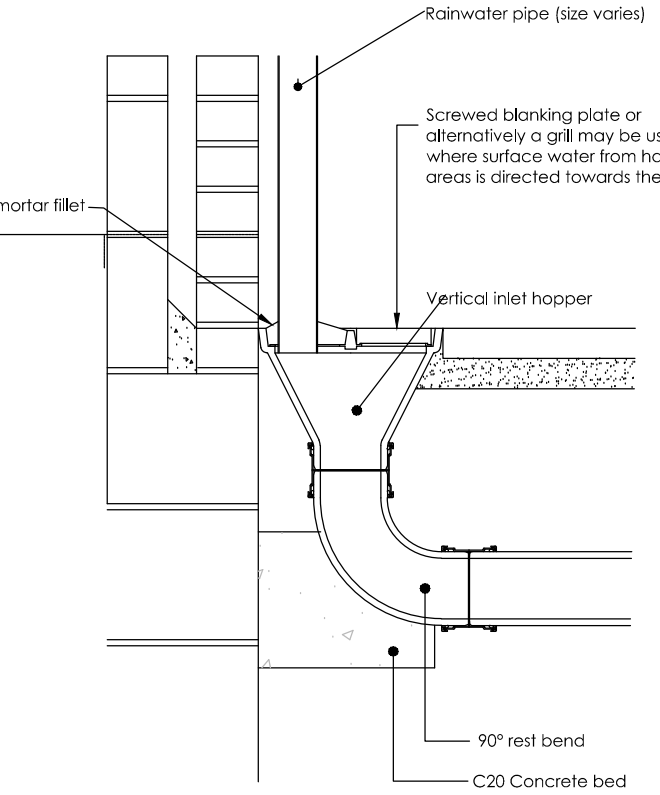


NOTE: In accordance with building regulation H1, clearance of blockages, table 11. Should the depth of the chamber from invert level, to the top top of the specified cover exceed 1.2 meters, a restricted access cover no greater than 350, must be used for health and safety reasons to defer entry.

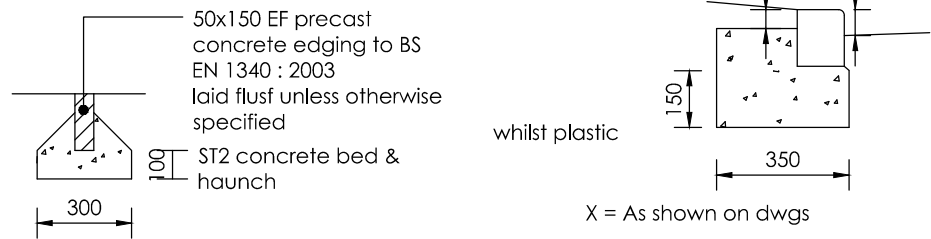
SUDS02005 - CONTROFLOW 500 SERIES UNIVERSAL



SILT-TRAP/CATCHPIT MANHOLE DETAIL



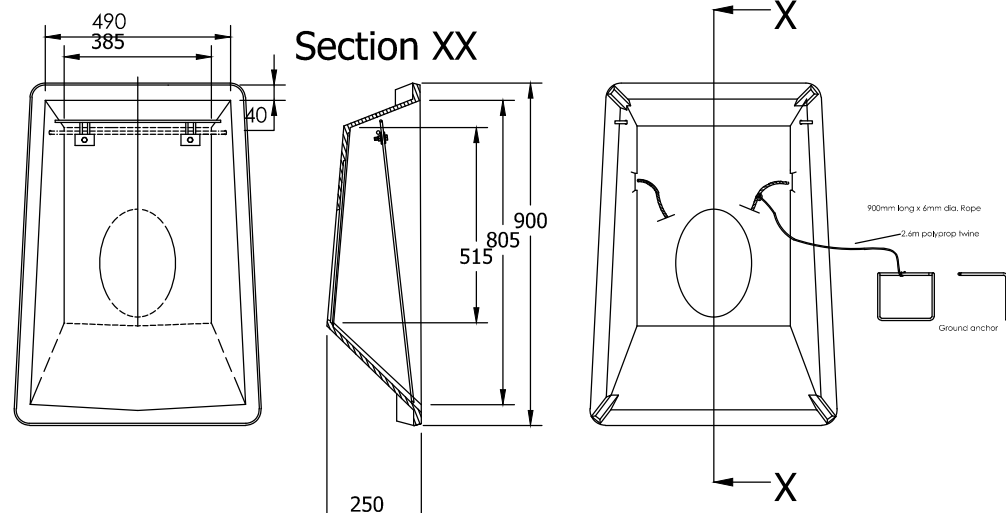
RAIN WATER PIPE WITH RODDING ACCESS



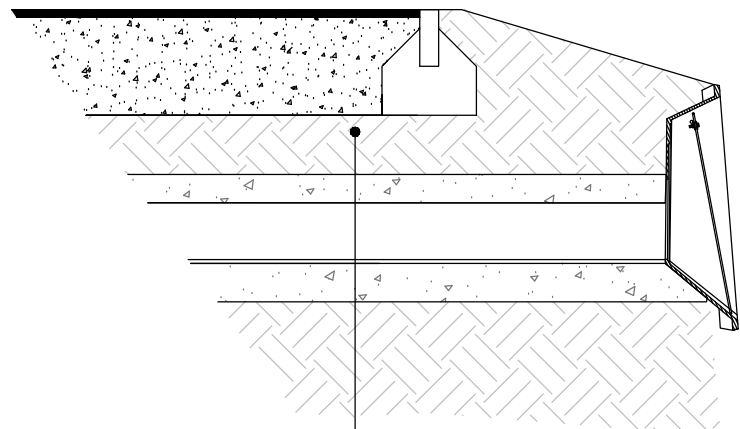
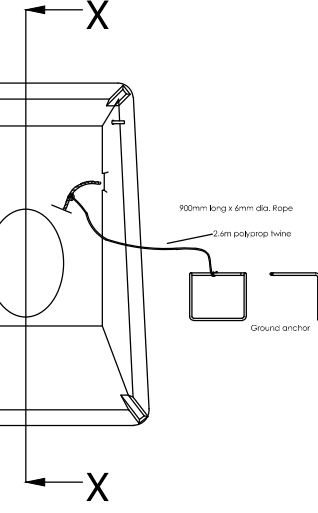
50x150 EF PATH EDGING

BN KERB CONSTRUCTION

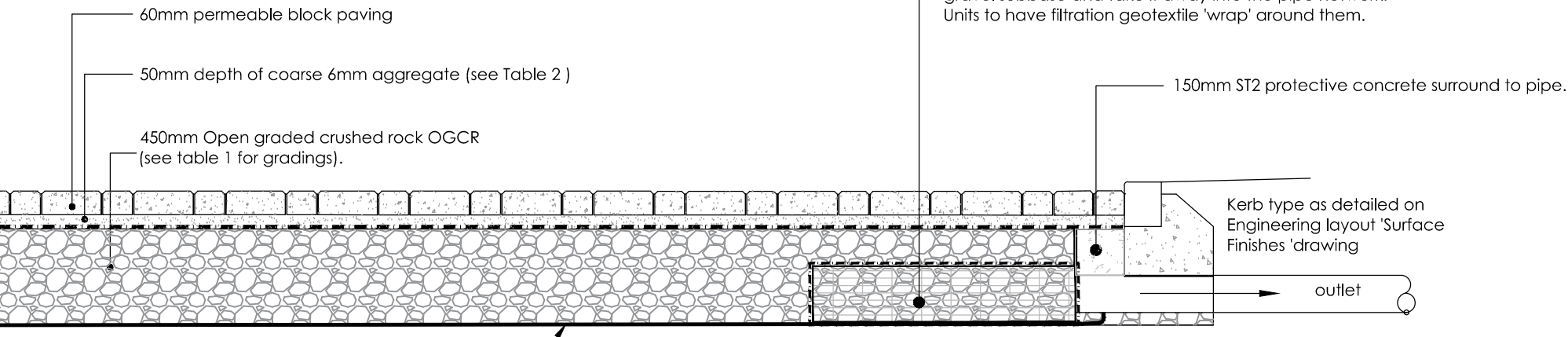
SPILLWAY HEADWALL
GPLARGE G (Drainage outfall)



HEADWALL



HEADWALL



Sieve size mm	Percentage by mass passing % 4/20	single sized aggregate SIEVE SIZE (mm)	Percentage by mass passing %
80	-	14mm	100
63	-	10mm	98-100
40	100	6.3mm	80-99
31.5	98 - 100	2mm	0-25
20	90 - 99	1mm	0-5
10	25 - 70	0.63mm	0-2
4	0 - 15		
2.8	0 - 5		

Grading for sub-base material for permeable paving pavements (BS EN 12620:2002 Gc 4/20 coarse aggregate)

* (BS EN 12620:2002 fines category f2)
Grading for laying course material for permeable paving (BS EN 12620:2002 Gc 80/20 2/6.3 coarse aggregate)

TABLE 1

TABLE 2

PERMEABLE PAVING DIVEWAY

NOTES

- All dimensions and levels are in metres unless otherwise noted
- This drawing is to be read in conjunction with the relevant Architect's/Engineer's drawings, specifications and CDM documentation
- This drawing has been produced electronically and may have been photo reduced or enlarged when copied. Work to figured dimensions only (DO NOT SCALE - EXCEPT FOR PLANNING PURPOSES). All dimensions to be checked on site. Any errors or omissions to be reported to the engineer immediately.
- This drawing contains coloured lines / information that may not be clear if reproduced in black and white.
- Digital copies of this plan can only be considered accurate if supplied directly by Infrastruct CS Ltd.

P01	NJ	MBD	Initial Issue	21/01/25
REV	DRAWN	CHECK	REVISION COMMENTS	ISSUE DATE
DRAWING TITLE				SHEET NO.
Typical Construction Details				1/1
PROJECT				
Oakview Mill Lane, Sindlesham Wokingham, RG41 5DF				
CLIENT				
MGI Architecture Ltd			Infrastruct CS Ltd	
SCALE @ A1 Not To Scale				ENGINEER MBD
PROJECT NUMBER 6277				DRAFT NJ
STATUS S2				APPROVED A.J.G
ISSUE PURPOSE INFORMATION				
PROJECT	ORIGIN	PHASE	LEVEL	TYPE
OAKV	ICS	01	XX	DR
				ROLE
				NO.
				REVISION
				P01