



PERMEABLE PAVED AREAS
TO BE SELF DRAINING.

UPPER SUMP AREA TO BE USED
FOR STORAGE WITH FORMALIN
LEVEL GRADED AT 1 IN 1000
TOWARDS LOWER SUMP

PERFORATED PIPE TO BE LAID
WITHIN LOWER SUMP TO COLLECT
FLOWS FROM
DRAINAGE LAYER OF PERMEABLE
PAVING AND CONVEY THEM
TOWARDS CHAMBER S1

FORMATION LEVEL OF PERMEABLE PAVING TO BE LAID PARALLEL WITH PROPOSED GROUND LEVEL CONVEYING SURFACE WATER TO UPPER SUMP AREA AND GRADED AT 1 IN 1 TO FORMATION LEVEL OF UPPER SUMP AREA

PROPOSED COMBINED MANHOLE ON
EXISTING RUN TO CONTAIN
NON-RETURN VALVE TO PREVENT
COMBINED FLOWS FROM
SURCHARGING AND ENTERING
PROPOSED SUDS FEATURES

FOR DRAINAGE DETAILS AND
SECTIONS, PLEASE REFER TO
DRG. 21417_501_r02.

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
3. DO NOT SCALE FROM THE DRAWING. USE FIGURED DIMENSIONS ONLY.
4. ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY TO THE ENGINEER.
5. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SUBCONTRACTORS AND SPECIALISTS DRAWINGS AND SPECIFICATIONS.
6. EXISTING SERVICES HAVE NOT BEEN SHOWN BUT ARE PRESENT - THE CONTRACTOR IS TO LIAISE WITH ALL STATUTORY AUTHORITIES PRIOR TO THE COMMENCEMENT OF ANY WORKS.

- 1000 @ 1:40 PROPOSED COMBINED WATER DRAINAGE
- 1500 @ 1:150 PROPOSED SURFACE WATER DRAINAGE
- EXISTING COMBINED DRAINAGE
- EXISTING SURFACE WATER DRAINAGE
- +11.300 PROPOSED SPOT LEVEL
- +6.9/2 EXISTING SPOT LEVEL
- +10.280 DRAINAGE FORMATION LEVEL
- PERFORATED PIPE
- FLOW CONTROL CHAMBER
- AREA OF SUBBASE UTILIZED FOR STORAGE
- PERMEABLE PAVING
- SAB BOUNDARY

1. MH COVERS AND FRAMES TO CONFORM TO BS EN 124:- -HIGHWAYS AND FOOTWAYS TO FRONT OF BUILDINGS (D400) -FOOTWAYS TO REAR OF BUILDINGS (C250) 2. TYPE S BEDDING AND SURROUND TO ALL PIPES EXCEPT IN THE FOLLOWING CIRCUMSTANCES, IN WHICH TYPE Z BEDDING AND SURROUND ARE TO BE USED. -DOMESTIC GARAGES AND PATHWAYS WITHOUT ANY POSSIBILITY OF VEHICULAR ACCESS, 0.35m; -DOMESTIC DRIVEWAYS, PARKING AREAS AND YARDS WITH HEIGHT RESTRICTIONS TO PREVENT ENTRY BY VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.5m; -DOMESTIC DRIVEWAYS, PARKING AREAS AND NARROW STREETS WITHOUT FOOTWAYS (E.G. MEWS DEVELOPMENT) WITH LIMITED ACCESS FOR VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.9m; -AGRICULTURAL LAND AND PUBLIC OPEN SPACE, 0.9m; -HIGHWAYS AND PARKING AREAS WITH UNRESTRICTED ACCESS TO VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 1.2m. 3. ALL EXISTING MANHOLE INVERTS TO BE CHECKED AND REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF DRAINAGE WORKS. EXISTING PIPE CONNECTIONS ARE TO BE CCTV SURVEYED AND INSPECTED BY THE ENGINEER AND LOCAL AUTHORITY. IF THE PIPE CONNECTION IS FOUND TO BE DAMAGED OR IN DUBIOUS, THE CONTRACTOR IS TO CARRY OUT REMEDIAL WORKS OR PROVIDE A NEW CONNECTION TO THE EXISTING SEWER PIPE SIZE AND GRADIENT TO BE DETERMINED BY THE ENGINEER. 4. THE GRADIENTS INDICATED AGAINST THE DRAIN RUNS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL INSTALL DRAINS TO THE INVERT LEVELS SHOWN FOR EACH MANHOLE OR OTHER INDICATED POSITION. 5. ALL PLOT FOUL DRAINAGE TO BE MINIMUM 100mm DIAMETER UNLESS OTHERWISE NOTED. 6. ALL ADAPTABLE THERMOPLASTIC STRUCTURED WALL SEWER PIPE SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 13476-1 AND WIS 4-35-01 AND BS EN 13476-2 OR BS EN 13476-3. PIPES SHALL BE BSI KITEMARKED OR HAVE EQUIVALENT THIRD PARTY CERTIFICATION. PIPES LESS THAN OR EQUAL TO 500mm DIA. SHALL HAVE A SHORT-TERM RING STIFFNESS OF NOT LESS THAN 9kN/m² (SN8). 7. ALL JOINTING IN ACCORDANCE WITH MANUFACTURERS TECHNICAL ADVICE & SPECIFICATION. 8. ALL NON ADAPTABLE DRAINAGE TO BE THE STANDARD UPVC 110mm, 160mm DRAINAGE AND MANUFACTURED TO BS-EN 1401 AND BS 4660 UNLESS NOTED OTHERWISE. 9. ALL PERMEABLE PAVING CELLS TO HOUSE LATERAL FIN DRAIN ALONGS LOWER EDGE WITH 1500c CONNECTION PIPE. 10. ALL STORM WATER DRAINAGE TO BE A MINIMUM OF 150mm DIAMETER UNLESS OTHERWISE NOTED. 11. SOIL & VENT PIPE LOCATION AND NUMBER TO BE CONFIRMED WITH ARCHITECT. 12. THIS DRAWING TO BE USED IN CONJUNCTION WITH ALL RELEVANT ENGINEERS DRAWINGS, TOGETHER WITH THEIR LATEST SPECIFICATIONS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER (VALE CONSULTANCY) AS SOON AS POSSIBLE. 13. FIGURED DIMENSIONS ONLY TO BE USED. ANY QUERIES OR DISCREPANCIES TO BE REFERRED TO THE ENGINEER (VALE CONSULTANCY) IMMEDIATELY. 14. PRIOR TO ORDERING ANY MATERIALS THE CONTRACTOR IS TO CONFIRM MANUFACTURER/PIPE MATERIAL AND GRADE PROPOSED WITH WATER AUTHORITY. 15. TEMPORARY WORKS DESIGN BY OTHERS. 16. DESIGN RISK ASSESSMENTS AND METHOD STATEMENTS ARE TO BE PROVIDED TO THE PRINCIPLE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY WORKS.	
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DRAWING STATUS
A - Approval, AB - As-Built, C - Construction, D - Draft, P - Preliminary, T - Tender