

1. ALL WORKS FOR ADOPTION UNDER A SECTION 104 AGREEMENT SHALL BE CARRIED OUT TO THE NATIONAL WATER COUNCIL GUIDE "SEWERS FOR ADOPTION" 7TH EDITION AND THE REQUIREMENTS OF DWR CYMRU WELSH WATER AS THE STATUTORY SEWERAGE UNDERTAKER AND THE WELSH MINISTERS BUILD STANDARD.
2. A SECTION 106 APPLICATION TO CONNECT MUST BE MADE TO DCNW, THE DEVELOPER SHALL GIVE 21 DAYS NOTICE PRIOR TO CONNECTION, THE WORKS MUST BE UNDERTAKEN BY A DCNW HEALTH & SAFETY APPROVED CONTRACTOR.
3. AN ACCREDITED CONTRACTOR BY THE BRITISH PLASTICS FEDERATION WILL BE USED TO LAY ANY ADAPTABLE PLASTICS PIPES, A COPY OF THE ACCREDITATION CERTIFICATE TO BE SUPPLY TO DCNW BEFORE ANY ORDER IS PLACED OR WORK COMMENCES ON SITE.

1. THE PLANNING, DESIGN AND CONSTRUCTION OF SEWERS SHALL BE IN ACCORDANCE WITH SEWERS FOR ADDITION 7TH EDITION.
2. THE MINIMUM SIZE OF SEWER WHERE GUIDE BARS, SAFETY CHAINS, OR OTHER SAFETY DEVICES ARE REQUIRED IN MANHOLES SHALL BE 375mm DIAMETER.
3. ALL TYPE 1 AND 2 MANHOLES SHOULD HAVE A CONCRETE SURROUND. CONCRETE RINGS SHALL BE SEALED USING "TACKSTRIP" AND LIFTING EYES POINTED WITH RESIN MODIFIED MORTAR.
4. COMPLIANCE WITH HEALTH AND SAFETY MATTERS ON ANY TRENCH/MANHOLE IS OBLIGATORY AND A PERMIT TO ENTER A CONFINED SPACE IS REQUIRED WHEN CONSIDERING THE DRAINAGE TO THE EXISTING PUBLIC SEWERAGE SYSTEM. A PERMIT TO ENTER A CONFINED SPACE MUST BE OBTAINED FROM DOW PRIOR TO WORKS COMMENCING ON ANY PUBLIC SEWERAGE SYSTEM.

6. MH COVERS AND FRAMES SHALL BE DUCTILE IRON WITH A MINIMUM SQUARE OPENING OF 675x675mm. COVERS SHALL BE DOUBLE TRIANGLE FOR 675mm SQUARE OPENINGS AND BE PROVIDED WITH LOOSE BOLTED CONNECTIONS. TYPICALLY FRAMES ARE 150mm DEEP BUT IN ALL CASES THE FRAMES SHALL COMPLY WITH SFA7.

8. ALL IRONWORK TO BE KITE MARKED BY BSI OR CERTIFIED BY EQUAL INSPECTION AUTHORITY.

9. RED COLOURED PLASTIC MARKER TAPE AT LEAST 150mm WIDE SHALL BE LAID A MINIMUM OF 200mm ABOVE THE SOFFIT OF THE PIPE. THE TAPE SHALL BE

10. ALL WORKS TO BE ADOPTED UNDER THE SECTION 104 AGREEMENT SHALL BE INSPECTED BY DOWW IN ACCORDANCE WITH THEIR REQUIREMENTS (FOUL AND SURFACE WATER SEWERS)

12. REFER TO LONGITUDINAL SECTIONS FOR DETAILS OF PIPE SIZES, INVERT LEVELS, BEDDING, ETC.

• POLYSEWER TWINWALL SYSTEM
PLASTIC PIPES APPROVAL BY DCWW FOR LARGER DIAMETER GRAVITY SEWERS ARE:
• POLYPIPE – RIGISEWER (400mm-600mm)
• POLYPIPE – RIDGISTORM XL (750mm-900mm)
ANY PROPOSED CHANGES TO THE MATERIAL MUST BE AUTHORISED BY DCWW.

15. FOUL WATER MANHOLES TO BE BADGED "FW". SURFACE WATER MANHOLES TO BE BADGED "SW"

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PROJECT: **WDL Home**

Sheet 4 of 4

DRAWN:	CHK:	STATUS:	SCALE:
MP	SJD	Approval	NTS @ A

Years 2020	2021	2022	2023
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Technical drawing showing a cross-section of a concrete bed and surrounding dish channel block. The drawing includes the following labels and dimensions:

- 100mm Concrete Bed and surrounding dish channel block** (indicated by a dashed line and arrow)
- 255x125 Dished Channel Block** (indicated by a dashed line and arrow)
- RWP discharge to Porous Surface** (indicated by a dashed line and arrow)
- Channel & routed to Porous Surface** (indicated by a dashed line and arrow)
- 350** (vertical dimension)
- 900** (horizontal dimension)

Typical Depth = 0.25m

1 in 200 min Longitudinal fall towards outlet

Rounded shoulders for mowing

400mm Topsoil

Infiltration membrane

Gently sloping sides Max. 1:3

Base to encourage sheet flow run-off

Small Baffles to be provided to aid retention of surface water to aid removal of silts.

Vegetation to match existing species and suit wet/dry design

Subsoil

50

LOCKABLE GULLY COVER

CHAMBER - WITH 300 mm SUMP/SILT TRAP

INLET PIPE OPTIONAL - SUBJECT TO STRUCTURE TYPE

OUTLET 1500 PIPE

100mm CONCRETE BEDDING

This diagram illustrates the vertical structure of a permeable pavement system. From top to bottom, the layers are:

- Vegetation to match existing species and suit wet/dry design:** Grass growing on the surface.
- Footpath / Edging detail to be confirmed:** A concrete curb on the right side.
- Carriageway:** The main paved area, shown with a variable upstand kerb (HB2/TK/BN) on the left.
- Filter Medium:** A layer of material directly beneath the carriageway.
- Permeable Geotextile membrane:** A layer separating the filter medium from the transition layer.
- Overflow / cleaning access to perforated pipe(s):** A vertical access point for maintenance.
- Transition Layer (OR Geotextile):** A layer below the permeable geotextile.
- Drainage Layer:** A layer below the transition layer.
- Perforated Pipe to Distribute SW:** A pipe at the bottom of the drainage layer.

Diagram illustrating the connection of a pipe to a manhole. The diagram shows a cross-section of a manhole structure. An incoming pipe is connected to the manhole, and a perforated pipe is shown extending from the manhole to disperse surface water. Labels indicate the incoming pipe connection and the purpose of the perforated pipe.

INCOMING PIPE
CONNECTED TO
ADJACENT MANHOLE. FOR
DIAMETER - PLEASE REFER
TO ENGINEERING PLAN

PERFORATED PIPE TO
DISPERSE SURFACE
WATER

Diagram illustrating the cross-section of a road pavement structure, showing three distinct layers:

- SURFACE COURSE** - 15mm THICK AC6 DENSE SURF 100/150 TO EN13108-1
- BINDER COURSE** - 50mm THICK OF AC20 DENSE B100/150 REC. EN13108-1 PD 6691 TABLE B11
- SUB-BASE** - 225mm THICK CLAUSE 803 TYPE 1 UNBOUND MIXTURE

The diagram shows a vertical section of the pavement structure, with a circular feature (likely a manhole or drainage) visible in the sub-base layer.

Inlet - The inlet design is critical and should be designed to prevent scour and erosion and to evenly distribute water onto the filter surface.

Vegetation - Vegetation influences the performance of the system through direct uptake of pollutants and by facilitating physical and chemical processes in the soil that remove nutrients. It also prevents erosion of the surface soil layers and helps maintain the permeability of the filter medium. Vegetation can have a strong influence on the amenity and bio diversity value of the system. Vegetation selection is very site specific and requires the input of landscape architects, ecologists or horticultural experts.

Transition Layer - This is required to prevent the washing of fines from the filter medium into the drainage layer. To achieve this it should be at least 100mm deep and should be designed using standard geotechnical filter criteria (Chapter 30 - CIRIA SuDS Manual). Alternatively a Geotextile membrane can be used.

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AMENDMENTS				

CLIENT:



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DRAWING TITLE:

SAB Construction Details
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