



- Notes**
- This Drawing is to be read in conjunction with all relevant TRP Architects, Service Engineers and Subcontractor drawings.
  - Review all drawings and report any discrepancies to TRP Consulting prior to commencement.
  - Do not scale from this drawing. All dimensions and levels including any abutment to existing structures to be checked on site prior to commencement.
  - Work from figured dimensions only.
  - No deviation from details shown on this drawing is allowed without TRP Consulting's prior permission in writing.
  - All work is to be carried out in accordance with the relevant specifications issued by TRP Consulting, British Standard Codes of Practice, Statutory requirements and the Contract Documents.

- Drainage Notes**
- All drainage to be installed in accordance with the requirements set out in BS 8301, BS 8005 and the Building Regulations UNO.
  - This drawing is to be read in accordance with TRP drainage detail drawings 67242-D410, D411 & D412.
  - For details of materials and workmanship refer to the specification (R12).
  - The manhole cover levels shown on the drawing are approximate. Final cover levels are to be adjusted to suit finished paving levels and are to be confirmed with architect prior to construction.
  - The contractor is responsible for checking invert levels and positions of all existing drains, sewers, inspection chambers and manholes shown on this drawing immediately on site establishment. Any discrepancies must be reported immediately.
  - Where the new site drainage is to connect into the existing manholes in carriageways and/or existing adopted sewers, the contractor is responsible for all liaison with the relevant statutory undertaker and local authority with regard to road closures, traffic management, permits to work, submission of contractors method statement and risk assessment and other documentation and correspondence associated with the site stage (part 2) element of the works.
  - Rocker pipes to be provided at all concrete cased interfaces.
  - Maintain adequate protection to drains by providing a minimum cover during the construction period.
  - The falls shown on pipe runs are indicative and pipes are to be installed to the invert levels shown on the manhole schedule.
  - All pipes are to be laid with soffits level unless noted otherwise.
  - All pipework to be installed with soffit level (e.g. at changes in pipe size) UNO.
  - Surface channel drains to be acco multidrain or similar approved.
  - Pipe gradients are indicative minimums.
  - All sump units to linear drainage channels to be fitted with foul air traps.
  - All surface water gullies to be trapped.
  - All surface water connections to be 150mm diameter at min falls of 1:100 UNO.
  - All foul water connections to be min 100mm diameter at min falls of 1:40 UNO.
  - All drains to be set out to give a minimum clearance of 1.0m to kerb lines.
  - All pipes from 100-300mm diameter to be Hepworth SuperSleeve or equivalent.
  - All pipes above 300mm diameter to be precast concrete to BS 5911-1 Class 120.
  - All covers and rodding access points to be sealed and screwed tight.
  - All gullies to be precast concrete to BS 5911-230.
  - Setting out of all internal gully/plumbing connections to be co-ordinated between the service engineers and the architect.
  - Internal gullies, plumbing connections, soil stacks, SVPS and all other connections of foul and surface water drains to below ground to be fitted with accessible rodding points above slab level.
  - Gully gratings to be Grade D400.
  - Drainage channels in car parks to be fitted with Heelgard ductile iron gratings Grade C250.
  - Upon completion of drainage works, the new drainage system is to be thoroughly cleaned and a CCTV survey performed to confirm no construction debris or blockages remain.
  - All private drainage is to comply with BS EN 752 and Building Regulations Part H.

**LEGEND**

	SW	DENOTES PROPOSED SURFACE WATER DRAIN
	FW	DENOTES PROPOSED FOUL WATER DRAIN
	SW	DENOTES EXISTING SURFACE WATER DRAIN
	FW	DENOTES EXISTING FOUL WATER DRAIN
		DENOTES SERVICES TO BE ABANDONED
	RWP	RAINWATER PIPE
	SRWP	SYPHONIC RAINWATER PIPE
	EG	EXISTING GULLY

Manhole Name	Cover Level (m)	MH Depth (m)	Manhole Connection	Manhole Diam., L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Pipes In Backdrop (mm)
SW1	72.390	0.990	Open Manhole	900	S1.000	71.540	225				
SW3	72.390	1.090	Open Manhole	900	S1.001	71.290	225	S1.000	71.290	225	
SW4	72.835	1.881	Open Manhole	1200	S1.002	70.954	150	S1.002	70.954	150	
Ex MHS8	72.860	2.010	Existing Manhole		OUTFALL	70.850		S1.005	70.850	150	
SW5	72.570	1.570	Open Manhole	1200	Ex 450dia	71.000	450				
SW6	72.890	1.671	Open Manhole	1200	S3.000	71.219	150				

Manhole Name	Cover Level (m)	MH Depth (m)	Manhole Connection	Manhole Diam., L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Pipes In Backdrop (mm)
FW1	72.570	1.058	Open Manhole	1050	F1.000	71.512	150				
FW2	72.560	1.142	Open Manhole	1050	F1.001	71.418	150	F1.000	71.418		
FW3	72.860	1.352	Open Manhole	1200	F1.002	71.508	150	F1.001	71.508	150	
								F2.000	71.508	150	
FW4	72.600	1.408	Open Manhole	1200	F1.003	71.192	150	F1.002	71.192	150	
FW5	72.890	1.036	Open Manhole	1200	F2.000	71.854	150				
Ex FMH	72.750	1.650	Existing Manhole	1200	OUTFALL	71.100	150	F1.003	71.100	150	

- Manholes**
- All manholes to be precast concrete to BS 5911-3.
  - Manhole covers in roads and hard paved areas to be Grade D400 double triangle.
  - All internal manhole covers to be double sealed, lockable and recessed to accept floor finishes where applicable.
  - Internal diameters of manholes to be 1050mm dia. where depth to pipe soffit is less than 1.5m, and 1200mm dia. elsewhere unless noted otherwise. IC - denotes polypropylene inspection chamber by Hepworth or similar approved installed in accordance with the manufacturers recommendations.
- Manhole Covers**
- Carriageways General - EN124 Class D400.
  - Carriageways within 0.5m of kerb - EN124 Class C250.
  - Slow Moving HGV (38t) - EN124 Class B125, Slowing moving GLV (10t) - EN123 Class B125, Slow moving private cars - EN124 class B125.
  - Internal - Jones of Oswestry - Suprastee double sealed with neoprene gasket and cover grease or similar approved.
  - Refer to architects drawing for details of any manhole covers which require inset panels.

Rev.	P06	FWS Added Description	31-07-25 / AP Date By
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Project: 1 Shed Press Extension

Client: BAE

Drawing Title: Drainage GA

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Structural Environmental Civil  
Environmental Civil Structural

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Ref	Project No	Drawn By	Checked	Date	Scale	Sheet
	7274	AP	TR	02/25	1:200	A1

Status	Description	Revision
D2	Issue for Tender	P06

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