

S104 Surface Water Adoptable Manhole Schedule										
MH Ref.	Cover Level	Invert Level	Pipe Dia. (mm)	Depth to Soffit (m)	MH Type	MH Size (mm)	Frame	Cover	Easting (m)	Northing (m)
HW1		1.863	-	-	-	-	-	-	537238.247	324706.898
HW2		1.863	-	-	-	-	-	-	537238.173	324674.861
HW3		1.803	-	-	-	-	-	-	537247.131	324655.752
S1	3.632	2.665	300	0.667	D	Ø600	150X600X600	D400	537356.036	324859.711
S2	3.604	2.633	300	0.671	D	Ø600	150X600X600	D400	537348.341	324868.154
S3	3.598	2.607	300	0.691	D	Ø600	150X600X600	D400	537359.501	324867.452
S4	3.878	2.581	300	0.997	D	Ø600	150X600X600	D400	537333.225	324860.835
S5	3.846	2.520	300	1.026	C	Ø1350	150X685X1220	D400	537311.760	324859.455
S6	3.794	2.425	300	1.069	D	Ø600	150X600X600	D400	537278.632	324857.050
S9	3.839	2.204	450	1.185	C	Ø1350	150X685X1220	D400	537263.665	324865.983
S10	4.075	2.181	450	1.444	C	Ø1350	150X685X1220	D400	537256.767	324859.484
S11	4.031	2.133	450	1.448	C	Ø1350	150X685X1220	D400	537243.286	324839.060
S12	3.834	2.100	450	1.284	C	Ø1350	150X685X1220	D400	537244.396	324822.774
S13	3.688	2.077	450	1.161	C	Ø1350	150X685X1220	D400	537244.207	324810.940
S14	3.669	2.941	300	0.428	C	Ø1350	150X685X1220	D400	537329.827	324820.602
S15	4.144	2.877	300	0.967	C	Ø1350	150X685X1220	D400	537332.522	324780.841
S16	3.997	2.828	300	0.869	C	Ø1350	150X685X1220	D400	537331.574	324792.847
S17	3.676	2.773	300	0.603	C	Ø1350	150X685X1220	D400	537311.034	324790.305
S18	3.404	2.739	300	0.365	D	Ø600	150X600X600	D400	537298.700	324786.917
S19	3.385	2.563	450	0.372	C	Ø1500	150X885X1220	D400	537289.065	324785.496
S20	3.608	2.545	450	0.613	C	Ø1500	150X685X1220	D400	537279.291	324785.184
S20A	3.881	2.500	450	0.931	C	Ø1350	150X685X1220	D400	537254.338	324786.893
S21	3.574	2.035	450	1.089	C	Ø1500	150X885X1220	D400	537242.354	324787.817
S22	4.299	2.694	300	1.305	D	Ø600	150X600X600	D400	537368.969	324725.479
S23	4.094	2.630	300	1.164	D	Ø600	150X600X600	D400	537362.861	324715.959
S24	4.094	2.494	300	1.300	D	Ø600	150X600X600	D400	537354.716	324715.403
S25	4.106	2.360	300	1.446	D	Ø600	150X600X600	D400	537347.920	324723.713
S26	3.666	2.182	300	1.484	C	Ø1350	150X685X1220	D400	537276.799	324718.758
S27	3.736	2.152	300	1.284	D	Ø600	150X600X600	D400	537265.008	324719.230
S28	4.000	1.908	450	1.642	B	Ø1500	150X600X600	D400	537242.486	324724.595
S29+	3.500	1.344	375	1.656	Flow Control	Ø2700	150X600X600	D400	537242.804	324668.416

+ Denotes Flow Control Chamber with 500mm deep sump

S104 Foul Adoptable Manhole Schedule										
MH Ref.	Cover Level	Invert Level	Pipe Dia. (mm)	Depth to Soffit (m)	MH Type	MH Size (mm)	Frame	Cover	Easting (m)	Northing (m)
F1	3.896	2.586	150	1.160	C	Ø1350	D400	150X685X1220	537324.073	324797.349
F2	3.669	2.336	150	1.213	C	Ø1350	D400	150X685X1220	537291.108	324789.701
F3	3.838	2.005	150	1.683	B	Ø1200	D400	150X600X600	537246.521	324792.707
F4	4.199	1.732	150	2.317	B	Ø1200	D400	150X600X600	537247.960	324829.539
F5	4.357	1.622	150	2.585	B	Ø1200	D400	150X600X600	537246.939	324844.342
F6	4.402	1.543	150	2.709	B	Ø1200	D400	150X600X600	537252.984	324853.143
F7	3.966	2.122	150	1.694	B	Ø1200	D400	150X600X600	537353.360	324855.023
F8	4.077	1.742	150	2.185	B	Ø1200	D400	150X600X600	537302.138	324854.247
F9	4.040	1.587	150	2.303	B	Ø1200	D400	150X600X600	537261.841	324848.932
F10	4.243	1.438	150	2.655	B	Ø1200	D400	150X600X600	537265.210	324860.092
F11	4.073	1.374	150	2.549	B	Ø1200	D400	150X600X600	537268.410	324868.227
F12	3.336	0.992	150	2.194	B	Ø1200	D400	150X600X600	537269.048	324919.766
F13	3.531	0.892	150	2.489	B	Ø1200	D400	150X600X600	537264.897	324929.989

S104 Surface Water Adoptable Pipe Schedule										
Pipe Ref.	Upstream IL	Downstream IL	Diameter (mm)	Distance (m)	Fall (m)	Pipe Gradient 1:X	Pipe Gradient %	Pipe Material	Pipe Bedding	
HW2 - S29	1.863	1.844	450	7.936	0.019	1:410.0	0.244%	Solid Plastic	Class S	
S1 - S2	2.665	2.633	300	11.424	0.033	1:350.0	0.286%	Perforated Plastic	Class S	
S2 - S3	2.633	2.607	300	8.869	0.025	1:350.0	0.286%	Perforated Plastic	Class S	
S3 - S4	2.607	2.581	300	9.120	0.026	1:350.0	0.286%	Perforated Plastic	Class S	
S4 - S5	2.581	2.520	300	21.509	0.061	1:350.0	0.286%	Perforated Plastic	Class S	
S5 - S6	2.520	2.425	300	33.315	0.098	1:351.5	0.285%	Perforated Plastic	Class S	
S6 - S9	2.425	2.354	300	17.344	0.068	1:245.0	0.408%	Perforated / Solid Plastic	Class S	
S9 - S10	2.204	2.181	450	9.477	0.023	1:410.0	0.244%	Perforated / Solid Plastic	Class S	
S10 - S11	2.181	2.133	450	26.600	0.048	1:555.5	0.180%	Perforated / Solid Plastic	Class S	
S11 - S12	2.133	2.100	450	16.324	0.033	1:500.0	0.200%	Perforated / Solid Plastic	Class S	
S12 - S13	2.100	2.077	450	11.836	0.024	1:500.0	0.200%	Perforated / Solid Plastic	Class S + CS	
S13 - S21	2.077	2.035	450	23.197	0.042	1:555.0	0.180%	Perforated / Solid Plastic	Class S + CS	
S14 - S16	2.941	2.828	300	27.811	0.114	1:245.0	0.408%	Perforated / Solid Plastic	Class S + CS	
S15 - S16	2.877	2.828	300	12.043	0.049	1:245.0	0.408%	Perforated / Solid Plastic	Class S + CS	
S16 - S17	2.828	2.773	300	20.697	0.055	1:375.0	0.267%	Perforated / Solid Plastic	Class S + CS	
S17 - S18	2.773	2.739	300	12.791	0.034	1:375.1	0.267%	Perforated / Solid Plastic	Class S + CS	
S18 - S19	2.739	2.713	300	9.739	0.026	1:375.9	0.266%	Perforated / Solid Plastic	Class S + CS	
S19 - S20	2.563	2.545	450	9.779	0.018	1:555.0	0.180%	Perforated / Solid Plastic	Class S + CS	
S20 - S20A	2.545	2.500	450	25.011	0.045	1:555.0	0.180%	Perforated / Solid Plastic	Class S + CS	
S20A - S21	2.500	2.035	450	12.020	0.465	1:25.9	3.868%	Perforated / Solid Plastic	Class S + CS	
S21 - S28	2.035	1.908	450	63.510	0.127	1:502.0	0.199%	Perforated / Solid Plastic	Class S	
S22 - S23	2.694	2.630	300	11.310	0.064	1:177.4	0.564%	Perforated Plastic	Class S	
S23 - S24	2.630	2.494	300	8.164	0.136	1:60.0	1.667%	Perforated Plastic	Class S	
S24 - S25	2.494	2.360	300	10.735	0.134	1:80.0	1.250%	Perforated Plastic	Class S	
S25 - S26	2.360	2.182	300	71.293	0.178	1:400.0	0.250%	Perforated / Solid Plastic	Class S	
S26 - S27	2.182	2.152	300	11.860	0.030	1:400.0	0.250%	Perforated Plastic	Class S	
S27 - S28	2.152	2.058	300	23.153	0.095	1:245.0	0.408%	Perforated / Solid Plastic	Class S	
S28 - HW1	1.908	1.863	450	18.198	0.044	1:410.0	0.244%	Perforated / Solid Plastic	Class S	
S29+ - HW3	1.844	1.803	375	13.383	0.041	1:325.0	0.308%	Perforated / Solid Plastic	Class S	

CS - Denotes concrete slab protection outside of Suds

S104 Foul Adoptable Pipe Schedule										
Pipe Ref.	Upstream IL	Downstream IL	Diameter (mm)	Distance (m)	Fall (m)	Pipe Gradient 1:X	Pipe Gradient %	Pipe Material	Pipe Bedding	
F1 - F2	2.586	2.336	150	33.840	0.251	1:135.0	0.741%	Plastic	Class S + CS	
F2 - F3	2.336	2.005	150	44.688	0.331	1:135.0	0.741%	Plastic	Class S	
F3 - F4	2.005	1.732	150	36.860	0.273	1:135.0	0.741%	Plastic	Class S	
F4 - F5	1.732	1.622	150	14.838	0.110	1:135.0	0.741%	Plastic	Class S	
F5 - F6	1.622	1.543	150	10.677	0.079	1:135.0	0.741%	Plastic	Class S	
F6 - F10	1.543	1.438	150	14.063	0.104	1:135.0	0.741%	Plastic	Class S	
F7 - F8	2.122	1.742	150	51.228	0.379	1:135.0	0.741%	Plastic	Class S	
F8 - F9	1.742	1.587	150	20.982	0.155	1:135.0	0.741%	Plastic	Class S	
F9 - F10	1.587	1.438	150	20.028	0.148	1:135.0	0.741%	Plastic	Class S	
F10 - F11	1.438	1.374	150	8.741	0.065	1:135.0	0.741%	Plastic	Class S	
F11 - F12	1.374	0.992	150	51.543	0.382	1:135.0	0.741%	Plastic	Class S	
F12 - F13	0.992	0.910	150	11.034	0.082	1:135.0	0.741%	Plastic	Class S	

CS - Denotes concrete slab protection

S38 Surface Water Adoptable Manhole Schedule										
MH Ref.	Cover Level	Invert Level	Pipe Dia. (mm)	Depth to Soffit (m)	MH Type	MH Size (mm)	Frame	Cover	Easting (m)	Northing (m)
S7	3.048	2.473	300	0.275	IC	Ø600	600X600X150	D400	537265.503	324919.331
S8	3.484	2.397	300	0.787	IC	Ø600	600X600X150	D400	537263.805	324885.076

IC-Denotes Plastic Inspection Chamber for use in Features Suds Only

S38 Surface Water Adoptable Pipe Schedule										
Pipe Ref.	Upstream IL	Downstream IL	Diameter (mm)	Distance (m)	Fall (m)	Pipe Gradient 1:X	Pipe Gradient %	Pipe Material	Pipe Bedding	
S7 - S8	2.473	2.397	300	34.298	0.076	1:450.9	0.222%	Perforated Plastic	Class S	
S8 - S9	2.397	2.354	300	19.093	0.042	1:450.0	0.222%	Perforated Plastic	Class S	

Note: All pipe lengths, slopes and gradient percentages are based on centre of chamber to centre of chamber. Drainage Contractor is responsible to check this information for construction purposes prior to any works

All connections to the adoptable sewers will be made at soffit to soffit level.

All plastic pipes to be HAPAS Certified.

Perforated pipes to be used beneath the swale only.

Anglian Water approved pipe materials:
High Strength HDPE
Clay / Perforated Clay (Suds Applications)
Concrete / Perforated Concrete (Suds Applications)

General Notes

- DO NOT SCALE.
- This drawing is to be read in conjunction with all other relevant drawings and details.
- Should there be any conflict between the details indicated on this drawing and those on other drawings the Engineer should be informed PRIOR to construction on site.
- Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the Contractor commence site work prior to such approval being given it is entirely at their own risk.
- Sketch proposals are for illustrative purposes only and as such are subject to detailed site investigation including ground conditions / contaminants, drainage, design and planning / density negotiations.
- All dimensions are in millimetres unless otherwise stated.
- The Farrow Walsh Consulting Designers Risk Assessments for this project must be reviewed PRIOR to the commencement of any works on site.

NOTES

- This drawing to be read in conjunction with all other relevant Engineers and Architect's details.
- All work is to be carried out in accordance with the current British Standards, codes of practice, building regulations and with Sewerage Guidance Approved Version 2.1 dated 25/05/21.
- The exact position, level, size and use of existing sewers to be confirmed on site. Any discrepancies to be reported to the engineer prior to commencement of works.
- All uncovered and shallow pipework to be protected against construction traffic as part of the contractors temporary works requirements.
- Cover levels shown are approximate only, subject to the Architect's external works and landscaping scheme.
- All connections to road gullies and channels shall be 150mm nominal bore pipework. Connections to RWP's to be 100mm nominal bore pipework subject to confirmation of RWP sizes and/or design flow. No pipe work to be downsized in the direction of flow.
- Connections to foul terminal fittings to be 100mm nominal bore pipework subject to confirmation of above ground pipe diameters and/or design flow. No pipe work to be downsized in the direction of flow.
- All pipework to be Plastic unless otherwise noted.
- All pipes connecting to adopted manholes up to and including 300mm dia. to be Wavin Ultram or Twinwall.
- All pipes connecting to adopted manholes greater than 300mm dia. to be Concrete.
- All pipework entering and exiting manholes to be connected with pipe soffits level.
<