Surface Water Manhole Schedule:

MH Ref:	Cover Level	Invert Level	MH Depth (m)	MH Material	MH Size (mm)	MH Cover
re1	3.550	3.100	0.450	Plastic	RE	A15
s1	3.550	3.000	0.550	Plastic	Ø450	A15
re2	3.550	3.003	0.547	Plastic	RE	A15
s2	3.550	2.903	0.647	Plastic	Ø450	A15
s3	3.550	2.796	0.754	Plastic	Ø450	B125
rd1	3.700	2.747	0.953	Plastic	RD	B125
re3	3.700	3.137	0.563	Plastic	RE	A15
s4	3.550	3.037	0.513	Plastic	Ø450	B125
s5	3.575	2.918	0.657	Plastic	Ø450	B125
re4	3.550	3.100	0.450	Plastic	RE	A15
s6	3.575	2.885	0.690	Plastic	Ø450	B125
rd2	3.700	2.747	0.953	Plastic	RD	B125
S1L*	3.700	2.277	1.423	Concrete	Ø1200	B125
S2L*	3.720	2.291	1.429	Concrete	Ø1200	B125
s7	3.650	2.997	0.653	Plastic	Ø450	A15
re7	3.650	3.200	0.450	Plastic	RE	A15
s8	3.650	2.875	0.775	Plastic	Ø450	B125
re8	3.750	3.300	0.450	Plastic	RE	A15
s9	3.750	2.679	1.071	Plastic	Ø450	A15
re9	3.750	2.978	0.772	Plastic	RE	A15
s10	3.750	2.877	0.873	Plastic	Ø450	A15
re10	3.750	3.300	0.450	Plastic	RE	A15
s11	3.750	2.754	0.996	Plastic	Ø450	A15
s12	3.750	2.662	1.088	Plastic	Ø450	B125
S5LA*	3.930	2.175	1.755	Concrete	Ø1200	B125
re12	3.650	3.200	0.450	Plastic	RE	A15
s14	3.650	2.973	0.677	Plastic	Ø450	A15
s15	3.750	2.941	0.809	Plastic	Ø450	A15
re13	3.750	3.300	0.450	Plastic	RE	A15
s16	3.750	3.210	0.540	Plastic	Ø450	B125
s17	3.750	2.855	0.895	Plastic	Ø450	B125
rd3	3.750	2.814	0.936	Plastic	RD	B125
re14	3.750	3.300	0.450	Plastic	RE	B125
s18	3.700	2.969	0.731	Plastic	Ø450	B125
re15	3.850	3.110	0.740	Plastic	RE	A15
s19	3.850	3.039	0.811	Plastic	Ø450	A15
s20	3.840	2.950	0.890	Plastic	Ø450	B125
re16	3.850	3.076	0.774	Plastic	RE	A15
s21	3.850	2.972	0.878	Plastic	Ø450	A15
s22	3.850	2.826	1.024	Plastic	Ø450	A15
rd4	3.840	2.814	1.026	Plastic	RD	B125
s23	3.940	2.617	1.323	Plastic	Ø450	A15
S5LB*	3.850	2.197	1.653	Concrete	Ø1200	B125
re17	3.650	3.200	0.450	Plastic	RE	A15
s24	3.820	2.825	0.995	Plastic	Ø450	B125
re18	3.650	3.200	0.450	Plastic	RE	A15
s25	3.650	2.696	0.954	Plastic	Ø450	B125
s26	3.550	2.642	0.908	Plastic	Ø450	A15
rd5	3.550	2.517	1.033	Plastic	RD	B125
re19	3.550	2.856	0.694	Plastic	RE	A15
s27	3.550	2.672	0.878	Plastic	Ø450	A15
re20	3.550	3.100	0.450	Plastic	RE	A15
s28	3.550	2.556	0.994	Plastic	Ø450	B125
rd6	3.550	2.517	1.033	Plastic	RD	B125
S7LA*	3.550	1.995	1.555	Concrete	Ø1200	B125
re21	3.650	3.200	0.450	Plastic	RE	A15
s29	3.625	2.735	0.890	Plastic	Ø450	B125
s30	3.650	2.627	1.023	Plastic	Ø450	A15
rd7	3.650	2.609	1.041	Plastic	RD	B125
re22	3.650	3.200	0.450	Plastic	RE	B125
rd8	3.625	2.609	1.016	Plastic	RD	B125
re23	3.650	3.200	0.450	Plastic	RE	A15
s31	3.650	2.645	1.005	Plastic	Ø450	A15
s32	3.650	2.598	1.052	Plastic	Ø450	A15
s33	3.650	2.497	1.153	Plastic	Ø450	A15
rd9	3.650	2.479	1.171	Plastic	RD	B125
re24	3.530	3.080	0.450	Plastic	RE	A15
s34	3.550	2.628	0.922	Plastic	Ø450	A15
re25	3.550	3.100	0.450	Plastic	RE	A15
s35	3.550	2.502	1.048	Plastic	Ø450	A15
S7LB*	3.600	2.009	1.591	Concrete	Ø1200	B125

*** Denotes chamber with 400mm Sump**

Surface Water Pipe Schedule:

Pipe Ref:	Upstream IL	Downstream IL	Pipe Dia (mm)	Distance (m)	Pipe Gradient 1:X	Pipe Material
re1 - s1	3.100	3.000	100	10.040	100.0	Plastic
s1 - s3	3.000	2.796	100	2.146	10.5	Plastic
re2 - s2	3.003	2.903	100	10.040	100.0	Plastic
s2 - s3	2.903	2.796	100	10.744	100.0	Plastic
s3 - rd1	2.796	2.747	100	4.819	100.0	Plastic
re3 - s4	3.137	3.037	100	10.040	100.0	Plastic
s4 - s5	3.037	2.918	100	11.890	100.0	Plastic
s5 - s6	2.918	2.885	100	3.276	100.0	Plastic
re4 - s6	3.100	2.885	100	6.764	31.4	Plastic
s6 - rd2	2.885	2.747	100	13.740	100.0	Plastic
S1L* - S1	2.677	2.635	150	6.314	150.3	Plastic
S2L* - S2	2.691	2.647	150	6.566	149.2	Plastic
s7 - s8	2.997	2.875	100	12.256	100.0	Plastic
re7 - s8	3.200	2.875	100	11.808	36.3	Plastic
s8 - s9	2.875	2.679	100	19.548	100.0	Plastic
re8 - s9	3.300	2.679	100	10.040	16.2	Plastic
s9 - s12	2.679	2.662	100	1.728	100.0	Plastic
re9 - s10	2.978	2.877	100	10.090	100.0	Plastic
s10 - s11	2.877	2.754	100	12.291	100.0	Plastic
re10 - s11	3.300	2.754	100	10.040	18.4	Plastic
s11 - s12	2.754	2.662	100	9.162	100.0	Plastic
s12 - S5LA*	2.662	2.625	100	3.716	100.0	Plastic
S5LA* - S5	2.575	2.449	150	4.427	35.1	Plastic
re12 - s14	3.200	2.973	100	10.040	44.3	Plastic
s14 - s15	2.973	2.941	100	3.293	100.0	Plastic
s15 - s17	2.941	2.855	100	8.600	100.0	Plastic
re13 - s16	3.300	3.210	100	9.040	100.0	Plastic
s16 - s17	3.210	2.855	100	10.886	30.7	Plastic
s17 - rd3	2.855	2.814	100	4.082	100.0	Plastic
re14 - s18	3.300	2.969	100	10.040	30.3	Plastic
s18 - s22	2.969	2.826	100	14.249	100.0	Plastic
re15 - s19	3.110	3.039	100	7.023	100.0	Plastic
s19 - s20	3.039	2.950	100	8.893	100.0	Plastic
s20 - s22	2.950	2.826	100	12.433	100.0	Plastic
re16 - s21	3.076	2.972	100	10.384	100.0	Plastic
s21 - s22	2.972	2.826	100	14.627	100.0	Plastic
s22 - rd4	2.826	2.814	100	1.233	100.0	Plastic
s23 - S5LB*	2.617	2.597	150	3.053	150.0	Plastic
S5LB* - S5	2.597	2.449	150	7.720	52.2	Plastic
re17 - s24	3.200	2.825	100	10.490	28.0	Plastic
s24 - s25	2.825	2.696	100	12.937	100.0	Plastic
re18 - s25	3.200	2.696	100	10.490	20.8	Plastic
s25 - s26	2.696	2.642	100	5.369	100.0	Plastic
s26 - rd5	2.642	2.517	100	12.490	100.0	Plastic
re19 - s27	2.856	2.672	100	18.379	100.0	Plastic
s27 - s28	2.672	2.556	100	11.554	100.0	Plastic
re20 - s28	3.100	2.556	100	18.379	33.8	Plastic
s28 - rd6	2.556	2.517	100	3.947	100.0	Plastic
S7LA* - S7	2.395	2.198	150	4.708	23.9	Plastic
re21 - s29	3.200	2.735	100	11.141	24.0	Plastic
s29 - s30	2.735	2.627	100	10.809	100.0	Plastic
s30 - rd7	2.627	2.609	100	1.781	100.0	Plastic
re22 - rd8	3.200	2.609	100	10.197	17.3	Plastic
re23 - s31	3.200	2.645	100	6.166	11.1	Plastic
s31 - s32	2.645	2.598	100	4.695	100.0	Plastic
s32 - s33	2.598	2.497	100	10.159	100.0	Plastic
s33 - rd9	2.497	2.479	100	1.781	100.0	Plastic
re24 - s34	3.080	2.628	100	18.383	40.7	Plastic
s34 - s35	2.628	2.502	100	12.568	100.0	Plastic
re25 - s35	3.100	2.502	100	18.373	30.7	Plastic
s35 - S7LB*	2.502	2.459	100	4.348	100.0	Plastic
S7LB* - S7	2.409	2.198	150	6.829	32.4	Plastic

Foul Water Manhole Schedule:

MH Ref:	Cover Level	Invert Level	MH Depth (m)	MH Material	MH Size (mm)	MH Cover
f1	3.550	2.850	0.700	Plastic	Ø450	A15
f1a	3.550	2.850	0.700	Plastic	Ø300	A15
f2	3.550	2.794	0.756	Plastic	Ø450	A15
f2a	3.675	2.975	0.700	Plastic	Ø300	A15
f2b	3.675	2.975	0.700	Plastic	Ø300	A15
f3	3.575	2.497	1.078	Plastic	Ø450	A15
f4	3.550	2.850	0.700	Plastic	Ø450	A15
f4a	3.550	2.850	0.700	Plastic	Ø300	A15
f5	3.550	2.394	1.156	Plastic	Ø450	A15
F1L	3.400	-0.680	4.080	Concrete	Ø1200	A15
f6	3.650	2.950	0.700	Plastic	Ø450	A15
f6a	3.650	2.950	0.700	Plastic	Ø300	A15
f7a	3.850	3.150	0.700	Plastic	Ø300	A15
f7	3.840	3.059	0.781	Plastic	Ø450	B125
f7b	3.850	3.150	0.700	Plastic	Ø300	B125
f8	3.750	3.050	0.700	Plastic	Ø450	A15
f8a	3.750	3.050	0.700	Plastic	Ø300	A15
f9	3.840	2.895	0.945	Plastic	Ø450	B125
f10	3.750	2.642	1.108	Plastic	Ø450	A15
f11	3.750	2.629	1.121	Plastic	Ø450	A15
f11a	3.750	3.050	0.700	Plastic	Ø300	A15
f12	3.750	2.509	1.241	Plastic	Ø450	A15
f12a	3.750	2.950	0.800	Plastic	Ø300	A15
F5L	3.750	-0.500	4.250	Concrete	Ø1200	A15
f13	3.650	2.950	0.700	Plastic	Ø450	A15
f13a	3.650	2.850	0.800	Plastic	Ø300	A15
f14	3.650	2.871	0.779	Plastic	Ø450	A15
f14a	3.750	2.950	0.800	Plastic	Ø300	A15
f15	3.750	2.664	1.086	Plastic	Ø450	A15
f16	3.750	3.050	0.700	Plastic	Ø450	A15
f16a	3.750	2.950	0.800	Plastic	Ø300	A15
f16b	3.750	2.950	0.800	Plastic	Ø300	A15
f16c	3.750	2.950	0.800	Plastic	Ø300	A15
f17	3.750	2.815	0.935	Plastic	Ø450	A15
f18	3.750	2.614	1.136	Plastic	Ø450	A15
F6L	3.930	-0.500	4.430	Concrete	Ø1200	A15
f19	3.550	2.850	0.700	Plastic	Ø450	B125
f20	3.550	2.850	0.700	Plastic	Ø450	A15
f20a	3.550	2.750	0.800	Plastic	Ø300	A15
f21	3.550	2.756	0.794	Plastic	Ø450	A15
f21a	3.550	2.750	0.800	Plastic	Ø300	A15
f21b	3.550	2.750	0.800	Plastic	Ø300	A15
f22	3.550	2.456	1.094	Plastic	Ø450	A15
f23	3.650	2.325	1.325	Plastic	Ø450	A15
f23a	3.650	2.850	0.800	Plastic	Ø300	A15
f24	3.650	2.950	0.700	Plastic	Ø450	A15
f25	3.650	2.262	1.388	Plastic	Ø450	A15
F7L	3.650	-1.000	4.650	Concrete	Ø1200	A15
f26	3.650	2.950	0.700	Plastic	Ø450	A15
f26a	3.650	2.850	0.800	Plastic	Ø300	A15
f27	3.650	2.950	0.700	Plastic	Ø450	A15
f27a	3.650	2.850	0.800	Plastic	Ø300	A15
f28	3.650	2.793	0.857	Plastic	Ø450	B125
f29	3.550	2.850	0.700	Plastic	Ø450	A15
f29a	3.550	2.750	0.800	Plastic	Ø300	A15
f30	3.550	2.686	0.864	Plastic	Ø450	A15
f30a	3.550	2.750	0.800	Plastic	Ø300	A15
f31	3.625	0.500	3.125	Plastic	Ø450	B125
F8L	3.625	-1.000	4.625	Concrete	Ø1200	A15

[bd] Denotes Backdrop

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

Foul Water Pipe Schedule:

Pipe Ref:	Upstream IL	Downstream IL	Pipe Dia (mm)	Distance (m)	Pipe Gradient 1:X	Pipe Material
f1 - f2	2.850	2.794	100	4.444	80.0	Plastic
f1a - (f1 - f2)	2.850	2.802	100	0.695	14.6	Plastic
f2 - f3	2.794	2.497	100	23.775	80.0	Plastic
f2a - (f2 - f3)	2.975	2.788	100	0.695	3.7	Plastic
f2b - (f2 - f3)	2.975	2.721	100	0.695	2.7	Plastic
f3 - f5	2.497	2.394	100	8.264	80.0	Plastic
f4 - f5	2.850	2.394	100	7.768	17.0	Plastic
f4a - (f4 - f5)	2.850	2.622	100	0.695	3.0	Plastic
f5 - F1L	2.394	2.320 [bd]	100	3.039	41.1	Plastic
F1L - F1	-0.680	-0.822	100	2.477	17.4	Plastic
f6 - f10	2.950	2.642	100	8.383	27.2	Plastic
f6a - (f6 - f10)	2.950	2.804	100	0.793	5.4	Plastic
f7a - f7	3.150	3.059	100	7.241	80.0	Plastic
f7 - f9	3.059	2.895	100	13.178	80.0	Plastic
f7b - (f7 - f9)	3.150	0.043	100	4.313	1.4	Plastic
f8 - f9	3.050	2.895	100	9.210	59.3	Plastic
f8a - (f8 - f9)	3.050	2.959	100	0.644	7.1	Plastic
f9 - f10	2.895	2.642	100	20.249	80.0	Plastic
f10 - f11	2.642	2.629	100	1.000	80.0	Plastic
f11 -f12	2.629	2.509	100	9.617	80.0	Plastic
f11a - (f11 - f12)	3.050	2.998	100	0.725	13.8	Plastic
f12 -F5L	2.509	2.300 [bd]	100	3.669	17.6	Plastic
f12a - f12	2.950	2.509	100	0.719	1.6	Plastic
F5L - F5	-0.500	-1.029	100	6.252	11.8	Plastic
f13 - f14	2.950	2.871	100	6.314	80.0	Plastic
f13a - (f13 - f14)	2.850	2.779	100	2.347	32.8	Plastic
f14 - f15	2.871	2.664	100	16.531	80.0	Plastic
f14a - (f14 - f15)	2.950	2.835	100	1.174	10.2	Plastic
f15 - f18	2.664	2.614	100	4.030	80.0	Plastic
f16 - f17	3.050	2.815	100	18.795	80.0	Plastic
f16a - (f16 - f17)	2.950	2.882	100	0.646	9.5	Plastic
f16b - (f16 - f17)	2.950	2.796	100	0.643	4.2	Plastic
f16c - (f16 - f17)	2.950	2.754	100	0.646	3.3	Plastic
f17 - f18	2.815	2.614	100	1.843	9.2	Plastic
f18 - F6L	2.614	2.500 [bd]	100	3.760	33.0	Plastic
F6L - F6	-0.500	-1.093	100	5.410	9.1	Plastic
f19 - f21	2.850	2.756	100	7.124	76.0	Plastic
f20 - f21	2.850	2.756	100	7.501	80.0	Plastic
f20a - (f20 - f21)	2.750	2.686	100	0.794	12.5	Plastic
f21 - f22	2.756	2.456	100	23.983	80.0	Plastic
f21a - (f21 - f22)	2.750	2.545	100	0.794	3.9	Plastic
f21b - (f21 - f22)	2.750	2.481	100	0.794	3.0	Plastic
f22 - f23	2.456	2.325	100	10.478	80.0	Plastic
f23 - f25	2.325	2.262	100	5.088	80.0	Plastic
f23a - (f23 - F25)	2.850	2.807	100	0.643	14.8	Plastic
f24 - f25	2.950	2.262	100	2.440	3.5	Plastic
f25 - F7L	2.262	2.000 [bd]	100	3.635	13.9	Plastic
F7L - F7	-1.000	-1.199	100	5.612	28.2	Plastic
f26 - f28	2.950	2.793	100	12.546	80.0	Plastic
f26a - (f26 - f28)	2.850	2.787	100	1.798	28.4	Plastic
f27 - f28	2.950	2.793	100	7.416	47.3	Plastic
f27a - (f27 - f28)	2.850	2.749	100	0.796	7.9	Plastic
f28 - f31	2.793	0.500	100	11.269	4.9	Plastic
f29 - f30	2.850	2.686	100	13.110	80.0	Plastic
f29a - (f29 - f30)	2.750	2.686	100	0.656	10.3	Plastic
f30 - f31	2.686	0.500	100	10.199	4.7	Plastic
f30a - f30	2.750	2.686	100	1.865	29.2	Plastic
f31 - F8L	0.500	-1.000	100	5.481	3.7	Plastic
F8L - F8	-1.000	-1.286	100	4.467	15.6	Plastic

Surface Water Catchpit Manhole Schedule:

MH Ref:	Cover Level	Invert Level	MH Depth (m)	MH Material	MH Size (mm)	MH Cover
cp1*	3.700	2.375	1.325	Plastic	Ø600	B125
cp2*	3.700	2.297	1.403	Plastic	Ø600	B125
cp3*	3.400	2.406	0.994	Plastic	Ø600	B125
cp4*	3.500	2.332	1.168	Plastic	Ø600	B125
cp5*	3.710	2.414	1.296	Plastic	Ø600	B125
cp6*	3.910	2.252	1.658	Plastic	Ø600	B125
cp7*	3.550	2.117	1.433	Plastic	Ø600	B125
cp8*	3.500	2.022	1.478	Plastic	Ø600	B125
cp9*	3.550	2.209	1.341	Plastic	Ø600	B125
cp10*	3.635	2.079	1.556	Plastic	Ø600	B125

*** Denotes chamber with 400mm Sump**

Surface Water Catchpit Pipe Schedule:

Pipe Ref:	Upstream IL	Downstream IL	Pipe Dia (mm)	Distance (m)	Pipe Gradient 1:X	Pipe Material
cp1* - cp2*	2.775	2.697	150	11.783	150.0	Plastic
cp2* - S1L*	2.697	2.677	150	2.986	150.0	Plastic
cp3* - cp4*	2.806	2.732	150	11.156	150.0	Plastic
cp4* - S2L*	2.732	2.691	150	6.166	150.0	Plastic
cp5* - cp6*	2.814	2.652	150	24.227	150.0	Plastic
cp6* - s23	2.652	2.617	150	5.232	150.0	Plastic
cp7* - cp8*	2.517	2.422	150	14.282	150.0	Plastic
cp8* - S7LB*	2.422	2.409	150	1.921	150.0	Plastic
cp9* - cp10*	2.609	2.479	150	19.537	150.0	Plastic
cp10* - S7LA*	2.479	2.395	150	12.592	150.0	Plastic

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

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General Notes

1. DO NOT SCALE.
2. This drawing is to be read in conjunction with all other relevant drawings and details.
3. 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.
4. 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.
5. 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.
6. All dimensions are in millimetres unless otherwise stated.
7. The Farrow Walsh Consulting Designers Risk Assessments for this project must be reviewed PRIOR to the commencement of any works on site.

NOTES

1. This drawing is for Approval purposes only and is not to be used for Construction.
2. This drawing to be read in conjunction with all other relevant Engineers and Architect's details.
3. All work is to be carried out in accordance with the current British Standards, codes of practice, building regulations and with Sewers for Adoption 6th Edition guidance.
4. 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.
5. All uncovered and shallow pipework to be protected against construction traffic as part of the Contractors temporary works requirements.
6. All connections to road gullies and channels shall be 150mm nominal bore pipework.
7. All pipework to be U-PVC type in accordance with WIS 4-35-01 unless otherwise noted.
8. All pipes connecting to adopted manholes up to and including 300mm dia. to be Wavin Ultrarib or similar approved.
9. All pipes connecting to adopted manholes greater than 300mm dia. to be Concrete or approved U-PVC.
10. All pipework entering and exiting manholes to be connected with pipe soffits level.
11. All works are to be to the satisfaction of the Engineer, Building Officer, Severn Trent Water, local authority Highway & Flood Planning Officer.
12. All insitu services and drainage networks are to be located and protected as necessary by the Contractor prior to the commencement of the works.

Rev	Description of updates	Drawn	Check'd	Appr'd	Date
T4	Connections to foul lateral chamber revised to show backdrops into concrete manholes	JD	LC	DM	01.11.19
T3	Adoptable drainage has been updated following an increased discharge rate. Domestic drainage schedules have been updated to suit these changes.	JR	BM	JD	30.09.19
T2	Client updated to GEDA Construction Ltd.	CC	CB	BM	24.05.19
T1	Issued for Tender.	CB	CC	JD	18.04.19

Revision Schedule

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TENDER

Client: GEDA Construction Ltd.

Project: Station Road, Long Sutton

Title: Domestic Drainage Schedules

Drawn:	Checked:	Approved:	Date:	Scale:
CB	CC	JD	April 2019	1:250 @ A1

Drawing No.: **FW1733-D-401-02**

Revision: **T4**