FOUL WATER MANHOLE SCHEDULE

MANHOLE NAME	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH (m)	SIZE (mm∅)	PIPE IN DIAMETER (mm)	PIPE IN LENGTH (m)	PIPE IN INVERT LEVEL (m)	PIPE OUT DIAMETER (mm)	PIPE OUT LENGTH (m)	PIPE OUT INVERT LEVEL (m)
FW1	58.765	56.919	1.846	600	150 150	35.019 1.684	56.919 56.919	150	5.071	56.919
FW2	58.714	56.747	1.967	600	150	3.649	56.747	150	23.421	56.747
FW3	58.586	56.508	2.078	600	150 150	23.421 4.922	56.508 56.508	225	9.009	56.508
FW4	58.374	56.458	1.916	1200	225	9.009	56.458	225	26.764	56.471
FW5	58.747	56.331	2.416	1200	225 225	26.764 7.780	56.331 56.331	225	42.539	56.331
FW6	59.620	56.112	3.508	1200	225 225	42.539 6.788	56.112 56.112	225	39.082	56.112
FW7	59.869	55.911	3.958	1200	225 150	39.082 12.246	55.911 57.411	225	5.321	55.911
FW8	59.803	55.878	3.925	1200	225	5.321	55.878	225	4.923	55.878
FW10	58.782	56.716	2.066	600	150 150 100 100	4.559 13.966 8.791 8.790	56.716 56.716 56.716 56.716	225	4.065	56.716
FW12	59.958	57.195	2.763	600	150 100	10.267 8.834	57.195 57.195	150 100	13.966 9.143	57.195 57.195
FW13	59.967	58.203	1.764	450	150	20.709	58.203	150	5.549	58.203
FW15	59.963	58.112	1.851	450	100 100 100	7.898 8.110 3.969	58.112 58.112 58.112	100	1.597	58.112
FW17	59.942	58.648	1.294	450	100 100	10.218 10.005	58.648 58.655	150	29.905	58.655
FW18	59.895	57.585	2.310	600	150 150	16.091 21.964	57.585 57.585	150	12.246	57.585
FW20	58.463	57.336	1.127	600				100	10.342	57.336
FW21	59.522	56.262	3.260	1200	225 150	4.848 35.514	56.262 57.762	225	6.788	56.262
FW22	59.882	58.661	1.221	600				150	35.514	58.661
FW24	58.732	57.364	1.368	600	150 150	1.210 1.848	57.364 57.364	150	35.019	57.364
FW25	58.775	57.489	1.286	450	100 100	8.283 8.571	57.489 57.489	150	1.210	57.489
FW26	58.775	57.489	1.286	450	100 100	8.586 8.597	57.489 57.489	150	1.546	57.489
FW27	58.775	57.320	1.455	450	100 100 100 100	8.686 8.929 8.098 7.754	57.320 57.320 57.320 57.320	150	1.558	57.320
FW28	58.775	57.489	1.286	450	100 100	8.303 8.573	57.489 57.489	150	1.558	57.489
FW29	58.781	57.489	1.292	450	100 100	7.717 7.659	57.489 57.489	150	1.772	57.489
FW30	58.781	57.489	1.292	450	100 100 100	8.127 8.127 8.376	57.489 57.489 57.489	150	1.801	57.489
FW31	58.775	57.489	1.286	450	100 100	7.753 7.686	57.489 57.489	150	1.620	57.489
FW33	58.765	56.849	1.916	450	150 100 100	5.071 9.034 9.008	56.849 56.849 56.849	150	0.526	56.849
FW34	58.765	56.837	1.929	450	150 100 100	0.526 9.057 9.026	56.837 56.837 56.837	150	4.367	56.837
FW37	58.710	57.452	1.258	450	100 100	8.217 7.988	57.498 57.498	150	4.922	57.498
FW38	58.715	57.502	1.213	450	100 100	8.049 8.030	57.502 57.502	150	0.670	57.502
FW39	58.715	57.474	1.241	450	100 100 150	8.114 8.084 0.670	57.474 57.474 57.474	150	3.826	57.474
FW40	58.729	57.348	1.381	450	100 100	7.937 8.144	57.348 57.348	150	2.030	57.348
FW43	58.749	57.348	1.401	450	100 100	7.829 8.094	57.348 57.348	150	2.484	57.348
FW44	58.754	57.275	1.479	450	150 100 100	2.484 8.245 8.482	57.275 57.275 57.275	150	8.026	57.275
FW45	58.790	57.479	1.311	450	100 100	8.646 8.977	57.479 57.479	150	12.415	57.479
FW47	58.782	57.158	1.625	450	150 100 100	12.415 8.849 9.008	57.158 57.158 57.158	150	2.999	57.158
FW48	58.782	57.072	1.711	450	150 100 100	2.999 7.723 7.986	57.072 57.072 57.072	150	3.932	57.072
FW50	58.782	57.017	1.765	450	150 100 100	3.932 8.720 8.898	57.017 57.017 57.017	150	2.268	57.017
FW51	58.782	56.983	1.799	450	150 100 100	2.268 7.817 7.905	56.983 56.983 56.983	150	4.957	56.983
FW53	58.782	56.915	1.867	450	150 100 100	4.957 8.724 8.967	56.915 56.915 56.915	150	1.890	56.915
FW56	58.782	56.840	1.942	450	150 100 100	4.187 8.595 8.955	56.840 56.840 56.840	150	4.976	56.840
FW57	58.781	56.786	1.995	450	150 100 100	4.976 7.373 7.771	56.786 56.786 56.786	150	1.456	56.786
FW58A	58.782	56.767	2.015	450	150 100 100	1.456 8.699 8.941	56.767 56.767 56.767	150	4.559	56.767
FW60	58.800	57.610	1.190	450	100 100 100 100	3.465 3.596 2.568 2.770	57.610 57.610 57.610 57.610	100	6.653	57.610
FW61	58.768	56.677	2.091	600	225 100	4.065 6.653	56.677 56.677	225	4.690	56.677
FW62	58.798	56.633	2.165	600	225	4.690	56.633	225	7.780	56.633
FW64	59.832	57.934	1.899	450	100 100	8.521 8.790	57.934 57.934	150	4.563	57.934
FW65	59.835	57.809	2.026	450	150 100 100	4.563 8.245 8.433	57.809 57.809 57.809	150	10.841	57.809
FW67	59.855	57.621	2.234	450	150 100	10.841 8.607	57.621 57.621	150 100	5.563 8.831	57.621 57.621
FW68	59.919	57.546	2.373	450	150 100	5.563 8.587	57.546 57.546	150 100	0.951 8.747	57.546 57.546
FW70	59.919	57.529	2.391	450	150 100	0.951 8.232	57.529 57.529	150 100	6.194 8.408	57.529 57.529
FW71	59.919	57.446	2.473	450	150 100	6.194 8.621	57.446 57.446	150 100	1.287 8.880	57.446 57.446
FW73	59.918	57.424	2.494	450	150 100	1.287 8.247	57.424 57.424	150 100	5.673 8.449	57.424 57.424
FW74	59.923	57.347	2.576	450	150 100 100	5.673 8.515 8.730	57.347 57.347 57.347	150	0.901	57.347
FW76	59.923	57.330	2.593	450	150 100 100	0.901 8.013 8.383	57.330 57.330 57.330	150	10.267	57.330
FW78	59.966	58.047	1.919	450	150 100 100	8.390 1.940 1.597	58.047 58.047 58.047	150	20.652	58.047
FW79	59.960	58.268	1.692	450	150 100	2.230 9.160	58.268 58.268	150 100	8.390 8.914	58.268 58.268
FW81	59.960	58.335	1.625	450	150 100	3.786 8.857	58.335 58.335	150 100	2.230 8.603	58.335 58.335
FW82	59.963	58.441	1.522	450	150 100	0.833 9.161	58.441 58.441	150 100	3.786 8.943	58.441 58.441
FW83	59.967	58.473	1.495	450	150 100	4.573 9.092	58.473 58.473	150 100	0.833 8.875	58.473 58.473
FW84	59.980	58.454	1.526	600	100 100 100	8.852 9.056 14.247	58.600 58.600 58.600	150	4.573	58.600
FW87	59.982	58.600	1.382	450	100 100	8.096 8.275	58.600 59.171	100	1.415	58.600
FW89	59.982	58.300	1.682	450	100 100	8.305 8.445	58.300 58.300	100 100	8.296 1.445	58.300 58.300
FW90	60.000	59.076	0.924	450	100 100 100	6.097 1.707 1.814	59.076 59.076 59.076	150	8.688	59.076
FW91	59.982	58.500	1.482	450	100 100 100	6.545 8.191 8.372	58.500 58.500 58.500	100	1.598	58.500
FW92	60.000	58.730	1.270	450	100 100 100	6.916 5.931 2.232	58.730 58.730 58.730	150	7.757	58.730
FW93	60.000	59.188	0.812	450	100 100 100	3.531 7.603 3.601	59.188 59.188 59.188	100	6.013	59.188
FW94	59.938	57.895	2.043	600	150 150 150	29.905 7.757 8.688	57.895 57.895 57.895	150	16.091	57.895
FW96	60.000	58.450	1.550	600	100 100 100	4.349 7.167 3.939	58.450 58.450 58.450	150	2.117	58.450

FOUL WATER MANHOLE SCHEDULE

MANHOLE NAME	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH (m)	SIZE (mm∅)	PIPE IN DIAMETER (mm)	PIPE IN LENGTH (m)	PIPE IN INVERT LEVEL (m)	PIPE OUT DIAMETER (mm)	PIPE OUT LENGTH (m)	PIPE OUT INVERT LEVEL (m)
FW97	59.965	58.600	1.365	450	100 100 100 100	6.857 6.573 6.579 6.953	58.600 58.600 58.600 58.600	150	0.819	58.600
FW99	60.000	59.139	0.861	450	100 100	3.883 3.585	59.139 59.139	150	9.754	59.139
FW101	60.000	58.656	1.344	450	100 100 100	5.538 5.459 2.961	58.656 58.656 58.656	150	2.202	58.656
FW102	60.000	58.862	1.138	450	100 100	1.196 1.631	58.862 58.862	150	1.264	58.862
FW103	59.982	58.322	1.660	450	100 100	8.243 8.569	58.322 58.322	100	1.032	58.322
FW104	59.982	58.683	1.299	450	100 100	8.539 8.874	58.683 58.683	100	0.927	58.683
FW105	59.982	58.683	1.299	450	100 100	8.196 8.550	58.683 58.683	100	0.964	58.683
FW106	59.982	58.683	1.299	450	100 100	8.382 8.707	58.683 58.683	100	0.964	58.683
FW107	59.982	58.500	1.482	450	100 100	8.685 8.888	58.500 58.500	150	0.772	58.500
FW108	59.967	58.640	1.327	600	100 100	0.948 1.346	58.640 58.640	150	9.720	58.640
FW110	58.462	57.646	0.816	450	100 100 100	10.909 6.766 4.381	57.646 57.646 57.646	100	1.884	57.646
FW111	58.461	57.646	0.815	450	100 100 100	6.445 10.579 5.243	57.646 57.646 57.646	100	1.667	57.646
FW113	58.461	57.646	0.815	450	100 100 100	6.518 10.641 5.216	57.646 57.646 57.646	100	1.960	57.646
FW114	58.747	57.946	0.801	450	100 100 100	10.903 7.230 4.495	57.946 57.946 57.946	100	2.178	57.946
FW115	58.726	57.946	0.780	450	100 100 100	6.519 10.707 5.381	57.946 57.946 57.946	100	2.195	57.946
FW116	58.737	57.946	0.791	450	100 100	10.697 6.596	57.946 57.946	100 100	2.188 5.118	57.946 57.946
FW117	58.745	57.946	0.799	450	100 100 100	6.617 10.746 5.294	57.946 57.946 57.946	100	2.205	57.946
FW118	59.043	58.250	0.794	450	100 100 100	10.750 6.646 5.125	58.250 58.250 58.250	100	2.402	58.250
FW119	59.043	58.250	0.793	450	100 100 100	6.673 10.775 5.215	58.250 58.250 58.250	100	2.432	58.250
FW120	59.042	58.250	0.792	450	100 100 100	10.804 6.719 5.250	58.250 58.250 58.250	100	2.446	58.250
FW121	59.041	58.250	0.791	450	100 100 100	6.740 10.871 5.412	58.250 58.250 58.250	100	2.450	58.250
FW122	59.057	58.250	0.807	450	100 100 100	6.774 10.907 5.447	58.250 58.250 58.250	100	2.457	58.250
FW123	59.057	58.250	0.807	450	100 100 100	10.912 6.811 5.284	58.250 58.250 58.250	100	2.460	58.250
FW124	59.057	58.250	0.807	450	100 100 100	6.825 10.958 5.429	58.250 58.250 58.250	100	2.476	58.250
FW125	59.305	58.550	0.755	450	100 100 100	10.964 6.855 5.341	58.550 58.550 58.550	100	2.725	58.550
FW126	59.320	58.550	0.770	450	100 100 100	11.005 6.950 5.217	58.550 58.550 58.550	100	2.745	58.550
FW127	59.338	58.550	0.788	450	100 100 100	6.638 10.689 4.950	58.550 58.550 58.550	100	2.992	58.550
FW128	59.336	58.550	0.786	450	100 100 100	11.058 6.970 5.370	58.550 58.550 58.550	100	1.269	58.550
FW129	59.808	59.000	0.808	450	100 100 100	10.847 6.769 5.301	59.000 59.000 59.000	100	3.716	59.000
FW130	59.809	59.000	0.809	450	100 100 100	6.626 10.820 5.464	59.000 59.000 59.000	100	3.737	59.000
FW131	59.501	58.700	0.801	450	100 100 100	10.792 6.708 5.071	58.700 58.700 58.700	100	3.708	58.700
FW132	59.507	58.700	0.807	450	100 100 100	6.590 10.771 5.428	58.700 58.700 58.700	100	3.731	58.700
FW133	59.508	58.700	0.808	450	100 100 100	10.741 6.648 5.152	58.700 58.700 58.700	100	3.735	58.700
FW134	59.510	58.700	0.810	450	100 100 100	6.526 10.733 5.500	58.700 58.700 58.700	100	3.761	58.700
FW135	59.775	58.380	1.395	450	150 150	8.609 7.295	58.380 58.380	150	10.746	58.380
FW136	59.929	57.905	2.024	600	150 150	10.746 14.412	57.905 57.978	150	12.988	57.905
FW137	59.981	57.769	2.212	600	150 150 150	12.988 20.652 3.611	57.769 57.769 57.769	150	21.964	57.769
FW138	59.386	56.428	2.958	1200	225	76.757	56.428	225	4.848	56.428
FW139	58.437	56.947	1.490	1050	100	10.342	56.947	225	76.757	56.947
FW140	58.774	57.423	1.351	450	100 100	11.132 11.227	57.423 57.423	150	1.848	57.423
FW141	58.781	57.489	1.292	450	100 100	7.419 7.485	57.489 57.489	150	1.798	57.489
FW142	58.778	57.489	1.289	450	100 100	8.623 8.431	57.489 57.489	150	1.684	57.489
FW143	58.766	56.789	1.977	450	100 100 150	9.029 8.810 4.367	56.789 56.789 56.789	150	3.649	56.789
FW144	59.982	58.683	1.299	450	100 100 100 100	8.735 8.496 8.562 8.187	58.683 58.683 58.683 58.683	150	1.265	58.683
FW145	60.000	58.127	1.873	600	150 150 150	5.549 1.264 3.886	58.127 58.127 58.127	150	14.412	58.127
FW146	60.000	59.306	0.694	600	100 100 100	1.665 1.658 1.765	59.306 59.306 59.306	150 100 100	7.295 2.806 2.842	59.306 59.306 59.306
FW147	60.000	58.600	1.400	450	100 100 100	8.366 8.149 5.193	58.600 58.600 58.600	150	3.611	58.600

STANDARD NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
2. THIS DRAWING SHOULD NOT BE SCALED.
3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF WORKS.

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DRAWING NOTES

1. THE FOLLOWING ASSUMPTIONS HAVE BEEN MADE TO SET THE DEPTH OF FOUL WATER DRAINS AND RWPS AT THIS STAGE. DEPTH OF ALL RUNS AND NUMBER OF ICs SUBJECT TO FURTHER DESIGN DEVELOPMENT ONCE SUBSTRUCTURE STRATEGY IS CONFIRMED AND POSITION, NUMBER OF POP UPS IS CONFIRMED.
   - 1.1. TOWNHOUSES - FOUL WATER DRAINAGE PASSES BENEATH 900mm DEEP STRIP FOUNDATIONS AT PERIMETER OF PLOTS. 1:40 GRADIENT FOR SUB-STRUCTURE FOUL DRAINAGE. RWPs ARE EXTERNAL.
   - 1.2. EXTRA CARE & APARTMENTS - DEPTH BETWEEN FFL AND BOTTOM OF SUSPENDED SLAB IS 675mm. FOUL WATER DRAINAGE & RWPs PENETRATE SUSPENDED SLAB WITH 150mm BEND AND PASSES ABOVE/CASTS THROUGH GROUND BEAMS WHERE REQUIRED. 1:40 GRADIENT FOR SUB-STRUCTURE DRAINAGE
   - 1.3. ALLOW FOR PENETRATIONS THROUGH PERIMETER FOUNDATIONS WITH A ROCKER PIPE EITHER SIDE AT THIS STAGE FOR COSTING.
   - 1.4. DRAINAGE RUNS MAY BE DEEPER THAN THE ABOVE PARAMETERS IN SOME AREAS TO RESOLVE CLASHES BETWEEN FOUL WATER AND SURFACE WATER.
2. LEVELS SHOWN FOR HEADS OF DRAINS FROM SVPS/SS ARE SUBJECT TO COORDINATION WITH M&E AND STRUCTURAL ENGINEERS.
3. SW1 - SW10 AND FW3-FW8 AND FW21 TO ADOPTED SEPARATE S104 AND S106 AGREEMENTS
4. THE INDICATED LEVEL INFORMATION OF EXISTING SEWERS ASSETS IS BASED ON CURRENT AVAILABLE INFORMATION AND SHOULD BE CONFIRMED ON SITE BY CONTRACTOR AND REPORTED TO ENGINEER.

DATE	REV	DESCRIPTION	DRAWN	CHKD
31.07.26	P04	ISSUED FOR INFORMATION	ZA	JDL
19.04.26	P03	DRAFT STAGE 4A ISSUE	ZA	JDL
24.04.26	P02	UPDATED BASED ON COMMENTS	TPR	JDL
24.03.26	P01	STAGE 3 ISSUE	ZA	JDL

PROJECT: BROTHERTON HOUSE

TITLE: MANHOLE SCHEDULE
SHEET 2 OF 2

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DRAWING STATUS	STATUS CODE
STAGE 4A	-

CE PROJECT No.	SCALE @ A0	DATE CREATED	DRAWN	CHECKED	DRAWING No.	REV
3323-02	--	MAR 26	ZA	JDL	18704-CIV-XX-XX-D-C-30011	P04

FILE LOCATION PATH: P:\PROJECTS HOT\3323-02 MUSE - WYTHENSHAWE - PLOTS C2 AND 3.3\004 BIM\CIVILS\DRAWINGS\BROTHERTON\18704-CIV-XX-XX-D-C-30010_MANHOLE SCHEDULE.DWG