DO NOT SCALE

STORM Network 1

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	225	170	Circular	12.882	S101	85.88	87.61	S102	85.81	87.84
1.001	225	170	Circular	12.287	S102	85.81	87.84	S103	85.74	88.16
1.002	225	170	Circular	19.892	S103	85.74	88.16	S104	85.62	88.62
1.003	225	21	Circular	14.257	S104	85.62	88.62	S109	84.95	88.85
1.004	450	400	Circular	24.242	S109	84.72	88.85	S110	84.66	89.16
1.005	450	400	Circular	36.859	S110	84.66	89.16	S111	84.57	89.34
1.006	525	400	Circular	16.308	S111	84.49	89.34	S112	84.45	89.01
1.007	525	400	Circular	21.510	S112	84.45	89.01	S113	84.40	88.43
1.008	525	400	Circular	15.959	S113	84.40	88.43	S114	84.36	87.78
1.009	525	400	Circular	22.574	S114	84.36	87.78	S128	84.30	86.72
1.010	600	400	Circular	27.144	S128	84.23	86.72	S129	84.16	87.25
1.011	600	400	Circular	15.299	S129	84.16	87.25	S130	84.12	87.53
1.012	600	400	Circular	12.935	S130	84.12	87.53	S131	84.09	87.70
1.013	600	400	Circular	28.023	S131	84.09	87.70	S132	84.02	86.57
1.014	600	36	Circular	22.503	S132	84.02	86.57	S133	83.40	85.50
2.000	450	400	Circular	13.950	S105	84.91	86.67	S106	84.87	86.85
2.001	450	400	Circular	12.231	S106	84.87	86.85	S107	84.84	87.07
2.002	450	400	Circular	10.381	S107	84.84	87.07	S108	84.82	87.35
2.003	450	400	Circular	38.401	S108	84.82	87.35	S109	84.72	88.85
3.000	225	170	Circular	15.006	S115	85.85	87.28	S116	85.77	87.47
3.001	225	170	Circular	17.427	S116	85.77	87.47	S117	85.66	87.52
3.002	225	60	Circular	23.566	S117	85.66	87.52	S118	85.27	86.82
3.003	225	15	Circular	6.449	S118	85.27	86.82	S123	84.84	86.55
3.004	450	400	Circular	9.462	S123	84.62	86.55	S124	84.59	86.24
3.005	450	75	Circular	9.619	S124	84.59	86.24	S125	84.46	86.11
3.006	450	400	Circular	9.726	S125	84.46	86.11	S126	84.44	86.17
3.007	450	400	Circular	11.062	S126	84.44	86.17	S127	84.41	86.33
3.008	450	400	Circular	13.714	S127	84.41	86.33	S128	84.38	86.72
4.000	225	170	Circular	18.809	S119	85.17	86.59	S120	85.06	86.74
4.001	225	170	Circular	13.439	S120	85.06	86.74	S121	84.98	86.81
4.002	300	240	Circular	13.090	S121	84.90	86.81	S122	84.85	86.73
4.003	300	240	Circular	19.952	S122	84.85	86.73	S123	84.77	86.55

STORM Network 2

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	225	59	Circular	38.556	S201	88.47	91.37	S202	87.82	89.86
1.001	225	59	Circular	15.200	S202	87.82	89.86	S204	87.56	89.42
1.002	300	240	Circular	16.211	S204	87.49	89.42	S205	87.42	89.08
1.003	300	240	Circular	21.172	S205	87.42	89.08	S206	87.33	88.87
1.004	450	240	Circular	12.656	S206	87.18	88.87	S207	87.13	89.21
1.005	450	240	Circular	13.085	S207	87.13	89.21	S208	87.07	89.87
1.006	450	300	Circular	18.156	S208	87.07	89.87	S209	87.01	90.73
1.007	450	300	Circular	31.960	S209	87.01	90.73	S210	86.91	92.01
1.008	450	300	Circular	15.216	S210	86.91	92.01	S211	86.85	91.30
1.009	450	40	Circular	16.089	S211	86.85	91.30	S212	86.45	90.92
1.010	450	40	Circular	18.035	S212	86.45	90.92	S213	86.00	90.70
1.011	450	40	Circular	11.942	S213	86.00	90.70	S214	85.70	90.55
1.012	450	40	Circular	14.935	S214	85.70	90.55	S215	85.33	90.36
1.013	450	41	Circular	13.409	S215	85.33	90.36	S235	85.00	90.19
1.014	600	400	Circular	21.893	S235	84.85	90.19	S236	84.79	90.25
1.015	600	400	Circular	12.263	S236	84.79	90.25	S237	84.76	90.02
1.016	600	400	Circular	14.248	S237	84.76	90.02	S238	84.73	89.66
1.017	600	400	Circular	19.155	S238	84.73	89.66	S240	84.68	89.26
1.018	600	400	Circular	19.912	S240	84.68	89.26	S241	84.63	88.98
1.019	600	400	Circular	13.533	S241	84.63	88.98	S242	84.60	88.58
1.020	600	400	Circular	18.224	S242	84.60	88.58	S248	84.55	87.74
1.021	750	400	Circular	12.878	S248	84.40	87.74	S249	84.37	87.23
1.022	750	400	Circular	10.853	S249	84.37	87.23	S250	84.34	86.97
1.023	750	400	Circular	15.270	S250	84.34	86.97	S251	84.30	86.77
1.024	750	400	Circular	13.235	S251	84.30	86.77	S252	84.27	86.57
1.025	750	400	Circular	9.609	S252	84.27	86.57	S253	84.25	86.37
1.026	750	400	Circular	9.465	S253	84.25	86.37	S254	84.22	86.09
1.027	750	400	Circular	11.619	S254	84.22	86.09	S255	84.19	86.20
2.000	225	170	Circular	19.505	S203	87.68	89.10	S204	87.56	89.42
3.000	300	80	Circular	17.996	S216	87.24	89.04	S217	87.02	89.27
3.001	300	80	Circular	4.649	S217	87.02	89.27	S218	86.96	89.34
3.002	300	80	Circular	7.238	S218	86.96	89.34	S219	86.87	89.42
3.003	300	80	Circular	44.598	S219	86.87	89.42	S220	86.31	89.17
3.004	300	41	Circular	21.035	S220	86.31	89.17	S224	85.80	88.91
3.005	450	400	Circular	21.244	S224	85.65	88.91	S225	85.59	88.65
3.006	450	400	Circular	15.771	S225	85.59	88.65	S226	85.56	88.44
3.007	450	400	Circular	10.599	S226	85.56	88.44	S227	85.53	88.31
3.008	450	400	Circular	12.743	S227	85.53	88.31	S228	85.50	88.16
3.009	600	400	Circular	8.436	S228	85.35	88.16	S229	85.33	88.05
3.010	600	400	Circular	32.269	S229	85.33	88.05	S230	85.25	87.90
3.011	600	300	Circular	60.069	S230	85.25	87.90	S231	85.05	87.80
3.012	600	400	Circular	19.256	S231	85.05	87.80	S232	85.00	87.76
3.013	600	400	Circular	30.031	S232	85.00	87.76	S233	84.92	89.26
3.014	600	400	Circular	14.479	S233	84.92	89.26	S234	84.89	89.85
3.015	600	400	Circular	14.709	S234	84.89	89.85	S235	84.85	90.19
4.000	300	50	Circular	24.047	S221	87.32	89.25	S222	86.84	88.66
4.001	300	50	Circular	12.894	S222	86.84	88.66	S223	86.58	88.53
4.002	300	32	Circular	24.640	S223	86.58	88.53	S224	85.80	88.91
5.000	225	11	Circular	18.748	S239	87.90	89.84	S240	86.18	89.26
6.000	300	240	Circular	26.159	S243	85.11	86.53	S244	85.00	86.91
6.001	450	400	Circular	8.386	S244	84.85	86.91	S245	84.83	87.03
6.002	450	400	Circular	9.327	S245	84.83	87.03	S246	84.80	87.17
6.003	450	400	Circular	8.862	S246	84.80	87.17	S247	84.78	87.30
6.004	450	400	Circular	32.347	S247	84.78	87.30	S248	84.70	87.74

STORM Network 3

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	300	240	Circular	31.641	S301	90.47	92.27	S302	90.33	92.66
1.001	300	240	Circular	14.773	S302	90.33	92.66	S303	90.27	92.77
1.002	300	240	Circular	13.877	S303	90.27	92.77	S304	90.21	92.67
1.003	300	240	Circular	22.260	S304	90.21	92.67	S305	90.12	92.49
1.004	375	300	Circular	14.856	S305	90.05	92.49	S306	90.00	92.74
1.005	375	300	Circular	13.042	S306	90.00	92.74	S307	89.95	92.95
1.006	375	300	Circular	28.964	S307	89.95	92.95	S308	89.86	93.04
1.007	375	63	Circular	17.767	S308	89.86	93.04	S309	89.57	92.10
1.008	375	21	Circular	11.166	S309	89.57	92.10	S310	89.04	91.35
1.009	375	21	Circular	12.189	S310	89.04	91.35	S311	88.46	90.53
1.010	375	21	Circular	12.311	S311	88.46	90.53	S312	87.87	89.70
1.011	375	21	Circular	9.682	S312	87.87	89.70	S314	87.41	89.05
1.012	450	400	Circular	15.207	S314	86.17	89.05	S315	86.13	88.98
2.000	450	400	Circular	17.786	S313	86.21	87.86	S314	86.17	89.05

STORM Network 4

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	300	240	Circular	9.991	S401	83.33	84.83	S402	83.28	85.24
1.001	300	240	Circular	8.251	S402	83.28	85.24	S403	83.25	85.66
1.002	300	240	Circular	12.305	S403	83.25	85.66	S405	83.20	86.29
1.003	375	300	Circular	15.750	S405	83.12	86.29	S406	83.07	85.69
1.004	375	300	Circular	12.209	S406	83.07	85.69	S407	83.03	85.26
1.005	375	300	Circular	14.345	S407	83.03	85.26	S408	82.98	84.72
1.006	375	55	Circular	15.093	S408	82.98	84.72	S409	82.71	84.28
1.007	375	300	Circular	16.101	S409	82.71	84.28	S410	82.65	85.07
2.000	225	36	Circular	12.880	S404	85.23	86.95	S405	84.87	86.29

FOUL Network 5

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	150	150	Circular	24.470	F1	90.00	92.27	F2	89.84	92.58
1.001	150	150	Circular	12.315	F2	89.84	92.58	F3	89.76	92.70
1.002	150	150	Circular	14.706	F3	89.76	92.70	F4	89.66	92.69
1.003	150	150	Circular	27.564	F4	89.66	92.69	F5	89.47	92.45
1.004	150	150	Circular	14.767	F5	89.47	92.45	F6	89.38	92.70
1.005	150	150	Circular	13.000	F6	89.38	92.70	F7	89.29	92.92
1.006	150	23	Circular	33.958	F7	89.29	92.92	F13	87.84	92.94
1.007	150	150	Circular	44.097	F13	86.34	92.94	F19	86.05	92.14
1.008	150	150	Circular	15.151	F19	86.05	92.14	F20	85.95	91.39
1.009	150	150	Circular	22.770	F20	85.95	91.39	F21	85.80	90.88
1.010	150	45	Circular	19.579	F21	85.80	90.88	F22	85.36	90.63
1.011	150	39	Circular	17.929	F22	85.36	90.63	F23	84.90	90.40
1.012	150	32	Circular	13.521	F23	84.90	90.40	F40	84.47	90.23
1.013	225	150	Circular	26.395	F40	84.40	90.23	F41	84.22	90.13
1.014	225	150	Circular	35.584	F41	84.22	90.13	F42	83.99	89.30
1.015	225	150	Circular	19.617	F42	83.99	89.30	F43	83.86	89.03
1.016	225	150	Circular	13.581	F43	83.86	89.03	F44	83.77	88.67
1.017	225	21	Circular	18.027	F44	83.77	88.67	F89	82.92	87.85
1.018	225	170	Circular	37.599	F89	81.26	87.85	F90	81.04	87.26
1.019	225	170	Circular	8.604	F90	81.04	87.26	F91	80.99	87.14
1.020	225	170	Circular	10.236	F91	80.99	87.14	F92	80.93	86.99
1.021	225	170	Circular	8.283	F92	80.93	86.99	F93	80.88	86.88
1.022	225	170	Circular	26.506	F93	80.88	86.88	F94	80.72	86.50
1.023	225	170	Circular	16.266	F94	80.72	86.50	F95	80.63	86.35
2.000	150	150	Circular	19.557	F8	86.83	88.18	F9	86.70	89.48
2.001	150	150	Circular	13.108	F9	86.70	89.48	F10	86.62	90.35
2.002	150	150	Circular	12.448	F10	86.62	90.35	F11	86.53	91.17
2.003	150	150	Circular	12.107	F11	86.53	91.17	F12	86.45	91.97
2.004	150	150	Circular	16.854	F12	86.45	91.97	F13	86.34	92.94
3.000	150	17	Circular	28.250	F14	88.68	90.03	F15	87.00	89.16
3.001	150	150	Circular	31.583	F15	87.00	89.16	F16	86.79	88.93
3.002	150	150	Circular	18.194	F16	86.79	88.93	F17	86.67	89.69
3.003	150	150	Circular	24.291	F17	86.67	89.69	F18	86.51	90.85
3.004	150	70	Circular	32.249	F18	86.51	90.85	F19	86.05	92.14
4.000	150	150	Circular	29.740	F24	87.71	89.06	F25	87.51	89.35
4.001	150	150	Circular	57.530	F25	87.51	89.35	F26	87.13	89.20
4.002	150	150	Circular	20.871	F26	87.13	89.20	F30	86.99	88.94
4.003	150	150	Circular	21.515	F30	86.99	88.94	F31	86.85	88.67
4.004	150	150	Circular	25.573	F31	86.85	88.67	F32	86.68	88.35
4.005	150	150	Circular	13.353	F32	86.68	88.35	F33	86.59	88.18
4.006	150	150	Circular	13.761	F33	86.59	88.18	F34	86.50	88.02
4.007	150	93	Circular	32.135	F34	86.50	88.02	F35	86.15	87.50
4.008	150	150	Circular	58.814	F35	86.15	87.50	F36	85.76	87.35
4.009	150	30	Circular	25.258	F36	85.76	87.35	F37	84.90	87.67
4.010	150	150	Circular	34.686	F37	84.90	87.67	F38	84.67	89.40
4.011	150	150	Circular	13.876	F38	84.67	89.40	F39	84.58	89.93
4.012	150	150	Circular	15.518	F39	84.58	89.93	F40	84.48	90.23
5.000	150	40	Circular	19.796	F27	87.91	89.26	F28	87.41	88.76
5.001	150	97	Circular	16.770	F28	87.41	88.76	F29	87.24	88.59
5.002	150	80	Circular	20.090	F29	87.24	88.59	F30	86.99	88.94
6.000	150	150	Circular	12.677	F45	85.42	87.52	F46	85.33	87.85
6.001	150	150	Circular	13.020	F46	85.33	87.85	F47	85.25	88.17
6.002	150	150	Circular	20.091	F47	85.25	88.17	F48	85.11	88.62
6.003	150	9	Circular	9.174	F48	85.11	88.62	F53	84.11	88.76
6.004	150	150	Circular	24.052	F53	84.11	88.76	F54	83.95	89.08
6.005	150	150	Circular	43.747	F54	83.95	89.08	F55	83.66	89.28
6.006	150	150	Circular	15.069	F55	83.66	89.28	F56	83.56	88.94
6.007	150	150	Circular	21.051	F56	83.56	88.94	F57	83.42	88.34
6.008	150	150	Circular	16.874	F57	83.42	88.34	F58	83.31	87.62
6.009	150	150	Circular	16.987	F58	83.31	87.62	F70	83.19	86.81
6.010	150	150	Circular	27.839	F70	83.19	86.81	F71	83.01	87.39
6.011	150	150	Circular	13.487	F71	83.01	87.39	F72	82.92	87.62
6.012	150	150	Circular	13.530	F72	82.92	87.62	F73	82.83	87.80
6.013	150	150	Circular	12.151	F73	82.83	87.80	F74	82.75	87.95
6.014	150	150	Circular	35.539	F74	82.75	87.95	F75	82.51	86.86
6.015	150	150	Circular	14.384	F75	82.51	86.86	F79	82.41	86.16
6.016	150	150	Circular	12.881	F79	82.41	86.16	F80	82.33	85.52
6.017	150	150	Circular	10.416	F80	82.33	85.52	F81	82.26	85.00
6.018	150	150	Circular	9.463	F81	82.26	85.00	F82	82.20	84.73
6.019	150	150	Circular	53.525	F82	82.20	84.73	F83	81.84	86.00
6.020	150	150	Circular	14.845	F83	81.84	86.00	F84	81.74	86.42
6.021	150	150	Circular	8.922	F84	81.74	86.42	F85	81.68	86.61
6.022	150	150	Circular	12.771	F85	81.68	86.61	F86	81.60	86.80
6.023	150	150	Circular	15.325	F86	81.60	86.80	F87	81.49	87.02
6.024	150	150	Circular	10.898	F87	81.49	87.02	F88	81.42	87.31
6.025	150	150	Circular	12.814	F88	81.42	87.31	F89	81.34	87.85
7.000	150	150	Circular	8.698	F49	84.56	86.71	F50	84.51	86.83
7.001	150	150	Circular	11.759	F50	84.51	86.83	F51	84.43	87.03
7.002	150	150	Circular	9.049	F51	84.43	87.03	F52	84.37	87.27
7.003	150	150	Circular	38.612	F52	84.37	87.27	F53	84.11	88.76
8.000	150	80	Circular	41.366	F59	85.40	87.43	F60	84.88	86.93
8.001	150	13	Circular	7.293	F60	84.88	86.93	F65	84.31	86.64
8.002	150	150	Circular	10.169	F65	84.31	86.64	F66	84.24	86.30
8.003	150	150	Circular	10.049	F66	84.24	86.30	F67	84.17	86.14
8.004	150	150	Circular	10.948	F67	84.17	86.14	F68	84.10	86.14
8.005	150	150	Circular	11.434	F68	84.10	86.14	F69	84.02	86.28
8.006	150	23	Circular	19.086	F69	84.02	86.28	F70	83.19	86.81
9.000	150	150	Circular	14.109	F81	84.69	86.59	F62	84.59	86.75
9.001	150	150	Circular	13.757	F62	84.59	86.75	F63	84.50	86.80
9.002	150	150	Circular	13.029	F63	84.50	86.80	F64	84.41	86.70
9.003	150	150	Circular	16.152	F64	84.41	86.70	F65	84.31	86.64
10.000	150	150	Circular	12.044	F76	82.78	84.28	F77	82.70	84.78
10.001	150	150	Circular	14.927	F77	82.70	84.78	F78	82.60	85.35
10.002	150	150	Circular	27.919	F78	82.60	85.35	F79	82.41	86.16

Notes

1. Setting out shall be undertaken using only the information given. Distances should not be scaled from this drawing.
2. All adoptable drainage shall be constructed in accordance with 'Sewers for Adoption' 7th Edition, Welsh Ministers Standards and Welsh Water Details and Guidelines.
3. The minimum gravity pipe diameter under adoptable highways shall be 150mm
4. It is the responsibility of the Contractor to verify all information given with regards to existing services and drainage connections etc. prior to commencing the works. The rates shall include for hand dig around services where necessary. The Contractor shall adhere to the CDM Regulations at all times
8. All materials to bear the relevant B.S. Kitemark and comply fully with the specifications. All concrete & concrete products must use Sulphate resistant cement to withstand Class 3 condition (unless the site investigation report proves that sulphate attack from soils and groundwater will not occur).
9. All opening notices etc. as required under Highways Acts etc. are to be obtained prior to commencement of works. All works are to be inspected by L.A., NHBC or the Network Operator as applicable.
10. Where structured wall UPVC pipes (or similar approved) are used in adoptable drainage they shall be handled and laid in accordance with the manufacturers instructions and will be subject to post installation deformation testing prior to adoption.
    A Class S Bed and Surround must be used for structured wall pipes
10. Trench backfill in highways to within 1m of highway shall, as directed by the Highway Authority be a suitable granular material all in accordance with Sewers for Adoption.
12. Slab levels shall not be varied without reference to the Engineer for guidance.
13. Pipes have not been designed to accommodate construction traffic loading. The contractor is responsible for providing adequate protection to the pipes during construction.
14. All manhole covers and frames shall comply with BS EN124. All adoptable manholes and chambers shall comply with Sewers for Adoption 7th Edition. Covers in roads to be grade D400 and be 150mm deep. Manhole covers in car parking areas and drives to be grade B125 and covers in landscaping areas to be grade A15. All to be sized in accordance with Building Regulations Part H, Tables 11 & 12. "In-fill" type covers should not be used. Where a cover is located in an area of block paving, the bottom of the frame should be 150mm deep.

STRATEGY

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Client

Castle Green

Project

STANSTY ROAD,
WREXHMA

Title

Drainage Strategy
Sheet 3 of 3

DRAWING NUMBER	SCALE at A1	1:500	
8562 / SK02-3	DATE	21.07.25	REVISION
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