

SAFETY, HEALTH & ENVIRONMENTAL HAZARD INFORMATION BOX.



The hazards noted below are in addition to the normal hazards and risks faced by a competent contractor when dealing with the types of works detailed on this drawing.

CONSTRUCTION RISKS:

- Deep Trenches
- Unforeseen Services
- Leptospirosis

DEMOLITION RISKS:

- Leptospirosis

Notes:

1. DO NOT SCALE FROM THIS DRAWING.
2. All dimensions are in millimetres Unless Noted Otherwise (u.n.o.)
3. Drawing is to be read in conjunction with all relevant architect's drawings. Any inconsistencies should be reported to PRP immediately.
4. All levels and dimensions are to be checked on site before any work commences.
5. The Health and Safety at Work act is to be complied with at all times. Attention is drawn to the wearing of hard hats, reflectorised clothing, and the use of any other required safety equipment.

Drainage:

1. Invert levels of existing manholes to be checked on site prior to commencing any drainage works.
2. For positions of all rainwater pipes & foul outlets refer to Architect's drawings.
3. All joints between precast manhole components shall have a minimum uncompressed thickness of 10mm of proprietary bitumen or resin mastic sealant.
4. Storm & foul branch connections are to be laid at gradients of between 1:10 & 1:80
5. All in-situ concrete shall be minimum grade GEN3.
6. Precast concrete cover & reducing slabs to be heavy duty reinforced concrete to BS 5911.
7. Rising mains shall be black MDPE SDR11 as WI 4-32-03 & joints & fittings to be in accordance with WI 4-32-04. Other approved pipe materials to be in accordance with their relevant BS.
8. Manhole covers & frames shall be manufactured in cast iron or ductile iron & shall comply with requirements of BS EN 124 & shall be kile marked or equivalent.
9. Where there is no intermediate manhole between the start of a surface water pipe run and the soakaway the gradient of the run shall be not less than 1 : 60.
10. All completed work shall be suitably protected from damage by construction work. Damaged drainage will not be accepted. It is recommended that no heavy loading or underground work is permitted above or near unprotected drainage, and that dumpers, trucks, fork lifts or other heavy vehicles are not driven along or near pipe runs.

Surface Water Manhole and Pipe Schedule

Manhole Name	Cover Level	Invert Level	Depth	Manhole Type	Cover Type	Comments	Route	Length	Fall	Gradient	Pipe Size
RE1	107.215	106.615	0.600	Rodding Eye	B125		RE1-S1	29.774	0.373	1 in 80	100mm PVC
RE2	107.065	106.465	0.600	Rodding Eye	B125		RE2-S8	7.881	0.313	1 in 25	100mm PVC
RE3	107.015	106.415	0.600	Rodding Eye	B125		RE3-S11	26.278	0.931	1 in 28	100mm PVC
RE4	106.865	106.265	0.600	Rodding Eye	B125		RE4-S15	10.338	1.072	1 in 10	100mm PVC
RE5	106.865	106.265	0.600	Rodding Eye	B125		RE5-S14	7.785	0.256	1 in 30	100mm PVC
RE6	106.475	105.875	0.600	Rodding Eye	B125		RE6-S16	15.415	0.775	1 in 20	100mm PVC
RE7	106.730	106.130	0.600	Rodding Eye	B125		RE7-S36	14.802	0.465	1 in 32	100mm PVC
RE8	106.325	105.725	0.600	Rodding Eye	B125		RE8-S36	4.741	0.060	1 in 79	100mm PVC
RE9	106.325	105.725	0.600	Rodding Eye	B125		RE9-S38	16.411	0.506	1 in 32	100mm PVC
RE10	106.105	105.505	0.600	Rodding Eye	B125		RE10-S41	8.235	0.593	1 in 14	100mm PVC
RE11	106.185	105.585	0.600	Rodding Eye	B125		RE11-S43	12.139	0.602	1 in 20	100mm PVC
RE12	106.185	105.585	0.600	Rodding Eye	B125		RE12-S45	24.403	0.306	1 in 80	100mm PVC
RE13	106.140	105.540	0.600	Rodding Eye	B125		RE13-S63	29.208	0.366	1 in 80	100mm PVC
RE14	106.335	105.735	0.600	Rodding Eye	B125		RE14-S62	13.734	0.172	1 in 80	100mm PVC
S1	107.000	106.242	0.758	450mm PPIC	B125		S1-S11	22.361	0.758	1 in 29	100mm PVC
S2	106.993	106.243	0.750	450mm PPIC	C250		S2-S3	8.303	0.281	1 in 30	150mm PVC
S3	106.712	105.962	0.750	450mm PPIC	C250		S3-S7	7.126	0.298	1 in 24	150mm PVC
S4	106.730	105.980	0.750	450mm PPIC	C250		S4-S5	8.914	0.109	1 in 82	150mm PVC
S5	106.621	105.871	0.750	450mm PPIC	C250		S5-S7	8.897	0.207	1 in 43	150mm PVC
S6	106.671	105.921	0.750	450mm PPIC	C250		S6-S7	15.556	0.257	1 in 61	150mm PVC
S7	106.564	105.664	0.900	450mm PPIC	D400		S7-S11	17.992	0.180	1 in 100	150mm PVC
S8	106.902	106.152	0.750	450mm PPIC	C250		S8-S9	9.456	0.411	1 in 23	150mm PVC
S9	106.491	105.741	0.750	450mm PPIC	C250		S9-S11	7.739	0.257	1 in 30	150mm PVC
S10	106.440	105.690	0.750	450mm PPIC	C250		S10-S11	10.224	0.206	1 in 50	150mm PVC
S11	106.498	105.484	1.014	450mm PPIC	D400		S11-S12	17.919	0.180	1 in 100	150mm PVC
S12	106.466	105.304	1.162	450mm PPIC	D400		S12-S15	11.071	0.111	1 in 100	150mm PVC
S13	106.902	106.152	0.750	450mm PPIC	C250		S13-S14	9.288	0.143	1 in 65	150mm PVC
S14	106.759	106.009	0.750	450mm PPIC	C250		S14-S15	11.928	0.816	1 in 15	150mm PVC
S15	106.566	105.193	1.373	600mm PPIC	D400		S15-S16	9.262	0.093	1 in 100	150mm PVC
S16	106.295	105.100	1.195	600mm PPIC	D400		S16-S18	23.690	0.140	1 in 169	225mm PVC
S17	106.226	105.476	0.750	450mm PPIC	C250		S17-S18	10.758	0.516	1 in 21	150mm PVC
S18	106.054	104.960	1.094	450mm PPIC	D400		S18-S30	20.193	0.119	1 in 170	225mm PVC
S19	106.375	105.625	0.750	450mm PPIC	C250		S19-S20	15.130	0.375	1 in 40	150mm PVC
S20	106.000	105.250	0.750	450mm PPIC	C250		S20-S30	16.277	0.409	1 in 40	150mm PVC
S21	106.117	105.367	0.750	450mm PPIC	C250		S21-S22	11.370	0.114	1 in 100	150mm PVC
S22	106.200	105.253	0.947	450mm PPIC	C250		S22-S30	9.666	0.412	1 in 23	150mm PVC
S23	106.650	105.900	0.750	450mm PPIC	C250		S23-S27	16.118	0.216	1 in 75	150mm PVC
S24	106.650	106.050	0.600	300mm PPIC	B125		S24-S26	12.800	0.219	1 in 58	100mm PVC
S25	106.581	105.981	0.600	300mm PPIC	B125		S25-S26	3.906	0.150	1 in 26	100mm PVC
S26	106.581	105.831	0.750	450mm PPIC	C250		S26-S27	11.515	0.147	1 in 78	150mm PVC
S27	106.434	105.684	0.750	450mm PPIC	C250		S27-S30	13.380	0.843	1 in 16	150mm PVC
S28	106.206	105.456	0.750	450mm PPIC	C250		S28-S29	9.103	0.092	1 in 99	150mm PVC
S29	106.380	105.364	1.016	450mm PPIC	C250		S29-S30	4.327	0.523	1 in 8	150mm PVC
S30	106.194	104.841	1.353	600mm PPIC	D400		S30-S35	6.701	0.040	1 in 168	225mm PVC
S31	106.300	105.550	0.750	450mm PPIC	C250		S31-S32	9.451	0.174	1 in 54	150mm PVC
S32	106.126	105.376	0.750	450mm PPIC	C250		S32-S35	7.446	0.575	1 in 13	150mm PVC
S33	105.900	105.150	0.750	450mm PPIC	C250		S33-S34	11.187	0.203	1 in 55	150mm PVC
S34	105.697	104.947	0.750	450mm PPIC	C250		S34-S35	13.521	0.146	1 in 93	150mm PVC
S35	106.162	104.801	1.361	600mm PPIC	D400	300mm sump acting as a catchpit	S35-Tank	10.119	1.501	1 in 7	225mm PVC
S36	106.520	105.665	0.855	450mm PPIC	B125		S36-S37	7.122	0.280	1 in 25	150mm PVC
S37	106.135	105.385	0.750	450mm PPIC	C250		S37-S38	10.924	0.166	1 in 66	150mm PVC
S38	105.969	105.219	0.750	450mm PPIC	C250		S38-S42	11.332	0.405	1 in 28	150mm PVC
S39	106.205	105.455	0.750	450mm PPIC	C250		S39-S40	9.347	0.172	1 in 54	150mm PVC
S40	106.033	105.283	0.750	450mm PPIC	C250		S40-S41	16.619	0.371	1 in 45	150mm PVC
S41	105.812	104.912	0.900	450mm PPIC	D400		S41-S42	9.741	0.098	1 in 99	150mm PVC
S42	105.761	104.814	0.947	450mm PPIC	D400		S42-S44	10.792	0.133	1 in 81	150mm PVC
S43	105.733	104.983	0.750	450mm PPIC	C250		S43-S44	6.147	0.302	1 in 20	150mm PVC
S44	105.581	104.681	0.900	450mm PPIC	D400		S44-S50	10.835	0.109	1 in 99	150mm PVC
S45	106.105	105.279	0.826	450mm PPIC	B125		S45-S46	20.113	0.202	1 in 100	150mm PVC
S46	106.000	105.077	0.923	450mm PPIC	B125		S46-S47	14.278	0.143	1 in 100	150mm PVC
S47	105.930	104.934	0.996	450mm PPIC	B125		S47-S49	12.421	0.125	1 in 99	150mm PVC
S48	106.105	105.355	0.750	450mm PPIC	C250		S48-S49	8.622	0.546	1 in 16	150mm PVC
S49	105.700	104.809	0.891	450mm PPIC	C250		S49-S50	5.285	0.237	1 in 22	150mm PVC
S50	105.704	104.572	1.132	450mm PPIC	D400		S50-S53	22.956	0.136	1 in 169	225mm PVC
S51	106.140	105.390	0.750	450mm PPIC	C250		S51-S52	13.592	0.222	1 in 61	150mm PVC
S52	105.918	105.168	0.750	450mm PPIC	C250		S52-S53	5.156	0.732	1 in 7	150mm PVC
S53	106.014	104.436	1.578	600mm PPIC	D400		S53-S55	8.525	0.051	1 in 167	225mm PVC
S54	106.100	105.350	0.750	450mm PPIC	C250		S54-S55	13.586	0.965	1 in 14	150mm PVC
S55	105.902	104.385	1.517	600mm PPIC	D400		S55-S57	12.360	0.073	1 in 169	225mm PVC
S56	106.100	105.350	0.750	450mm PPIC	C250		S56-S57	14.788	1.038	1 in 14	150mm PVC
S57	105.889	104.312	1.577	600mm PPIC	D400		S57-S59	15.218	0.090	1 in 169	225mm PVC
S58	106.050	105.300	0.750	450mm PPIC	C250		S58-S59	15.220	1.078	1 in 14	150mm PVC
S59	105.880	104.222	1.658	600mm PPIC	D400		S59-S60	16.285	0.096	1 in 170	225mm PVC
S60	105.900	104.126	1.774	600mm PPIC	B125		S60-S61	7.765	0.046	1 in 169	225mm PVC
S61	106.000	104.080	1.920	600mm PPIC	B125	300mm sump acting as a catchpit	S61-S89 Pump	4.492	0.795	1 in 6	225mm PVC
S62	106.300	105.563	0.737	450mm PPIC	B125		S62-S63	11.232	0.389	1 in 29	100mm PVC
S63	106.100	105.174	0.926	450mm PPIC	B125		S63-S64	24.304	0.244	1 in 100	150mm PVC
S64	106.026	104.930	1.096	450mm PPIC	B125	300mm sump acting as a catchpit	S64-Tank	4.843	1.630	1 in 3	150mm PVC
S65	106.140	105.390	0.750	450mm PPIC	C250		S65-S43	10.644	0.407	1 in 26	150mm PVC
S89 Pump	106.200	103.285	2.915	1200mm PPC	B125	Rising Main	S89 Pump-S90	Rising Main	Rising Main	Rising Main	Rising Main
S90 Adoptable	105.855	105.198	0.657	1200mm PPC	D400	Protective concrete bed and surround	S90 Adoptable-S91	10.807	0.048	1 in 225	375mm PVC
S91 Adoptable	106.080	105.150	0.930	1200mm PPC	D400		S91 Adoptable-STW MH 160	Existing	Existing	Existing	Existing
Tank	105.400	103.300	2.100				Tank-S89 Pump	3.681	0.015	1 in 245	300mm PVC

Foul Water Manhole and Pipe Schedule

Manhole Name	Cover Level	Invert Level	Depth	Manhole Type	Cover Type	Comments	Route	Length	Fall	Gradient	Pipe Size
F1	106.450	105.850	0.600	300mm PPIC	B125		F1-F2	8.948	0.224	1 in 40	100mm PVC
F2	106.550	105.626	0.924	450mm PPIC	C250		F2-F3	4.304	0.054	1 in 80	100mm PVC
F3	106.550	105.572	0.978	450mm PPIC	C250		F3-F4	4.498	0.045	1 in 100	150mm PVC
F4	106.550	105.527	1.023	450mm PPIC	C250		F4-F8	10.864	0.370	1 in 29	150mm PVC
F5	106.300	105.700	0.600	300mm PPIC	C250		F5-F6	17.369	0.435	1 in 40	100mm PVC
F6	106.188	105.265	0.923	450mm PPIC	D400		F6-F8	8.618	0.108	1 in 80	100mm PVC
F7	106.150	105.550	0.600	300mm PPIC	B125		F7-F8	8.901	0.393	1 in 23	100mm PVC
F8	106.130	105.157	0.973	450mm PPIC	D400		F8-F9	18.496	0.185	1 in 100	150mm PVC
F9	106.209	104.972	1.237	450mm PPIC	D400		F9-F				