



Soakaway Ref	Area Draining m ²	Width m	Length m	Ground level	Invert level incoming pipe	Soakaway base invert	Infiltration Zone
So1	50	1.00	8.0	7.20	6.550	6.20	1
So2	50	1.00	8.0	7.20	6.550	6.20	1
So11	440	1.80	52.0	7.60	7.10	6.60	2
So12	80	1.20	24.0	7.20	6.50	6.20	4

Infiltration Zone	Soakage Rate (m/s)	Soakage Rate (m/hr)
1	1.06 E-05	0.03816
2	2.95 E-06	0.01062
3	5.88 E-06	0.021168
4	1.86 E-06	0.006696
5	3.91 E-06	0.014076
6	4.06 E-06	0.14616

FOUL WATER MANHOLE SCHEDULE						
No	Reference	Cover Level (mm)	Invert Level (mm)	Depth to soffit (mm)	Chamber Size (mm)	Cover Grade
2	F1	6,200	4,900	1,200	450	A15*
3	F12	7,535	6,935	0,500	250	A15
3	F12	7,535	6,865	0,570	450	A15
4	F13	7,550	6,950	0,500	250	A15
5	F14	7,230	6,800	0,330	450	A15
6	F2	7,585	5,891	1,544	450	A15*
7	F21	7,595	6,801	0,577	450	A15
8	F22	7,685	7,007	0,578	450	A15
9	F3	7,700	6,302	1,298	450	A15*
10	F31*	7,685	6,989	0,596	450	A15
11	F4	7,625	6,822	0,903	450	B125
12	F41	7,685	7,014	0,571	450	A15
13	F42	7,685	7,085	0,500	250	A15
14	F42	7,685	7,085	0,500	250	A15
15	F44	7,700	7,004	0,596	450	A15
16	F45	7,685	6,984	0,601	450	A15
17	F46	7,685	7,085	0,500	250	A15
18	F5	7,535	6,862	0,603	450	A15
19	F51	7,535	6,935	0,500	250	A15
20	F6	7,545	6,945	0,500	450	A15
21	F7	7,625	7,025	0,500	250	A15

SURFACE WATER MANHOLE SCHEDULE						
No	Reference	Cover Level (mm)	Invert Level (mm)	Depth to sofit (m)	Chamber Size (mm)	Cover Grade
1	S1(S1)	7.200	6.725	0.375	450	A15
2	S2(S2)	7.625	6.970	0.555	450	A15
3	S3(S3)	7.365	6.770	0.495	450	A15
4	S4(S1)	7.535	6.780	0.655	450	A15
5	S5(S1)	7.300	6.764	0.436	450	A15
6	S6	7.685	7.244	0.341	450	A15
7	S7(S1)	7.630	7.158	0.372	450	A15
8	S8(S1)	7.685	7.128	0.457	450	A15
9	S9(S1)	7.685	7.169	0.416	450	A15
10	S10(S1)	7.685	7.172	0.413	450	A15
11	S11(S1)	7.685	7.122	0.413	450	A15
12	S12(S1)	7.685	6.988	0.399	450	A15
13	S13(S1)	7.685	7.125	0.460	450	A15
14	S14(S1)	7.585	7.122	0.360	450	A15
15	S15(S1)	7.585	7.175	0.310	450	A15

1. All levels are to be local Datum.
2. All Highway works or on adjacent to existing public highway shall be executed in accordance with the Traffic Safety Code for Roadworks and Chapter 8 of the Traffic Signs Manual.
3. At the commencement of works on site the contractor is to carry out trial pits and liaise with Utility Companies in order to establish the exact position of all existing statutory utility plant in the vicinity of works and take adequate precautions or their protection.
4. The Contractor is to comply fully with the CDM Regulations in the course of constructing the works.
5. Highways in the vicinity of the works must be kept free from mud, debris and dust falling from vehicles or the wheels of vehicles connected with the works.
6. All drain and sewer pipes to be laid soffit to soffit, unless shown otherwise.
7. Minimum gradient for 1000 SW is 1:100 and 1000 FW is 1:80 with one WC connected otherwise 1:40. Bedding for domestic drainage Class B. All pipe runs near buildings to comply with the Building Regulations 2010 Part H1.
8. Position of soil pipes, standing wastes, w outlets etc. are shown on the Architects' working drawings. Rainwater downpipe positions are to be checked against Architects details to ensure compatibility. Rainwater downpipes to have rodding access facilities where surface water drainage passes under buildings.
9. All concrete and concrete products to be in accordance with BRE 363 for sulphates.
10. All slab levels shown are for guidance only and may need to be adjusted on site, subject to approval by the engineer.
11. Do not scale from this drawing, work only from stated dimensions or setting out details.
12. Refer to tables for manhole schedules
13. Where paths falls towards the front door use suitable linear/slot drainage system connected to surface water system as per architects details.
14. All plots to have gardens sloping away from properties otherwise interceptor drains to be installed.
15. Surface water drainage connected to catchpit manhole prior to discharge to soakaway
16. Soakaways to be minimum 8.0m from dwelling foundations and 2.0m from boundary wall foundations. Boundary walls within 2.0m of soakaways to have reinforced foundations. Prior to construction of soakways trial holes to be dug to the invert of base to establish ground water level.
17. This drawing is to be read in conjunction with all relevant engineering drawings issued by Escher Silverman and Crayfen Homes for this site only.

	Domestic surface water drain with rodding eye.
	TYPE 3 - 450mm
	Type 5 - 450mm Silt Trap
	ACO drain
	Domestic trench soakaways.

Sizing determined by in-situ infiltration testing.
Soakaways designed in accordance with Environment Agency criteria for 1 in 100years storm return +40% climate change and sited a minimum of 8.0m from new dwellings.

Existing foul water sewer
 Domestic foul water sewer and manholes
 Type 3 - 450mm Ø
 Type 4 Shallow PPIC inspection chamber - 250mm Ø
 Invert 750mm lower than FFL unless noted otherwise

	Permeable block paved access construction - Paving Detail 01
	Permeable block paved drive construction - Paving Detail 02
	Impermeable paved access construction
	Cross Over Impermeable Finishes (TBC)
	Fence
	Retaining wall

Drawing Status
PRELIMINARY

Client



Drawn HN	Checked KN	Scales 1:200	Paper Size A1	Date 05.18
Job No. ES1801		Drawing No. 502-01		Revision E

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

Contractor is not relieved of any of his obligations under all applicable health and safety regulations.