SOAKAWAY DETAILS-Domestic Trench Soakaways

Soakaway Ref	Area Draining m^2	Width m	Length m	Ground level	Invert level upcoming pipe	Soakaway base Invert	Infiltration Zone
So1	50	1.00	7.0	7.20	6.375	6.00	1
So2	50	1.00	7.0	7.20	6.375	6.00	1
So3	65	1.50	7.0	7.20	6.70	6.00	2
So4	80	1.50	9.0	7.20	6.70	6.00	4
So5	90	1.50	7.0	7.60	6.90	6.30	3
So6	50	1.50	7.0	7.70	7.11	6.71	2
So7	50	1.50	7.0	7.70	7.11	6.71	2
So8	80	1.50	7.0	7.60	7.11	6.25	2
So9	80	1.50	7.0	7.60	7.11	6.25	2
So10	80	1.50	7.0	7.60	7.00	6.55	1

Infiltration Zone

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

Infiltration rates have been measured on site in accordance with BRE365.

FOUL DRAINAGE MANHOLE SCHEDULE

REFERENCE	Cover Level (m)	Invert Level (m)	Depth to Soffit (m)	Size (mm)	Type	Cover Grade
F1	6.20	4.80	1.250	450 diameter	3	D400
F2	7.60	6.20	1.250	450 diameter	3	B125
F3	7.70	6.40	1.150	450 diameter	3	B125
F4	7.55	6.663/6.613	0.787	450 diameter	3	B125
F5	7.55	6.825	0.625	450 diameter	3	B125
F6	7.55	6.95	0.500	450 diameter	3	B125
F7	7.55	6.95	0.500	450 diameter	3	B125

Notes:

1.All levels are to local Datum.
2.All Highway work's on or adjacent to existing public highway shall be executed in accordance with the Traffic Safety Code for Roadwork's 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 100Ø SW is 1:100 and 100Ø 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, wc outlets etc. are shown on the Architect's 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 sysytem 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 catchit 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 soakaways 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 relevent engineering drawings issued by Escher Silverman and Crayfern Homes for this site only.

LEGEND:

Surface Water Drainage Legend:

- R1 — Domestic surface water drain with rodding eye.
- S1/1 — TYPE 3 - 450mm
- ST3 — Type 5 - 450mm Silt Trap
- ACO drain
- So1 — 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.

Foul Water Drainage Legend:

- Existing foul water sewer
- F4 — Domestic foul water sewer and manholes
- F4 — Type 3 - 450mm Ø
- F4/1 — Type 4 Shallow PPIC Inspection chamber - 250mm Ø. Invert 750mm lower than FFL unless noted otherwise

Key:

- Permeable block paved access construction - Paving Detail 01
- Permeable block paved drive construction - Paving Detail 02
- +125.80 — Proposed levels

SAFETY, HEALTH & ENVIRONMENTAL INFORMATION CDM Regulations 2015

In addition to the hazards/risks normally associated with the type of work detailed on this drawing note should be made of the following:

- Working in vicinity of deep excavations.
- Working in live Highway
- Existing Services across site and in Highway

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.

Rev.	Date	Details	Initials
A	28.05.18	Initial issue	KN

Drawing Status: PRELIMINARY

Project: ORCHARD BUSINESS PARK
NORTH END ROAD, YAPTON

Client: Crayfern HOMES

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Drawing Title: Engineering Details
Drainage Proposals

Drawn	Checked	Scales	Paper Size	Date
KN		1:250	A1	05.18
Job No.		Drawing No.		Revision
ES1801		502-01		A

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Dimensions should be checked and verified on site and any discrepancies should be reported to Escher Silverman as soon as possible.