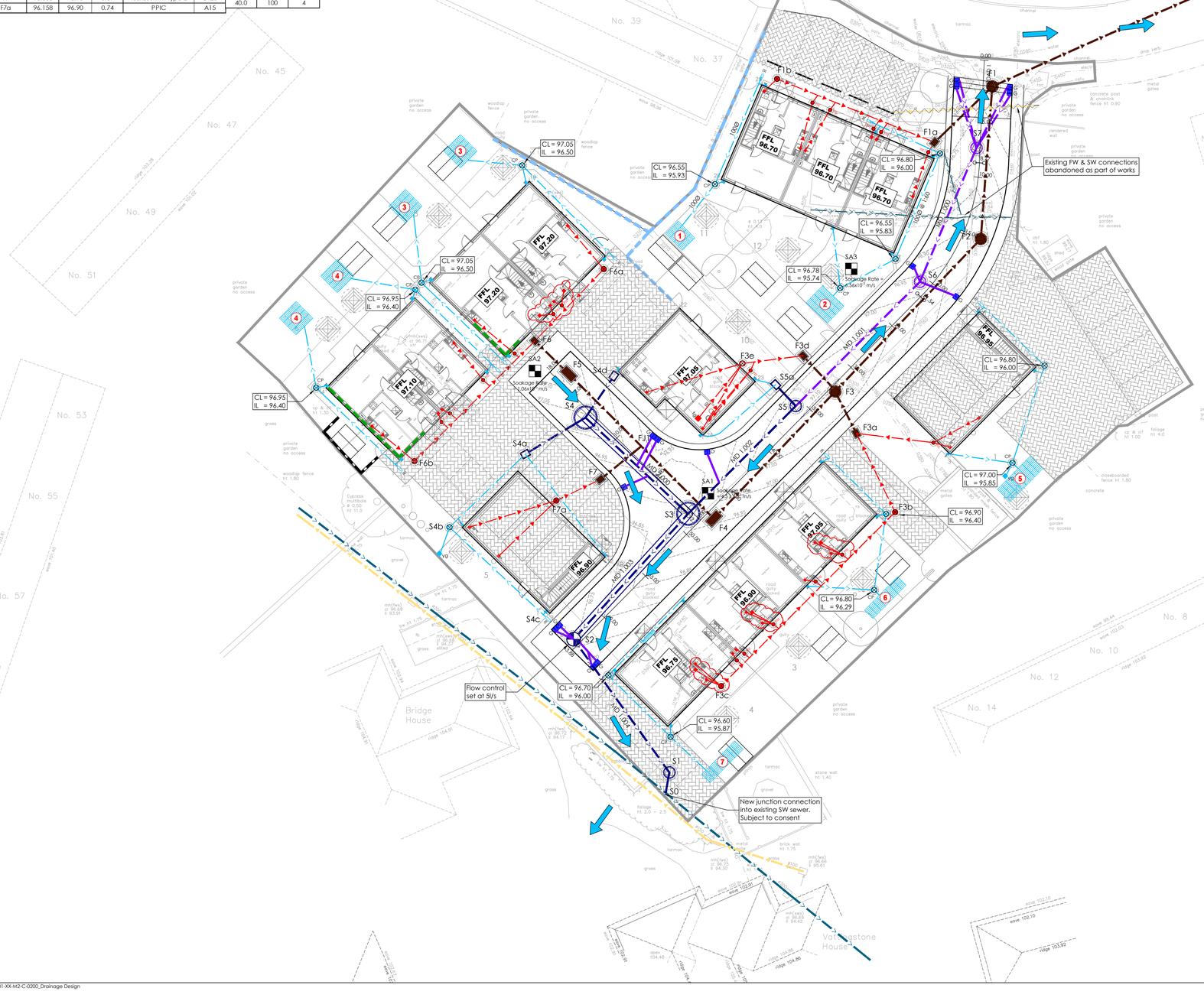
Foul Water Network					
Manhole Reference	Invert Level (m)	Cover Level (m)	Depth (m)	Chamber Details	Cover Loading
F0	94.700	96.10	1.40	Existing	-
F1	95.113	96.70	1.59	1200Ø PCC	D400
F2	95.275	96.87	1.60	1200Ø PCC	D400
F3	95.500	97.10	1.60	1200Ø PCC	D400
F4	95.800	96.95	1.15	900x1200mm Type C	D400
F5	96.092	97.10	1.01	450x600mm Type D	D400
F6	96.158	97.17	1.01	450x600mm Type D	B125
F1	95.163	96.70	1.54	1200Ø PCC	D400
F1a	95.513	96.78	1.27	450x600mm Type D	B125
F1b	95.875	96.65	0.78	PPIC	A15
F3	95.550	97.10	1.55	1200Ø PCC	D400
F3a	95.600	97.10	1.50	450x600mm Type D	D400
F3b	95.694	96.90	1.21	PPIC	A15
F3c	95.956	96.73	0.77	PPIC	A15
F3	95.500	97.10	1.60	1200Ø PCC	D400
F3d	95.900	97.10	1.20	450x600mm Type D	B125
F3e	96.275	96.90	0.63	PPIC	A15
F6	96.158	97.17	1.01	450x600mm Type D	B125
F6a	96.442	97.10	0.66	PPIC	A15
F6	96.158	97.17	1.01	450x600mm Type D	B125
F6b	96.340	96.95	0.61	PPIC	A15
FJ1	95.946	96.96	1.01	Junction	-
F7	96.058	96.95	0.89	450x600mm Type D	B125
F7a	96.158	96.90	0.74	PPIC	A15

Grade 1 in	Pipe DIA (mm)	Length (m)
80.0	150	33
80.0	150	13
80.0	150	18
60.0	100	15
60.0	100	17.5
60.0	100	4
20.0	100	7
40.0	100	14.5
80.0	100	4
80.0	100	7.5
80.0	100	21
10.0	100	4
12.0	100	4.5
30.0	100	8.5
80.0	100	14.5
40.0	100	4.5
40.0	100	4

Surface Water Network					
Manhole Reference	Invert Level (m)	Cover Level (m)	Depth (m)	Chamber Details	Cover Loading
S0	94.600	96.60	2.00	Junction	-
S1	94.633	96.60	1.97	1200Ø PCC	D400
S2	94.867	96.75	1.88	Flow Control	D400
S3	94.939	96.93	1.99	1800Ø PCC	D400
S4	94.999	97.04	2.04	1800Ø PCC	D400
S4 (in)	95.599	97.04	2.04	-	-
S4a	95.799	96.90	1.10	450x600mm Type D	B125
S4b	96.024	96.86	0.84	PPIC	A15
S4c	96.312	96.80	0.49	Rod. Eye	A15
S4	95.599	97.04	2.04	1800Ø PCC	D400
S4d	96.049	96.95	0.90	450x600mm Type D	B125
S3	95.464	96.93	1.47	1800Ø PCC	D400
S5	95.529	97.07	1.54	1200Ø PCC	D400
S6	95.604	96.97	1.37	1200Ø PCC	D400
S7	95.667	96.80	1.13	1200Ø PCC	D400
S5	95.679	97.07	1.39	1200Ø PCC	D400
S5a	95.929	97.15	1.22	450x600mm Type D	B125

Grade 1 in	Pipe DIA (mm)	Length (m)
60.0	150	2
60.0	150	14
200.0	750	14.5
200.0	750	12
30.0	150	0
30.0	150	6
40.0	100	9
40.0	100	11.5
10.0	150	4.5
200.0	225	13
200.0	225	15
200.0	225	12.5
10.0	150	2.5



SOAKAWAY SCHEDULE				
DIMENSIONS (length x width x depth)	REF	COVER LEVEL	INVERT LEVEL	BASE LEVEL
1.5m x 2.0m x 0.8m	1	96.95	95.900	95.200
2.0m x 2.5m x 0.8m	2	96.80	95.700	95.000
2.0m x 2.0m x 0.8m	3	96.85	96.400	95.700
2.0m x 2.0m x 0.8m	4	96.80	96.300	95.600
1.5m x 4.0m x 0.8m	5	97.00	95.700	95.000
1.0m x 4.0m x 0.8m	6	96.80	96.250	95.550
1.0m x 4.0m x 0.8m	7	96.70	95.800	95.100

BURIED UTILITIES RISK NOTE

- Buried utilities are present on and in the vicinity of the site.
- The Contractor must satisfy themselves that they have seen utility returns for the area and that appropriate Risk Assessment Method Statement (RAMS) are in place and implemented to ensure that buried and/or overhead services are located prior to any works taking place.
- Any RAMS shall address safe procedures for protection and working in the proximity of services.

DESIGNERS CDM NOTE - RESIDUAL RISKS NOT IDENTIFIED

The design Engineer(s) have assessed this design as the scheme has been developed in order to identify if there are any residual risk hazards (i.e. unusual, unexpected, abnormal or difficult).

No residual risks have been identified for this scheme and therefore no entries were added to the risk register.

This statement assumes that a competent Contractor with the appropriate qualified staff will be employed for the works, and that they will be familiar with site wide construction risks and hazards that they can reasonably be expected to encounter as part of their work.

Survey: 557/10090/1 Rev A Rec'd: 14.04.2020
Site Plan: 6332/W/10 C4 Rec'd: 03.09.2021

NOTES

1. All dimensions and levels are in metres unless otherwise noted
2. This drawing is to be read in conjunction with the relevant Architect's/Engineer's drawings, specifications and CDM documentation
3. This drawings has been produced electronically and may have been photo reduced or enlarged when copied. Work to figured dimensions only (DO NOT SCALE). All dimensions to be checked on site. Any errors or omissions to be reported to the engineer immediately.
4. This drawing contains coloured lines / information that may not be clear if reproduced in black and white.
5. Digital copies of this plan can only be considered accurate if supplied directly by Infrastruct CS Ltd.

Construction Note

It is essential that new drainage associated with the development is laid from the outfall(s) into the site. This is essential to avoid unforeseen obstructions where encountered (such as services). If the drainage is laid from the site out to the outfall it can result in significant abortive works to relay and overcome such obstructions.

Location of Public Sewers have been taken from record drawings which should be fully substantiated by the contractor prior to commencing works on site

All manholes covers located within carriageways shall have no slip covers to prevent motorcycles/cycles losing control

Manhole schedules - Invert level shown related to the deepest pipe within the chamber

Drainage Key

Sewers

- Foul water drain (private/non adoptable)
- Surface water drain (private/non adoptable)
- Foul water sewer (Adoptable)
- Surface water sewer (Adoptable)
- Highway drain (Adoptable)
- Existing highway drain
- Existing foul water drain (private/non adopted)
- Existing surface water drain (private/non adopted)
- Existing foul water sewer (Adopted)
- Existing surface water sewer (Adopted)
- Redundant sewer

Chamber Key

FW/SW

- Mini access chamber (mac) - 300mmØ
- PPIC - 475mmØ*
- P.C.C. units/brick*
- Adoptable demarcation manhole within 1m of boundary
- Manhole Depth: 1.25m to 1.5m* Depth: 1.55m to 3.0m*

* General note
(Refer to standard details & longitudinal sections for chamber sizes. Size may need to increase dependant on number of incoming pipes/size of incoming pipes)

- Surface water rodding eye
- Rain water down pipe (roddable access)
- Soil vent pipe/soil stack
- Silt Trap (ST) with removable silt bucket
- S1/F1 Manhole reference number
- YD Yard gully (150mm - 200mmØ trapped)
- CB Road gully (trapped) D400
- FD Floor gully (trapped)
- S Surface water sump unit
- Linear drainage channel
- Cellular storage (refer to drawing for sizes)
- FFL XX.XX Finished Floor Level (FFL)
- Block paving - permeable
- Flood Exceedance Route

NOTE

Drainage system has been designed to ensure no surface flooding during a 1 in 100yr plus 40% climate change storm event

Manhole covers within the road to be pedestrian friendly non-slip covers with Wessex water standards

REV	DRAWN	CHECK	REVISION COMMENTS	ISSUE DATE
P09	NJ	TST	Floor gullys added to plots 2-4 & 8-9, Minor SVP relocation to plots 2-4 WC	10/09/21
P08	NJ	TST	Gardens and drainage to plot 10 updated	09/09/21
P07	NJ	TST	Amendments to MH cover levels, F3a, F3b, F3c, F7a & S4a, S4b, S4c, S5a	01/07/21
P06	SNN	TST	Permeable Paving amended as Quattro Drawing 6332-W-10	28/06/21
P05	SNN	TST	Permeable Paving extended to Boundary	22/06/21
P04	NJ	TST	Road gully added to drawing	04/05/21
P03	NJ	TST	Note regarding pedestrian friendly covers added	14/04/21
P02	NJ	TST	Exceedance flow routes added	18/02/21

DRAWING TITLE: Drainage Design
SHEET NO.: 1/1

PROJECT
Quarry Road
Alveston
BS35 3JJ

CLIENT
EG CARTER & CO LTD

Infrastruct CS Ltd
The Stables, High Cogges Farm, High Cogges Lane, Witney, OX29 6AH. Tel: 01993 280700 info@infrastructcs.co.uk

SCALE @ A1	ENGINEER
1:200 (0m, 5m, 10.0m)	TST
	DRAFT NJ
PROJECT NUMBER: 3743	STATUS: S4
ISSUE PURPOSE: TECHNICAL APPROVAL	APPROVED TST

PROJECT	ORIGIN	PHASE	LEVEL	TYPE	ROLE	NO.	REVISION
QUAR	ICS	01	XX	DR	C	0200	P09