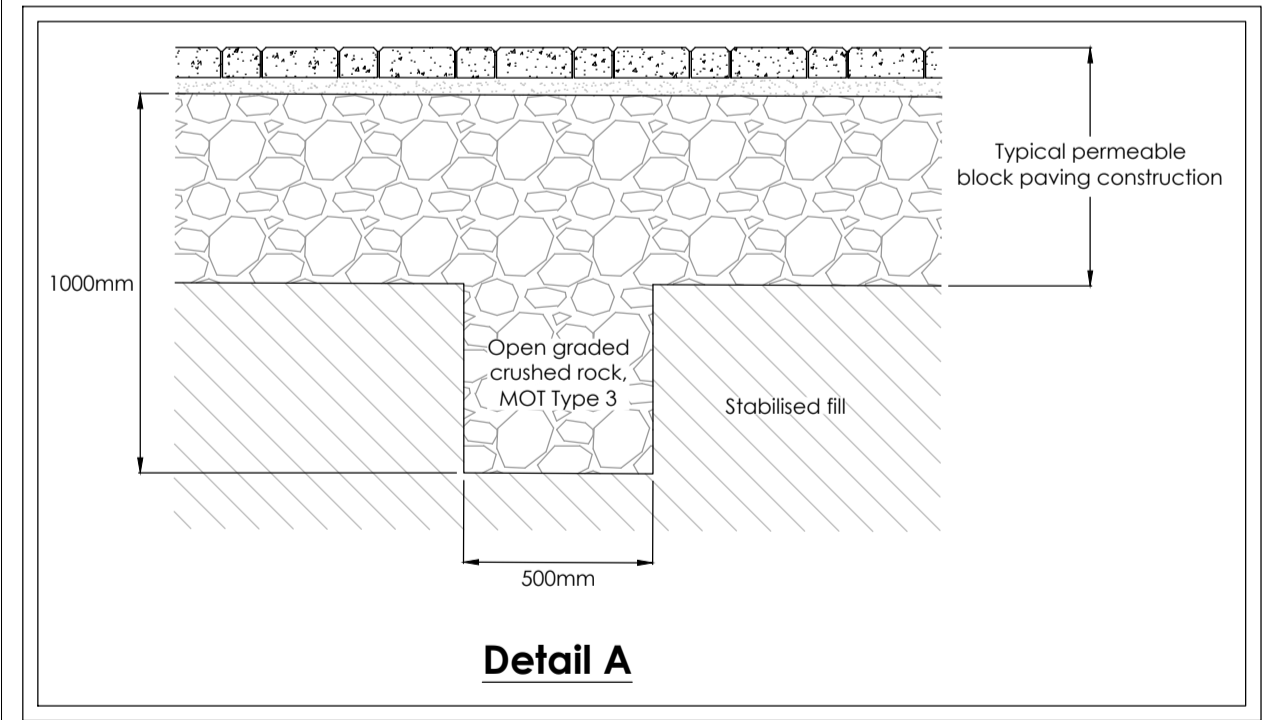
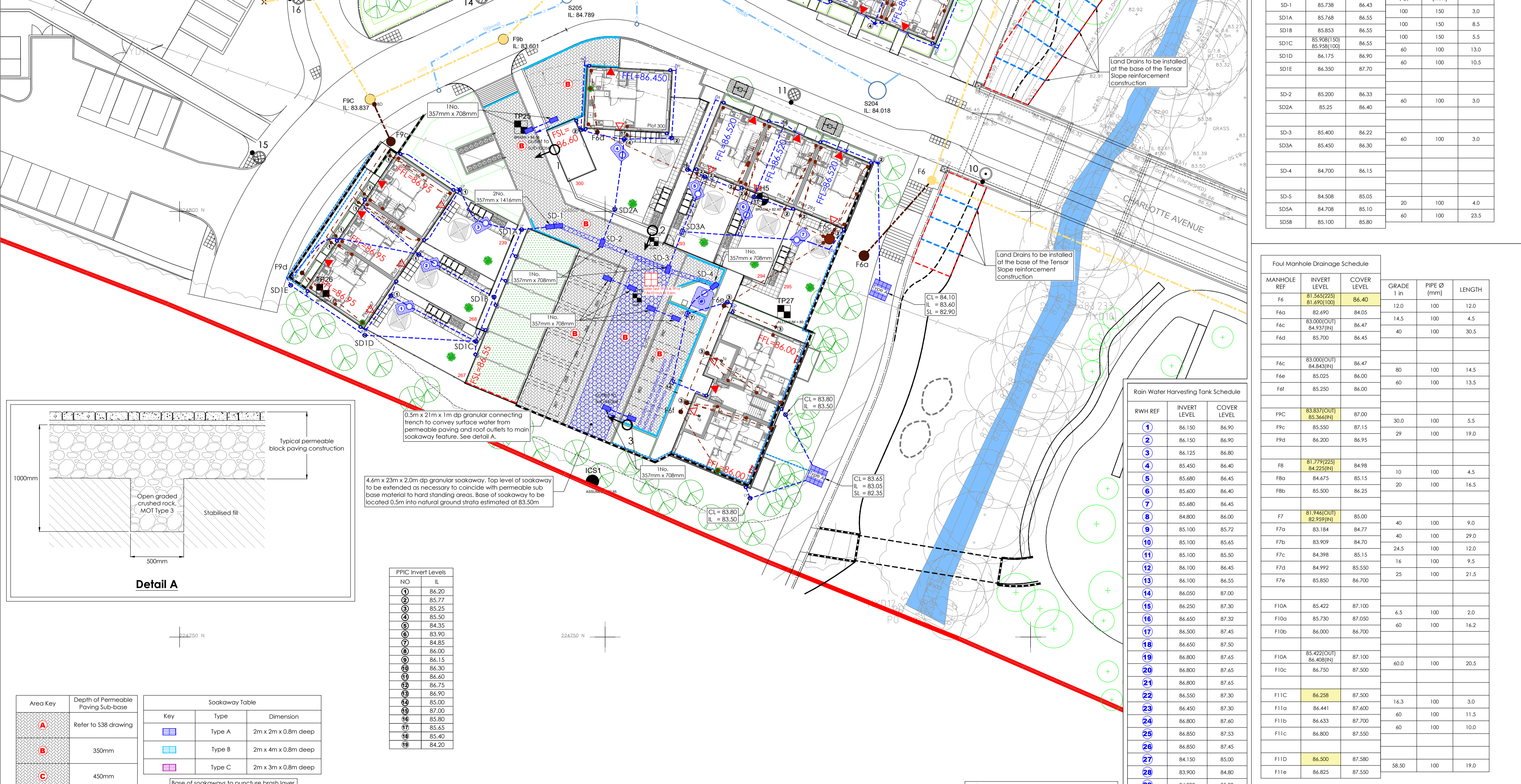




Sheet Arrangement (1:2500)



0.5m x 21m x 1m dp granular connecting trench to convey surface water from permeable paving and roof outlets to main soakaway feature. See detail A.

4.6m x 23m x 2.0m dp granular soakaway. Top level of soakaway to be extended as necessary to coincide with permeable sub base material to hard standing areas. Base of soakaway to be located 0.5m into natural ground strata estimated at 83.50m.

PPIC Invert Levels	NO	IL
1	84.20	
2	85.77	
3	85.25	
4	85.50	
5	84.35	
6	83.90	
7	84.85	
8	86.00	
9	86.15	
10	86.30	
11	86.40	
12	86.75	
13	86.90	
14	85.00	
15	87.00	
16	85.80	
17	85.65	
18	85.40	
19	84.20	

Area Key	Depth of Permeable Paving Sub-base	Soakaway Table
A	Refer to S38 drawing	Key
B	350mm	Type
C	450mm	Dimension

DESIGNER'S 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.

- NOTES**
- All dimensions and levels are in metres unless otherwise noted
 - This drawing is to be read in conjunction with the relevant Architect/Engineer's drawings, specifications and CDM documentation
 - 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.
 - This drawing contains coloured lines / information that may not be clear if reproduced in black and white.

Drainage Key

Symbol	Description
--- (dashed)	Foul water drain (private/non adoptable)
--- (dotted)	Surface water drain (private/non adoptable)
--- (dash-dot)	Foul water sewer (Adoptable)
--- (long dash)	Surface water sewer (Adoptable)
--- (short dash)	Existing foul water sewer (Adopted)
--- (medium dash)	Existing surface water sewer (Adopted)

Chamber Key

FW	SW	Description
●	●	Mini access chamber (mac) - 300mmØ*
○	○	PPIC - 475mmØ* - CP = Catchpit
■	■	P.C.C. units/brick *
□	□	Adoptable demarcation manhole within 1m of boundary *
○	○	Manhole Depth 1.25 to 1.5m * Depth 1.55 to 3.0m *

General note
(Refer to standard details & long sections for chamber sizes. Sizes may need to increase dependent on number of incoming pipes/size of incoming pipes)

F1 Surface water rodding eye
F1 Manhole reference number
● Rain water down pipe (roddable access)
● Soil vent pipe/soil stack
● Vented soil vent pipe/soil stack (minimum)
● RWP cellular discharge/collection unit

Retaining wall

Symbol	Description
FFL XX.XX	Finished Floor Level (FFL)
▨	Block paving - Permeable
▨	Impermeable barrier
▨	Permeable paving baffle
▨	Service baffle
▨	Proposed filter drain (To cater for extreme storm events)
○	Indicative location of fruit tree/bush
▨	Land drain adjacent to retaining wall
▨	Rainwater Harvesting Tank
▨	Tensor Greenslope (or similar approved) Banking/Slope reinforcement structure with Land Drains installed at the base.
▨	Areas of proposed green roof
▨	Existing watercourse

NOTE: ALL UNREFERENCED SURFACE WATER PIPEWORK TO BE 100mmØ UNLESS SHOWN OTHERWISE

ACA	NJ	TST	Comments	Date
AC2	SNN	TST	Cover level for Manhole F6 revised. River corridor stairs amended	29/08/17
AC3	SNN	TST	Lighting Column position amended following comments from OCC	21/07/17
AC4	SNN	TST	Area 2 updated to latest PRP layout drawing	03/07/17
AC3	SNN	TST	Area 1 Access Road re-aligned as client comments. Minor As-Built drainage amendments	13/06/17
AC2	SNN	TST	Area 1 Access Road re-aligned as client comments 08/06/2017	09/06/17
AC1	SNN	TST	As Constructed amendments to client comments 02/06/2017	05/06/17
C13	SNN	TST	Minor amendments to client comments	08/05/17

Surface Manhole Drainage Schedule

MANHOLE REF	INVERT LEVEL	COVER LEVEL	GRADE 1 in	PIPE Ø (mm)	LENGTH
SD-1	85.738	86.43	100	150	3.0
SD1A	85.768	86.55	100	150	8.5
SD1B	85.853	86.55	100	150	5.5
SD1C	85.908(150)	86.55	60	100	13.0
SD1D	86.175	86.90	60	100	10.5
SD1E	86.350	87.70	60	100	23.5
SD-2	85.200	86.33	60	100	3.0
SD2A	85.25	86.40	60	100	3.0
SD-3	85.400	86.22	60	100	3.0
SD3A	85.450	86.30	60	100	3.0
SD-4	84.700	86.15	60	100	3.0
SD-5	84.508	85.05	20	100	4.0
SD5A	84.708	85.10	60	100	23.5
SD5B	85.100	85.80	60	100	23.5

Foul Manhole Drainage Schedule

MANHOLE REF	INVERT LEVEL	COVER LEVEL	GRADE 1 in	PIPE Ø (mm)	LENGTH
F6	81.565(225)	81.690(100)	12.0	100	12.0
F6a	82.690	84.05	14.5	100	4.5
F6c	83.000(OUI)	84.937(84)	40	100	30.5
F6d	85.700	86.45	40	100	30.5
F6e	83.000(OUI)	84.843(84)	80	100	14.5
F6f	85.025	86.00	60	100	13.5
F6g	85.250	86.00	60	100	13.5
F9c	83.837(OUI)	83.866(84)	30.0	100	5.5
F9c	85.550	87.15	29	100	19.0
F9d	86.200	86.95	29	100	19.0
F8	81.779(225)	84.98	10	100	4.5
F8a	84.675	85.15	20	100	16.5
F8b	85.500	86.25	20	100	16.5
F7	81.944(OUI)	82.959(84)	40	100	9.0
F7a	83.184	84.77	40	100	29.0
F7b	83.909	84.70	24.5	100	12.0
F7c	84.398	85.15	16	100	9.5
F7d	84.992	85.550	16	100	9.5
F7e	85.850	86.700	25	100	21.5
F10A	85.422	87.100	6.5	100	2.0
F10a	85.730	87.050	60	100	16.2
F10b	86.000	86.700	60	100	16.2
F10A	85.422(OUI)	86.408(84)	60.0	100	20.5
F10c	86.750	87.500	60.0	100	20.5
F11C	86.258	87.500	16.3	100	3.0
F11a	86.441	87.600	60	100	11.5
F11b	86.633	87.700	60	100	10.0
F11c	86.800	87.550	60	100	10.0
F11D	86.500	87.580	58.50	100	19.0
F11e	86.825	87.550	58.50	100	19.0

Rain Water Harvesting Tank Schedule

RWH REF	INVERT LEVEL	COVER LEVEL
1	86.150	86.90
2	86.150	86.90
3	86.125	86.80
4	85.450	86.40
5	85.680	86.45
6	85.600	86.40
7	85.680	86.45
8	84.800	86.00
9	85.100	85.72
10	85.100	85.65
11	85.100	85.50
12	86.100	86.45
13	86.100	86.55
14	86.050	87.00
15	86.250	87.30
16	86.650	87.32
17	86.500	87.45
18	86.650	87.50
19	86.800	87.65
20	86.800	87.65
21	86.800	87.65
22	86.550	87.30
23	86.450	87.30
24	86.800	87.60
25	86.850	87.53
26	86.850	87.45
27	84.150	85.00
28	83.900	84.80
29	84.900	85.90
30	85.400	86.55

Note: For RWH Units 31 onward Refer to Sheets 3 of 4

DRAWING TITLE
Proposed Drainage Plan
Sheet 4/4

PROJECT
Phase 2
Bicester Eco Village
Bicester
Oxon

DESIGNED BY TST
DRAFTED BY NJ
APPROVED BY DJ

DATE 08/01/2016
STATUS AS CONSTRUCTED

SCALE 1:250 @ A1
Scale bar: 0m, 4.25m, 12.5m

CLIENT
Hill
Infrastrut CS Ltd

JOB NUMBER 15-1859
DRAWING NUMBER 03-4
REVISION AC6