

DRAINAGE STRATEGY

FOUL & STORM WATER DESIGN -

GENERAL - The storm water drainage scheme shown is designed to conform with the those requirements as set out in SuDS manual CIRIA document 753, ensuring run off water is source controlled appropriately.

Foul water is shown as connecting to a public sewer but may connect via a nearer public or indirectly through a private system subject to further detailed survey. Note, NOT ALL PUBLIC SEWERS ARE INDICATED ON THE SEWERAGE AUTHORITY MAPS.

STORM WATER - The existing greenfield site measures some 0.12 ha in area. It is located in flood zone 1 area for fluvial and tidal flooding. The proposed development adds offer the following areas:-

Red line boundary area	1233 sq.m
Predevelopment soft area	1233 sq.m

House roof area	260 sq.m
New car parking area	75 sq.m
Paving at front of houses	71 sq.m
Patios at rear of houses	62 sq.m

TOTAL IMPERMEABLE AREAS	468 sq.m
Soft areas	765 sq.m
TOTAL SITE AREA	1233 sq.m

Q-bar rate - The Q-bar rate is the established greenfield run off rate from the site. Run require this rate to be that apportioned to the impermeable run off and not the whole site. As the impermeable run off area is only 468 sqm, the Q-bar rate of 0.11 lit/sec is very low and impracticable to achieve. Therefore the outflow is controlled with a manufacturer of flow control device able to achieve a rate of 0.7 lit/sec.

Roof - The roof downpipes from the front of the houses shall be drained through a system of pipes and catchpits which connect to the positive storm drainage connection from the site. The roof downpipes at the rear of the houses will drop to drain with a rain diverter to a 210 lit water butt.

Geacrate Attenuation - The offline geocrate attenuation tanks provides the 100 year + 45% climate change event storage required for the outflow from the site of 0.7 lit/sec, established as 91 cu.m. This volume is provided in 3 nr. 0.5m deep geocrate module tanks wrapped with an impermeable membrane. The tanks are at a suitable depth required to overcome flotation due to the high winter groundwater levels likely.

DESIGN EXCEEDANCE FLOWS - Where design storms and attenuation volumes are exceeded, such flows will run down the road towards the lowest part of the site and to the highway.

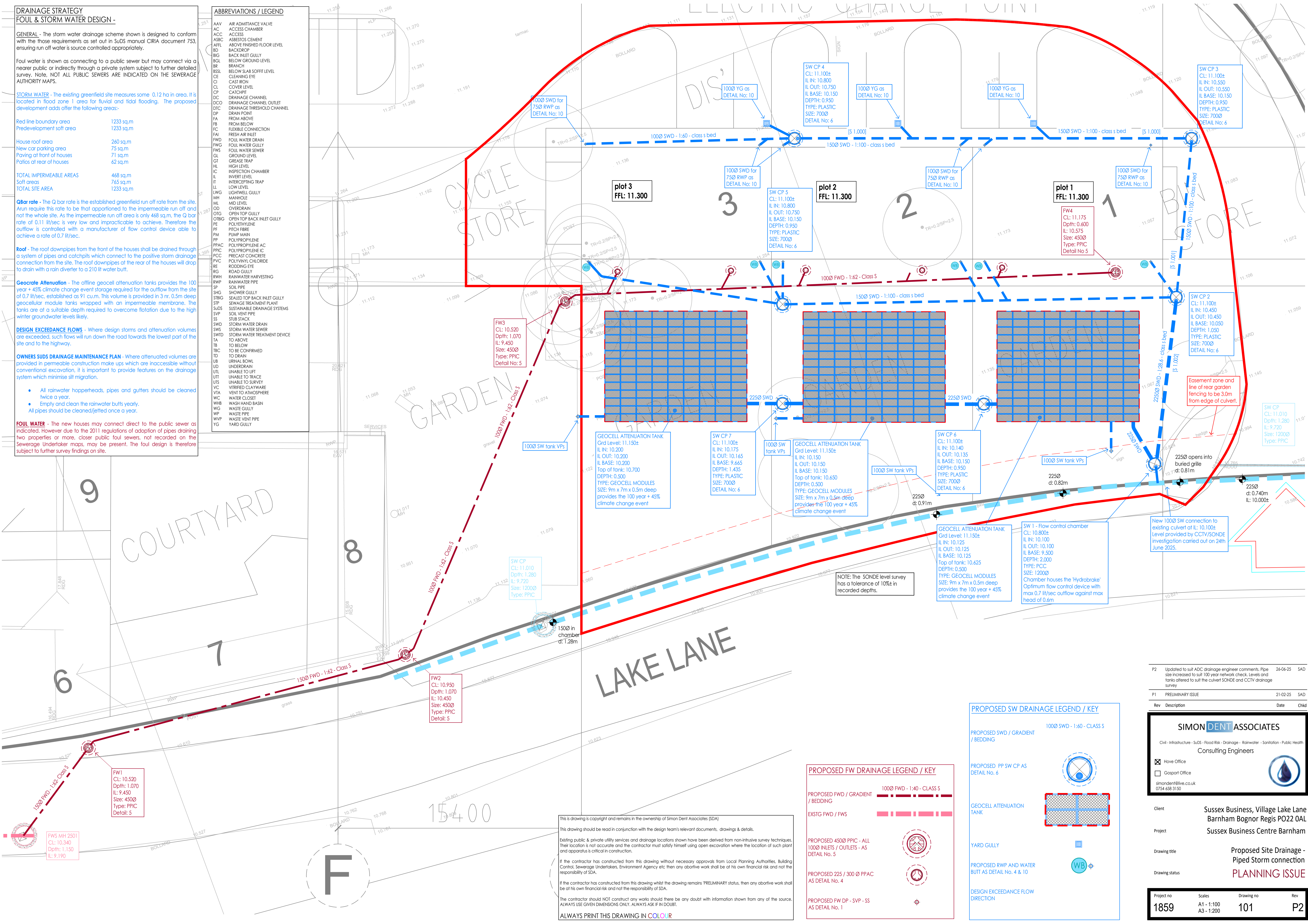
OWNERS SUDS DRAINAGE MAINTENANCE PLAN - Where attenuated volumes are provided in permeable construction make ups which are inaccessible without conventional excavation, it is important to provide features on the drainage system which minimise silt migration.	TD	TO DRAIN
	UB	URINAL BOWL
	UD	UNDERDRAIN
	UTL	UNABLE TO LIFT
	UTT	UNABLE TO TRACE
	UT	UNUSUAL

- All rainwater hopperheads, pipes and gutters should be cleaned twice a year.
 - Empty and clean the rainwater butts yearly.
- All pipes should be cleaned/jettied once a year.

FOUL WATER - The new houses may connect direct to the public sewer as indicated. However due to the 2011 regulations of adoption of pipes draining two properties or more, closer public foul sewers, not recorded on the Sewerage Undertaker maps, may be present. The foul design is therefore subject to further survey findings on site.

ABBREVIATIONS / LEGEND

AC	AIR ADMITTANCE VALVE
ACC	ACCESS
AS	ASBESTOS CEMENT
AFBL	ABOVE FINISHED FLOOR LEVEL
BD	BACKDROP
BG	BACK GROUND GULLY
BL	BELOW GROUND LEVEL
BR	BRANCH
BS	BELOW FINISH SOFFIT LEVEL
CE	CLEANING EYE
CI	CAST IRON
CC	CAP
DC	DRAINAGE CHANNEL
DO	DRAINAGE CHANNEL OUTLET
DP	DRAINAGE THRESHOLD CHAMBER
FR	FROM ABOVE
FB	FROM BELOW
FC	FLEXIBLE CONNECTION
FW	FRESH AIR INLET
PWG	FOUL WATER DRAIN
FWG	FOUL WATER GULLY
GL	GROUND LEVEL
GT	GREASE TRAP
HL	HIGH LEVEL
IN	INSPECTION CHAMBER
IN	INTERCEPTING TRAP
LG	LOW LEVEL
LI	LIGHTWELL GULLY
NH	MANHOLE
ML	MID LEVEL
OD	OVERDRAIN
OT	OPEN TOP GULLY
OTBG	OPEN TOP BACK INLET GULLY
PF	PITCH
PF	PITCH BREEZE
PP	PUMP MAIN
PP	POLYPROPYLENE
PPAC	POLYPROPYLENE AC
PCC	PRECAST CONCRETE
PVC	POLYVINYL CHLORIDE
RD	ROD/DRAIN
RG	ROAD GULLY
RWH	RAINWATER HARVESTING
SP	SOIL PIPE
SH	SHOWER GULLY
SS	SEALED TOP BACK INLET GULLY
SDS	SUSTAINABLE DRAINAGE SYSTEM
SV	SOIL VENT PIPE
SV	STUP
SWD	STORM WATER DRAIN
SW	STORM WATER SEWER
SWD	STORM WATER TREATMENT DEVICE
TO	TO
TC	TO BE CONFIRMED
TD	TO DRAIN
UTL	URNAL W/IN TRANCE
UD	UNDERDRAIN
UL	UNABLE TO LIFT
UL	UNABLE TO SURVEY
VC	VITRIFIED CLAYWARE
VV	VENT TO ATMOSPHERE
W	WATER
WHB	WASH HAND BASIN
WG	WASTE GULLY
WP	WASTE PIPE
WVP	WASTE WATER PIPE
YG	YARD GULLY



P2	Updated to suit ADC drainage engineer comments. Pipe size increased to suit 100 year network check. Levels and tanks altered to suit the culvert SONDE and CCTV drainage survey	26-06-25	SAD
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P1	PRELIMINARY ISSUE	21-02-25	SAD
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Rev	Description	Date	Chkd
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Client	Sussex Business, Village Lake Lane Barnham Bognor Regis PO22 0AL
Project	Sussex Business Centre Barnham

Drawing title	Proposed Site Drainage - Piped Storm connection
Drawing status	PLANNING ISSUE

Project no	Scales	Drawing no	Rev
1859	A1 - 1:100 A3 - 1:200	101	P2