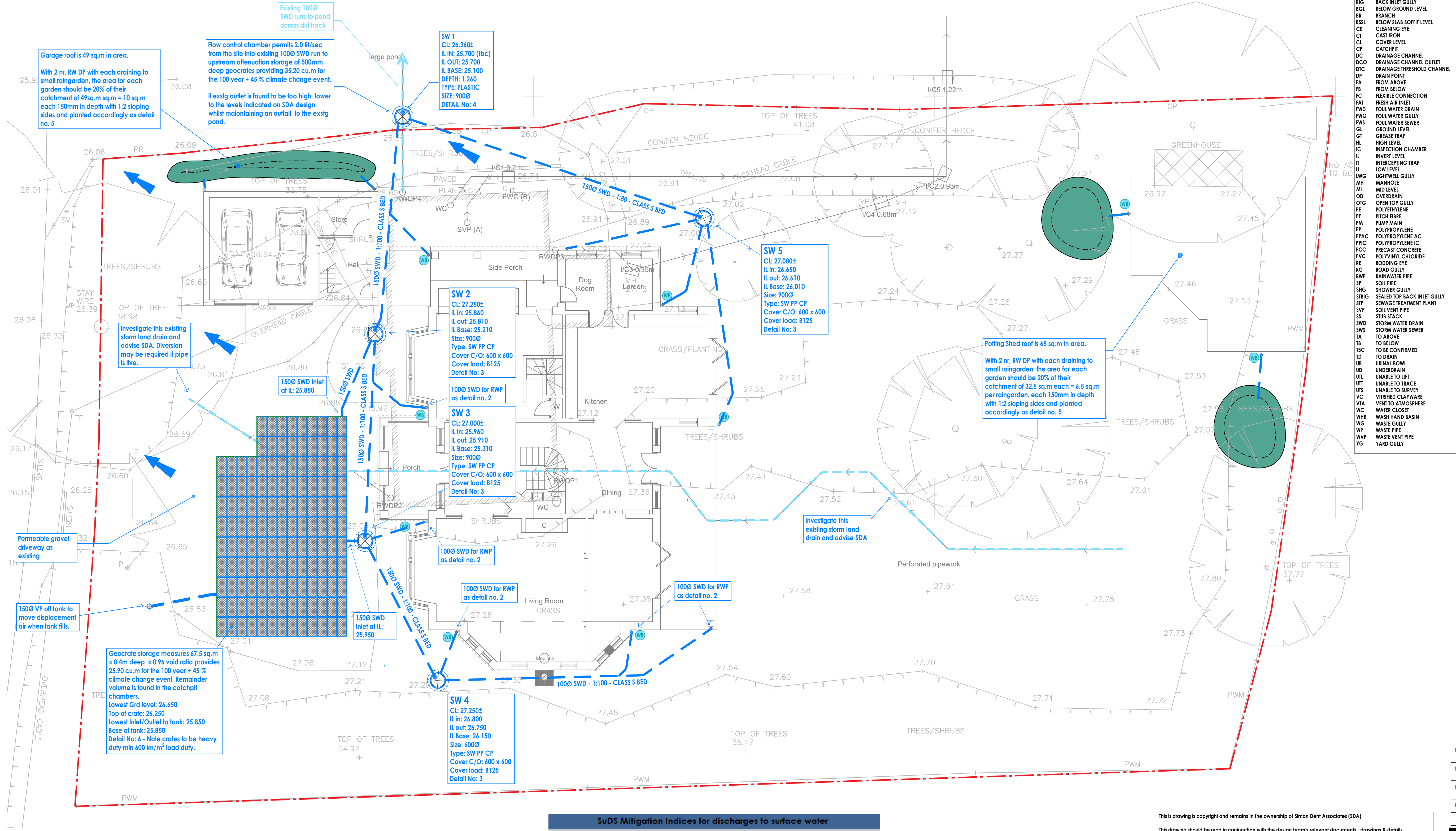




ABBREVIATIONS / LEGEND	
AAV	AIR ADMITTANCE VALVE
AC	ACCESS CHAMBER
ACC	ACCESS
AS8C	ASBESTOS CEMENT
AFSL	ABOVE FINISHED FLOOR LEVEL
BD	BACKDROP
BIG	BACK INLET GULLY
BGL	BELOW GROUND LEVEL
BR	BRANCH
BSSL	BELOW SLAB SOFFIT LEVEL
CE	CLEANING EYE
CI	CAST IRON
CL	COVER LEVEL
CP	CATCHPIT
DC	DRAINAGE CHANNEL
DCO	DRAINAGE CHANNEL OUTLET
DTC	DRAINAGE THRESHOLD CHANNEL
DP	DRAIN POINT
FA	FROM ABOVE
FB	FROM BELOW
FC	FLEXIBLE CONNECTION
FAI	FRESH AIR INLET
FWD	FOUL WATER DRAIN
FWS	FOUL WATER GULLY
FWS	FOUL WATER SEWER
GL	GROUND LEVEL
GT	GREASE TRAP
HL	HIGH LEVEL
IC	INSPECTION CHAMBER
IL	INVERT LEVEL
IT	INTERCEPTING TRAP
LL	LOW LEVEL
LWG	LIGHTWELL GULLY
ML	MANHOLE
ML	MID LEVEL
OD	OVERDRAIN
OTG	OPEN TOP GULLY
PF	POLYETHYLENE
PF	PITCH FIBRE
PM	PUMP MAIN
PP	POLYPROPYLENE
PPAC	POLYPROPYLENE AC
PPIC	POLYPROPYLENE IC
PCC	PRECAST CONCRETE
PVC	POLYVINYL CHLORIDE
RE	RODDING EYE
RG	ROAD GULLY
RWP	RAINWATER PIPE
SP	SOIL PIPE
SHG	SHOWER GULLY
STB/G	SEALED TOP BACK INLET GULLY
STP	SEWAGE TREATMENT PLANT
SVP	SOIL VENT PIPE
SS	STUR STACK
SWD	STORM WATER DRAIN
SW	STORM WATER SEWER
TA	TO ABOVE
TB	TO BELOW
TBC	TO BE CONFIRMED
TD	TO DRAIN
UB	URINAL BOWL
UD	UNDERDRAIN
UTL	UNABLE TO LIFT
UTL	UNABLE TO TRACE
UTS	UNABLE TO SURVEY
VC	VIRRIED CLAYWARE
VTA	VENT TO ATMOSPHERE
WC	WATER CLOSET
WB	WASH HAND BASIN
WG	WASTE GULLY
WP	WASTE PIPE
WVP	WASTE VENT PIPE
YG	YARD GULLY

DRAINAGE STRATEGY
FOUL & STORM WATER DESIGN -

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

Total site area	1990 sq.m
House roofs	261 sq.m
Garage roof	49.5 sq.m - To raingardens
Potting shed roof	65 sq.m - To raingarden
Permeable driveway	167 sq.m
soft garden areas	1448 sq.m

The design assumes poor infiltration due to BGS (British Geological Society) data.

The roofs will be drained to traditional gutters and downpipes which, in the main, will feed to water butts with overflow devices to a piped drainage system. Catch/silt pits are indicated in lieu of traditional chambers to mitigate silt migration through the system.

The site run off connects to a flow control chamber from which flow is restricted to 2.0 ltr/sec from the site to equate as near and practicably to greenfield run off rates.

A geocrate system has been shown to provide the 100 year + 45% climate change event volume of 26.24 cu.m.

The driveway will be offered as a permeable driveway with sufficient stone depth to offer a 100 year + 45% CC event but using a very low permeability with a high factor of safety of 5 to overcome subsequent storms.

DESIGN EXCEEDANCE FLOWS - Where design storms and attenuation volumes are exceeded, such flows will run toward the dirt track road at the lowest part of the site.

WATER QUALITY - The simple index approach suggests that the pollution hazard index is 'Very Low' with a total Pollution Hazard Index of 0.45.

See the Mitigation Indices Table below indicating the water quality measures taken satisfy Section 26.0 of the SuDS Manual (C753).

OWNERS SUDS DRAINAGE MAINTENANCE PLAN - Where attenuated volumes are provided in permeable construction make ups such as geocrates and gravels, which are inaccessible without conventional excavation, it is important to provide features on the drainage system which minimise silt migration. In addition, clean out and maintain these systems as follows:-

- All rainwater hopperheads, pipes and gutters should be cleaned twice a year.
- Empty and clean the rainwater butts yearly.
- Remove weeds and debris from any raingardens, keep soil agitated and plants tended.
- All pipes should be cleaned/jettied once a year.

FOUL WATER - There is an existing foul drainage system which connects to a foul sewer off site. Its route has been proven by CCTV survey and report issued to Mid Sussex District Council.

Pollution Hazard Indices - CIRIA 753 - Table 26.2				
Land Use	PHL	TSS	Metals	Hydrocarbons
Resi roofs	Very Low	0.2	0.2	0.05
Other roofs	Low	0.3	0.5	0.05
Private driveways	Low	0.5	0.4	0.4
Yards, public car parks & roads	Medium	0.7	0.6	0.7
Lorry parks - industrial sites	High	0.8	0.8	0.9

SuDS Mitigation Indices for discharges to surface water					
SuDS Component	No. off	TSS	Metals	Hydrocarbons	
Filter strip	0	0	0	0	0
Filter drain	0	0	0	0	0
Swale	0	0	0	0	0
Bioretention	0	0	0	0	0
Permeable pavement	1	0.7	0.6	0.7	0.7
Vortex desilting chamber	0	0	0	0	0
Detention basin/tank	1	0.5	0.5	0.6	0.6
Pond	0	0	0	0	0
Wetland	0	0	0	0	0
Total SuDS Mitigation Index (SMI) for discharge to surface water					3.60
The design features exceed the Pollution Hazard Index so are acceptable					

PROPOSED SW DRAINAGE LEGEND / KEY

PROPOSED SWD

EXSTG SWD

PROPOSED SW PP CP

GEOCOLL SOAKAWAY

PROPOSED RWP and WATER BUTT

DESIGN EXCEEDANCE FLOW DIRECTION

This is drawing is copyright and remains in the ownership of Simon Dent Associates (SDA)

This drawing should be read in conjunction with the design team's relevant documents, drawings & details.

Existing public & private utility services and drainage locations shown have been derived from non-intrusive survey techniques. Their location is not accurate and the contractor must satisfy himself using open excavation where the location of such plant and apparatus is critical in construction.

If the contractor has constructed from this drawing without necessary approvals from Local Planning Authorities, Building Control, Sewerage Undertakers, Environment Agency etc then any abortive work shall be at his own financial risk and not the responsibility of SDA.

If the contractor has constructed from this drawing whilst the drawing remains 'PRELIMINARY' status, then any abortive work shall be at his own financial risk and not the responsibility of SDA.

The contractor should NOT construct any works should there be any doubt with information shown from any of the source. ALWAYS USE GIVEN DIMENSIONS ONLY. ALWAYS ASK IF IN DOUBT.

ALWAYS PRINT THIS DRAWING IN COLOUR

EXISTING DRAINAGE NOTES

ALTHOUGH CONSIDERED A FAIR RECORD OF THE EXISTING DRAINAGE, CRITICAL DIMENSIONS AND SETTING OUT SHOULD BE CHECKED ON SITE WITH PIPES AND BURIED SERVICES TO USE INVASIVE TECHNIQUES (EXCAVATION) TO ASCERTAIN THEIR EXACT LOCATION.

THE BUILDING / LAND SURVEY WAS CARRIED OUT BY OTHERS AND SHOULD NOT BE RELIED UPON FOR CRITICAL DIMENSIONS, WHICH SHOULD BE TAKEN ON SITE BY THE CONTRACTOR.

IN ADDITION TO THE MAIN OBSERVATIONS RECORDED FOR PIPES, ALWAYS JET CLEAN THE EXISTING SYSTEM PRIOR TO ANY WORKS BEING UNDERTAKEN.

READ THIS DRAWING IN CONJUNCTION WITH THE CCTV REPORT AND VIDEO FOOTAGE.

P4 Storm design verified following further survey work and pipe level checks and reissued for planning condition sign off. 02-05-24SAD

P3 House relocated 2m to suit architects latest layout, Potting Shed storm drainage indicated. 17-10-24SAD

P2 Storm Water strategy updated, Storage tank and drainage chamber levels indicated. 21-08-24SAD

P1 PRELIMINARY ISSUE - WIP 11-07-24SAD

Rev	Description	Date	Chkd
1	Issue for planning	11-07-24	SDA

SIMON DENT ASSOCIATES
Civil - Infrastructure - SuDS - Flood Risk - Drainage - Rainwater - Sanitation - Public Health
Consulting Engineers

☒ Hove Office
☐ Gosport Office
simondent@live.co.uk
0754 658 3150

Client Mr and Mrs Allen

Project Eastlands Farmhouse Malthouse Lane
Hurstpierpoint West Sussex BN6 9LA

Drawing title Proposed Storm Water
Drainage Strategy

Drawing status **PRELIMINARY**

Project no	Scales	Drawing no	Rev
1894	A1 - 1:100 A3 - 1:200	100	P4