DRAINAGE LEGEND

- Proposed surface water sewer (& manhole)
- Proposed foul water sewer (& manhole)
- RO — Rainwater collection pipe
- SU ACO — Drainage channel (with sump unit)
- FO — Foul Outlet
- Soakaway

Refer to Architects / M&E Drawings for exact positions of internal connections & RO's
Unless specified otherwise, all Inspection chambers and catchpits are to be 450 Ø
Unless otherwise noted all drainage to be 100 Ø

NOT FOR CONSTRUCTION

SW DESIGN COMMENTARY

The surface water drainage design has been prepared using the following design criteria. The system is designed to keep all runoff below ground for al rainfall events.

Return Period	100 years
Climate Change	+ 45%
Storm Durations	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960 & 1,440 minutes
M5-60	20mm
r	0.30
Cv	1.00

Surface water flows are being disposed of via infiltration either by soakaways or permeable paving. The driveway/parking area is currently proposed to have a gravel finish. There is a pond currently proposed on the landscaping plan, this is not formally going to be used as part of the drainage strategy for the site.

The remaining hard standing areas will be directed to the soft landscaping areas.

Soakaway structures will be provided with a catchpit upstream of the structure to intercept any sediments/detritus.

Soakaways have be preliminary sized on a conservative infiltration rate of 1 x 10^{-5}m/s for detailed design post planning the actual permeability rate of the chalk will be obtained by undertaking intrusive site investigation testing in accordance with BRE365, this rate will be used to size an appropriate structure

Possible allowance required for garage
To be finalised during detailed design

Garage FFL - 91.60

Parking Area & Drive constructed from a gravel surface directly infiltrating into the chalk

Soakaways have be preliminary sized on a conservative infiltration rate of 1 x 10^{-5}m/s. For detailed design post planning the actual permeability rate of the chalk will be obtained by undertaking intrusive site investigation testing in accordance with BRE365, this rate will be used to size an appropriate structure

Small Soakway to manage flows intercepted from the gravel drive

Decorative Ecological Pond

Cattle Grid & Gate complete with drain to connect to soakaway to minimise surface water run off from the new Farm House

Existing Gravel Track

STONED TRACK

LONG GRASS UNEVEN GROUND

Package Sewage Treatment Plant
Designed to accommodate the proposed owners/residents indicative size (e.g. 8no Population)

Indicative area of Drainage Field for Sewage Treatment Plant
Current size based on 8Person Occupation utilising a VP of 100.
Post Planning in accordance with EA General Binding Rules the drainage field will be sized utilising the obtained VP rates from at least 3no Test Locations covering a 3day period. If rates exceed a VP of 15 the form of the drainage field will need to be discussed and agreed with the regional environment agency officer.
Due to the sloping nature of the site the drainage field may be terraced along the contours of the slope. In accordance with calculated rates and Sewage Treatment Plant requirements.

+92.00 (Grass)
+91.60 (Paved Patio)
+91.60 (Courtyard Gravel)
+91.80(Grass)
+91.75
+91.55
+91.45
+91.50
+91.00
+xx.xx
FFL - 91.75
Garage FFL - 91.60

0 1 2 3 4 5m
Scale 1:125

Rev	Date	Revision Description	Issued by
P02	27.07.23	Scale Bar checked	MR
P01	22.06.23	Preliminary Issue	MR

Drawing Status:
S2 - Suitable for Information

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Project: Sundown Farm, Martin Drove End

Drawing Title: Planning Drainage Strategy

Scale: As Indicated @A1 Drawn: Checked: MR

Project-Originator-Zone-Level-Type-Role: 23340-GAP-XX-XX-DR-C Drawing No.: 9000 Revision: P02