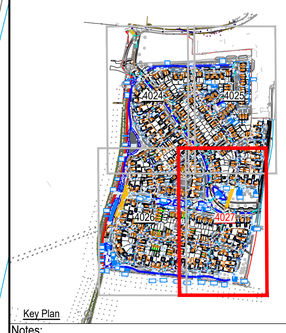
CIVIL / STRUCTURAL DESIGN RISK MANAGEMENT

Abnormal or unusual residual risks associated with the design outcomes shown on this drawing are:-

1. There will be deep excavations for structures and drainage systems. This is a high risk, high severity hazard. The contractor should provide protection and support in accordance with health and safety legislation. It is known that the groundwater is shallow in winter months, care to be taken to prevent collapse of the excavation.
2. Live Services - risks to contractor's personnel - Seek written confirmation from Statutory Authority and/or Building/site owner that all live services - especially electricity services - have been disconnected or diverted prior to construction. If any services are to remain live during the construction work, ensure that the locations of these are identified and clearly marked. All operatives are to be made aware of their presence. Employ hand digging near/adjacent to any known live services. This includes, but is not limited to, services located in Drove Lane and the B2233.

RSK LDE LTD has followed its Design Risk Management process for Hazard Elimination and Risk reduction in developing the designs shown on this drawing.
Abnormal or unusual residual risks may be shown above where it is considered that such risk may not normally be expected by competent persons engaged on work of this nature or type.



Key Plan

Notes:

1. This drawing presents the site drainage layout for the proposed development at Drove Lane, Yapton.
2. This drawing is to be read in conjunction with all relevant Engineer's and Architect's drawings and specifications.
3. This drawing is to be printed in COLOUR.
4. For Drainage Construction Details refer to RSK drawing CIV-1-4018 to CIV-1-4022.
5. Figures quoted next to manholes / rodding eyes are cover & invert level, in Metres AOD.
6. Footpaths are to be laid with a crossfall to allow drainage to soft landscaped areas.
7. This drawing is schematic for clarity, and where possible drains should be laid within 2m of houses, and connections kept as short as possible.
8. Where possible all drainage runs shall be kept a minimum of 4.0m from any existing tree that is to be retained.
9. This drawing has been prepared for House Drainage purposes only, and must not be used for House Setting Out.
10. All drainage design is subject to technical approval, no connections shall be made to any public sewers without written consent from the drainage authority.
11. The location of rain water pipes (RWP) have been specified by Polypipe.
12. The location of soil vent pipes (SVP) / stub stacks (SS) are as detailed by the Architect.
13. Where pipes pass under buildings, unless beam & block floors are used, they are to be surrounded in concrete.
14. All rest bends associated with stub stacks, soil vent pipes, wc connections and stub wastes are to be set with their inverts at 450mm below Finished Floor Level (FFL).
15. All drains and connections to be 100mm diameter, unless shown otherwise.
16. All branch drains, or connections, are to discharge to the collectors obliquely, and in the direction of the main flow.
17. All high void ratio attenuation units to be installed strictly in accordance with manufacturer's requirements.
18. All services should be laid below the permeable paving construction and coordinated around the proposed drainage on site. Where the service trench crosses the permeable paving the ducting will need to be sealed to ensure no egress of surface water runoff into the service ducting.
19. RWPs are to be connected to the Permeable Paving system where possible. Catchpit manholes to be used upstream of connections into permeable paving system. Where this is not possible RWPs are shown to be connected into the piped surface water network. Refer to RSK drawing CIV-1-4020 Private Drainage Details Sheet 1 for External Rainwater Pipe To Drain detail indicating the roddable maintenance access for all RWPs.
20. All adoptable drainage to be constructed in conjunction with Design and Construction Guidance (Water UK).
21. For guidance on types and distances of proposed trees away from adoptable sewers refer to Design and Construction Guidance Section B5.1.10 & 11 and B7.6.
22. Foul water pumping station details to be confirmed by PDAS.
23. Tracing Wire to be installed for rising mains in accordance with the requirements set out in Design and Construction Guidance.
24. Permeable paving sub-base may need to be lowered locally where pipes are connected into the sub-base. Refer to drainage details for information about geotextile sock to be wrapped around pipe connections into the sub-base.

Drainage Key

- 150Ø 1:100 1.001 — Proposed Adoptable Surface Water Sewer
- Adoptable Surface Water Manhole
- Adoptable Surface Water Type 3 Inspection Chamber
- 150Ø 1:100 1.001 — Proposed Adoptable Highway Drain
- Adoptable Highway Drain Manhole
- SWP G — Surface Water Gully & Connection
- 150Ø 1:100 1.001 — Proposed Private Surface Water Drain
- Private Surface Water Manhole
- Private Surface Water Type 3 Inspection Chamber
- Private Surface Water Type 2 Inspection Chamber
- RE — Rodding Eye
- RWP — Rain Water Pipe Position
- Linear Drainage Channel
- Permeable Block Paving
- Below Ground Storage Tank
- Check Dam With Pipe in Base
- Enhanced Swale (Roadside & Open Space)
- (150Ø 1:100) — Existing Foul Water Sewer
- Existing Foul Water Rising Main
- 150Ø 1:100 1.001 — Proposed Adoptable Foul Water Sewer
- Adoptable Foul Water Manhole
- Adoptable Foul Water Type 3 Inspection Chamber
- 150Ø 1:100 1.001 — Proposed Private Foul Water Drain
- Private Foul Water Manhole
- Private Foul Water Type 3 Inspection Chamber
- Private Foul Water Type 2 Inspection Chamber
- Private Foul Water 250Ømm Inspection Chamber
- SVP — Soil Vent Pipe Position
- Proposed Foul Rising Water Main
- Site Boundary
- 3m Buffer Zone (No works to occur)
- Sewer Easement

Rev.	Date	Amendment	Drawn	Chkd.	Appd.
AG	16.10.2024	Plots 258 and 282 rotated and RWP's updated. Plot 296 mirrored and RWP/SVP's updated to suit.	JC	AM	-
AF	14.10.2024	Housetype blocks rotated to correct orientation.	JC	AM	-
AE	30.08.2024	Drainage updated to reflect Phase 2 redesign. Private foul water drainage serving plots 70-77 updated to reflect as-built levels and RFI.	JC	AM	-
AD	27.08.2024	Plots 83-84 plot drainage updated	JC	-	-

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Client: BARRATT HOMES built around you; DAVID WILSON HOMES

Project Title: DROVE LANE, YAPTON, WEST SUSSEX

Status: ISSUED FOR CONSTRUCTION

Drawing Title: SITE DRAINAGE LAYOUT (SHEET 4 OF 4)

Drawn	Date	Checked	Date	Approved	Date
AM	12.2020	SM	01.2021	SM	01.2021

Scale	Orig Size	Dimensions
1:250	A0	m

Project No.: 133891
Drawing File: CIV-1-4024-4027 Site Drainage.dwg
Drawing No.: CIV-1-4027
Rev.: AG

Scale 1:250
0 2.5 5 7.5 10 12.5m

S38 ROAD GULLIES DRAINING INTO SWALES
All highway gullies draining into roadside swales MUST be connected directly into the perforated pipe within the swale.

CAG REVIEW NOTE
Drainage has been reviewed to remove and move manholes/ inspection chambers where possible across the site. Manholes clouded in magenta are manholes that could potentially be removed subject to review of drainage model for surface water. Site to confirm construction status of magenta clouded manholes for RSK to review.

SERVICES NOTE
Where services cross proposed permeable paving the groundworker will need to install impermeable zones to lay the services. Refer to RSK drawing CIV-1-4063 for construction detail for impermeable zones within permeable paving areas. Refer to Utilitas drawing SERV-1-7405 for proposed services routing.

Storage Tank ST8 (high void ratio cells) 12m x 15m x 0.4m dp 95% Porosity Storage Volume - 26m³ Base level 4.75 Top of cells level 5.15

Pond3 Base level 6.20 Top of bank 6.80 Depth of pond 0.6m Approximate volume 205m3

Pond4 Base level 6.20 Top of bank 6.60 Depth of pond 0.4m Approximate volume 123m3

Storage Tank ST17 (high void ratio cells) 15.5m x 12.0m x 0.4m dp 95% Porosity Storage Volume -62m³ Base level 4.915 Top of cells level 5.315

Storage Tank ST25 (high void ratio cells) 8.0m x 8.0m x 1.2m dp 95% Porosity Storage Volume - 77m³ Base level 5.03 Top of cells level 6.23

Soakaway SA24 (high void ratio cells) 11.0m x 5.0m x 0.4m dp 95% Porosity Storage Volume - 22m³ Base level 5.90 Top of cells level 6.30

Storage Tank ST18 (high void ratio cells) 7.0m x 6.5m x 0.4m dp 95% Porosity Storage Volume -18m³ Base level 4.45 Top of cells level 4.85

Storage Tank ST16 (high void ratio cells) 5.0m x 5.0m x 0.4m dp 95% Porosity Storage Volume -10m³ Base level 4.75 Top of cells level 5.15

Storage Tank ST15 (high void ratio cells) 9.5m x 10.0m x 0.4m dp 95% Porosity Storage Volume -38m³ Base level 4.85 Top of cells level 5.25

Enhanced Swale SW5 237m x 0.8m(base) x 0.3m dp - Swale Top 237m x 2.4m x 1.0m dp (average) - Enhanced Base 300Ø Perforated Pipe in base 30% Porosity Start Base of Trench IL 4.82 End Base of Trench IL 3.75