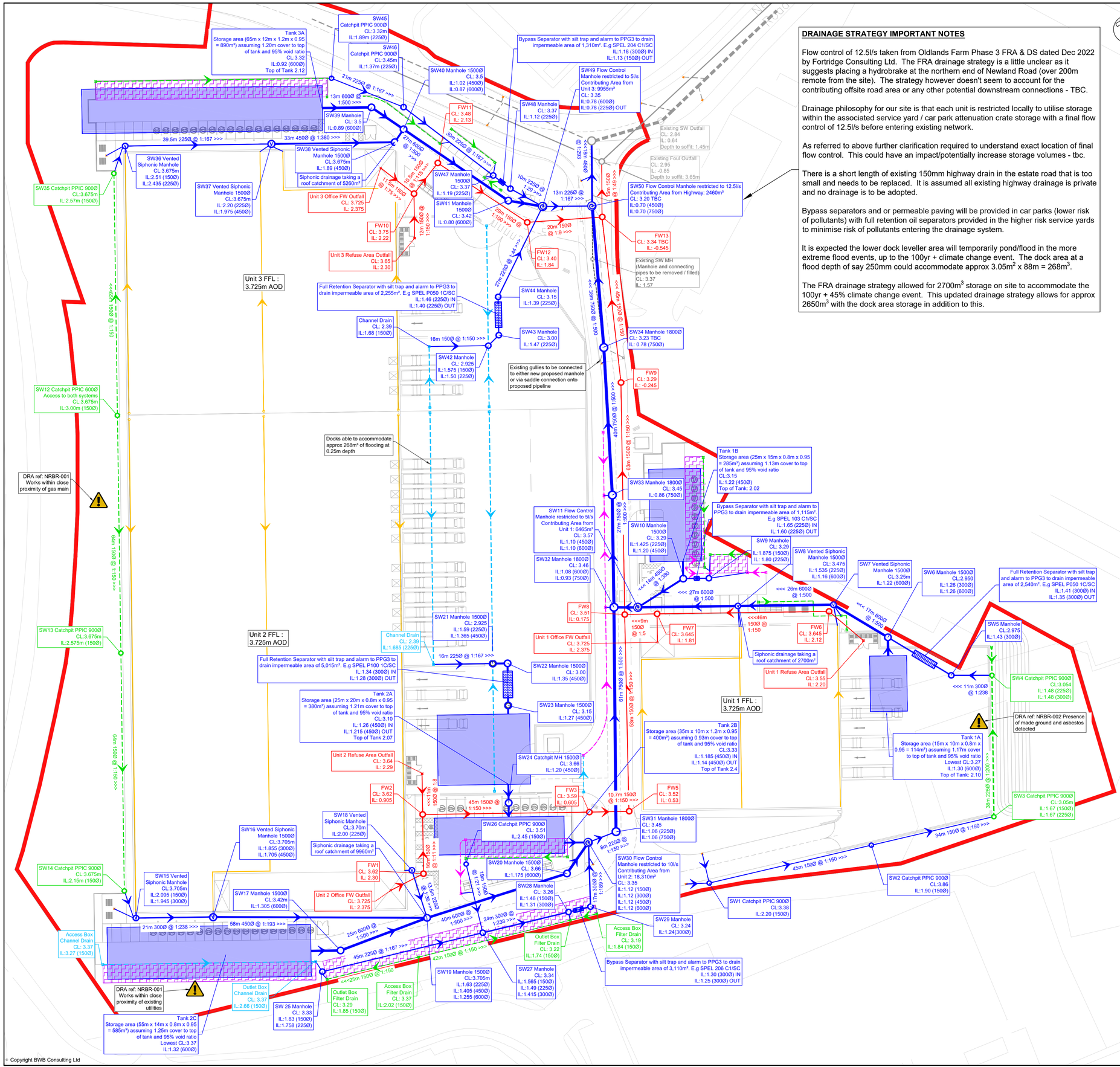

DRAINAGE STRATEGY IMPORTANT NOTES

Flow control of 12.5l/s taken from Oldlands Farm Phase 3 FRA & DS dated Dec 2022 by Fortridge Consulting Ltd. The FRA drainage strategy is a little unclear as it suggests placing a hydrobrake at the northern end of Newland Road (over 200m remote from the site). The strategy however doesn't seem to account for the contributing offsite road area or any other potential downstream connections - TBC.

Drainage philosophy for our site is that each unit is restricted locally to utilise storage within the associated service yard / car park attenuation crate storage with a final flow control of 12.5l/s before entering existing network.

As referred to above further clarification required to understand exact location of final flow control. This could have an impact/potentially increase storage volumes - tbc.

There is a short length of existing 150mm highway drain in the estate road that is too small and needs to be replaced. It is assumed all existing highway drainage is private and no drainage is to be adopted.

Bypass separators and or permeable paving will be provided in car parks (lower risk of pollutants) with full retention oil separators provided in the higher risk service yards to minimise risk of pollutants entering the drainage system.

It is expected the lower dock leveller area will temporarily pond/flood in the more extreme flood events, up to the 100yr + climate change event. The dock area at a flood depth of say 250mm could accommodate approx 3.05m^2 x 88m = 268m^3.

The FRA drainage strategy allowed for 2700m^3 storage on site to accommodate the 100yr + 45% climate change event. This updated drainage strategy allows for approx 2650m^3 with the dock area storage in addition to this.

Drainage Notes

1. All adoptable surface and foul water drainage works (including connections to the Public Sewers) to be carried out in strict accordance with the 'Sewer Sector Guidance' and any specific requirements of the adopting authority.
2. All adoptable highway drainage works to be carried out in strict accordance with the Local Highway Authority requirements and the DfT MCHW Specification for Highway Works.
3. All private drainage works are to be carried out in accordance with Building Regulations Part H, BS EN 752, the Civil Engineering Specification for the Water Industry and, where provided, the BWB Drainage Specification.
4. Where applicable the contractor shall allow free and full access to the drainage works for the local authority, highway authority, drainage authority or the overseeing organisation.
5. The Contractor shall check the condition of the existing drainage and ensure it is structurally sound and free from blockages / obstructions. Where necessary the Contractor is to replace and/or undertake remedial works on defective drainage. All drainage is to be cleaned by jetting, removing all debris from site to an appropriately licensed tip,
6. The exact position, level, line, size and use of existing drainage is to be confirmed on site. Any discrepancies to be reported to the engineer prior to the commencement of works.
7. For new connections to existing manholes, existing benching is to be broken out and reformed to suit. Concrete/brick surround to be made good.
8. All temporary works associated with the construction of the drainage works shall be the responsibility of the contractor, including the protection of any uncovered/shallow pipework against construction traffic.
9. The Contractor is responsible for obtaining and paying for all necessary permissions to enable construction of the works to be undertaken, including but not limited to licences for street works and connections to existing sewers. This includes Section 106 applications when connecting directly or indirectly to the public sewerage network (complete application to be made at least 3 weeks prior to the planned outfall construction works).
10. Any damage caused to existing footways, roads or other third party property to be made good.
11. Under roads and external paved areas all materials within 450mm of finished levels to be non-frost susceptible. Reinstatements shall be undertaken in accordance with the BWB standard detail.
12. All proposed chamber covers are to be marked permanently with "SWS" (or equiv.) on surface water sewers and "FWS" (or equiv.) on foul sewers. all covers to be in accordance with BS EN 124.
13. Unless noted otherwise, all lateral connections are to be installed with level soffits to the diameters and gradients shown on the layout drawing. Any pipe bends should be provided to suit the direction of flow & no pipework should be downsized in the direction of flow.
14. The number and location of all RWPs is shown indicatively only. To be confirmed by Architect / M&E contractor prior to commencement of works.
15. Foul water 'pop up positions' are shown indicatively only, to be confirmed by the Architect / M&E contractor prior to commencement of works. Refer to Architect plans for setting out of internal foul pop up positions.
16. All RWPs and SVPs to be fitted with rodable access plates. All foul drains to have rodable access.
17. Above ground drainage details to be designed/confirmed by the Architect/M&E contractor, including ventilation of the foul drainage system.
18. Proposed drainage passing through new foundations to be sleeved with cast-in oversized pipework.
19. All specialist/proprietary products such as separators, attenuation tanks, channel drains, soakaways, package pumping station and water treatment units to be installed as per the manufacturer's installation details and specifications..

Notes

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.
5. This drawing is to read in conjunction with BWB drawings: 243912-BWB-EXT-XX-D-C-0001_Civil Engineering Notes, 243912-BWB-EXT-XX-D-C-0530_Drainage Catchment Plan, 243912-BWB-EXT-XX-D-C-0560_Drainage Construction Details Sheet 1 & 243912-BWB-EXT-XX-D-C-0560_Drainage Construction Details Sheet 2
6. For details of approved FRA including original drainage strategy please refer to: Oldlands Farm Phase 3 FRA & DS dated Dec 2022.

Key Plan

- Site Boundary
- Surface Water Drainage
- Foul Drainage
- Existing Surface Water Drainage
- Existing Foul Water Drainage
- Kerb Drain
- Channel Drain
- Filter Drain
- Indicative Siphonic Drainage
- Existing Highway Drainage to be Removed / Infilled
- HydroBrake SW Flow Control Chamber
- SW Siphonic Vented Chamber
- Car Parking Bay Permeable Paving
- SW Attenuation Tanks

Important CDM / H&S Notes

For more information of specified hazard refer to BWB Designers Risk Assessment: 243912-BWB-EXT-XX-HS-C-0001

Any construction personnel including operatives intending to construct the designs shown on this drawing should ensure that they have been regularly and thoroughly briefed by the principal Contractor on all health and safety matters and have had sight of:

1 - The full Designers and Contractors risk assessments and risk registers.
2 - The developed construction health and safety plan.
3 - The Contractors construction method statements.

Hazards that are obvious to a competent Contractor are not shown, as are every day and low risk hazards.

Rev	Date	Details of issue / revision	Drw	Rev
P02	29.11.24	Issued for comment	DH	TAJ
P01	11.11.24	Preliminary Issue	DH	TAJ

Issues & Revisions

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Client

PANATTONI

Project Title

Newlands Road, Bognor Regis

Drawing Title

Drainage Layout

Drawn:	J.Arnold		Reviewed:	T.Jones	
BWB Ref:	243912	Date:	08.11.24	Scale@A1:	1:500

Drawing Status

FOR COMMENT

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
243912-BWB-EXT-XX-D-C-0500	**S3**	**P01**

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