

PROPOSED DRAINAGE NOTES

Surface water will be managed via a subsurface soakaway system in accordance with BRE 365 and Welsh Government SAB Standards.

All runoff from impermeable surfaces will infiltrate to ground. No surface water connection to public sewers is proposed.

Impermeable Areas

Roof Area:	117.70M ² at 12°
Paved Perimeter:	21.90M ²
Total Area	= 139.60M ²

Permeable gravel excluded

Infiltration Testing

- Ground comprises coarse granular made ground including sandstone cobbles and gravel.
- The measured infiltration rate 3,9474 x 10⁻³ (14.12 m/hr) confirms that the material is highly permeable and suitable for drainage.
- No evidence of contamination or excessive fines was encountered during testing

Archeology

Made ground is potential 'Debtage': rough, irregular or unfinished waste stone produced from cutting, knapping, and shaping; That is, quarried stone deposit's following construction of listed buildings such as The Orangery. Liaise with project archeologist during excavation to confirm. This type of material is inert, free draining, and comparable in behavior to natural granular soils.

Construction Verification

Prior to installation, the exposed formation level shall be inspected by a competent person to verify that ground conditions are consistent with those recorded during site investigation. The founding material shall be confirmed as firm, granular, and free-draining, with no evidence of soft spots, excessive fines, contamination, or loose/uncompacted fill. If unsuitable material is encountered, it shall be removed and replaced with approved free-draining granular material, or the soakway design shall be reviewed and amended accordingly. A photographic record of the excavation and formation shall be maintained for verification purposes.

General Notes

- All surface water drainage shall be installed in accordance with:
 - SAB Wales Statutory Standards for Sustainable Drainage
 - BRE 365 Soakaway Design Guidance
 - Building Regulations Approved Document H
- All dimensions to be verified on site prior to construction.
- The contractor shall ensure all works are carried out using approved materials and good practice.

Surface Water Disposal

- All roof drainage and impermeable paving shall discharge to the proposed soakaway system.
- No surface water connections shall be made to any public sewer.
- Permeable and landscaped areas shall drain naturally and are not connected to the formal drainage system.

Soakaway Construction

- The soakaway shall be constructed using a modular geocellular crate system with a minimum **95% void ratio**.
- The soakaway shall have minimum internal volume of **7M3 E.g 3.0 m (L) × 2.5 m (W) × 1.0 m (D)**.
- The soakaway shall be wrapped in a **permeable geotextile membrane** to prevent ingress of fines.
- The base of the soakaway shall be level and founded on undisturbed, free-draining subsoil.
- Inlet pipework shall discharge via a **silt trap or catchpit** to prevent sediment entering the system.

Infiltration and Performance

- The soakaway has been designed using an infiltration rate of:
f = 3.9474 x 10⁻³ m/s
- The system is sized to accommodate a **1 in 100 year storm event plus 40% climate change allowance**.
- The soakaway shall be constructed in accordance with BRE 365 methodology.

Location and Protection

- The soakaway shall be located a minimum of **5 metres from any building or structure**.
- The soakaway shall not be located within:
 - Areas of made ground unless verified as suitable
 - High groundwater conditions
 - Contaminated land (unless otherwise approved)
- Exact soakaway location shall be coordinated with all services including tree root protection zones and archaeology.
- Avoid Tree Protection Zones.

Maintenance

- The system shall be inspected and maintained regularly to ensure performance.
- Silt traps, gullies, and inspection points shall be cleared of debris at regular intervals.
- Any signs of blockage or reduced performance shall be investigated and remedied immediately.

Exceedance

- In the event of exceedance, surface water shall be directed away from buildings and towards adjacent landscaped areas.
- Finished levels shall ensure no ponding occurs against building foundations.

Health & Safety

- All excavations shall comply with current health and safety regulations.
- Appropriate temporary works and edge protection shall be provided during construction.

EXISTING

PROPOSED

NOTES

- All dimensions in millimetres unless otherwise stated.

SITE SURVEY
By NPTCC Estates Drawing Office

KEY:

- PRIVATE UNADOPTED COMBINED SEWER
- PROPOSED SOAKAWAY

TREE SURVEY
Refer to Tree Survey & Arboricultural Constraint Report: The ABB Team January 2026
Tree Protection Zones

Rev	Description	Date
A	Site Boundary	Feb 26
Rev	Details	Dr On Apr Date

File No.	Format Ref. No.
DRAWN Title	PROPOSED SURFACE WATER DRAINAGE Planning Application Drawings

Date	Checked	Approved
Jan 2026	Date	Date

Scale: 1:100@A1, 1:200@A3

Drawing No. A-1333-09 Rev.

Neath Port Talbot Council Cynghorirfaeth y Gwladfa
Making a difference

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