

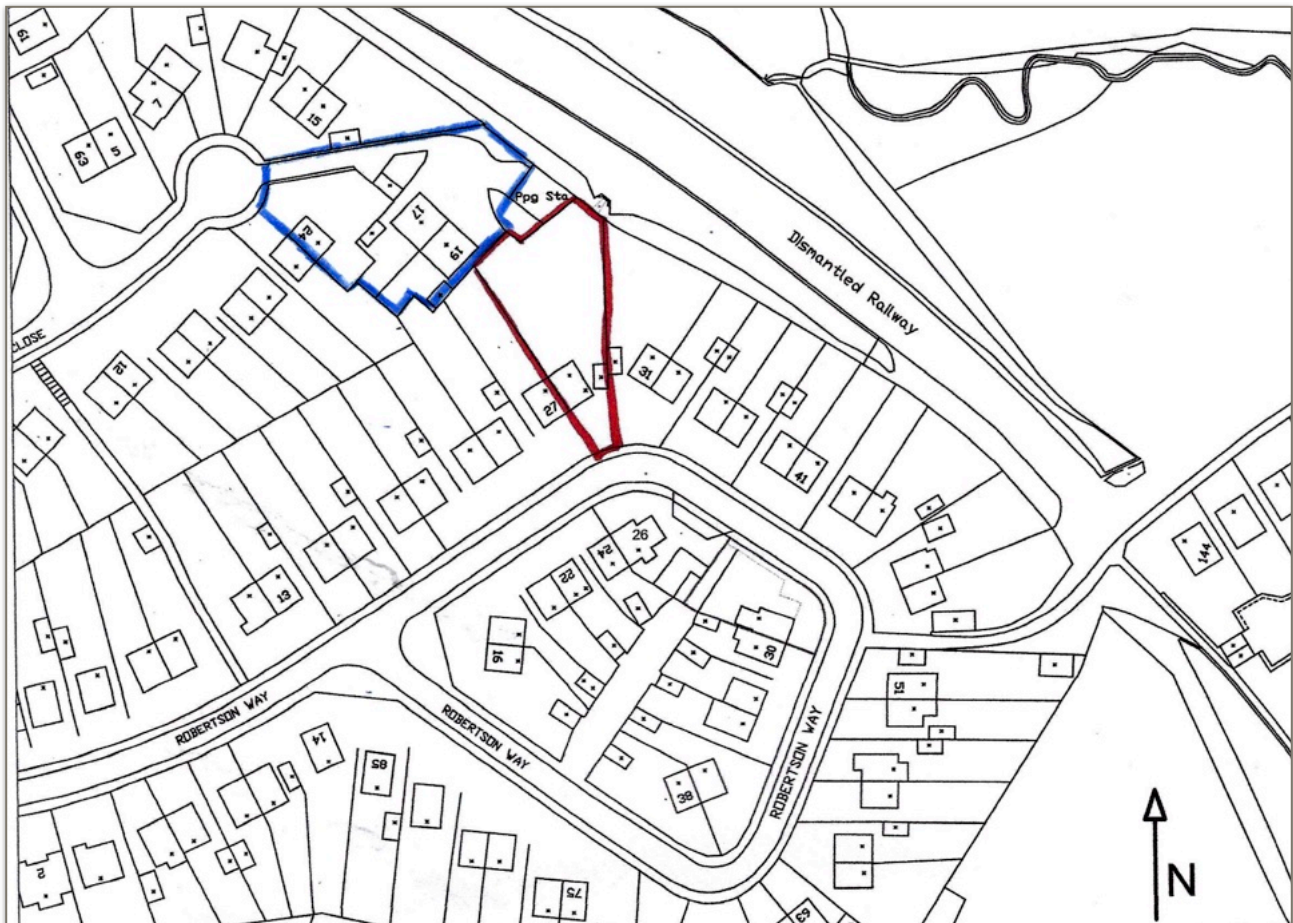
23/02/2026

Flood and Surface Water Technical Note

Proposed dwelling to the rear of 29 Robertson Way, Malpas, Newport

1. Purpose and scope

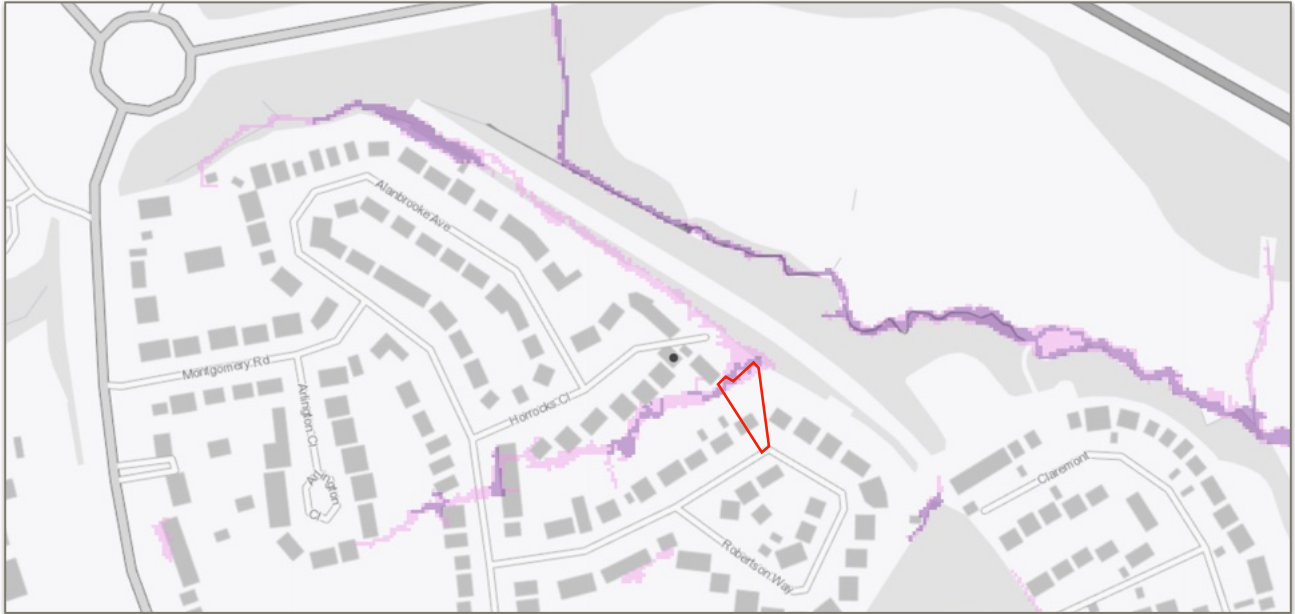
This note addresses the localised flood mapping constraint at the rear of the site and sets out the basis for finished levels and surface water management. It is intended to provide proportionate technical confirmation rather than a full Flood Consequence Assessment (FCA).

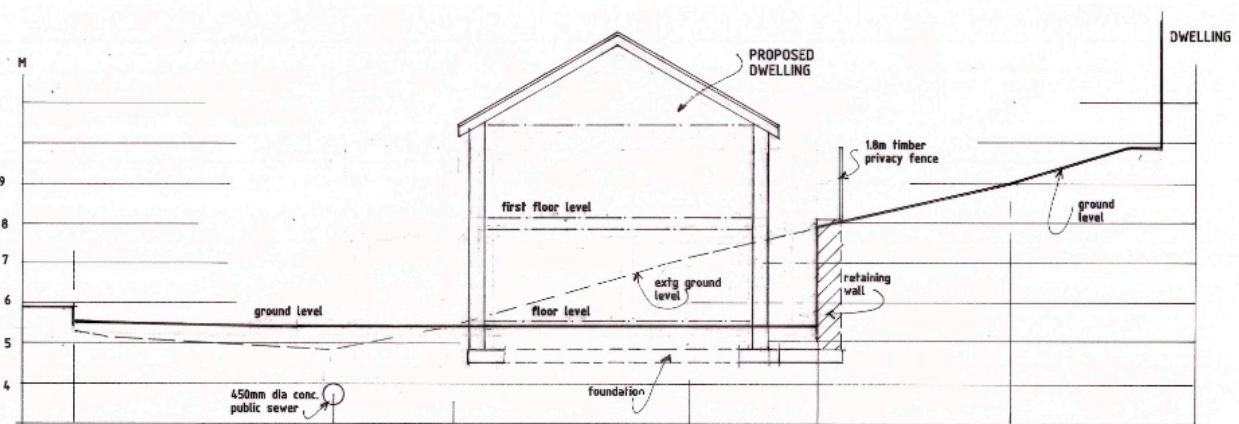
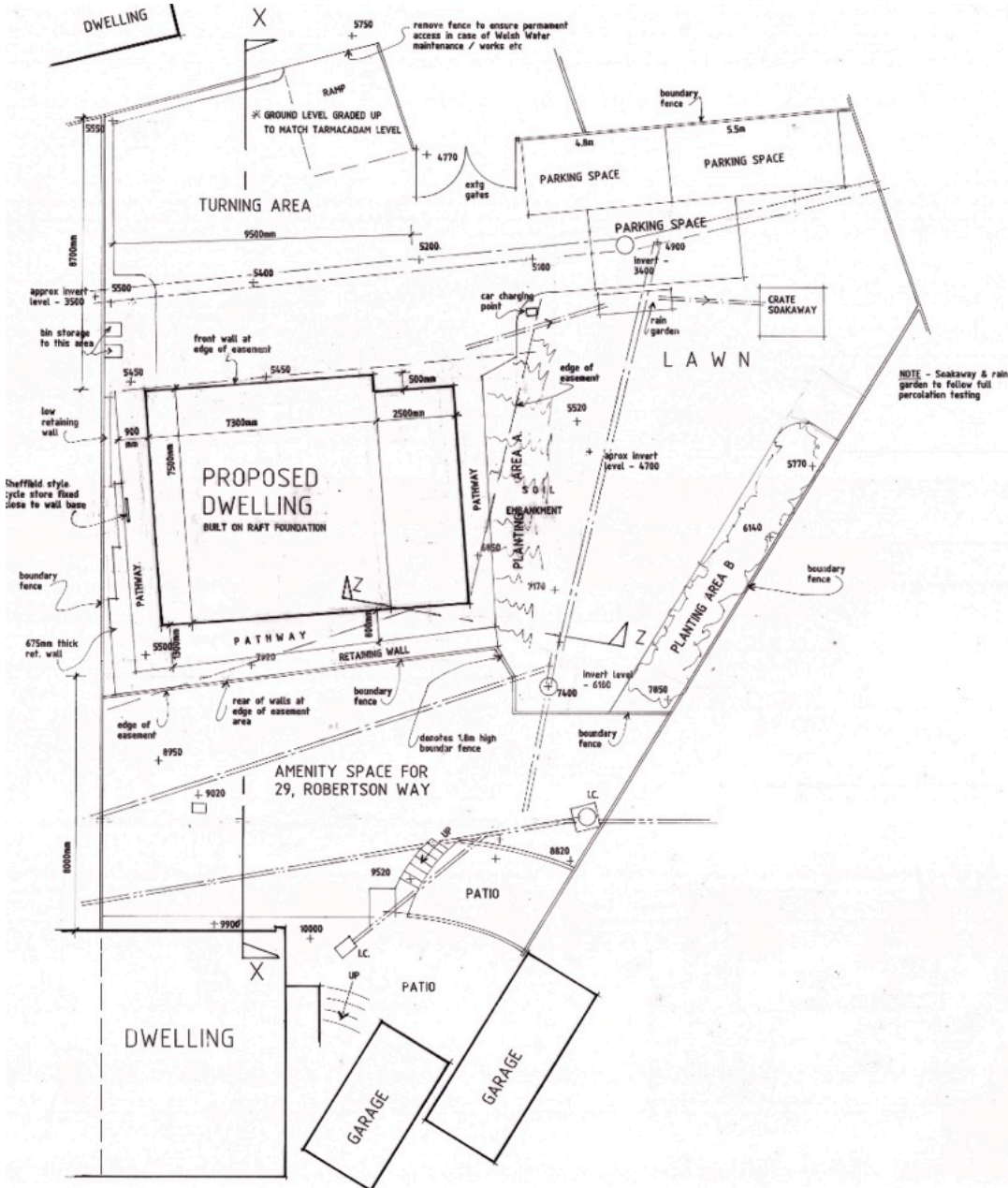


2. Site topography and mapped flood extent

Review of the NRW flood mapping overlaid on the site survey shows that the modelled flood extent is confined to the very rear of the plot, following the existing low corridor associated with the culvert and public sewer. The lowest surveyed ground level in this rear corner is approximately 4.62mAOD. The mapped flood extent clips the site up to approximately 5.200mAOD at this location only. The remainder of the site, including the proposed dwelling footprint and access, lies upslope of this localised depression.

The mapped extent reflects a local topographic low point rather than a site-wide floodplain. No built development is proposed within this rear low area and existing flow paths and flood storage are not impeded by the proposal.





PROPOSED SECTION X-X

3. Proposed external levels and finished floor level

Proposed external finished ground levels around the dwelling are set at approximately 5.450mAOD. This provides about 250mm clearance above the interpolated modelled flood level of 5.200mAOD at the rear low point.

The dwelling finished floor level (FFL) is to be set at 5.600mAOD. This provides a 150mm upstand above proposed external ground and approximately 400mm freeboard above the modelled flood level. This establishes a clear and defensible vertical separation between the design flood level and habitable floor levels.

4. Flood risk outcome

With the dwelling and its immediate external levels set upslope and above the modelled flood level, and with no built development within the localised rear low area, the proposal does not increase flood risk on or off site. Overland exceedance flows will continue to route towards the existing rear low corridor and away from the building.

5. Surface water drainage strategy

The site is underlain by bedrock with no mapped superficial deposits, and infiltration performance is uncertain due to the interbedded mudstone and sandstone geology and the potential for perched or seasonally saturated conditions in the rear low area. A conservative and robust strategy is therefore adopted that does not rely on infiltration.

Surface water from roofs and hardstanding will be collected and attenuated on site, with discharge to the public surface water sewer at a restricted rate to be agreed with Dŵr Cymru Welsh Water, who have confirmed acceptance in principle subject to flow control. Attenuation storage and a flow control device will limit outflow to the agreed rate. An exceedance route will be provided to direct flows safely towards the rear low corridor in extreme events.

This approach removes dependency on variable ground conditions, provides a deterministic and reviewable drainage solution, and complies with the planning requirement to avoid uncontrolled discharge to the sewer network.

6. Summary

The mapped flood risk is confined to the rear of the site at a local low point up to approximately 5.200mAOD. External ground levels at 5.450mAOD and a dwelling FFL of 5.600mAOD provide clear vertical separation from this level. The development footprint lies outside the flood-affected area and does not obstruct flood flows or storage. Surface water will be managed by on-site attenuation with restricted discharge to the surface water sewer and defined exceedance routing. On this basis, the proposal is appropriate in flood risk and drainage terms without the need for a full FCA.

Prepared by:

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