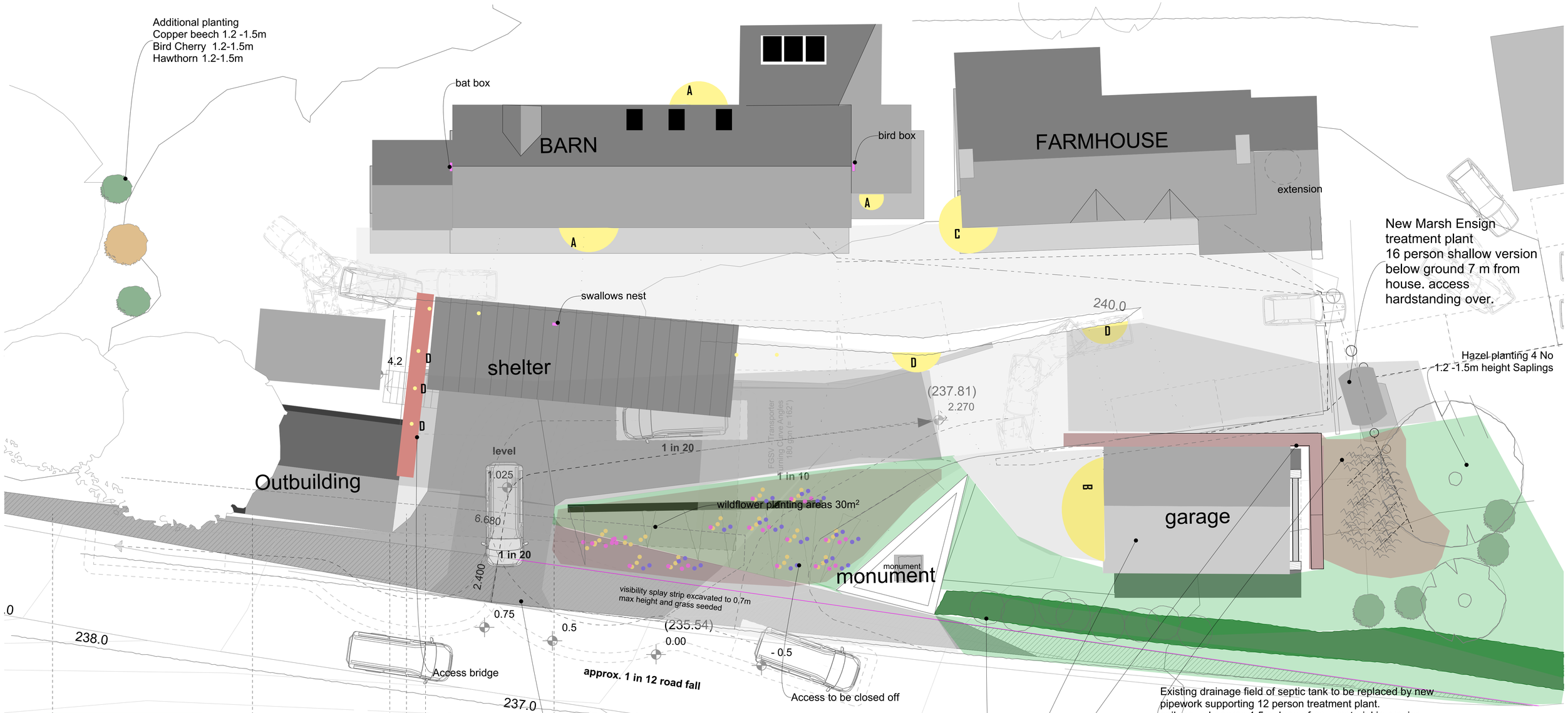


External lighting

A LED 3.8 W Bustan LIE
colour:warm white (2.700 K)
Lumens (lm):800 PIR detection

B GALAXY-ECO22- ISDW.
Bat Friendly Floodlights 2200K IP66
2.5m mounting height

C Paulmann LED outdoor wall light Kimu.
anthracite. 2.200 K

D Warm White 2200K to railing / ballard lighting
no higher than 1.2m from floor level
downward facing

All lighting to be set no higher than 2.5m from ground level to prevent disturbance to to protected species and preserve dark skies

Re : Foul drainage and treatment plant (16 PE, septic tank replacement)
The existing dwelling is currently served by a septic tank discharging to ground, with an estimated design load of 8 PE (approximately 1.2 m³/day, 0.48 kg BOD/day and 0.06 kg N/day). The proposed barn conversion introduces an additional 8 PE, and both the existing house and the converted barn will be connected to a new shared packaged treatment plant sized for 16 PE, with a design flow of approximately 2.4 m³/day, a BOD load of 0.96 kg/day and an ammonia load of 0.13 kg N/day. Although the total foul flow from the site increases, the new plant provides a significantly higher level of treatment than the existing septic tank. Final effluent will pass through a reed bed and then discharge to a soakaway, providing additional polishing and attenuation before infiltration to ground. This arrangement substantially reduces the pollutant load to the environment per unit of flow and replaces an older septic system with a modern, controlled treatment train.
Run-off, soakaway and river impact
The foul system operates at a relatively steady, low discharge rate, which is then further attenuated within the reed bed and soakaway, so it does not contribute to peak surface-water run-off or fluvial flood flows in the nearby river.
Surface-water from roofs and hardstanding is managed separately via sustainable drainage measures, with post-development run-off rates and volumes controlled to at or below existing conditions. As a result, peak flows in the adjacent watercourse remain governed by rainfall events rather than foul discharges, and the combination of a modern treatment plant, reed bed polishing and soakaway infiltration represents an overall improvement in the quality of water ultimately reaching the river.

Wildflower strip is a no mow area replanted each February with a native mix (see species list)
Lavender Hidcote are low Maintenace, Mound forming 30cm x 30cm flowering march to September ,
Maintenace is 3 times a year cutting back dead flowers to promote re flowering, bark is applied around plants to suppress
weeds from competing.
Replanting and maintaining all planting as required for 3 years minimum

1	Chamomile, Corn 30 - 50cm Annual	Anthemis arvensis	15%	Jun - Jul
2	Corn Cockle 50 - 70cm Annual	Agrostemma githago	45%	May - Aug
3	Cornflower 20 - 80cm Annual	Centaurea cyanus	20%	Jun - Oct
4	Marigold, Corn Jun - Oct 30 - 50cm Annual	Chrysanthemum segetum		15%
5	Poppy, Common 50 - 70cm Annual	Papaver rhoeas	5%	May - Jul

Any existing hedgerow and planting on site to be utilised where possible as part of the final landscaping scheme.
Weed suppressant barrier and mulch to a depth of 150cm to planted borders.
All planting to be maintained for five years with species that fail to take to existing soil to be replaced with more successful planting from the species listed above.
Plants larger than 1.5m will need the support of a stake until the root system is established, placed at a 45 degree angle to the trunk, to avoid damaging the tree root system. Where there is prevailing wind the stake should be positioned upwind of the tree.
For successful planting, trees should be treated with care as newly planted trees are very susceptible to drying winds, as well as dry, waterlogged or frosted ground. Therefore where possible these should be avoided. Bare root stock needs to be planted between November and the end of March.

Landscaping & Biodiversity plan

Refer to Biodiversity/ Green infrastructure statement

:Pont Y Meibion, Llanarmon Road, Glyn Ceiriog, Llangollen

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DATE	1/8/2024	SCALE	1:100
DWG No	P.2024.91.D06	REV	D