Design and Access Statement for Proposed Agricultural Slurry Silo, Installation of pipework and Associated Works.
at Asney Park Farm, Erbistock. Wrexham

for – Mr M Done

Revision A – 13-02-2025

Design and Access Statement for the above Proposals.
Policies taken into consideration:-

Control of Agricultural Pollution Regulations (CoAPR),
Planning Policy Wales 5
Technical Advise Note 6 & 7
Planning

- • Any new building, structure, tank or excavation for the storage of manure, slurry and dirty water which is to be built within 400 metres of the curtilage of a 'protected' building requires planning permission.

- • A 'protected' building is one that is occupied by people on a regular basis and is such as a private dwelling or school. The definition excludes a dwelling or other buildings that are used for or in connection with agriculture.

- • The 400-metre rule is in addition to other restrictions on permitted development for agriculture such as that of 'within 25 metres of the metaled portion of a road'.

- • From 2 January 1992, even if full planning permission is not required, the local planning authority will require to be informed of the sitting, construction and size of any planned agricultural buildings and any engineering operations on any size of agriculture unit.

- • Smaller agricultural units of 0.5-5.0 hectares have more restricted development rights.

- • Further information is contained in the booklet 'A Farmer's Guide to the Planning System' that is available free from Welsh Assembly Government offices.

The Code of Good Agricultural Practice for the Protection of Water, Soil and Air for Wales - Welsh Assembly Government

Slurry storage:

- Storage systems must be impermeable, corrosion resistant, and have structural integrity.
- Reception pits must be of appropriate size (capable of holding at least 2 days slurry production, taking account of rainfall and run-off to be collected.)
- There must be 2 valves in-line on any outlet pipes between above ground stores and reception pits, at least 1 metre apart and be locked shut when not in use.
- You must provide at least 5 months' slurry storage, unless you can demonstrate to Natural Resources Wales that you have a safe year-round slurry

management and field application system that includes reducing impact on land to acceptable levels.

- You must also comply with the minimum storage requirement.
- All new or substantially altered earth-banked lagoons must keep a 750 mm freeboard at all times and other slurry and dirty water stores must be sized to include a 300 mm freeboard.

Policies

Technical Advice Note 6 states that when considering applications for livestock and Dirty Water units planning authorities should exercise particular care, to avoid potential future conflict between neighbouring land uses. The main planning consideration relating to this type of proposal is whether it would cause any unacceptable adverse effects on landscape.
The principle of the proposed development at this location complies with relevant planning policy.

Existing Farm and proposals

Asney Park Farm is a well-established Organic Dairy farm of owned land area totalling 475 acres. The farm is currently stocked with 200 Dairy cows and 130 youngstock. There are no plans to extend the herd.

All cows & young stock are housed within existing livestock buildings. Slurry generated from the buildings, feeding, collecting and scraping yards are directed into the existing Slurry Lagoon.

The existing Lagoon @ 27m x 47m x 2.5m = 2787 cubic metres minus 380 freeboard gives effective capacity of approx. 2400 cubic metres is undersized for the current farm operation and is in need of refurbishment.
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The site is some 3 metres from a public footpath.

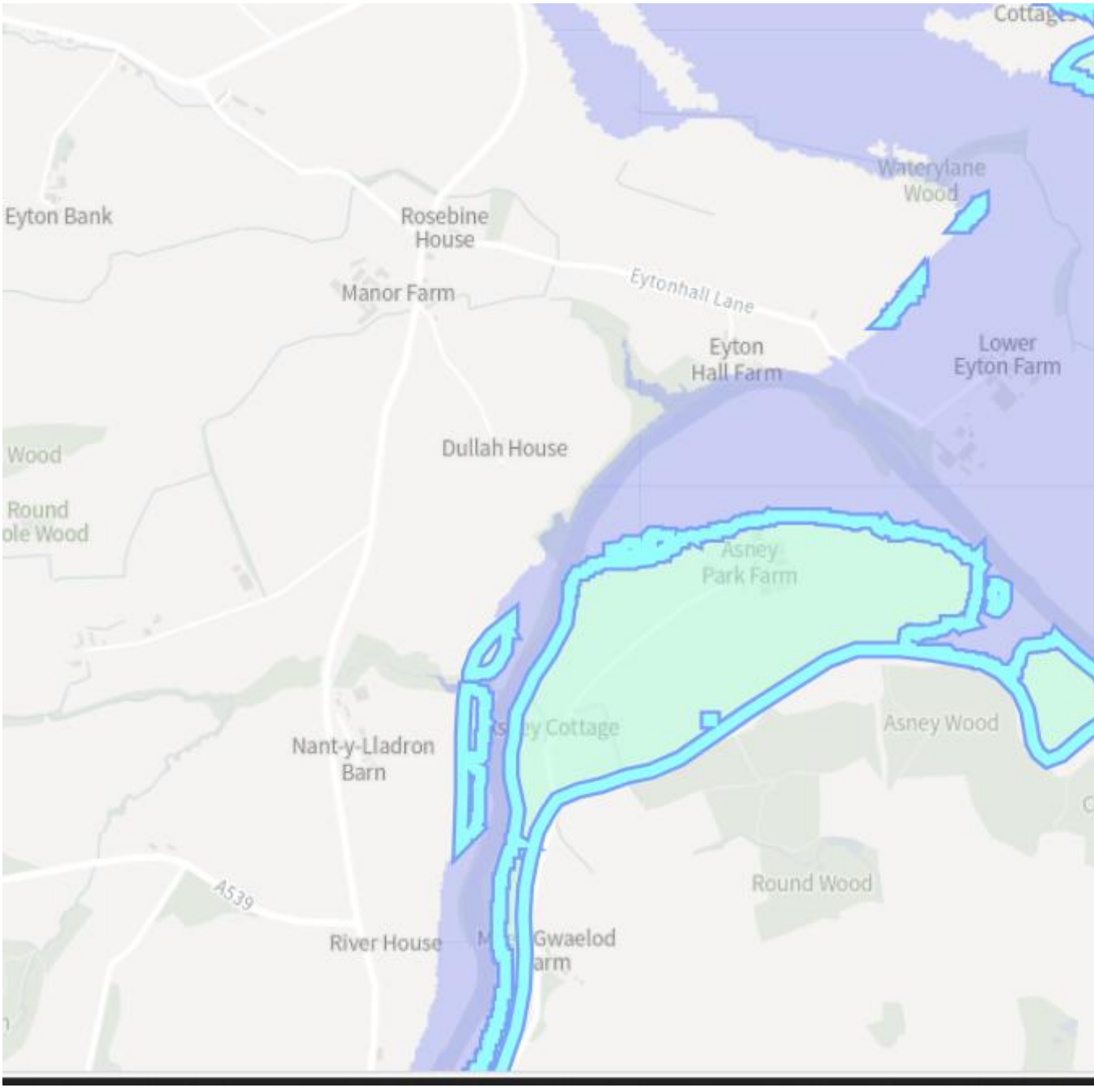
Proposed Slurry Silo Location Site

The application site is located adjacent to the existing buildings and slurry lagoon and the access gates into fields.
The application site is surrounded to the south by agricultural land.
It is understood no part of a slurry storage system (tanks, effluent tanks, channels, or reception pits) will be located within 50m of any borehole, well or spring or 20m from an open water course.

The land does currently lie within the Nitrate Venerable Zone area in North / mid Wales.

The site is within development flood Zone B.

FLOOD MAP



The site area is slightly elevated from the surrounding field by between 100 mm and 150mm. The displaced area of flood water is 5510 sqm, it is proposed that a pit is excavated to accommodate the flood waters displaced.

Scale

- Slurry Silo

The above ground circular slurry stores will have an estimated capacity of 2402 cubic meters with a minimum of 300mm freeboard.

The proposed Slurry Silo, is of a size to comply with the current Control of Agricultural Pollution Regulations (CoAPR),

Criteria used as per AHDB slurry wizard.

Slurry Silo details: Permastore 87 15sr9 Slurry store
Colour: Blue.
Capacity:2402.2 cubic metres with a minimum 300mm freeboard.
Size: Store height 4.458m, Diameter 26.470m.
Material: Glass fused to steel sheets.

This investment will allow efficient and compliant facilities to be built to capture and store all slurry and dirty water produced over the 160 days storage period. Allowing slurry to be applied at optimal times when crop nutrient uptake is high, therefore reducing the risk of diffuse pollution caused by nutrients leaching from soils during winter because of limited crop uptake.
Allowing the farm to comply with the Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021, the storage requirements for slurry came into force on 1 August 2024 .
The existing slurry lagoon (approx. 2400 cubm) is to be retained, the content will be pumped into the new silo as and when required, to avoid any overflow of slurry.

Policies

Technical Advice Note 6 states that when considering applications for livestock and slurry units planning authorities should exercise particular care, to avoid potential future conflict between neighbouring land uses. The main planning consideration relating to this type of proposal is whether it would cause any unacceptable adverse effects on landscape. LDP Policy sets out the main considerations in terms of the impact of proposals upon the landscape.

The principle of the proposed development at this location complies with relevant planning policy.

Waste will be generated in association with the use of the site, location, scale and nature of the development, this application complies with LDP Policy.

Landscape and Appearance
The Slurry Silo is designed and located to be sympathetic with the surrounding landscape. Sited close to the existing farm building and the overall farm complex as a backdrop.
Trees will be planted as ecology mitigation and screening as indicated on drawing.

New Tree Planting Specification,
The fruiting trees will comprise of one crab apple (Malus sylvestris), four wild pear (Pyrus pyraster), four wild cherry (Prunus avium) and two wild plum (Prunus domestica). They will be selected from local-provenance stock and will be planted within the first planting season post-completion of the development works (December to March, inclusive). The grassed area will have a wild seed mix grass.

Existing hedge will be retained, with a new Hedge as specification,

Mixture of Privet, Oak and cherry Plum trees

Wild privet Ligustrum vulgare	33%
Oak	33%
Cherry plum tree	34%
Total	100%

Methods of Tree / Hedge protection
• Stock-proof fencing: essential if animals are to graze nearby. Fencing must be at least two metres from any new planting.
• Rabbit-proof fencing: around plantations where there is a problem – but ensure the rabbits are not fenced inside.
• Shelters for individual trees: it is important to find out which animals are likely to threaten the survival of newly planted trees and then use shelters and stakes of the appropriate height.

See The Tree Council: Tree Planting Guide

Ecology

Protected Species

BIRDS - As an enhancement prescription it is recommended that two bird nesting boxes Schwegler 1B are installed upon mature trees within the vicinity of the site, fixed on trees with straps at least 5m above ground in a southerly direction. Indicated thus $

Within the Loose stock building two Schwegler Swallow Nest Box Bowls. They should be fixed at eaves level in an easterly direction. Indicated thus @

BATS - As an enhancement prescription it is recommended that one Vivara Pro Seville WoodStone Bat Box is to be erected upon mature tree in the vicinity of the site. It should be fixed at least 5m above ground. Indicated thus #

Green Infrastructure Statement

See Ecology and Green infrastructure report

Reasonable avoidance measures are to be adopted to mitigate any risks to wild birds, badgers, common herpetofauna or other priority wildlife.
As such, subject to the delivery of the above, the proposed development is considered likely to result in a clear biodiversity net gain/a net gain in local green infrastructure.

The 'stepwise approach' should be adopted throughout the design stage of all new developments in Wales. This means that the loss of existing green infrastructure should be avoided whenever possible, and when it is not possible to avoid the loss of or damage to the existing green infrastructure entirely, the extent of the loss or damage should be minimised to the greatest extent possible. When a proposed development poses a risk of harm to green infrastructure, protected habitats or habitats of principal importance, or protected species or species of principle importance, suitable mitigation should be incorporated into the proposed scheme of works to safeguard that green infrastructure/those habitats and species to the greatest extent possible. Finally, if the loss of green infrastructure cannot be avoided, minimised or mitigated for, suitable on-site compensation should be incorporated into the design of the development.

BAT LITE2 – Bat External Lighting General
Any external lighting should be sensitively designed to reduce impacts on nocturnal wildlife. All lighting should be angled downwards and installed with a protective cowl to reduce light spillage.

Guidance is set out in Guidance Note 08/23 Bats and Artificial Lighting at Night (2023) published by Bat Conservation Trust and the Institution of Lighting Professionals. A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component. Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats. The document can be found at https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released

BIO GEN1 – Protected Species General Note inc. trees
Many trees support wildlife, such as bats and nesting birds, that is protected by law. The consent given any approval does not override the protection afforded to these species and their habitats through legislation including the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).

You must take steps to ensure that the work you are carrying out will not harm any protected species, which may include surveys for bats and nesting birds by a suitably qualified ecologist. Works potentially affecting protected species may require a licence from Natural Resources Wales. Advice can be obtained from Denbighshire County Council's Biodiversity Officer (01352 811029 / biodiversity@denbighshire.gov.uk).

BIO GEN3 – General Note Destruction of Bird Nests
Works which could result in the damage or destruction of active bird nests should take place outside of the bird breeding season (March - August, inclusive) or immediately following a nesting bird check conducted by a suitably qualified ecologist.

Access

The proposed slurry Silo will be accessed from the farm yard along existing established field track. There is sufficient space for turning vehicles in all areas. A hard standing will be formed to provide access for mixing or emptying the Slurry Silo. Full Health and Safety signage will be displayed. Access gates will be locked.

Construction
All works will be carried out to standards required in BS5502 and code of practice for Earthworks, the store will be designed and built to the CoAPR standards and executed by experienced contractors.
Wastewater and slurry will be pumped by underground pipe between the new the existing lagoon and new Slurry Silo. The slurry silo will have a reinforced concrete base with channel to the perimeter to collect any effluent discharged.
All works will be carried out to standards required in BS5502 and code of practice for Earthworks, the store will be designed and built to the CoAPR and design by a qualified structural engineer.
There will be no flood lighting on the Silo, this ensures current dark sky standards are maintained.

Conclusion
The regulation led design solution delivers a sustainable development for the storage of slurry.

Post Application Notes 13/02/2025

DAS Amendments and additional information requested by NRW:
I am aware that NRW has replaced EAW, also that the whole of Wales is now NVZ. I am also aware that CoAPR require 5 months storage and we are actually hoping to eventually achieve 6 months storage by redirecting some of the rainwater that falls onto the roof and yards to soakaways at some time in the future.

Regarding the design and build standards of the tank, that will conform to BS 5502 requirements, also designed and built to the CoAPR standards (**see quote from Davies and Parry attached, please do not publish this document as it is commercial sensitive information**).

The capacity of the existing slurry store facilities is 27m x 47m x 2.5m = 2787 cubic metres minus 380 freeboard gives effective capacity of approx. 2400 cubic metres.

An approx. breakdown of the yard areas included in the slurry wizard are as follows:
Silage pits: 1000 sq. metres
Cow standings: 375 sq. metres
Misc. concrete areas: 1475 sq. metres
yes - the 2850 sq. m does include the silage clamps.

Yes - the 1500 sq. m pertains to the existing storage (It is a bit less than that ie 27 x 47 = 1269)

Yes - for now the 300 sq. metres of roof space will continue to be collected.

Yes - only the cows produce slurry of which there are 200 in total (185 in cubicles and 15 in loose housing) The yield of the cows is 8100 litres per cow per year.

The dimensions of the tank are 26.47 diameter 4.23m high and yes the store will designed and built to CoAPR standards (see quote from Davies and Parry)