

Title: NRW response – Gnoll Park
Date: 05/02/2024
Version: P2

I. Introduction

Jubb have been appointed by Andrew Scott Ltd. to provide engineering input relating to a foul strategy for the re-development of the existing facilities and its associated works, located at Gnoll Country Park, Neath on National Grid Reference SS766975, 2766975 E; 197559 N, postcode SA11 3EF.

The site is divided into six work area zones approximately 3 ha in size and is currently occupied by a visitor centre, pond cottage, ruins, service yard, potting sheds and associated car parking.

The proposed re-development will include the six work area zones, which are identified in the table below:

Area	Description	Proposed Works	Foul	Note
01	Gnoll House Ruins	Restoration and repair	NO	No foul drainage required for this area.
02	Visitor Centre	Proposed new visitor centre	YES	Visitor Centre includes toilets and a restaurant kitchen.
03	Pond Cottage	Restoration and minor extension	YES	Pond Cottage includes toilets and a café kitchen.
04	Kitchen Garden & Service yard	Cabin accommodation lodges, service yard and Carpark	YES	Kitchen Garden includes toilets, showers, baths and kitchens for the accommodation units. No foul drainage required for the Service yard. Foul to be combined with Pond cottage
05	Main Carpark	Proposed additional carpark	NO	No foul drainage required for this area.
06	Woodland Bridge	Proposed bridge	NO	No foul drainage required for this area.

This note outlines the design response to the comments raised by Natural Resources Wales during their consultation on the 6th September 2023 (NRW ref CAS-236747-Q9H2).

II. NRW Response

The original foul strategy on which NRW provided comment on, comprised of two treatment plants, one serving the visitors centre which discharged directly into the Fish Pond and the second to serve Pond Cottage and the kitchen gardens which discharged into an adjacent stream and subsequently into The Great Pond.

On NRW review they provided the below foul drainage response:

“We must highlight that the streams are ephemeral and dry up during periods of no rainfall, which could potentially lead to insufficient dilution of the effluent for large periods of the year. The two ponds on site currently suffer from algal blooms and low dissolved oxygen level and therefore discharging treated sewage effluent into the ponds could exacerbate the situation.”

To resolve the concerns raised within the statement the proposed drainage strategy (drawing 2080-02-JUB-C-DR-00500) was amended and further discussions and a site meeting was undertaken with the NRW Ecology officer Edward Davies. The proposed foul strategy is to maintain the two treatment plants and upstream arrangements, with the downstream systems from the Visitor Centre, Pond Cottage and Kitchen Gardens being merged and utilising a single discharge location into the Fish Pond's downstream watercourse which flows into DCWW culvert CUL_0237 approximately 250m downstream of the pond, the discharge location is shown indicatively within Appendix A. The arrangement would bypass the pond and therefore omit the concerns over exacerbating the existing ecological situation.

The point raised regarding insufficient dilution remained and was raised as a risk by NRW on their review of the new proposal resulting in a request for further information on the management of the ponds water levels and flows to alleviate their concerns. Edward Davies attended site on the 15th January 2024 and agreed that the park team were able to demonstrate sufficient control of the upstream ponds water level to provide suitable dilution throughout the year. The methods of controlling the water levels are described within section III.

III. Water Level Management

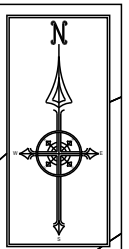
The pond water level is managed through a series of controls which locations and means have been captured within Appendix A – Water Management Controls Plan.

The Gnoll Park site manager has provided the below statements to outline their procedure for controlling the watercourses water levels and ensuring sufficient flows within the downstream watercourse.

“Each day, a site ranger will check all of the watercourses and their associated inlets and outlets. If the rangers discover that the water levels in Fish pond are lower than required then they will divert flows from other sources into the pond via 2 sluice gates. One sluice gate is located on the road to Preswelfa dingle (Location B within Appendix A) and can be opened and closed when needed. This allows water to flow down the site and into the cascades, which feed directly into the Fish pond. The second sluice gate is located in front of the halfway house. This controls the water that runs down from the North, this device can control the diversion of water into the fish pond or to the back of the Guinea pond (Location B within Appendix A) which subsequently discharges into the Fish pond at the outlet next to the Visitors Centre. In order to control the water levels within fishpond, there are 2 stop logs that can be used to alter water levels as needed throughout the year. In addition, there are a series of additional diversion points and sluice gates across the site that can be used to control the water going in and out of the pond”

The above process has been discussed with Edward Davies during the site meeting/walkover, it was agreed that from an ecological perspective that the forementioned methods are sufficient to alleviate their concerns with the dilution of the treated foul water as a constant flow throughout the year can be achieved.

IV. Appendix A: Water Management Controls Plan.



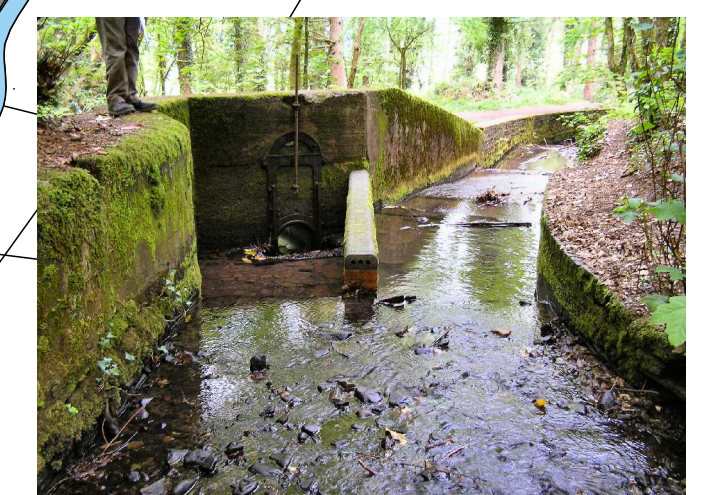
NOTES

1 THIS IS A C.A.D. DRAWING AND SHOULD NOT BE AMENDED BY HAND.

2 All dimensions in millimetres unless otherwise stated.

KEY

PIPE LINE CONNECTIONS



THESE WATERCOURSES ARE NOT CONNECTED



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Rev	Details	Dr	Ch	Ap	Date

Client



Neath Port Talbot
Castell-nedd Port Talbot
County Borough Council / Cyngor Bwrdeistref Sirol
ENGINEERING AND TRANSPORT

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Project

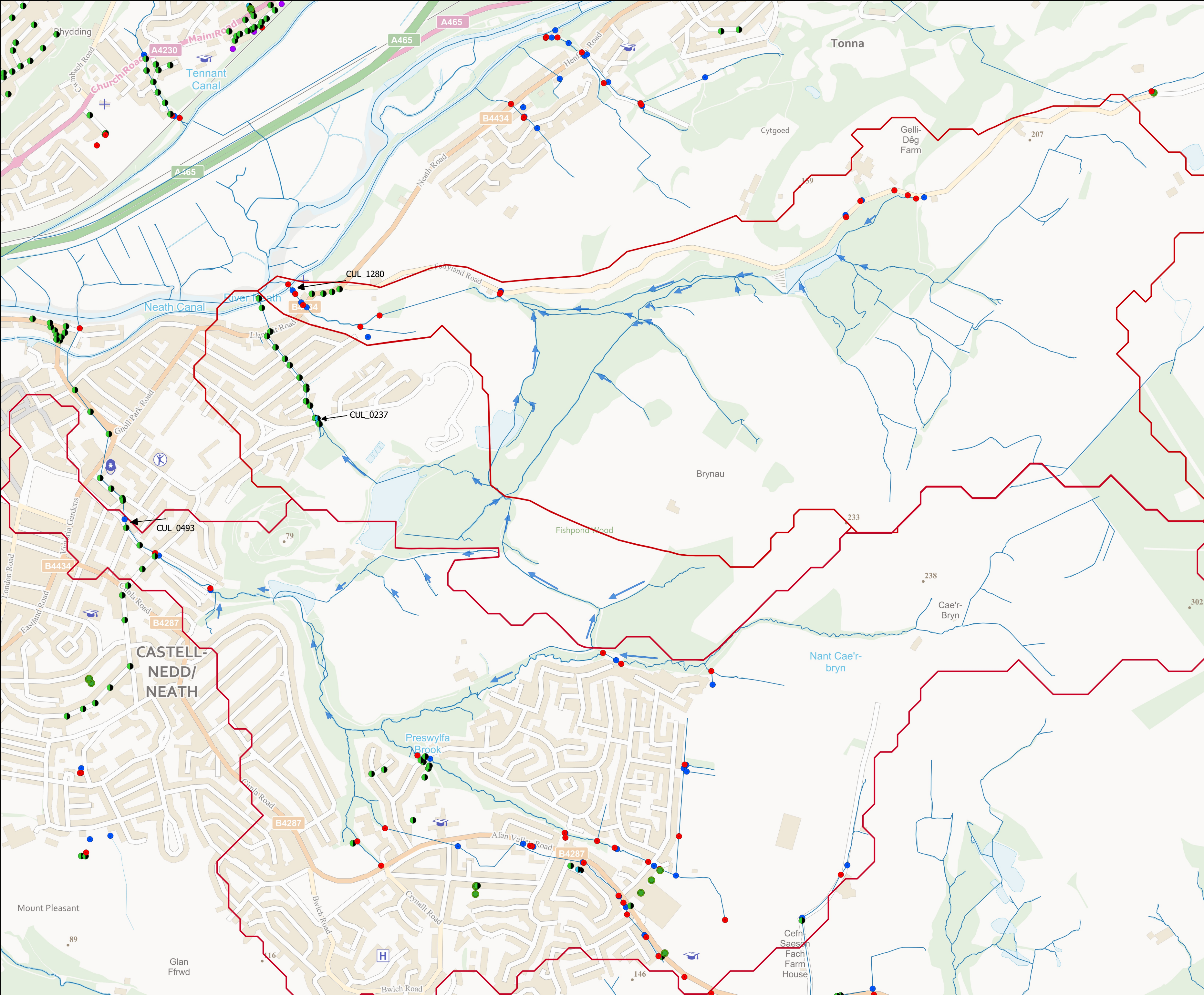
GNOLL PARK
FISH POND

File No.		Financial Code No.			
Drawn	BJD	Checked	PGG	Approved	MPT
Date	MAY 10	Date	MAY 10	Date	MAY 10
Scales	1 : 1250				
Drawing No.	GNOLL/FISHPOND/GEN/1				

Dwg. No.

Project

V. Appendix B: Watercourse Plan.



Legend

MasterPoint

- Inlet
- Outlet
- Surface Water Chamber
- Catchpit Chamber
- Storm Overflow Chamber
- Soakaway
- Pollution Control Valve
- Hydrobrake Chamber
- Sluice
- Access Cover
- Beany Kerb Access Cover
- Beany Kerb Outfall

MasterLine

- Aco Drain
- Beany Kerb
- Culvert
- Earth Ditch
- Fluted Channel
- Gully Line
- Land Drain
- Storm Overflow
- Surface Water Channel
- Surface Water Lines
- Rising Main
- French Drain
- Abandoned Pipe
- Sluice Pipe

Catchment Analysis

Secondary Watercourses

- Gnoll_Brook
- Gnoll_Park_Brook
- Llantwit_Brook

Background Details

- Flow_Direction
- River and Stream Network

NETWORK MANAGEMENT

Neath Port Talbot County Borough Council
Cyngor Bwrdeistref Sirol Castell-nedd Port Talbot
GARETH NUTT
Director of Environment
The Quays, Brunel Way, Baglan Energy Park,
Neath, SA112GG

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15/10/2019

**Gnoll Park
Neath
Catchment Analysis**

A2	Sheet 6
1:7,400	R Bailey

Gnoll Country Park, Neath
23157

2080-00-JUB-C-TN-00502-S2

VI. Appendix C: NRW response – ref: CAS-236547-Q9H2

Ein cyf/Our ref: CAS-236547-Q9H2
Eich cyf/Your ref: P2023/0659

Neath Port Talbot County Borough Council
The Quays
Briton Ferry
SA11 2GG

Dyddiad/Date: 06 October 2023

Annwyl Syr/Madam/Dear Sir/Madam,

BWRIAD/PROPOSAL: DEMOLITION OF EXISTING VISITORS CENTRE AND CONSTRUCTION OF NEW 2-STOREY VISITOR CENTRE INCLUDING NEW BALUSTRADES, SPRINKLER TANK, EXTERNAL LIGHTING OF PEDESTRIAN ROUTES FROM EXISTING CAR PARK AND ASSOCIATED LANDSCAPING AND DRAINAGE WORKS.

LLEOLIAD/LOCATION: VISITOR CENTRE, GNOLL ESTATE, NEATH, SA11 3BS.

Thank you for consulting Cyfoeth Naturiol Cymru (CNC)/Natural Resources Wales (NRW) about the above, which we received on 06 September 2023.

We have concerns with the application as submitted because inadequate information has been provided in support of the proposal. To overcome these concerns, you should seek further information from the applicant regarding foul drainage. If this information is not provided, we would object to this planning application. Further details are provided below.

Foul Drainage

We understand that the development is not served by the public foul sewer and that the application form indicates that foul drainage is to be discharged to a private sewerage system. In these circumstances Welsh Government Circular 008/2018 advises that a full and detailed consideration be given to the environmental criteria listed under paragraph 2.6 of the Circular, to justify the use of private sewerage.

In this instance, we note that the applicant is proposing two new package treatment plants, one to serve the visitors centre discharging directly into the pond and one to serve Pond Cottage and the kitchen gardens which will discharge into an adjacent stream and the pond onsite. We must highlight that the streams are ephemeral and dry up during periods of no rainfall, which could potentially lead to insufficient dilution of the effluent for large periods of the year. The two ponds on site currently suffer from algal blooms and low dissolved oxygen levels and therefore discharging treated sewage effluent into the ponds

could exacerbate the situation. For your Authority to fully assess the application we advise that clarification is provided on the existing private sewerage systems on site and their drainage fields, soakaway tests have been undertaken across the site, but it is unclear where the tests were performed in relation to any potential drainage field locations and, we note that no percolation tests have been undertaken.

The application does not, therefore, provide a sufficient basis for an assessment to be made of the risks of pollution to the water environment arising from the proposed development.

Pollution Prevention

We note that the supporting Construction Environmental Management Plan (CEMP), dated August 2023, has been produced for the redevelopment of the Gnoll Estate and not just for the demolition and construction of the visitors' centre.

We welcome the submission of the CEMP and are generally satisfied with its contents. We note that a CEMP can be an evolving document especially on larger schemes and therefore advise that the plan should consider the following points:

- Discharge points for temporary wheel washing areas.
- If the provision of a temporary lagoon is required, presumably for dewatering excavations and silt settlement, the CEMP should carefully consider any proposed discharge from the lagoon.

Construction and demolition activities can give rise to pollution and so it is important that appropriate provisions are in place to manage dust, silt, surface water and the storage of waste during the construction phase.

We continue to refer the developer to the [NetRegs website](#), specifically the Guidance for Pollution Prevention (GPP) documents which provide detailed guidance on pollution prevention. GPP5, 'Works and maintenance in or near water' and PPG6, 'Working at construction and demolition sites' will be of relevance.

Ecology

We note the bat report submitted in support of the above application (Bat Survey Report and Preliminary Ecological Appraisal, dated August 2023) has identified bats were not using the application site.

Notwithstanding the above, please note that should any trees require felling or management works to facilitate the development, a preliminary bat roost inspection for trees should be undertaken to assess their potential to support roosting bats. For any trees categorised as having moderate to high potential for supporting bats, further surveys (climbing inspections and/or activity surveys) will be required in accordance with best practice. A detailed plan should be submitted which outlines which trees that require felling pruning, and their potential to support roosting bats. Should bat roosts be confirmed, we advise that an assessment of the impacts of the scheme on these roost sites and proposals to mitigate or compensate for them is submitted.

If any trees require felling or management to facilitate the development, we advise that the above information is provided to inform the determination of the application.

Other Matters

Our comments above only relate specifically to matters included on our checklist, *Development Planning Advisory Service: Consultation Topics* (September 2018), which is published on our [website](#). We have not considered potential effects on other matters and do not rule out the potential for the proposed development to affect other interests.

We advise the applicant that, in addition to planning permission, it is their responsibility to ensure they secure all other permits/consents/licences relevant to their development. Please refer to our [website](#) for further details.

Advice for the Developer

Applicants wishing to operate a private sewerage system will need either to apply to us for an environmental permit or register with us for an exemption from the permit requirement. Septic tanks and small sewage treatment works that meet certain criteria may be registered as exempt.

A step by step guide to registering an exemption can be found on our [website](#).

If the septic tank or private sewage treatment system is not eligible for an exemption, the Applicant will need to apply for an environmental permit, further details can be found [here](#). Should a permit be required further information may be needed as part of that application process. The Applicant is therefore advised to contact us for pre-application advice at the earliest opportunity to try to ensure that there is no conflict between any planning permission granted and the permit requirements. Further details on how to access our pre-application advice service can be found [here](#).

It is important to note that a grant of planning permission does not guarantee that a permit will be granted. A proposal may be deemed unacceptable either because of environmental risk or because upon further investigation, a connection to mains sewer was feasible. Applicants are encouraged to ensure they have all the required permissions, consents, permits and any other approvals in place prior to commencement of works on the site.

Where private sewage treatment/disposal facilities are used, they must be installed and maintained in accordance with British Standard 6297 and Approved Document H of the Building Regulations. We also refer the Applicant to Guidance for Pollution Prevention 4 on the NetRegs [website](#), which provides further information.

If you have any queries on the above, please do not hesitate to contact us.

Yn gywir / Yours faithfully

Bonnie Palmer

Cynghorydd - Cynllunio Datblygu/Advisor - Development Planning
Cyfoeth Naturiol Cymru/Natural Resources Wales

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Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi./Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.