Environmental Statement

Non-Technical Summary

Land at Lower Berse Farm, Wrexham

On behalf of Redrow Homes Ltd

July 2024

1 Introduction

Redrow Homes Ltd (the Applicant) is seeking planning permission for the development of a residential-led mixed-use development at Lower Berse Farm in Wrexham.

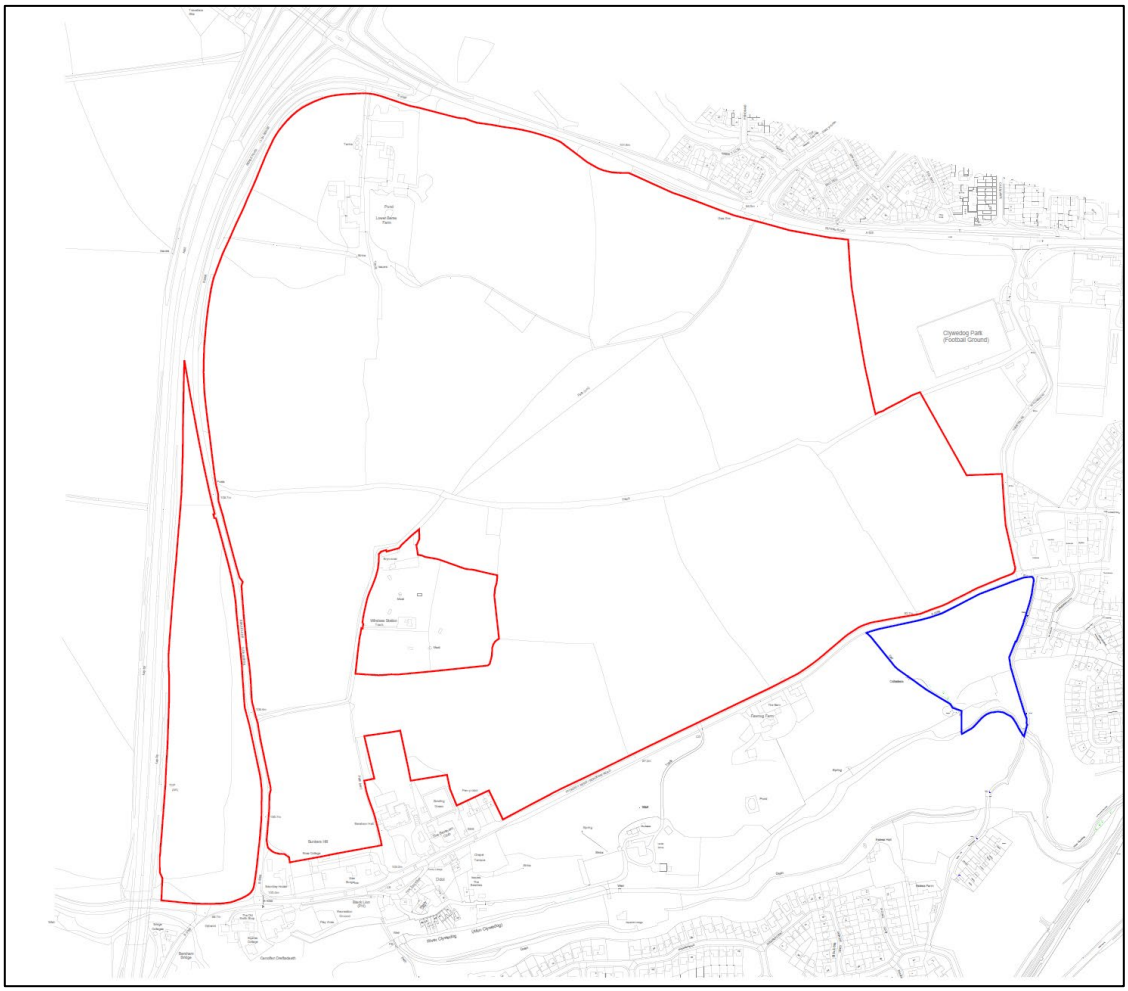


Figure 1: Site Location

The proposals have been developed in response to an allocation for the site in the Council's Local Development Plan. This allocation removed the site from the Green Barrier and established the principle of development for around 1,500 new homes.

This document in the Non-Technical Summary of the Environmental Statement (ES), which was prepared in support of the planning application for the proposed development. The ES reports the work carried out to assess the environmental impacts of the proposed development. This document was prepared by Pea Green Ltd, with the various technical chapters prepared by specialist consultants.

The ES and all planning documents can be viewed at Wrexham CBC's planning access website. Paper copies can be obtained at cost price from Redrow Homes Ltd or Pea Green Ltd.

2 Approach

Environmental Impact Assessment (EIA) is a process that seeks to identify the likely environmental effects associated with development proposals and propose ways in which they can be avoided, reduced or offset. The purpose of producing the Environmental Statement is to provide the Local Planning Authority with sufficient environmental information to decide a planning application.

An EIA is required for the proposed development due to its size, the sensitivity of the local environment and the potential for significant environmental effects to arise. The applicant therefore appointed a team of consultants to evaluate the key potential environmental issues. A Scoping Opinion on the content of the ES was issued by Wrexham CBC, which confirmed the need for assessments of impacts on archaeology and heritage, soils, minerals and foul drainage. Further to this, the applicant has voluntarily added ecology and landscape and visual assessments to the scope of the EIA. Therefore, the environmental topics that are included in the ES are:

- Landscape and Visual
- Ecology
- Archaeology and Heritage
- Soils and Minerals
- Drainage

Each assessment first established the existing environmental conditions on the site before predicting the potential impacts during both the construction phase and the operational phase of the development. The assessments then evaluated the 'significance' of each impact to determine their relative importance, based on the sensitivity of the environment and the size of the impact. When a significant effect was identified, measures to avoid, reduce or offset them were proposed or changes to the design were made.

3 Site Description

The site comprises 72.85 hectares of agricultural land on the western side of Wrexham, in north-west Wales. The national grid reference for the site centre point is SJ31314983, post code LL14 4HP.

The site is positioned to the south of Ruthin Road (A525), east of Lower Berse Lane and the A483, and north of Bersham Road (B5099). To the east are further agricultural fields, playing fields and residential areas on the fringes of Wrexham.

The topography of the site is generally flat or undulating but broadly slopes downwards from north-west to a low point in the south-east. The fields comprise arable areas as well as improve and semi-improved grasslands, which are bordered by hedgerows and trees. There is a narrow belt of ancient woodland within the south-west corner of the site located within a field bounding the A483.

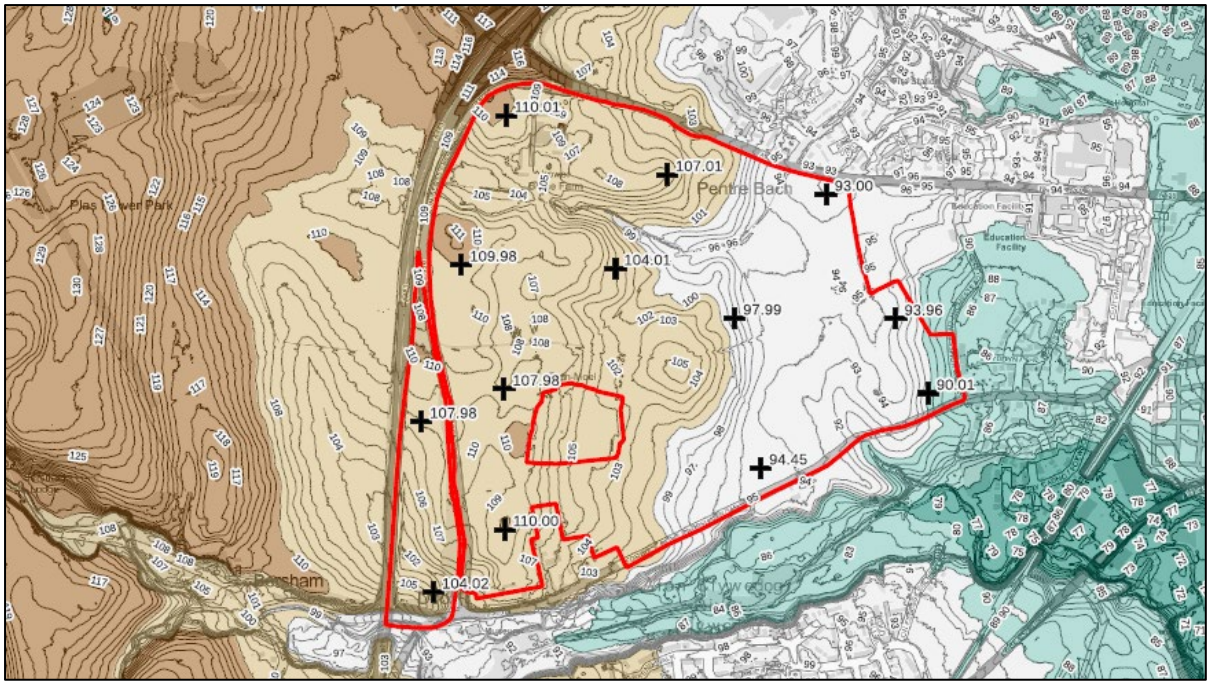


Figure 2: Topographical Survey Plan

The land within the site comprises high quality agricultural soils, which are underlain by potential mineral reserves of sand and gravel, brick clay and coal.

An unnamed watercourse flows east through the northern extent of the site, exiting on the northern boundary. The majority of the site is located within an area at little or no risk of flooding. However, an area of low-lying land at the north-eastern boundary adjoining Ruthin Road is identified as being at risk of flooding, which is associated with the unnamed watercourse. A public sewer crosses the site from north-west to south-east.

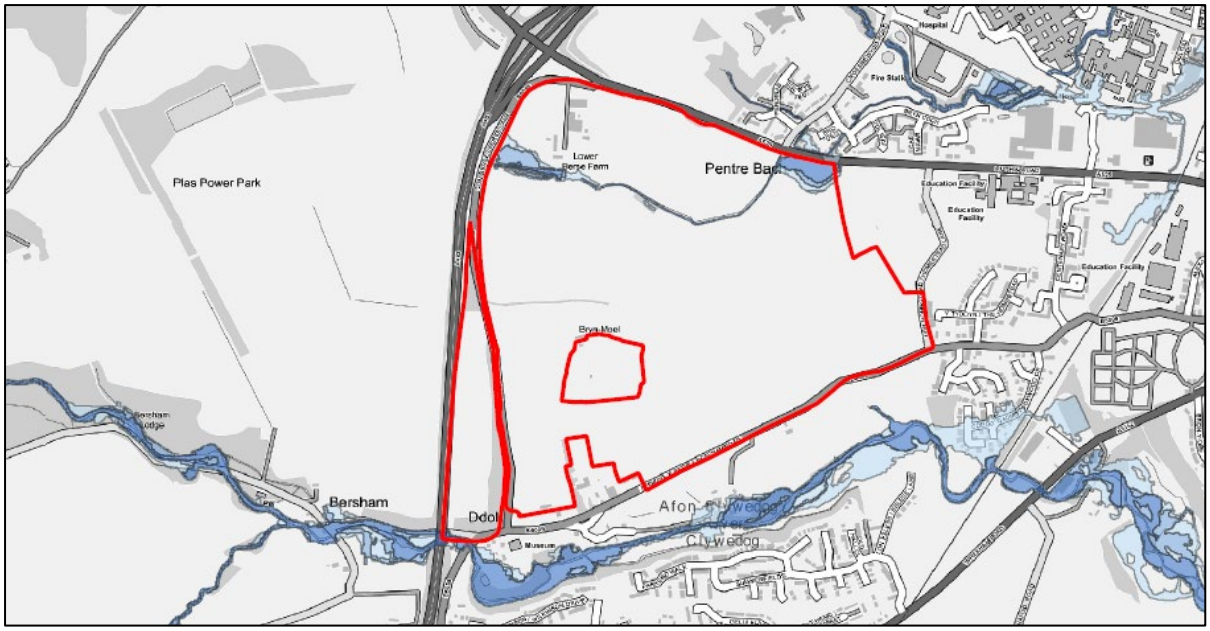


Figure 3: Flood Risk Map

Lower Berse Farmhouse is located in the north-west portion of the site and is Grade II* Listed. Outbuildings of various age are position to the north of the Farmhouse, some of which are brick built and similar in character whereas others are modern sheds or storage units.

A telecoms mast with anchoring and power substation structures are located centrally within the site but outside of the planning application area. There is also a residential property north of the telecoms mast, which is accessed from Berse Lane.

The site is accessed off B5098 Berse Lane, which connects the A525 Ruthin Road leading east into Wrexham and west/northwest towards Coedpoeth. Berse Lane also junctions with B5099 Bersham Road, which leads east towards Wrexham and south to junction with the A483. The site is also accessible from Ruthin Road and Crosnewydd Road. There are several public footpath routes providing public access into and through the site.

4 The Proposed Development

The planning application seeks permission for the construction of up to 1,450 residential dwellings along with a neighbourhood centre, a primary school and public open space. An indicative proposed site layout plan is presented below as Figure 4.



Key

Existing

- Application Boundary (72.85ha)
- Trees/Woodland
- Hedgerow
- Watercourse
- Public Right of Way (PRoW) Footpath
- Public Right of Way (PRoW) Bridleway
- Public Right of Way (PRoW) BOAT

Proposed

- Residential Development in the region of 1,450 dwellings (38.10ha)
- 2FE Primary School Site (1.62ha)
- Local Centre with possible nursery, shops, cafe, public house and community facilities subject to viability(1.46ha)
- Land Reserved for Potential Future Highways Scheme (2.54ha excluding spine road)
- Telecom Mast Exclusion Zone
- Spine Road with Tree Avenue, Landscape Verge and Swale
- Secondary Road/Shared Drive
- Emergency Access
- Footpath
- Footpath Cycleway
- Footpath Cycleway Off Road
- Public Open Space (15.39ha)
- Strategic Open Space (7.89ha)
- Drainage Attenuation (1.96ha)
- Tree Planting
- Hedgerow Planting
- Neighbourhood Equipped Area for Play (NEAP)
- Multi Use Games Area (MUGA)
- Locally Equipped Area for Play (LEAP)
- Local Area for Play (LAP)

Figure 4: Proposed Site Layout Plan

As can be seen on this plan, the proposals include a series of new access points from the surrounding highways network, as well as the creation of a network of primary highway routes through the site providing access to the various plots within the site. These routes will include pedestrian and cycle paths and will be tree lined. Within the plots, a network of smaller roads will provide access to the homes and other uses.

The majority of the development is for residential use, which would be delivered on a phased basis over approximately 15 years. This would include a mix of house type and size, ranging from 2 to 4-bed units, and will include 15% affordable homes in accordance with local planning requirements.

Other uses are proposed to support the residential elements of the scheme. A local centre will be delivered in the north-west corner of the site, making use of the existing buildings at Lower Berse Farm. This will include local services such as a neighbourhood shop, café, pub, nursery and community facilities. In order to deliver this element of the scheme, the modern outbuildings around Lower Berse Farmhouse will be demolished but the Farmhouse and older outbuildings will be retained and refurbished in a manner sensitive to their historic value.

A primary school is proposed in the east of the site, which has been sized to accommodate the needs of the new residents. Play and open space is provided throughout the site, with parkland in the south-west, equipped play area located centrally and other green pathways created throughout the site. The planting of trees and hedgerows in public spaces will feature throughout the development.

Drainage infrastructure is also shown on the layout plan. Ponds are located alongside each plot, which will provide rainwater storage to avoid flooding and to enable the slow release of water into watercourses and groundwater. In terms of sewerage infrastructure, wastewater will discharge to the public sewer which flows to the Five Fords Wastewater Treatment Works.

An area in the north-west of the site has been safeguarded for a future Welsh Government highways scheme, which would see the creation of a new junction on the A483, with a connection through the site to the A525 Ruthin Road. This is shown on the plan above as a retained green corridor and part of the internal road layout, to enable that development to be delivered when required.

5 Alternatives and Design Evolution

The EIA Regulations require that an ES includes a description of the alternative options considered by the developer. This could be in the form of alternative sites, types of development, scale of development or no development at all.

The site has been identified for development through a site selection process undertaken by Wrexham CBC. Subsequently, the site was included as an allocated residential development site in the Local Development Plan, which was adopted in December 2023. The applicant has designed the proposed

development of this site to comply directly with this planning allocation, and therefore, no alternative sites for this development were considered by the applicant as part of the EIA.

The EIA considered the implications of the development not coming forward. It concluded that without the development and the continuation of agricultural uses, there would be less traffic generated, the rural landscape character and setting of the listed building would remain unaffected, but that the economic benefits of job creation and housing supply, as well as the potential health benefits of providing high quality housing and open space, would not be realised. In addition to this, it is noted that the allocation of the site for residential development means that the 'no development' alternative is highly unlikely to persist, even if this application were not to come forwards, and that this is not a realistic scenario for this site. It is also the case that the A483 Junction 4 highway improvement works are expected to result in the development of the site in the next few years so, even in the absence of this development, the site would be subject to significant change and development.

The EIA and consultation process influenced the design in multiple ways, which improved the environmental performance of the proposals. These included the retention and sensitive refurbishment of the listed building and its associated undesignated outbuildings of historic value, the inclusion or surface water storage ponds and swales that will provide flood risk mitigation and ecological enhancements, the incorporation of public rights of way through the site, and the planting of new native hedgerow and tree species to compensate for removals. The application of these design improvements demonstrates that the EIA and consultation process was effective at influencing the development of the proposals.

6 Planning Policy Context

The current planning policy for the site is the Wrexham Local Development Plan (LDP). The LDP removed the site from the Green Barrier and a Special Landscape Area and has allocated it (along with two smaller parcels of land to the east) for a residential development of at least 1,500 homes. The applicant has progressed the development proposals to align precisely with this policy.

7 Landscape and Visual

Landscape effects associated with a development relate to changes in the character and quality of the landscape and how it is experienced. Visual effects are concerned with changes in views from sensitive locations. The assessment of visual effects takes account of people's perception and response to changes in views, particularly in terms of new elements that cause visual intrusion or obstruct views.

The site is not located within a Special Landscape Area, a National Landscape (formerly 'Areas of Outstanding Natural Beauty') or National Park but the Clwydian Range and Dee Valley National Landscape lies approximately 3km to the west of the Site. The site is located within National Landscape

Character Area (NLCA) 13: Deeside and Wrexham, which covers a large and varied landscape. The site exhibits some of the character of the NLCA, notably arable land and woodland cover.

The landscape is generally low-lying open farmland with a large open field pattern with well-defined hedgerow boundaries and patches of woodland. The original rural character has been significantly weakened by urban influences and is heavily influenced by the A483, Mold Road. Overall, the landscape at the site was determined to be of medium sensitivity to development.

The development will cause inevitable change to the landscape because of the change from a greenfield site to a largely developed one. However, the proposals include extensive areas of greenspace and the retention and enhancement of many of the highest quality landscape features of the site including the watercourse, woodland and hedgerows. Planting throughout the development would mature over time, helping to soften the appearance of the developed site and provide better connection to the wider countryside. The site will also be subject to a Landscape and Ecological Management Plan, which would ensure that the landscape is maintained in the long term, ensuring local terms ecological and landscape benefits as well as delivering improved access for recreational use.

The assessment considered the impact of the development of important nearby viewpoints, such as from public footpaths and residential areas. The proposed development would inevitably lead to significant changes in views of the site given the required construction activities, the nature of the proposals and the change in the type of land use. However, the proposals include a significant amount of retained landscape as well as new landscaping that would minimise the effect on views from adjacent residential properties, pathways and roads. The effects during the construction stage would be minimised through best practice such as the use of hoarding, positioning of site compounds away from adjacent residents, the considerate use of lighting and the protection of existing trees.

The overall conclusion is that, although a series of adverse effects on the landscape and visual amenity have been identified, these are inevitable when examining a change from agricultural to residential land, and the proposed landscaping strategy will help to improve the landscape effects over the longer term. The change in the landscape and views should also be considered in the context of the allocation of the site for this type of development, which confirms the acceptability of the site for residential use.

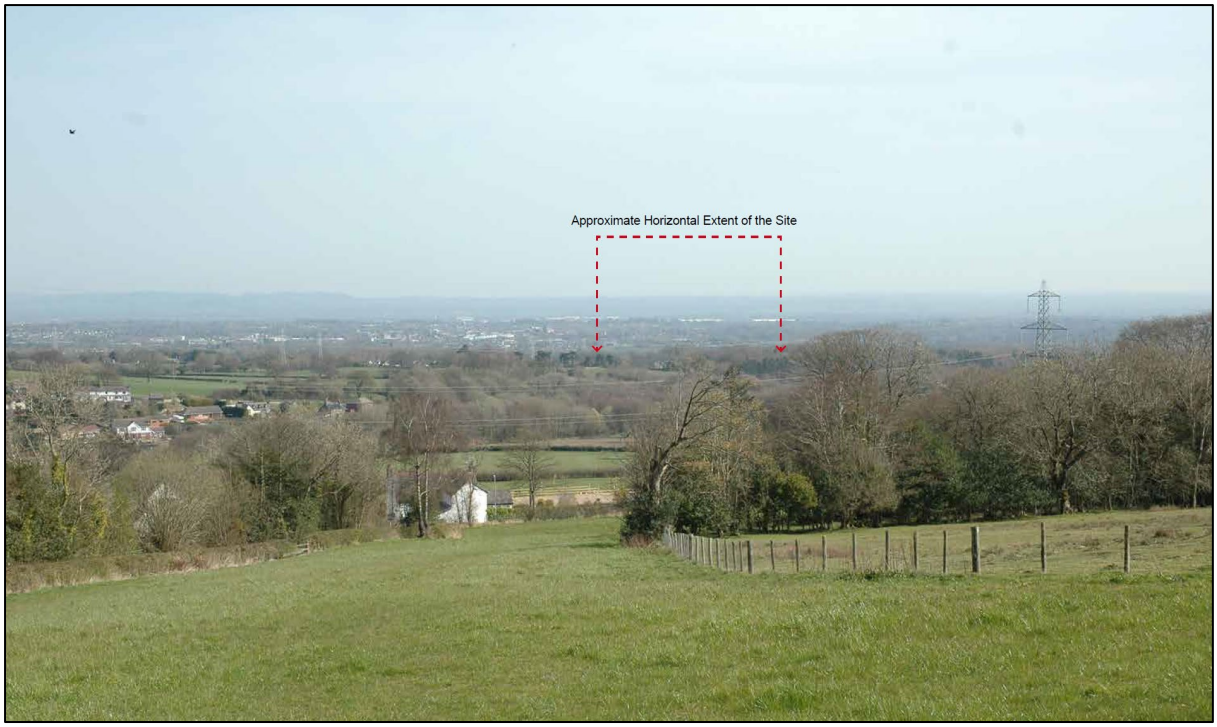


Figure 5: View of the Proposed Development Site from the Clwydian Range National Landscape in Winter

8 Ecology

The site includes a variety of habitats including a watercourse, woodland, improved grassland and hedgerow. There is a narrow belt of ancient woodland within the south-west corner of the site located within a field bounding the A483, along with further broadleaved woodland adjacent. Surveys identified native bluebell present within woodland areas and hedgerows. One pond was identified but it was found to be in poor condition due to the presence of slurry.

The proposals include the loss of some habitats on the site to make way for development, but these have been focused on the areas of lowest ecological value wherever possible, specifically the open grass fields. As such, the valued ecological features such as hedgerow and woodland have been retained where possible and enhanced through additional or replacement planting throughout the masterplan. Protection of habitats and pollution prevention measures are to be secured through the Construction Environmental Management Plan (CEMP) to reduce the potential effects of the construction stage. Furthermore, the Landscape and Ecological Management Plan (LEMP) will set out further measures by which the ecological features and habitats will be maintained in good condition over the lifetime of the development once completed. This will ensure that impacts upon habitats are not significant.

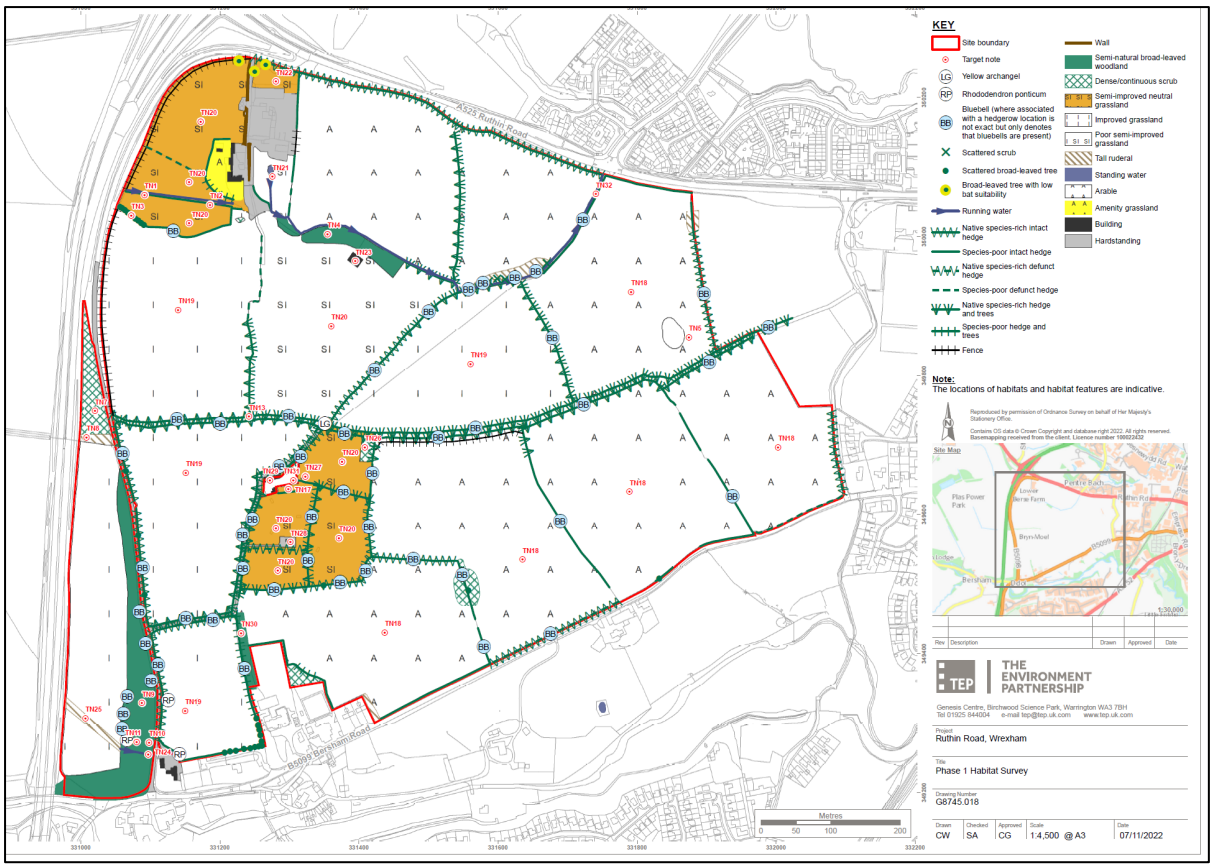


Figure 6: Extract from the Ecology Habitats Plan

A programme of surveys for protected species has been carried out at the site and the surrounding area. These confirmed the following key findings:

- [redacted]
- 80 trees within the site were identified as having some potential for support roosting bats and during further surveys, common pipistrelle, soprano pipistrelle, brown long-eared, Myotis species, noctule and lesser horseshoe were all identified. The habitats on the wider site have also been confirmed to be of local foraging importance for bats.
- 37 bird species were recorded on and around the site, and around 20 of these species are considered likely to nest within the site itself.
- Great crested newt are considered to be absent from the site due to the lack of suitable ponds, but are likely present in the surrounding area and could use parts of the site as terrestrial habitat.
- Otter and water vole were not identified on the site, but existing records identified otter in the River Clywedog to the south.
- Reptiles were not identified at the site.
- No notable groups of invertebrates were identified.
- The site has the potential to support hedgehog and polecat.

In order to avoid or compensate for impacts upon protected species at the site, a number of strategies have been proposed [redacted] Bat and bird boxes are also proposed to compensate for any loss of nesting opportunities on the site.

Precautionary working practices are proposed in relation to protected species, which would be adhered to throughout the construction period and secured through the CEMP. These will include measures such as sensitive lighting to avoid disturbance to bats, removal of trees outside the bird nesting season, and careful removal of vegetation or soils to minimise risk of harm to hedgehog, badger, amphibians and reptiles.

[redacted] However, the commitments to provide replacement an enhanced habitats and long-term management of the site would mitigate almost all of the potential impacts such that they are not significant and deliver long term enhancements.

9 Historic Environment

An assessment has been undertaken to consider the potential effects of the proposed development on heritage assets. There are no Scheduled Monuments, Registered Parks and Gardens or Registered Battlefields within the site or immediately adjacent. The Grade II* Listed Lower Berse Farmhouse is located within the north-western part of the site and many more listed buildings are located within Wrexham to the north and east. The Bersham Conservation Area and associated listed buildings are located to the south-west of the site.

The proposed development includes the demolition of some structures located around the farmyard at Lower Berse Farm, as identified on the plan below in orange. The structures to be demolished have all been erected since 1948 and are modern, functional agricultural structures. The buildings shaded grey were constructed before 1948 and (along with the Listed Farmhouse) are identified as non-designated heritage assets and, therefore, it has been concluded that these older structures form part of the Lower Berse Farmhouse listing. All of these structures are retained within the proposals.



Figure 7: Demolitions at Lower Berse Farmhouse (hatched orange)

The assessment of heritage impact identifies that there will be an effect upon the listed building itself from its refurbishment and an indirect impact upon its setting, given the change from agricultural fields to residential development. These effects have been mitigated as far as possible through the specification of a series of design principles that will guide the redevelopment of the listed building and ensure the retention of historic features and the sensitive design of new structure proposed in the vicinity of the Farmhouse and its curtilage structures.

Impacts to the Bersham Conservation Area have been avoided through the incorporation of a strategic open space to the south-west corner of the site. The positioning of open space in this area provides separation of the conservation Area and the site.

The site has a low potential for unrecorded archaeology to be present dating from the prehistoric, Roman, and early medieval periods but moderate to high potential for medieval and post medieval archaeology, although that would most likely be of only local significance. A programme of geophysical survey has been undertaken, the findings of which support this assessment of locally significant potential, having identified features associated with medieval and post medieval farming practice and field boundaries that correlate to boundaries depicted on the tithe and early Ordnance Survey mapping. On this basis, a programme of further investigative work has been recommended, which would be carried out prior to the commencement of the development.

10 Ground Conditions, Soils and Minerals

The assessment of ground conditions has been based on a desk-based assessment of historic records, site-based analysis. The current conditions of the site are predominantly greenfield agricultural land and has not been previously developed. The risks of contamination at the site are therefore generally low. However, a remediation strategy would be agreed with Wrexham CBC to ensure that any identified risks from contamination or ground gas are addressed during the design and construction period.

The construction activities will be carefully managed to ensure that silts and contaminants do not find their way into watercourses or adversely affect site workers. Any contamination identified during the construction works will be appropriately managed or treated in accordance with industry best practice and in consultation with statutory bodies. The management of these risks would be achieved through the use of a Materials Management Plan and a Construction Environmental Management Plan.

The site is partially located within a Mineral Safeguarding Area (MSA) for sand and gravel, brick clay and coal. This policy for MSAs seeks to ensure that the use of land does not prevent the extraction of mineral reserves in the future, although development may be permissible under certain circumstances. A minerals safeguarding assessment has confirmed that the extraction of minerals at the site prior to development would not be acceptable due to the potential impacts of noise and dust on adjacent residents, the impacts upon ecological receptors and the nuisance associated with extracting and transporting the material. This notwithstanding, an assessment of the impact of the development upon mineral reserves has been undertaken based on best practice guidance. This confirms that would be a significant environmental effect of development of the site because of the extent of the potential reserves at the site. However, this should be considered in the context of the allocation of the site and the fact that there are significant areas of safeguarded minerals in the local area, much of which is not located in close proximity to sensitive receptors, which would be unaffected by the proposed development.

The site also has high quality agricultural soils, which cover around 80% of the site. The assessment of the impact of the development on the soil resource confirms that there would be a significant effect due to the loss of these soils, but that this could be managed and minimised through the retention of open spaces and the reuse of high-quality soils within the landscaped areas and private gardens. The handling and stockpiling of these soils should be carried out in accordance with best practice guidance and secured through a Soil Resources Plan.

11 Drainage and Water Quality

Based on the advice of the local planning authority at the scoping stage, the assessment of drainage focused primarily on issues related to foul drainage and its potential effect upon the River Dee Special Area of Conservation (SAC). The SAC has been found to have elevated levels of phosphorous, which can cause algae to thrive and deplete oxygen levels in watercourses, making them inhospitable to some

aquatic animals. The primary sources of phosphorous in watercourses are runoff from agricultural land and discharges from sewage works. In response to the elevated levels in the River Dee, Natural Resources Wales (NRW) has confirmed that new developments in the catchment of the River Dee must demonstrate 'nutrient neutrality', which means that they do not increase the amount of phosphorous entering the River Dee through the change in land use.

A public sewer passes through the site and connects to the Five Fords Wastewater Treatment works. At the early stage of the design and planning process, the treatment works was only able to reduce phosphorous in the wastewater to levels specified by Natural Resources Wales (NRW), which would not have achieved the necessary nutrient neutrality. This constraint resulted in the applicant proposing a wastewater treatment works as part of the development. However, during the planning process, it was confirmed by Welsh Water that the Five Fords Wastewater Treatment Works would be upgraded such that it would meet NRW's standards for phosphate reduction, and also that it would have capacity to accept waste from the proposed development site. As a result, the applicant has removed the proposed treatment plant from the planning application and proposes instead to discharge to the public sewer. This means that there would be no adverse impact upon the River Dee SAC from phosphates entering the river.

The assessment also includes an analysis of the effects of the development on flood risk. As stated previously, the risk of flooding at the site is low and, due to the inclusion of sustainable drainage measures, there would be no increase in flood risk from the proposed development. During the construction stage, the management of runoff entering watercourses would also be controlled and this would be secured through the Construction Environmental Management Plan.

12 Cumulative Effects

The assessment of cumulative effects considered the potential impacts of the proposed development in conjunction with effects arising from other developments in the surrounding area. It also provides an assessment of the potential combination of some or all of the effects identified in the EIA on a particular receptor.

The potential for the interaction of effects of multiple developments was found to be limited due to the distances between the site and the other development areas. In terms of potential cumulative effects upon watercourses, and the River Dee catchment in particular, the same strict requirements for managing surface water runoff and foul drainage would be applied across all sites meaning that there is no residual cumulative effect on flood risk or on the River Dee SAC.

In terms of the combination of effects from the project on adjacent sensitive receptors, it was concluded that the properties in closest proximity to the site could experience a combination of construction related noise, visual intrusion and dust, but that this would be mitigated through good construction practices that will be confirmed in the Construction Environmental Management Plan.

13 Summary and Conclusions

A comprehensive assessment of the potential effects of the construction and operational phases of the proposed development has been undertaken as part of the EIA to establish the environmental effects associated with the development.

The proposed development has been designed in accordance with the findings and recommendations of the EIA. Any adverse effects identified through the assessment have been minimised as far as possible throughout the design process through the application of mitigation measures that have been designed into the proposals. Where mitigation measures could not be embedded into the design it is proposed that these are secured through planning conditions or obligations.

The EIA has identified the potential for some adverse residual effects, some of which will be unavoidable, despite the implementation of best practice measures, and are inevitable when developing land that is currently undeveloped. Loss of landscape features and habitats have been avoided where possible, with the areas of highest value being retained, but where habitats are lost, compensatory habitats are proposed and long-term management of the site will be secured through a Landscape and Ecological Management Plan.

Those effects which occur during the construction phase will be offset as far as possible by the application of best practice measures that will be secured, monitored and controlled through a Construction Environmental Management Plan (CEMP).

The majority of the remaining impacts identified are of negligible or minor significance and have been mitigated through good design or through the measures described above wherever possible. Overall, the proposed development has been subject to a rigorous appraisal of its environmental effects and an ongoing process of assessment and improvement. The submitted plans have been designed to avoid, minimise, compensate or offset adverse environmental effects wherever possible and additional mitigation measures have been proposed that should be a condition of any planning permission. From the point of view of environmental effects, there is no reason why planning permission should not be granted for this application.