Herefordshire Council

The Conservation of Habitats and Species Regulations (2017)
Part 6, section 63
'Assessment of implications for European sites and European offshore marine sites'

Habitats Regulation Assessment

This is a record of the Habitat Regulations Assessment (HRA) (including Screening for Likely Significant Effects and Appropriate Assessment where required) carried out by Herefordshire Council (the competent authority) as required by Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (the 'Habitats Regulations') relating to the following **planning application.**

This HRA is carried out in accordance with the relevant guidance documents including those by Natural England at https://www.gov.uk/guidance/appropriate-assessment, and David Tyldesley Associates https://www.dtapublications.co.uk/

The HRA is carried out by Herefordshire Council. Detailed information will need to be provided by the applicant to enable to authority to make the assessment.

The Project / Plan

1.1 Planning Application Reference Number, Description and Address

Application reference number: 163932 Address: Land at Hardwick Bank Bromyard Herefordshire Description: Outline planning application for a sustainable urban extension comprising: up-to 250 dwellings; open space, allotments and landscaping; school expansion land; areas of children's play; sustainable urban drainage infrastructure; internal roads; and associated infrastructure. Detailed approval is sought for principal means of access and layout with all other matters reserved. Applicant: Bovis Homes Limited & Mosaic Estates Case officer: Ollie Jones Location OSGR: 364358 - 254665 Link to Planning Application on Herefordshire Council Website: Planning Search – Herefordshire Council

1.2 Description of the plan or project (details)

Outline planning application for a sustainable urban extension comprising: up-to 250 dwellings; open space, allotments and landscaping; school expansion land; areas of children's play; sustainable urban drainage infrastructure; internal roads; and associated infrastructure. Detailed approval is sought for principal means of access and layout with all other matters reserved.

1.3 Documents and plans considered – *delete/ add as appropriate*

Herefordshire Local Plan Core Strategy 2011 – 2031 River Wye SAC Nutrient Management Plan National Planning Policy Framework The Conservation of Habitats and Species Regulations 2017 (as amended)

1.4 Planning Policy context:

The site is an Allocated Site in the Core Strategy.

1.5 Size (ha) and description (habitats etc.) of existing site

11.62ha of agricultural grazing land with hedgerows.

1.6 Surrounding land use and context in relation to designated sites

The development site is 10km east of the River Lugg SSSI which is an integral part of the River Wye SAC. The land between Bromyard and the River is rural in nature with mixed agricultural land, small rural roads and rural development present.

Relevant Habitats (Natura 2000) site(s)

Please select all that apply from:

- ☒ **River Wye Catchment SAC (including schemes impacting on the linked River Lugg SSSI)**
- ☐ **River Clun SAC**
- ☐ **Wye Valley Woodlands SAC**
- ☐ **Downton Gorge SAC**
- ☐ **Wye Valley & Forest of Dean Bat Sites SAC (Wigpool Iron Mines SSSI)**
- ☐ **Other site (SAC, Ramsar)**

Details of the Site:

1.River Wye SAC

The River Wye SAC covers an area of 2234.89 ha in Gloucestershire, Herefordshire, Monmouthshire and Powys.

Designated features

Qualifying habitats
The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Transition mires and quaking bogs. (Very wet mires often identified by an unstable 'quaking' surface).
- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho Batrachion vegetation. (Rivers with floating vegetation often dominated by water crowfoot)

Qualifying species
The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:

- Allis shad Alosa alosa
- Atlantic salmon Salmo salar
- Brook lamprey Lampetra planeri
- Bullhead Cottus gobio
- Otter Lutra lutra
- River lamprey Lampetra fluviatilis
- Sea lamprey Petromyzon marinus
- Twaite shad Alosa fallax
- White-clawed (or Atlantic stream) crayfish Austropotamobius pallipes

Conservation Objectives of the Designated features:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

[European Site Conservation Objectives for River Wye SAC - UK0012642 (naturalengland.org.uk)]

Site Condition
Site condition, for the area of the site in England, is taken from the constituent SSSI units for the River Wye SSSI and the River Lugg SSSI.

River Wye SSSI

Unit	Unit name	Condition	Condition Threat Risk	Habitat	Area (ha)	GridRef
001	TIDAL RIVER - ESTUARY TO BROCKWEIR BRIDGE	Unfavourable - Declining	High	RIVERS AND STREAMS	114.9234 ha	ST 537 956
002	BROCKWEIR BRIDGE TO MONMOUTH	Unfavourable - Declining	High	RIVERS AND STREAMS	36.3835 ha	SO 534 055
003	MONMOUTH TO ROSS	Unfavourable - Declining	High	RIVERS AND STREAMS	157.0946 ha	SO 573 185
004	ROSS TO HEREFORD	Unfavourable - Declining	High	RIVERS AND STREAMS	293.5648 ha	SO 568 320
005	HEREFORD TO BREDWARDINE BRIDGE	Unfavourable - Declining	High	RIVERS AND STREAMS	150.1955 ha	SO 418 415
006	BREDWARDINE BRIDGE TO WHITNEY TOLL	Unfavourable - Declining	High	RIVERS AND STREAMS	122.4429 ha	SO 300 461
007	WHITNEY TOLL TO HAY	Unfavourable - Declining	High	RIVERS AND STREAMS	30.8778 ha	SO 242 458

River Lugg SSSI

Unit	Unit name	Condition	Condition Threat Risk	Habitat	Area (ha)	GridRef
001	RIVER LUGG (WYE SAC)	Unfavourable - Declining	High	RIVERS AND STREAMS	58.8726 ha	SO 530 455
002	BODENHAM WEIR TO LEOMINSTER	Unfavourable - Declining	High	RIVERS AND STREAMS	20.4404 ha	SO 503 573
003	LEOMINSTER TO MORTIMERS CROSS	Unfavourable - Declining	High	RIVERS AND STREAMS	36.2719 ha	SO 448 623
004	MORTIMERS CROSS TO PRESTEIGNE	Unfavourable - Declining	High	RIVERS AND STREAMS	26.8469 ha	SO 366 648

Other Relevant Documents
There is a Site Improvement Plan for the River Wye which can be found at [Site Improvement Plan: River Wye - SIP199 (naturalengland.org.uk)]

Stage1: Preliminary Screening including Likely Significant Effects (LSE)

Completed by:

Fran Lancaster
Date: 24th November 2023

Table 1: Initial Screening
Does the project or plan qualify for exemption from the HRA process?

Is the project or plan directly connected with or necessary for the conservation	No

management of the habitat site (provide details)? If so the project may be considered exempt from the HRA process.	
If the proposal is considered exempt from the HRA process? Has this been consulted upon and agreed with Natural England?	N/A – not exempt

Table 2: Screening for Likely Significant Effects (LSE)

Key issues considered:

☒	**Foul water**	☒	**Water pollution**
☒	**Surface water**	☐	**Water abstraction**
☐	**Aerial Emissions (ammonia, N deposition & acid deposition)**	☐	**Recreational impacts**
☐	**Construction or Demolition processes**	☐	**Protected species impacts (direct)**
☐	**Direct impacts inside SAC boundary (habitats)**	☐	**Protected species impacts (indirect)**
☐	**Impacts upon supporting habitats**	☐	**Other**

Details of key issues & identification of potential effect pathways

The proposal relates to a development of up to 250 dwellings which will discharge via a mains connection to Bromyard Waste Water Treatment Works. Surface water from the site is to be attenuated to greenfield rate plus an allowance for climate change and discharged to a mixture of local watercourses and highways drains.

***NB**: Where avoidance and mitigation measures do not form an integral part of the project/ plan and are to be put in place to reduce the impacts, these must not be considered in order to avoid impacts at the Screening stage and will require consideration at the Appropriate Assessment stage (in line with the People Over Wind judgement).*

Are there any potential effects of the project or plan when considered alone?	Yes *If 'yes' then proposal must be carried forward to the Appropriate Assessment Stage.* *If 'no' then proposal must still be considered in-combination below.* *The identification of a potential effect pathway is sufficient to require an Appropriate Assessment i.e. no judgement on significance/ or threshold is applied at screening stage. Existence of a pathway is considered to be an LSE.*
Are there any potential effects of the project or plan in combination with other projects or plans?	Potentially yes *If 'yes' then proposal must be carried forward to the Appropriate Assessment Stage.*

Natural England consultation reference and summary (if available):

None

Summary of LSE test conclusions

☐ **No likely significant effects – no Appropriate Assessment required and planning permission can be legally granted. A consultation with NE is not required where a proposal is 'screened out'.**

☒ **Likely significant effects – Appropriate Assessment required.**

And, where relevant:

☐ **Further information to inform the Appropriate Assessment required** – the applicant is advised to provide the relevant information as detailed below.

Further information required to inform the Appropriate Assessment	N/A

Stage 2: Appropriate Assessment

Completed by:

Fran Lancaster
Date: 24th November 2023

Appropriate Assessment statement including alone, impacts in-combination and discussion of proposed mitigation measures

Complete the tables and boxes below, deleting as necessary. Where information is taken from supporting documents this should be quoted and fully referenced. Any documents not available on the Council's website should be provided to Natural England when they are consulted.

Table 3: Impacts of the plan/ project alone

Complete boxes as appropriate below and delete boxes for potential effect pathways which are not relevant:

Foul Water Mains Connection – Phosphate Credit Purchase
The proposal is for up to 250 dwellings to be connected to mains sewer which will discharge to Bromyard WWTW which has a permit limit of 1mg/l of phosphate.

The **Waste Water P load** of the development is calculated to be:

Development	250 dwellings
Occupancy	2.3 per dwelling
Additional population	575 people
Water usage	110 l per person per day
Waste water volume	63,250 l per day
Receiving WwTW environmental permit	1 mg/l (*0.9 for calculation)
Total phosphate after treatment	56,925 mg/TP/day
Convert mg/TP/day to kg/TP/day	0.056925 kg/TP/day
Per year	20.79 kg/TP/year

Waste Water Total Phosphate Load is 20.79 kg/TP/year.

The **Current Land Use** is lowland grazing.

The **Current P Leaching Load** is 2.56 kg TP.

The **Post Development Land Use** is residential development (7.23ha), greenspace (3.83ha), open urban land (0.56ha) which equates to an **Annual Phosphorus Nutrient Export** of 11 kg TP.

The **Phosphate Balance for the Site** is:

TP Waste Water post treatment	20.79 kg/TP/year
Historic landuse P export	2.56 kg TP
Post development P export	11 kg TP
Landuse net change	8.44 kg TP
Phosphate budget	29.23 kg TP/year
Phosphate budget including 20% buffer	35.08 kg TP/year

The Natural England Nutrient Neutrality Budget Calculator – River Lugg Catchment has been used correctly for this proposed development and the outcome of the nutrient budget is that there is an annual phosphorous load to mitigate = 35.08kg TP/year.

Mitigation is proposed in this case including the purchase of Phosphate credits and is set out in table 4 below.

Surface Water and Water Pollution

Information on proposed surface water drainage is found within the Flood Risk Assessment and Surface Water Drainage Strategy by Santec (January 2023) and in ongoing correspondence between the applicant and the Council's Drainage Consultant which can be found on the casefile. The Council's Drainage Consultant has agreed the technical elements of the drainage strategy but is still clarifying some elements of detail.

The development site is divided into two catchments. The larger northern catchment includes the bulk of the residential development. The smaller southern catchment includes only highways development. The site is 200m south east of the River Frome with unnamed watercourses closer to the site.

Soil testing showed that at shallow depths soakaways are not viable with only 1 test pit (of 38) achieving a suitable rate of soakage. On this basis the surface water drainage strategy assumes no soakaways are possible on the site.

A direct discharge to an unnamed watercourse is the proposed strategy for the northern catchment, this watercourse flows into the River Frome. The southern catchment (entirely highways development) is proposed to discharge into existing highways drains once the agreement of the Highways Authority has been secured.

All discharges will be attenuated to greenfield runoff rate equating to 1 in 100 year storm events plus a 45% allowance for climate change. An detention basin in the northern catchment will be 2951m3. A detention basin in the southern catchment will be 83.1m3.

The surface water treatment train will comprise of source control measures (including permeable surfacing where appropriate), conveyance will be via pipes due to the topography of the site and site control will occur within the detention basins.

Surface water comes from roofs and roadways/parking areas and is assessed as having very low (roofs) and low (everything else) pollution prevention. The detention basins are set out as being sufficient to address pollution arising from suspended solids, metals and hydrocarbons but it is anticipated that a range of other measures will be included in the details at reserved matters which will further reduce potential pollution bringing the quality of water discharged from the site to above adequate.

Surface water is not considered likely to have an adverse effect on the integrity of the River Wye SAC either alone or in-combination and sufficient measures are embedded in the proposal to ensure sufficient water quality within the need for additional mitigation.

Table 4: Mitigation Requirements and Outcomes

For cases purchasing Phosphate Credits

The development has applied for, and received, an allocation of phosphate credits from Herefordshire Council at a cost of £14,000 per kg as follows:
Annual phosphorous load to mitigate 35.08 kg TP/year * £14,000 per kg

= 35.08 * £14,000
= £491,120.

This proposal is a valid Planning Application awaiting a positive determination subject to receipt of Phosphate Credits and the developer is prepared to enter into legal agreement with the Council through either a S106 agreement or a S106 agreement including a S111 agreement for phased development to secure the financial payment for phosphate credits.

Herefordshire Council's Phosphate Credit Allocation Process (taken from the Council's Phosphate Credit Pricing and Allocation Policy April 2022):
'The Phosphate Credit Allocation Process is a staged process setting out how Phosphate credits that are generated by Herefordshire Council Integrated Wetlands can be secured by developers to offset the phosphate load of their development. The process necessitates a number of steps which can be run in tandem simultaneously. This process is monitored throughout and will span several services as well as requiring engagement with, statutory consultees, and developers themselves. Credits will only be released as they become available.

The process starts with developers working out the number of credits needed using the Council's Phosphate Calculator Budget Tool supplied by Natural England. The developers are then kept on a list according to 'first come first served' policy as stated above. As credits become available and when applications are ready for determination, case officers will contact developers and provide them with an invitation to apply for credits. The developer submits this alongside their phosphate calculations, a S106 legal document and an online payment for their allocated credits. Their application is reviewed internally by Legal and Ecology and in consultation with Natural England.

Permission can then be granted or refused. If refused, developers have a set amount of time to go through the appeals procedure, credits will be held as stated above. Where permission is granted, HRA conditions are applied and they have a set amount of time and requirements they must fulfil otherwise the credits are returned to Herefordshire Council and payment is reimbursed to developers as stated above.'

Phosphate Credits in Herefordshire are being generated through the delivery, by Herefordshire Council, of a program of integrated wetlands associated with existing Waste Water Treatment Works (Wwtw). The first integrated wetland was delivered in 2022 on land adjacent to the Luston Wwtw. As set out in the feasibility study for the wetland[1] 'The purpose of the wetland would be to provide enhanced treatment for removal of phosphorus from the final effluent of the Luston Waste Water Treatment Works (WWTW), to contribute to the resolution of the current embargo on housing development and to deliver nutrient neutrality for future housing.'

The aim, in creation of the Luston Integrated Wetland is reducing the Total Phosphorus (TP) in the effluent leaving the Luston WWTW from 4.24mg/L TP to less than 1mg/L TP.

[1] Wetland Feasibility, Design and Offsetting. Wetland Development on the River Wye – Luston. Wye and Usk Foundation. (May 2022).

The Council, working with partners, has assessed potential for integrated wetlands at 8 sites of which Luston is the first to be granted planning permission (under application 213571) and constructed. Natural England have been engaged with the development of the integrated wetland program and did not object to the planning application to create the Luston wetland for the purpose of selling Phosphate Credits.

The precautionary principal has been applied to the construction of the Luston wetland, and will be applied to any further integrated wetlands created under the project:

'To provide a robust wetland design and provide certainty, WUF applied a number of steps to ensure that the design can be considered to provide certainty under the Habitats Directive. These are outlined below and presented in the following sections:

- The primary objective of the wetland is to provide an effluent quality that leaves the wetland at less than 1mgTP/l. To achieve this, and provide certainty around the design, WUF have designed the wetland on the basis of a reduction to 0.8mg/l. This has effectively introduced a 20% buffer and over-sized the wetland to provide greater certainty in its overall future performance, thus adopting a precautionary approach.
- A water balance has been developed and the design has been tested against UK Climate Projections (UKCP) estimates for rainfall and evapo-transpiration in 2070. Understanding the water balance is essential to ensure that the wetland design is robust under current and future climate change conditions and that the hydrology of the system will not be compromised.
- Due to uncertainties with wetland design models, WUF has adopted an approach outlined in the Treatment Wetlands publication (Dotro et al., V7 2017) which recommends application of multiple models to provide sensitivity in terms of calculation of overall design.
- Continued monitoring of phosphorus and flow data at the site to provide increasing and greater understanding of the current operation of the treatment works.'

Text taken from the WUF feasibility study.

The full technical design and modelling work for the Luston wetland can be found at in the Wetland Feasibility, Design & Offsetting Report for the Luston Wetland by Wye & Usk Foundation (May 2022).

Additionally, the precautionary principle is applied to the allocation of Phosphate Credits with 80% of the capacity generated by the creation of each integrated wetland being allocated to development and 20% of the capacity generated being allocated to providing river betterment. HC Global Template (herefordshire.gov.uk)

The sale of phosphate credits to developers will allow the Council to recoup its expenditure in delivering the Strategic Wetlands (and credit costs will be regularly reviewed as new wetlands are brought forward) and will also provide ongoing income for the long term management and maintenance of the wetland features.

On the basis of the program of integrated wetland delivery and the phosphate credit system developed by Herefordshire Council in partnership with a number of organisations including Natural England and has committed to purchasing the phosphate credits required to address the phosphate load generated by the development this proposal it is not considered to have a likely impact on the integrity of the SAC and planning permission can therefore be granted.

Table 5: Remaining Impacts

None

Table 6: Consequences for Conservation Objectives of the Designated Site

Impacts on maintaining the favourable condition of the site	No

Disruptions or delays in progress towards achieving the conservation objectives of the site	No
Alterations to natural progression or other natural changes within the site	No
Loss of key habitat/ species features. Fragmentation or isolation of key species and habitats. Impacts to diversity, distribution, density, balance, area or population(s) of key species or habitats that are indicators of the favourable condition of the site, including from disturbance	No
Alterations to the ecological relationships and balance between species and habitats that are key to the structure/ function of the site	No
Alterations to nutrient balance or other processes vital to the functioning of the ecosystem	No

Table 7: Integrity Test

Will there be an impact upon the Integrity of the Designated Site?

There will be no adverse impact upon the integrity of the River Wye SAC.

Table 8: Are there Alternative Solutions to the proposal?

If adverse effects on the integrity of the site, either alone or in combination, cannot be ruled out through avoidance or mitigation then alternative solutions must be considered.

N/A

Please Note: Where there are no satisfactory alternatives then consideration may be given to whether the proposal could follow the Imperative Reasons of Overriding Public Interest (IROPI) route. Is this option is under consideration for a plan or project then specialist legal advice should be sought and followed.

Table 9: Recommended planning conditions to secure mitigation which is required in order to achieve no effect on integrity of the Designated Site.

1.Prior to the first occupation of any of the residential development hereby permitted written evidence / certification demonstrating that water conservation and efficiency measures to achieve the 'Housing – Optional Technical Standards – Water efficiency standards' (i.e. currently a maximum of 110 litres per person per day) for water consumption as a minimum have been installed / implemented shall be submitted to the Local Planning Authority for their written approval. The development shall not be first occupied until the Local Planning Authority have confirmed in writing receipt of the aforementioned evidence and their satisfaction with the submitted documentation. Thereafter those water conservation and efficiency measures shall be maintained for the lifetime of the development

Conclusion of the Appropriate Assessment:

☒ **Herefordshire Council, as a Competent Authority under the Habitat Regulations 2017, Part 6, section 63(5) concludes that there would be NO adverse effects on the integrity of the Special Area of Conservation; subject to appropriate mitigation being secured via the planning conditions listed above. Planning Permission can legally be granted.**

Please Note: The authority must consult Natural England on the draft HRA and must have regard to the advice of Natural England before granting planning permission.