



**UKOG (234) LTD
BROADFORD BRIDGE EXPLORATORY WELL SITE**

PLANNING STATEMENT

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| PROPOSAL: | AMENDMENT OF CONDITION 1 OF PLANNING PERMISSION REF: WSCC/032/18/WC EXTENDING THE PERMISSION BY 24 MONTHS TO ENABLE THE COMPLETION OF PHASE 4 SITE RETENTION AND RESTORATION. |
| LOCATION: | WOOD BARN FARM, ADVERSANE LANE, BROADFORD BRIDGE, BILLINGSHURST, WEST SUSSEX RH14 9ED |
| DOC REF: | UKOG-BB-PA-2019-S73.WSC |
| DATE: | 22 ND NOVEMBER 2019 |



APPROVAL LIST

| NAME | | TITLE |
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REVISION RECORD

| VERSION | DATE | DESCRIPTION |
|---------------------------|--------------------------------|------------------|
| UKOG (234)-BB-PA-S73. | 8 th November 2019 | Draft for Review |
| UKOG (234)- BB-PA-S73.WSC | 22 nd November 2019 | Submission |

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APPENDIX 1: SITE LOCATION PLAN

APPENDIX 2: ECOLOGICAL HABITAT ASSESSMENT 2019 REPORT



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1. INTRODUCTION

1.1 Planning History

UKOG (234) Ltd (the “Applicant”) is a wholly-owned subsidiary of UK Oil & Gas PLC (UKOG), an investment company focused on oil and gas assets in the Weald Basin.

On 11th February 2011, West Sussex County Council (WSSC), consented a temporary borehole for the exploration, testing and appraisal of hydrocarbons at Wood Barn Farm, Adversane Lane, Broadford Bridge, Billingshurst, West Sussex (referred to hereafter as the “original consent”)¹.

Following the discharge of conditions attached to the original consent, a phased programme of works commenced on 16th September 2014. Having completed *Phase 1: Construction*, the programme was put on hold by the then operator Celtique Energie Weald Limited (CEWL). UKOG completed acquisition of CEWL in August 2016 and in spite of commencing *Phase 2: Drilling*, in May 2017 the approved *Phase 3: Testing*, could not complete prior to the expiry of the original consent on 15th September 2017. Accordingly, WSSC permitted a 1-year extension of time until 15th September 2018 (referred to hereafter as the “1st amendment consent”)².

Having completed *Phase 3: Testing*, in March 2018 the Applicant intended to perform an expeditious appraisal of the data obtained from the Broadford Bridge well (BB-1) and sidetrack well (BB-1z). However, this process was delayed as a result of the discoveries made at the Horse Hill 1 well (HH-1) on land north of Gatwick Airport, Surrey. Similar to the wells at Broadford Bridge, HH-1 penetrated the same Kimmeridge limestone and Portland sandstone reserves and initial findings indicated that the two sites may access the same continuous oil deposit.

On 1st November 2017 Surrey County Council permitted a further 3-years testing and appraisal of HH-1³ and the drilling of a second borehole (HH-2) in 2018 to be followed by testing and appraisal in 2019/20. Given the similarities between the two sites, the outcome of this further work would be material in determining the future productive use of Broadford Bridge. To enable decision making at Broadford Bridge to benefit from this work, WSSC permitted a further 18-months extension of time until 31st March 2020 (referred to hereafter as the “2nd amendment consent”).

However, since the date of this permission, delays at Horse Hill and the likelihood of new information coming forward from other sites would make the restoration of Broadford Bridge on 31st March 2020 premature. Accordingly, the Applicant is respectfully requesting a further extension of time in the form of a 3rd amendment application.

1.2 The Need for a Further Extension of Time

The future use of the Broadford Bridge Site will be determined by the appraisal of the following well sites targeting the same Kimmeridge limestone and Portland sandstone reserves:

- **Horse Hill Well Site**

The 2nd amendment consent was predicated upon the delivery of further information from HH-1 but unfortunately drilling has not progressed as quickly as originally envisaged (which is indicative of the uncertainty when seeking to retrieve and accurately interpret data from deep below

¹ West Sussex County Council planning consent reference WSSC/052/12/WC.

² West Sussex County Council planning consent reference WSSC/029/17/WC.

³ West Sussex County Council planning consent reference WSSC/037/14/WC issued 3rd September 2014 and extended for a further 12 months by WSSC/032/17/WC issued 11th October 2011.

ground). The drilling HH-2 was originally planned for 2018 but only commenced 29th September 2019. It is now due to complete in 2019, with the appraisal of HH-1 and HH-2 in 2020.

- **Loxley Well Site**

In June 2019, the Applicant applied to Surrey County Council for a mineral planning consent to authorise hydrocarbon exploration, testing and appraisal from a new well site on land to the east of Dunsfold, Surrey. This well site is in the same Petroleum Exploration and Development Licence area (PEDL-234) as Broadford Bridge and will test the same Kimmeridge limestone and Portland sandstone reserves. This application is due to be determined late-2019/early-2020 and, if consented, the site would be operational in 2020/21.

Data from above-named sites will help determine the extent of the reserves, the mix of hydrocarbons, the flow rates and the pressures at play within the target formations. This information will help determine the need for further testing and appraisal at Broadford Bridge and its potential for commercial success. Put simply, the data is critical for the future planning of the Broadford Bridge Site.

1.3 The Proposal – 3rd Amendment Application

To ensure sufficient time is allowed for data retrieval and appraisal this application is seeking to vary the wording of 2nd amendment consent *Condition 1*, to read:

1. *This permission shall be for a limited period expiring on 31st March 2022, by which date all operations shall have ceased, all buildings, plant and machinery, including foundations and hard standings shall have been removed and the site restored in accordance with the approved restoration and aftercare schemes.*

This extension would mean that the Site would be held in *Phase 4; Retention*, mode for a further 24-months beyond the current expiry date of 31st March 2020. For the avoidance of doubt, *Phase 4; Retention*, does not allow for any further drilling or testing activities as operations have been completed. The 24-month period of data review and appraisal would be followed immediately by *Phase 4: Restoration*, commencing and completing within the planting season (October-March).

1.4 Site and Surroundings

The Site comprises a worked farm that accommodates a well site in retention mode. Temporary earth bunding delineates a stable, flat and drained well pad formed of crushed stone overlaying an impermeable membrane. A concrete well cellar and a conductor pipe have been sunk into the ground and cemented to surface through which the BB-1/1z wells have been installed.

Upon completion of *Phase 3: Testing*, BB-1/1z were suspended and permanent barriers to flow installed within the wells. All operational plant and machinery was removed and the stone surface cleaned and retained along with the perimeter drainage ditches. A standard shipping container has been installed over the wellhead assembly and all valves closed.

The well site and its crushed stone access track in-off the B2133 are enclosed by a boundary fence which was authorised under a separate planning permission⁴. This has been retained along with entrance gates and on-site security cabins to deter unauthorised access.

⁴ Surrey County Council planning consent reference RE16/02556/CON.

The Site is within the Parish of West Chiltington approx. 7km south-east of Horsham and 3km south of Billingshurst. The surrounding area is characterised by gently undulating farmland, mature hedgerows and woodland blocks restricting visual access (see *Appendix 1: Site Location Plan*).

1.5 Environmental Impact Assessment

The Environmental Statement (ES), dated July 2012, that informed the original consent assessed the likely effects of hydrocarbon exploration, testing and evaluation at the Site. The current proposal amounts to an “*extension of time*” that constitutes “*Schedule 2 development*” under the terms of *The Town and County Planning (Environmental Impact Assessment) Regulations 2017*⁵. Therefore, the likelihood of significant adverse effects arising from the proposal must be considered.

The ES established that if significant adverse effects were to occur, they would be largely experienced within *Phase 1: Construction*, and *Phase 2: Mobilisation and Drilling*,⁶ and not *Phase 3: Testing*, or *Phase 4: Retention & Restoration*. Consistent with this 2012 finding, extending the timeframe within which *Phase 4: Retention & Restoration*, can complete is not likely to give rise to significant adverse effects. The proposal would not materially change the nature or duration of the effects assessed as acceptable by WSCC when issuing the original consent and subsequent temporary time extensions.

The Site has been developed subject to mitigation embedded within the design and secured by planning conditions. The environmental impacts that are monitored (i.e. noise, traffic and transport effects, groundwater protection and surface water run-off) do not depart from the acceptable outcomes predicted within the ES. In October 2019, the Applicant performed a Phase 1 Habitat Survey and an updated Ecological Appraisal (attached at *Appendix 2*). It found the habitat surrounding the Site to be unchanged from that assessed in the 2012 (prior to development) and 2018 (prior to the 2nd amendment consent). Upon completion of *Phase 3: Testing*, all plant and machinery was removed and operations ceased. The Site is now in *Phase 4 Retention*, mode and is non-active.

Taking account of these findings, the development, as extended, would not give rise to any new or additional significant effects beyond those previously considered and found to be acceptable. Accordingly, the Applicant finds the proposal does not constitute EIA development.

1.6 Structure of this Statement

The purpose of this Planning Statement is to consider the acceptability of the proposal, adopting an assessment approach consistent with the *Planning and Compulsory Purchase Act 2004*, section 38(6) and the *Town and Country Planning Act 1990*, section 70(2) this Planning Statement is structured accordingly:

- **Chapter 2: Development Description**
A detailed description of the operational development and the nature of the activity.
- **Chapter 3: Compliance with the Development Plan**
Recognising the Development Plan as the starting point.
- **Chapter 4: The Influence of Other Material Planning Consideration**
- **Chapter 5: Final Planning Balance**

⁵ Town and County Planning (Environmental Impact Assessment) Regulations 2017, Schedule 2(1) table row No.13: Changes and Extension (b).

⁶ Broadford Bridge-1 Exploratory Well Site ES (July 2012) – Chapter 15: Statement of Significance, para 15.4.

2. DEVELOPMENT DESCRIPTION

2.1 Retention Mode

Consistent with paragraph 1.3: *The Proposal*, and 1.4: *Site and Surroundings*, the Site will be held in *Phase 4; Retention*, mode. If the future review of data indicates no further hydrocarbon development is needed the wells would be plugged and abandoned consistent with *Oil and Gas UK Guidelines for the Abandonment of Wells*. A workover rig would return to Site and install cement plugs at strategic points to isolate and seal the wells. The steel casing would be cut approximately 2.5m below the surface, the wells capped with a steel plate, all plant and machinery removed and the Site cleaned.

2.2 Restoration Mode

Restoration would commence with the removal of well site concrete and compacted stone for off-site recycling. The access track would then be removed consistent with the details agreed to discharge original consent *Condition 11 & 14: Landscaping*, namely:

- “*Methodology for the removal and reinstatement of the access track and no-dig surfacing at the access of Adversane Lane*”;
- “*Tree Protection Plan Methodology*”⁷ and the accompanying “*Tree Protection Plans*”; and,
- “*Landscape Proposals*”⁸.

Areas of compaction would be lifted prior to the replacement and re-grading of soil stored within earth bunds. Disruption to land or field drains would be addressed and new systems installed if necessary. There are no water courses adjacent to the well site but the ditches around the field perimeter would be cleaned if necessary.

Restoration would complete within the first available planting season following retention. The works would be consistent with the “*Landscape Proposals*” allowing for:

- Tree and Hedgerow Planting: the introduction of young whips and the infilling of existing hedgerows with native variety plants to replace and restore lost vegetation;
- New Wooden Post & Rail Fencing: to be installed with rabbit netting to deter rodents and protect freshly worked soils from damage and disruption;
- Grass Seeding: all areas will be checked prior to seeding within the planting season to ensure weed-free growth. Hand tools shall be used around trees and the seed mix and specification will be designed to return the well site and access track to permanent pasture.

All highway signage would be removed upon completion of the works.

2.3 Aftercare

This period would extend 5 years from the completion of restoration and would be sub-contracted to the landowner/farmer to ensure the works are timed to suit farming operations and the growing season. It would allow for:

⁷ Details agreed to discharge condition 11 of App Ref: WSCC/052/12/WC which were then secured as part of the development consented by App Ref: WSCC/029/17/WC by condition 9.

⁸ Details agreed to discharge condition 14 of App Ref: WSCC/052/12/WC which were then secured as part of the development consented by App Ref: WSCC/029/17/WC by condition 9.

- Annual Inspections of Re-seeded Grassland: to be made in August/September of each year for three years with the Landowner/Agent to review the progress and productivity of the restored areas. The works would allow for weed control, watering and the replacement of failed areas to the original specification in the planting season following failure. Mowing of re-seeded areas would be carried out using approved machinery to maintain a vegetation length of approx. 30mm-50mm April-August and 50mm-70mm outwith this period;
- Annual Inspections of New/Replacement Hedge Planting: to be made in August/September of each year for three years with the Landowner/Agent to review the progress and hedgerow recovery across the restored areas. All new and replacement planting to receive annual pruning and hedges/groundcover to be trained and edged twice a year; and
- Annual inspections of New/Replacement Tree Planting: to be made in August/September of each year for a period of five years with the Landowner/Agent to review the progress and woodland recovery across the restored areas. The works would allow for the replacement of failures to the original specification in the planting season following failure.

The schedule for re-seeded grassland management would be as follows:

| YEAR 1 | |
|------------|--|
| TASK | DESCRIPTION |
| 1 | Initial treatment will be carried out as described above. |
| 2 | The Site will be rolled with a light, grassland roller and spread with a fertilizer to promote growth. |
| 3 | The grass will be cut across the year as described above. Alternatively, it may be grown for silage or hay, cut in May/June and subsequently grazed. |
| 4 | Any weeds will be sprayed with an appropriate weed killer. |
| 5 | All stock/cattle will be removed in adverse weather conditions to prevent damage. |
| 6 | Areas of failure to be identified and re-seeded within the planting season. |
| YEAR 2 & 3 | |
| TASK | DESCRIPTION |
| 1 | Annual inspection. |
| 2 | Carry out additional restoration and compensate the owner or the land user for any loss. |

The schedule for new/replacement tree and hedge management would be as follows:

| YEAR 1-3 | |
|--|---|
| TASK | DESCRIPTION |
| 1 | Annual pruning of trees. |
| 2 | Bi-annual trimming of hedge/ground cover. |
| 3 | All stock/cattle will be removed in adverse weather conditions to prevent damage. |
| 4 | Areas of failures identified and re-planted within the planting season. |
| YEAR 4 – 5 TREES | |
| Perform an annual inspection and replace losses if required. | |

3. COMPLIANCE WITH THE DEVELOPMENT PLAN

The Development Plan for the Site comprises:

- West Sussex Joint Minerals Local Plan (JMLP) (2018); and the
- Horsham District Planning Framework (HDPF) (2015).

3.1 West Sussex Joint Minerals Local Plan

3.1.1 Vision and Strategic Objective 11: Oil and Gas

The JMLP is predicated upon a “*Vision*” for West Sussex in 2033. It provides the direction of travel for sustainable minerals development. The relevant statements for consideration are that West Sussex:

- *Will be a place where minerals are produced in ways which conserve and enhance the beautiful outdoors of West Sussex... for the benefit of current and future generations.*
- *Will have contributed to the supply of minerals, in particular... oil and gas, to support growth in West Sussex.*
- *Will be a place where the production and transportation of minerals does not detract from it having thriving communities and being a special place to live and visit.*
- *Will ensure minerals have been produced in a manner that protects and enhances the historic and natural environment... and contributes to a low carbon, circular economy.*
- *Will be a place where mineral sites are restored to the highest standards...⁹*

The vision is transposed into sector specific *Strategic Objectives*. The Oil and Gas objective reads:

Strategic Objective 11: *To protect the environment and local communities in West Sussex from unacceptable impacts of any proposal for oil and gas development, whilst recognising the national commitment to maintain and enhance energy security in the UK¹⁰*

The strategic objective is transposed into ***JMLP Policy M7a: Hydrocarbon development not involving hydraulic fracturing***. When dealing with a type of development for which there is a bespoke policy, it is logical to take that policy as the starting point in the determination process. While the Development Plan must be read as a whole, it follows that the greatest weight should be attributed to bespoke policies. The dominant policy for consideration in this case is ***JMLP Policy M7a***.

3.1.2 Compliance with Dominant Policy: JMLP Policy M7a: Hydrocarbon Development not Involving Hydraulic Fracturing

Criterion (a) states that proposals for exploration and appraisal “*including extensions of time*” to existing sites will be permitted subject to criteria compliance.

- ***Criterion (a)(i):***
When granting the original consent, WSCC considered an Environmental Statement (ES) that accompanied the original application. *ES Chapter 5: Need and Alternative Sites*, recorded seven alternatives locations, applying a range of technical, environmental and planning policy constraints. The developed Site emerged as the “*best option*”, having adopted a site selection approach consistent with the spatial guidance of *criterion (a)(i)*.

⁹ West Sussex JMLP (July 2018), para 2.2, page 14.

¹⁰ West Sussex JMLP (July 2018), para 2.3.14, page 18.

- **Criterion (a)(ii):**
WSSC Highway Department found the traffic and transport effects assessed within *ES Chapter 10: Transport and Access* to be “imperceptible”¹¹ and a further temporary extension of time would not materially change this finding. The developed Site has been constructed consistent with consent *Conditions 18 and 19: Access/Highways*, that secure satisfactory standards of access and the routing of HGV’s was agreed with WSSC Highways in discharging the original consent *Condition 20*, prior to the commencement of development. Taking account of these findings, the highway network can acceptably accommodate a temporary extension consistent with *criterion (a)(ii)*.
- **Criterion (a)(iii):**
ES Chapter 7: Ecology, assessed the Site to be of “low” ecological value¹² and that the integrity and conservation status of the area would not be compromised¹³. Further mitigation derives from adherence to original consent *Condition 10: Ecology*, and the “*Tree Protection Plan*” secured by the original consent *Condition 11: Landscaping*. In October 2019, the Applicant performed an updated Ecological Habitat Assessment (attached at *Appendix 2*). This establishes the ecological environment has not materially changed since the commencement of development. Taking account of these findings, the effects of the proposal upon the natural environment is acceptable.

Having considered *ES Chapter 8: Landscape and Visual Impact*, and *ES Chapter 9: Noise*, WSSC found residential amenity effects to be “minimal”¹⁴, given the separation distances involved. The developed Site has been constructed consistent with the original consent *Condition 6: Hours of Operation*, and *Conditions 7-9: Noise*, that secured a Noise Management Plan designed to protect the amenity of residents. Taking account of these findings, the effects of the proposal upon residential amenity inclusive or noise and outlook is acceptable.

The Site is not constrained by public footpaths or bridleways. *ES Chapter 11 Ground and Groundwater Protection*, found there to be no major aquifers present and a limited local reliance on groundwater supplies¹⁵. The risk of groundwater pollution is inherently “low” and has been further reduced by the implementation of mitigation secured by the original consent *Conditions 22 and 23: Groundwater Protection/Drainage*. It is material to note the drilling and flow testing of hydrocarbons has completed and the well site is now dormant. Taking account of these findings, the effects of the proposal upon the ground and groundwater is acceptable.

ES Chapter 15: Statement of Significance, records that the exploration, testing and evaluation of hydrocarbons would have a “negligible” environmental effect overall¹⁶. Taking account of these findings, the proposal would not give rise to any unacceptable effects across the range of environmental topics recorded within *criterion (a)(iii)*.

¹¹ WSSC Planning Committee Report dated 5th February 2013, Agenda Item 8: Exploration, Testing & Evaluation at Broadford Bridge: para 9.6.

¹² Broadford Bridge-1 Exploratory Well Site ES (July 2012) - Chapter 7: Ecology, para 7.135.

¹³ Broadford Bridge-1 Exploratory Well Site ES (July 2012) - Chapter 7: Ecology, para 7.126.

¹⁴ WSSC Planning Committee Report dated 5th February 2013, Agenda Item 8: Exploration, Testing & Evaluation at Broadford Bridge: para 9.13.

¹⁵ Broadford Bridge-1 Exploratory Well Site ES (July 2012) - Chapter 11: Ground and Groundwater Protection, para 11.86.

¹⁶ Broadford Bridge-1 Exploratory Well Site ES (July 2012) – Chapter 15: Statement of Significance, para 15.4.

- **Criterion (a)(iv):**
High-quality aftercare would be secured by the agreed programme detailed at paragraph 2.3 above consistent with *criterion (a)(iv)*.
- **Criterion (a)(v):**
Ground and groundwater pollution prevention measures have been embedded within the developed Site to ensure no unacceptable effects arise from the on-site storage of fluids consistent with *criterion (a)(v)*.

The extension of time would not change the nature or duration of effects assessed within the original ES; they would remain temporary and reversible. The developed Site occupies a small footprint, screened by mature woodland adopting best available techniques to minimise the scope for adverse effects. Taking account of these findings, the proposal is in compliance with **JMLP Policy M7a** with no material conflict identified.

3.1.3 Compliance with Other Policies

The agreed programmes for restoration detailed at paragraph 2.2 above, and aftercare detailed at paragraph 2.3 demonstrate compliance with **JMLP Policy M15: Air and Soil** and **JMLP Policy M24: Restoration and Aftercare**.

Having established compliance with *JMLP Policy M7a.(a)(iii)*, relating to the effects upon the natural environment, the proposal is consistent with **JMLP Policy M23: Design and Operation of Mineral Developments**, and its relevant criteria. The remote and secluded location of the Site minimises the potential for conflict with pre-existing land-uses and areas recognised for their natural heritage consistent with *JMLP Policy M23(a)* and **JMLP Policy M17 Biodiversity and Geodiversity**.

ES Chapter 8: Landscape and Visual Impacts, paid proper regard to the local context and landscape character of the Site, which then informed the assessment of effects and the mitigation brought forward consistent with *JMLP Policy M23(b)* and **JMLP Policy M12: Character**. None of these benefits would be lost as a result of the proposal.

Having established the proposal would not give rise to any unacceptable effects with regard to lighting, noise, dust, odours, vibration or emissions derived from traffic generation consistent with *JMLP Policy M7a.(a)(ii) and (iii)*, the proposal is consistent with **JMLP Policy M18: Public Health and Amenity**, and **JMLP Policy M20: Transport**.

Having established that the proposal would not give rise to any unacceptable effects with regard to ground and groundwater consistent with *JMLP Policy M7a.(a)(v)*, the proposal is consistent with **JMLP Policy M16 Water Resources**, and **JMLP Policy M19: Flood Risk Management**.

Consistent with **JMLP Policy M22 Cumulative Impact**, the proposal would not give rise to an unreasonable level of disturbance to the environment, residents, businesses and visitors resulting from adverse effects experience cumulatively with other operational sites.

JMLP para 8.12.8 Extensions of time, states that mineral activities are temporary and so conditions are used to limit the period during which the activity can take place. However, “*on occasions it may be that an extension of the time period is proposed by the operator. Such extensions may be acceptable provided that there is a need for the activity and they do not result in unacceptable impacts on the environment and communities*”.

The “need” for the proposed extension of time is recorded above at paragraphs 1.1 and 1.2. Restoration of the Site would be premature given the reasonable prospects of new data for existing and new sites coming forward in 2020/21; information that will help determine the need for further testing and appraisal at Broadford Bridge and its potential for commercial success.

Having established the proposal to be in compliance with *JMLP Policy M7a*, the proposal would not give rise to any “unacceptable impacts on the environment and communities”.

3.1.4 Overall Assessment of Compliance

The predicted environmental effects of the proposal are low and further reduced by their temporary and reversible nature. The proposal gives rise to no new or additional effects beyond those previously considered acceptable and therefore no new policy conflicts arise. When read as a whole, the proposal is in overall compliance with the JMLP.

3.2 Horsham District Planning Framework

The HDPF does not contain a dominant minerals policy designed to address oil and gas development. It does contain planning policies designed to promote sustainable development and protect natural and built heritage. The relevant policies are considered below.

HDPF Policy 1: Sustainable Development, establishes that local decision-takers will apply the NPPF’s “**presumption in favour of sustainable development**”¹⁷. Having established compliance with the JMLP when read as a whole the proposal is “sustainable development”. The decision taking guidance of *HDPF Policy 1* and the NPPF will inform the final planning balance.

ES Chapter 13: Socio-Economics, found that indirect economic vitality would be introduced to the District through the procurement of locally supplied services and materials¹⁸. Moreover, agricultural diversification would be supported by virtue of the steady income stream that would supplement the existing agricultural business. The proposal would not compromise these benefits, consistent with **HDPF Policy 10: Rural Economic Development**.

Having established compliance with *JMLP Policy M7a(i), (iii) and (v)*, the proposal is consistent with the relevant criteria of **HDPF Policy 24: Environmental Protection**, **HDPF Policy 31: Green Infrastructure and Biodiversity**, **HDPF Policy 25: The Natural Environment and Landscape Character** and **HDPF Policy 30: Protected Landscapes**, policies designed to protect the District’s high-quality environment by minimising its exposure to pollutants and maintaining/enhancing its natural heritage.

Having demonstrated the developed Site to be the “best option” consistent with *JMLP Policy M7a(i)*, the proposal is in compliance with **HDPF Policy 26: Countryside Protection**, which recognises the “extraction of minerals” (criterion 2) as being appropriate development outside built-up area boundaries. In addition, it would be consistent with the siting and design criteria of **HDPF Policy 33 Development Principles**. In accordance with both policies, the proposal would not lead to a significant increase in the overall level of activity in the countryside and nor would it compromise its key features or wider landscape character.

¹⁷ National Planning Policy Framework (2019), para 10, page 5, the “**bold type**” derives from the Framework.

¹⁸ Broadford Bridge-1 Exploratory Well Site ES (July 2012) - Chapter 13: Socio-Economics, para 13.60.

3.3 Overall Assessment of Compliance

The predicted environmental effects of the proposal are low and further reduced by their temporary and reversible nature. The proposal gives rise to no new or additional effects beyond those previously considered acceptable and therefore no new policy conflicts arise. When read as a whole, the proposal is in overall compliance with the Development Plan. This is a benefit which attracts significant weight in favour of the proposal.

4. THE INFLUENCE OF OTHER MATERIAL PLANNING CONSIDERATION

Section 38(6) of *The Planning and Compulsory Purchase Act 2004*, and section 70(2) of the *Town and Country Planning Act 1990*, provide for the influence of other material considerations.

4.1 European Energy Policy

4.1.1 European Union 2020 Climate and Energy Package (2007), European Commission Security and Solidarity Action Plan (2008) and European Union Energy Security Strategy (2014)

The European Union (EU) incorporate its goals for energy security and climate change into a single strategy, emphasising the need for “*smart, sustainable and inclusive growth*”¹⁹. The delivery of secure energy at affordable prices, whilst moving towards a low carbon economy, was addressed within the subsequent European Commission (EC) action plan. It focused on improvements to energy supply by, amongst other things, improving the EU’s ability to respond to supply disruption and making better use of its indigenous resources (which included the sustainable use of fossil fuels).

The current Energy Security Strategy establishes that the EU imports more than half of all the energy it consumes from sources such as Russia²⁰. The strategy records that global energy markets are becoming tighter with emerging Asian countries and the Middle East accounting for most of the growth in global demand.

The EU remains vulnerable to external energy shocks and the strategy represents the EC’s “*hard-headed*” response. It aims to secure energy supplies in the short-term, promote resilience against potential disruption and reduce the dependency of the EU on particular fuels, suppliers and routes in the long-term²¹.

4.2 National Energy Policy

Government energy policy is set out in the following primary legislation and policy statements.

4.2.1 The Energy White Paper: Meeting the Energy Challenge (2007)

The Government used the paper to set out its international and domestic energy strategy in response to climate change, rising fuel prices and the need for substantial new investment in the UK’s energy generating infrastructure. It promotes a diverse energy mix within which fossil fuels will continue to

¹⁹ European Commission, Energy, Climate Change & Environment
<https://ec.europa.eu/clima/policies/strategies/2020>.

²⁰ Communication from the Commission to the European Parliament and the Council, European Energy Security Strategy 28th May 2014, Key Facts & Figures on EU Energy Security, bullet 1 & 4.

²¹ Communication from the Commission to the European Parliament and the Council, European Energy Security Strategy 28th May 2014, para 2.

play an “essential role”²². To ensure security of the supply, a crucial element of the Government’s energy strategy is to maximise production of the UK’s domestic energy sources.

4.2.2 The Energy Act 2008 and the Climate Change Act 2008

The Act’s implemented the legislative aspects of the paper, ensuring the long-term delivery of the UK’s energy and climate change strategy.

The Energy Act 2008, has three principal objectives, one of which is to maintain the commitment to energy security. It confers a duty upon the Government and the UK energy industry to report and closely monitor energy markets allowing for timely intervention to mitigate supply side shocks.

The Climate Change Act 2008, established a legally binding target to reduce the UK’s greenhouse gas emissions by at least 80% below base year levels by 2050, to be achieved through action at home and abroad.

4.2.3 The Climate Change Act (2008) (2050 Target Amendment) Order 2019

The 2019 Order aims to achieve a 100% reduction in net UK emissions of targeted greenhouse gasses by 2050. Before the draft was laid before parliament, the Secretary of State “(a) obtained and took into account the advice of the Committee on Climate Change [CCC]” which included the recommendations of the “Net Zero: The UK’s contribution to stopping global warming” report (May 2019). The report performed a review of the latest scientific evidence on climate change “including last year’s Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5°C”²³.

The measures necessary to achieve net-zero have yet to be brought forward by government within national planning or energy policy. The CCC report made it clear it would require widespread and major interventions across a range of areas of national life requiring actions that “must be supplemented by stronger approaches to policy for industry, land use, HGVs, aviation and shipping, and GHG removals”²⁴. The NPPF and NPPG are unchanged; the policy with respect to minerals (including hydrocarbons) remains that they form an essential part of the UK’s fuel and energy supply.

4.2.4 The Energy Security Strategy 2012

Published by the Department of Energy and Climate Change, the ministerial foreword records that energy is vital to our quality of life, comfort and prosperity, which is why energy security is one of the Governments “key priorities”. The importance of energy security to economic growth and to consumers is “too great for us to take it for granted”²⁵.

Security will come from a broad, diverse and flexible energy system, supported by the right infrastructure and is “central to ensuring that the UK remains an attractive place to live and do

²² The Energy White Paper: Meeting the Energy Challenge (2007) - Maximising economic production from our domestic fossil fuel reserves, page 20.

²³ House of Lords - Secondary Legislation Scrutiny Committee 53rd Report of Session 2017–19 (20th June 2019), Proposed Negative Statutory Instruments under the European Union (Withdrawal) Act 2018, Drawn to the special attention of the House: Draft Climate Change Act 2008 (2050 Target Amendment) Order 2019, para 3, page 2.

²⁴ Committee on Climate Change, Net Zero: The UK’s contribution to stopping global warming” report (May 2019), Forward, paragraph 2, page 34.

²⁵ The Energy Security Strategy 2012: Ministerial Forward, para 1-2, page 1.

business”²⁶. The policy goals include “maximising economic production of our oil and gas reserves to provide reliable energy supplies which are not exposed to international energy supply risks”²⁷.

Within the “key messages” for gas, the Government acknowledges that “gas will continue to play a crucial role in our energy mix for many years to come, both for power generation and for heat”²⁸. For oil, the Government acknowledges that, whilst seeking to reduce demand (to meet climate change objectives) and focusing the economy on more secure energy supplies, “oil will continue to be a major part of our energy mix for the next few decades”²⁹.

4.3 National Planning Policy

4.3.1 Overarching National Policy Statement for Energy (EN-1) (2011)

Fossil fuel plays a “vital role” in providing reliable electricity supplies and is an “important role”³⁰ in our energy mix as the UK makes the transition to a low carbon economy. It finds the UK’s domestic gas market to be robust but warns that the risk of shortfalls in supply “cannot be ruled out nor that there may need to be significant rises in wholesale gas prices to balance the market”³¹. It concludes that further infrastructure (beyond that which exists) is needed³².

4.3.2 National Planning Policy Framework

The purpose of the planning system is to contribute to the achievement of “sustainable development”³³. This means meeting the needs of the present, without compromising the ability of future generations to meet their own needs³⁴. The planning system has three overarching objectives, which are to be pursued in mutually supportive ways. They are:

- a) economic objective: to help build a strong, responsive and competitive economy by, amongst other things, coordinating the provision of infrastructure;
- b) social objective: to support strong, vibrant and healthy communities; and an
- c) environmental objective: to protect and enhance the natural, built and historic environment by, amongst other things, using natural resources prudently, minimising waste and pollution and mitigating/adapting to climate change by moving to a low carbon economy.

To ensure sustainable development is pursued in a positive way, at the heart of the Framework is a “presumption in favour of sustainable development”³⁵.

NPPF Chapter 17: Facilitating the sustainable use of minerals, contains the dominant policies for consideration. A sufficient supply of minerals (including hydrocarbons) is “essential” to provide the infrastructure, buildings, energy and goods that the country needs. Before considering extraction, the contribution that substitute, secondary or recycled materials would make to indigenous supplies must

²⁶ The Energy Security Strategy 2012: Ministerial Forward, para 10, page 1.

²⁷ The Energy Security Strategy 2012: Ministerial Forward, page 6.

²⁸ The Energy Security Strategy 2012: page 45.

²⁹ The Energy Security Strategy 2012: page 55.

³⁰ Overarching National Policy Statement for Energy (EN-1) (2011), para 3.6.1, page 30.

³¹ Overarching National Policy Statement for Energy (EN-1) (2011), para 3.8.8, page 38.

³² Overarching National Policy Statement for Energy (EN-1) (2011), para 3.8.8, page 38.

³³ National Planning Policy Framework (February 2019) para 7, page 5.

³⁴ National Planning Policy Framework (February 2019) page 5, footnote 4 - resolution 42/187 of the United Nations General Assembly.

³⁵ National Planning Policy Framework (February 2019) para 10, page 5.

be considered so far as is practicable³⁶. Since minerals are finite and can only be worked where found, “best use” needs to be made of them³⁷.

Plan-making and decision-making policies specific to environmental topics are provided³⁸, along with the overarching guidance that, when determining planning applications, “great weight should be given to the benefits of mineral extraction, including to the economy”³⁹.

Linking the benefits of hydrocarbon development to the wider economy engages **NPPF Chapter 6. Building a strong, competitive economy**. Businesses should be helped to invest, expand and adapt and “significant weight”⁴⁰ should be placed on the need to support economic growth and productivity. Areas should “build on their own strengths”, policies should recognise the “specific locational requirements of different sectors”⁴¹ and decisions should support a prosperous rural economy by enabling “the development and diversification of agricultural and other land-based rural businesses”⁴². Decision-makers should recognise that “sites to meet local business needs in rural areas may have to be found adjacent to or beyond existing settlements”. In these circumstances, it will be important to ensure that development is sensitive to its surroundings, does not have an unacceptable impact on local roads and exploits any opportunities to make a location more sustainable⁴³.

Having identified the dominant planning policies, other relevant policies are found within:

- **NPPF Chapter 14. Meeting the challenge of climate change, flooding and coastal change**, “the planning system should support the transition to a low carbon future” in ways that “contribute to radical reductions in greenhouse gas emissions, minimise vulnerability... improve resilience... and support renewable and low carbon energy and associated infrastructure”⁴⁴.
- **NPPF Chapter 9. Promoting sustainable transport**, “transport issues should be considered from the earliest stages” so that, amongst other things, the “environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains”.
- **NPPF Chapter 15. Conserving and enhancing the natural environment**, planning decisions should protect and enhance valued landscapes, sites of biodiversity or geological value and recognise the intrinsic character and beauty of the countryside. Development should be prevented from generating unacceptable levels of pollution, mitigation should be engaged where appropriate and remediation sought⁴⁵.

Addressing pollution, new development should be appropriate for its location taking account of human health, existing living conditions and the surrounding natural⁴⁶. Addressing amenity,

³⁶ National Planning Policy Framework (February 2019) para 204, criterion b), page 58.

³⁷ National Planning Policy Framework (February 2019) para 203, page 58.

³⁸ National Planning Policy Framework (February 2019) para 204-5, page 58-59.

³⁹ National Planning Policy Framework (February 2019) para 205, page 59.

⁴⁰ National Planning Policy Framework (February 2019) para 80, page 23.

⁴¹ National Planning Policy Framework (February 2019) para 82, page 23.

⁴² National Planning Policy Framework (February 2019) para 83, criterion b) page 23.

⁴³ National Planning Policy Framework (February 2019) para 84, page 24.

⁴⁴ National Planning Policy Framework (February 2019) para 148, page 44.

⁴⁵ National Planning Policy Framework (February 2019) para 170, page 49.

⁴⁶ National Planning Policy Framework (February 2019) para 180, page 52.

new development should integrate with existing businesses and community facilities and suitable mitigation should be engaged to avoid the imposition of unreasonable restrictions⁴⁷.

- **NPPF Chapter 16. Conserving and enhancing the historic environment:** heritage assets are an “irreplaceable resource” and “great weight” should be given to their conservation⁴⁸.

NPPF decision-taking policy is addressed within *Chapter 5: Final Planning Balance*.

4.3.3 National Planning Practice Guidance (NPPG)

Minerals “make an essential contribution to the country’s prosperity and quality of life”⁴⁹. Decision-makers should recognise that:

- minerals can only be worked where they naturally occur so locations for the economically viable and environmentally acceptable extraction may be limited;
- adverse effects are likely but they can be made acceptable with effective mitigation; and
- when considering the need for hydrocarbon development decision-makers should take account of government energy policy which is predicated upon supply from a variety of sources inclusive of onshore oil and gas⁵⁰.

The NPPF and NPPG state that the focus of planning system should be on the acceptable use of land, rather than the control of processes or emissions because these matters are subject to separate control regimes⁵¹ governed by the following regulator:⁵²

- **Department of Energy and Climate Change:** issues PEDL’s and grants consent to drill once other permissions and approvals are in place, monitors seismic activity and grants consents for flaring or venting;
- **Environment Agency:** protects water resources (including groundwater aquifers), ensures the appropriate treatment and disposal of waste, emissions to air and any naturally occurring radioactive materials; and
- **Health and Safety Executive:** regulates the safety aspects of hydrocarbon extraction.

These non-planning regimes regulate hydrocarbon development through alternative licencing and permitting mechanisms. Decision-makers can assume that these regimes will operate effectively⁵³ to avoid or mitigate the scope for material environmental harm.

NPPG procedural guidance relating to the use of planning conditions is considered below at paragraph 4.6 as part of the overall assessment of the influence of the other planning considerations in this case.

4.4 Government Statements and Statistics

4.4.1 Annual Energy Statements (AES) (2012, 2013 and 2014)

AES 2012 states the Government continues to develop a fiscal regime that encourages “investment in indigenous oil and gas production for the economy and security of supply” and will “support new ways

⁴⁷ National Planning Policy Framework (February 2019) para 182, page 52.

⁴⁸ National Planning Policy Framework (February 2019) para 184, page 54 & para 193, page 55.

⁴⁹ National Planning Practice Guidance, Minerals, para 001.

⁵⁰ National Planning Practice Guidance, Minerals, para 124.

⁵¹ National Planning Policy Framework (February 2019) para 183, page 53 and National Planning Practice Guidance, Minerals, para 012.

⁵² National Planning Practice Guidance, Minerals, para 110.

⁵³ Frack Free Balcombe Residents Association v West Sussex County Council [2014] EWHC 4108 Admin.

of tapping our indigenous resources”⁵⁴. The policy framework aims to “bring forward investment in every aspect of our energy infrastructure” which includes “maintaining UK oil and gas production”⁵⁵.

AES 2013 confirms that oil and gas remain “key elements of the energy system for years to come”. And that the Government is committed to “maximising indigenous resources”⁵⁶. AES 2014 states “UK oil and gas continues to make a substantial contribution to our economy, supporting around 450,000 jobs in the wider UK economy and supplying the equivalent of more than half the UK’s oil and gas”⁵⁷.

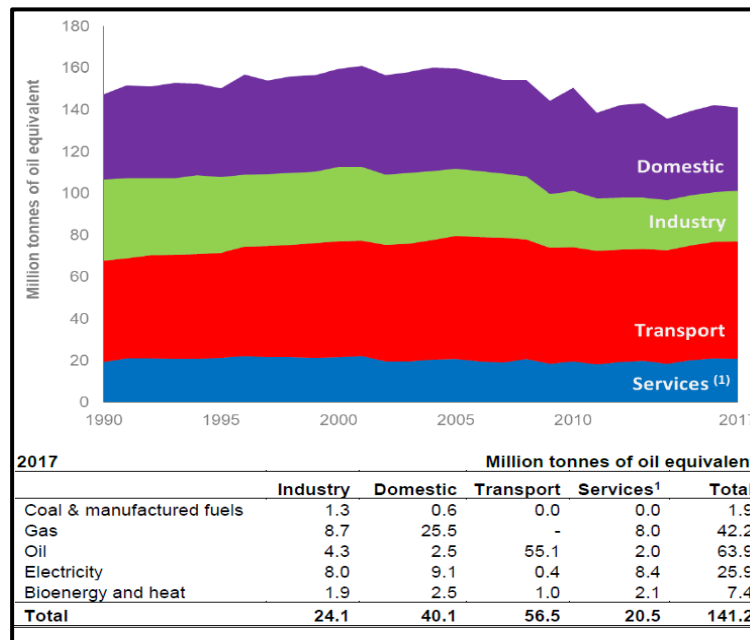
4.4.2 Industrial Strategy: Building a Britain Fit for the Future (November 2017)

The should be an “intelligent use of our oil and gas assets and expertise”. While the move towards clean growth is clear, “oil and gas remain one of the most productive sectors of the UK economy, supporting 200,000 jobs directly and in the supply chain,⁵⁸generating £24bn in annual exports”⁵⁹.

4.4.3 UK Energy in Brief (2018)

The Brief summarise the economic performance of the UK energy system; the key findings are:

Figure 1: Final Energy Consumption (1990-2017)



- **Contribution to GDP by Energy Industries:** following a peak of 10.4% in 1982 the contribution by the energy industries has reduced to 2.9% of GDP by 2017. Of the 2017 totals:
 - 42% derives from electricity (including renewables) (down 2.9 percentage points); and
 - 29% derives from oil and gas extraction (up 3.4 percentage point on the previous year).
- **Trends in Employment in Energy Industries:** in 2017 employment in the energy industries is 181,000 (66% above the 2005 level) and accounts for 6.3% of all industrial employment.

⁵⁴ Annual Energy Statement 2012: Department of Energy & Climate Change, para 1.8, page 7.

⁵⁵ Annual Energy Statement 2012: Department of Energy & Climate Change, para 1.9, page 8.

⁵⁶ Annual Energy Statement 2013: Department of Energy & Climate Change, para 3.69, page 39.

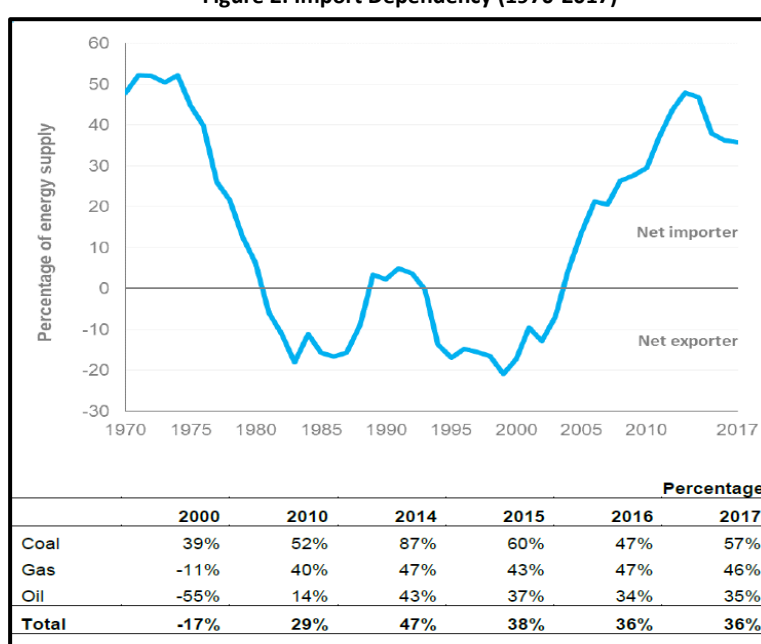
⁵⁷ Annual Energy Statement 2014: Department of Energy & Climate Change, para 197, page 51.

⁵⁸ Oil and Gas UK (2017) Oil & Gas UK Economic Report 2017.

⁵⁹ Office of National Statistics (2015), Statistical Bulletin - UK Trade: December 2015, Table 8 – Value of Trade in Goods by Commodity.

- **Investment in Energy Industries:** amounts to £18.7 billion in 2017. Of the 2017 totals:
 - 60% was in electricity
 - 30% was in oil and gas extraction (with 7.5% in gas alone)⁶⁰
- **Final Energy Consumption (1990-2017):** was up by 0.9%, in 2017 with oil and gas being the most consumed fuel type given their importance to the transport and industry sector and domestic heating.
- **Import Dependency (1970-2017):** in the 1970's the UK was a net importer of energy but the recovery of North Sea oil and gas made the UK a net exporter of energy by 1981. Output fell back in the 1980's with the UK regaining a position as a net exporter in the mid 1990's. North Sea production peaked in 1999 and the UK returned to being an energy importer in 2004.

Figure 2: Import Dependency (1970-2017)



The UK is now a net importer of all main fuel types. In 2017, 36% of energy used in the UK was imported which is a reduction from 2014 levels due to increases in indigenous oil and gas output and the energy contribution made by renewables. In 2017, all EU countries are net importers of energy.

4.4.4 Digest of UK Energy Statistics (DUKES) (2018)

Fossil fuels remain the dominant source of energy supply (80.1%), which is a record low level given the onset of renewable and low carbon sources (inclusive of nuclear).

Figure 3: Fossil Fuel and Low Carbon Dependencies 2015 to 2017

| Table 1C: Fossil fuel and low carbon dependencies 2015 to 2017 | | | |
|--|----------|-------|-------|
| | Per cent | | |
| | 2015 | 2016 | 2017 |
| Fossil fuel | 81.7% | 81.1% | 80.1% |
| Low-carbon | 16.8% | 17.4% | 18.4% |
| Other | 1.5% | 1.4% | 1.4% |

⁶⁰ With residual investment in coal extraction, coke and refined petroleum product industries.

4.4.5 Updated Energy and Emissions Projections (2017)

The primary energy demand in 2018 will be 191 million tonnes of oil equivalent (Mtoe)⁶¹. By 2035 it will be 193Mtoe. In 2018, 75% of the primary demand was met by oil and natural gas. In 2035, it is projected to be 66% (due in part to the uptake of electric vehicles and an increased use of biofuels). Put another way, in 2035 oil and gas will still provide two-thirds of total primary energy demand.

4.5 Wider Benefits for Hydrocarbon Development

The near identical reservoir geology of the Broadford Bridge well site and the exploration and appraisal wells at Horse Hill indicate that the Kimmeridge limestone and Portland sandstone reserves may be linked. Therefore, one of the material benefits derived from retaining the Broadford Bridge well site would be the potential confirmation of a Kimmeridge/Portland *“Geological Concept”*; namely the presence of an open and continuous natural network of hydrocarbon deposits capable of flowing to surface without stimulation. Confirming the nature and extent of this regional system will be key to the future commercial recovery of deposits across the Weald Basin formation.

4.6 Overall Assessment of Influence

The UK is a net-importer of energy and this *“changes the way we need to view and tackle our energy security”*⁶². The importance of energy security to economic growth and consumers is *“too great for us to take it for granted”*⁶³. In response, UK energy policy promotes a *“diverse mix of technologies and fuels”*⁶⁴. Should hydrocarbons be found at the Site, their recovery would broaden the energy base, provide resilience and counter the vulnerability of import dependency, supply shocks and price spikes.

Oil and gas are the dominant source of energy in the UK⁶⁵ with our transport networks being almost wholly dependent.⁶⁶ This means that oil and gas are likely to play a significant role in UK energy mix for some time to come. Sustainable growth is predicated upon energy security and the need to reverse the adverse effects of climate change through the transition to low-carbon future. This has brought forward new investment in renewable technologies and new energy generating solutions but not to the exclusion of new investment in oil and gas. Government energy policies are clear; minerals:

- *“make an essential contribution to the country’s prosperity and quality of life”*⁶⁷; are
- *“central to ensuring that the UK remains an attractive place to live and do business”*⁶⁸; and are
- *“vital to economic prosperity and social well-being”*⁶⁹.

An extension of time at Broadford Bridge would keep alive a Site that has the potential to;

- assist the UK’s transition to a long-term low-carbon future without compromising the energy security or sustainable growth in the short-to-medium term; and

⁶¹ Department for Business, Energy and Industrial Strategy, Updated Energy and Emissions Projections 2017 (January 2018), Figure 4.3: Primary energy demand by fuel (Mtoe), page 33 – derived from the “Web Figures” supporting evidence.

⁶² Annual Energy Statement 2014: Department of Energy & Climate Change, para 9-10, page 12.

⁶³ The Energy Security Strategy 2012: Ministerial Forward, para 1-2, page 1.

⁶⁴ Overarching National Policy Statement for Energy (EN-1) (July 2011) para 2.2.20, bullet 2, page 13.

⁶⁵ Digest of Energy Statistics (DUKES) (2018), Table 1.C: Fossil Fuel and low carbon dependencies 2015-2017.

⁶⁶ Overarching National Policy Statement for Energy (EN-1) (July 2011) para 2.2.23, page 13.

⁶⁷ National Planning Practice Guidance, Minerals, para 001.

⁶⁸ The Energy Security Strategy 2012: Ministerial Forward, para 10, page 1.

⁶⁹ Overarching National Policy Statement for Energy (EN-1) (July 2011) para 2.2.23, page 13.

- provide valuable information to help inform future mineral exploration and extraction across the wider Weald basin formation; and

NPPG states “it will rarely be justifiable to grant a second temporary permission (except in cases where changing circumstances provide a clear rationale) and that “further permissions can normally be granted permanently or refused if there is clear justification for doing so”⁷⁰.

The “clear rationale” called for derives from the potential benefits recorded above. Hydrocarbon exploration is active within the Weald Basin and is due to complete in 2020/21. This will generate the data needed to determine if the Broadford Bridge Site has the potential to play a major role in the future recovery of the fuel, feedstocks and energy supplies essential to the UK economy. Within this context the Applicant considers the option of applying for a “permanent consent” to be inappropriate. Should the future review of data establish resource recovery to be viable and feasible the Applicant would seek to authorise production by way of a further temporary planning application only. The approach adopted by the Applicant is consistent with NPPG procedural advice relating to the use of planning conditions and having established compliance with the environmental protection policies of the Development Plan, there is no “clear justification” to refuse the proposal.

Overall, the proposal achieves a high degree of consistency with the other relevant material considerations; a benefit that weighs significantly in favour of consent. These findings are taken forward to *Chapter 5: Final Planning Balance*.

5. FINAL PLANNING BALANCE

The proposal is “sustainable development” in principle and design. It is consistent with the Development Plan and it engages the NPPF “presumption in favour of sustainable development” with full force. It draws strong support from the other material considerations engaged in this case and it represents precisely the kind of investment envisaged by Government energy policy if the UK is to make the “best use” of its mineral resources⁷¹, reduce the vulnerability of being a net-importer of energy and deliver the sustainable growth called for by the NPPF.

Applying the presumption means that the scales of the planning balance do not start from an even keel; they are tilted significantly in favour of sustainable development and tilted further when the potential benefits unique to hydrocarbon development are factored into the balance, namely;

- the “crucial” and “critical role” gas will play in keeping the lights on and the economy working⁷²;
- the “great weight” attributed to the economic benefits of mineral extraction⁷³;
- “significant weight” attributed to the growth of a thriving UK oil and gas sector⁷⁴; and the.
- “essential” nature of the development if there is to be a sufficient supply of minerals providing the infrastructure, buildings, energy and goods that the country needs⁷⁵.

The presumption requires decision-makers approve development proposals that accord with the development plan. Accordingly, the Applicant respectfully requests that planning permission be consented without delay.

⁷⁰ NPPG para 014 Reference ID: 21a-014-20140306

⁷¹ National Planning Policy Framework (February 2019) para 203, page 58.

⁷² Gas Generation Strategy: Department of Energy & Climate Change, para 2, page 4 and para 4.2, page 43.

⁷³ National Planning Policy Framework (February 2019) para 205, page 59.

⁷⁴ National Planning Policy Framework (February 2019) para 80, page 23.

⁷⁵ National Planning Policy Framework (February 2019) para 203, page 58.



APPENDIX 1: SITE LOCATION PLAN



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APPENDIX 2: ECOLOGICAL HABITAT ASSESSMENT 2019 REPORT



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Broadford Bridge Well Site

Updated Ecological Appraisal (2019)

Zetland Group

Project number: 60555556

October 2019

Quality information

| Prepared by | Checked by | Approved by |
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Revision History

| Revision | Revision date | Details | Authorized | Name | Position |
|----------|---------------|---------------------------------|------------|------|--------------------|
| V0.1 | 01.11.19 | Draft for client review | 05.11.19 | MW | Technical Director |
| V0.2 | 05.11.19 | Draft for client review | 06.11.19 | MW | Technical Director |
| V0.3 | 07/11/19 | Final version for client review | | | |

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1. Executive Summary

AECOM was instructed by Zetland Group on behalf of UK Oil & Gas PLC (UKOG) to carry out an updated 2019 Ecological Appraisal (inclusive of a Phase 1 Habitat survey) of its existing Broadford Bridge well site, which is located north-west of the village of Broadford Bridge off Adversane Lane (B2133) in West Sussex (central grid reference: TQ 090 217).

UKOG wishes to retain the well site and extend the lifetime of the planning permission for a further 24 months to enable completion of Phase 4: retention followed by restoration.

Previous ecology surveys of the site, including a Phase 1 Habitat survey, and surveys for bats, great crested newt (GCN) and dormouse were undertaken by URS (now AECOM) in 2011 and 2012 to inform the planning application for the construction of the well site. Consent was granted by West Sussex County Council in 2013, and construction of the well site and access track, and drilling and testing of the Broadford Bridge exploration well have since been completed. The 2011/12 ecological assessment concluded that the original development would not result in any significant adverse effects on ecological features, and there were no objections to the development in this respect.

A Phase 1 Habitat survey was undertaken in March 2018 to update the survey undertaken in 2011 in order to determine whether there had been any significant changes in the period since the previous ecology surveys were undertaken that would be material to the consideration of the application to extend the time for retention of the existing well. The only real change over this timeframe has been as a result of the construction of the well site in 2014, which has resulted in an area of bare ground within the well pad and the construction of a crushed stone access track. These habitats do not have any potential to support protected or notable species. All other habitats surrounding the well site remained as previously reported.

A further Phase 1 Habitat survey was undertaken in October 2019 to update the 2018 survey, at that point over a year old, in order to determine what, if any changes to the surrounding habitat had occurred since the last visit, in order to inform the life extension of the project. The majority of the minor changes noted were attributable to natural succession of vegetation and changes in agricultural practice, neither of which were caused by the presence of the well site. One change that can potentially be linked to the well site is the cutting of a section of bracken (*Pteridium aquilinum*) and bramble (*Rubus fruticosus* aggregate) along the access track.

The life extension of the well site will not result in any further developments that would change the location of the main compound or access track. The updated ecological appraisal has concluded that extension of the well site operation will not result in any impacts on designated sites or protected or notable species. This is consistent with the findings of the previous assessment. Consequently, no additional ecological mitigation is necessary.

The previously agreed site restoration plan will remain applicable to the well site, noting that habitat restoration will be delayed by a further 18 months. As part of this process, UKOG has committed to infilling of the gaps in a hedgerow on the north side of the access track with native tree and shrub species to enhance the structure of the habitat for foraging bats, and for nesting and foraging birds. Additional biodiversity enhancements will be achieved by the installation of bird and bat boxes as part of the restoration process.

2. Introduction

2.1 Background

AECOM was instructed by Zetland Group on behalf of UK Oil & Gas PLC(UKOG) to carry out a Phase 1 Habitat survey and an updated Ecological Appraisal of its existing Broadford Bridge well site (the well site). The well site is located north-west of the village of Broadford Bridge off Adversane Lane (B2133) in West Sussex. The approximate central grid reference for the site is TQ 090 217 and the boundary of the well site is shown on Figure 1.

Planning consent was granted to Celtique Energy Weald Ltd by West Sussex County Council in February 2013 for the construction of Broadford Bridge well site and included permission for a single borehole and associated above ground infrastructure including temporary welfare and office cabins, site drainage and lighting, access track and boundary enclosure (Planning Ref.: WSCC/052/12/WC & WSCC/037/14/WC).

Permissions were granted by West Sussex County Council in September 2017 for a variation to conditions to allow for a further 12 months of continued operations to enable the completion of Phase 3 (testing) and Phase 4 (retention or restoration) and the retention of other infrastructure (Planning Ref.: WSCC/029/17/WC & SCC/032/17/WC).

In 2018 further extension was granted through WSCC/033/18/WC - Amendment of condition no. 1 of planning permission WSCC/032/17/WC to enable the retention of security fencing, gates and cabins for a further 18 months (Granted).

To date the Broadford Bridge well site has been constructed and the exploratory well drilled and tested. An access track was constructed through the arable field off the B2133. Following the completion of Phase 3: testing, there would be no mobilisation of additional equipment to the site, and no change in the footprint.

2.2 Site Description

The well site occupies approximately 2.1 ha and includes a single borehole, with associated above ground infrastructure including temporary welfare and office cabins, site drainage and lighting as well as a pre-existing access track.

The well site is located within farmland consisting of a network of woodland copses and pasture fields, west of Broadford Bridge village in West Sussex. The access track runs north-east from the well site through an arable field linking it to Adversane Lane (B2133). The well site is situated between two woodland copses; Pocock's Wood to the west and Prince's Wood to the east and is surrounded by pasture fields. Prince's Wood is listed on the Ancient Woodland Inventory as 'ancient semi-natural woodland'.

This wider area was surveyed to assist with the assessment process of potential impact on the wider area, and as such a wider survey boundary is shown by a blue line on Figure 1. Within this the blue boundary is the 'Survey Area'. The Broadford Bridge well site was constructed in 2014. Topsoil was removed from the site and stored along the eastern site boundary in a bund, and the site was securely fenced with steel palisade fencing. A geo-synthetic clay liner (a bentonite filled composite membrane of the type typically used to provide containment in landfill sites) is laid across the well site and ditch and then overlaid with crushed stone to form the well pad surface. A ditch was excavated around the perimeter of the site to capture and clean surface water run-off from the well site prior to its discharge into a local watercourse.

2.3 Previous Ecological Surveys

A summary of the ecology surveys and reports prepared to date for the Broadford Bridge well site is provided below.

A Phase 1 Habitat survey and ecological appraisal were originally completed by URS (now AECOM) at the Broadford Bridge well site in September 2011 to support the original planning application for construction of the well site (URS 2012a). This was supported by a suite of protected species surveys, a summary of which is provided in Table 1. An addendum to the ES was submitted later in 2012 to address changes in the proposed timing of construction from that originally assessed (URS, 2012b). No significant ecological constraints were identified, and standard mitigation measures were recommended to minimise impacts to ecological features during construction of the well site.

No objections on the grounds of ecology were received from statutory consultees in response to the 2012 application for construction of the well site (Planning Ref: WSCC/052/12/WC & WSCC/037/14/WC).

No objections on the grounds of ecology were received from statutory consultees in response to the 2017 application for a 12-month extension of time for retention of the well site and other infrastructure (Planning Ref: WSCC/029/17/WC & WSCC/032/17/WC). The council ecologists confirmed in their consultation response to the application that *'There is no reasonable expectation of harm to local biodiversity, thus requesting repeat-ecological surveys at this stage would not be proportionate to the risk of harm'*.

One planning condition relating to ecology was made with the original planning permission for the Broadford Bridge well site (Planning Ref: WSCC/052/12/WC):

"Condition 10: No removal of hedgerows or trees shall be carried out on site between March to August inclusive in any year, unless otherwise approved in writing by the County Planning Authority. Where vegetation must be cleared during the bird breeding season a check for nesting birds by a suitably qualified ecologist will be required. Any vegetation containing occupied nests will be retained until the young have fledged. The location details of the compensatory nesting provision are to be supplied to the County Planning Authority for approval prior to their erection."

The site was constructed in 2014 consistent with this planning condition.

An ecological appraisal survey carried out in 2018 to update the survey undertaken in 2011 in order revealed that beyond what had been expected, no further disruption to the habitats on site had occurred. Due to the minimal effect of the presence of the well site on the surrounding environment and the species potentially present in the surrounding areas, no new conditions on operation of the well site were imposed.

Table 1. Summary of Ecology Work to Date at Broadford Bridge Well Site

| Survey/Report | Date | Report | Comments |
|--|-----------------------|------------|---|
| Extended Phase 1 Habitat Survey and Protected Species Walkover | Sept 2011 | URS, 2012a | Phase 1 Habitat survey, desk study and ecological appraisal for planning application for the exploratory well site (including drilling of well) (Planning Ref: WSCC/052/12/WC). Further surveys were recommended for badger, dormouse, bats and great crested newts. |
| Environment Statement Volume 2: Chapter 7 Ecology | July 2012 | URS 2012a | Ecological impact assessment concluded that there would be significant effects. |
| Badger Survey | Sept 2011 – July 2012 | URS 2012a | Records confidential (see Appendix C) |
| Dormouse Survey | Sept 2011 – July 2012 | URS 2012a | No dormice recorded |
| Bats (roost potential survey of trees) | Sept 2011 | URS 2012a | One tree with low/ moderate bat roost potential approximately 200m north of well site. |
| Bats (activity survey) | Sept 2011 | URS 2012a | Static detectors deployed for 5 nights recorded low/ moderate levels of bat activity dominated by common and soprano pipistrelle, with some records of brown long-eared and <i>Myotis</i> (possibly Natterer's) bats. |

| Survey/Report | Date | Report | Comments |
|---|-------------|------------|---|
| Great Crested Newt Survey | Spring 2012 | URS 2012a | One suitable pond identified approximately 130m south of the well site. Small population of GCN present. |
| Environmental Statement: Chapter 7 Ecology Addendum | Nov 2012 | URS 2012b | Update to ecological impact assessment following changes in programme for construction of the well site. |
| Grassland Management Plan for GCN | Jan 2013 | URS 2013 | Precautionary mitigation for GCN. Method statement for keeping grassland within proposed well site construction area short, to deter GCN. |
| Updated Broadford Bridge Ecological Appraisal | June 2018 | AECOM 2018 | Well site in operation with no effect on the surrounding habitats or protected species. |

2.4 Quality Assurance

All AECOM ecologists follow the Chartered Institute of Ecology and Environmental Management (CIEEM) code of professional conduct when undertaking ecological work and many are Full or Fellow Members. They are appropriately qualified and will conduct their work using all reasonable skill and care. Many senior AECOM ecologists are also Chartered Environmentalists or Ecologists.

2.5 Purpose of this Document

This report has been prepared to inform the planning application for an extension of operation duration of the existing well site. It represents an update to reports prepared for the original planning application for the construction and drilling of the well at Broadford Bridge well site, which was originally consented in 2013.

The scope of the updated assessment has been informed by the limited potential for the well site operation extension to result in new, previously unexamined, ecological effects to those considered for the exploration well drilling and testing phases. The operation extension will not result in any new impacts on semi-natural habitats because the well site and access track have already been constructed, and all continuing works would be undertaken within the existing footprint of the constructed well site.

Given that a substantial period of time has elapsed since the original Phase 1 Habitat survey was undertaken in 2011 and the associated protected species surveys undertaken in 2011/12 and a follow up Phase 1 Habitat survey in 2018, it was considered prudent to undertake a review of the baseline ecological data in 2019 to establish whether there had been any changes in the interim period that would be material to the determination of the application.

The scope of works reported in this document therefore comprises:

- Updated desk study – to identify any additional protected sites or protected species records within a 1 km radius of the site since the previous reports were completed that might alter the conclusions of the original assessments.
- Updated Phase 1 Habitat survey – to determine whether there had been any changes from the established 2011/12 baseline habitat conditions and 2018 update and whether or not these changes would materially alter the conclusions of the original assessment.
- Updated ecological appraisal – to identify whether the well site would result in any new impacts on habitats or protected species that were not assessed at the time of the original application.
- Consideration of any additional ecological mitigation/ compensation requirements – to be based on the outcome of the updated ecological appraisal.

- Updated restoration proposals – to provide updates to restoration proposals where necessary as influenced by changes to the baseline ecology conditions.

3. Wildlife Legislation and Planning Policy

3.1 Wildlife Legislation

There have been no significant changes in relevant legislation apart from the EU Invasive Alien Species Regulation (2014) which has been implemented as the Invasive Alien Species (Enforcement and Permitting) Order 2019. The following wildlife legislation remains potentially relevant to the Well site:

- Wildlife and Countryside Act (WCA) 1981 (as amended)
- Countryside and Rights of Way (CRoW) Act 2000
- Natural Environment and Rural Communities (NERC) Act 2006
- The Conservation of Habitats & Species Regulations 2017 (the Habitats Regulations)
- Protection of Badgers Act 1992
- The Hedgerow Regulations 1997
- Invasive Alien Species (Enforcement and Permitting) Order 2019.

The EU Invasive Alien Species Regulation (2014) lists a number of plant and animal species of EU concern for which measures are in force should certain statutory agencies deem it necessary to control a given species in a particular site or location.

Further information on the requirements of the above legislation is provided as Appendix E.

3.2 National Planning Policy

The National Planning Policy Framework (NPPF) was originally published on 27th March 2012 and detailed the Government's planning policies for England and how these are expected to be applied. The NPPF was then revised on 24th July 2018 and 19th February 2019.

The NPPF states the commitment of the UK Government to minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity.

It specifies the obligations that the Local Authorities and the UK Government have regarding statutory designated sites and protected species under UK and international legislation and how this it to be delivered in the planning system. Protected or notable habitats and species can be a material consideration in planning decisions and may therefore make some sites unsuitable for particular types of development, or if development is permitted, mitigation measures may be required to avoid or minimize impacts on certain habitats and species, or where impact is unavoidable, compensation may be required.

The NPPF is clear that pursuing sustainable development includes moving from a net loss of biodiversity to achieving net gains for nature, and that a core principle for planning is that it should contribute to conserving and enhancing the natural environment and reducing pollution.

Further information on the relevant parts of the NPPF is provided in Appendix E

3.3 Local Minerals and Planning Policy

Relevant local planning policies are detailed in the Horsham Local Plan 2015 and West Sussex Joint Minerals Local Plan 2018, and a summary of the policies relevant to nature conservation is provided in Table 2

Table 2. Summary of Local Planning and Mineral Policy

| Document | Planning Policy | Purpose |
|---|--|--|
| Horsham District Planning Framework 2015 | Policy 24 – Environment Protection | All new developments must be mitigated appropriately to prevent damage to the environment and human health. The quality of watercourses will be either maintained or improved. |
| | Policy 25 – District Charter and the Natural Environment | The Natural Environment and landscape character of the District, including the landscape, landform and development pattern, together with protected landscapes and habitats will be protected against inappropriate development. The council will support development proposals which; <ul style="list-style-type: none"> • Maintain and enhances the Green Infrastructure Network and addresses any identified deficiencies in the District. • Maintains and enhances the existing network of geological sites and biodiversity, including safeguarding existing designated sites and species, and ensures no net loss of wider biodiversity and provides net gains in biodiversity where possible. • Conserve and where possible enhance the setting of the South Downs National Park. |
| | Policy 26 – Countryside Protection | Outside built-up area boundaries, the rural character and undeveloped nature of the countryside will be protected against inappropriate development. Any proposal must be essential to its countryside location, and in addition meet one of the following criteria: <ol style="list-style-type: none"> 1. Support the needs of agriculture or forestry; 2. Enable the extraction of minerals or the disposal of waste; 3. Provide for quiet informal recreational use; or 4. Enable the sustainable development of rural areas. In addition, proposals must be of a scale appropriate to its countryside character and location. Development will be considered acceptable where it does not lead, either individually or cumulatively, to a significant increase in the overall level of activity in the countryside, and protects, and/or conserves, and/or enhances, the key features and characteristics of the landscape character area in which it is located, including: <ol style="list-style-type: none"> 1. The development pattern of the area, its historical and ecological qualities, tranquillity and sensitivity to change; The pattern of woodlands, fields, hedgerows, trees, waterbodies and other features; and The landform of the area. |
| | Policy 30 – Protected Landscapes | The natural beauty and public enjoyment of the High Weald AONB and the adjoining South Downs National Park will be conserved and enhanced and opportunities for the understanding and enjoyment of their special qualities will be promoted. As such proposals for plans in these areas must demonstrate how key features will be conserved or enhanced. This includes maintaining local distinctiveness and the setting of protected landscapes, as well as preparing compensation or mitigation if needed. |
| Policy 31 – Green Infrastructure and Biodiversity | Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. | |

| Document | Planning Policy | Purpose |
|--|---|--|
| | | <p>Development proposals will be required to contribute to the enhancement of existing biodiversity and should create and manage new habitats where appropriate.</p> <p>Where felling of protected trees is necessary, replacement planting with a suitable species will be required.</p> <p>Particular consideration will be given to the hierarchy of sites and Habitat. Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that:</p> <ul style="list-style-type: none"> • The reason for the development clearly outweighs the need to protect the value of the site; and, • That appropriate mitigation and compensation measures are provided. <p>Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to an HRA to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan.</p> |
| West Sussex Joint Minerals Local Plan 2018 | JMLP Policy M7a: Hydrocarbon development not involving hydraulic fracturing | <p>Exploration and Appraisal</p> <ol style="list-style-type: none"> a. Proposals for exploration and appraisal for oil and gas, not involving hydraulic fracturing, including extensions* to existing sites will be permitted provided that: <ol style="list-style-type: none"> iii. any unacceptable impacts including (but not limited to)... noise, dust, visual intrusion... and lighting on... the natural... environment... can be minimised, and/or mitigated, to an acceptable level; |
| | JMLP Policy M17: Biodiversity and Geodiversity | <p>Proposals for minerals development will be permitted provided that:</p> <ol style="list-style-type: none"> a. there is no significant harm to wildlife species and habitats, or significant harm is effectively mitigated where it cannot be avoided, or (as a last resort) there is suitable compensation where there is still significant residual harm; b. there are no unacceptable impacts on areas or sites of national biodiversity or geological conservation importance unless the benefits of the development clearly outweigh both the impact on the features of interest, and on the wider network of such designated areas or sites; c. there are no unacceptable impacts on areas, sites or features of regional or local biodiversity or geological conservation importance unless the benefits of the development clearly outweigh both the impact on the features of interest and on the wider network of such designated areas or sites; d. there is no loss or deterioration of irreplaceable habitats, including Ancient Woodland and aged or veteran trees, unless the benefits of the development clearly outweigh the loss; e. where possible, there are net gains in biodiversity, including, the creation, enhancement, and management of habitats, ecological networks, geodiversity and ecosystem services shall be secured consistent with wider environmental objectives, including Biodiversity Opportunity Areas and the South Downs Way Ahead Nature Improvement Area; and |

| Document | Planning Policy | Purpose |
|----------|-----------------|---|
| | | f. where necessary, the investigation, evaluation, and recording of important sites, areas, and features is undertaken and, where appropriate, representative examples are preserved. |

4. Methods

4.1 Updated Desk Study

An updated desk study was carried out to identify nature conservation designations and protected and notable habitats and species including invasive non-native species potentially relevant to the well site.

A stratified approach was taken when defining the desk study area, based on the likely zone of influence of the well site on different ecological receptors; and, an understanding of the maximum distances typically considered by statutory consultees. Accordingly, the desk study identified any international nature conservation designations within 10 km of the site boundary¹; other statutory nature conservation designations within 2 km of the site boundary; and, local non-statutory nature conservation designations, and protected and notable habitats and species within 1 km of the site boundary.

The desk study was carried out using the data sources detailed in Table 3. Protected and notable habitats and species include those listed under Schedules 1, 5 and 8 of the WCA; Schedules 2 and 5 of the Habitats Regulations; species and habitats of principal importance for nature conservation in England listed under section 41 (s41) of the NERC Act; and other species that are Nationally Rare, Nationally Scarce or listed in national or local Red Data Lists and Biodiversity Action Plans.

Table 3. Desk Study Data Sources

| Data Source | Date | Data Obtained |
|---|------------------|--|
| Multi-Agency Geographic Information for the Countryside (MAGIC) website | October 2019 | International statutory designations within 10 km Other statutory designations within 2 km Ancient woodlands and notable habitats within 1 km Higher Level Environmental Stewardship agreements applied to the Site Information on habitats and habitat connections (based on aerial photography) relevant to interpretation of planning policy and assessment of potential protected and notable species constraints |
| Sussex Biodiversity Record Centre Data Search | October 2019 | Non-statutory designations within 1km Protected and notable species records within 1km (records for the last 10 years only). |
| Ordnance Survey 1:2500 Pathfinder maps and aerial photography | October 2019 | Information on habitats and habitat connections (based on aerial photography) relevant to interpretation of planning policy and assessment of potential protected and notable species constraints |
| Previous ecology surveys and reports for the original planning application and life extension of the project. | 2011/12 and 2018 | Information on habitats and protected species relevant to the well site. |

4.2 Update Field Survey

An update Phase 1 habitat survey was completed by a pair of suitably qualified and experienced AECOM ecologists on the 18th October 2019. The survey covered all accessible areas within approximately 20m of the well site boundary to map habitat types, where access permission had been

¹ The previous 2012 ecological assessment only considered a search radius of 2 km for international statutory designated sites; this has been extended to 10 km for the updated assessment due to the potential for air quality impacts.

granted in advance of survey or this land was visible from within the site boundary or from public rights of way, or other publicly accessible areas.

This wider area was surveyed to assist with the assessment process of potential impact on the wider area, and as such a wider survey boundary is shown by a blue line on Figure 1. Within this the blue boundary is the Survey Area.

The standard Phase 1 Habitat Survey methodology (JNCC, 2010) was used to identify and map all habitat types and other associated ecological features present within the identified survey area. Any notable or otherwise relevant ecological features were marked on the map using target notes. Typical and notable plant species were recorded for each habitat type present, where necessary. The Phase 1 Habitat survey is not intended to be a comprehensive inventory of the plant species present, as this is not required for the purposes of habitat survey. The survey also included an assessment of the presence of any invasive, non-native plant species as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), such as Japanese knotweed (*Reynoutria japonica*) and any species listed in the EU Invasive Alien Species Regulation (2014). Any areas of invasive non-native species found were mapped and target noted.

An updated appraisal was also made of the potential suitability of the habitats to support protected and notable species of plants or animals, including any invasive non-native plants or animals, to determine whether there were any material changes since the previous application was submitted. Field signs, features with potential to support protected species, and evidence of their presence were recorded when encountered, but no detailed surveys were carried out for any particular species.

4.2.1 DAFOR Survey

Native and notable plant and invasive non-native species were recorded for different habitat types and reflect the conditions at the time of survey. This was not intended to be a detailed inventory of the plant species present in the survey area, as this is not required for the purposes of Phase 1 Habitat Survey. The frequency of plant species was recorded using the Dominant, Abundant, Frequent, Occasional and Rare (DAFOR) scale, and the overall values of species within habitat blocks are recorded in Appendix D. The DAFOR scale measures the relative abundance of plant species on site, and assigning a value regarding relative population, as shown in Table 4.

Table 4. DAFOR Scale Designations

| Abundance | | Relative Cover |
|-----------|------------|----------------|
| D | Dominant | 50-100% |
| A | Abundant | 30-50% |
| F | Frequent | 15-30% |
| O | Occasional | 5-15% |
| R | Rare | <5% |

Source: Guidance Notes for Recording DAFOR, Norfolk Wildlife Trust

4.3 Limitations

The aim of a desk study is to help characterise the baseline context of a Proposed Development and provide valuable background information that would not be captured by a single site survey alone. Information obtained during the course of a desk study is dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for a particular habitats or species does not necessarily mean that the habitats or species do not occur in the study area. Likewise, the presence of records for particular habitats and species does not automatically mean that these still occur within the area of interest or are relevant in the context of the well site.

The recording of plant species (both native and invasive non-native plant species listed on Schedule 9 of the Wildlife and Countryside Act) was constrained by the time of year that the survey was undertaken. Some of these species are not visible or cannot be reliably mapped outside the growing

season (May to September), and some species are only apparent during certain months. Populations of annual plant species may fluctuate markedly between years dependent on the growing conditions present in any given season.

Where habitat boundaries coincide with physical boundaries recorded on OS maps the resolution is as determined by the scale of mapping. Elsewhere, habitat mapping is as estimated in the field and/or recorded by hand-held GPS. Where areas of habitat are given, they are approximate and should be verified by measurement on site where required for design or construction.

5. Results

5.1 Sites designated for their biodiversity value

5.1.1 Statutorily Designated Sites

Four internationally designated nature conservation sites were identified within the 10km study area; The Mens Special Area of Conservation (SAC), and the Arun Valley SAC, Special Protection Area (SPA) and Ramsar. The Mens SAC and Arun Valley SAC/Ramsar have a number of component Sites of Special Scientific Interest (SSSI) with boundaries that are within/overlapping with the European designations, but none were within the 2km study area for national designations.

There were no nationally designated SSSIs within the 2km study area.

A summary of the qualifying features for each of the internationally designations, and the relationship of the designation to the Site is provided in Table 5.

Table 5. Sites with Statutory Designations

| Designation | Reasons(s) for Designation | Relationship to the Site |
|--|---|--------------------------|
| Internationally Designated Sites within 10km of Well Site | | |
| The Mens SCA (205.16ha) | An extensive areas of mature beech (<i>Fagus sylvatica</i>) woodland rich in lichens, bryophytes, fungi and saproxylic invertebrates, and is one of the largest tracts of Atlantic acidophilous beech forests in the south-eastern part of the habitat's UK range. The SAC supports a population of barbastelle bat (<i>Barbastella barbastellus</i>), which is a qualifying feature but is not a primary reason for the selection of the site as a SAC. | Approx 6.2km north-west |
| Arun Valley SAC (487.48ha) | Supports one of the three main population centres for the Annex II species little whirlpool ramshorn snail (<i>Anisus vorticulus</i>) in the UK | Approx 6.9 south-west |
| Arun Valley Ramsar (530.42ha) | The Arun Valley consists of three component SSSIs. Together these sites comprise an area of wet meadows on the floodplain of the River Arun between Pulborough and Amberley, The neutral wet grassland which is subject to winter flooding is dissected by a number of ditches. The site meets Ramsar criteria 2 and 3 for its invertebrate and nationally rare and scarce plant species. The site meets criterion 5 for its internationally important assemblage of wintering waterfowl. Key species for the site includes pintail (<i>Anas acuta</i>), wigeon (<i>Anas penelope</i>), teal (<i>Anas crecca</i>), shoveler (<i>Anas clypeata</i>) and ruff (<i>Philomachus pugnax</i>). The site is also important for its assemblage of breeding waders. | Approx 8.2km south |
| Arun Valley SPA (530.42ha) | Designated for its wintering population of Bewick's swan (<i>Cygnus columbianus bewickii</i>) which represents 1.6% of the GB wintering population, as well as its internationally important assemblage of overwintering waterfowl. | Approx 8.2km south |

5.1.2 Non-Statutorily Designated Sites

Table 6 details the non-statutory nature conservations designation identified by the desk study based on the method given in Section 4 of this report.

One locally designated Local Wildlife Site (LWS) was identified in the desk study area; Cattlestone Farm LWS. Four areas of ancient woodland listed on the Ancient Woodland Inventory (AWI) were also identified in the desk study area.

Table 6. Sites with Non-Statutory Designations for Nature Conservation

| Designation (and Size) | Reason(s) for Designation | Relationship to the Well Site |
|---|---|---|
| Locally Designated Sites within 1km of the Well Site | | |
| Cattlestone Farm Local Wildlife Site (9.8ha) | <p>The site encompasses five fields of pasture and meadow. The largest, southern pasture contains some interesting plants of wet grassland including marsh foxtail (<i>Alopecurus geniculatus</i>), sneezewort (<i>Achillea ptarmica</i>) and marsh thistle (<i>Cirsium palustre</i>).</p> <p>Adjacent to this pasture is a herb-rich grassland featuring abundant common knapweed (<i>Centaurea nigra</i>) and wild carrot (<i>Daucus carota</i>) among multiple grass species,</p> <p>North of the farmhouse a small meadow containing typical herbs adjoins a much larger meadow with frequent oxeye daisy (<i>Leucanthemum vulgare</i>), bird's-foot-trefoil (<i>Lotus corniculatus</i>), and meadow vetchling (<i>Lathyrus pratensis</i>).</p> <p>The most northerly meadow has a very rich flora with large populations of pepper saxifrage (<i>Silaum silaus</i>), ox-eye daisy and meadow fescue (<i>Festuca pratensis</i>)</p> | Approx. 1.9km to the south east of Site |
| Ancient Woodland Inventory Sites within 1km of the Well Site | | |
| Gatewick Copse | Ancient and semi-natural woodland | Approx. 195m to the south of Site |
| Prince's Wood | Ancient and semi-natural woodland | Approx. 200m to the east of Site |
| Steepwood Rough | Ancient and semi-natural woodland | Approx. 950m to the north-west of Site |
| Beedings Copse | Ancient and semi-natural woodland | Approx. 980m to the west of Site |

5.2 Habitats

The Phase 1 Habitat Survey was undertaken on the 18th of October 2019 and recorded a comparable suite of habitats to those present in both September 2011 and March 2018, when the initial PEA and the update was drafted respectively.

Other than the loss of approximately 2ha of pasture field during the construction of the well site and access track, and a short length of mature hedgerow along Adversane Lane, the habitat composition remained the same as that recorded in 2012 and 2018. Any additional changes are a result of changes in agricultural practices, seasonal changes such as the flooding of water bodies on site or natural succession of vegetation.

Table 6 below provides a summary of the habitats recorded on site in the 2011, 2018 and 2019 habitat surveys allowing comparison of current and previous habitat baselines for clarity. The Phase 1 Habitat plan illustrating their location and extent is included as Figure 1 while photographs referenced in the text are included in Appendix C.

The surrounding land use had not changed in the intervening period since the 2011 habitat survey was undertaken in 2011, remaining in agricultural use. The woodland copses to the north, east and south have also remained unchanged.

Table 7. Summary of Updated Phase 1 Habitat Survey

| Phase 1 Habitat Survey | Brief Description 2011 | Brief Description from Updated Survey 2018 | Brief Description from Updated Survey 2019 |
|--|--|--|---|
| Within Well Site | | | |
| Hard Standing | Not Present | All areas within the well site operational boundary comprise hard-standing (stone overlaid on an impermeable geo-synthetic clay liner). The well site is surrounded by a steel palisade fence. The access track comprises crushed stone | The site compound remains the same as it was during the last visit, with no additional features present. |
| Spoil Heap | Not Present | The topsoil removed from the well site has been stored in a bund along the eastern boundary of the well site. | The bund still remains within the well site compound. |
| Ruderal | Not Present | Not Present | The banks of the earth bank are now colonised by broad-leaved dock (<i>Rumex obtusifolius</i>) and spear thistle (<i>Cirsium vulgare</i>). |
| Within Wider Survey Area | | | |
| Improved Grassland (Photographs 1 and 3) | The Application Site is predominantly improved grassland carrying dominant species of perennial ryegrass (<i>Lolium perenne</i>) and annual meadow grass (<i>Poa annua</i>) with common chickweed (<i>Stellaria media</i>), spear thistle, prickly sow thistle (<i>Sonchus asper</i>) stinging nettle (<i>Urtica dioica</i>), dandelion (<i>Taraxacum officinale</i>), white clover (<i>Trifolium repens</i>) and scarlet pimpernel (<i>Anagallis arvensis</i>). | There is no improved grassland present within the well site boundary and has been replaced by a hard-standing pad. The surrounding improved grassland remains dominated by a perennial ryegrass-bent (<i>Agrostis</i> sp.) mix with multiple meadow grass species (<i>Poa</i> sp.) present. Herbaceous plants were limited and included white clover, creeping buttercup (<i>Ranunculus repens</i>), broad-leaved dock and redshank (<i>Persicaria maculosa</i>). | The majority of the site consists of improved grassland, with an area of arable field now replaced with improved pasture. The grassland is dominated by ryegrass, annual meadow grass and bent species. Small numbers of herbaceous plants were present including broad-leaved dock, white clover and crane's bill (<i>Geranium</i> sp.) |
| Arable Field | A large arable field was recorded north-east of Pocock's Wood. | The western site voluntary included three areas of arable planting in addition to the field north-east of Pocock's Wood. One was a large, ploughed field in the north-west corner. The second was a large area of planting on the western boundary, presumed to be cover crop for game birds (this was also accompanied by feeders). A smaller area of similar planting was present along a field margin perpendicular to the western boundary of Pocock's Wood. | A single field of maize crop (<i>Zea mays</i>) was recorded in the south west corner of the field fenced off with an electrified barrier. |

| Phase 1 Habitat Survey | Brief Description 2011 | Brief Description from Updated Survey 2018 | Brief Description from Updated Survey 2019 |
|-----------------------------|---|--|--|
| Broad-leaved Woodland | <p>Pocock's Wood is directly adjacent to the north of the Application Site and consists of semi-natural broad-leaved woodland. Prince's Wood is situated over 50m to the east and south-east and is a designated ancient woodland.</p> <p>Species recorded within Pocock's Wood and Prince's</p> <p>Wood included beech (<i>Fagus sylvatica</i>), pedunculate oak (<i>Quercus robur</i>), hazel (<i>Corylus avellana</i>), holly (<i>Ilex aquifolium</i>), hawthorn (<i>Crataegus monogyna</i>), field maple (<i>Acer campestre</i>), buckthorn (<i>Rhamnus cathartica</i>), blackthorn (<i>Prunus spinosa</i>) and wild service tree (<i>Sorbus torminalis</i>).</p> | <p>The woodland habitat associated with Pocock's Wood and Prince's Wood remained as previously reported. These two woodland areas from part of a larger network of woodland copses, tree lines and hedgerows throughout the wider landscape.</p> <p>Both woods contained a good number of woodland ground flora species, potentially due to the coppiced hazel understorey and general lack of encroachment by bramble (<i>Rubus fruticosus</i> aggregate) or nettle. Woodland ground flora species recorded included: primrose (<i>Primula vulgaris</i>), lords-and ladies (<i>Arum maculatum</i>) and dog's mercury (<i>Mercurialis perennis</i>).</p> | <p>The woodland habitat associated with Pocock's Wood and Prince's Wood remained as previously reported. These two woodland areas from part of a larger network of woodland copses, tree lines and hedgerows throughout the wider landscape.</p> <p>Both woods were predominantly oak with a willow, hazel, holly and hawthorn understorey (Photograph 4). Species on the woodland floor included species such as butcher's broom (<i>Ruscus aculeatus</i>), male fern (<i>Dryopteris filix-mas</i>) and English ivy (<i>Hedera helix</i>). Multiple species of fungi were present on both living trees and dead wood within these woodlands (Photograph 8).</p> |
| Tall Ruderal (Photograph 5) | None Recorded | Strips of tall ruderal vegetation were present along the edges of the access track. | <p>An additional band of tall ruderal vegetation was present in one of the northern fields. The existing ruderal habitat had been managed and remains were seen along the edge of the access track (Photograph 78). Ruderal vegetation such as spear thistle and burdock (<i>Arctium lappa</i>) had colonised the earth mound in the compound.</p> |
| Standing Water | <p>All waterbodies within 500m were assessed using the Habitat Suitability Index (HSI) assessment method to determine their suitability for breeding GCN.</p> <p>One pond approximately 130m to the south of the well site (referred to as WB2) was identified as suitable (HSI score of 0.69 (Average suitability)) and was subsequently surveyed for the species. All</p> | <p>WB1 is a pond approximately 130 m to the north-west of the well site.</p> <p>WB2 is a pond approximately 130 m to the south of the well site</p> <p>No change in the habitat of these pond or their surroundings within 500m other than the installation of the well site and its access track.</p> | <p>No change in habitat of these ponds was recorded.</p> <p>The area surrounding WB1 was flooded and was actively receiving (Photograph 6)</p> |

| Phase 1 Habitat Survey | Brief Description 2011 | Brief Description from Updated Survey 2018 | Brief Description from Updated Survey 2019 |
|--|---|--|--|
| | other ponds were scoped out for GCN on the basis that they were highly seasonal and unable to support breeding GCN. | | |
| Intact species poor hedgerow and trees | A blackthorn hedgerow is located between Pocock's Wood and the proposed access route into the Application Site from the north-east field boundary. This hedgerow is species-poor and defunct, and heavily grazed by cattle. | The access track runs alongside (and to the south of) this field boundary hedgerow. There have been no changes to the hedgerow since the last survey was undertaken. | An additional hedgerow consisting predominantly of blackthorn runs along the eastern edge of Prince's Wood. |
| Species rich hedgerow and trees (Photograph 2) | The hedgerow alongside the road and the proposed access track to the north-east is predominantly bramble and blackthorn and contains mature standard oak trees. The hedgerow is species-rich. | A short section of this hedgerow was removed to create the site access (approximately 8 m). However, this has not result in any material changes to the species-composition or structure of the hedgerow and its mature standard trees | The hedgerow remains intact with the exception of the gap cleared previously for the creation of the access track. |
| Scattered Trees | Two large mature oak trees were present between Pocock's Wood and Prince's Wood. | These oak trees remain present and have not been affected by the construction if the site access track which has been routed to avoid impacting upon them. | These oak trees remain in situ and don't appear to have been affected by the continued work on Site. |

5.3 Protected and Notable Species

A summary of the potential protected species constraints identified is provided below and a comparative summary is provided in Table 8 along with a summary of the previously reported constraints from the 2011 and 2018 surveys for ease of comparison.

The well site itself was largely unsuitable for protected species because it almost entirely consists of hard standing.

5.3.1 Great Crested Newt

There was no suitable habitat for great crested newt (*Triturus cristatus*) within the well site boundary.

The ponds previously assessed for great crested newt remained present but the fields surrounding the well site were of low suitability for foraging great crested newt because the grassland was grazed short by cattle. The high-quality habitats provided by the woodland copses and the connecting hedgerows had not been affected by the construction of the well site and its current operating procedures, due to good connectivity between the ponds on and around site, and the woodland and hedgerows on site.

The habitat suitability of the ponds for great crested newt was of similar condition to that recorded in 2012 and 2018.

5.3.2 Reptiles

There was no suitable habitat for reptiles within the well site boundary.

Limited habitat suitable for reptiles was present within the survey area, with the majority of the closely grazed and mowed fields providing limited cover for reptiles. The hedgerows and woodland edge were the most suitable habitat on site for reptiles, providing foraging and commuting habitat for bats. The ditches within Pocock's Wood and the two ponds identified within 250m of the well site were suitable for foraging grass snake (*Natrix helvetica*). However, these habitats were not affected by the construction of the well site, and are unlikely to be affected by continuing works

5.3.3 Breeding Birds

There was no suitable nesting habitat for birds within the well site boundary.

The woodland, hedgerows and open arable fields surrounding the well site could support a diverse assemblage of breeding birds, including ground nesting species and an assemblage of species of conservation importance associated with agricultural farmland. In particular, the Birds of Conservation Concern Red List and Section 41 NERC species; nightingale (*Luscinia megarhynchos*) and lesser spotted woodpecker (*Dendrocopos minor*) were present within the 2km radius of the well site provided by the data search. Both species are woodland nesters and may be present within the woodland within the survey area boundary. Given the limited footprint of the well site and its limited direct effect on the surrounding area it is unlikely that it will affect breeding birds in the surrounding area.

5.3.4 Schedule 1 Birds

There was no suitable nesting habitat for Schedule 1 birds within the perimeter of the well site.

The most recent desk study returned records of red kite (*Milvus milvus*), hobby (*Falco subbuteo*) and barn owl (*Tyto alba*) from the last 10 years within a 2km radius of the well site. All three species are tree nesters and may potentially be present within the nearby blocks of woodland.

5.3.5 Badgers

In accordance with industry best practice, information pertaining to badgers is kept out of the public domain to reduce the risk of illegal persecution to badgers and their setts. The status of badger is the same as within the previous issued 2018 addendum report².

5.3.6 Dormice

There was no suitable habitat for hazel dormouse (e.g. hedgerows and broad-leaved woodland) within the Well site boundary.

Although habitat adjacent to the well site had some suitability for dormouse due to the presence of hazel (*Corylus avellana*) coppice woodland and hedgerows, no dormouse was found during previous surveys in 2012. The habitats around the well site were largely the same as when the initial surveys were carried out, and still support suitable foraging, commuting and hibernation resources for dormouse. Despite this, it is unlikely that any works at the well site will affect the surrounding habitat, and on this basis no further consideration is given to hazel dormouse in this updated appraisal.

5.3.7 Bats

There was no suitable habitat for foraging/commuting or roosting bats within the well site boundary.

The undated desk study returned several records of bats within the study area: whiskered bat (*Myotis mystacinus*), soprano pipistrelle (*Pipistrellus pygmaeus*), common pipistrelle (*Pipistrellus pipistrellus*) and brown long-eared bat (*Plecotus auritus*).

The desk study results were consistent with the findings of the bat surveys undertaken by URS in 2011 for the original planning application, which recorded low/moderate activity by a near identical suite of bat species in the habitats surrounding the (then proposed) well site. Given that the habitats surrounding the well site have not changed in the intervening period since the bat survey was

² AECOM (2018). Updated Broadford Bridge Ecological Appraisal. Confidential Appendix C. Badgers

undertaken, it is reasonable to assume that similar levels of foraging/ commuting activity by these species has continued to occur in these habitats.

5.3.8 Invasive Non-native Species

The desk study returned records of Japanese knotweed (*Reynoutria japonica*), rhododendron (*Rhododendron ponticum*) and Himalayan balsam (*Impatiens glandulifera*) within the desk study area.

However no invasive non-native species (as listed on Schedule 9 of the Wildlife and Countryside Act 1981) or as a species of EU concern (EU IAS Regulation 2014)) were recorded within the field survey area, and this is consistent with the findings of the 2011 and 2018 surveys.

5.3.9 Other Notable Species

The updated desk study returned records of the Section 41 NERC species hedgehog (*Erinaceus europaeus*) within the data search area. While the adjacent woodland and hedgerow was suitable habitat for the species, there was no foraging, commuting or hibernation resources within the well site, and as such it is not considered further in this update appraisal.

The updated desk study also returned a number of notable invertebrate species within the desk study area including purple emperor (*Apatura iris*), dingy skipper (*Erynnis tages*), grizzled skipper (*Pyrgus malvae*), shaded broad-bar moth (*Scotopteryx chenopodiata*) and cinnabar moth (*Tyria jacobaeae*). The growth of more ruderal habitat vegetation on the earth bank within the well site may potentially grow larval plants of three of these species; cinnabar moth, shaded broad-bar and dingy skipper, and as such there is potential for these species to breeding within the well site.

Table 8. Summary of Updated Protected and Notable Species Appraisal

| Species | Site Appraisal 2011 | Updated Site Appraisal March 2018 | Updated Site Appraisal October 2019 |
|--------------------------|--|--|--|
| Great Crested Newt (GCN) | Grazed pasture within well site boundary was evaluated to be of negligible suitability for foraging and dispersing GCN. Small population of GCN present in one pond 130 m to the south; all other ponds within 500m scoped out of further survey on the basis of habitat unsuitability. | No suitable habitat within well site boundary. Surrounding woodland and hedgerows provide habitat for GCN foraging, dispersal and refuge/ hibernation. | No suitable habitat within well site boundary. Surrounding woodland and hedgerows provide habitat for GCN foraging, dispersal and refuge/ hibernation. |
| Reptiles | Not identified as a potential constraint | No suitable habitat within well site boundary. Surrounding cattle-grazed pasture is of negligible suitability. Drains and pond in Pocock's Wood, and pond to the south of the site may be suitable for grass snake. | No suitable habitat within well site boundary. Surrounding cattle-grazed pasture is of negligible suitability. Drains and pond in Pocock's Wood, and pond to the south of the site may be suitable for grass snake. |
| Breeding Birds | Application Site was appraised to be of limited value to nesting birds due to it being predominately improved grassland. Surrounding woodland likely to support a good | No suitable habitat within site boundary. Arable habitat in the wider local area is suitable for ground nesting species, with breeding success likely to be dependent | No suitable habitat within site boundary. Arable habitat in the wider local area is suitable for ground nesting species, |

| Species | Site Appraisal 2011 | Updated Site Appraisal March 2018 | Updated Site Appraisal October 2019 |
|----------------------------|---|---|---|
| | assemblage of nesting woodland species. | upon the agricultural regime in a particular season. Nesting birds may also be present in the surrounding woodlands and hedgerow. | with breeding success likely to be dependent upon the agricultural regime in a particular season. Nesting birds may also be present in the surrounding woodlands and hedgerow. |
| Schedule 1 Birds | Not identified as a potential constraint | Not present within site boundary although may be present in the wider area. | Not present within site boundary although may be present in the wider area. |
| Bats (Roosting) | No suitable habitat within proposed well site boundary. One mature tree in Pocock's Wood identified as low/ moderate bat roost potential. | No suitable habitat within well site boundary. Previously identified tree was not reassessed for bat roost potential but will not be affected. | No suitable habitat within well site boundary. Previously identified tree was not reassessed for bat roost potential, but will not be affected. |
| Bats (Foraging/ Commuting) | No suitable habitat within proposed well site boundary. Low/ moderate bat activity (common species in woodland edge habitat and hedgerows in the surrounding area. | No suitable habitat within well site boundary. Surrounding habitat remains unchanged from that previously reported and therefore is considered likely to support the same level of bat activity by the same species. | No suitable habitat within well site boundary. Surrounding habitat remains unchanged from that previously reported and therefore is considered likely to support the same level of bat activity by the same species. |
| Hazel Dormouse | Not identified as a potential constraint | Not present within site boundary | Not present within site boundary |
| Badger | See Appendix C | See Appendix C | See Appendix C |
| Notable Invertebrates | Not identified as a potential constraint | Not present within site boundary although may be present in the surrounding habitat. | Minor area of potential larval food for some species within site boundary. Potential for presence in the surrounding habitat. |

6. Identification of Ecological Constraints and Recommendations

6.1 Summary of Potential Effects

The application seeks planning permission for the retention of the well site and a continuation of existing operations for a further 24 months. There will be no changes in the footprint of the well site, or the extent and nature of operations, and therefore the potential for any additional pathways for impacts on protected or notable habitats and species is negligible.

No additional protected species constraints were identified in the updated Phase 1 Habitat survey. However, for completeness, potential impacts have been re-examined and the assessment updated as appropriate to demonstrate that a robust consideration of all potential source-receptor pathways has been completed for relevant ecological features.

6.2 Statutorily Designated Sites

6.2.1 The Mens SAC and Arun Valley SAC/SPA/Ramsar

The constraints posed by the Mens SAC and Arun Valley SAC/SPA/Ramsar are consistent with those mentioned in the 2018 Updated Ecological Appraisal. The previous assessment therefore remains relevant as follows;

“The original ecological assessment limited the desk study area to 2 km, and therefore did not consider potential effects on The Mens SAC. However, the updated appraisal considered a search radius of 10 km for any European sites, primarily due to the potential sensitivity of such sites to indirect effects from air quality impacts, and the larger zone of influence over which changes in air quality can occur. This extension included The Mens SAC, however, the Well site will not give rise to any material emissions to air over and above what is currently consented for the well site. There is therefore no pathway by which the Well site could impact upon on The Mens SAC as a result of changes in air quality. Similarly, there is no potential for the Well site to impact upon on the Arun Valley SAC/ SPA/ Ramsar sites.

Potential pathways for impacts on The Mens SAC and the Arun Valley SAC/ SPA/ Ramsar sites as a result in changes in hydrology and surface water quality have also been scoped out on the basis of the distance between the designated sites and the well site (all these designated sites are in excess of 6 km from the well site).

Given that there are no pathways by which the Well site could impact upon the European designated sites within 10 km of the well site, a Habitats Regulations Assessment (HRA) is not required.”

6.3 Non-Statutorily Designated Sites

6.3.1 Ancient Woodland

The constraints posed by ancient woodland within the desk study radius are consistent with those assessed in the 2018 Updated Ecological Appraisal ;

“The nearest non-statutory designated sites are the AWI sites at Gatewick Copse and Prince’s Wood, which are approximately 195 m south and 200 m east of the well site respectively. The Well site will not result in any material changes in emissions to air from those currently consented, and therefore there is no pathway by which the Well site could give rise to adverse effects on the ancient and semi-natural woodland habitat as a result of changes in air quality. The well site is underlain by an impermeable membrane that captures and contains surface water run-off. There is therefore no potential, under normal operational usage, for surface water pollution to habitats outside the well site boundary including the nearby areas of ancient”

6.3.2 Cattlestone Farm LWS

The constraints posed by Cattlestone Farm are consistent with those addressed in the 2018 Updated Ecological Appraisal. The previous assessment therefore remains relevant as follows;

“The meadows and pastures of the Cattlestone Farm LWS are approximately 1.9 km south-east of the well site. At this distance, it is reasonable to conclude that there will be no source-receptor pathways by which the Well site could give rise to any adverse effects on the designated habitats.”

6.3.3 Habitats

No notable habitats are to be further impacted by the continuation of well site operation. It is however noted that the extension of operation will delay restoration of previously removed habitat. This is addressed in section 7.1

6.4 Protected or Notable Species

6.4.1 Great Crested Newt

The constraints posed by great crested newt presence remain consistent with those mentioned in the 2018 Updated Ecological Appraisal ;

‘There is no potential for the Well site to give rise to direct impacts on individual great crested newts. This is because there is no suitable habitat for this species within the well site boundary, which contains only hardstanding and temporary portacabins.

The construction of the well site has not resulted in any impacts on high quality GCN terrestrial foraging, dispersal or hibernation habitat associated with the woodlands and hedgerow surrounding the well site. There has been no fragmentation or isolation of breeding ponds. The Well site will similarly not impact on any habitat that may be used by foraging, dispersing or hibernating newts, because the existing footprint will not change.

There is no potential for any surface water pollution to the ponds, because the well pad is underlain with an impermeable membrane and all site surface water drainage is contained and collected within the operational area. There is therefore no reasonable risk of polluted surface water entering ponds and causing damage to breeding habitats.

Further survey work in respect of GCN is not considered necessary because there is no potential for the Well site to adversely affect this species.’

6.4.2 Breeding and Schedule 1 Birds

The constraints posed by breeding bird species presence remain consistent with those mentioned in the 2018 Updated Ecological Appraisal ;

“The Well site will not result in any impacts on nesting birds, because there is no suitable habitat within the operational area of the well site. Any birds nesting in the woodland surrounding the well site (including Schedule 1 species that the desk study indicated are present within 1km of the site (red kite, barn owl, hobby)) or foraging in habitats surrounding the well site, do so in the context of the current operational well site. The Well site will not change the baseline environment in terms of noise or visual impacts, and therefore it is reasonable to conclude that a continuation of consented operations would not adversely affect nesting (or foraging) birds.

Further survey work in respect of nesting birds is unnecessary because there is no potential for the Well site to adversely affect nesting birds. ”

6.4.3 Bats

The constraints posed by bat presence remain consistent with those mentioned in the 2018 Updated Ecological Appraisal ;

'The Well site will not result in any changes to the existing consented nocturnal lighting of the well site.

Any bats foraging/ commuting through the surrounding habitat do so in the context of the presence of the existing well site, to which it is assumed they are habituated. Even if bats chose to avoid habitats immediately surrounding the well site, there is a large amount of undisturbed habitat in the wider local area to which the bats have access for foraging. Therefore, even if there were disturbance effects, any disruption to bats foraging in the vicinity of the wellsite would not be expected to result in significant adverse effects on local bat populations or their local conservation status.

The potential for disturbance to bat roosts as a result of the construction and operation of the consented well site were examined as part of the original application and found to be not significant. There will be no changes to the consented activities on the well site for the Well site, and therefore, the outcome of the previous assessment remains valid

Further survey work in respect of bats is unnecessary because there is no potential for the Well site to adversely affect bats.'

6.4.4 Badger

The constraints posed by badgers remain consistent with those mentioned in the 2018 Updated Ecological Appraisal , as such these results are contained in confidential Appendix C.

7. Mitigation and Enhancement

7.1 Habitat and Protected Species Mitigation

Mitigation for the original construction of the Broadford Bridge well site was limited to the avoidance of the removal of hedgerows or trees within the nesting bird season (or a check for nesting birds prior to commencement of works), as set out in Condition 10. Given that the well site has already been constructed, this condition is not applicable to the well site.

The well site will not result in any significant effects on ecological receptors, and therefore no ecology mitigation is required.

7.2 Biodiversity Enhancement

A restoration plan for the well site was prepared by Terrafirma in 2013 and agreed with West Sussex County Council and remains applicable to the well site; drawing reference 1377-3001 '*Wood Barn Farm Broadford Bridge – Landscape Proposals*'. The restoration plan will deliver habitat enhancement through the infilling of hedgerow gaps along the north side of the access track. Native tree and shrub species have been included in the landscape plan to provide nesting habitat for birds, and a winter berry food source for wintering birds.

UKOG has committed to infilling of the gaps in a hedgerow on the north side of the access track with native tree and shrub species to enhance the structure of the habitat for foraging bats, and for nesting and foraging birds. The improvements to the hedgerow structure will also enhance its value to foraging and commuting bats, once the hedgerow has successfully established. The hedgerow will be infilled with specimens of field maple (*Acer campestre*), hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), beech (*Fagus sylvatica*), holly (*Ilex aquifolium*), privet (*Ligustrum vulgare*) and dog-rose (*Rosa canina*).

The following additional habitat enhancements are also proposed that are considered proportionate to the scale of the Well site and that it will not result in any adverse effects on ecological features:

- Installation of five bird nest boxes on mature trees in surrounding woodland (subject to landowner consent); and
- Installation of five bat boxes on mature trees in surrounding woodland (subject to landowner consent).

8. Assessment of Residual Effects

The previous assessment completed for the construction of the Broadford Bridge well site did not predict any residual adverse effects on ecology and nature conservation receptors. The updated residual effects assessment similarly concludes that the extended life of the well site will result in no residual adverse effects on ecology.

Appendix A Figures

Figure 1 Phase 1 Habitat Map

THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- Proposed Site
- Wider Site Boundary
- Target Notes
- Phase 1 Habitat**
- Individual Broad-leaved Tree
- Defunct Hedge - Species-poor
- Dry Ditch
- Earth Bank
- W Hedge With Trees - Native Species-rich
- H Hedge With Trees - Species-poor
- Broadleaved Woodland - Semi-natural
- Buildings
- A Cultivated/ Disturbed Land - Arable
- Hard Standing
- Improved Grassland
- / Other Tall Herb and Fern - Ruderal
- Running Water
- Standing Water

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Purpose of Issue:
FOR INFORMATION

Client:
ZETLAND GROUP PLC

Project Title:
**BROADFORD BRIDGE WELL SITE
PRELIMINARY ECOLOGICAL
APPRAISAL**

Drawing Title:
PHASE 1 HABITAT MAP

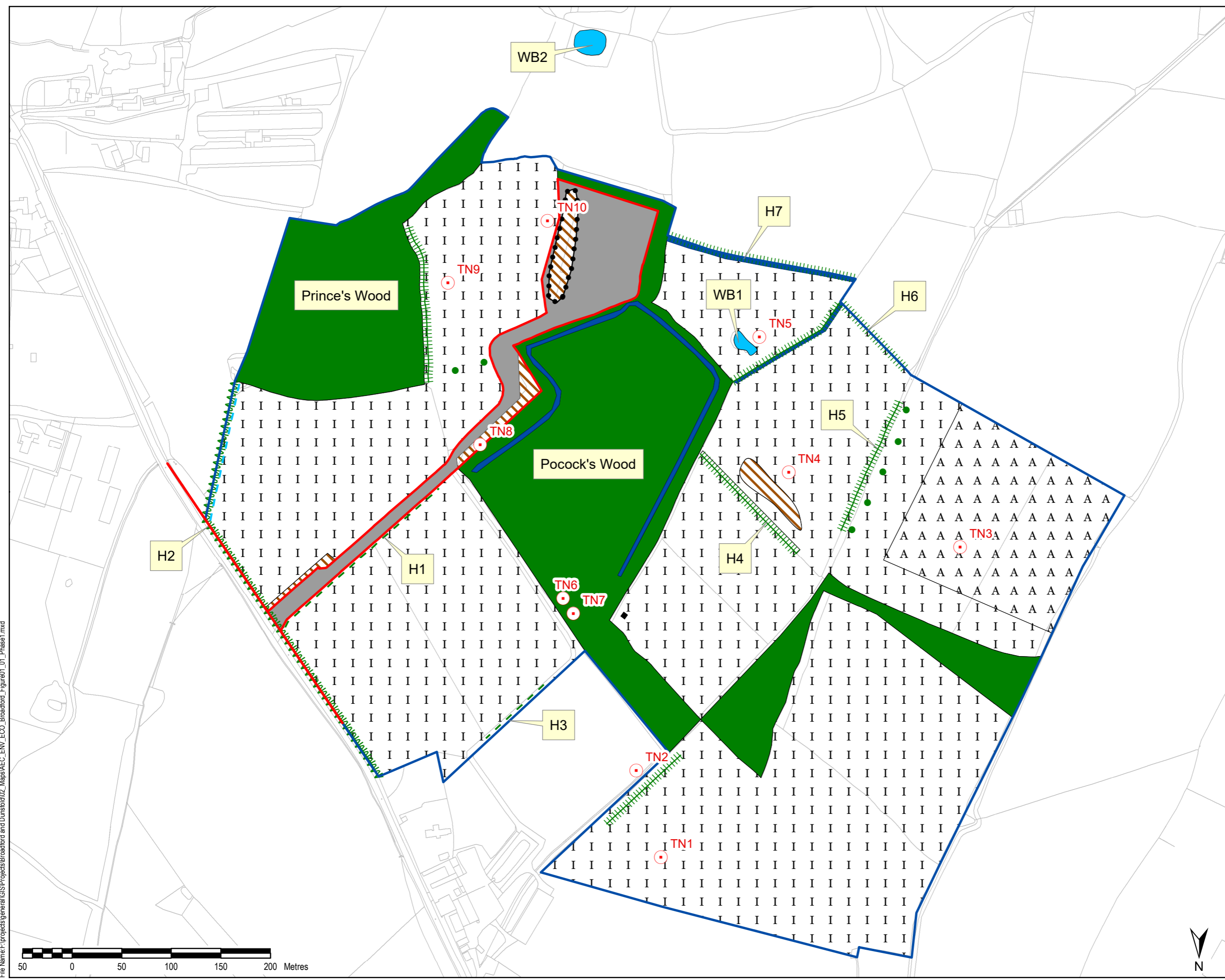
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|--|---------------|-------------------------|---------------------|
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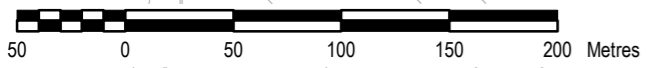
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Appendix B Target Notes

| Number | Target Note |
|--------|---|
| TN1 | Former arable field now used as pasture/improved grassland |
| TN2 | Species poor hedgerow growing within Site Boundary. |
| TN3 | Arable field dominated by bird food crop |
| TN4 | Ruderal vegetation strip growing in improved grassland pasture |
| TN5 | Water Body 1 had overflowed and flooded surrounding area |
| TN6 | Deadwood piles suitable for amphibians, reptiles, invertebrates and fungi |
| TN7 | Butcher's broom stands growing on forest floor of Pocock's Wood |
| TN8 | Signs of recent cutting of tall ruderal vegetation |
| TN9 | Species poor blackthorn dominated hedge growing along eastern edge of Prince's Wood |
| TN10 | Colonisation of earth bank within compound by herbaceous plants and grasses |

Appendix C Site Photographs

Table 9: Photographs



Photograph 1 – Improved grassland (Target Note 1)



Photograph 2 – Species poor hedge (Target Note 2)



Photograph 3 – Rabbit warrens in Improved Grassland with Arable Field in Background



Photograph 4 – Willow understory of Pocock's Wood



Photograph 5 – Tall ruderal strip of vegetation (Target Note 4)



Photograph 6 - Water body 1



Photograph 7 – Butcher's Broom growing Pocock's Wood

Appendix D Detailed Phase 1 Species List

| Common Name | Scientific Name | Location/Habitat | DAFOR Rating |
|---------------------|-----------------------------|-------------------------------------|--------------|
| Annual Meadow Grass | <i>Poa annua</i> | Improved Grassland/Target Note 1 | Frequent |
| Apple | <i>Malus domestica</i> | Species Poor Hedgerow/H5 | Rare |
| Birch | <i>Betula pendula</i> | Semi Natural Woodland/Pocock's Wood | Frequent |
| Blackthorn | <i>Prunus spinosa</i> | Species Poor Hedgerow/Target Note 2 | Dominant |
| Blackthorn | <i>Prunus spinosa</i> | Species Poor Hedgerow/Target Note 9 | Dominant |
| Blackthorn | <i>Prunus spinosa</i> | Species Poor Hedgerow/H4 | Abundant |
| Blackthorn | <i>Prunus spinosa</i> | Species Poor Hedgerow/H5 | Occasional |
| Bracken | <i>Pteridium aquilinum</i> | Semi Natural Woodland/Pocock's Wood | Occasional |
| Bracken | <i>Pteridium aquilinum</i> | Short Ephemeral/Target Note 8 | Frequent |
| Bramble | <i>Rubus fruticosus</i> agg | Semi Natural Woodland/Pocock's Wood | Abundant |
| Bramble | <i>Rubus fruticosus</i> agg | Short Ephemeral/Target Note 8 | Rare |
| Bramble | <i>Rubus fruticosus</i> agg | Species Poor Hedgerow/Target Note 2 | Frequent |
| Bramble | <i>Rubus fruticosus</i> agg | Species Poor Hedgerow/Target Note 9 | Frequent |
| Bramble | <i>Rubus fruticosus</i> agg | Species Poor Hedgerow/H4 | Occasional |
| Bramble | <i>Rubus fruticosus</i> agg | Species Poor Hedgerow/H5 | Occasional |
| Bramble | <i>Rubus fruticosus</i> agg | Tall Ruderal/Target Note 4 | Dominant |
| Broad Leaved Dock | <i>Rumex obtusifolius</i> | Improved Grassland/Target Note 1 | Abundant |
| Broad Leaved Dock | <i>Rumex obtusifolius</i> | Improved Grassland/Target Note 3 | Occasional |
| Broad Leaved Dock | <i>Rumex obtusifolius</i> | Tall Ruderal/Target Note 4 | Abundant |
| Burdock | <i>Arctium lappa</i> | Short Ephemeral/Compound East Bank | Occasional |
| Butcher's Broom | <i>Ruscus aculeatus</i> | Semi Natural Woodland/Pocock's Wood | Rare |
| Clover | <i>Trifolium</i> sp. | Improved Grassland/Target Note 1 | Frequent |
| Cock's Foot | <i>Dactylis glomerata</i> | Improved Grassland/WB1 | Rare |
| Common Mallow | <i>Malva sylvestris</i> | Species Poor Hedgerow/Target Note 9 | Rare |
| Dandelion | <i>Taraxacum officinale</i> | Improved Grassland/Target Note 1 | Occasional |
| Dandelion | <i>Taraxacum officinale</i> | Improved Grassland/WB1 | Occasional |

| Common Name | Scientific Name | Location/Habitat | DAFOR Rating |
|---------------------|-------------------------------|-------------------------------------|--------------|
| Dog Rose | <i>Rosa canina</i> | Species Poor Hedgerow/Target Note 2 | Rare |
| Dog Rose | <i>Rosa canina</i> | Species Poor Hedgerow/H5 | Rare |
| Dwarf Thistle | <i>Cirsium acaule</i> | Improved Grassland/WB1 | Rare |
| False Oat Grass | <i>Arrhenatherum elatius</i> | Improved Grassland/WB1 | Occasional |
| Field Bindweed | <i>Convolvulus arvensis</i> | Species Poor Hedgerow/Target Note 2 | Frequent |
| Field Maple | <i>Acer campestre</i> | Species Poor Hedgerow/H4 | Frequent |
| Field Maple | <i>Acer campestre</i> | Species Poor Hedgerow/H5 | Frequent |
| Field Rose | <i>Rosa arvensis</i> | Species Poor Hedgerow/H4 | Rare |
| Germanium | <i>Geranium</i> sp. | Improved Grassland/Target Note 3 | Rare |
| Greater Plantain | <i>Plantago major</i> | Improved Grassland/Target Note 1 | Occasional |
| Hard Rush | <i>Juncus inflexus</i> | Tall Ruderal/Target Note 4 | Abundant |
| Hawthorn | <i>Crataegus monogyna</i> | Improved Grassland/WB1 | Rare |
| Hawthorn | <i>Crataegus monogyna</i> | Species Poor Hedgerow/Target Note 2 | Abundant |
| Hawthorn | <i>Crataegus monogyna</i> | Species Poor Hedgerow/Target Note 9 | Dominant |
| Hawthorn | <i>Crataegus monogyna</i> | Species Poor Hedgerow/H4 | Dominant |
| Hawthorn | <i>Crataegus monogyna</i> | Species Poor Hedgerow/H5 | Dominant |
| Hazel | <i>Corylus avellana</i> | Semi Natural Woodland/Pocock's Wood | Abundant |
| Hedge Bedstraw | <i>Galium album</i> | Species Poor Hedgerow/Target Note 2 | Occasional |
| Holly | <i>Ilex aquafolium</i> | Semi Natural Woodland/Pocock's Wood | Frequent |
| Horse Chestnut | <i>Aesculus hippocastanum</i> | Semi Natural Woodland/Pocock's Wood | Frequent |
| Ivy | <i>Hedera helix</i> | Species Poor Hedgerow/Target Note 2 | Occasional |
| Ivy | <i>Hedera helix</i> | Species Poor Hedgerow/H5 | Occasional |
| Maize | <i>Zea mays</i> | Arable Field | Dominant |
| Male Fern | <i>Dryopteris filix-mas</i> | Semi Natural Woodland/Pocock's Wood | Occasional |
| Oak | <i>Quercus robur</i> | Semi Natural Woodland/Pocock's Wood | Dominant |
| Oak | <i>Quercus robur</i> | Species Poor Hedgerow/H4 | Occasional |
| Oak | <i>Quercus robur</i> | Species Poor Hedgerow/H5 | Occasional |
| Perennial Rye Grass | <i>Lolium perenne</i> | Improved Grassland/Target Note 1 | Dominant |
| Perennial Rye Grass | <i>Lolium perenne</i> | Improved Grassland/Target Note 3 | Dominant |
| Perennial Rye Grass | <i>Lolium perenne</i> | Improved Grassland/WB1 | Dominant |

| Common Name | Scientific Name | Location/Habitat | DAFOR Rating |
|---------------------|------------------------|-------------------------------------|--------------|
| Perennial Rye Grass | <i>Lolium perenne</i> | Short Ephemeral/Compound East Bank | Dominant |
| Ribwort Plantain | <i>Lolium perenne</i> | Improved Grassland/WB1 | Occasional |
| Spear Thistle | <i>Cirsium vulgare</i> | Improved Grassland/Target Note 1 | Rare |
| Spear Thistle | <i>Cirsium vulgare</i> | Short Ephemeral/Compound East Bank | Abundant |
| Spear Thistle | <i>Cirsium vulgare</i> | Tall Ruderal/Target Note 4 | Abundant |
| Stinging Nettle | <i>Urtica dioica</i> | Improved Grassland/Target Note 3 | Rare |
| Stinging Nettle | <i>Urtica dioica</i> | Species Poor Hedgerow/Target Note 2 | Occasional |
| Stinging Nettle | <i>Urtica dioica</i> | Species Poor Hedgerow/Target Note 9 | Occasional |
| Stinging Nettle | <i>Urtica dioica</i> | Species Poor Hedgerow/H4 | Frequent |
| Stinging Nettle | <i>Urtica dioica</i> | Tall Ruderal/Target Note 4 | Frequent |
| Stinging Nettle | <i>Urtica dioica</i> | Short Ephemeral/Target Note 8 | Dominant |
| Willow | <i>Salix</i> sp. | Semi Natural Woodland/Pocock's Wood | Abundant |
| Willow | <i>Salix</i> sp. | Species Poor Hedgerow/H4 | Occasional |

Appendix E Legislation

The Conservation of Habitats & Species Regulations 2017 (as amended)

The Habitats Regulations consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. The Regulations came into force on 30th October 1994. In Scotland the Habitats Directive is transposed through a combination of the Habitats Regulations 2017 (in relation to reserved matters) and the 1994 Regulations. The Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) transpose the Habitats Directive in relation to Northern Ireland.

The Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites.

Under the Regulations, competent authorities i.e. any Minister, Government department, public body, or person holding public office, have a general duty, in the exercise of any of their functions, to have regard to the EC Habitats Directive.

The Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I and II of the Habitats Directive respectively) to the European Commission. Once the Commission and EU Member States have agreed that the sites submitted are worthy of designation, they are identified as Sites of Community Importance (SCIs). The EU Member States must then designate these sites as Special Areas of Conservation (SACs) within six years. The Regulations also require the compilation and maintenance of a register of European sites, to include SACs and Special Protection Areas (SPAs) classified under Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). These sites form a network termed Natura 2000.

The Regulations enable the country agencies to enter into management agreements on land within or adjacent to a European site, in order to secure its conservation. If the agency is unable to conclude such an agreement, or if an agreement is breached, it may acquire the interest in the land compulsorily. The agency may also use its powers to make byelaws to protect European sites. The Regulations also provide for the control of potentially damaging operations, whereby consent from the country agency may only be granted once it has been shown through Appropriate Assessment that the proposed operation will not adversely affect the integrity of the site. When considering potentially damaging operations, the country agencies apply the precautionary principle' i.e. consent cannot be given unless it is ascertained that there will be no adverse effect on the integrity of the site.

In instances where damage could occur, the appropriate Minister may, if necessary, make special nature conservation orders, prohibiting any person from carrying out the operation. However, an operation may proceed where it is or forms part of a plan or project with no alternative solutions, which must be carried out for reasons of overriding public interest. In such instances the Secretary of State must secure compensation to ensure the overall integrity of the Natura 2000 system. The country agencies are required to review consents previously granted under the Wildlife and Countryside Act 1981 for land within a European site and may modify or withdraw those that are incompatible with the conservation objectives of the site.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.

The Regulations make special provisions for the protection of European marine sites, requiring the country agencies to advise other authorities of the conservation objectives for a site, and also of the

operations which may affect its integrity. The Regulations also enable the establishment of management schemes and byelaws by the relevant authorities and country agencies respectively, for the management and protection of European marine sites.

Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 is the major domestic legal instrument for wildlife protection in the UK, and is the primary means by which the following are implemented:

- The Convention on the Conservation of European Wildlife and Natural Habitats ('the Bern Convention'); and
- The Council Directive 79/409/EEC on the Conservation of Wild birds (the 'Bird Directive')

Wild Birds

The Act makes it an offence (with exception to species listed in Schedule 2) to intentionally:

- kill, injure, or take any wild bird,
- take, damage or destroy the nest of any wild bird while that nest is in use or being built (also [take, damage or destroy the nest of a wild bird included in Schedule ZA1] under the Natural Environment and Rural Communities Act 2006), or
- take or destroy an egg of any wild bird.

Special penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of disturbing these birds at their nests, or their dependent young. The Secretary of State may also designate Areas of Special Protection (subject to exceptions) to provide further protection to birds. The Act also prohibits certain methods of killing, injuring, or taking birds, restricts the sale and possession of captive bred birds, and sets standards for keeping birds in captivity.

Other Animals

The Act makes it an offence (subject to exceptions) to intentionally kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Flora, Fungi and Lichens

The Act makes it an offence (subject to exceptions) to intentionally pick, uproot or destroy:

- any wild plant listed in Schedule 8, or
- unless an authorised person, to intentionally uproot any wild plant not included in Schedule 8,
- to sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Non-native Species

The Act contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife, prohibiting the release of animals and planting of plants listed in Schedule 9 in England and Wales. It also provides a mechanism making any of the above offences legal through the granting of licences by the appropriate authorities.

Countryside and Rights of Way (CRoW) Act 2000

The Countryside and Rights of Way Act 2000 applies to England and Wales only. Part III of the Act deals specifically with wildlife protection and nature conservation.

The Act places a duty on Government Departments and the National Assembly for Wales to have regard for the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity.

Schedule 9 of the Act amends the SSSI provisions of the Wildlife and Countryside Act 1981, including increased powers for their protection and management of SSSIs. The provisions extend powers for entering into management agreements; place a duty on public bodies to further the conservation and enhancement of SSSIs; increase penalties on conviction where the provisions are breached; and include an offence whereby third parties can be convicted for damaging SSSIs.

Schedule 12 of the Act amends the species provisions of the Wildlife and Countryside Act 1981, strengthening the legal protection for threatened species. The provisions make certain offences 'arrestable', include an offence of reckless disturbance, confer greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and enable heavier penalties on conviction of wildlife offences.

Natural Environment and Rural Communities (NERC) Act 2006

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 41 (S41) of the Act required the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list was drawn up in consultation with Natural England, as required by the Act.

The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the (now withdrawn) UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. They include terrestrial habitats such as upland hay meadows to lowland mixed deciduous woodland, and freshwater and marine habitats such as ponds and subtidal sands and gravels.

There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the (now withdrawn) UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. In addition, the hen harrier has also been included on the list because without continued conservation action it is unlikely that the hen harrier population will increase from its current very low levels in England.

Protection of Badgers Act 1992

Badgers and their setts (burrows) are protected under the Act. This makes it an offence to kill or take a badger, to cruelly ill-treat a badger, or to interfere with a badger sett, including disturbing a badger while it is occupying a sett.

Licences to permit otherwise prohibited actions can be granted under section 10 of the Act for various purposes. This includes licences to interfere with a badger sett for the purpose of development as defined by section 55(1) of the Town and Country Planning Act 1990.

Licences may be granted in order to close down setts, or parts of setts, prior to development or to permit activities close to a badger sett that might result in disturbance. A licence will be required if a sett is likely to be damaged or destroyed in the course of development or if the badger(s) occupying the sett will be disturbed.

Licences can be applied for at any time, but a licence for repair works will not normally be issued unless full planning permission has been granted. The closure of setts under licence is normally only permitted during July to November, inclusive.

The Hedgerow Regulations 1997

The intention of the Act is to protect important countryside hedges from destruction or damage. The Act does not apply where planning permission has been granted. There are various other exemptions under the Act, including:

- To make a new opening in substitution for an existing one that gives access to land. For example, a gate. However, the old opening must be filled in within 8 months;
- To obtain access to land where other means are not available or are only available at disproportionate cost;
- For the proper management of the hedgerow. This means real management, such as coppicing. But if the hedgerow is deliberately 'over-managed' this might qualify as removal.

If the proposed works are not exempt or subject to a current planning permission then the landowner must serve a Hedgerow Removal Notice in writing on their local planning authority. The authority then has 42 days (which period can be extended if the applicant agrees) to determine whether or not the hedge is considered 'important' under the regulations, and if so, whether or not to issue a Hedgerow Retention Notice. The local authority does not have to issue a Retention Notice, even if the hedgerow counts as important. If they do not issue a notice for an important hedge this is often on condition that certain things are done, e.g. reinstatement or replanting to a certain standard, or creation of an equivalent boundary elsewhere.

National Planning Policy Framework

The latest version of the NPPF came into being in February 2019, relevant sections are as follows:

Section 15 of the NPPF relates specifically to 'Conserving and Enhancing the Natural Environment'. Paragraph 170 states that '*Planning policies and decision should contribute to and enhance the natural and local environment by:*

- *protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- *recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
- *maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
- *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.'*

Paragraph 171 states that 'Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries. '

Paragraph 174 states that '*To protect and enhance biodiversity and geodiversity, plans should:*

- *Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
- *promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity. '*

Paragraph 175 states that *'When determining planning application, local planning authorities should apply the following principles:*

- *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.'*

Paragraph 176 states that *'The following should be given the same protection as habitats sites:*

- *potential Special Protection Areas and possible Special Areas of Conservation;*
- *listed or proposed Ramsar sites; and*
- *sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.'*

Paragraph 176 states that *'The presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined.'*

Paragraph 177 states that *'The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.'*





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