



Habitat Regulations Assessment

in respect of

Land at LEA Castle Farm, Wolverley, Kidderminster

for

NRS Aggregates LTD

Prepared By

Heaton's

February 2022

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| 1. Introduction | 1 |
| 2. The Habitat regulations of England and Wales | 6 |
| 3. Stages of Habitat Regulations Assessment | 8 |
| 4. Ecologically Designated Sites | e67 |

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Baseline Information

Heatons have been commissioned to undertake a Habitat Regulations Assessment (HRA) to determine whether the proposed extraction at LEA Castle Farm (hereafter referred to as the site) would have any adverse effects on the integrity of a number of sites designated under the Conservation of Habitats and Species Regulations 2017 (as amended). The HRA has been requested under Regulation 25 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 in relation to planning application ref: 19/000053/CM.

This HRA screening will determine whether the proposed development presents any likely significant effects (LSEs) on the qualifying interests of the Severn Estuary SPA and SAC and also whether or not an Appropriate Assessment for adverse effects for these sites will be required.

Regulation 25 Request

The application site is located approximately 70 kilometres north-east of the Severn

tributaries (including the River Stour). The qualifying bird species of the European site are reliant on estuarine and coastal habitats within the SPA / Ramsar boundary which have the potential to be susceptible to changes in water quality and quantity as a result of water abstraction, nutrient enrichment, or one-off pollution events. In addition, the qualifying bird species are reliant on non-estuarine habitats within functionally linked watercourses of the Severn Estuary SPA / Ramsar within the River Severn hydrological catchment. There is the potential for run-off of surface water, pollutants and chemical spills at the application site to result in impacts on the water courses which are functionally linked to the Severn Estuary (e.g., The River Stour). Such water courses or their adjacent habitats could be of importance to the qualifying bird species of the SPA / Ramsar. Any changes in water quality or quantity within the River Severn or its tributaries due to mineral extraction at the application site, therefore, has the potential to result in likely significant effects on the Severn Estuary SPA / Ramsar.

Particular issues that could affect water quality include dissolved oxygen, which may result in changes to vegetation and invertebrate prey communities for SPA / Ramsar bird species and leaching and runoff from the application site, which is likely to affect nutrient levels. Water quantity could also be affected by water abstraction for minerals processing and disposal of water used in the mineral extraction process.

As above for birds, hydrological connectivity between the Severn Estuary SAC and Ramsar site and the application site could result in impacts on the qualifying fish species due to changes in water quality and quantity as a result of nutrient enrichment, or one-off pollution events.

There is potential for run-off of surface water, pollutants and chemical spills, and changes in the below-ground water connectivity to result in impacts on the water courses which are functionally linked to the Severn Estuary. Such

include smothering of habitats leading inhibiting natural processes and increased suspended sediment within the water resulting in reduced levels of dissolved oxygen which may act as a barrier to migrating qualifying fish species.

- x – Air pollution, in particular nitrogen deposition, has been
- h



further depleting and looking forward there will be a significant under allocation or shortfall.

There are a very limited number of alternative sand and gravel and solid sand quarries within Worcestershire. The closest quarry supplying sand and gravel in the county is located ~ 24 miles away at Clifton Quarry (operated by Tarmac), near Severn Stock in the south of the county. The closest supplies of potential solid sand are at Wildmoor, ~ 10 miles to the east of Kidderminster. The quarry is operated by Salop Sand and Gravel (SS&G), with the majority of the sand being utilised internally by this company. SS&G have recently had planning

2.0 HABITATS REGULATIONS

The Conservation of Habitats and Species Regulations 2017 (as amended) (the 'Habitats Regulations') transposes the requirements of European Council Directive 92/43/EEC 'the Habitats Directive' into English law. The Habitats Regulations apply to

- x Continue to meet our international legal obligations, such as the Bern Convention, the Oslo and Paris Conventions (OSPAR), Bonn and Ramsar Conventions.

It is also a matter of government policy that Ramsar sites are considered in the HRA process, as described in part 181 of the National Planning Policy Framework. Where it is anticipated that a development could affect the integrity of a Special Protection Area (SPA), Special Area of Conservation (SAC) or Ramsar site, either individually or cumulatively with other development, a Habitat Regulation Assessment under the Habitats Regulations will be undertaken. If adverse impacts on the integrity of the site and its qualifying features are predicted, measures to mitigate for these effects will be implemented. If it is not possible to mitigate satisfactorily for adverse effects, the development will not be permitted. If there is no alternative solution, the consideration of imperative reasons of overriding public interest (IROPI), despite a potentially negative effect on site integrity, can be considered.

This report presents information to enable the screening assessment required as part of Stage 1 of the HRA process, to establish whether or not the proposed scheme will have any LSE upon the national site network and Ramsar sites, referred to hereafter

3.0 ~~ASSESSMENT~~

Guidance on the Habitats Directive (European Commission, 2000) sets out the staged approach that should be followed to enable Competent Authorities to discharge their duties under the Habitats Directive and provides further clarity on the interpretation of Articles 6 (3) and 6 (4). The process used is usually summarised in four distinct stages of assessment:

Stage 1: Screening - the process that identifies whether effects upon a habitat site as a consequence of a plan or project are possible, either alone or in combination with other plans or projects, and considers whether these effects are likely to be significant;

Stage 2: Appropriate Assessment - the detail ()JT2 (r)12.1 (o6BT/TT295(t)-3 (h)2.3 (e)-3.1 (c 0.150

Desk Study

In order to obtain information on sites of nature conservation interest in the area, the Multi-Agency Geographical Information for the Countryside (MAGIC) website was searched for ecological statutory and non-statutory designated sites and ancient woodland within a 3km radius around the central point of the site.

A 3km search radius was conducted from the central point of the site to ensure that a 2km radius from the boundaries of the site was covered.

In addition, Worcestershire Biological Records Centre (WBRC) was commissioned to undertake a data search for all protected and notable species and all sites of conservation importance within 3km of central grid reference SO834789. For relevant information please see the Preliminary Ecological Appraisal Report (submitted for application ref: 19/000053/CM – attached at Appendix 1).

Reference was also made to Ordnance Survey maps and aerial photography, which were used to determine the presence of open water and ponds in the area and to provide information on land use and habitat connectivity throughout the area.

The woodland Trust Ancient Tree Inventory and the Worcestershire Council Habitat inventory was also accessed in order to obtain further information on Ancient Woodland habitat within the site and within adjacent habitats.

Severn Estuary SPA and SAC

As stated within the regulation 25 request, 'The application site is located approximately 70 kilometres north-east of the Severn Estuary SPA and SAC which are European sites (also commonly referred to as Natura 2000 sites), which is also notified as a Ramsar Site (of international importance) and at a national level as the Upper

very rare worldwide. This tidal range creates strong tidal streams and high turbidity, producing communities characteristic of the extreme physical conditions of liquid mud and tide-swept sand and rocks.

The Estuary includes a wide diversity of habitats including Sandbanks which are slightly covered by sea water all the time, Mudflats and sandflats not covered by sea water at low tide, Atlantic salt meadows, and Reefs, which are identified as Annex I habitat types in their own right.

The intertidal zone of mudflats, sand banks, rocky platforms and saltmarsh is one of

x Estuaries

x

marinus population is found in the main stem below Llyswen, whilst river lampreys (*Lamprologus fluviatilis*) and brook lampreys (*L. planeri*) are widely distributed in the catchment. The Wye also contains high quality spawning grounds and juvenile habitat for Atlantic salmon (*Salmo salar*) in both the main channel and tributaries. Twait shad (*Alosa fallax*) have long been abundant in the Wye. Twait shad often spawn at or just above the tidal limit, but in the Wye they migrate over 100 km upstream, the highest spawning site being at Builth Wells. The river has relatively good water quality, adequate flows through an unobstructed main channel and a wide range of aquatic habitats conducive to supporting this fish species. In particular, there are a number of deep pools essential for congregation before spawning. The river also supports allis shad (*A. alosa*).

The Wye holds a dense and well-established otter (*Lutra lutra*) population. The bank-side vegetation cover, abundant food supply, clean water and undisturbed areas of dense scrub suitable for breeding, make it particularly favourable as otter habitat. The tributaries are the main haven for white-clawed crayfish (*Austropotamobius pallipes*) particularly at the confluences of the main river and the Edw, Dulas Brook, Sgithwen and Clettwr Brook.

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

- x Transition mires and quaking bogs. (Very wet mires often identified by an unstable 'quaking' surface)
- x Water courses of plain to montane levels with the *Ranunculum fluitans* and *Callitriche* *Batrachion* vegetation. (Rivers with floating vegetation often dominated by watercress).

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

- x Allis shad
- x Atlantic salmon
- x Brook lamprey
- x Bullhead
- x Otter

- x River lamprey
- x Sea lamprey
- x Twaite shad
- x White-clawed (or Atlantic stream) crayfish

Statutory Designated Sites

No internationally designated statutory nature conservation sites (such as Special Areas of Conservation (SAC) or Special Protection Areas) are present within a 3km radius of the Site. There is one internationally designated site within 15km of the site. This is Fen Pools SAC which is located approximately 11.5km to the north-east of the site. This SAC is designated due to the presence of great crested newts (*triturus cristatus*). It is considered that this SAC is sufficiently distant from the site and therefore a likely significant effect is not anticipated.

There are no statutory designated sites present on the Site; however there are seven statutory designated sites within 3km of the centre of the Site.

These are:

- x Hurcott and Podmore Pools Site of Special Scientific Interest (SSSI), located 670m to the south

- x Hurcott Wood Local Nature Reserve (LNR), located 620m to the south-east of the Site, designated for habitat including pools, woodland and wet valley alder carr which is the largest in Worcestershire;
- x Kingsford Forest Park LNR, located 1.9km to the north-west of the Site, designated for habitats including heathland, sandy tracks, pine forests and broad-leaved woodland; and
- x Blake Marsh LNR, located 2.3km to the south-west of the Site, designated for its marshland habitat with rare f1esin13.1 (c)-1.9 (lu)2.2 (d)2.3 3in fo thr2.3 3int mr

Ancient Woodland

There are six areas of ancient woodland within 3km of the central point of the Site, which comprised both ancient and semi-natural woodland and ancient re-planted woodland. These were:

- x Gloucester Coppice, located 280m to the north-west of the Site and comprising ancient and semi-natural woodland;
- x Axborough Wood, located 990m to the north of the Site and comprising ancient replanted woodland;
- x Cookley Wood, located 1.1km to the north of the Site and comprising ancient and seminatural woodland;
- x An un-named ancient and semi-natural woodland, located 1.3km to the north-west of the Site;
- x An un-named ancient replanted woodland, located 1.4km to the north-west of the Site; and
- x The Hollies Wood, located 2.4km to the south-west of the Site and comprising ancient and semi-natural woodland.

In addition, thirty one records of ancient trees were returned from the data search with the closest being 690m to the south-west of the Site.

~~Table 3.2: Ancient Woodland Sites within 3km of the Site (Table 3.2)~~

| | | | | |
|----------|--|--|--|--|
| National | Gloucester Coppice Ancient and Semi-Natural | | | |
|----------|--|--|--|--|



5.0 ~~EECD~~ED ES

Severn Estuary SPA and SAC and River Wye SAC

Although the Severn Estuary SPA and SAC designated site is located approximately 70km from the site boundary and the River Wye SAC is located about 40km south-west of the site, the River Stour tributary to this designated is located approximately 190m to the north-west of the site boundary.

It is assessed that the habitats present within the site boundary are not suitable to support any of the qualifying species listed within these designations and therefore there will be no direct impacts on these designated sites.

Although the site is located 190m from the River Stour, located between the two sites is a canal network and two separate areas of broad-leaved woodland. In addition, the River Stour valley is located at a much lower level than the site, therefore is it considered that the River Stour is sufficiently screened from any impacts that the proposed development may cause.

This can be further supported in the Hydrological Assessment Response of the Regulation 25 request of 5 June 2020 (See Appendix 2), which states ' Both the Site



Within the initial Ecological Impact assessment



(*Urtica dioica*), ground ivy, (*Glechoma hederacea*), wood avens, (*Geum urbanum*),
bramble (*Rubus fruticosus*), and rhododendron, (*Rhododendron ponticum*). It is not
known whether the box in this area of the woodland is planted or native. Should it be
native, this is a very rare species in the county. One record of box was returned from
the data search. This was recorded in Gloucester Coppice in 2007 approximately 655m
to the north-west of the site. Due to the uniform size of the dominant sycamore trees
it is suspected that the woodland here has been clear-felled and replanted at some
point in the past. This may be because of a requirement for timber or as a result of
disease.

The north-eastern boundary of the western part of the site is bordered by broad-
leaved semi-natural woodland, with species recorded including wych elm, (*Ulmus*
glabra), small-leaved lime, (*Tilia cordata*), oak, sycamore, hawthorn, ash (*Fraxinus*
excelsior) and broom, (*Cytisus scoparius*).

The south-western boundary of the site is bordered by broad-leaved semi-natural
woodland, with species recorded including small-leaved lime, sycamore, oak, box,
beech, willow, (*Salix sp.*), and elm. Ground flora in this area included herb Robert,
(*Geranium robertianum*), ground ivy, common vetch, (*Vicia sativa*), white dead-nettle,
(*Lamium album*), bramble and nettle.

The woodland that borders the southern boundary of the site was dominated by
common lime, (*Tilia x europaea*) and also included silver birch, sycamore, horse
chestnut, (*Aesculus hippocastanum*), fig, (*Ficus carica*), elm, yew, holly, ivy, cherry
laurel, (*Prunus laurocerasus*), bramble, common nettle, herb Robert and foxglove,
(*Digitalis purpurea*).

Assessment of Boundary Woodland

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6.0 ~~CO5~~

Heatons have been commissioned to undertake a Habitat Regulations Assessment (HRA) assessment to determine whether the proposed extraction at LEA Castle Farm in isolation and in combination with other development would result in likely significant effects upon the Severn Estuary SPA / SAC / Ramsar and River Wye SAC.

The Regulation 25 request states 'the application site is located approximately 70 kilometres north-east of the Severn Estuary SPA and SAC which are European sites (also commonly referred to as Natura 2000 sites), which is also notified as a Ramsar Site (of international importance) and at a national level as the Upper Severn SSSI. The River Wye SAC is located about 40 kilometres south-west of the site. Despite the distance from these European sites, the River Stour is located in close proxim

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