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ASSOCIATES

# Land at Wye Valley, Chepstow

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## Preliminary Ecological Appraisal Report

Final

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## DOCUMENT CONTROL

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## DOCUMENT REVISIONS

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1.0 Draft	Draft Preliminary Ecological Appraisal issued to Client for review	09.05.2022
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## NON-TECHNICAL SUMMARY

<b>Purpose of the Report</b>	To provide an ecological overview of the land at Wye Valley, Chepstow, NP16 6HD. Ecological features are described and mapped, further recommendations are outlined, and mitigation/enhancement measures are provided.
<b>Surveys Undertaken</b>	A Preliminary Ecological Appraisal was undertaken which comprised of a desk study and an extended Phase 1 Habitat survey, mapping habitats and faunal receptors on site and in adjacent areas.
<b>Summary of Results</b>	Data search results show little use of the Site by most protected species other than bats for commuting and foraging. Habitats on-Site consist of poor semi-improved grassland, marshy grassland and plantation woodland, hosting common UK flora species. Very little faunal impact on the Site but with the high probability of use by commuting and foraging bats and reptiles.
<b>Conclusions</b>	Common UK habitats and limited faunal impact on the Site. There is high potential for bat species to be using the Site for foraging and commuting along with the potential for commuting and basking reptiles. The relatively small-scale and temporary nature of the proposed works suggests that no severe impacts will be caused to either the species commuting/foraging habitat, nor the land itself.
<b>Further Surveys Required</b>	Ecological Clerk of Works style roles to oversee protected species searches pre-works, vegetation clearance and light pruning, along with minor soil scraping.
<b>Mitigation</b>	Supervised vegetation clearance works by a suitably qualified ecologist, cutting grassland and vegetation into the woodland to allow any potential reptiles to move away. When using lighting equipment, shrouds and cowls must be used alongside taking care not to illuminate the woodland, River Wye valley and night sky. No vehicles will stray from proposed gravel path, nor set up base anywhere but bare ground as stated in report below. This is to protect as much grassland habitat as possible and to reduce the need to re-instate it to current standards once production is over.
<b>Data Valid Until</b>	Habitats and behaviour of any species present will naturally change over time and, as such, the data has a limited validity period, after which it may not be considered to be an accurate reflection of the current ecological features and will require updating. Therefore, this report and the data enclosed is valid until May 2023.

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# 1 INTRODUCTION

## 1.1 BACKGROUND

Johns Associates Ltd was commissioned by Bad Wolf in April 2022 to undertake a Preliminary Ecological Appraisal (PEA) of the land at Wye Valley, Chepstow, NP16 6HD (hereafter referred to as “the Site”). The Site has a central grid reference of ST 54571 97467, and its location is shown on Figure 1.

An extended Phase 1 survey was conducted on 20<sup>th</sup> April 2022 to assess the current Site conditions, habitats and protected species influence, and to inform a subsequent PEA report of the proposals.

## 1.2 SUMMARY OF PROPOSALS

This PEA report has been produced to support a planning application being submitted by Bad Wolf for temporary features being constructed for the use of a film production set. These features will remain on Site throughout the course of July 2022 through January 2023, but only used for filming sporadically in this time period, after which the Site will be completely returned to its current state. Vehicles and marquees for catering, costume, make-up (and others) intend to set up base on the bare ground clearing at the end of the road into the quarry site.

Proposed set features include; a two-track gravel path running from the road in the north of the Site to the oak tree (Plate 3 below); a 24m diameter gravel footing for the erection of a wooden-clad, scaffold tower and associated wooden pergola-style lattices; light vegetation clearance works and artificial path through woodlands’ (existing) public footpath. All gravel used will originate from the disused quarry to the west of the Site and will be placed on membrane to allow easy removal.

The client intends on filming in multiple areas across the Site, specifically around the lone oak tree situated on the grassland, through the grassland habitat itself and the woodland located on Site. Film sets will be constructed (as mentioned above) and filmed on throughout the day, along with occasional night filming. These will be limited to 3-4 nights per month from July 2022 through January 2023, where lighting will be required to replicate the moonlight.

## 1.3 PURPOSE OF THIS REPORT

This report provides the ecological baseline for the Site, a preliminary assessment of the potential effects of the scheme on ecological receptors (including legally protected species) associated with the Site, and makes recommendations for required avoidance, mitigation and enhancement measures to inform the planning application.

## 1.4 PERSONNEL

Consultant Ecologist Myles Sedgwick BSc (Hons) Qualifying CIEEM of Johns Associates Ltd conducted the Site visit on 20<sup>th</sup> April along with compiling this report. Myles has 4 years’ experience in the ecology sector conducting protected species surveys, ecological clerk of works (ECoW) roles and managing and delivering small-medium scale projects.

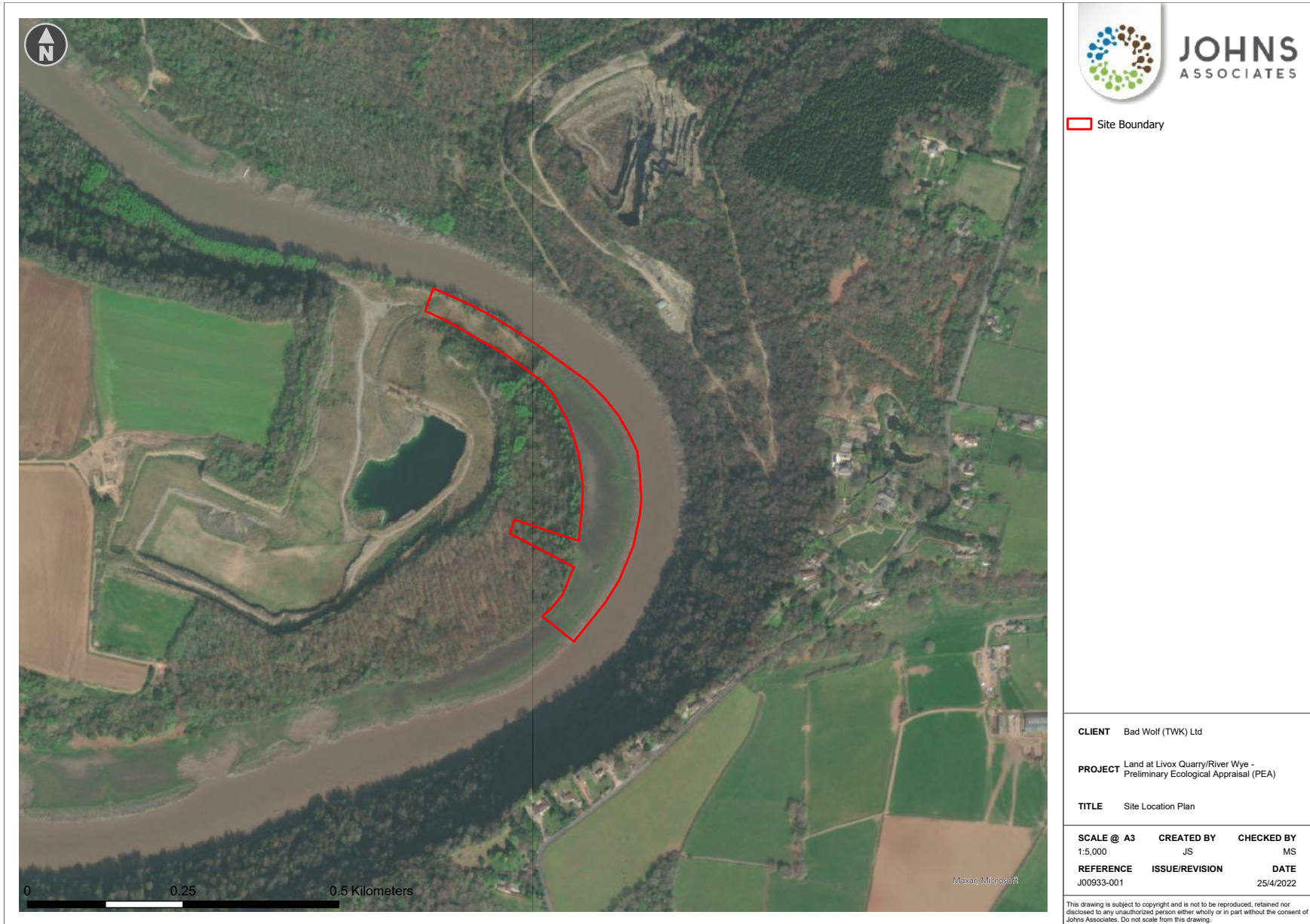
## 1.5 SITE DESCRIPTION AND LOCATION

The Site is approximately 4ha in size, however the works are only affecting a small proportion of the overall Site. The Site is located within the Wye Valley between Tidenham Chase and St Arvans, Monmouthshire and directly to the east of Livox Quarry (now dis-used). The Site is dominated by grassland habitat, along with a broad-leaved/mixed plantation woodland band to the west and the River Wye to the east. There is an oak tree which stands alone in the grassland which

is intended as the focus of the film. The Site is privately owned and was last used for grazing 20 years ago, it is now currently disused.

The areas surrounding the Site include River Wye valley, steep cliff faces and broad-leaved woodlands, along with grazed and arable fields. The River Severn is located 3km to the east.

Figure 1: Site Location





## 2 METHODOLOGY

### 2.1 DESK STUDY

A desk study was undertaken to collate all relevant existing information relating to the Site and its surrounding area. The data was used to inform the scope of the subsequent site survey and to enable a preliminary appraisal of the likely effects of the proposed activities on any sites, habitats or species of conservation interest to be carried out.

Due to the Site lying near the border to England and Wales, information requests were submitted to both the Southeast Wales Biodiversity Records Centre (SEWBRC) and Gloucester Centre for Environmental Records (GCER) for notable and protected species within a 2km radius of the Site.

In addition to the local records centre data, the following websites were also consulted:

- Multi Agency Geographic Information for the Countryside (MAGIC) website. Records and citations within a 5km buffer for designated sites, priority habitats and EPS licences for notable species, including a 500m buffer radius for GCN and GCN ponds. Search made on 21 April 2022.
- Natural Resources Wales website. Priority habitats scanned in relation to Welsh perimeter of Site. Search made on 21 April 2022.
- Google Maps ([www.maps.google.com](http://www.maps.google.com)) to identify the wider context of the Site.

### 2.2 FIELD SURVEY

An extended Phase 1 Habitat survey of the Site was undertaken on 20<sup>th</sup> April 2022, with the weather being bright and dry. This survey was completed in accordance with Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and BS42020:2013 Biodiversity - Code of practice for planning and development (British Standards Institute, 2013).

#### 2.2.1 Habitats

The on-Site habitats were classified following the standardised system for classifying and mapping British Habitats using the Joint Nature Conservancy Council (Joint Nature Conservancy Council, 2010), Handbook for Phase 1 Habitat survey – a technique for environmental audit. An annotated habitat map together with descriptions of the recorded habitat types was produced, which was subsequently digitized using a geographical information system (ArcGIS). The survey also included identification of any non-native invasive plant species. Flora taxonomy follows the nomenclature detailed in New Flora of the British Isles (4th Edition) (Stace C., 2019).

#### 2.2.2 Species

The survey was 'extended' to assess the suitability of the Site and immediately adjacent habitats to support legally protected and/or notable species, including (but not limited to) plants, badger, bats, dormouse, amphibians, reptiles and breeding birds. This included recording visible signs of species presence and/or features that may indicate likely presence. Hedgerow/corridors were assessed for likely value for dormice, trees on Site were assessed for their suitability for roosting bats and on-Site water bodies were assessed for suitability for great crested newt. A search for Invasive Non-Native Species e.g. Japanese knotweed *Reynoutria japonica* was conducted of the Site and the immediate surrounding area.

## 3 RESULTS

### 3.1 DESK STUDY

#### 3.1.1 Designated Sites

##### International

There are three statutory designated sites of international importance within 2km of the Site, all three have designations in both England and Wales. Details of these can be found below.

##### River Wye SAC

The River Wye SAC spans an approximate 2,148ha on the border of England and Wales, and is made up of varying habitats – most predominantly inland water bodies (52.5%). This SAC lies directly adjacent to the eastern boundary of the Site.

This SAC is designated for the following features:

Annex I habitats that are the primary reason for the selection of the SAC:

- Water courses of plain to montane levels with the sub-type 2 *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation species.

Annex I habitats present as a qualifying feature, but not a primary reason for selection of the SAC:

- Transition mires and quaking bogs

Annex II species that are a primary reason for selection of the SAC include:

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

##### Wye Valley & Forest of Dean Bat SAC

This SAC is approximately 145ha in size and hosts two main habitat types, broad-leaved, deciduous woodland (26.2%) and 'other land' including towns, villages, roads, waste places, mines and industrial sites (73.8%). The nearest part of the SAC is Caerwood and Ashberry Goose House, located 770m south of the Site boundary, on the plateau of the valley.

There are no Annex I habitats which are the reason for this designation, only Annex II species. These being:

- Lesser horseshoe bat *Rhinolophus hipposideros*
- Greater horseshoe bat *Rhinolophus ferrumequinum*

The complex and varying habitats which make up the bat SAC between England and Wales contain the greatest concentration of lesser horseshoe bats (LHS) in the UK, due to great breeding potential and hosting maternity roosts. Both species are believed to roost and hibernate in the many disused mines in the forest areas.

#### Wye Valley Woodland SAC

This woodland SAC is approximately 913ha in size and is predominantly made up of broad-leaved, deciduous woodland (87%). This SAC sits on the opposite bank of the River Wye to the Site, <100m away and loops around the outer edge of the river’s meander south towards Chepstow.

This SAC is designated for the following features:

Annex I habitats that are the primary reason for the selection of the SAC:

- *Asperulo-Fagetum* beech forests
- *Tilio-Acerion* forests of slopes, screes and ravines (Priority feature)
- *Taxus baccata* woods of the British Isles (Priority feature)

Annex II species present as a qualifying feature, but not a primary reason for SAC selection:

- Lesser horseshoe bat

#### National

There are seven statutory sites of national importance within 2km of the Site boundary, with designations spanning both England and Wales. Details can be found in Table 1 below.

Table 1: Sites of National Importance within 2km of the Site

Name of Site	Size (Hectares)	Reason for Designation	Distance and Location from Site Boundary
River Wye SSSI	1404.8	The River Wye SSSI acts as an important wildlife corridor, an essential migration route and a key breeding area for many nationally and internationally important species. The river’s overall diversity is a product of its underlying geology, soil type, adjacent land use and near natural fluvio-geomorphological regime.	Directly adjacent to east
Lower Wye Gorge SSSI	66.45	The SSSI is designated for its varying woodland types, mostly consisting of ancient, semi-natural woodland located on the steep eastern valley of the River Wye, as well as varied and species-rich areas of limestone gorge woodland, with floristic similarities to other gorge sites in south west England,	<100m east on opposite bank of River Wye
Shorn Cliff and Caswell Woods SSSI	68.65	This SSSI covers the carboniferous limestone and old red sandstone of the eastern slopes of the lower Wye Gorge and contain an exceptional number of semi-natural woodland stand types and several rare or uncommon plant species.	630m northwest on opposite bank of River Wye
Caerwood and Ashberry Goose House SSSI	0.01	This SSSI lies within the Forest of Dean and Wye Valley and is notified for its lesser and greater	770m south on valley plateau

		horseshoe populations. It is one of three sites in Gloucestershire known to host nationally important LHS breeding roosts.	
Blackcliff – Wyndcliff SSSI	122.45	This site is the largest area of SSSI within the River Wye SAC area, with key attributes for its SSSI designation being its semi-natural, broad-leaved woodland and hosting protected species such as lesser horseshoe bat and hazel dormice <i>Muscardinus avellanarius</i> .	900m west
Pierce, Alcove and Piercefield Woods SSSI	78.66	This SSSI site hosts semi-natural, broad-leaved woodland habitats home to 750-year-old yew trees and lesser horseshoe bats.	1km southwest
Poor’s Allotment SSSI	28.87	This complex SSSI site overlies some of the carboniferous rocks of the Forest of Dean and mainly consists of unimproved acidic grassland, lowland heath and dense bracken habitats.	1.63km northeast

### 3.1.2 European Protected Species (EPS) Licences

Eight European Protected Species Licence applications have been submitted for bats for sites within 2km of the Site in recent years and nine great crested newt class survey licence returns. Details can be found in Table 2 and 3 below.

Table 2: EPS Licence Submissions within 2km of the Site

Species	Licence Type	Licence Dates	Distance and Location from Site Boundary
Brown long-eared, lesser horseshoe, whiskered bat	N/A	05/04/2019 – 31/08/2019	600m southeast
Brown long-eared, lesser horseshoe, whiskered bat	N/A	24/07/2019 – 30/09/2019	600m southeast
Brown long-eared, lesser horseshoe, whiskered bat	Damage of resting place	24/10/2019 – 15/11/2019	600m southeast
Brown long-eared, lesser horseshoe, whiskered bat	Damage of resting place	28/10/2019 – 15/11/2019	600m southeast
Brown long-eared, greater horseshoe, lesser horseshoe, whiskered bat	Damage of resting place	17/08/2020 – 30/09/2030	600m southeast
Brown long-eared, greater horseshoe, lesser horseshoe, whiskered bat	Damage of resting place	04/09/2020 – 30/09/2030	600m southeast
Common pipistrelle, soprano pipistrelle	Destruction of resting place	16/11/2020 – 28/03/2027	760m south
Lesser horseshoe	Destruction of resting place	15/06/2016 – 14/06/2021	1.8km east

Table 3: GCN Class Survey Licence Returns within 2km of the Site

GCN Present	Survey Date	Grid Reference	Distance and Location from Site Boundary
Y	26/04/2016	ST554987	1.36km northeast
Y	27/04/2018	ST553990	1.52km northeast
Y	11/04/2017	ST553990	1.52km northeast
Y	13/05/2016	ST553991	1.63km northeast
Y	11/04/2017	ST553991	1.63km northeast
Y	23/05/2014	ST553991	1.63km northeast

Y	10/06/2016	ST559988	1.76km northeast
Y	11/04/2017	ST557991	1.84km northeast
Y	27/04/2018	ST557991	1.84km northeast

### 3.1.3 SEWBRC Data Search

Table 4 below displays the results returned by SEWBRC for protected and notable species within 2km of the Site boundary, in the past 10 years.

Table 4: SEWBRC Results

Species/Groups	Details of records, Distance and Location from Site
Amphibians	No records of amphibians were returned.
Badger	No records of badger were returned.
Bats	616 bat records have been returned in the data search spanning the 2km buffer zone of the Site. Species recorded within the Site boundary include Daubenton's, whiskered, long-eared, lesser horseshoe bat, greater horseshoe.
Birds	13 bird records have been returned, including species such as dunnoek, peregrine, house sparrow, song thrush, cuckoo.
Hazel dormouse	A small population of dormice (5 individuals) have resided in the woodlands 1.8km west/southwest of the Site.
Invertebrates	A number of invertebrates listed within the LBAP notable species were recorded, more notably within the quarry site to the west. Species include ghost moth, dingy skipper, grizzled skipper and blood-vein.
Reptiles	No records of reptile were returned.
Other Mammals	No records of other mammals (beaver, otter, water vole) were returned.
White claw crayfish	No records of white claw crayfish were returned.

### 3.1.4 GCER Data Search

Table 5 below displays the results returned by GCER for protected and notable species within 2km of the Site Boundary, in the past 10 years. Due to the data search being England side of the River Wye, only species which will not see the river as a major barrier are included in the table below.

Table 5: GCER Results

Species/Groups	Details of records, Distance and Location from Site
Bats	9 bat species have been recorded including, common pipistrelle, soprano pipistrelle, noctule, serotine, Myotis spp. brown long-eared bat, lesser and greater horseshoe bat. The closest species recorded within the Wye valley immediately east of Site include; whiskered/Brandt's bat and greater horseshoe.
Birds	200+ records for birds of multiple species including peregrine, swift, house martin, lapwing, skylark and linnet.
Invertebrates	UK priority species and NERC S.41 species have been recorded, white ermine, small heath, ghost moth, pretty chalk carpet, white-letter hairstreak, white admiral.
Other mammals	No records of other mammals (beaver, otter, water vole) were returned.
White claw crayfish	No records of white claw crayfish were returned.

## 3.2 FIELD SURVEY

### 3.2.5 Habitats

A total of five habitat types were identified within the Site. A detailed Phase 1 map is contained in Appendix B of this report, showing the habitat types present and their distribution.

#### Poor Semi-Improved Grassland

The dominant habitat on Site was populated by poor semi-improved grassland. The Site was grazed c.2000 and appeared relatively un-managed at the time of survey. Species in this habitat included cock's foot *Dactylis glomerata*, common couch *Elymus repens*, hemlock water dropwort *Oenanthe crocata*, lesser celandine *Ficaria verna*, lady's smock *Cardamine pratensis* and silverweed *Argentina anserina*.

Plate 1: Grassland Habitat and Area Topography



#### Marshy Grassland

A depression in the grassland in the centre of the Site supported marshy grassland habitat as this area stays wetter for longer after periods of rain and/or flooding. Marshy indicator rush and sedge species dominate this habitat, including jointed rush *Juncus articulatus* and pendulous sedge *Carex pendula*. A small area of exposed, swampy earth as seen in Plate 2 below, was located in the centre of this depression.

Plate 2: Marshy Grassland Habitat



### Broad-leaved/Mixed Plantation Woodland

There was a broad-leaved plantation and mixed plantation woodland directly to the west of the Site and partially within the potential works boundary, divided by the now disused public footpath. Named Liveoaks Grove and approximately 12.4ha in size, this plantation was dominated by beech *Fagus sylvatica* and hazel *Corylus avellana* with a mixed plantation of European larch *Larix decidua* and ash *Fraxinus excelsior* in its northern area. The understorey was relatively shaded and undeveloped with ground level species such as bluebell *Hyacinthoides non-scripta*, wild garlic *Allium ursinum*, dog's mercury *Mercurialis perennis*, wood anemone *Anemonoides nemorosa*, hart's tongue fern *Asplenium scolopendrium*, lords and ladies *Arum maculatum* and male fern *Dryopteris filix-mas*.

Natural Resource Wales mapping software states the woodland as being a restored ancient woodland site.

Plate 3: Woodland Path and Understorey



## Bare ground

Plate 4 below displays an area of bare ground located between the road into the Quarry site and the grassland. This bare ground area appeared recently cleared and levelled and was approximately 20x30m in size.

Plate 4: Bare Ground Area before Field Entrance



## Scrub

There was a moderately sized patch of scrub located on the edge of the woodland, where the disused footpath reaches the grassland, as seen in Plate 5 below. Dominant species here included bramble *Rubus fruticosus* and nettle *Urtica dioica*.

Plate 5: Patch of Scrub on Woodland Edge





### 3.2.6 Species and Species Groups

#### Amphibians

There are 4 known ponds/waterbodies within 500m of the Site boundary, three of those however are on the eastern side of the River Wye, a substantial barrier to commuting great crested newt (GCN) *Triturus cristatus*. The fourth waterbody was the lagoon within the Livox Quarry site, directly west of the Site boundary. Although the Site is within close proximity to the lagoon, the eastern wall of the disused quarry, approximately 20m in height, acts as a substantial barrier for any potential commuting GCN, alongside this, no GCN have been recorded using this waterbody.

GCN have been scoped out for the rest of this report.

#### Badgers

No badger field signs (i.e. latrines, fence push-ups, sett entrances) were seen on Site during the survey.

#### Bats

The dark, undisturbed nature of the section of the Wye Valley provides high suitability for commuting, foraging bat species. The different habitats on/near the Site - river, grassland, woodland provide ample opportunities for a range of bats' usual foraging habits.

During the Site walkover, trees on Site were inspected from ground level using high powered binoculars to assess the potential roosting features (PRFs) for bats, such as rot holes, woodpecker holes, hazard beam cracks. The lone oak tree (Plate 3) was found to be hollow inside, with rot holes being completely exposed – Plate 4. No other PRFs were identified on the tree. No trees along the eastern edge of the plantation woodland were assessed as having suitable PRFs for bats, however ivy cover on most of the trees obscured complete vision over the trees' surface.

Comments and potential mitigation measures for bats have been made in Section 4.3 below

Plate 6: Oak Tree in Central Site Location



Plate 7: Oak Tree Hollow Internals



### Birds

The Site offered moderate suitability for common UK bird species due to the woodland and scrub habitat providing nesting and foraging opportunities. Species such as robin *Ericathus rubecula*, blue tit *Cyanistes caeruleus*, great tit *Parus major*, wood pigeon *Columba palumbus*, chaffinch *Fringilla coelebs* and wren *Troglodytes troglodytes* were either seen or heard during the survey.

### Dormice

The woodland habitat on Site offered low suitability for foraging and nesting dormice due to the undisturbed nature of the woodland body and connectivity to the wider woodland habitat where known populations of dormice reside. However, there is not a diverse understorey of suitable coppice, bramble, shrubs to allow optimum conditions for dormice. No field signs for dormice were seen during the survey. Although the proposed works throughout the woodland will be minor, comments have been made in Section 4.4 to ensure no potential offences are caused.

### Invertebrates

Due to the grass, scrub and trees species present on Site, it is assumed that common UK invertebrate species will use the Site for foraging and commuting. No specially protected invertebrates were reported in either data search.

### Reptiles

The grassland habitat on Site offers moderate suitability for reptiles such as grass snake *Natrix natrix* and/or slow worm *Anguis fragilis* due to it being tussocky in areas. However, the Site is quite wet underfoot with areas of bog, suggesting that, if present, any reptiles would stick to the grassland/scrub band that immediately hugs the woodland strip to the west of the Site for basking/nesting. No reptiles, nor field signs were seen during the survey. Comments and mitigation measures have been made in Section 4.5 below.

## Other Mammals

Although the River Wye and Wye valley is known for hosting otter *Lutra lutra*, no field signs were spotted on Site during the survey, nor along the opposing bank of the Wye. Given the nature of the proposed works, impacts to otter and water vole have been scoped out of the assessment and no further reference to these species is made.

There were field signs for field vole *Microtus agrestis*, in the form of burrow entrances, gnawed vegetation and droppings along the Wye bank and into the drainage ditches running through the grassland habitat.

## White-clawed Crayfish

Whilst this species is a primary feature of the river Wye SAC, the species is typically considered to be associated with tributaries rather than the Wye itself. Due to the nature of the proposed works, white-clawed crayfish have been scoped out of this report.

## 4 ECOLOGICAL ASSESSMENT, CONSTRAINTS AND OPPORTUNITIES

### 4.1 DESIGNATED SITES

Given the minor and temporary nature of the proposed works, no impact is predicted to occur to the SACs or SSSIs in the area. There is no land take from the adjacent SAC and such minor and temporary works using good practice measures like fuel spill kits and sensitive lighting are unlikely to have any impact to SAC habitats or species.

### 4.2 HABITATS

Given the habitats present and the minor and temporary nature of the proposed works, no significant impacts are predicted to habitats.

### 4.3 BATS

Although there is no roosting potential in any of the trees within or adjacent to the Site boundary the dark, relatively untouched river valley suggests there is high potential for commuting and foraging bats to be using the Site. The two data searches confirm high numbers of bats in the area and known roosting locations within 5km, including the Annex II species lesser and greater horseshoe bat.

Due to the nature of the proposed works, production lighting will be used to illuminate the temporary set on Site to re-create moonlight style conditions. It is recommended that cowls, shrouds and filters are used, and that all lighting is angled away from all areas not needed for filming purposes – including the woodland, River Wye valley, large expanses of sky. With sufficient tilting of lighting away from the dark valley habitats, light-spill will be reduced greatly, along with the infrequent filming (3-4 nights per month), the impact of this lighting on surrounding commuting habitat should be negligible.

### 4.4 DORMICE

Although the plantation woodland habitat on Site offers low potential for foraging and nesting dormice, the woodland habitat to the west has known records of a small population, meaning they cannot be ruled out as using the Site for commuting purposes.

The proposed works within the woodland include minor trimming of small branches overhanging the disused woodland public footpath, as well as minor ground clearance works (raking) to allow for an artificial pathway to be created on top of membrane. An area of scrub at the edge of the woodland habitat will need to be cleared to allow for a clear path to the oak tree. It is advised that a suitably qualified ecologist is present on Site during the vegetation clearance works to conduct a protected species check of the tree and scrub habitat before removal to ensure no potential nesting dormice, birds, other mammals are present.

### 4.5 REPTILES

While the grassland habitat on Site was damp underfoot in the marshy areas, it was dry and tussocky in other parts, offering moderate suitability for reptiles to be using the Site for commuting and basking. Data searches show no reptiles have been recorded using the Site, however reptile surveys undertaken in July and August 2018 by BSG Ecology found two juvenile grass snake using the quarry site to the west.

Due to the untouched grassland habitat and potential for commuting reptiles, a precautionary approach should be undertaken to reduce the risk of an offence. It is advised that a suitably qualified ecologist should be on Site during the vegetation clearance works to oversee a phased cutting of the grassland where the proposed track and tower footing is to be installed, to be on hand for any potential reptiles using the Site during the active reptile period (March to October). Cutting works will be in the direction of the woodland to encourage any potential reptiles present to move into more suitable habitat and green corridors on the fringes of the Site. Cut vegetation should be piled in non-disturbed areas along the woodland edge to create artificial refugia.

#### 4.6 GENERAL WORKS

General production vehicles, catering and marquees should be set up on bare ground areas only, specifically the area mentioned in Section 3.2.5 – Plate 4. This area is already cleared and levelled and will reduce the need to clear any further vegetation and/or spill onto grassland habitats. It is recommended that fuel spill kits are always on standby to prevent any potential leachate from vehicles into the river Wye SAC or on-Site habitats. Lighting in this basecamp area should be kept to an absolute minimum to prevent any light spill into the surrounding habitat.

## 5 CONCLUSIONS

The Site comprises common UK habitats with common flora species and a lack of notable faunal presence on Site during the survey. However, due to the dark, undisturbed nature of the Wye valley and known bat activity in the area (from data searches and local surveys) there is high potential for foraging and commuting bats to be using the Site, along with potential for commuting and basking reptiles within the grassland.

Recommendations for avoiding potential offences being committed in relation to bats, dormice and reptiles have been included in Section 4 of this report and should be incorporated into all phases throughout the construction/filming periods.

All recommendations have been made with reference to current best practice guidelines and legislation.

## APPENDIX A – LEGISLATION AND PLANNING POLICY

### LEGISLATION

Many species of animal and plant receive some degree of legal protection. For the purposes of this report, legal protection refers to: species included on Annex II of the Habitats Directive 1992 (Council of European Communities, 22/07/1992) , Schedules 2 and 5 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 (as amended) , excluding species that are only protected in relation to their sale (see Section 9[5] and 13[2]) reflecting the fact that the proposed development does not include any proposals relating to the sale of species.

Legal offences associated with species listed on Schedule 2 of the Conservation of Habitats and Species Regulations and Schedule 5 of the Wildlife and Countryside Act in England and Wales include inter alia:

- Deliberate capture, injury or killing of animals or taking or destroying their eggs;
- Deliberately disturb animals in a way that would significantly affect their local distribution or abundance, or affect their ability to survive, breed or rear young;
- Intentional or reckless disturbance of an animal in its place of shelter or protection;
- Damaging or destroying a resting place or breeding site;
- Intentionally or recklessly obstructing access to a place of shelter or protection; and
- Possess, control, transport, sell, exchange or offer for sale/exchange any live or dead animal or any part of an animal.

Relevant species listed on these Schedules that are potentially associated with this Site include bats and reptile species (e.g. slow worm). All species of bat receive full protection from all legal offences listed above. Common reptile species receive partial protection under the Wildlife and Countryside Act in that they are protected from killing and injury only.

All species of wild bird are protected under the Wildlife and Countryside Act (1981) (as amended) from killing or injury. In addition, it is an offence to take or damage/ destroy their eggs and to damage or destroy a nest whilst it is in use. Species listed on Schedule 1 (such as barn owl) receive additional protection in that it is illegal to disturb birds or their young whilst occupying, or near to, an active nest.

A number of wild plants, habitats and animals (including reptiles, hedgehog and most species of bat) are also included within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 which lists flora, fauna and habitats considered by the Secretary of State to be of principal importance for conserving biodiversity. The publication of the "England Biodiversity List" satisfies the requirements of Section 41 of the NERC Act 2006 for the conservation of biodiversity. Section 40 of the NERC Act 2006 requires public bodies, including local planning authorities, to have regard for the conservation of biodiversity in England, when carrying out their normal functions.

Badgers are protected under the Protection of Badgers Act 1992 (UK Government, 1992) which makes it an offence to willfully kill, injure or take (or attempt to kill, injure or take) a badger; or to disturb badgers whilst occupying their setts.

## NATIONAL PLANNING POLICY

### Planning Policy Wales 2021

Development proposals must consider the need to:

- Support the conservation of biodiversity, in particular the conservation of wildlife and habitats;
- Ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;
- Ensure statutorily and non-statutorily designated sites are properly protected and managed;
- Safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and
- Secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks.

### National Policy Framework

To comply with Planning Policy Wales (2018), section 6 and Technical Advice Note (TAN) 5, biodiversity considerations must be taken into account in determining planning applications. Planning permission should be refused if the proposals will result in adverse harm to wildlife that cannot be overcome by adequate mitigation and compensation measures.

## LOCAL PLANNING POLICY

The Monmouthshire Local Biodiversity Action Plan 2005 sets out the policies and proposals to guide all development within the area; the following policies are of note regarding ecological issues and safeguarding biodiversity

The overall objectives of the LBAP are to:

- Protect, conserve and where possible enhance Biodiversity in Monmouthshire.
- Protect, conserve and where possible enhance the status of key habitats and species in Monmouthshire (See Generic actions for Species and Habitats and individual Action Plans for more specific objectives (Part B)).
- Increase public awareness of Biodiversity issues in Monmouthshire.
- Continue a partnership approach to the production, implementation and reporting of the Monmouthshire LBAP.
- Make links to other relevant plans and strategies in the UK, Wales, Greater Gwent and Monmouthshire.
- Safeguard, conserve and enhance sites that are valuable for wildlife including Sites of Special Scientific Interest (SSSIs), Local Nature Reserves (LNRs) and Sites of Importance for Nature Conservation (SINCs).
- Provide Supplementary Planning Guidance to the Unitary Development Plan
- Ensure reliable, up to date and complete information is available on the biological resources in Monmouthshire.
- Fulfil the national Biodiversity reporting requirements through BARS.



# APPENDIX B – PHASE 1 HABITAT SURVEY MAP & TARGET NOTES

