

[REDACTED]

From: Ivon Blumer [REDACTED]
Sent: 14 May 2019 14:16
To: Andrew Wood
Cc: Planning.Responses; Planning; Denise Simpson
Subject: Re: M/25/19/PL 27 Central Drive, amended drawings for substitution into application

Dear Andrew

Please find attached the following documents in support of the above planning application M/25/19/PL:

- 1) Revised Flood Risk Assessment Rev A, dealing with the points raised by the EA.
- 2) Ecology Report, no issues reported.

This I think brings every thing up to date, subject to the acceptance of the above documents.

If you need an extension of time to clear the above please let me know.

Kind regards

Ivon

Ivon Blumer Architects Ltd



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[REDACTED]

The Studio, 41 West Drive, Aldwick Bay, PO21 4LZ

On 8 May 2019, at 14:22, Andrew Wood <Andrew.Wood@arun.gov.uk> wrote:

Ivan,

Should all be good to go once the Environment Agency issues are resolved subject to the final opinion of my line management team.

Thank you,

Andrew Wood MRTPI

Andrew Wood MRTPI | Senior Planning Officer, Planning Department, Arun District Council |
Location: 1st Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF
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Save the environment - think before you print.

From: Ivon Blumer [REDACTED]
Sent: 08 May 2019 14:13
To: Andrew Wood
Cc: Planning.Responses; Planning; Denise Simpson
Subject: M/25/19/PL 27 Central Drive, amended drawings for substitution into application

Dear Richard

Many thanks for our meeting yesterday, as agreed please find attached a set of drawings amended to remove the direct link (door ground and first floors) between our proposed replacement dwelling and No 25.

I trust this will allow the application to no go forward for approval, subject to the EA lifting their objection. I am currently revising the FRA to answer the EA's queries and will issue by the end of week.

Many thanks.

Kind regards

Ivon

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<image001.jpg>

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Flood Risk Access Statement

Proposed New Residential Development

For Mrs Denise Simpson

At

27 Central Drive
Elmer
PO22 7TT



IVON BLUMER ARCHITECTS

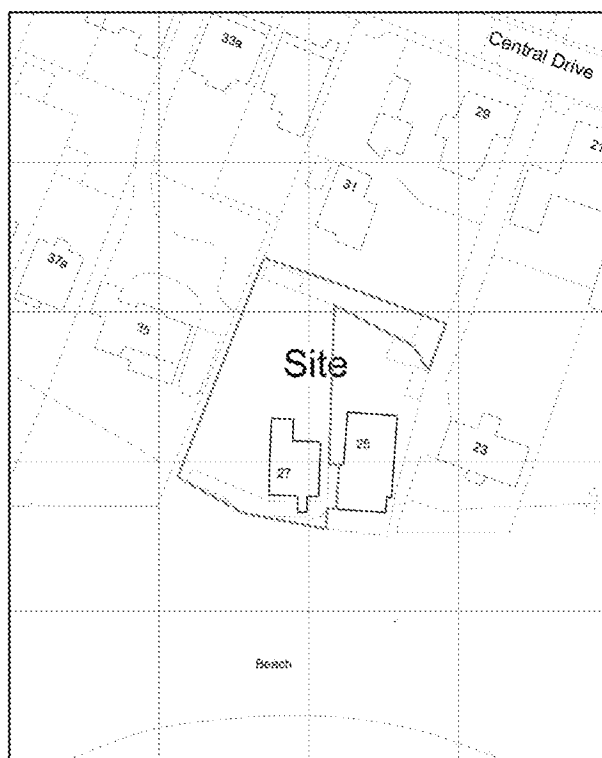
Flood Risk Access Statement

INTRODUCTION

The proposed development is for demolition of the existing sub-standard single storey house, and the construction of a specially adapted 2 bedroom detached house for the sole use of the applicant who is elderly and disabled. The applicant wishes to connect the new dwelling to her existing property at No 25. The house has been designed with the main open plan accommodation located at first floor level, with self-contained accommodation for occasional use by the applicant's carer on the ground floor.

Location

The site is a residential site located on the sea front at No 27 Central Drive, Elmer.



Location Plan

Assessment of Physical Context and Flood Risk

The site (photo below) is located on the sea front at 27 Central Drive, Elmer, West Sussex and is currently owned by the applicant. The applicant also owns the adjacent property at No 25 Central Drive. The property is currently a private residence and was built in the mid 1930's, with a detached garage. The site is accessed from a shared private drive. The site is flat and is approximately 1,000 sq. m in size. There are no notable trees on the site. The site is mainly laid to lawn with shrub borders.

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Topographical site survey (see Appendix A) shows that the existing bungalow has a finished floor level of 4.11 AOD, with typical site levels across the site of 4.00 AOD. The site is protected from the foreshore by a substantial raised bank and shingle beach. The southern boundary of the site is raised to a level of 5.00 AOD by a stone wall, rising to a continuous foreshore bank along the Elmer Beach Estate frontage at a level of between 5.52 & 5.84 m, to a depth of 10 – 15 m. The site is further protected from wave action by the offshore rock islands.

Given the predicted sea level rises due to climate change the undefended site is at high risk during it's lifetime of flooding during an extreme high tide event. However, allowing for the presence of the existing banking between the site and the foreshore and the offshore islands, would reduce the risk to low.

Climate change in the lifetime of the development is predicted to increase peak rainfall by up to 40% compared with today. This is likely to increase the risk of surface water flooding on the site.

Fluvial flooding is not a risk to the site.

In the event of the site flooding this could have an impact on the resident's safety at the time, in order to safeguard their position they will have to take refuge at a level above the maximum predicted storm/flood level.



Rear Garden

Planning Policy & History

Planning History

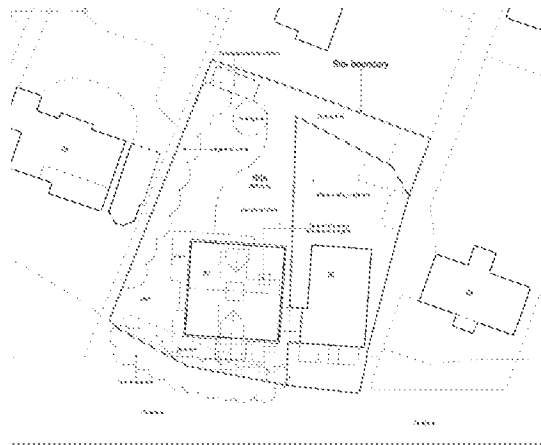
M/67/16/PL	1 Replacement Dwelling	Approved 5/10/16
M/13/16/PL	1 Replacement dwelling	Refused 21/04/16

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Flood Risk Access Statement

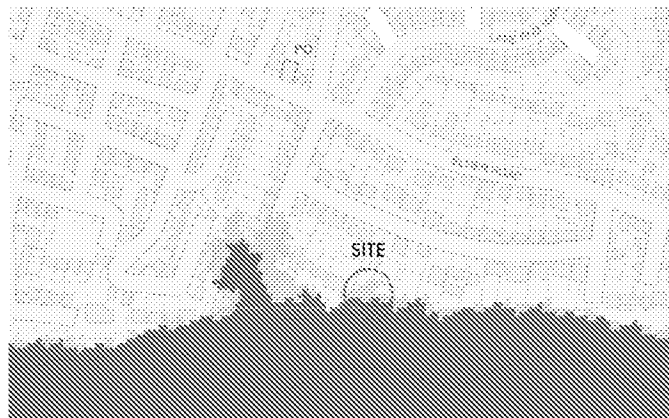
Site Layout

The proposed new property is to be positioned in a similar location as the adjacent property No 25 on the southern boundary of the site taking advantage of the exceptional sea views, as shown on the site layout below. The footprint is in the same location as the existing property.



Site Plan

Flood Map



The site would be in flood zone 2 & 3.

POTENTIAL FLOOD HASZARDS

- 1 Flooding from the sea.
- 2 Flooding from rivers, not applicable.
- 3 Flooding from groundwater, risk is considered low.
- 4 Flooding from sewers, not applicable.
- 5 Flooding from the land, the risk is considered low.

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Proposed Floor Levels to Mitigate The Risk of Flooding

To minimise the risk from flooding the primary habitable accommodation is to be located at first floor level, with some ancillary accommodation at ground floor level which will be used on a limited basis.

The EA's flood model indicates a 0.54% AEP (1 in 200 year event) undefended flood levels within the site in the year 2115 lie in the region of 4.94 AOD. The proposed first floor accommodation will be at a level of 7.00 min AOD, offering a freeboard of 2.0 m above the undefended tidal flood.

The ground floor level will be set at 4.41 m AOD, typically 400 mm above the existing site level. As this is below the predicted undefended tidal flood level by 550 mm, it is proposed that the first 600 mm of construction will be to a standard capable of withstanding the potential risk of flooding, with proprietary flood protection (Floodgate System) to all door openings. The habitable accommodation at this level is limited to overnight use by the owner's carer.

In the event of a flood, refuge would be taken at first floor, with the residents waiting out the storm event which would probably last no longer than 12 hours.

Whilst this report appraises the worst case it may be noted that the defended site flood levels are in the region of 4.50 AOD, giving an onsite predicted flood level of 400 mm.

Surface Water Runoff Assessment

It is proposed that all non-porous external surfaces and roof areas in this development will be designed to prevent surface water flooding above ground level during a 1 in 100 year storm event with an additional allowance of plus 40% for climate change to the year 2115.

Surface water will be disposed of by adequately sized cellular soakaways, as approved by Arun District Building Control.

Outline Foul Water Strategy

A preliminary assessment based on British Water's Cop flows and loads -3 indicates average dry weather flow would be in the order of 0.02 l/s. Such flows are considered low and would be discharged into the local foul water sewer in Central Drive

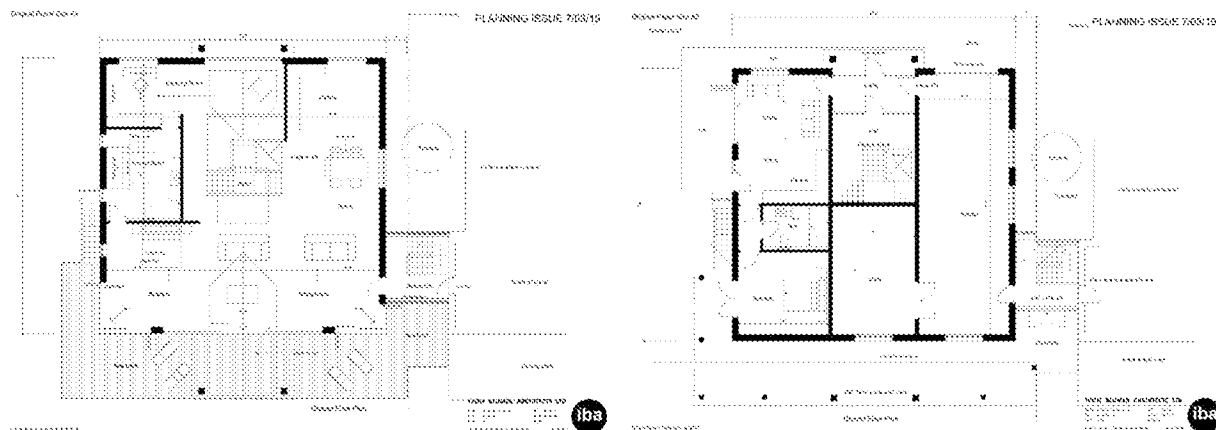
Proposed Floor Plans

As with the previous application it would be proposed that the new floor level would be set 300 mm above the existing finished floor level of the existing house.

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Flood Risk Access Statement

The main accommodation is located on the first floor, see floor plans below.



Emergency Flood Planning

The use of the flood protection measures (Floodgate devices) and proposed action in the event of a flood will be documented in The Health and Safety Manual, provided to the owner by the Principle CDM designer.

Conclusion

As the main first floor accommodation is set at 7.00 m AOD, well above the predicted undefended tidal flood level of 4.95, and that the secondary accommodation on the ground floor is set 300 mm above the existing FFL of the existing house at 4.41 AOD, with flood protection measures, the proposal is considered reasonably safe from flooding.

The site is defended by a substantial shingle bank on the foreshore, well above the existing site level, which will considerably reduce the risk of flooding.

Refuge at the first floor level provides adequate safety for residents in a storm/flooding event.

Given the proximity and extent of the undefended flood plain to the proposal the most likely course of action to be taken by residents during such an event would be to sit out the flood at first floor level, which would be expected to last no longer than 12 hours.

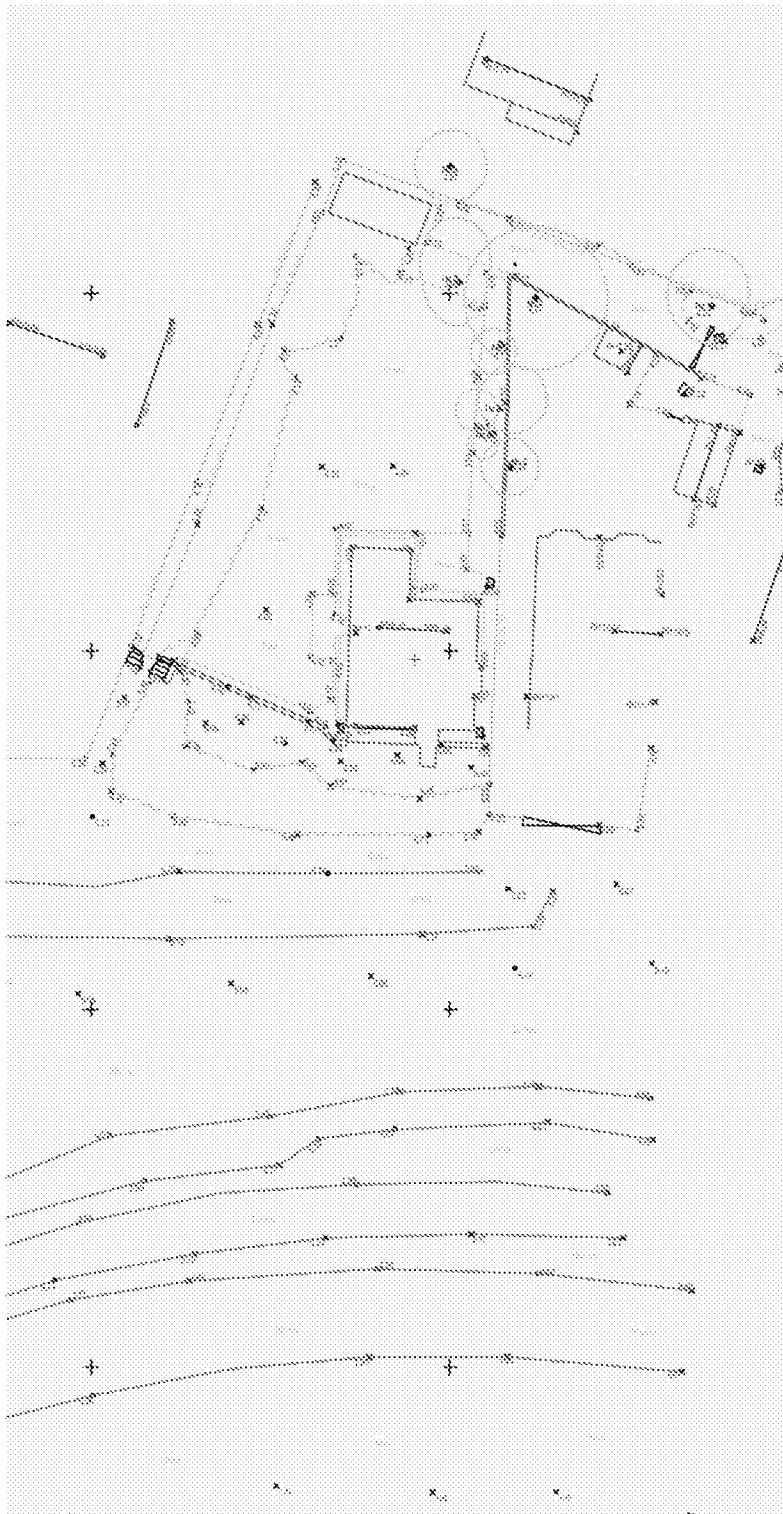
All site surface water will be managed on site to accommodate the worst case M100 + 40% storm event.

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Flood Risk Access Statement

Appendix A

Site Survey



Ivon Blumer Architects Ltd



ECOLOGICAL IMPACT ASSESSMENT

27 Central Drive, Elmer, Bognor Regis, PO22 7TT

On Behalf of: Ivon Blumer Architects Ltd

Planning Issue

Prepared by	CO
Checked by	GS
Date	14th May 2019
Project Reference	LLD1709
Revision	00

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Table No. 02 – Non-Statutory Protected Sites

Table No. 03 – Species List

APPENDICES:

Appendix A – Site Photographs



SUMMARY

Lizard Landscape Design and Ecology has been commissioned to undertake an Ecological Impact Assessment of land proposed for development at 27 Central Drive, Elmer Beach Estate (*Grid Reference: SU 981 000– hereafter referred to as ‘the site’*).

A site visit was undertaken on 03rd May 2019 by Catherine O’Reilly MCIEEM (*Senior Ecologist, Lizard Landscape Design & Ecology*), to appraise the existing ecological resource within the land and the surrounding area. A full Ecological Impact Assessment was then undertaken using this baseline data.

The site is formed of existing building surrounded by hard / bare ground, shrubs and amenity grassland. The site itself is of **low ecological value** with no habitats or flora of interest noted.

The site was assessed as being unsuitable for the majority of protected species including badger, dormouse, reptile, amphibian and water vole; no habitat for these species exists on site. The site was found to be of negligible value to foraging and roosting bats, however nesting birds are likely to be present within the surrounding shrubs and trees while measures will be taken to ensure the protection of the adjacent Elmer Rocks SNCI. A series of mitigation / avoidance measures have been devised to ensure the development does not contravene any UK or European legislation.

Once avoidance and mitigation measures have been taken into account, the impacts of the planned development upon biodiversity will be **negligible, non-significant** with proposed ecological enhancements resulting in **no net loss** of biodiversity in line with national planning policy guidance.

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1.0 INTRODUCTION

- 1.1 Lizard Landscape Design and Ecology has been commissioned to undertake an Ecological Impact Assessment of land proposed for development at 27 Central Drive, Elmer Beach Estate (*Grid Reference: SU 981 000– hereafter referred to as 'the site'*).
- 1.2 A Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment of the site was undertaken on 03rd May 2019, to appraise the existing ecological resource within the land and the surrounding area. A full Ecological Impact Assessment was then undertaken using this baseline data.
- 1.3 A summary of the results of this survey, potential impacts of the proposals, and details of avoidance, mitigation and compensation measures have been detailed within this report. This report has been prepared by Catherine O'Reilly (*MCIEEM, Senior Ecologist; Lizard Landscape Design and Ecology*) and reviewed by George Sayer (*PgDip, BSc, Project Ecologist; Lizard Landscape Design and Ecology*).

Site Information

- 1.4 The plot extends to approximately 530m² of well-tended gardens and parking / access with a single detached dwelling located to the south-eastern corner of the site. The site is in an urban position, to the southern edge of the small village of Elmer. The property is surrounded by residential properties to the north, east and west and the beach front to the south.

Surrounding Landscape

- 1.5 The surrounding landscape is urban, with residential properties extending for a minimum of 0.5km to the north, east and west. Beyond this, to the north and east, land opens to an agricultural landscape dominated by large arable fields. Very little woodland exists in the wider landscape, however fields are delineated by mature hedgerows with small copses.

Development Proposals

- 1.6 The scheme proposals include the demolition of the existing building followed by constitution of a new single detached dwelling on a similar footprint to the existing.

Survey Aims

- 1.7 The aim of this ecological appraisal survey has been:
- *To identify habitats and protected species present, and any other features of ecological value;*
 - *Identify any potential ecological constraints;*
 - *Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
 - *To provide suggestions for enhancements to be incorporated into the scheme.*

2.0 PLANNING POLICY AND LEGISLATION**Legislation**

- 2.1 Legislation relating to wildlife and biodiversity of particular relevance to this EcIA includes:
- *The Conservation of Habitats and Species Regulations 2017;*
 - *The Wildlife and Countryside Act 1981 (as amended);*
 - *The Natural Environment and Rural Communities (NERC) Act 2006;*
- 2.2 This above legislation has been addressed, as appropriate, in the production of this report.

National Planning Policy

- 2.3 The National Planning Policy Framework (NPPF) 2019 sets out the government planning policies for England and how they should be applied. 'Chapter 15: *Conserving and Enhancing the Natural Environment*' states that development should be '*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*'

- 2.4 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

Local Planning Policy

- 2.5 The Arun Local Plan: Key Policies 2011-2031 states that:

- Arun District Council will encourage and promote the conservation preservation, restoration and enhancement of biodiversity and the natural environment through the development process and particularly through policies for the protection of both designated and non-designated sites.
- Proposed development likely to have an adverse effect on land within or adjoining the designated features of any Site of Biodiversity or Geological Importance will not normally be permitted unless there are no satisfactory alternatives and the development is of overriding importance.
- Where appropriate the Council will ensure the effective management of designated sites through the imposition of planning conditions or Section 106 agreements as appropriate.
- Developments within 400m of Pagham Harbour will only be permitted in exceptional circumstances where the developer is able to demonstrate there will be no detrimental effects on Pagham Harbour.
- Developments within 5.0km of Pagham Harbour will be required to contribute towards the agreed strategic approach to access management at Pagham Harbour.
- Development schemes shall, in the first instance, seek to achieve a net gain in biodiversity and protect existing habitats on site. They shall also however incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features minimising adverse impacts on existing habitats (whether designated or not)

3.0 METHODOLOGY

3.1 Desk Study

- 3.1.1 The Multi-Agency Geographic Information for the Countryside (*MAGIC*) was consulted for all designated sites, priority habitats and protected species licence records within 2.0km of the site. The desk search was conducted on 03rd May 2019. Due to the small scale of the site, and poor quality habitats present, a full data search was not considered proportionate.

3.2 Field Survey

- 3.2.1 A preliminary ecological appraisal was undertaken on 03rd May 2019, and the site subjected to an ecology survey using guidelines set out in the *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit (JNCC, 2003)*.
- 3.2.2 Habitats within the site were classified and the presence, or potential presence, of certain protected and / or notable species of flora and fauna were identified. A summary description of the habitat within the site following the *Phase 1 Habitat Survey Methodology* is presented in Section 4.0. This involved identifying features that may be used by protected species, potential foraging areas and other signs of use. Water bodies were recorded wherever possible, within 500 metres of the proposed development site.
- 3.2.3 The results are summarised and accompanied in large part by photographic evidence contained in *Appendix A – Site Photographs*. Recommendations for further investigation and survey are made in the following report.

3.3 Preliminary Bat Roost Assessment

3.3.1 A Preliminary Bat Roost Assessment of the building on site was undertaken on 03rd May 2019 by an experienced, licenced bat surveyor who undertook an internal and external examination of the existing building. The bat surveyor assessed the existing building visually and searched for evidence such as;

- *Staining beneath or around a hole caused by natural oils in bat fur;*
- *Bat droppings beneath a hole, roost or resting area;*
- *Bat droppings and / or insect remains beneath a feeding area;*
- *Audible squeaking from within a hole;*
- *Insects (especially flies) around a hole;*
- *Dead bats.*

3.3.2 An external investigation assessed the fabric of the building to determine whether there were access points readily available for bats to utilise. Gaps / crevices identified within the structure were examined using a Clulite CB2 torch, ladder and endoscope where appropriate.

3.3.3 Trees were visually identified from the ground, using binoculars where necessary, for features that could be used by bats such as:

- *Woodpecker Holes;*
- *Knot Holes;*
- *Tear-outs;*
- *Flush Cuts;*
- *Double Leaders.*

3.3.4 Once features had been assessed the trees and buildings were then categorised in accordance with *Table 4.1 of the Bat Conservation Trust's Good Survey Guidelines (2016) (shown below):*

Table No. 01 – Bat Roost Suitability Guidelines (BCT, 2016)

Category	Buildings	Trees
Negligible	<i>No suitable features identified.</i>	<i>No suitable features identified.</i>
Low	<i>A structure which could be used opportunistically, however, are not likely to be used on a regular basis / by a large number of bats.</i>	<i>Tree of sufficient size / age to support bat roost features; but with none identified from the ground.</i>
Moderate	<i>A building with features which, could be used regularly by a small number of bats.</i>	<i>Tree with features which, may support a bat roost of low conservation status.</i>
High	<i>A building with features suitable for use by a large number of bats on a regular basis.</i>	<i>A tree with several potential bat roost sites that are suitable for use by a large number of bats.</i>

3.4 Ecological Impact Assessment

3.4.1 The methodology for Ecological Impact Assessment (EclA) follows best practice guidelines set by the Chartered Institute of Ecology & Environmental Management (CIEEM): 'Guidelines for Ecological Impact Assessment' (CIEEM, 2018). This includes identifying the baseline conditions on the site and subsequently rating the potential effects of the development based on the sensitivity and value of the resource affected, combined with the magnitude, duration and scale of the impact (or change). This is initially assessed without mitigation measures, and then assessed again after allowing for the proposed mitigation measures; this provides the residual effects. The assessment is divided into construction effects and longer term operational effects.

3.4.2 Each ecological feature within the site has been considered within a defined Geographic context such as:

- *International and European;*
- *National;*
- *Regional;*
- *County;*
- *District;*
- *Local;*
- *Site Level;*
- *Negligible.*

3.4.3 Based upon CIEEM guidance, value was determined with reference to the following factors:

- *Its inclusion as a Designated Site or other protected area;*
- *The presence of habitat types of conservation significance, e.g. Habitats of Principal Importance (NERC 2006);*
- *The presence (or potential presence) of species of conservation significance e.g. Species of Principal Importance (NERC 2006);*
- *The presence of other protected species e.g. those protected under The Wildlife and Countryside Act 1981;*
- *The sites social and economic value.*

3.4.4 The ecological impacts resulting from the proposals were then described according to a defined set of characteristics as defined within 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (CIEEM, 2018). This assessment considers residual impacts (once all mitigation has been taken into account), with any significant effects highlighted. A significant effect is defined as "*an effect which either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general*".

3.4.5 The confidence that a certain activity will result in a significant adverse effect has been ranked as follows:

- *Highly probable;*
- *Probable;*
- *Unlikely;*
- *Highly unlikely.*

3.4.6 Where initial impacts have been identified as significant, avoidance, mitigation and compensation measures have been proposed to avoid, prevent or offset such effects. Enhancement has been proposed to ensure that the development represents a net gain in biodiversity in accordance with National Policy.

4.0 BASELINE ECOLOGICAL CONDITIONS

4.1 Designated Sites

Statutory Protected Sites

- 4.1.1 There are no Statutory Protected Sites located within 2.0km of the site; the nearest area is *Felpham SSSI* located 3.2km west. The site is located 9.8km from *Pagham Harbour SPA*.
- 4.1.2 The site is within the Impact Risk Zone (IRZ) of *Bognor Reef SSSI* and *Pagham Harbour SPA* however the proposed development does not meet the criteria which would require the LPA to consult with Natural England to assess the impacts on nearby protected sites. Proposals are considered highly unlikely to have a negative impact upon these protected areas due to the small scale of the proposals, existing use of the site and the intervening distances.

Non-Statutory Protected Areas

- 4.1.3 *Sites of Importance for Nature Conservation (SNCI's)* are non-statutory designations given to areas of high, local conservation value. Despite being non-statutory, *SNCIs* are still recognised by local planning authorities in their policies and plans. There are no *SNCI's* located within 2.0km of the site, the nearest sites are detailed in *Table No. 02* below.

Table No. 02 – Non-Statutory Protected Sites

<i>Name</i>	<i>Distance</i>
Elmer Rocks	0.02km S
Middleton Shingle	1.5km E

- 4.1.4 The site is located adjacent to Elmer Rocks SNCI, a site designated for its vegetated shingle. The development shall not remove any area of this habitat; the area shall be suitably protected during construction to prevent its damage or degradation.

4.2 Habitats

4.2.1 Within 2.0 kilometres of the site there are *Priority Habitats of deciduous woodland, vegetated shingle, coastal and floodplain grazing marsh and maritime cliffs and slopes.*

4.2.2 Habitats within and adjacent to the site include:

- *Existing Building;*
- *Hard / Bare Ground;*
- *Amenity Grassland;*
- *Scattered Trees;*
- *Introduced Shrub.*

Existing Building

4.2.3 2no. buildings are present on site; a small detached bungalow (B1) and a single garage (B2). The bungalow is of rendered brick construction with a pitched felt roof in good overall condition. Soffit boxes are of painted wooded construction and were in good condition throughout while the double-glazed windows are tightly fitting.

4.2.4 The single garage is of typical pre-fabricated construction with corrugated asbestos roofing. The building appeared to be in good condition.

Hard / Bare Ground

4.2.5 An access pathway runs around the existing property with an access driveway running along the northern boundary of the site. This area is of **negligible value.**

Amenity Grassland

- 4.2.6 The site is dominated by regularly mown amenity grassland which forms a large lawn area to the north and west of the bungalow. The sward was approximately 3cm at the time of survey and appears to be well maintained year-round. Perennial ryegrass (*Lolium perenne*), bents and fescues (*Festuca* sp.) dominate with frequent yarrow and birds-foot trefoil with the sward. Occasional creeping buttercup (*Ranunculus repens*), germander speedwell (*Veronica chamaedrys*), clover (*Trifolium repens*) and cats-ear (*Hypochaeris radicata*) were also present. This common, widespread habitat is of **site value** only.

Scattered Trees

- 4.2.7 A single small holly tree is present within the site with a large cypress tree growing against the north-eastern fence in an adjacent garden. The trees are of **site value**.

Introduced Shrub

- 4.2.8 Mature shrubs border the lawn to the west and east with a narrow planting bed present to the margins of the bungalow. Species noted include euonymus, fuchsia, pittosporum, laurel, holly and buddleia. A line of recently cut-back Tamarisk shrubs forms the southern boundary of the site, with typical disturbed ground species to the north including bristly ox-tongue, ragwort, sow thistle and cleavers. This common, widespread habitat is of **site value** only.

4.3 Protected Species

- 4.3.1 The following species assessment is based upon protected species records returned from desk study and the field study of the site. Those species for which no suitable habitat exists on site have been screened out of the assessment.

Bats*Desk Study*

- 4.3.2 6 no. bat species have been recorded within 5.0 km of the site including bats such as Whiskered (*Myotis mystacinus*), Daubenton's (*Myotis daubentonii*), Nathusius' pipistrelle (*Pipistrellus nathusii*), Common Pipistrelle (*Pipistrellus pipistrellus*) and Soprano Pipistrelle (*Pipistrellus pygmaeus*).

Site Assessment

- 4.3.3 The bungalow (B1) has a small loft void which was fully inspected. The void has a height to the ridge of max. 1.2m with fiberglass insulation present between the floor joists. Extensive evidence of mouse was recorded within the roof space however no evidence of bats such as droppings, feeding remains, urine splashes or grease marks were recorded. All external walls, windowsills and ledges were examined for any evidence of bats; none was found.
- 4.3.4 The garage (B2) on site contained no enclosed roof void while its single-skin construction means the building is of low thermal mass, negating its suitability as a bat roost. No evidence of roosting bats was found anywhere on site; the site is considered to be of **negligible value** to roosting bats.
- 4.3.5 The surrounding amenity grassland and introduced shrubs offer very little foraging habitat for the local bat community. The site is of **negligible value** to foraging / commuting bats.

Breeding Birds*Desk Study*

- 4.3.6 A total of 81no. species of bird have been recorded within 5.0km of the site, including Schedule I species of Barn Owl; and 12 no. of BoCC Red Listed Species.

Site Assessment

- 4.3.7 The surrounding shrubs and scattered trees offer suitable nesting habitat for small passerines. Due to the abundance of other similar habitat in the local area, the habitat is of **site value** only to nesting birds.

Others

- 4.3.8 No suitable habitat for any other protected species including great crested newt, reptiles, dormouse, water vole or notable invertebrates was recorded within or adjacent to the site area.

5.0 ASSESSMENT OF EFFECTS AND MITIGATION MEASURES

5.1 Designated Sites

Potential Impacts

- 5.1.1 The site is located within the *Impact Risk Zone* of *Bognor Reef SSSI* and *Pagham Harbour SPA*; however due to the intervening distances and small scale of the proposals no impacts are predicted.
- 5.1.2 The site is located adjacent to *Elmer Rocks SNCI*. In the absence of mitigation, impacts during the construction phase could include increased disturbance through noise, vibration and lighting, degradation of habitat through dust smothering and pollution events resulting from fuel spills etc. Given the small scale of the site, impacts would be of minor impact magnitude.

Mitigation and Compensation

- 5.1.3 All construction activities will be undertaken in accordance with best practice guidance with regards dust, vibrations and noise control. A Heras fence line fitted with fine mesh debris netting will be installed along the southern boundary of the site to minimise dust / debris settling on the adjacent SNCI. At no time during demolition or construction shall vehicles or machinery track across the adjacent SNCI. The construction compound and any storage of hazardous materials / fuel will be located a minimum of 15m from the SNCI with appropriate measures in place for the prevention of fuel spillage.

Residual Impacts

- 5.1.4 **No likely significant effect** upon surrounding designated sites will arise from the proposed development.

5.2 Habitats

Potential Impacts

- 5.2.1 Development will cause the loss of areas of introduced shrub and amenity grassland. In the absence of mitigation, impacts upon the adjacent vegetated shingle could include degradation of habitat through dust smothering and pollution events resulting from fuel spills etc. Given the small scale of the site, impacts would be of minor impact magnitude.

Mitigation and Compensation

- 5.2.2 All construction activities will be undertaken in accordance with best practice guidance with regards dust, vibrations and noise control. The construction compound and any storage of materials / fuel will be located a minimum of 15m from the foreshore. A Heras fence line fitted with fine mesh debris netting will be installed along the southern boundary of the site to minimise dust / debris settling on the vegetated shingle. At no time during demolition or construction shall vehicles or machinery track across the foreshore. The post-development landscape scheme will replace areas of amenity grassland and shrub with like-for-like habitats.

Residual Impacts

- 5.2.3 Residual impacts after mitigation will be negligible and **non-significant**.

5.3 Bats

Potential Impacts

- 5.3.1 In the absence of mitigation impacts could include the disruption of commuting corridors and foraging habitat through inappropriate lighting. Given the small scale of the site, and presence of better foraging habitat in the local environment, impacts would be of very minor impact magnitude.

Mitigation and Compensation

- 5.3.2 All light spill upon surrounding scattered trees and shrubs will be avoided.

Residual Impacts

- 5.3.3 Residual impacts after mitigation will be negligible and **non-significant**

5.4 Breeding Birds*Potential Impacts*

- 5.4.1 In the absence of avoidance / mitigation, the development could result in the damage / destruction of a bird nest.

Mitigation and Compensation

- 5.4.2 Where required, any dense vegetation should be removed outside the nesting season (*season: March-August, although pigeons may nest all year*) or should be checked prior to removal by a suitably qualified person. Should an active nest be found the area will be left undisturbed until the chicks have fledged.

Residual Impacts

- 5.4.3 The overall impact of the scheme will be **negligible, non-significant**.

6.0 ECOLOGICAL ENHANCEMENTS

- 6.1 The design of the proposed development includes ecological enhancements for the benefit of wildlife in line with the *National Planning Policy Framework* and *Local Planning Policy*. Ecological enhancements which will be included as part of development proposals include

- *The use of flowering shrubs as listed within the RHS 'Perfect for Pollinators' plant list to create a border between the new building and adjacent path;*
- *Installation of bird boxes to suit local species including a house sparrow terrace;*
- *Installation of a bat box suitable for crevice dwelling species e.g. pipistrelles.*

7.0 CONCLUSIONS

- 7.1 The site is formed of existing building surrounded by hard / bare ground, shrubs and amenity grass. The site itself is of **low ecological value** with no habitats of interest noted.
- 7.2 The site was assessed as being unsuitable for the majority of protected species including badger, dormouse, reptile, amphibian and water vole; no habitat for these species exists on site. The site was found to be of negligible value to foraging and roosting bats, however nesting birds are likely to be present within the surrounding shrubs and trees while measures will be taken to ensure the protection of the adjacent Elmer Rocks SNCI. A series of mitigation / avoidance measures have been devised to ensure the development does not contravene any UK or European legislation.
- 7.3 Once avoidance and mitigation measures have been taken into account, the impacts of the planned development upon biodiversity will be **negligible, non-significant** with proposed ecological enhancements resulting in **no net loss** of biodiversity in line with national planning policy guidance.

8.0 REFERENCES

JNCC: Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit; (2003);

Collins J (ed): Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed.) The Bat Conservation Trust (2016);

Mitchell-Jones and McLeish: Bat Workers Manual; JNCC, 3rd Edition (2004);

Streeter, D.: The Most Complete Guide to the Flowers of Britain and Ireland; Harper Collins, London (2010);

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus). Herpetological Journal 10 (4), 143-155

www.magic.gov.uk.

Table No. 03 – Species List for Habitat Parcels**Amenity Grassland**

Common Name	Scientific Name	DAFOR
Bent sp.	<i>Agrostis sp.</i>	LD
Birds-foot Trefoil	<i>Lotus corniculatus</i>	F
Cats-ear	<i>Hypochaeris radicata</i>	O
Chickweed	<i>Stellaria media</i>	O
Clover sp.	<i>Trifolium sp.</i>	O
Common Daisy	<i>Bellis perennis</i>	LA
Common Yarrow	<i>Achillea millefolium</i>	F
Creeping Buttercup	<i>Ranunculus repens</i>	O
Dandelion	<i>Taraxacum officinale</i>	O
Dog Violet	<i>Viola riviniana</i>	O
Fescue sp.	<i>Festuca sp.</i>	LD
Germander Speedwell	<i>Veronica</i>	O
Hairy Bittercress	<i>Cardamine hirsuta</i>	O
Mosses	<i>Mosses sp.</i>	O
Perennial Ryegrass	<i>Lolium perenne</i>	LD
Wild Carrot	<i>Daucus carota</i>	R

Scattered Trees

Common Name	Scientific Name	DAFOR
Cypress	<i>Cupressus sp.</i>	D
Holly	<i>Ilex aquifolium</i>	O

Introduced Shrub

Common Name	Scientific Name	DAFOR
Buddleia	<i>Buddleia davidii</i>	O
Euonymus sp.	<i>Euonymus sp.</i>	LD
Laurel	<i>Laurus sp.</i>	LF
Pittosporum	<i>Pittosporum sp.</i>	O
Privet	<i>Ligustrum sp.</i>	O
Tamarisk	<i>Tamarisk sp.</i>	LD

APPENDICES:

Appendix A – Site Photographs

APPENDIX A - SITE PHOTOGRAPHS



Photograph No. 01 - View across the site looking towards the north.



Photograph No. 02 - View across the site looking towards the south.

APPENDIX A - SITE PHOTOGRAPHS



Photograph No. 03 - Building B1, assessed as offering negligible bat roost suitability.



Photograph No. 04 - Interior view of Building B1; no evidence of bats was noted anywhere during the site visit.

APPENDIX A - SITE PHOTOGRAPHS



Photograph No. 05 - Building B2; assessed as offering negligible bat roost suitability.



Photograph No. 06 - Existing access drive which runs along the northern boundary of the property.



Legend - 1:250

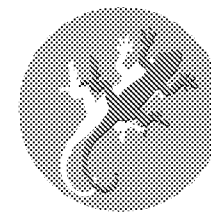
A	Amenity Grassland
	Bare/Hard Ground
	Site Boundary
B1	Existing Building
	Fenceline
	Introduced Shrub
	Scattered Trees
	Wall

Notes: The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

Habitat areas are indicative and for information only - please do not scale from this drawing.

Planning Issue

Rev	Description	Date	Initials
00	Planning Issue	14.05.19	WM

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Client Ivan Blumer Architects LTD			
Project Title and Location 27 Central Drive, Elmer			
Drawing Title Figure No.1 - Site Habitat Plan			
Scale 1:250	Drawn WM	Approved CO	Date 14.05.19
Drawing No LLD1709-ECO-FIG001-HP-A1			Revision 001

Figure No.1 - Site Habitat Plan
27 Central Drive, Elmer