

PROTECTED SPECIES REPORT: Bat Characterisation Surveys

Goldthorpe Hotel, Goldthorpe, South Yorkshire

Report Reference: BG19.318.1

November 2021



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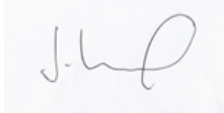


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Contents

Contents	6
1 Summary.....	7
2 Introduction.....	9
3 Methodology.....	10
4 Site Context.....	12
5 Results	14
6 Evaluation.....	19
7 Recommendations	20
Appendix 1. General References	22
Appendix 2. Legislation and Guidance Sources	23
Appendix 3. Relevant Ecology and Legislation	24
Appendix 4. Design Plans.....	25
Appendix 5. Proposed Compensation Diagram	26

1 Summary

- 1.1 Brindle and Green were commissioned by Jump Architects to undertake a suite of bat roost characterisation surveys at Goldthorpe Hotel, Goldthorpe, South Yorkshire. The surveys were undertaken between June and August 2021.
- 1.2 A Preliminary Roost Assessment (PRA) was undertaken on 17th October 2021 by Brindle and Green Ltd. (BG19.318, November 2019) which concluded that the Goldthorpe Hotel (Hereafter referred to as Building 1) offered potential roosting features with a 'Low' suitability and a further emergence survey was recommended to confirm presence / absence of bat roosts. The PRA should be reviewed in conjunction with this report.
- 1.3 Building 1 is the subject of a full application for the conversion into 10 flats with associated parking. Design proposals for the site are presented in Appendix 4 of this report.
- 1.4 Building 1 was found to support a single common pipistrelle (*Pipistrellus pipistrellus*) day roost on the eastern elevation within a gap in the mortaring. Bat activity within the application site was considered low, with activity pertaining to intermittent commuting passes by common pipistrelle (*Pipistrellus pipistrellus*) and noctule bat (*Nyctalus noctula*). Foraging activity was constrained to areas to the west of the application area.
- 1.5 All bats in the United Kingdom and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species Regulations 2017 (as amended). It is an offence to damage or destroy any bat roost, intentionally or recklessly obstruct a bat roost, deliberately, intentionally or recklessly disturb a bat or intentionally kill, injure or take any bat.
- 1.6 A summary of recommendations set out to ensure the client works within the law and that any impacts to protected species are minimised is included below:

- 1.6.1 The proposed redevelopment will involve the modification of a common pipistrelle day roost. A **Natural England European Protected Species (EPS) Development licence or Bat Mitigation Class Licence must be secured** in order to continue with redevelopment works concerning Building 1. In order for either Licence to be approved by Natural England it must be demonstrated that proposals will minimise any potential impacts upon roosting bats and that the Favourable Conservation Status of the bat species is met. A mitigation plan has been devised and outlined within Chapter 7 of the report.
- 1.6.2 Bats are highly mobile and can change roost sites throughout the year and from season to season. If the site works do not begin within twelve months of this initial survey it will be necessary to conduct a re-survey to determine if the characteristics of the roosts on site have changed.

2 Introduction

- 2.1 Brindle & Green were commissioned by Jump Architects to undertake bat roost characterisation surveys on Building 1, Goldthorpe Hotel, Goldthorpe, South Yorkshire, Grid Ref.: SE 46640 04520.
- 2.2 The purpose of these surveys was to establish whether bats were roosting within the potential features identified within Building 1 during the Preliminary Ecological Appraisal (BG19.318, November 2019) and to provide details on solutions for mitigation if required.
- 2.3 The site is located off Doncaster Road, Goldthorpe within a residential and commercial area. The project area comprises The Goldthorpe Hotel (B1) positioned within hardstanding and scrub. B1 was a two-storey red-brick former public house supporting a triple ridge and valley roof, with an enclosed loft space accessible by a set of steps. The application site is the subject of a full application for the conversion of the existing building into 10 flats with associated parking. Design proposals for the site are presented in Appendix 4 of this report.
- 2.4 The legislation relevant to bats within the United Kingdom is summarised within Appendix 2 and Appendix 3.
- 2.5 Results and recommendations contained within this report have been prepared by an experienced ecologist and are therefore the view of Brindle & Green Limited. The survey is based on information provided by our client, the development proposals, and the results of our survey of the site. This report pertains to this information only.

3 Methodology

- 3.1 Building 1 was subjected to two bat dusk emergence surveys (23/06/2021 and 03/08/2021), and a single dawn re-entry survey (11/08/2021) to confidently characterise the roost observed on 23rd June 2021.
- 3.2 Bat surveys were conducted according to methodologies outlined within Natural England's Bat Mitigation Guidelines (Mitchell-Jones, 2004) and the Bat Conservation Trust Good Practice Guidelines (Collins, 2016). The dusk surveys began 15 minutes before sunset and lasted for up to two hours following sunset, while dawn re-entry surveys began up to 2 hours prior to sunrise and were completed 15 minutes after sunrise. Where methodology has deviated from good practice, it has been recorded and justified within the limitations section of the report.
- 3.3 On each survey, surveyors operated an Echo Meter Touch detector connected to an iPad. Where possible, species were identified using information from visual and audio cues, all sonograms were recorded on to the iPad and were analysed using Analook software to confirm species identification, where required.
- 3.4 All bat passes, including time and species, were recorded on to field maps, noting direction of flight and emergence. Where possible, the number of individuals observed and behaviour of the bat was also recorded, including foraging, commuting and social calling behaviours.

3.5 Surveyors

Surveys carried out by:

- John Harvey BA (Hons.), ACIEEM, Natural England Bat Licence (2018-34117-CLS-CLS), Consultant Ecologist
- Sabina Schneider, Trained Field Ecologist
- Rowan Bates, Trained Field Ecologist
- Nikki Scott, Trained Field Ecologist

3.6 Survey Conditions

The surveys were undertaken in weather conditions considered conducive to bat activity. The weather conditions for each survey are summarised within Section 5: Results.

3.7 Limitations

It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. The protected and notable species assessment provides a preliminary view of the likelihood of these species occurring on site, based upon the suitability of the habitats and known distribution of the species in the local area.

3.8 Report Lifespan

Given the transient nature of the subject we would consider the survey results contained to be accurate for 12 months.

4 Site Context

4.1 Site Description

The application site can be found at SE 46640 04520, located off Doncaster Road, to the east of the town of Goldthorpe. The surrounding environment was dominated by residential and commercial development to the west and north of the site, with arable and pastoral land present within the wider environment. Several parkland and recreational areas were recorded, namely Phoenix Park 250m to the north and playing fields 100m to the south-east. In addition, allotments were recorded approximately 100m to the north of the site which may provide valuable foraging habitat for bats. However, due to the urban dominated immediate surroundings, featuring artificially lit highways, good quality connective vegetative habitats were limited.

4.2 Zone of Influence

The zone of Influence is used to describe the geographic extent of potential impacts of a proposed development in relation to the target species, in this case bats and breeding birds. Due to the scale and nature of the proposals, it is not considered that the impacts of the proposed works would extend beyond the scheme footprint and its immediate surroundings.



Figure 1. OS Map of the project site and surrounding area.

The red line boundary depicts the application site. The Bat surveys pertained to Building 1

5 Results

5.1 A summary of bat activity per survey is provided in the tables below. Raw data sheets are available upon request. A diagrammatic representation of the bat activity recorded during surveys can be seen within Figure 2.

5.2 Bat Dusk Emergence Survey – 23/06/2021

Sunset time:	21:38	Cloud Cover:	1/8	Wind speed:	BF1
Start time:	21:25	Start temp:	16.2°C	Start humidity:	75%
Finish time:	23:08	Finish temp:	15.8°C	Finish humidity:	77%

5.2.1 Survey effort was focused on determining the presence of bats within Building 1 and establishing the location of access / egress points. Assessments of how bats were using the area adjacent to the survey building were also undertaken.

5.2.2 Table 1. Summary of bat activity on dusk emergence survey 23/06/2021

Time	Activity
21:23-21:30	No bat activity observed
21:30-21:45	No bat activity observed
21:45-22:00	At 21:57 a NOC was HNS At 21:59 a CP was observed emerging from a gap underneath the eaves southern end of the eastern elevation. The bat emerged from a gap within missing mortar and continued to commute east.
22:00-22:15	Between 22:01 and 22:04 HNS NOC calls were recorded
22:15-22:30	At 22:18 a CP was HNS
22:30-22:45	No bat activity observed
22:45-23:08	At 22:48 a CP was observed commuting westerly to the south of the application area. At 22:48 a CP was HNS At 23:03 a CP was HNS
Key: NOC – Noctule Bat HNS – Heard Not Seen CP – Common Pipistrelle	

5.2.3 Activity was low during the survey with infrequent commuting passes from two common pipistrelle (*Pipistrellus pipistrellus*) and noctule bat. No periods of foraging were recorded. A single common pipistrelle roost was recorded on the southern end of the eastern elevation from a gap within missing mortar.

5.3 Bat Dawn Re-entry Survey – 11/08/2021

Sunrise time: 05:37	Cloud Cover: 3/8	Wind speed: BF1
Start time: 04:07	Start temp: 13.1°C	Start humidity: 85%
Finish time: 05:52	Finish temp: 11.4°C	Finish humidity: 85%

5.3.1 Survey effort was focused on characterising the roost within Building 1 and establishing the extent of the roost. Assessments of how bats were using the area adjacent to the survey building were also undertaken.

5.3.2 Table 2. Summary of bat activity on dawn re-entry survey 11/08/2021

Time	Activity
04:07 – 04:15	No bat activity observed
04:15 – 04:30	A NOC was HNS
04:30 – 04:45	No bat activity observed
04:45 – 05:00	At 04:46 a NOC was HNS At 04:58 a NOC was HNS
05:00 – 05:15	Between 05:03 and 05:08 a CP was foraging over residential gardens to the west of the application site. At 05:08 a CP was observed commuting west to the south of the application area. At 05:10 a SP was HNS
05:15 – 05:30	At 05:21 a NOC was HNS
05:30 – 05:45	No bat activity observed
05:45 – 05:52	No bat activity observed
No bats were recorded returning to B1 during the assessment	
Key: NOC – Noctule Bat HNS – Heard Not Seen CP – Common Pipistrelle SP – Soprano Pipistrelle (<i>Pipistrellus pygmaeus</i>)	

5.3.3 Activity was low during the survey with four HNS commuting passes from noctule bat, a single observed commuting pass from a common pipistrelle and a period of foraging for 5 minutes to the west of the application site. No bats were recorded returning to B1 during the survey.

5.4 Bat Dusk Emergence Survey – 31/08/2021

Sunset time:	19:57	Cloud Cover:	8/8	Wind speed:	BF2
Start time:	19:42	Start temp:	16.5°C	Start humidity:	73%
Finish time:	21:27	Finish temp:	15.2°C	Finish humidity:	79%

5.4.1 Survey effort was focused on characterising the roost within Building 1 and establishing the extent of the roost. Assessments of how bats were using the area adjacent to the survey building were also undertaken.

5.4.2 **Table 3.** Summary of bat activity on dusk emergence survey 31/08/2021.

Time	Activity
19:42 – 20:00	No bat activity observed
20:00 – 20:15	At 20:09 a NOC was HNS.
20:15 – 20:30	At 20:19 a CP was observed foraging over residential gardens to the west of the site which commuted to the north of B1 to forage at 20:26 At 20:28 a CP was HNS
20:30 – 20:45	At 20:32 a NOC was HNS At 20:34 a NOC was HNS
20:45 – 21:00	No bat activity observed
21:00 – 21:15	No bat activity observed
No bats were recorded emerging from the building	
Key:	
NOC – Noctule bat HNS- heard not seen CP – Common pipistrelle	

5.4.3 Activity was low during the survey with three HNS commuting passes from noctule bat and a period of foraging by common pipistrelle to the west and north of Building 1 between 20:19 and 20:26. No bats were recorded emerging from the building during the survey.

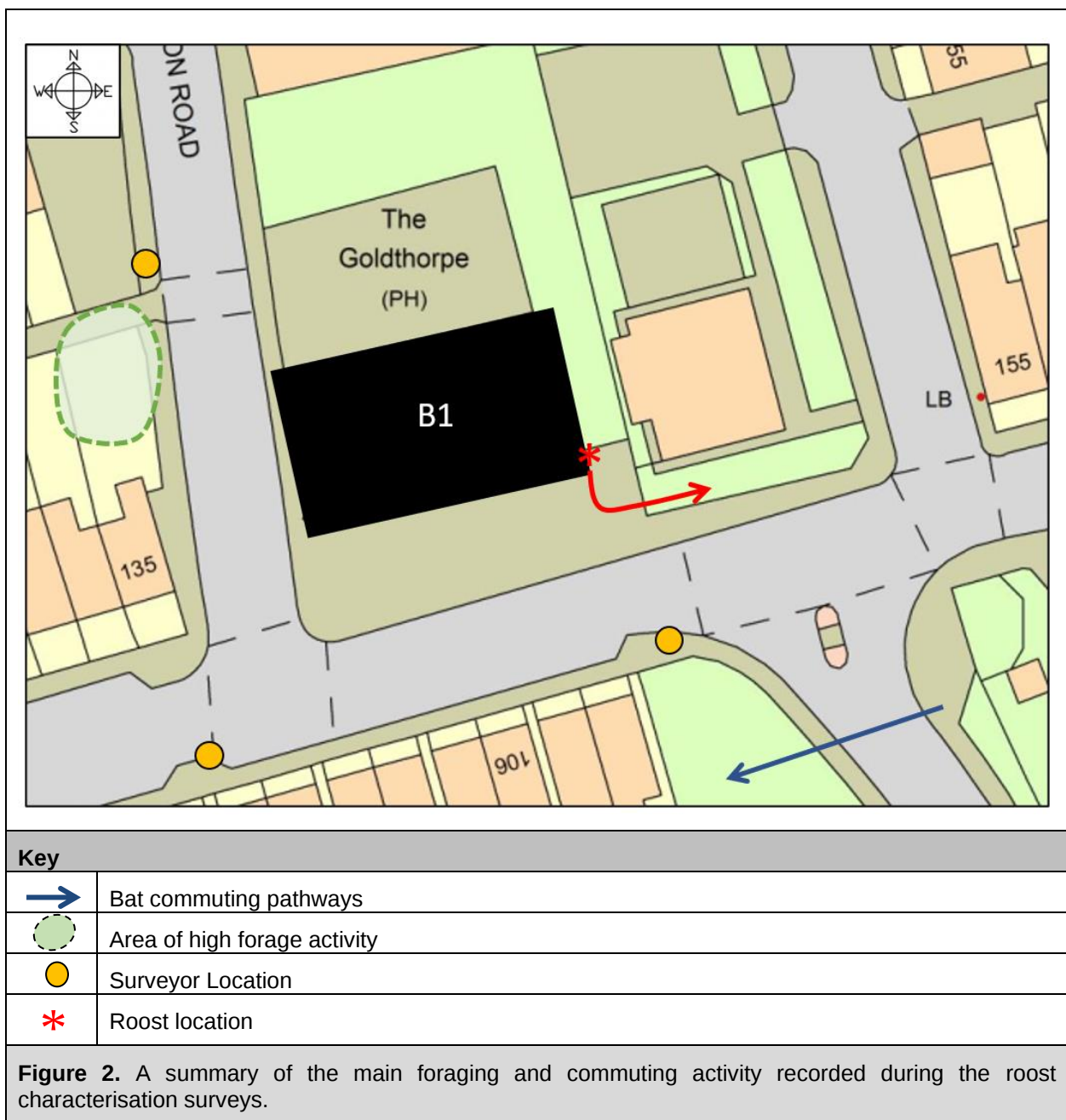


Figure 3.

A single common pipistrelle was observed emerging from a gap within missing mortar on the eastern elevation of B1 on 23rd June 2021.



6 Evaluation

- 6.1 The dusk emergence and dawn re-entry surveys confirmed a common pipistrelle day roost within missing mortar at the southern extent of the eastern elevation of Building 1, Goldthorpe Hotel, South Yorkshire on 23rd June 2021. As such, a Natural England EPS development licence or Bat Mitigation class licence is required to proceed with the development works.
- 6.2 The development proposals will see the complete renovation of the building into apartments which has the potential for the loss or disturbance of the of a known roost. The roost is considered of low conservation significance due to the low number of non-breeding individuals recorded (Bat mitigation guidelines, 2004). Furthermore, the building and roost location did not support suitability for roosts of higher conservation significance such as maternity or hibernation colonies, due to their being no recorded accessible cavities.
- 6.3 It is considered that common pipistrelle bats are common in the county, providing local level importance to roosting bats (Wray *et al*, 2010). Foraging activity was considered low, with the majority of passes relating to commuting bats. A single foraging area was utilised during the nocturnal surveys to the west of Building 1 (Figure 2). Commuting activity was mostly observed to the south and east of the site in association with local parklands and allotments. The site was located within close proximity to artificially lit highways to the south and west which may further reduce the commuting and foraging quality of the site.

7 Recommendations

7.1 Roosting Bats

As the proposed redevelopment will involve major disturbance and potential destruction of a day night roost for a single common pipistrelle bat within Building 1 at The Goldthorpe Hotel, Goldthorpe, South Yorkshire. **A Natural England European Protected Species (EPS) licence, or Bat Mitigation Class Licence must be secured** to continue with redevelopment works.

7.2 In order for a European Protected Species Licence to be approved by Natural England it must be demonstrated that proposals will minimise any potential impacts upon roosting bats and that the favourable conservation status of bat species is met. To ensure this is the case a mitigation plan is outlined in Table 1.

7.3 Bats are highly mobile and can change roost sites throughout the year and from season to season. If the renovation of the site does not begin within twelve months of this initial survey it will be necessary to conduct a re-survey to determine if the characteristics of the roosts on site have changed.

Table 1. Recommendations for mitigation and compensation

Roosting Bats	
Recommendations	Timing
Natural England Licence & Method Statement A licence from Natural England is to be applied for. This will include a method statement produced by a suitable qualified ecologist. The recommendations below outline suggested mitigation work to be included within an accompanying method statement. These works can take place at any time, however, should ideally take place during either the transitional period, when bat species such as common pipistrelle bats are likely to be absent from buildings. transitional period for common pipistrelle bats is understood to be between March to April and October to November.	Prior to works commencing. (Application can take 30 – 45 days to process once submitted)

1. Installation of temporary bat boxes Install x1 temporary bat box (Eco Kent Bat Box) on the southern face of on a nearby wall within the site ownership. Any bats found during the following exclusion and/or soft stripping works to be transferred to this box by hand. The box should be positioned at a height of at least 4m from ground level.	Pre-development works.
2. Install exclusion devices If re-pointing / re-mortaring works are to be conducted on Building 1, the installation of one-way excluders will be undertaken prior to the permanent blocking of access points to known roost sites on Building 1. Devices to remain in-situ for a period of five nights where weather conditions are favourable for bat activity. Period to be extended should unfavourable weather conditions occur.	Pre-development works.
3. Capture exercise during soft stripping of roofing features If the roof is to be replaced / renovated either internally or externally, all bat roosting features should be soft stripped under the supervision of the Named Ecologist. Should bats be encountered during soft stripping then they will be captured by hand and relocated to pre-installed temporary bat boxes. Once all bat roosting features have been stripped, checked and structures made unsuitable for roosting bats the building can be declared free of bats and the renovation process can proceed without ecological supervision. Temporary bat box to remain in place during this period.	Pre -development works
3. Retention of Existing Roosting Features / Creation of Compensatory Habitat The existing roosting location (Figure 3) should be retained in its current form post-development, with free access into the feature (Appendix 5) Permanent compensatory bat roosting habitat to comprise of a single bat box such as an 'Eco Bat Box', or similar approved. The mitigation feature should be incorporated on the southern elevation (Appendix 5) of the renovated building. The roof should be underlined with traditional bitumen felt to prevent injury to roosting bats.	Bat mitigation / compensation features are to be installed during construction works, but access points will be restricted until construction has been completed.
5. Monitoring Due to the low conservation status of the roost type, no post construction monitoring will be required.	

Appendix 1. General References

Bat Conservation Trust (2014) Artificial lighting and wildlife Interim Guidance: Recommendations to help minimise the impact artificial lighting. Bat Conservation Trust, London.

Bell, S. McGillivray, D. (2006) *Environmental Law*. 6th ed. Oxford University Press.

Butterfly Conservation trust (2014) Nectar Plants, http://mothscount.org/text/64/nectar_plants.html

Collins, J (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines, (3rd edition), Bat Conservation Trust, London

Mitchell-Jones A.J. *Bat Mitigation Guidelines* 2004. English Nature.

Mitchell-Jones A.J. McLeish, A.P. (2004) *Bat Workers Manual* (3rd Edition). Joint Nature Conservation Committee.

South Yorkshire Bat Group (2021), Bats of South Yorkshire, <https://www.sybatgroup.org.uk/bats-of-south-yorkshire>

Wray S. Wells D. Long E. Mitchell-Jones T (2010) Valuing Bats in Ecological Impact Assessment. CIEEM In Practice December 2010.

Appendix 2. Legislation and Guidance Sources

Articles of British wildlife and countryside legislation, policy guidance and both Local and National Biodiversity Action Plans (BAPs) are referred to. The articles of legislation are:

- The Wildlife and Countryside Act 1981 (as amended)
- The Conservation of Habitats and Species Regulations 2017 (as amended)
- Department for Communities and Local Government. National Planning Policy Framework. March 2012
- The Natural Environment and Rural Communities Act 2006
- The United Kingdom Biodiversity Action Plan 2006
- Local Biodiversity Action Plan (LBAP).

Appendix 3. Relevant Ecology and Legislation

(Please note that this is for information purposes only. Clients should seek further legal advice where necessary).

There are 17 species of bats that occur in Britain. Dramatic declines in population numbers initiated the introduction of European and UK legislative protection. British bats and their roosts are fully protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). Additional protection is offered under The Conservation of Habitats and Species Regulations 2017.

Buildings and structures which offer roosting potential to bats can be impacted by development and this can result in disturbance to potential roost sites. Bats occupy different roost sites during the year depending on species-specific summer roost and hibernation roost requirements. Bats usually re-use the same roosts, therefore the legal opinion is that the roost is protected whether or not the bats are present at the time.

In the case of development work, activities involving the capture, disturbance and/or relocation of bats are subject to a licence from Natural England. Such licences are only granted:

“For the purpose of preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment, to allow people to carry out activities which would otherwise be illegal.”

Under The Conservation of Habitats and Species Regulations 2017., licences can only be issued if Natural England are satisfied that:

- there is no satisfactory alternative; and
- the action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.

Undertaking work to a bat roost without following appropriate recommendations from Natural England and/or DEFRA could lead to prosecution resulting in imprisonment, fines and confiscation of vehicles/equipment used.

Appendix 4. Design Plans



South Elevation (Doncaster Road) Scale 1:100 @ A1



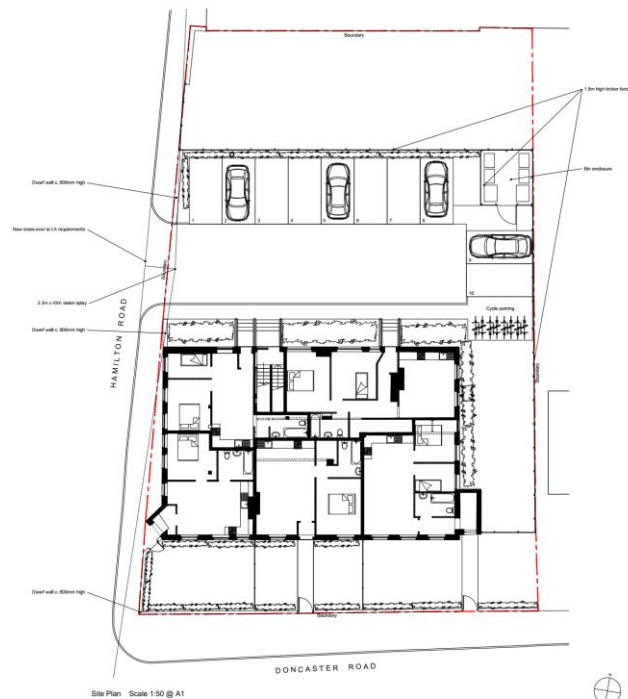
North Elevation Scale 1:100 @ A1



East Elevation Scale 1:100 @ A1



West Elevation (Hamilton Road) Scale 1:100 @ A1



Site Plan Scale 1:50 @ A1



Appendix 5. Proposed Compensation Diagram

