

BIODIVERSITY NET GAIN REPORT

OF

BERKELEY, PIER VIEW HOTEL SOUTHERN LAND PARCEL



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Site Address	Berkeley, Pier View Hotel (Southern Land Parcel)
Report type	Biodiversity Net Gain Report
Client	GFC Property Ltd
Project number	001COLE100

The material and data in this report were prepared under the supervision and direction of the undersigned.

	Name	Position
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Approved by	[REDACTED]	Principal Ecologist/Director

Revision History		
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VALIDITY

Due to the dynamic nature of ecological conditions the results of the survey(s) and related conclusions and recommendations as contained within this report should only be considered valid for up to 12 months from the date the last survey was undertaken.

Any alterations to the site proposals may invalidate the recommendations contained within this report.

Executive Summary

Abricon Ltd. was commissioned by GFC Property Ltd to complete a Biodiversity Net Gain (BNG) assessment for the proposed development of the southern land parcel at Pier View Hotel, 34 Oldminster Road, Sharpness, Berkeley, GL13 9NA. The purpose of the assessment is to quantify the likely habitat gains and losses associated with the proposed development and establish whether the proposal leaves biodiversity in a better state following the alteration of existing habitats and the creation of new habitats.

The site is surrounded by hedgerows with trees. Residential gardens back onto the site towards the south, an area of broadleaved woodland is located towards the north and the associated Northern land parcel bounds the site to the north. Oldminster Road is located to the west following a tree line and park dominated by grassland. The site is centred on National Grid Reference: SO 67454 02080.

It is understood that the proposed plans for the site include the conversion of the former hotel into five residential units with new access, parking, and associated works. The proposed site plan is provided in Appendix C at the end of this document.

The Natural England (DEFRA) Biodiversity Metric 4.0 was utilised to assess whether the proposal will result in a biodiversity net gain through development by quantifying the value of area and linear habitats prior to and post-development.

The pre-intervention biodiversity units were calculated by utilising all habitat data available at the time of writing this report, which predominantly comprised information from a Baseline BNG Habitat Survey carried out by Abricon Limited in August 2023 as well as historic satellite imagery of the site.

The soft landscape plan prepared by In House Building Design (Drawing No. 22:014 PL02, Revision C (2023)) was utilised to calculate the post-development biodiversity units for the proposal. The plan used to inform this assessment is provided at the end of this document.

Following the calculation of the pre-intervention and post-intervention biodiversity units of the on-site habitats, a net gain of +0.21 (+32.02%) biodiversity units was returned for area-based habitats, and a net gain of +0.01 (+19.55%) hedgerow units was returned for linear (hedgerow) habitats.

A Landscape Environmental Management Plan (LEMP) will need to be developed for the site, which will provide prescriptions for habitat creation and management to ensure that the targeted habitats and their respective conditions can be delivered as part of the proposed development.

Given the positive outcome of the DEFRA Biodiversity Metric for habitat and linear habitat units, the proposed development is currently considered to be in accordance with the requirements of the National Planning Policy Framework (NPPF, July 2021).

1 Introduction

1.1 Survey Background Aims and Objectives

- 1.1.1 Abricon Ltd. was commissioned by GFC Property Ltd. to undertake a Biodiversity Net Gain Assessment of Pier View Hotel, 34 Oldminster Road, Sharpness, Gloucestershire, GL13 9NA, referred to as 'the site'.
- 1.1.2 The purpose of the assessment is to quantify the likely habitat gains and losses associated with the proposed development and establish whether the proposal leaves biodiversity in a better state following the alteration of existing habitats and the creation of new habitats.

1.2 Site Location & Description

- 1.2.1 The land within the ownership boundary is approximately 0.18 ha and comprises a former hotel building, hardstanding driveway and parking area, modified grassland and several scattered trees.
- 1.2.2 The site is bounded by trees to the south and beyond that can be found residential gardens, an area of broadleaved woodland is located towards the north and the associated Northern site parcel bounds the site to the north. Oldminster Road is located to the west following a tree line and park dominated by grassland. The site is centred on National Grid Reference: SO 67454 02080.
- 1.2.3 The wider landscape includes areas of broadleaved woodland, as well as arable and pasture farmland bounded by tree lines and hedgerows, lowland meadows, floodplains, grazing marsh and intertidal habitats associated with the River Severn which is located approximately 680m towards the west of the site.



Figure 1 - Site Location (highlighted) – accessed on 30/10/2023.

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1.3 Proposed Development

- 1.3.1 It is understood that the proposed plans for the site include the conversion of the former southern hotel land parcel into a residential apartment complex with new access, parking, and associated works. The proposed site plan is provided in Appendix C at the end of this document.

2 Methodology

2.1 Biodiversity Metric Assessment

- 2.1.1 Under the Environment Act (2021), most developments in England will have to deliver at least 10% Biodiversity Net Gain (BNG) in order to be granted planning permission. This requirement becomes mandatory from April 2024 for small sites. BNG is being introduced to ensure developments have a positive impact on nature by increasing the biodiversity of the site (or offsetting if an onsite gain is not achievable). BNG will be measured using Defra's biodiversity metric and habitat enhancements will need to be secured for at least 30 years.
- 2.1.2 In the interim all LPAs across Gloucestershire (including Stroud District Council (2023)) have produced an interim guidance document which states that "Prior to BNG becoming mandatory, we encourage applicants to achieve a minimum 10% net gain but any "measurable net gains" are acceptable in accordance with Paragraph 180d of the National Planning Policy Framework (NPPF)."
- 2.1.3 A core principle set out in the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) is to achieve sustainable development, which can be attained by planning proposals meeting three fundamental objectives of an economic, social and environmental nature. The environmental objective states that proposals will '*contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy*'.
- 2.1.4 The Natural England (DEFRA) Biodiversity Metric 4.0 was utilised to assess whether the proposal will result in a biodiversity net gain through development by quantifying the value of area and linear habitats prior to and post-development. This was achieved through calculating pre-intervention and post-intervention biodiversity units based on the habitats anticipated to be removed, altered, provided and/or enhanced to establish whether the difference results in a quantified net loss or gain in biodiversity.
- 2.1.5 Pre-intervention biodiversity units were determined by multiplying the size of a certain habitat parcel/length by its 'quality', which encompasses its distinctiveness, condition, strategic location and connectivity. Each parcel/length of habitat on site was accounted for and as a result, provides differing biodiversity units. The pre-intervention assessment determines the baseline biodiversity value of the development site and was quantified by adding the aforementioned biodiversity units together.
- 2.1.6 The pre-intervention biodiversity units on-site were calculated by utilising all habitat data available at the time of writing this report, which predominantly comprised information from a BNG Baseline Survey carried out by Abricon Limited in August 2023, as well as satellite imagery of the site. The site has recently been altered as part of development related activities, generally the BNG baseline must be based on the habitats found prior to 2020 to ensure no alterations post Environment Act (2021) influences the outcome of the BNG calculation.
- 2.1.7 The post-intervention assessment calculates the number of biodiversity units anticipated to be achieved through development. Post-intervention biodiversity units were determined in the same manner as outlined above while also taking into account the difficulty and time it takes to achieve habitat establishment, in addition to factoring in the element of risk in attaining the desired habitat.
- 2.1.8 The soft landscape plan prepared by In House Building Design (Project: 22:014, Drawing: PL02 Rev C, 2023) was utilised to calculate the post-development biodiversity units for the proposal. The plan used to inform this assessment is provided at the end of this document.

2.2 Personnel

- 2.2.1 [REDACTED] has been working in environmental consultancy since 2020. He holds a BSc in a related field with honours. His primary experience comprises 'extended' Phase 1 habitat surveys for Preliminary Ecological Appraisals, Preliminary Roost inspections, report writing including EclA, BNG and CEMP's, protected species surveys and habitat mapping for Biodiversity Net Gain calculations. He is a qualifying member of CIEEM and has been trained in Arboriculture for detailed tree surveys with associated report writing and figure creation.
- 2.2.2 [REDACTED] has been working in environmental consultancy since 2021. She holds a BSc and MSc in related subjects. Her primary experience comprises Preliminary Ecological Appraisals, Preliminary Roost inspections, report writing, protected species surveys and analysis of data collection.
- 2.2.3 [REDACTED] has been working in environmental consultancy since 2019. She is a qualifying member of CIEEM and holds a BSc and Postgraduate Diploma in related subjects. [REDACTED] primary experience includes Preliminary Ecological Appraisal, Ecological Assessment, protected species surveys, project and schedule management and Ecological Clerk of Works.
- 2.2.4 [REDACTED] has worked in ecological consultancy since 2012 and is an experienced project manager and environmental survey coordinator, including for major infrastructure projects. She is a full member of CIEEM and skilled in undertaking various ecological surveys including Preliminary Ecological Appraisal, protected species surveys and habitat condition assessment for Biodiversity Net Gain. [REDACTED] has also provided advice on wildlife legislation and planning policy including commenting on ecological matters regarding planning applications on behalf of local planning authorities.
- 2.2.5 [REDACTED] has worked in consultancy sector since 2006 with a focus on mammalian ecology, particularly bats [REDACTED] runs Abricon's Ecology Department as well as being involved in project delivery. She has managed various ecological projects and has expertise in a range of ecological survey techniques including Phase 1 habitat assessments and a variety of protected species surveys (e.g. the aforementioned mammal species as well as reptiles and great crested newts). [REDACTED] also devises ecological mitigation schemes for a variety of protected species. She is well versed in producing preliminary ecological appraisals, BREEAM/CSH Ecology Assessments, protected species licences, Ecological Impact Assessments (EclA), Construction Environmental Management plans, Biodiversity Enhancement Schemes and Ecological Design Strategies. [REDACTED] holds Natural England and Natural Resources Wales Class 2 licence for bats as well as Natural England Class and Natural Resources Wales Class 1 licence for great crested newts. She is also a Registered Consultant of the Bat Low Impact Class Licence (BLIC) and holds a CSCS card. [REDACTED] is a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM).

2.3 Limitations

Biodiversity Metric Constraints

- 2.3.1 The total biodiversity units calculated for area and linear habitats cannot be combined as they are treated as separate biodiversity accounts.
- 2.3.2 Small inaccuracies are introduced when mapping biodiversity net gain habitat areas, but since the Net Gain Metric accepts just two decimal places when entering habitat areas, these inaccuracies do not result in significant impacts to the net gain feasibility of the site.
- 2.3.3 A second BNG calculation is being performed for an adjacent site, and the two projects shared the access route into the site. As the BNG metric demands no double-counting of habitat areas, the hard-standing access was split into two to satisfy this requirement.

3 Biodiversity Metric Results

3.1 Pre-Intervention Biodiversity Units

3.1.1 The area-based habitats identified within the Phase 1 Habitat Survey on-site were amenity grassland, hardstanding, and scattered trees. Once translated into the UK Habitat Classification System, these habitats were labelled as the following:

UKHab Classification	Condition Assessment	Notes
Modified grassland – g4	Good	Grassland habitat area found throughout the existing hotel site, assessed as moderate condition, lost to development as a result of new wildflower grassland, modified grassland and new residential garden.
Ruderal or ephemeral - 81	Moderate	Ruderal vegetation fringing the modified grassland habitat; assessed as moderate condition, lost to development.
Developed land; sealed surface – u1b	N/A - Other	Hardstanding access and parking as well as buildings.
Urban Tree - 32	Moderate	9 Small trees, in moderate condition, 3 are to be removed and 6 retained.

3.1.2 The baseline biodiversity units were calculated for area habitats, as displayed in the worksheet titled 'A-1 Site Habitat Baseline' within the metric spreadsheet.

3.1.3 The majority of the habitats in the above table are anticipated to be lost through development. However, six trees will be retained through the proposed development, and therefore this has been marked as retained within the A-1 spreadsheet.

3.1.4 The linear-based habitat identified within the baseline habitat survey were the bounding hedgerows with trees to the western boundary of the site. Once translated into the UK Habitat Classification System, this habitat was labelled as the following:

UKHab Classification	Condition Assessment	Notes
Hedgerow with trees - 11	Moderate	6m section of hedgerow with trees that is due to be removed.

3.1.5 The baseline biodiversity units were calculated for linear habitats, as displayed in the worksheet titled 'B-1 Site Hedge Baseline' within the metric spreadsheet.

3.1.6 The existing hedgerow with trees habitat area is due to be lost to the proposed development to facilitate the new access route into the site.

3.1.7 All baseline habitats are displayed in the Baseline Habitats Plan in Figure 2 below.

3.2 Post-Intervention Biodiversity Units

3.2.1 The area-based habitats identified within the landscape plan were: other neutral grassland (species-rich wildflower turf) managed for the benefit of wildlife, modified gardens (residential gardens), buildings and hardstanding, species-rich native hedgerows and rural trees. Once translated into the UK Habitat Classification System, the post-development area habitats were characterised as the following:

UKHab Classification	Condition Assessment	Notes
Other neutral grassland – g3c	Good	Species-rich wildflower sowing to the southern boundary of the site
Modified grassland – g4	Poor	New grassland sowing the Pier View Hotel building
Vegetated Garden	N/A - Other	Residential garden associated with Flat 2.
Developed land; sealed surface – u1b	N/A - Other	Buildings, roads, and other hard landscaping
Urban tree - 32	Good	1 medium-sized and 11 small native trees to be planted in the newly created grassland area (good condition)

3.2.2 The biodiversity units were calculated for the above newly created area habitats, as displayed in the worksheet titled 'A-2 Site Habitat Creation' within the metric spreadsheet.

- 3.2.3 Two new linear-based habitats are proposed within the landscaping plan, comprising a native species-rich hedgerow which will be created within the central aspect of the site. The proposed enhancements are as detailed below, and are displayed in the worksheet titled 'B-3 Site Hedge Creation':
- 3.2.4 In order to calculate the tree sizes, a tree age calculator was used to inform the correct species and stem circumference at planting, and after how long the tree is expected to reach 7.5cm in stem circumference to reach 'Small' size.
- 3.2.5 In order to calculate the tree sizes, a tree age calculator was used to inform the correct species and stem circumference at planting, and after how long the tree is expected to reach 30cm in stem circumference to reach 'Moderate' size.

Proposed Habitat	Condition Change	Notes
Species-rich native hedgerow	Moderate	3 new hedgerows – total length of 10m

- 3.2.6 All newly proposed habitats are displayed in the Proposed Habitats Plan in Figure 3 below.



Figure 2 - Baseline Habitats Plan On-Site

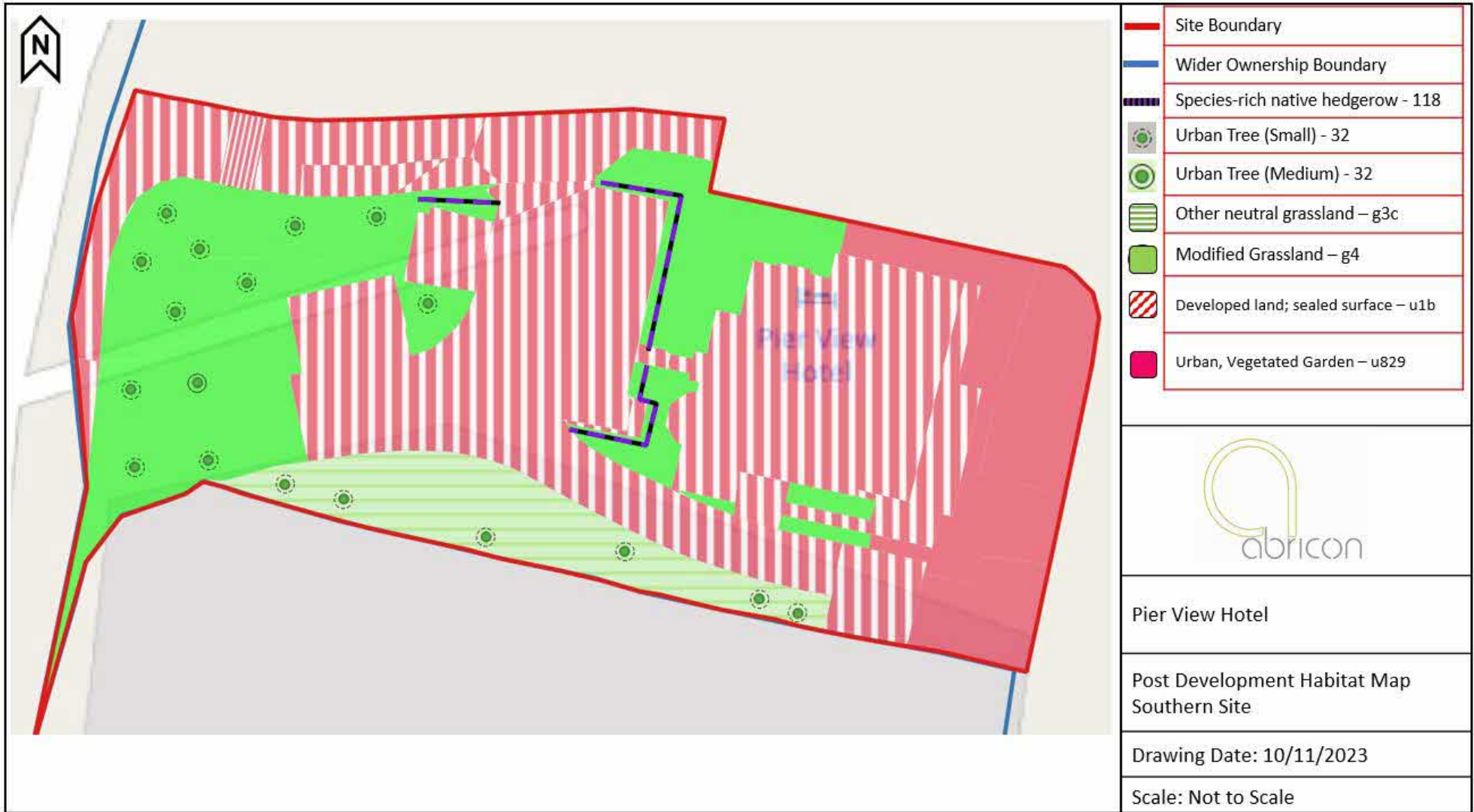


Figure 3 - Proposed Habitats Plan On-Site

4 Biodiversity Net Gain Results

4.1.1 Following the calculation of the pre-intervention and post-intervention biodiversity units, a total net gain of +0.21 biodiversity units was returned for area-based habitats (combined on and off-site), and a net gain of +0.01 biodiversity units was returned for linear (hedgerow) habitats on-site. These results are summarised in the below table in Figure 4:

FINAL RESULTS		
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	0.21
	<i>Hedgerow units</i>	0.01
	<i>Watercourse units</i>	0.00
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	32.02%
	<i>Hedgerow units</i>	19.55%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

Figure 4 - Biodiversity Net Gain Results

4.1.2 As outlined in the above table (Figure 4), assuming that the habitats targeted for creation/enhancement will be achieved, the proposed development is anticipated to result in an overall net gain in area-based habitat units (+32.02%), and a net gain in linear-based (hedgerow) habitat units (+19.55). All trading rules have been satisfied.

5 Conclusions

- 5.1.1 The above assessment has concluded that the proposed development is anticipated to deliver an overall net gain in both the area-based habitat and hedgerow units.
- 5.1.2 A Landscape Environmental Management Plan (LEMP) will need to be developed for the site, which will provide prescriptions for habitat creation and management to ensure that the targeted habitats and their respective conditions can be delivered as part of the proposed development.
- 5.1.3 Given the positive outcome of the DEFRA Biodiversity Metric for both area and linear habitat units, and assuming the successful implementation of the LEMP, the proposed development can be considered to be in accordance with the requirements of the National Planning Policy Framework (NPPF, July 2021).

6 References

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Appendix A – PL01 Planning Layout (Project: 22:014, Drawing: PL02 Rev C)

PROPOSED RESIDENTIAL DEVELOPMENT
PIER VIEW HOTEL
SHARPNESS



AFFORDABLE				
REF			TOTAL	
A	2B4P HOUSE	2 BED	79.5	02 159
B	3B5P HOUSE	3 BED	93.4	01 93.4
			TOTALS	03 252.4

OPEN MARKET				
REF			TOTAL	
C	1B2P FLAT	1 BED	50.0	01 50.0
D	1B2P FLAT	1 BED	55.0	01 55.0
E	3B5P HOUSE	3 BED	93.4	01 93.4
F	3B5P HOUSE	3 BED	93.4	01 93.4
G	3B5P HOUSE	3 BED	108.9	01 108.9
H	4B5P HOUSE	4 BED	118.9	01 118.9
			TOTALS	06 517.5
			TOTALS	09 769.9



- KEY**
- 450mm high timber trip fence.
 - 900mm high timber post and wire.
 - 1800mm high timber close boarded fencing.
 - 1800mm high timber gate.
 - Indicates concrete flag paved path/ patio area.
 - Indicates private drives.
 - Porous paving to road
 - Indicative proposed turf planting.
 - Existing trees to be retained
 - Existing trees to be removed
 - Proposed tree and shrub planting
 - Front / rear door position.
 - Patio / french door position.
 - External bin storage location
 - Cycle storage location

Note:
Scale via 25 metre grid

HOTEL				
REF			TOTAL	
F1	2B4P FLAT	2 BED	93.4	01 93.4
F2	2B4P FLAT	2 BED	119.1	01 119.1
F3	2B4P FLAT	2 BED	91.4	01 91.4
F4	3B5P FLAT	3 BED	92.0	01 92.0
F5	2B3P FLAT	2 BED	94.6	01 94.6
			TOTALS	05 490.5

PIER VIEW HOTEL
34 OLDMINSTER ROAD
SHARPNESS, BERKELEY
GL13 9NA

PROJECT NO.
22:014

DRAWING: PL02

REVISION : C

SCALE :
1/500 @ A3

PLANNING LAYOUT HOTEL

