



SUSTAINABILITY ASSESSMENT REPORT

GEORGE & DRAGON PUB REDEVELOPMENT

MAY 2025

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Project Name
Viro Project Number

George & Dragon Pub Redevelopment
7481

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Verified By:	Daryl Fisher	Signed:	

INTRODUCTION

This project, located at 162 Bath Road, Reading, comprised the demolition of the George & Dragon Public House to make way for a new Greggs Drive Thru retail and bakery unit. Additionally, the site's vehicular accessway, car parking facilities and landscaping underwent alterations.

In line with Planning Conditions 20 and 21, an alternative sustainability assessment addressing the requirements of Policy CC2 including appropriate assessment criteria has been proposed. Details of the sustainability assessment are described within the assessment report presented here.

This report was written at Post-Construction Stage (RIBA Stage 6) to demonstrate compliance with the criteria referred to in Planning Condition 20. Enclosed within this document are validation statements addressing each requirement, references to relevant evidence, images of the site in operation taken during the final site inspection (Appendix A), a comprehensive schedule of evidence (Appendix B) and a progress tracker (Appendix C).

At the time of submission (20th of May 2025), the assessment has met the requirements of 28 of the 30 credits and achieved a score of 93% (Appendix C). The assessment report should be read in conjunction with the full evidence package issued with the report.

Yours Sincerely,
for Viro



Phoebe Marshall BSc (Hons), MSc.
Senior Sustainability Consultant

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SUSTAINABILITY ASSESSMENT

MANAGEMENT

Requirement
The following measures have been incorporated into the design: • Site and building layout designed to allow full access by elderly and disabled persons which meets CAGE guidance and Part M of the Building Regulations, • Ensuring the Principal Contractor establishes a system to monitor and control construction impacts such as waste generation and energy use, • Use of local suppliers and contractors wherever possible, • Use of high-grade materials from local sources as far as possible.
Validation Statement
Architect Richard Smith of Darnton B3 confirmed in a letter that the site and building layout will be designed to allow full access by elderly and disabled persons in order to meets CAGE guidance and part M of the Building Regulations (Ref.3). Please see the As-Built Site Plan which illustrates tactile paving at the break of pavement on Bath Road and the crossing point between Bath Road and the drive-thru (Ref.P41). Please see Ref.P43 for details of the tactile paving. Ref.P44 is an image of the tactile paving installed at the pavement break along Bath Road. Please see the principal contractor's site monitoring proforma in Ref.P79; the shopfitters' site monitoring proforma can be reviewed in Ref.P99. The shopfitters sent images of the electrical meter when they started onsite and when the finished (Ref.P97). The waste generated by the fit-out was monitored and is presented in Ref.P94 & Ref.P95. Please see the email sent by Paul Curlett of Kinnear Miller Associates which details the contractors approached for tender bids. Paul confirms that PCA Build were appointed due to their price which was a necessity over a local contractor. Mike Blewett of PCA Build also provided a document to justify why non-local sub-contractors were chosen; cost was also the driving factor for PCA Build (Ref.P55).
Evidence
Ref 3 Architecture Commitment Letter George and Dragon Reading 15.04.24
Ref 4 Greene King Contractor's Commitment Letter
Ref P41 16854-DB3-B01-00-DR-A-90002J As-Built Site Plan
Ref P43 16854-DB3-B01-00-DR-A-90005F As-Built Landscape Plan
Ref P44 Bath Road Tactile Paving
Ref P52 Principal Contractor Tender
Ref P55 George & Dragon - Subcontractor Records
Ref P79 PCA Build Site Monitoring Proforma 2025_02_6
Ref P94 Waste Transfer Notes - Greggs Reading - Interiors
Ref P95 Recycling Report - Interiors
Ref P97 Meter Readings Start and End

Ref P99 Greggs Interiors Reading Monitoring Site Impacts

1/1 Credit(s) Achieved

HEALTH AND WELLBEING

Requirement

High frequency ballasts are to be installed on all fluorescent and compact fluorescent lamps.

Validation Statement

Please see Greggs' commitment letter which confirms that all lights are LED (Ref.6). Ref.P65 includes manufacturer's literature for the installed lights confirming that all light fittings are LED. Please see Ref.P104 for the as-built lighting layout and Appendix A for images of the installed lights.

Evidence

Ref 6 George & Dragon Letter - Greggs

Ref P65 Lighting - Fagerhult

Ref P104 S6349 READING GEORGE DRAGON DT -AS BUILT-04 RCP & POWER

1/1 Credit(s) Achieved

Requirement

All internal and external lighting, where specified will be in accordance with the appropriate maintained luminance levels (in lux) as recommended by CIBSE.

Validation Statement

Andrew John Kay of Concept MEP confirmed in a letter that all external lighting is designed in compliance with the guidance in the Institution of Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2005 (Ref.1).

Shop Design Manager at Greggs, Mike Harwood, confirmed that all lighting schemes are specified in accordance with maintained luminance levels as recommended by CIBSE (Ref.6).

Evidence

Ref 1 Concept-MEP Commitment Letter

Ref 6 George & Dragon Letter - Greggs

1/1 Credit(s) Achieved

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ENERGY AND CARBON EMISSIONS

Requirement
While energy efficiency is a clear sustainability issue, Policy CC2 does not require a specific reduction in carbon emissions above Part L building regulations. However, it is advisable that an improvement on the Part L building regulations is achieved for new build projects.
Validation Statement
The MEP commitment letter confirms that an improvement over Part L will be achieved (Ref.1). The as-built BRUKL confirms that the Building Emission Rate is 15.94 kgCO ₂ /m ² .annum which demonstrates an improvement over the Target Emission Rate of 16.6 kgCO ₂ /m ² .annum and therefore, an improvement over Part L (Ref.P34). Please see also the as-built EPC which confirms an A rating (Ref.P35).
Evidence
Ref 1 Concept-MEP Commitment Letter
Ref P34 Greggs_BathRoad_brukl_AsBuilt_ShellCore
Ref P35 Greggs_BathRoad_epc_AsBuilt_ShellCore
1 / 1 Credit(s) Achieved

Requirement
A fabric first approach to the reduction of energy will be adopted with low carbon heating and hot water systems.
Validation Statement
Architect Richard Smith of Darnton B3 confirmed in a letter that a fabric first approach to the reduction of energy will be adopted with low carbon heating and hot water systems (Ref.3).
An air permeability test was carried out on the 22 nd of January 2025; the certificate highlighted no defects (Ref.P36).
Please see the manufacturer's literature for the heat pump inverter which confirms that a low carbon heating system has been installed (Ref.P59). An electric water heater has also been specified and installed (Ref.P66). Therefore, all heating and hot water is supplied by non-combustion systems. Datasheets for the electric wall heater panels installed in the staffroom were provided by Greggs and can be viewed in Ref.P102 & Ref.P103.
Please see Appendix A for images of the installed building services.
Evidence
Ref 3 Architecture Commitment Letter George and Dragon Reading 15.04.24
Ref P36 Air Permeability Test Certificate EAS-10398078
Ref P59 PLA-ZM-R32_Three_Phase_MAY_24 - Greggs George and Dragon DT

Ref P66 Water Heater
Ref P102 PVE
Ref P103 PLE-MWIFI
1 / 1 Credit(s) Achieved

Requirement
The development proposes a building specification and services strategy that will exceed the minimum requirements of the Building Regulations, and will aim to incorporate the following measures: • Electric meter, • LED and compact fluorescent lighting, • Motion controlled low energy internal lighting and photocell controlled external lighting, • An innovative energy efficient, low temperature and cooking system and energy heat recovery on dishwashing systems.
Validation Statement
Greggs confirmed in a letter they will install an electric meter (Ref.6). The datasheet of the installed meter can be seen in Ref.P86. Gemma Pearson of Greggs confirmed via email that additional sub-meters were not required and therefore have not been installed (Ref.P87, page 2 under point 3). Shop Design Manager at Greggs, Mike Harwood, confirmed that all specified light fittings are LED (Ref.6). Ref.P65 includes manufacturer's literature for the installed lights confirming that all light fittings are LED. Please see Ref.P104 for the as-built drawing layout. Please see the external lighting proforma which confirms that LED lighting has been installed externally (Ref.P46; Ref.P80). With a luminous efficacy of 171 lm/W, the fittings greatly exceed the efficacy of 70 lm/W recommended by BREEAM. The MEP commitment letter confirms that external lighting will be controlled via photocell (Ref.1). Please see Appendix A for images of the internal and external lighting. Mike Harwood also confirmed that energy efficient Self Selectors, Eco Ovens, Eco Sota ovens, Eco Dishwasher will be installed (Ref.6). Ref.P67 includes datasheets and drawings of the installed cooking and storage equipment whilst Ref.P68 presents the datasheet for the dishwasher installed. Please see Appendix A for images of the cooking and dishwashing system.
Evidence
Ref 1 Concept-MEP Commitment Letter
Ref 6 George & Dragon Letter - Greggs
Ref P46 George & Dragon External Lighting Proforma
Ref P65 Lighting - Fagerhult
Ref P67 Greggs Cooking & Store Equipment

Ref P68 Hobart FPSW-10B Dishwasher
Ref P80 External Light Fitting THEOS GLASS MINI SR100
Ref P86 Mk10A-Factsheet-English
Ref P87 Greggs' PC Confirmation Email
Ref P104 S6349 READING GEORGE DRAGON DT -AS BUILT-04 RCP & POWER
1 / 1 Credit(s) Achieved

Requirement
In addition to the above the end-user will implement the following principals in the shop layout: • Cooling units located away from warm areas, • Air curtains over entrance doors to mitigate heat loss, • Air conditioning will be turned off when not required and at night.
Validation Statement
The commitment letter sent by Greggs confirms that cooling units will be located away from warm areas (Ref.6). Ref.P60 illustrates the location of the air conditioning units and oven canopy and confirms that these are located away from one another. Please see also Ref.P61 & Ref.P105 to verify the location of the ovens. Ref.P60 & Ref.P101 illustrate the proposed location of the 2000mm heat pump over door air curtain suspended from entrance soffit and air conditioning cassettes. Please see datasheets for the air curtain system and air conditioning in Ref.P58 & Ref.P59 respectively. Greggs confirmed that air conditioning will be turned off when not required and at night (Ref.6). This is also confirmed in Greggs' Sustainability Policy (Ref.P72). Please see Appendix A for images of the cooling units, air curtain, ovens and air conditioning.
Evidence
Ref 6 George & Dragon Letter - Greggs
Ref P58 HP_DX_2.0_R32_Air_Curtain_System - Greggs George and Dragon DT
Ref P59 PLA-ZM-R32_Three_Phase_MAY_24 (1) (1) - Greggs George and Dragon DT
Ref P60 S6349 READING GEORGE DRAGON DT 11B PROPOSED HVAC PLAN
Ref P61 S6349 READING GEORGE DRAGON DT 08C PROPOSED GA PLAN
Ref P72 Greggs Sustainability Policy
Ref P101 S6349 READING GEORGE DRAGON DT -AS BUILT-05 HVAC PLAN
Ref P105 S6349 READING GEORGE DRAGON DT -AS BUILT-02 EXISTING GA PLAN
1 / 1 Credit(s) Achieved

TRANSPORT

Requirement
The proposed development is surrounded by residential areas and accessible by multiple forms of transport.
Validation Statement
The Architectural Commitment Letter confirms that the development is surrounded by residential areas and accessible by multiple forms of transport (Ref.3). The site is located to the west of Reading town centre to the northern side of the A4 Bath Road (Ref.P17, Clause 4.1.1). The peripheries to the site are generally characterised by residential dwellings, resulting a high level of permeability to / from the site on foot (Ref.P17, Clause 4.1.1). Figure 2 illustrates the site location and local neighbourhood context (Ref.P17). The screenshot taken from Google Maps corroborates this (Ref.P18). The closet bus stops are located on Bath Road and Burghfield Road, circa 125m from the site (Ref.P17, Figure 6). Access to the stops on foot is facilitated by the dedicated local pedestrian infrastructure as previously outlined (Ref.P17, Clause 4.2.14). Figure 8 presents the local bus service information including peak frequencies (Ref.P17). The closest railway station to the site is Reading West located approximately 3.5km to the north-west of the site and is accessible by a cycle ride or bus journey (Ref.P17, Clause 4.2.16). The station has a ticket office / machine and bicycle parking (Ref.P17, Clause 4.2.16). Frequent links to local destinations include Newbury and Basingstoke and Reading Station, providing onward travel across the south of England (Ref.P17, Clause 4.2.16). The site records an Accessibility Index (AI) of 2.54 as confirmed in Clause 4.2.18 and Appendix B of Ref.P17. Please see Appendix A for images of the local bus stops.
Evidence
Ref 3 Architecture Commitment Letter George and Dragon Reading 15.04.24
Ref P17 2023-04-03 - George and Dragon Reading - Travel Plan - 6488
Ref P18 Site Location
1/1 Credit(s) Achieved

Requirement
The site aims to have suitable and appropriate parking spaces for its size and use with clear demarcation for pedestrian and vehicular movements.
Validation Statement
It is not expected that public transport would serve as a primary mode of travel to the site by customers given its nature as a Drive-Thru unit (Ref.P17, Clause 4.2.17). However, local staff could utilise the public transportation detailed in the validation statement above as an alternative to

driving which in turn would free up car parking onsite (Ref.P17, Clause 4.2.17). The Architectural Commitment Letter confirms that the site aims to have suitable and appropriate parking spaces for its size and use with clear demarcation for pedestrian and vehicular movements (Ref.3).

The site plan confirms an allocation of 33no. parking spaces including 2no. disabled spaces and 2no. waiting bay (Ref.P19; Ref.P41). In addition to this, the EVC Demise Plan illustrates proposals for 5no. electric vehicle chargers towards the western boundary of the site (Ref.P20). The as-built site plan confirms that these have been installed and serve 10no. EVC spaces (Ref.P41). Images of the site's parking spaces are included in Appendix A. The EVC data sheet can be viewed in Ref.P56.

Evidence

Ref 3 Architecture Commitment Letter George and Dragon Reading 15.04.24

Ref P17 2023-04-03 - George and Dragon Reading - Travel Plan - 6488

Ref P19 16854-DB3-B01-00-DR-A-90002F Proposed Site Plan

Ref P20 16854-DB3-B01-00-DR-A-07001B EVC Demise Plan

Ref P41 16854-DB3-B01-00-DR-A-90002J As-Built Site Plan

Ref P56 Tritium_PKM150_Data-Sheet

1 / 1 Credit(s) Achieved

Requirement

It is proposed that five electric vehicle charging points will be installed on site, servicing the equivalent of ten parking bays with further cabling infrastructure installed for another six spaces.

Validation Statement

The Architectural Commitment Letter confirms that 5no. EV charging points are proposed, servicing the equivalent of ten parking bays with further cabling infrastructure installed for another six spaces (Ref.3). The EVC Demise Plan illustrates proposals for 5no. electric vehicle chargers serving 10no. parking bays towards the western boundary of the site (Ref.P20). The as-built site plan confirms that these have been installed and serve 10no. EVC spaces (Ref.P41). Images of the EV parking bays are included in Appendix A. The EVC data sheet can be viewed in Ref.P56.

Evidence

Ref 3 Architecture Commitment Letter George and Dragon Reading 15.04.24

Ref P20 16854-DB3-B01-00-DR-A-07001B EVC Demise Plan

Ref P41 16854-DB3-B01-00-DR-A-90002J As-Built Site Plan

Ref P56 Tritium_PKM150_Data-Sheet

1 / 1 Credit(s) Achieved

Requirement
The site is accessible by walking and cycling with good quality, continuous and well-lit footways and cycleways planned within the development and in the adjacent developments.
Validation Statement
The Architectural Commitment Letter confirms compliance with the above requirement (Ref.3). A shared footway / cycleway is provided along the frontage of the site with tactile paving and dropped kerbs at key crossing points (Ref.P26, Clause 3.1.4). A similar arrangement is provided along the southern flank of Bath Road (Ref.P26, Clause 3.1.4). Concept MEP's Proposed External Lighting Layout illustrates the locations of the street lighting to be installed onsite (Ref.P28). The Layout includes a heat map to illustrate light spill and how the fittings will sufficiently light the footways and cycleway. The as-built External Lighting Layout demonstrates that there have been no changes between design stage and construction stage (Ref.P38). The Electrical Services Details drawing also illustrates the locations of the external light fittings (Ref.P33; Ref.P39). Please see the as-built site plan in Ref.P41 which illustrates the pedestrian and cycle entrance to the site from Bath Road. Images of the local cycleways, footways and tactile paving can be viewed in Appendix A.
Evidence
Ref 3 Architecture Commitment Letter George and Dragon Reading 15.04.24
Ref P19 16854-DB3-B01-00-DR-A-90002F Proposed Site Plan
Ref P26 2023-04-03 - George and Dragon Reading - Transport Assessment - 6488
Ref P28 020-09-E-01-C1 Proposed External Lighting
Ref P33 020-09-E-02-C4 Electrical Services Details Proposed Installation Works
Ref P38 020-09-E-01-AB As-Built External Lighting Layout
Ref P39 020-09-E-02-AB As-Built Electrical Services Details
Ref P41 16854-DB3-B01-00-DR-A-90002J As-Built Site Plan
1 / 1 Credit(s) Achieved

Requirement
The drive-thru units design includes 5no. cycle stands for parking up to 10no. bicycles.
Validation Statement
The Architectural Commitment Letter confirms that 10no. cycle storage spaces are proposed (Ref.3). The Proposed Site Furniture Plan confirms that 10no. cycle spaces are proposed (Ref.P25).
The As-Built Site Furniture Plan confirms that 10no. cycle spaces are provided (Ref.P42). Please see Appendix A for an image of the cycle shelter including 10no. cycle spaces.
Evidence
Ref 3 Architecture Commitment Letter George and Dragon Reading 15.04.24

Ref P25 16854-DB3-B01-00-DR-A-90010D Proposed Site Furniture

Ref P42 16854-DB3-B01-00-DR-A-90010E As-Built Site Furniture

1 / 1 Credit(s) Achieved

WATER

Requirement

To minimise water consumption a range of measures will be utilised so that they are kept to appropriate levels. The client has a design policy to ensure that all taps and WCs consume less potable water in use than standard specifications and includes:

- The use of non-concussive taps in public and staff areas.
- Installation of suitable metering of mains water supply.

Validation Statement

Shop Design Manager Mike Harwood of Greggs confirmed in a letter that non-concussive taps will be specified in public and staff areas (Ref.6); datasheets can be reviewed in Ref.P69.

Please see the as-built Mechanical Services Details drawing which illustrates the location of the mains incoming water supply and water meter (Ref.P40). An image of the installed meter on the mains supply has also been provided (Ref.P45). James Morley of Concept MEP confirmed in an email that the existing pub water supply was repurposed for the new development and the existing water meter was retained (Ref.P50). Please see the datasheet of the Honeywell Elster V210 Q2.5 water meter in Ref.P51. Please see Appendix A for images of the non-concussive taps.

Evidence

Ref 6 George & Dragon Letter - Greggs

Ref P40 020-09-M-01-AB As-Built Mechanical Services Details

Ref P45 Installed Water Meter Serial Number 10M402309

Ref P50 Water Meter Details

Ref P51 Water Meter Datasheet - V200V210Specsheet-1

Ref P69 D67381_Saracen_TDS

1 / 1 Credit(s) Achieved

Requirement

Water consumption will be monitored and shop located wash hand basins will be knee operated instantaneous water heaters.

Validation Statement

Please see the commitment letter sent by Greggs confirming the above (Ref.6). Please see the as-built Mechanical Services Details drawing which illustrates the location of the mains incoming

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water supply and water meter (Ref.P40). An image of the installed meter on the mains supply has also been provided (Ref.P45). James Morley of Concept MEP confirmed in an email that the existing pub water supply was repurposed for the new development and the existing water meter was retained (Ref.P50). Please see the datasheet of the Honeywell Elster V210 Q2.5 water meter in Ref.P51.

Ref.P81 illustrates the locations of the knee operated taps, whilst Ref.P82 & Ref.P83 present drawings of the knee operated sinks. Ref.P88 is a datasheet for the tap to be used in the back of house area. Please see Appendix A for images of the knee operated sinks.

Evidence

Ref 6 George & Dragon Letter - Greggs

Ref P40 020-09-M-01-AB As-Built Mechanical Services Details

Ref P45 Installed Water Meter Serial Number 10M402309

Ref P50 Water Meter Details

Ref P51 Water Meter Datasheet - V200V210Specsheet-1

Ref P81 S6349 READING GEORGE DRAGON DT 08E PROPOSED GA PLAN

Ref P82 KNEE OPERATED WHB

Ref P83 SINK GBB517 - knee operated sink

Ref P88 D67383_Saracen_TDS

1 / 1 Credit(s) Achieved

Requirement

Water temperatures will be pre-set and WCs will have dual flush cisterns with a main flush capacity of 6 litres.

Validation Statement

Greggs confirmed in a commitment letter that water temperatures will be pre-set and WCs will have dual flush cisterns with a main flush capacity of 6 litres (Ref.6).

It is confirmed in the notes of Ref.P81 that water temperatures are preset on water heaters.

The datasheet for the WC cisterns can be viewed in Ref.P91. The installed DOC M WC has a main flush capacity of 6 litres (Ref.P70), and a half flush capacity of 4 litres (Ref.P90). Therefore, it is a dual flush cistern. Appendix A presents images of the WCs and flush mechanisms installed.

Evidence

Ref 6 George & Dragon Letter - Greggs

Ref P70 G34964_Technical Data Sheet

Ref P81 S6349 READING GEORGE DRAGON DT 08E PROPOSED GA PLAN

Ref P90 ASH_Sandringham21_E898701_DSHEET_NN-EN

Ref P91 RAK Tonique Full Access Open Back White Close Coupled WC Pack With Urea Soft Close Seat

MATERIALS

Requirement
All thermal insulation products used in the building will have a low embodied impact relative to their thermal properties, again determined by the Green Guide to Specification targeting A or A+ ratings and all thermal insulation products used in the building will be responsibly sourced.
Validation Statement
<u>Building Fabric Insulation:</u> Please the architectural commitment letter in line with the requirement detailed above (Ref.3). Principal contractors PCA Build provided a completed building fabric insulation proforma with details of the insulation specified for the cavity walls, floors and roof (Ref.P21). Please note that whilst specifying the external wall and ground floor insulation, Celotex's product literature confirmed that they "operate independently monitored Quality and Environment Assurance Systems in line with EN ISO 9001 and EN ISO 14001" (see the technical datasheets within Ref.P22 & Ref.P23). However, further investigations confirmed that since Soprema acquired the Celotex brand from Saint-Gobain, they have not yet obtained ISO 14001 Certification (Ref.P29), rendering their current literature out-of-date and incorrect. Unfortunately, by the time this was confirmed, the building fabric insulation had already been procured. As this non-conformance arose due to the manufacturer's misinformation and not due to the diligence of the design team, I can confirm that this specification will not hinder the assessment from achieving this credit. Mannok Insulation was specified for the roof; as Mannok Insulation Ltd are certified to ISO 14001, the specified product is compliant with this criterion (Ref.P24). Manufacturers' literature for each specified product can be viewed in Ref.P22-Ref.P24; please see the product datasheets within each zip folder for confirmation that all products achieve a minimum BRE Green Guide Rating of A. Invoices for each product is included within each zip folder to confirm that the products listed in the proforma have been procured. Please see the site images confirming that the respective products have been installed (Ref.P30). <u>Building Services Insulation:</u> At the time of project submission, the building services insulation information was not available, therefore the credit has been withheld until this information becomes available.
Evidence
Ref 3 Architecture Commitment Letter George and Dragon Reading 15.04.24
Ref P21 Building Fabric Insulation Proforma
Ref P22 Celotex CW4000 - Cavity Wall Insulation

Ref P23 Celotex GA4000 - Floor Insulation
Ref P24 Mannok Therm Floor - Roof Insulation
Ref P29 Email - Celotex ISO 14001 & EPDs
Ref P30 Insulation - Site Images
0 / 1 Credit(s) Achieved

Requirement
Suitable protection will be given vulnerable parts of the building such as areas exposed to high pedestrian traffic, vehicular and trolley movements. For example, a bump rail will be provided in the service areas and the doors will be protected by kick plates.
Validation Statement
Architect Richard Smith of Darnton B3 confirmed in a letter that suitable protection will be given to vulnerable parts of the building such as areas exposed to high pedestrian traffic, vehicular and trolley movements (Ref.3). Ref.P71 presents a drawing of the proposed corner protection. Manufacturer's literature for the flooring confirms that the specified products are durable (Ref.P84; Ref.P85). The door schedule confirms that all doors are to be fitted with kickplates (Ref.P89). Please see the manufacturer's literature for the installed door stops in Ref.P96. Images of the installed durability measures can be reviewed in Appendix A.
Evidence
Ref 3 Architecture Commitment Letter George and Dragon Reading 15.04.24
Ref P71 walls-corner guard details
Ref P84 Altro-Technical-Data-Sheet-Altro-Suprema
Ref P85 Karndean - usa_2021_kd_epd_gluedown
Ref P89 05 DOORS 05-01-00
Ref P96 Projection_Door_Stop
1 / 1 Credit (s) Achieved

Requirement
The client is committed to the use of sustainable and recyclable materials throughout their shops ensuring that shop equipment and materials can be recycled after completion of the economic working life.
Validation Statement
The commitment letter sent by Greggs confirms that they will comply with the above (Ref.6). It is confirmed in Greggs' Sustainability Policy that they are committed to the use of sustainable and recyclable materials throughout their shops (Ref.P72). The policy also confirms that practically all

shop equipment and materials can be recycled after completion of the economic working life (Ref.P72).

Evidence

Ref 6 George & Dragon Letter - Greggs

Ref P72 Greggs Sustainability Policy

1 / 1 Credit(s) Achieved

Requirement

The client will endeavour to ensure where possible that materials come from a sustainable source which can be traced to its location of origin such as the timber used in shop fronts in conservation areas or listed buildings (FSC compliant).

Validation Statement

It is confirmed in Greggs' Sustainability Policy that they endeavour to ensure where possible that materials come from a sustainable source which can be traced to their location of origin such as the timber used in shop fronts in conservation areas or listed buildings (FSC compliant) (Ref.P72).

Please see the shopfitters (MDR Interiors) completed timber proforma in Ref.P92 and accompanying certificates in Ref.P93. Please see images of the internal and external timber in Appendix A. MDR Interiors confirmed that the only other applicable material were the ceiling tiles installed; please see British Gypsum's BES 6001 certificate within Ref.P100.

Additionally, principal contractor's PCA building also procured timber from legal and sustainable sources; please see their completed proforma in Ref.P75 along with the associated certificates and invoices in Ref.P76. PCA Build also completed a responsible sourcing proforma to confirm that the materials procured for the building's construction came from reputable and sustainable sources (Ref.P77). Please see Ref.P78 for the responsible sourcing certificates and invoices.

Evidence

Ref 6 George & Dragon Letter - Greggs

Ref P72 Greggs Sustainability Policy

Ref P75 PC Timber Procurement Proforma REV01

Ref P76 Timber Procurement - Certs and Invoices

Ref P77 Responsible Procurement Proforma REV01

Ref P78 G&D Responsible Procurement - Certs and Invoices

Ref P92 Greggs Timber Proforma - MDR Interiors

Ref P93 Interior Timber Certificates

Ref P100 Ceiling Tiles

1 / 1 Credit(s) Achieved

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Requirement

In addition to the above, the end-user will hire approved shopfitting contractors that are required to:

- To show details of disposal in Health and Safety files.
- All timber to come from sustainable FSC sources.
- Materials and equipment will be recycled. Equipment will be checked and refurbished as required before re use. Used materials will go through a recycling process.
- Waste is to be managed and recycling maximised.

Validation Statement

Greggs sent a letter to confirm that the shopfitters they instruct will comply with the above requirements (Ref.6). Please review Ref.P72 for evidence of compliance with the above points (page 4):

- Details of disposal will be shown in Health and Safety files.
- All timber to come from sustainable FSC sources (Ref.P75; Ref.P76; Ref.P92; Ref.P93).
- Materials and equipment will be recycled. Equipment will be and check and refurbished as require before re use. Used materials will go through a recycling process.
- Waste is to be managed and recycling maximised (Ref.P73; Ref.P74). Appendix A includes images of the internal bins and external bin store.

Additionally, principal contractor's PCA building also procured timber from legal and sustainable sources; please see their completed proforma in Ref.P75 along with the associated datasheets and invoices in Ref.P76.

Evidence

Ref 6 George & Dragon Letter - Greggs

Ref P72 Greggs Sustainability Policy

Ref P73 Greggs-Waste-Management-Process

Ref P74 SRP 0380-11- Retail Waste Litter Management procedure - Issue 2

Ref P75 PC Timber Procurement Proforma REV01

Ref P76 Timber Procurement - Certs and Invoices

Ref P75 PC Timber Procurement Proforma REV01

Ref P76 Timber Procurement - Certs and Invoices

Ref P92 Greggs Timber Proforma - MDR Interiors

Ref P93 Interior Timber Certificates

1/1 Credit(s) Achieved

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WASTE

Requirement

To promote a more sustainable approach to waste management the following measures will be undertaken:

- A Site Waste Management Plan (SWMP) will be developed and implemented to segregate and recycle construction waste.
- The significant majority of non-hazardous construction waste generated by the development will be diverted from landfill and reused or recycled.
- The use of recycled or secondary aggregates where possible.
- The provision of operational recycling facilities within the service yard.
- The client aims to divert the majority of waste away from landfill.

Validation Statement

SWMP:

Johann Barnard of PCA Build (Principal Contractor) developed a Site Waste Management Plan for the site in July 2024 prior to the commencement of onsite works (Ref.P10); Revision 2 of the project programme confirms that demolition was due to commence on the 29th of July 2024 (Ref.P11), whilst the SWMP was published on the 24th of July 2024 (Ref.P10). The SWMP includes:

- Waste Management Objectives (Clause 4.0), including ensuring compliance with waste management regulations. Please see the demolition contractor J Mould's legal register which details all applicable legislation they comply with while carrying out our operations in Ref.P31.
- Removal of Materials includes details of how waste streams will be segregated (Clause 5.0),
- Details of Post-Demolition Waste Management (Clause 6.0),
- Monitoring and Reporting (Clause 7.0). It is confirmed in Clause 7.0 that regular audits will be conducted to ensure compliance with the SWMP.

The demolition waste transport schedule presents the waste generated by the demolition phase and confirms that activities were closely monitored as required by the Management credit (Ref.P32).

Diversion from Landfill – Construction:

MDR Interiors provided their waste transfer notes and recycling report to confirm that 70% of waste was recycled and the remaining 30% was recovered (Ref.P94; Ref.P95).

Diversion rates for the waste generated by the build were not available at the time of submission, therefore, the credit has been withheld until this information is becomes available.

Operational Recycling Facilities:

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It is confirmed that operational recycling facilities will be supplied within the service yard within the Architectural commitment letter (Ref.3). Please see the as-built site plan which illustrates the external bin storage (Ref.P41).

Diversion from Landfill – Operational:

Greggs is committed to managing waste sustainably and uses the principles of Reduce, Reuse, and Recycle (Ref.P73).

Evidence

Ref 3 Architecture Commitment Letter George and Dragon Reading 15.04.24

Ref 4 Greene King Contractor's Commitment Letter

Ref 6 George & Dragon Letter - Greggs

Ref P10 Site Waste Management Plan

Ref P11 Appendix A - GK George & Dragon, Reading Programme 15.10.24 Rev 2

Ref P31 JMLEMS401 Legal Register V2

Ref P32 Final Demolition Waste Transport Schedule

Ref P41 16854-DB3-B01-00-DR-A-90002J As-Built Site Plan

Ref P73 Greggs-Waste-Management-Process

Ref P94 Waste Transfer Notes - Greggs Reading - Interiors

Ref P95 Recycling Report - Interiors

0 / 1 Credit(s) Achieved

Requirement

The end-user will implement in addition to the above the following waste management measures:

- Three external bins will be provided for both general waste and mixed recycling.
- Waste will be collected twice weekly Monday to Friday.
- All unsold food will be taken to an outlet store or collected by local charity groups and food banks on a nightly basis.
- The client's staff will ensure that bins will be monitored to ensure no overflowing of waste.

Validation Statement

Greggs confirmed that they will comply with the above requirement in a letter (Ref.6).

- Please see the as-built site plan and Appendix A which illustrate the external bin storage (Ref.P41).
- All waste transferred off-site via Biffa is covered by an annual Duty of Care season ticket (Ref. P74).
- Greggs look to redistribute any unsold food through their three unsold food streams (Ref.P73). Anything we can't redistribute will eventually go into food waste (Ref.P73).
- The shop Management will regularly monitor for the presence of litter at (Ref. P74):
 - Both the front of shop and any relevant rear yard areas etc.
 - Waste bin/skip areas or compounds.

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- The frequency of monitoring will be based on previous litter findings (Ref. P74).

Evidence

Ref 6 George & Dragon Letter - Greggs

Ref P41 16854-DB3-B01-00-DR-A-90002J As-Built Site Plan

Ref P73 Greggs-Waste-Management-Process

Ref P74 SRP 0380-11- Retail Waste Litter Management procedure - Issue 2

1/1 Credit(s) Achieved

LAND USE AND ECOLOGY

Requirement

The site will be landscaped to a high standard with existing boundary planting retained where possible. Landscaping will be focused around the perimeter of the site and will include the planting of 15 new trees to replace those that need to be removed. 6 of these trees will be planted along the Bath Road frontage as requested in pre-application advice.

Validation Statement

Senior Landscape Architect Chris Chippendale of Ground Control confirmed in a letter that the site will be landscaped to a high standard with existing boundary planting retained where possible (Ref.5). Christ also confirmed that landscaping will be focused around the perimeter of the site and will include the planning of 15 new trees to replace those that need to be removed (Ref.5). 6 of these trees will be planted along the Bath Road frontage as requested in pre-application advice (Ref.5).

The detailed planting plan illustrates the proposed locations of the 15 new trees including the 6 new trees proposed along Bath Road (Ref.8). Please see images of the planted trees in Ref.P54. Chris Chippendale of Ground Control confirmed that revision P05 of the planting plan informed the locations of the new trees and animal refuges (Ref.P62; Ref.P63). Appendix A includes images of the boundary protection, perimeter landscaping, 15 new trees including 6 new tress along Bath Road.

Evidence

Ref 5 Landscape Commitment letter - April 24

Ref 8 J230907-GCPS-ZZ-ZZ-D-L-0201 - George & Dragon Detailed Planting Plan - P04

Ref P54 Planted Trees & Hedgehog Highways

Ref P62 J230907-GCPS-ZZ-ZZ-D-L-0201 - The George and Dragon Greggs P05

Ref P63 Confirmation of As-Built J230907-GCPS-ZZ-ZZ-D-L-0201 - P05

1/1 Credit(s) Achieved

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Requirement

The scheme will demonstrate 66.25% net biodiversity gain as illustrated by the Biodiversity Metric Report. In response to advice from the applicant's ecologist and in order to enhance the ecological value of the site, the scheme also includes 4 bird boxes, 2 bat boxes, 3 insect houses as well as log piles and hedgehog houses.

Validation Statement

Ciara Bass of E3P completed a Biodiversity Metric Calculation to determine the change in ecological value of the site between pre- and post-development (Ref.P6). Ciara is Consultant Ecologist and a Qualifying Member of the Chartered Institute of Ecology and Environmental Management (Ref.P5, page 1). Ciara has experience undertaking Biodiversity Net Gain and Condition Assessments on a variety of projects across the UK (Ref.P5, Clause 1.1).

The Department for Environment, Food and Rural Affairs' (DEFRA) Biodiversity Metric 3.1 2022 version was used to undertake the metric calculation (Ref.P5, Clause 2.1). Results of the calculation were consolidated into a Biodiversity Metric Report which can be reviewed in Ref.P5. The report is dated November 2023 which was prior to the commencement of works onsite (Ref.P11). The calculation modelled a total gain of 0.36 habitat units and 0.18 hedgerow units as a result of the development based on the proposed planting plans (Ref.P6, Headline Results Tab; Ref.P5, Clause 3.6). A 66.25% gain in habitat units and 100% gain in hedgerow units will be incurred on-site as a result of development (Ref.P6, Headline Results Tab; Ref.P5, Table 3.5).

The report recommends a 30-year habitat management plan is produced to secure net gains on site (Ref.P5, Clause 4). Please see the email sent by Project Manager Paul Curlett of KMA which confirms that E3P have been instructed to produce a 30-year habitat management plan (Ref.P12). The 30 Year Habitat Management Plan can be reviewed in Ref.P53.

Senior Landscape Architect Chris Chippendale of Ground Control confirmed in a letter that the scheme will demonstrate 66.25% net biodiversity gain as illustrated by the Biodiversity Metric Report (Ref.5).

Jake M. Robinson PhD MCIEEM MRSB of RSK Biocensus produced a Preliminary Ecological Appraisal (PEA) and Bat Roost Assessment Report in August 2022 to identify mitigation and enhancement measures for the site (Ref.P1). The following opportunities for ecological enhancement were presented in Ref.P1:

- Nest / Roost Boxes:
 - Bird and bat boxes should be incorporated into the development design, including those suitable for a range of bat species, swift, house sparrow and/or starling, which are all species of conservation concern and are likely to be present within 1 km of the site (Clause 5.4.1).
- Log Piles and 'Hedgehog Highways':
 - Log piles incorporated into quieter parts of the site landscaping to offer deadwood refuge for hedgehogs and invertebrates including the locally present stag beetle (Clause 5.4.2). These should be created using any logs generated from vegetation clearance.

- Provision of 'hedgehog highways' (holes approx. 13 cm²) in any fencing on site would improve habitat connectivity for hedgehogs (Clause 5.4.2). Images of the hedgehog highways are included in Ref.P54.
- Biodiversity Enhancement Measures (Clause 5.4.4):
 - Creation of new native species boundary hedgerows along the western and eastern boundaries to strengthen habitat connectivity and/or provide habitats or food sources for birds, bats and mammals.
 - Install bat and/or bird boxes on retained buildings and trees within the site to provide additional roosting/nesting locations for these species.
 - Any retained grassland can be enhanced by seeding with locally present native species. The addition of kidney vetch would provide opportunities for the protected NERC S41-listed small blue butterfly. Chris Chippendale of Ground Control confirmed via email that this point is not relevant as all existing grassland has been removed from site (Ref.P14).

In line with the PEA, the Soft Landscape Management & Maintenance Plan produced by Landscape Architects Ground Control details the proposed features to be incorporated into the design (Ref.7). The habitat management features have been specified by the Project Ecologist (Ref.7; Ref.8; Ref.P13); it is confirmed in Ref.P14 that Celia Kenyon is the Project Ecologist.

Senior Landscape Architect Chris Chippendale of Ground Control also confirmed that in order to enhance the ecological value of the site, the scheme includes 4 bird boxes, 2 bat boxes, 3 insect houses as well as log piles and hedgehog houses (Ref.5). The Detailed Planting Plans (P04 & P05) illustrate the proposed location of the following refuges (Ref.8; Ref.P13):

- 5no. bird boxes,
- 5no. bat boxes,
- 3no. insect houses,
- 2no. log piles,
- 2no. hedgehog houses.

Ref.P15 illustrates the location of bat boxes as detailed within the licence for the demolition of the building. As these locations didn't align with the planting plan (Ref.P13), queries were raised regarding whether the locations shown in the planting plan were acceptable. Celia Kenyon confirmed that the proposed locations are acceptable as there is a separate requirement for the Natural England Bat Licence (Ref.P16). Celia later confirmed that the quantities and locations of the habitat features details above and presented in Ref.P13 were determined through the requirements of Natural England on replacement roosts (Ref.P27). An assessment was also made of what would be deemed suitable for the site in terms of professional judgement (Ref.P27).

Images of the installed animal refuges were provided by PCA at handover (Ref.P54; Ref.P57). Chris Chippendale of Ground Control confirmed that revision P05 of the planting plan informed the locations of the new trees and animal refuges (Ref.P62; Ref.P63).

Please see also Appendix A for confirmation that all required refuges have been installed.

Evidence

Ref 5 Landscape Commitment letter - April 24

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Ref 7 J230907-GCPS-XX-XX-T-L-0601 - Soft Landscape Management & Maintenance Plan - Rev C
Ref 8 J230907-GCPS-ZZ-ZZ-D-L-0201 - George & Dragon Detailed Planting Plan - P04
Ref P1 Preliminary Ecological Appraisal and Bat Roost Assessment Report
Ref P4 Bat Survey Report
Ref P5 Biodiversity Metric Report
Ref P6 Biodiversity Metric Calculation Tool
Ref P11 Appendix A - GK George & Dragon, Reading Programme 15.10.24 Rev 2
Ref P12 Habitat Management Plan Confirmation
Ref P13 J230907-GCPS-ZZ-ZZ-D-L-0201 - The George and Dragon, Greggs P05
Ref P14 No Retained Grassland
Ref P15 E3 Specification for Mitigation
Ref P16 Acceptable Proposed Bat Box Locations
Ref P27 Habitat Features - Quantities & Locations
Ref P53 81-070-R3-3- 30 Year Habitat Management Plan - George and Dragon, Reading
Ref P54 Planted Trees & Hedgehog Highways
Ref P57 Bat & Bird Boxes
Ref P62 J230907-GCPS-ZZ-ZZ-D-L-0201 - The George and Dragon Greggs P05
Ref P63 Confirmation of As-Built J230907-GCPS-ZZ-ZZ-D-L-0201 - P05
1 / 1 Credit(s) Achieved

Requirement
The scheme proposes a range of measures to support these species and enhance the site's future ecology potential, these measures are detailed on the submitted Landscape Plan.
Validation Statement
Please see the final planting plan which illustrates the location of all retained and new trees, new planting and installed animal refuges (Ref.P62); Ref.P63 confirms that Ref.P62 guided the location of the new planting and animal refuges. Images of the planted trees and animal refuges can be viewed in Ref.P54 & Ref.P57. To support the onsite species and the site's future ecology potential, a 30-Year Habitat Management Plan was produced by E3P ecology (Ref.P53).
Evidence
Ref 5 Landscape Commitment letter - April 24
Ref 7 J230907-GCPS-XX-XX-T-L-0601 - Soft Landscape Management & Maintenance Plan - Rev C
Ref 8 J230907-GCPS-ZZ-ZZ-D-L-0201 - George & Dragon Detailed Planting Plan - P04
Ref P53 81-070-R3-3- 30 Year Habitat Management Plan - George and Dragon, Reading
Ref P54 Planted Trees & Hedgehog Highways
Ref P57 Bat & Bird Boxes

Ref P62 J230907-GCPS-ZZ-ZZ-D-L-0201 - The George and Dragon Greggs P05

Ref P63 Confirmation of As-Built J230907-GCPS-ZZ-ZZ-D-L-0201 - P05

1 / 1 Credit(s) Achieved

POLLUTION AND FLOOR RISK

Requirement

The proposed development will ensure all external lighting design is in compliance with the guidance in the Institution of Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2005.

Validation Statement

Senior M&E Engineer Anrew John Kay of Concept MEP confirmed in a letter that all external lighting design is compliant with the guidance in the Institution of Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2005 (Ref.1).

Please see MEP Design Engineer James Morley's letter confirming that the external lighting strategy for the project takes consideration of the guidance in the ILP Guidance Notes for the reduction of obtrusive light, 2011 and ILE Guidance Notes for the reduction of obtrusive light, 2005 (Ref.P37). The lighting strategy complies with (Ref.P37):

- The external lighting design is in compliance with Table 2 of the ILP Guidance Notes for the reduction of obtrusive light, 2011 & ILE Guidance Notes for the reduction of obtrusive light, 2005.
- Where specified, all external lighting (except safety and security lighting) can be automatically switched off between 2300 and 0700.
- Where specified, safety and security light used between 2300 and 0700 comply with the lower levels of lighting recommended during these hours.
- Illuminated advertisements, where specified, will be designed in compliance with ILP PLG 05 The Brightness of Illuminated Advertisements

Please see Ref.P38 for the as-built external lighting schematic and Appendix A for images of the external lighting.

Evidence

Ref 1 Concept-MEP Commitment Letter

Ref P37 Concept MEP Light Pollution Confirmation Letter

Ref P38 020-09-E-01-AB As-Built External Lighting Layout

1 / 1 Credit(s) Achieved

Requirement

The unit will also ensure the specification of low Global Warming Potential (GWP) and zero Ozone Depleting Potential (ODP) insulation materials.

Validation Statement

It is confirmed in the Architectural commitment letter that low Global Warming Potential (GWP) and zero Ozone Depleting Potential (ODP) insulation materials will be specified (Ref.3). Manufacturers' literature for every insulation material installed can be viewed in Ref.P22-Ref.P24; please see the product datasheets within each zip folder for confirmation that all products achieve a minimum BRE Green Guide Rating of A. It is confirmed on page 2 of the Mannok Therm Floor MF PIR Insulation Boards - Green Guide Rating document that the product has zero ozone depletion potential (zero ODP) and low global warming potential (Ref.P24). Please see also Celotex's [Sustainability](#) webpage which confirms that "all Celotex products are manufactured under an Environmental Management System which is aligned with ISO 14001 standards. BRE Global Green Guide generic specification achieves a summary rating of A. Global Warming Potential (GWP) Less than 5 and zero Ozone depletion (ODP)" (Ref.P64).

Evidence

Ref 3 Architecture Commitment Letter George and Dragon Reading 15.04.24

Ref P22 Celotex CW4000 - Cavity Wall Insulation

Ref P23 Celotex GA4000 - Floor Insulation

Ref P24 Mannok Therm Floor - Roof Insulation

Ref P64 Celotex Sustainability

1 / 1 Credit(s) Achieved

Requirement

The proposed strategy strives to utilise sustainable drainage techniques in accordance with the guidance described in CIRIA C753 and the published RBC guides. With this in mind, the strategy employs a soakaway consisting of geo-cellular crates to facilitate the discharge of surface water run-off via infiltration to the underlying soil strata.

Validation Statement

The above is confirmed in Clause 3.3 of the Drainage Strategy (Ref.P9) and again in the commitment letter sent by Glanville (Ref.2). Drainage calculations are viewable within Appendix G of the Drainage Strategy (Ref.P9). Please see the geocellular crate soakaway illustrated in Ref.P47.

Evidence

Ref 2 Glanville Consultants' Commitment Letter

Ref P9 Drainage Statement

Ref P47 As-Built 8220244 - 1201 Z1 Drainage Layout

1 / 1 Credit(s) Achieved

Requirement
Given the site is under 1 hectare in area, is located entirely within Flood Zone 1 (and at low risk of all other sources of flooding identified) and does not propose a change to a higher flood risk vulnerability classification, a site-specific Flood Risk Assessment is not required to accompany a planning application. Nonetheless, in accordance with local guidance, a drainage strategy for the proposed development has been developed.
Validation Statement
The above statement was taken from the introduction of the Drainage Statement produced by Glanville (Ref.P9, Clause 1.4); it is also reiterated in the commitment letter sent by Lucy Moxon of Glanville Consultants (Ref.2). The flood map for planning presented in Ref.P8 confirms that the site and surrounding area is located in Flood Zone 1 with a low probability of flooding. Ref.P7 is a screenshot taken from the UK Government's long term flood risk page which confirms a low yearly chance of flooding. The surface water drainage strategy employs a soakaway consisting of geocellular crates to facilitate the discharge of surface water run-off via infiltration to the underlying soil strata (Ref.P9, Clause 3.3). MicroDrainage calculations included in Appendix G show the proposed soakaway has been sized to provide sufficient storage for the 1 in 100-year storm event, with a 40% allowance for the effects of climate change (Ref.P9, Clause 3.6). Please review the as-built drawings which illustrate the site's drainage strategy in compliance with the Drainage Strategy (Ref.P47; Ref.P48; Ref.P49).
Evidence
Ref 2 Glanville Consultants' Commitment Letter
Ref P7 Flood Risk G&D
Ref P8 Flood Map for Planning
Ref P9 Drainage Statement
Ref P47 As-Built 8220244 - 1201 Z1 Drainage Layout
Ref P48 As-Built 8220244 - 1001 Z1 External Works Layout
Ref P49 As-Built 8220244 - 1101 Z1 Levels Layout
1 / 1 Credit(s) Achieved

Requirement
The development will discharge domestic sewage via a connection to the public foul sewer or combined sewer network where it is reasonable to do so.
Validation Statement
The commitment letter sent by Glanville confirms the above (Ref.2). A CCTV survey of the existing drainage regime on site found surface water flows discharged to a combination of soakaways located on site (Ref.P9, Clause 5.3). Foul water was found to discharge to a Thames Water sewer

located to the east of the site via the existing foul sewer serving the existing public house (Ref.P9, Clause 5.3).

Foul water effluent generated by the proposed development will drain to the existing Thames Water sewer located to the east of the site via the existing foul sewer serving the existing public house (Ref.P9, Clause 5.6). A Thames Water sewer is located to the east of the site (Ref.P9, Clause 4.2); this is illustrated on Topographical Survey & CCTV Drainage Survey (drawing no. 41024A /1) produced by Midland Survey Ltd in February 2022 (Ref.P9, Appendix B). Please see the as-built drainage layout which illustrates where domestic sewage from the site is discharged (Ref.P47).

Evidence

Ref 2 Glanville Consultants' Commitment Letter

Ref P9 Drainage Statement

Ref P47 As-Built 8220244 - 1201 Z1 Drainage Layout

1 / 1 Credit(s) Achieved

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APPENDIX A

SITE INSPECTION PHOTOGRAPHS

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GENERAL IMAGES



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Internal Light Fittings





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Energy and Carbon Emissions

Heat Pump



Ceiling Cassette



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Air Conditioning



Staffroom Panel Heater



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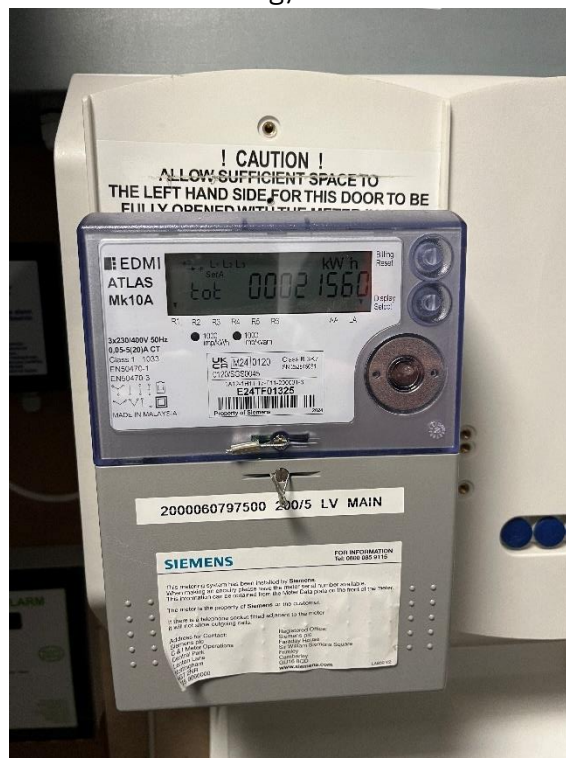
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Water Heater



Energy Meter



External Light Fittings



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Internal Light Fittings and PIR



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Cooking Systems



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Dishwashing Heat Recovery Systems



Cooling Units



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Air Curtain



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Transport Nodes



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Parking



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Footways & Cycleways



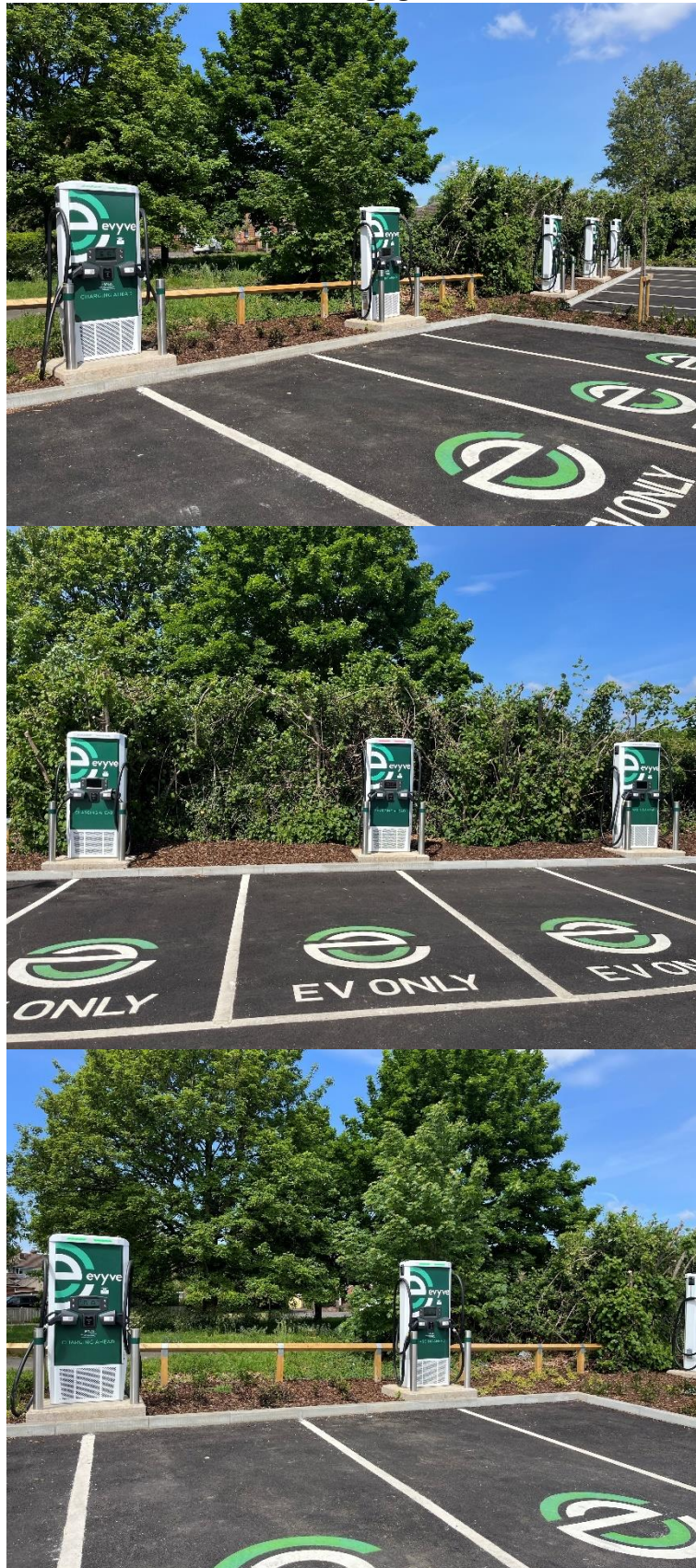
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10 EV Charging Bays



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Footway Lighting



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Tactile Paving



10 Cycle Spaces



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Non-Concussive Taps



Knee Operated Sink & Tap



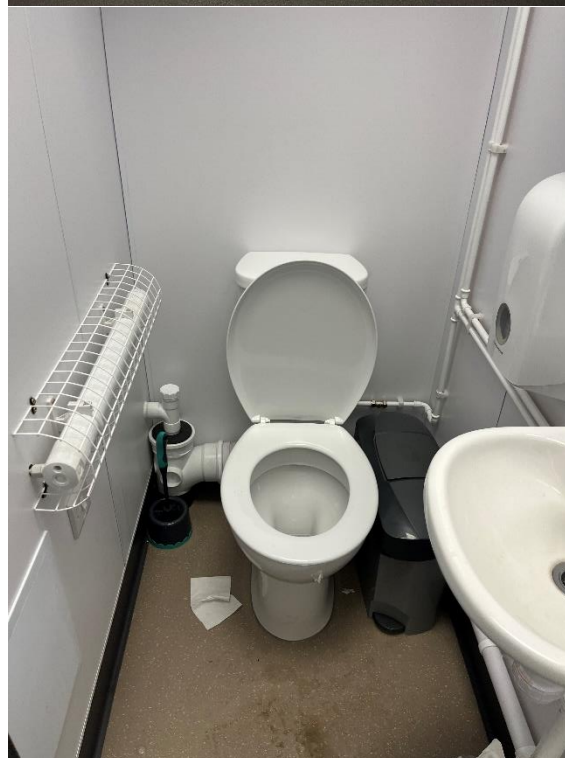
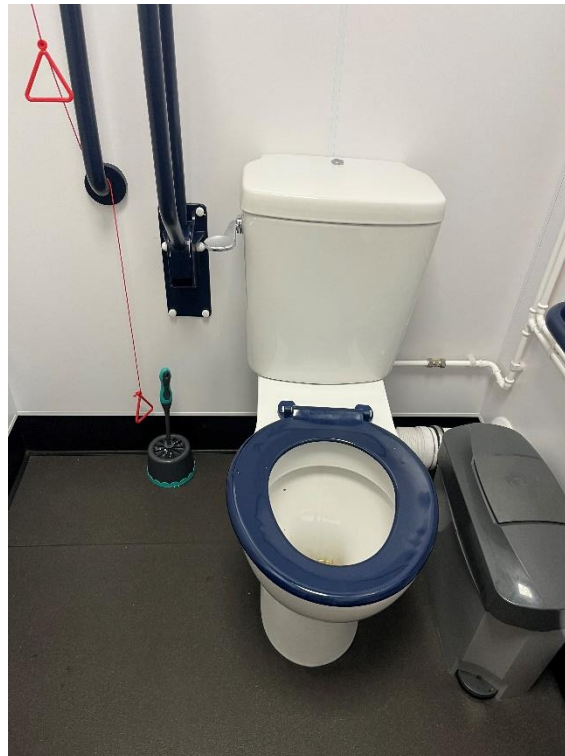
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WCs



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Flush Mechanisms



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Corner Protection



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Door Stops



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Kick Plates



Durable Flooring



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External Timber



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Bollards



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Internal Waste Facilities



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External Waste Facilities



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Boundary Protection



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Perimeter Landscaping



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15 New Trees



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6 New Trees along Bath Road



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New Planting



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2 Bat Boxes



4 Bird Boxes



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3 Insect Houses



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Log Piles



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Hedgehog Highways



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Head Office

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APPENDIX B

SCHEDULE OF EVIDENCE

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George & Dragon Redevelopment Reading

Sustainability Assessment - Schedule of Evidence

First Submission Revision - 20.05.2025

Reference Number	Document Name
1	Concept-MEP Commitment Letter
2	010_8220244_LM_Letter
3	Architecture Commitment Letter_George and Dragon_Reading 15.04.24
4	Greene King Contractor's Commitment Letter
5	Landscape Commitment letter - April 24
6	George & Dragon Letter - Greggs
7	J230907-GCPS-XX-XX-T-L-0601 - Soft Landscape Management & Maintenance Plan - Rev C
8	J230907-GCPS-ZZ-ZZ-D-L-0201 - George & Dragon Detailed Planting Plan - P04
P1	Preliminary Ecological Appraisal and Bat Roost Assessment Report
P2	Tree Climbing Survey Letter/Report
P3	Emergence Survey Addendum
P4	Bat Survey Report
P5	Biodiversity Metric Report
P6	Biodiversity Metric Calculation Tool
P7	Flood Risk G&D
P8	Flood Map for Planning
P9	Drainage Statement
P10	Site Waste Management Plan
P11	Appendix A - GK George & Dragon, Reading Programme 15.10.24 Rev 2
P12	Habitat Management Plan Confirmation
P13	J230907-GCPS-ZZ-ZZ-D-L-0201 - The George and Dragon, Greggs P05
P14	No Retained Grassland
P15	E3 Specification for Mitigation
P16	Acceptable Proposed Bat Box Locations
P17	2023-04-03 - George and Dragon Reading - Travel Plan - 6488
P18	Site Location
P19	16854-DB3-B01-00-DR-A-90002F Proposed Site Plan
P20	16854-DB3-B01-00-DR-A-07001B EVC Demise Plan
P21	Building Fabric Insulation Proforma
P22	Celotex CW4000 - Cavity Wall Insulation
P23	Celotex GA4000 - Floor Insulation
P24	Mannok Therm Floor - Roof Insulation
P25	16854-DB3-B01-00-DR-A-90010D Proposed Site Furniture
P26	2023-04-03 - George and Dragon Reading - Transport Assessment - 6488
P27	Habitat Features - Quantities & Locations
P28	020-09-E-01-C1 Proposed External Lighting
P29	Email - Celotex ISO 14001 & EPDs

P30	Insulation - Site Images
P31	JMLEMS401 Legal Register V2
P32	Final Demolition Waste Transport Schedule
P33	020-09-E-02-C4 Electrical Services Details Proposed Installation Works
P34	Greggs_BathRoad_bruckl_AsBuilt_ShellCore
P35	Greggs_BathRoad_epc_AsBuilt_ShellCore
P36	Air Permeability Test Certificate EAS-10398078
P37	Concept MEP Light Pollution Confirmation Letter
P38	020-09-E-01-AB As-Built External Lighting Layout
P39	020-09-E-02-AB As-Built Electrical Services Details
P40	020-09-M-01-AB As-Built Mechanical Services Details
P41	16854-DB3-B01-00-DR-A-90002J As-Built Site Plan
P42	16854-DB3-B01-00-DR-A-90010E As-Built Site Furniture
P43	16854-DB3-B01-00-DR-A-90005F As-Built Landscape Plan
P44	Bath Road Tactile Paving
P45	Installed Water Meter Serial Number 10M402309
P46	George & Dragon External Lighting Proforma
P47	As-Built 8220244 - 1201 Z1 Drainage Layout
P48	As-Built 8220244 - 1001 Z1 External Works Layout
P49	As-Built 8220244 - 1101 Z1 Levels Layout
P50	Water Meter Details
P51	Water Meter Datasheet - V200V210Specsheet-1
P52	Principal Contractor Tender
P53	81-070-R3-3- 30 Year Habitat Management Plan - George and Dragon, Reading
P54	Planted Trees & Hedgehog Highways
P55	George & Dragon - Subcontractor Records
P56	Tritium_PKM150_Data-Sheet
P57	Bat & Bird Boxes
P58	HP_DX_2.0_R32_Air_Curtain_System - Greggs George and Dragon DT
P59	P59 PLA-ZM-R32_Three_Phase_MAY_24 (1) (1) - Greggs George and Dragon DT
P60	S6349 READING GEORGE DRAGON DT 11B PROPOSED HVAC PLAN
P61	S6349 READING GEORGE DRAGON DT 08C PROPOSED GA PLAN
P62	J230907-GCPS-ZZ-ZZ-D-L-0201 - The George and Dragon Greggs P05
P63	Confirmation of As-Built J230907-GCPS-ZZ-ZZ-D-L-0201 - P05
P64	Celotex Sustainability
P65	Lighting - Fagerhult
P66	Water Heater
P67	Greggs Cooking & Store Equipment
P68	Hobart FPSW-10B Dishwasher
P69	D67381_Saracen_TDS
P70	G34964_Technical Data Sheet
P71	walls-corner guard details
P72	Greggs Sustainability Policy
P73	Greggs-Waste-Management-Process
P74	SRP 0380-11- Retail Waste Litter Management procedure - Issue 2
P75	PC Timber Procurement Proforma REV01
P76	Timber Procurement - Certs and Invoices

P77	Responsible Procurement Proforma REV01
P78	G&D Responsible Procurement - Certs and Invoices
P79	PCA Build Site Monitoring Proforma 2025_02_6
P80	External Light Fitting THEOS GLASS MINI SR100
P81	S6349 READING GEORGE DRAGON DT 08E PROPOSED GA PLAN
P82	KNEE OPERATED WHB
P83	SINK GBB517 - knee operated sink
P84	Altro-Technical-Data-Sheet-Altro-Suprema
P85	Karndean - usa_2021_kd_epd_gluedown
P86	Mk10A-Factsheet-English
P87	Greggs' PC Confirmation Email
P88	D67383_Saracen_TDS
P89	05 DOORS 05-01-00
P90	ASH_Sandringham21_E898701_DSheet_NN-EN
P91	RAK Tonique Full Access Open Back White Close Coupled WC Pack With Urea Soft Close Seat
P92	Greggs Timber Proforma - MDR Interiors
P93	Interior Timber Certificates
P94	Waste Transfer Notes - Greggs Reading - Interiors
P95	Recycling Report - Interiors
P96	Projection_Door_Stop
P97	Meter Readings Start and End
P98	Greggs Building Services Proforma
P99	Greggs Interiors Reading Monitoring Site Impacts
P100	Ceiling Tiles
P101	S6349 READING GEORGE DRAGON DT -AS BUILT-05 HVAC PLAN
P102	PVE
P103	PLE-MWIFI
P104	S6349 READING GEORGE DRAGON DT -AS BUILT-04 RCP & POWER
P105	S6349 READING GEORGE DRAGON DT -AS BUILT-02 EXISTING GA PLAN



APPENDIX C

Progress Tracker

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Sustainable Performance Progress Tracker

George & Dragon Redevelopment Reading

First Submission Revision - 20.05.2025



Available	30
Achieved	28
Score	93%

Achieved
Some Outstanding
All Outstanding

BREEAM Aim	Credits		Sustainability Statement Measure	Evidence Required	Responsibility	Status	Comments
Management	Available	Achieved					
This category encourages the adoption of sustainable management practices in connection with design, construction, commissioning, handover and aftercare. This ensures that robust sustainability objectives are set and followed through into the operation of the building. Issues in this section focus on embedding sustainability through the key stages of design, procurement and initial occupation, from the initial project brief stage to the appropriate provision of aftercare.	1	1	The following measures have been incorporated into the design; - Site and building layout designed to allow full access by elderly and disabled persons which meets CABE guidance and Part M of the Building Regulations; - Monitor and control construction impacts such as waste generation and energy use; - Use of local suppliers and contractors wherever possible; - Use of high-grade materials from local sources as far as possible;	The following evidence is required: - As-built drawings & Assessor's images. - Monthly monitoring reports spanning the duration of the project & final figures. - Purchase orders & receipts. - Purchase orders & receipts.	DB3 / PCA Build / Greggs		
Health and Wellbeing							
Encourage best practice in visual performance and comfort by ensuring daylighting, artificial lighting and occupant controls are considered.	1	1	High frequency ballasts are to be installed on all fluorescent and compact fluorescent lamps.	As-fitted electrical schematics & manufacturers' literature.	Greggs		
Designing internal and external lighting systems to provide appropriate illuminance (lux) levels, thereby giving a more comfortable environment for occupants Internal lighting is zoned to allow for occupant control.	1	1	All internal and external lighting, where specified will be in accordance with the appropriate maintained luminance levels (in lux) as recommended by CIBSE.	Confirmation letter.	Greggs		
Energy and Carbon Emissions							
Encouraging the design of energy efficient buildings with energy performance above national building regulations. Encouraging the accurate modelling of operational energy consumption.	1	1	While energy efficiency is a clear sustainability issue, Policy CC2 does not require a specific reduction in carbon emissions above Part L building regulations. However it is advisable that an improvement on the Part L building regulations is achieved for new build projects.	As-built BRUKL.	Concept MEP		
Factors such as the thermal insulation, air permeability, shading and glazing areas should be carefully considered early as they can be used to reduce heating, cooling, and lighting demands.	1	1	A fabric first approach to the reduction of energy will be adopted with low carbon heating and hot water systems.	As-built mechanical specification, manufacturers' literature & Assessor's images.	Greggs		
Helping to identify and reduce high energy demands where possible by accurate measurement of the energy consumption of the building by end use. To encourage the installation of energy sub-metering to facilitate the monitoring of operational energy consumption. To enable managers and consultants post-handover to compare actual performance with targets in order to inform ongoing management and help in reducing the performance gap.	1	1	The development proposes a building specification and services strategy that will exceed the minimum requirements of the Building Regulations, and will aim to incorporate the following measures; - Electric meter; - LED and compact fluorescent lighting; - Motion controlled low energy internal lighting and photocell controlled external lighting; - An innovative energy efficient, low temperature and cooking system and energy heat recovery on dishwashing systems.	The following evidence is required: - Manufacturer's literature, Assessor's images, details of the metering system and end uses sub-metered e.g. tech sub. - Manufacturer's literature & Assessor's images. - Manufacturer's literature & Assessor's images. - Manufacturer's literature & Assessor's images.	Greggs / Viro		
Presence detection in areas of intermittent pedestrian traffic to avoid the unnecessary use of lighting.	1	1	In addition to the above the end-user will implement the following principals in the shop layout: - Cooling units located away from warm areas - Air curtains over entrance doors to mitigate heat loss - Air conditioning will be turned off when not required and at night	The following evidence is required: - As-built layout, Assessor's images. - As-built layout, Assessor's images. - Written confirmation from building occupier and manufacturer's literature confirming controls.	Greggs / Viro		
Transport							
To reward awareness of existing local transport and identify improvements to make it more sustainable.	1	1	The proposed development is surrounded by residential areas and accessible by multiple forms of transport.	The following evidence is required: - Screenshot of Google Maps illustrating the local transport nodes. - Calculation of average frequency per hour.	Walsingham Planning		
	1	1	The site aims to have suitable and appropriate parking spaces for its size and use with clear demarcation for pedestrian and vehicular movements.	The following evidence is required: - As-built site plan. - Assessor's images.	DB3 / Viro		
Promote provision of electric car recharging stations and reduced reliance on cars.	1	1	It is proposed that five electric vehicle charging points will be installed on site, servicing the equivalent of ten parking bays with further cabling infrastructure installed for another six spaces.	The following evidence is required: - As-built site plan. - Assessor's images.	DB3 / Ground Control / Viro		
Dedicated and safe cycle paths are provided from the site entrance to any cycle storage, and connect to off-site cycle paths where applicable. Dedicated and safe footpaths are provided on and around the site providing suitable links for the following: - The site entrance to the building entrance, - Car parks (where present) to the building entrance, - The building to outdoor space, - Connecting to off-site paths where applicable.	1	1	The site is accessible by walking and cycling with good quality, continuous and well-lit footways and cycleways planned within the development and in the adjacent developments.	The following evidence is required: - As-built site plan displaying ways on-site. - As-fitted external electrical drawing illustrating external lighting serving footways and cycleways. - Assessor's images.	DB3 / Ground Control / Viro / Greggs		

Dedicated and safe cycle paths are provided from the site entrance to any cycle storage, and connect to off-site cycle paths where applicable. Dedicated and safe footpaths are provided on and around the site providing suitable links for the following: - The site entrance to the building entrance, - Car parks (where present) to the building entrance, - The building to outdoor space, - Connecting to off-site paths where applicable.	1	1	The drive-thru units design includes 5no cycle stands for parking up to 10no bicycles.	The following evidence is required: - As-built site plan. - As-built cycle storage drawing. - Assessor's images.	DB3 / Viro		
Water							
Reducing the demand for potable water through the provision of efficient sanitary fittings, rainwater collection and water recycling systems. Specification of water meters to allow for management and monitoring of water use in the building. This encourages reductions in water use by identifying areas of high usage and investigating potential causes.	1	1	To minimise water consumption a range of measures will be utilised so that they are kept to appropriate levels. The client has a design policy to ensure that all taps and WCs consume less potable water in use than standard specifications and includes; - The use of non-concussive taps in public and staff areas. - Installation of suitable metering of mains water supply.	The following evidence is required: - Manufacturer's literature for taps & water meters. - Assessor's images.	Greggs		
	1	1	Water consumption will be monitored and shop located wash hand basins will be knee operated instantaneous water heaters.	The following evidence is required: - Confirmation letter from client. - Monitoring reports if available. - Manufacturer's literature. - Assessor's images.	Greggs		
Baseline effective flush volume is 6 litres.	1	1	Water temperatures will be pre-set and WCs will have dual flush cisterns with a main flush capacity of 6 litres.	The following evidence is required: - Confirmation letter from client detailing how water temperature will be set. - Manufacturer's literature. - Assessor's images.	Greggs		
Materials							
To recognise and encourage the use of thermal insulation which has a low embodied environmental impact relative to its thermal properties.	1	0	All thermal insulation products used in the building will have a low embodied impact relative to their thermal properties, again determined by the Green Guide to Specification targeting A or A+ ratings and all thermal insulation products used in the building will be responsibly sourced.	The following evidence is required: - Completed Fabric Insulation Proforma. - Completed Services Insulation Proforma. - Confirmation of GGRs. - Manufacturer's literature.	DB3 / PCA Build / Greggs		PM to MDR 09/04: o Are the RWA45 slabs for the building fabric? o Please include the building services insulation in the proforma too i.e. ductwork and pipework. PM to PC 23/04: o Did PCA install building services insulation? Now with Concept MEP 20/05. - PM asked for datasheet.
Increasing the lifespan of the building through designing for durability and protection from degradation and specifying appropriate construction products. Reduce the need to repair and replace materials resulting from damage to exposed elements of the building and landscape.	1	1	Suitable protection will be given to vulnerable parts of the building such as areas exposed to high pedestrian traffic, vehicular and trolley movements. For example a bump rail will be provided in the service areas and the doors will be protected by kick plates.	The following evidence is required: - As-built drawings illustrating where the measures have been installed. - Assessor's images.	Greggs / Viro		
Minimise cost and environmental damage resulting from waste going to landfill.	1	1	The client is committed to the use of sustainable and recyclable materials throughout their shops ensuring that shop equipment and materials can be recycled after completion of the economic working life.	Fit-out specification.	Greggs		
Recognising and encouraging responsible sourcing of construction products. This includes the source of products and the intermediary companies processing and transporting the product to site. To facilitate the selection of products that involve lower levels of negative environmental, economic and social impact across their supply chain including extraction, processing and manufacture.	1	1	The client will endeavour to ensure where possible that materials come from a sustainable source which can be traced to its location of origin such as the timber used in shop fronts in conservation areas or listed buildings (FSC compliant).	The following evidence is required: - Completed responsible sourcing proforma. - Responsible Sourcing Certificates.	PCA Build / Greggs		
Maximise the recovery and reuse of construction materials to avoid unnecessary extraction and processing of virgin materials, and associated vehicle movement.	1	1	In addition to the above the end-user will hire approved shopfitting contractors that are required to:- - To show details of disposal in Health and Safety files. - All timber to come from sustainable FSC sources. - Materials and equipment will be recycled. Equipment will be checked and refurbished as required before re use. Used materials will go through a recycling process. - Waste is to be managed and recycling maximised.	The following evidence is required: - O&M & H&S Files. - Completed timber proforma. - Details of process. - Waste monitoring figures. - Diversion from landfill figures.	Greggs		
Waste							
Improving resource efficiency through developing a pre-demolition audit and a Resource Management Plan, maximising the recovery of material during demolition and diverting non-hazardous waste from landfill. To reduce construction waste by encouraging reuse, recovery and best practice waste management practices to minimise waste going to landfill. Encouraging the use of recycled or secondary aggregate or aggregate types with lower environmental impact to reduce waste and optimise material efficiency. Encouraging the diversion of operational waste from landfill through the provision of space and facilities allowing the segregation and storage of recyclable waste.	1	0	To promote a more sustainable approach to waste management the following measures will be undertaken: - A Site Waste Management Plan (SWMP) will be developed and implemented to segregate and recycle construction waste. - The significant majority of non-hazardous construction waste generated by the development will be diverted from landfill and reused or recycled. - The use of recycled or secondary aggregates where possible. - The provision of operational recycling facilities within the service yard. - The client aims to divert the majority of waste away from landfill.	The following evidence is required: - Final SWMP. - Diversion from landfill figures. - Aggregate procurement details. - As-built bin store drawing marking out bins of each waste stream & Assessor's images. - Details of building occupier's waste strategy.	PCA Build / DB3 / Viro / Greggs		19/11; 17/12; 15/01: Details of J Mold's segregation practices required. 24/02: Do you have waste figures for the waste removed from site by PCA please? 25/02: J Mold final log to confirm the total waste removed from site and how this was disposed of required. We'll also need this information for the waste removed by PCA. 02/04: PM asked if we can assume waste not diverted. 09/04: PM chased again (attached email). 20/05: MB confirmed over phone he will work on this tomorrow.

To encourage the recycling of operational waste through the provision of dedicated storage facilities and space. - Help to meet corporate and statutory waste recycling targets. - Reduce environmental impacts and costs arising from the disposal of operational waste. - Provide convenient and well integrated waste storage areas in suitable locations.	1	1	The end-user will implement in addition to the above the following waste management measures: - Three external bins will be provided for both general waste and mixed recycling. - Waste will be collected twice weekly Monday to Friday. - All unsold food will be taken to an outlet store or collected by local charity groups and food banks on a nightly basis. - The client's staff will ensure that bins will be monitored to ensure no overflowing of waste.	The following evidence is required: - As-built bin store drawing marking out bins of each waste stream. - Assessor's images. - Waste contract details. - Commitment from client.	DB3 / Gregg / Viro		
Land Use and Ecology							
Recognising the reuse of previously developed land.							
Recognition of steps taken to avoid impacts on existing site ecology as far as possible.	1	1	The site will be landscaped to a high standard with existing boundary planting retained where possible. Landscaping will be focused around the perimeter of the site and will include the planting of 15 new trees to replace those that need to be removed. 6 of these trees will be planted along the Bath Road frontage as requested in pre-application advice.	The following evidence is required: - As-built site/landscape plan detailing planting (J230907-GCPS-ZZ-D-L-0201). - Purchase order for trees and new planting. - Assessor's images.	Walsingham Planning / PCA Build / Ground Control		
Recognition of steps taken to enhance site ecology.	1	1	The scheme will demonstrate 66.25% net biodiversity gain as illustrated by the Biodiversity Metric Report. In response to advice from the applicant's ecologist and in order to enhance the ecological value of the site, the scheme also includes 4 bird boxes, 2 bat boxes, 3 insect houses as well as log piles and hedgehog houses.	The scheme proposes a range of measures to support these species and enhance the site's future ecology potential, these measures are detailed on the submitted Landscape Plan.	Walsingham Planning / PCA Build / Ground Control		
Encouraging the long term maintenance and management of ecology on site to ensure both new and existing ecological features continue to thrive.	1	1	The scheme proposes a range of measures to support these species and enhance the site's future ecology potential, these measures are detailed on the submitted Landscape Plan.	Evidence to confirm the installation of enhancement measures as specified by the ecologist.	Walsingham Planning / PCA Build / Ground Control		
Pollution and Flood Risk							
To ensure that external lighting is concentrated in the appropriate areas and that upward lighting is minimised, thereby reducing unnecessary light pollution, energy consumption and nuisance to neighbouring properties.	1	1	The proposed development will ensure all external lighting design is in compliance with the guidance in the Institution of Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2005.	The following evidence is required: - Confirmation letter. - As-built lighting schematic.	Concept MEP		
To reduce the level of greenhouse gas emissions arising from the leakage of refrigerants from building systems.	1	1	The unit will also ensure the specification of low Global Warming Potential (GWP) and zero Ozone Depleting Potential (ODP) insulation materials.	Manufacturer's literature for the refrigerants and refrigerant containing systems.	PCA Build		
To avoid, reduce and delay the discharge of rainfall to public sewers and watercourses, thereby minimising the risk and impact of localised flooding on-site and off-site, watercourse pollution and other environmental damage.	1	1	The proposed strategy strives to utilise sustainable drainage techniques in accordance with the guidance described in CIRIA C753 and the published RBC guides. With this in mind, the strategy employs a soakaway consisting of geo-cellular crates to facilitate the discharge of surface water run-off via infiltration to the underlying soil strata.	The following evidence is required: - As-built draining drawings. - Drainage strategy. - Drainage calculations (if applicable).	Glanville		
Rewarding buildings and their sites that limit on-site and off-site local flooding and hence the damage this can cause. Flood maps from the appropriate statutory body confirm the development is situated in a flood zone that is defined as having a low annual probability of flooding. Enhance the resilience of local drainage and flood prevention systems.	1	1	Given the site is under 1 hectare in area, is located entirely within Flood Zone 1 (and at low risk of all other sources of flooding identified) and does not propose a change to a higher flood risk vulnerability classification, a site-specific Flood Risk Assessment is not required to accompany a planning application. Nonetheless, in accordance with local guidance, a drainage strategy for the proposed development has been developed.	Drainage strategy.	Glanville		
To avoid, reduce and delay the discharge of rainfall to public sewers and watercourses, thereby minimising the risk and impact of localised flooding on-site and off-site, watercourse pollution and other environmental damage.	1	1	The development will discharge domestic sewage via a connection to the public foul sewer or combined sewer network where it is reasonable to do so.	As-built drainage drawings.	Glanville		