JNP GROUP

CONSULTING ENGINEERS

Construction Environmental Management Plan

Project: Neighbourhood Centre
Finchampstead

Client: CALA Homes Thames

Reference: C86941-JNP-XX-XX-RP-G-1001 P01

Date: September 2025

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FOR AND ON BEHALF OF JNP GROUP

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1 INTRODUCTION

1.1 General

1.1.1 JNP Group was instructed by CALA Homes Thames to produce a Construction Environmental Management Plan (CEMP) for the development at:

Neighbourhood Centre
Finchamptstead
RG40 4QEY

hereinafter referred to as 'the site'. This report is subject to the limitations presented in Appendix A.

1.2 Planning Context

1.2.1 Planning Permission (reference: O/2014/2179 and 140764) was granted by Wokingham Borough Council (WBC) in January 2017 for a hybrid application for the overall Hogwood Farm redevelopment. This comprised:

- Outline planning permission (OPP) for demolition of all existing buildings on site; up to 1,500 new dwellings; employment floor space; a Neighbourhood Centre; a primary school; sport pitches and associated pavilion building; highways infrastructure; associated landscaping, public realm, open/greenspace and sustainable urban drainage systems (SuDS); and
- Full permission for a 29.7ha Suitable Alternative Natural Greenspace (SANG) in the south of the site.

1.2.2 The hybrid planning permission was subsequently amended by a Section 73 application (181194), which was approved in November 2018.

1.2.3 Approval of Reserved Matters was granted on 7th April 2025 by WBC. The Reserved matters comprise details of 18 No. dwellings, commercial floorspace (use Class E) and public open space within the Neighbourhood Centre parcel together with associated access, parking, drainage and play infrastructure.

1.2.4 The submission of the CEMP is to discharge Planning Condition 43 of the outline planning permission.

1.2.5 This CEMP has been prepared to support the construction activities associated with the development of the Neighbourhood Centre.

1.3 Objectives

1.3.1 The objective of this CEMP is to outline the principles and detailed measures to minimise and mitigate the construction impacts of the works associated with development.

1.3.2 The CEMP will aim to ensure that relevant mitigation measures are implemented and adhered to during all works and stages of development, take into account relevant WBC planning policy and the local plan, and ensure relevant legislation and construction industry codes of practice and best practice are complied with.

1.3.3 The CEMP details the development works, outline site preparation, main construction works, construction plan, waste management, materials management, traffic management training, communication, and sets out the environmental control and safety procedures that will be

to be adhered to during the construction of the development. It also provides a tool to ensure the successful management of potential adverse effects as a result of the construction activities. It sets out roles and responsibilities for the management of these controls and procedures.

1.3.4 The CEMP in part relies on the information provided during development of the document.

1.3.5 Works on the development shall not commence until the CEMP has been approved in writing by WBC.

1.3.6 Any changes to the CEMP will be made by the appointed Contractor in consultation with WBC.

2 PROPOSED DEVELOPMENT AND SITE CONTEXT

2.1 Project Description

2.1.1 The commercial / residential development of the site will be concentrated in the north-eastern part of the site and consist of a single, multi-story building with associated residential parking and landscaping. The remainder of the site to the west consists of commercial parking areas, landscaping and infrastructure. The proposed development is shown on Omega Architects Site Layout drawing 3243.1/C/1005/PL/B, dated March 2025 and is included in Appendix C to this report.

2.1.2 The site will be developed in two stages of works; the groundworks phase and the superstructure phase, with the initial works being undertaken by an external Principal Contractor to be appointed by CALA Homes Thames.

2.1.3 The groundworks stage will involve the construction of site roads, sewers, utilities infrastructure, general earthworks and construction of the initial building foundations.

2.1.4 The superstructure stage will comprise the main construction phase to build the houses and complete the development. CALA Homes Thames will take over the role as Principal Contractor for this stage.

2.2 Site and Surroundings

2.2.1 The site is part of the wider development at Finchampstead and is located to the north of Parcel 10. The site was previously undeveloped agriculture land and is now being developed as part of the ongoing Finchampstead development. The site is approximately 0.94 hectares.

2.2.2 The northern and western boundaries of the site are the land set aside for the proposed school. The Nine Mile Extension highway forms the eastern boundary. The southern boundary is a new highway (Southern Bus Loop), which is currently being constructed, beyond this is Parcel 10 of the wider Finchwood Park development.

3 CONSTRUCTION PROGRAMME, ACTIVITIES AND GENERAL REQUIREMENTS

3.1 Construction Programme

3.1.1 It is anticipated that development will be instructed in phases; site preparation and enabling works, drainage and, road construction.

3.1.2 Site preparation and enabling works is required prior to the main earthworks and construction works commencing. This will include provision of the following:

- Site set up and construction of site hoards and temporary lighting around the perimeter of the site, and security;
- Material delivery and off-loading areas, storage areas, welfare facilities and site logistics, access arrangement and vehicles routing.

3.1.3 The proposed compound and storage area will be located immediately west the site in the proposed school land and will comprise a storage area for materials and assumed waste, a compound area (comprising site offices and welfare facilities) and an area for visitor and staff vehicle parking.

3.1.4 Details of the compound layout and storage areas are shown on the schematics produced by CALA given in Appendix C.

3.1.5 Any security lighting will be positioned and operated to ensure no issues of nuisance are created for the existing residents. Any surface or near surface obstructions will be removed and utilities will be disconnected or diverted.

3.2 Construction Activities

3.2.1 From the information provided to JNP Group, it is understood that the main sequence of construction activities will be as follows:

<u>Enabling Works</u>

- Set up of the site compound;
- Identification of utilities that require protection, monitoring and isolating, diverting or clearly marking their location;
- Tree and vegetation clearance or protection, where required;
- Heras fencing to be erected to separate necessary areas of the site while construction is progressing on site;
- Topsoil stripping and excavation;
- Earthworks operations including cut and fill operations;
- Piling mats construction using crushed concrete;
- Installation of piles;
- Installation of new drainage elements including manholes, drainage and headwalls;
- Construction of new roads and pavements;
- Construction of new footpaths; and

- Habitat management (preparation, planting, creation, installation of bird and bat boxes). Reference should be made to Hankinson Duckett Associates Landscape and Ecological Management Plan – Neighbourhood Centre (Reference 868.1, dated December 2024).

3.3 Construction Plant

3.3.1 During the construction activities, the types of plant and equipment that are likely to be used at various stages of construction are as follows:

- General hand tools;
- Trucks / tipper truck;
- Hoists;
- Screening plant / concrete crusher;
- Breaker / pavement breaker;
- 360° tracked excavators;
- Dumper trucks;
- Grader;
- Vibratory compactor / hammer;
- Roller;
- Concrete pumps and mixer;
- Compressors / generators;
- Mobile floodlighting;
- Environmental monitoring equipment; and
- Skips.

3.4 General Construction Requirements

3.4.1 The contractors will be required to register their site with the 'Considerate Constructors Scheme'. This schemes, administered by the Construction Confederation on behalf of the Construction Industry Board, seeks to:

- Minimise any disturbance or negative impacts (noise, odour, dust, dirt, inconvenience) sometimes caused by construction sites to the immediate neighbourhood;
- Eradicate offensive behaviour and language from construction sites; and
- Recognise and reward the contractors' commitment to raise standards of site management, safety and environmental awareness beyond statutory duties.

3.5 Hours of Work

3.5.1 The standard working hours for all operations and ancillary works (including minor internal works) will be:

- 08:00-18:00 Monday to Friday; and

- 08:00 -13:00 Saturday.

3.5.2 No works will be undertaken on Sundays or Public Bank Holidays.

3.5.3 These hours will be strictly adhered to unless or in the event of:

- An emergency demands continuation of the works on the grounds of safety; and
- Completion of an operation that would otherwise cause greater interference with the environmental / general public if left uncompleted.

3.5.4 No continuous 24-hour activities are envisaged for works and any necessary working outside of standard working hours will be agreed in advance with WBC and will be subject to reasonable notice.

3.5.5 The Principal Contractor will need to obtain an agreement under the Section 61 regime with WBC which will outline working hours, and dust, noise and vibration limits during the construction phase.

3.6 Access

3.6.1 All construction traffic will enter the site via access roads off the new Southern Bus Loop highway. Traffic marshals are in place to monitor and direct traffic through the access gates and to reduce public interaction during the works. The traffic management plan is included in Appendix C. Off-site vehicles requiring access to the storage area (plant and material delivery vehicles, waste collection vehicles etc.) will use the same access route and be directed up to the storage area by the traffic marshals.

3.6.2 Off-site vehicles (site operatives and visitors) requiring access to the compound area will use the access the site off the Southern Bus Loop and utilise the first access point into the site compound and into the car parking areas shown on the compound layout plan included in Appendix C. There are two access points off the Southern Bus Loop, which are to be used as a one way system once the redevelopment is complete, however, this may be utilised during the site work. If so appropriate signage and direction will be provided.

3.6.3 On-site vehicles (e.g. excavators) that are stored overnight will use the northern most access point to enter the storage compound.

3.6.4 The type and number of vehicles used during the construction phase will vary according to the different stages of construction. HGV movements will be restricted as far as reasonably possible to avoid peak traffic flow periods (08h00-09h00 and 17h00-18h00).

3.6.5 The Contractor will maintain a log of all drivers that will include a written undertaken from them to adhere to the use of the approved routes for construction traffic.

3.6.6 Directional signage will be implemented to ensure that construction traffic adheres to the designated route, to minimise the effect on the surrounding road network.

3.6.7 All construction traffic entering and leaving the site will be closely controlled and during delivery times, traffic marshals will be positioned to control and record entry and exit movements, these are shown on the construction access route plan included in Appendix C.

3.7 Temporary Traffic Orders

3.7.1 Under Section 14 of the Road Traffic Regulation Act 1984, temporary traffic orders can be imposed to close roads or to restrict traffic and parking so that works can be undertaken either on a road or near a road (such as on a building site or redevelopment site).

3.7.2 Should this be required at the site, the Principal Contractor shall apply to WBC for a temporary order, including the details of the date, duration and description of the works.

3.8 Security

3.8.1 Only authorised personnel will be permitted on site. All visitors will be required to enter through the main entrance and report to the Construction Manager / Site Manager. In addition, visitors will be required to sign in and out to ensure that site management are aware of the number of people on site in the event of an emergency.

3.8.2 Visitors will be required to undergo induction training, wear the necessary personal protective equipment (PPE) and will be accompanied by a representative on site at all times.

3.8.3 Banksmen will aid construction vehicles entering and exiting the site. All mobile plant / equipment will be parked safely and locked within a designated area to prevent tampering, and keys to all plant / equipment will be kept in a designated location.

3.8.4 A minimum 2.1 m high hoarding will be erected around the perimeter of the work or phases in advance of their commencement, with gated access put in place, The hoarding and all storage areas will be checked on a regular basis to ensure that it is maintained and in good condition, and remains secure. All gates into the site will be secure at all times.

3.8.5 In addition, any fencing placed around exclusion zones, such as the tree protective fencing, will also be checked on a regular basis to ensure that it remains in place.

3.9 Lighting

3.9.1 Lighting on construction sites, whether natural or artificial, is essential to the health and strategy. Poor lighting can present significant risks to personnel which can result in accidents and injury; the quicker and easier it is to see a hazard the better the likelihood of avoiding it.

3.9.2 As outlined within Section 35 of the CDM Regulations (2015), the development site must be provided with suitable and sufficient lighting, which must be, so far as is reasonably practicable, by natural light. This relates to both the construction site as well as the approach and traffic route to the development site.

3.9.3 Site lighting will be at the minimum luminosity necessary to enable the safety and security of the construction site. Where appropriate, lighting to site boundaries will be provided and illumination will be sufficient to provide safe routes for the passing public. In particular, precautions will be taken to avoid shadows cast by the site hoarding on surround footpaths, road and amenity areas.

3.9.4 Where artificial lighting will be activated by motion sensors to prevent unnecessary usage, it will comply will the Institute of Lighting Professional Guidance notes for the reduction of obtrusive light.

3.9.5 In determining any temporary construction lighting arrangement for the site, due consideration will be given by the Principal Contractor to any nearby residents and other sensitive receptors, such as wildlife, that may experience a nuisance by the light.

3.9.6 General control measures for the use of lighting are outlined below:

- Temporary site lighting, when used adjacent to residential areas, must be fixed with a noise screen to keep noise levels to a minimum;
- As far as is practical, lighting must be directed away from surrounding residential properties; and
- Lighting should always be positioned to prevent glare.

3.10 Storage of Materials

3.10.1 Materials will be loaded / unloaded in the storage area; this is shown on the compound layout schematic included in Appendix C.

3.10.2 Plant (including mobile plant) and materials will similarly be stored in the areas shown in same drawing.

4 CEMP RESPONSIBILITIES

4.1 Management Structure

4.1.1 Under the Construction (Design and Management) Regulations 2015 (CDM), the client must appoint a Principal Designer and Principal Contractor prior to the commencement of works on site. In the absence of an appointed Principal Designer and Principal Contractor, the client automatically takes on their duties. The roles of Client, Principal Designer and Principal Contractor under CDM 2015 are outside the scope of this CEMP.

4.1.2 The Principal Contractor will have the central role in managing Safety, Health, Environment and Quality (SHEQ) issues during construction of the development. The Principal Contractor and all appointed subcontractors are required to implement the environmental control measures set out within this CEMP.

4.1.3 An organogram of the proposed management and reporting structure is provided in Figure 1.

4.2 Individual Responsibilities

4.2.1 The duties of the Principal Designer, Project Manager, Construction Works Manager, Environmental Manager and other personnel are detailed in the table below. Together the Principal Designer, Project Manager, Construction Works Manager, Environmental Manager and the H&S Advisor form the Project Management Team.

Table 4.1 Individual Duties

Individual	Duties	
Principal Designer (PD)	Review & approve CEMP. Submit CEMP to WBC.	Assign appropriate resources. Undertake regular site inspections (ensure compliance with CEMP).
Project Manager (PM) (may also be the above)	Allocate project resources to deal with environmental issues. Designate representative for environmental issues.	Ensure CEMP is established & implemented throughout project. Review & approve environmental action plans.
Principal Contractor: Construction Works Manager	Understand environmental constraints & implications. Communicate need for CEMP compliance with project team. Implement & maintain CEMP. Develop general site induction, tool box talks & ensure records are maintained.	Act on audit findings. Address & response to complaints. Ensure appropriate pollution response provision is made. Report environmental breaches to PD and PM. Liaise with Statutory Authorities.
Principal Contractor: Environmental Manager (may also be the above)	Comply with CEMP. Understand environmental issues associated with project. Maintain complaints log. Ensure audits are undertaken. With PM review CEMP regularly.	Co-ordinate environmental awareness training & ensure responsibilities are outlined in site induction. Maintain & review environmental risk register. Liaise with Statutory Authorities.

Individual	Duties	
	Develop general site induction, tool box talks & ensure records are maintained.	Liaise with WBC and other interested parties on environmental issues (including complaints process). Report environmental incidents to PD, PM & Environmental Regulators.
H&S Advisor (could be same as above)	Undertake site inspections. Provide advise & support to project management team.	Undertake audits at intervals defined in this CEMP.
Off-site Environmental Manager	Ensure PM, PC and subcontractors manage issues in accordance with CEMP.	Provide advise & support to project management team. Aid in the management & selection of specialist environmental resources.
Environmental Specialists	Undertake specialist monitoring (e.g. noise, dust), surveys and advise construction staff accordingly.	
Ecological Clerk of Works (as appointed) or project ecologist	Verify that the enhancement measures set out in Section 5.3.2, are being adhered to as necessary.	

4.3 Collective Responsibilities

4.3.1 The table below lists the collective responsibilities of the Project Management Team (PMT) plus other site personal.

Table 4.2 Collective Duties

Individual	Duties
PMT	Comply with CEMP. Maintain CEMP QA. Implement CEMP and supporting documents on site. Report to Environmental Manager any environmental incidents. Ensure site staff are aware of their environmental obligations & have received site environmental awareness training.
Works Manager, Sub-agents, site engineers, quantity surveyors, foreman and subcontractors.	
All personnel	Comply with operational controls and working procedures implemented by this CEMP Undergo site environmental awareness training. Immediately report environmental incidents to supervisor. Suggest modification / improvements to CEMP or operational controls.

5 TRAINING, SITE RULES AND COMMUNICATION

5.1 Training

5.1.1 Contractual arrangements will require all contractor to provide suitably qualified staff to manage and implement the works for which they are responsible. The Principal Contractor will require that all employees demonstrate an appropriate awareness of local sensitivities, expected code of conduct, working knowledge of the legislation, codes of practice and guidance relevant to the activities in which they are engaged.

5.1.2 A training regime shall be implemented to ensure that all staff members, including subcontractors' personnel, receive focused environmental training to ensure their competence in undertaking their duties on the project.

5.1.3 The Principal Contractor will be responsible for identifying the training needs of their personnel and will ensure that appropriate training is provided.

5.1.4 Training will include information on local considerations and the Client's expectation on site behaviour, "toolbox talks" for site operatives to maintain an appropriate level of awareness regarding H&S and environmental topics, and to advise employees of changing circumstances as works progresses. Records of attendance will be kept.

5.2 Site Inductions

5.2.1 The Principal Contractor will operate an induction scheme for all personnel to ensure that they are aware of their individual responsibility to comply with the CEMP.

5.2.2 The general site induction shall be developed to introduce all site personnel to the environmental issues associated with the development. Important environmental controls associated with the day-to-day operation include housekeeping, boundary control, waste management, exclusion zones and emergency procedures.

5.2.3 The person responsible for the induction is the Environment Manager or Construction Works Manager. They will develop a general site induction to include environmental issues and ensure induction records are maintained.

5.3 Toolbox Talks and Method Statement Briefings

5.3.1 Toolbox talks and method statement briefings will be given as the work proceeds and will cover the environmental controls related to specific activities undertaken during the works e.g. refuelling, hazardous waste removal, spill response etc. A register of toolbox talks and method statement briefing attendance shall be maintained on site.

5.3.2 The person responsible for the induction is the Environment Manager or Construction Works Manager. They will regularly assess site activities and ensure relevant training requirements are met, and develop and deliver specialist toolbox talks as required to ensure site activities are undertaken in accordance with CEMP.

5.4 Emergency Procedures and Incident Reports

5.4.1 Procedures will be implemented to respond to any emergency incidents which may occur on site during the works. In order to ensure compliance with the requirements of the relevant legislation, and to avoid or mitigate against any significant environmental impacts, an Emergency Preparation Plan (EPP) will be developed by the Principal Contractor.

5.4.2 All staff will be trained and made aware of the EPP set in place. In the event of an incident, the Environmental Manager and H&S Advisor will be notified. In addition, WBC, the EA and any other appropriate bodies will be notified as required.

5.4.3 In the event of a spill or leak, the procedure shown as Figure 2 will be followed. This will be included in the incident response plan, and this will be briefed to the site staff and displayed on the site notice boards and near any relevant areas on site e.g. refuelling areas or storage areas.

5.4.4 In addition, in the event of an unforeseen environmental incident (pollution occurrence) on-site, work should be stopping in the area immediately affected and the EA should be contacted via their incident hotline 0800 80 70 60.

5.4.5 Emergency spill kits shall be kept on-site in strategic locations and a member of staff who is trained to use them shall be present on-site at all times.

5.5 Site Rules

5.5.1 The site rules shall be developed to include environmental controls wherever applicable; these rules should be displayed in all on site offices and welfare facilities as well as strategic positions around the site.

5.5.2 An initial list of "Site Rules" to be implemented is given below, these will be updated and developed further by the Principal Contactors as necessary:

- All personal visiting or working on site must complete induction training prior to accessing the site, and declare their CSCS cards (if appropriate);
- All plant / equipment used during the construction activities must be compliant with the 'Provision and Use of Work Equipment Regulations 1988 (PUWER)'; maintenance and relevant certificates must be retained on site;
- All substances to be used or handled on site must have the 'Control of Substances Hazardous to Health (COSHH)' assessment available on site for staff members to consult;
- At the end of each working day, all means of access, e.g. steps or ladders left in position, must be secured / removed to prevent unauthorised persons (especially children) assessing the site and hazardous areas;
- Smoking is prohibited on site, except in designated areas, and the possession or use of alcohol and drugs is prohibited;
- Site welfare facilities must be maintained for the duration of the works;
- Standard Personal Protective Equipment (PPE) is required on site at all times, as well as additional Protective Equipment as required for specific works;
- Use of audio equipment is not permitted on site, except in designated areas;
- All staff members must work to their safety method statements and abide by all safety signs at all times;
- All Principal Contractors and subcontractors personnel must conduct themselves and perform their duties on site in a safe manner;

- All plant and equipment must be checked prior to use, defects or problems must be reported and where necessary plant or equipment removed from site;
- All work areas must have clear, well maintained signage;
- Appropriate firefighting equipment to be maintained on site;
- All waste materials must be collected, segregated and removed from site at regulator intervals, and must follow the correct duty of care procedures;
- Wildlife or habitat buffer zones must be adhered to throughout the works;
- No fires are permitted on site;
- A qualified First Aider / Emergency First aider must be present on site at all times; and
- Acts of threat or violence will not be tolerated, and any offender will be removed and permanently excluded from the site.

5.6 On site Communication

5.6.1 A full contact list containing names, job titles, contact numbers and emails of the Project Team members shall be produced and maintained. This should include the Environment Manager. On site communication will be provided by mobile telephone or two-way radio.

5.7 Community Relations

5.7.1 The Construction Manager in conjunction with the Developer and with the support of the Environment Manager or any appointed specialist, will be responsible for liaison on matters with statutory and non-statutory authorities.

5.7.2 As the Principal Contractor, the Construction Manager / Environmental Manager will establish and maintain consultation, regarding project status, potential impact and mitigation measures, predicted timescales of activities etc., with several regulatory bodies regarding environmental aspects of this project. These will include:

- Environmental Health Office at WBC;
- Environment Agency;
- Natural England;
- H&S Executive; and
- Emergency Services.

5.8 Local Community Engagement

5.8.1 The Principal Contractor will commit to providing community relations personnel, who will be the first line of response to resolve issues of concern or complaints. Reasonable steps will be taken to engage with local community groups and residents prior to and during construction (such as through the use of newsletters and fliers). Neighbouring properties will be informed in advance of the works taking places, where possible, within two weeks but in any event, at least a week prior to the works commencing and as works progress. Information to be disseminated will included; location of planned work, type of work, duration, anticipated effects of the works, contact details for enquiries and compliant procedure.

5.8.2 Site boards outlining information on the project and forthcoming works will be erected by the Principal Contractor at the entrance to the site.

5.8.3 Site contact numbers will be displayed as appropriate along with the complaint's procedure.

5.8.4 All Contact Boards shall include the following information:

- The title "Contact Board";
- Name of the main contractor, address and person to whom correspondence should be addressed;
- Name of the Site Manager;
- Month and year of completion of works;
- Names and telephone number of staff who can take immediate action, so the contact can be made at any time.

5.9 Complaints Management

5.9.1 A formal complaints procedure will be developed, the Construction Manager will be responsible for receiving, recording and responding to external complaints.

5.9.2 The Construction Manager will have their telephone number displayed to enable a quick response to complaints. A staffed telephone enquiry line will be maintained at all times when site works are in progress to deal with enquiries and complaints from the local community. The telephone number (and any changes to it) shall be publicised widely in the local area and notified to WBC's Environmental Health, Noise and Licensing Enforcement Teams.

5.9.3 If any complaints are received concerning works / activities, then all work / activities causing the complaint should cease (unless this would lead to a H&S concern e.g. structural integrity) until such time as further agreement to works is negotiated.

5.9.4 The complaint will be logged in a complaint register. This should contain, if possible, the complainant's details, date and time of complaint made, cause of complaint, action taken to resolve the complaint, date and time of action taken to resolve the complaint and reasons for any unresolved complaint.

6 ENVIRONMENTAL CONTROL MEASURES

6.1 Introduction

6.1.1 The following section of the CEMP describes the general mitigation control measure to be implemented throughout development to ensure the protection of the environment from potential adverse effects from the development.

6.2 Traffic and Pedestrian Access

6.2.1 In order to reduce the impact of construction traffic, Cala Homes will adopt the following methods for the duration of the works. This is to ensure that construction works are organised and delivered in a manner that safeguards the highway impact, highway safety and amenity to the area surrounding the site.

6.2.2 Cala Homes will design an on-site traffic management system which will include the following details:

- Site operations;
- Operative staff and traffic generation; and
- Traffic management – HGV and construction routing strategy (including any time restrictions), delivery of plant and materials and contractor / visitor parking.

6.2.3 All loading, unloading and delivery of material and plant to the site, and removal of waste, should, where possible, be undertaken within the normal site working hours. Any early morning or evening deliveries must have approval by WBC.

6.2.4 In addition, positive action should also be taken to reduce the number of HGVs entering and exiting the site. This could include:

- Balancing the earthworks as far as possible to minimize the import and export of spoil material;
- 'Backloading' vehicle operation, where site delivery vehicles are utilised to remove waste material from the site as part of the same trip; and
- Practical reuse of materials (e.g. soils or aggregates) on site and recycling of materials (refer to Section 7 for further details).

6.2.5 Measures to be adopted to reduce traffic and transportation effects include:

- Construction personnel would be encouraged to utilise public transport to and from site, where possible;
- Agreed access and egress routes on the site will be observed at all times;
- Car sharing will be encouraged;
- Fire and emergency access routes will be kept free from obstructions at all times (the main access road is also the emergency access – no parking of vehicles along this road will occur). Footpaths and roads will always be kept clear of obstructions including parked vehicles;
- Materials will not be stored on or near roadways or other areas where they may constitute a hazard;

- Banksmen will be employed to assists in traffic movements to ensure pedestrian safety and minimal disturbance to other traffic;
- The sheeting of loads will ensure that any material which is removed from site is secure;
- Safe routes to separate pedestrians from construction plant and vehicles will be established as soon as practicable;
- The use of mobile phones whilst driving or operating plant is prohibited;
- Vehicles not fitted with an audible reversing alarm / flashing beacon will have a banksman present when reversing or undertaking difficult manoeuvres on site and in the loading area;
- Safety signs will be clearly posted to make personnel on and around the site aware of traffic hazards;
- Drivers must obey the site and neighbour traffic management system including speed restrictions; and
- On site measure will be implemented to minimise any mud and detritus being deposited on the roads around the site. These may include wheel washing at the site egress.

6.3 Noise and Vibration

6.3.1 Best practicable means (BPM) will be applied during construction works to minimise noise and vibration at nearby residential properties and sensitive ecological receptors, as necessary. The closest residential dwellings are adjacent to the northern site boundary.

6.3.2 BPM are defined in Section 72 of the Control of Pollution Act 974 and Section 79 of the Environmental Protection Act 1990 as those measures which are "*reasonably practicable having regard among other thing to local conditions and circumstances, to the current state of technical knowledge and the financial implications*".

6.3.3 The effects of noise and vibration construction will be controlled by introducing management and monitoring processes to ensure that BPM are planned and employed as necessary.

6.3.4 All works must comply with 'BS 5228: Noise and Vibration Control' and the 'Construction and Open Sites Part 1: Noise and Part 2: Vibration'. To ensure compliance with BS 5228 it is expected that noise monitoring will be required, at a level to be agreed with WBC. All site personnel will be trained on BS 5228 and training evidence held on site.

6.3.5 The Principal Contractor shall undertake background monitoring of noise and vibration levels prior to any work taking place on site. Where the measured noise levels are more than 3dB(A) above the background noise levels, or in the event of a noise-related complaint, an investigation shall be undertaken to ascertain the cause of the complaint and to check that BPM are being used.

6.3.6 Vibration monitoring may be required at locations on site that are in close proximity to adjacent residents and industrial units to the east of the site, to ensure the levels do not exceed those that may cause structural damage to adjoining buildings.

6.3.7 The following measures will be adopted to reduce noise and vibration during the works:

- New and quiet vehicles / plant machinery will be used at all times, and such vehicles / plant will be fitted with effective exhaust silencers;

- When not in use, all vehicle engines and plant will be switched off; pneumatic tools will be fitted with silencers / mufflers when in use close to sensitive receptors;
- Low impact techniques (e.g. munchers) will be adopted where possible such as hydraulic crushing plant during the demolition of the barns;
- Generators and compressors will be silenced or screened as appropriate;
- All vehicles and mechanical plant shall be maintained in good and efficient working order;
- Engine covers will be kept closed when machines are in use;
- Care will be taken when erecting or striking scaffolds to avoid impact noise from banging steel;
- Careful handling of materials and waste to minimise dropping from heights;
- Shouting and raised voices shall be kept to a minimum, use of radios is to be restricted except where two-way radios are required for H&S reasons;
- A minimum 2.1 m high impervious hoarding will be erected around the site, where feasible and practicable, and will continue to be maintained throughout the works;
- A site inspection will be undertaken daily to identify and rectify any issues which may increase noise and /or vibration; and
- Toolbox talks will instruct personnel on noise and vibration issues.

6.4 Air Quality and Nuisance Dust

6.4.1 There are three sources of emissions that will need to be controlled to minimise the potential for adverse environmental effects:

- Traffic – exhaust emissions from site plant and vehicles; and
- Excavation & demolition dust - dust emissions from site activities (i.e. materials handling, storage, stockpiling, spillages, disposal, excavation of ground for infrastructure requirements etc.)

6.4.2 Background monitoring of air and dust will be undertaken by the Principal Contactor prior to any works commencing to establish baseline conditions.

6.4.3 The Principal Contractor will be required to control and limit dust air quality, odour and exhaust emissions during the construction works as far as reasonably practicable and in accordance with BPM. This will include reference to publications on best practice including the following:

- Guidance on the Assessment of the Impacts on Air Quality and the Determination of their Significance, Institute of Air Quality Management, Jan 2014 (IAQM 2014);
- Air Quality Monitoring in the Vicinity of Demolition and Construction Sites, IAQM 2021;
- The Control of Dust and Emissions during Construction and Demolition. Supplementary Planning guidance, Greater London Authority, July 2014; and

- EU Directive 97/68/EC Requirements relating to gaseous and particulate pollutant emission limits and type approval for internal combustion engines for non-road mobile machinery (NRMM).

6.4.4 The site is located in a Local Authority with a recorded Air Quality Management Area (AQMA) for nitrogen dioxide and particulate matter (PM_{10}). The site itself is not within the AQMA, however, it is recommended that consideration is made in terms of equipment choice and mitigation methods implemented.

6.4.5 A number of mitigation methods will be implemented to minimise the nuisance and impact arising from dust produced throughout the works, and to maintain suitable air quality level. These include the following:

- Contractors will be instructed to use all reasonable means available to keep dust to a minimum, especially during dry weather conditions;
- Wind speed and direction must be taken into account when organising site operations;
- The use of damping down equipment must be employed where dust may be generated to control dust at source. Water run-off from dust suppression activities will be controlled;
- Bins and skips will either be in a restricted area or covered, sheeted and labelled; daily on-site and off-site inspections will be undertaken to monitor dust;
- All dust and air quality complaints will be recorded, identifying causes and taking appropriate measures to reduce emissions in a timely manner and recording the measures undertaken;
- Site dust inspections will be undertaken on a regular basis with records made of any exceptional incidents that cause dust and/or air emissions and the action taken to resolve the situation;
- A bowser will be installed on site during working hours to assist with the volume of dust created by the number of moving vehicles;
- Speed limits will be placed on all haul road to prevent dust spread;
- A road sweeper is to attend site every day to ensure that debris and dust is confined to the construction roads and does not spread to any public roads;
- A permanent gateman will be in place during the site operating hours who will radio in any instance of dust/ dirt making its way onto public highways. This will be dealt with immediately to avoid any issues arising;
- A permanent wheel wash facility will be in place on site and all plant operatives will be made aware during site induction that this facility is to be used on any day which will produce higher than normal levels of mud and debris on site;
- Burning of any material is prohibited anywhere on site;
- Avoid site run-off water or mud;

- Remove material that may have a potential to produce dust from site as soon as possible, and all vehicles hauling loose or potentially dusty materials to and from the site will be covered; and
- Any stockpiled materials will be suitably covered to avoid dust generation.

6.4.6 During construction:

- Only use cutting, griding or sawing equipment fitted with or in conjunction with suitable dust suppression techniques, such as waster spray and local extraction;
- An adequate water supply should be provided on site for effective dust suppression using non-potable water where possible and appropriate / adequate frost protection during the colder months should be taken into consideration;
- Skips will be covered;
- Areas where there are vehicle movements should have a consolidated surface which should be kept in good repair; and
- Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.

6.4.7 Measures will also be implemented to limit emissions from construction plant and vehicles. These are described in the traffic and transport section above and will also include the following as appropriate:

- Operation of construction plant in accordance with the manufacturer's written recommendation;
- Vehicle engines and plant will be switched off and secured when not in use;
- Construction vehicles will confirm to the current EU emissions standards;
- Vehicle and construction plant exhausts to be directed away from the ground and positioned a height to facilitate appropriate dispersal of exhaust emissions;
- The enclosure, shielding or provision of filters on plant likely to generate excessive quantities of dust beyond the site boundaries;
- The use of diesel or petrol powered generators will be reduced by using electricity or battery-powered equipment where reasonably practicable; and
- Vehicle, plant and equipment maintenance records will be kept on site and reviewed regularly.

6.4.8 From the Eastwood and Partners Consulting Engineers ground investigation undertaken in 2017 across the wider site, only two trial pit locations, TP23 and TP24, were located in the vicinity of the Neighbourhood Centre. From a review of these trial pit records, topsoil comprising brown silty clay was present to 0.3 m below ground level (bgl). Beneath this was orange-brown mottled grey, silty clay to 2.5m bgl (maximum depth not confirmed).

6.4.9 An additional ground investigation was undertaken by Eastwoods and Partners Consulting Engineers in August 2025 which covered the Neighbourhood Centre and comprised one cable tool borehole to 25.0 m bgl and three trial pits to depths between 2.90 m and 3.10 m bgl. In general, the ground conditions encountered were made ground or topsoil underlain by strata

of the London Clay Formation. The made ground consisted of hardcore containing deleterious material of brick, concrete, ceramic, glass, metal, slate, breezeblock and plastic. The London Clay was found to generally consist of slightly gravelly, slightly sandy to very sandy clay.

6.4.10 At the time of the investigation the site was occupied by stockpiles and material storage areas which limited access to areas of the site covered with hardcore or scrub vegetation.

6.4.11 One sample of topsoil, two samples of made ground and three samples of natural ground were tested for a full suite of contaminants. No exceedances were recorded in any of the strata types when compared to 'public open space near housing' screening values.

6.4.12 Three tests for asbestos were undertaken on the made ground encountered and asbestos was recorded in TP2 at 0.60 m bgl as loose fibres of chrysotile with a quantification of <0.001 %. This is considered to be a very low concentration, however, the use of damping down the soil as per Section 6.4 should be sufficient to prevent any such fibres becoming airborne, if they are excavated.

6.4.13 As evident from the above, asbestos may be encountered in the made ground on site. Therefore, should asbestos containing material (ACM) be identified during the groundworks and/or construction phase, then the appointed contractor will provide a method statement for controlling the release of asbestos fibres, for approval by the WBC prior to further works commencing.

6.5 Visual Impact

6.5.1 Appropriate controls will be put in place to protect nearby visual receptors, namely local residential and commercial receptors, most likely to be located in the northern part of the site where the site borders Parcel 15 which is currently being developed with residential properties. These include:

- Screening of the construction site with a 2.1 m high (minimum) protective barrier where feasible;
- Construction lighting will be positioned and operated to minimise visual intrusion and nuisance;
- Avoidance of unnecessary tree and vegetation removal, and protection of existing trees in accordance with BS 5837 Trees in relation to design, demolition and construction; and
- Stockpiles and mounds will be kept away from sensitive receptors and will be enclosed or securely sheeted where appropriate. Internal walls separating storage bays will be at least 0.5 m lower than external walls of the bays.

6.6 Water Resources

6.6.1 The underlying aquifer succession on site is evident from the most recent ground investigation by Eastwoods and Partners Consulting Engineers. No superficial deposits were encountered and as a result the underlying strata is classified as 'Unproductive' referring to the London Clay Formation.

6.6.2 Implementation of an appropriate temporary drainage system will be required in order to minimise the potential risk of increased sediment affecting the surrounding areas during construction activities on site. Construction activities may adversely affect the quality of

surface water or groundwater due to contaminated or uncontaminated run-off, stockpile run-off, or spillages or leaks on site. The Principal Contractor will take precautions during the works to protect the entire drainage system and nearby drainage ditch located to the south of the site and groundwater from siltation or pollution.

6.6.3 From the Eastwood and Partners Consulting Engineers ground investigation undertaken in 2017 across the wider site, only two trial pit locations (TP23 and TP24) were located in the vicinity of the Neighbourhood Centre. From a review of these trial pit records, topsoil comprising brown silty clay was present to 0.3 m below ground level (bgl). Beneath this was orange-brown mottled grey, silty clay to 2.5m bgl (maximum depth not confirmed). It has been assumed that the natural ground at the site is uncontaminated subject to any further investigation, testing and assessment undertaken at the site.

6.6.4 An additional ground investigation was undertaken by Eastwoods and Partners Consulting Engineers in August 2025 which covered the Neighbourhood Centre and comprised one cable tool borehole to 25.0 m bgl and three trial pits to depths between 2.90 m and 3.10 m bgl. In general, the ground conditions encountered were made ground or topsoil underlain by strata of the London Clay Formation. The made ground consisted of hardcore containing deleterious material of brick, concrete, ceramic, glass, metal, slate, breezeblock and plastic. The London Clay was found to generally consist of slightly gravelly, slightly sandy to very sandy clay. Evidence of mobile contamination was not recorded during the ground investigation or chemical testing.

6.6.5 Construction activities, including the storage and handling of materials on site will be undertaken in accordance with the Pollution Prevention Guidance (PPG), which can be found on the government website (https://www.gov.uk/guidance/pollution-prevention-for-businesses), this provides details on:

- Polluting substances;
- Activities that produce contaminated water;
- Correct use of drains;
- Storing materials, products and waste;
- Unloading and movement of potential pollutants; and
- Construction, inspection and maintenance.

6.6.6 The following mitigation measure will be implemented, where applicable, to protect the water environment and surface water quality during all construction activities:

- All tanks will be adequately bunded to prevent spillages and drip trays will be used under stationary plant.
- Bunds or drum pallets will be covered, where possible, to prevent the accumulation of rainwater;
- Bunds should be sized appropriately according to the number of containers being stored;
- During refuelling activities, spill kits will be on hand to address any minor incidents during these activities;

- Refuelling activities should take place away from the path to open drainage systems. Drains should be sealed if in close proximity;
- A lockable fuel bowser will be used for refuelling on site. The driver will be responsible for ensuring that refuelling of mobile plant does not take place within 250m of a drain, watercourse or pond;
- The refuelling bowser and the site vehicles shall be equipped with "Grab Pack" spillage control kits and personnel will be appropriately trained as part of the site induction;
- To minimise the risk of ground contamination, all plant operators will be required to clean up any small fuel or oil spillages immediately;
- Waste water generated from construction activities such as dewatering excavations should be disposed of in accordance with the relevant legislation and should not be discharged directly to surface or foul drains without appropriate licences in place;
- Existing and new surface water drains, and surface watercourses will be kept clear of silt build up. Stockpiled materials will not be located adjacent to drains and watercourses; and
- Road and hard surfaces will be kept clean to prevent a build-up of mud and sediment.

6.6.7 As referred earlier in this CEMP, an EPP will be created, reviewed and updated regularly by the Principal Contractor and project team. The EPP will be an up-to-date document containing information on the location and volumes of hazardous substances on site, the location of spill response equipment, the location of sensitive receptors (drainage, watercourse and ecology) and the incident response procedure to be followed. All staff will be trained and made aware of the EPP set in place. In the event of any incident, the Environmental Manager will be notified, in addition, if deemed significant, WBC Environmental Health Officers and any other appropriate bodies will be notified. The Principal Contractor will designate a Site Spillage Team who will take appropriate actions in the event of a significant event.

6.6.8 All redundant drainage pipework must be sealed off at the sewer. All retained sever pipes should be tested and a CCTV survey undertaken to ensure they are suitable for use.

Pollutants: Suspended Solids

6.6.9 Pollution can be caused by the discharge of suspended solids into a watercourse. This is most likely to occur from pumping out excess rainwater from areas of accumulation (such as excavations or low points), from uncontrolled rainwater run-off from the site into a watercourse or from stockpiled collapse or run-off.

6.6.10 This type of pollution is preventable if the following guidance is adhered too:

- The hazard of silt pollution will be emphasised in the Site Induction;
- No water will ever be pumped directly into a watercourse or drain (without appropriate licences in place);
- Only the minimum area of topsoil will be stripped at any one time;
- The spread will be 'lipped' as it crosses a watercourse to prevent direct run-off;

- A 5m buffer strip of vegetation will be left on either side a watercourse, if possible, to provide a barrier;
- Straw bales and spill kits will be stored at all sensitive receptors;
- Silt traps will be used if deemed necessary;
- Silty water well be disposed of by pumping to a suitable area of grassland, to sewer or to a watercourse after sufficient treatment, providing the correct permission and consent are in place prior to any disposal.

Pollutants: Concrete

6.6.11 Wet cement and / or dry cement will not be allowed to enter any watercourse or any groundwater resource and, if necessary, the flow of the watercourse will be temporary diverted.

6.6.12 Cement might be used as a means to strengthen the soil in some locations, mixing the cement with soil resulting in a controlled column. The risk this poses to the groundwater is low and groundwater can still flow around and through the site.

6.6.13 Tools and equipment will not be cleaned in the watercourse, and any cleaning required will be done well away from any watercourses. Wash water will not be discharged into watercourses, drains or disposed of in any way so as to cause a discharge of dirty water into a watercourse.

6.6.14 If concrete must be sprayed, sheeting will be used to cover any nearby surface watercourses.

6.6.15 A concrete wash out area will be created for contractors to wash out their delivery wagons. This will be appropriately signed and all drivers will be made aware of it.

6.6.16 Significant quantities of concrete wash-off water should not be left to soak into the ground without prior agreement from the Environment Agency.

6.7 Ground Conditions, Contamination and Hazardous Material

6.7.1 From the Eastwood and Partners Consulting Engineers ground investigation undertaken in 2017 across the wider site, only two trial pit locations TP23 and TP24 were located in the vicinity of the Neighbourhood Centre. From a review of these trial pit records topsoil comprising brown silty clay was present to 0.3 m below ground level (bgl). Beneath this was orange-brown mottled grey, silty clay to 2.5m bgl (depth not confirmed).

6.7.2 An additional ground investigation was undertaken by Eastwoods and Partners Consulting Engineers in August 2025 which covered the Neighbourhood Centre and comprised one cable tool borehole to 25.0 m bgl and three trial pits to depths between 2.90 m and 3.10 m bgl. In general, the ground conditions encountered were made ground or topsoil underlain by strata of the London Clay Formation. The made ground consisted of hardcore containing deleterious material of brick, concrete, ceramic, glass, metal, slate, breezeblock and plastic. The London Clay was found to generally consist of slightly gravelly, slightly sandy to very sandy clay.

6.7.3 One sample of topsoil, two samples of made ground and three samples of natural ground were tested for a full suite of contaminants. No exceedances were recorded in any of the strata types when compared to ‘public open space near housing’ screening values.

6.7.4 Three tests for asbestos were undertaken on the made ground encountered and was recorded in TP2 at 0.60 m bgl as loose fibres of chrysotile with a quantification of <0.001 %, which is a very low concentration and is not classified as hazardous waste.

6.7.5 Hazardous materials (fuels, solvents etc.) may be used during the construction works.

6.7.6 The EPP will set out any procedures to deal with any contamination issues that arise during the works. This procedure will be presented during the Site Induction. Best practice techniques will be used during all construction activities. The operation of construction vehicles and the handling, use and storage of hazardous material will be undertaken as follows:

- Construction vehicles and plant will be maintained and supplied with spill kits and drip trays to reduce the risk of hydrocarbon contamination;
- Refuelling will be undertaken in specified areas. Drip trays will be installed to collect leaks from fuel pumps;
- The handling, use and storage of hazardous material will be undertaken in line with current best practice;
- Adequate bunds and secure areas, away from drainage, are to be provided for the storage of fuel, oil, chemical and paints;
- Provision of spill containment equipment such as absorbent material on site as well as spill kits located near sensitive receptors and in construction vehicles.

6.7.7 A member of staff will be nominated to control and monitor the 'Control of Substances Hazardous to Health (COSHH)' system. Suppliers must send data sheets for every hazardous substance to be brought to or used at the site. For each hazardous substance, an assessment information sheet will be completed by the Health and Safety Advisor who will brief any personal likely to use such material as part of the induction or as a toolbox talk. This will include how to use it safely, disposal and emergency procedures. Written record of these briefings will be kept in the COSHH file held on the site.

6.7.8 Any new hazardous substances brought to site will have suitable arrangements made for their safe storage, use and disposal.

6.8 Ecology

6.8.1 The importance of protecting wildlife and habitat management during the construction process is recognised and practical measures will be taken to achieve this.

6.8.2 The following ecological reports have been reviewed and summarised in Table 6.1:

- Hogwood Farm, Finchampstead. Non-invasive Species Management Plan – Neighbourhood Centre. Ref 868.1 produced by Hankinson Duckett Associates (HDA), dated December 2024.
- Hogwood Farm, Finchampstead. Hedgerow Mitigation and Compensation Strategy – Neighbourhood Centre. Ref 868.1 produced by Hankinson Duckett Associates (HDA), dated December 2024.

- Hogwood Farm, Finchampstead. Detailed Bat Mitigation Strategy – Neighbourhood Centre. Ref 868.1 produced by Hankinson Duckett Associates (HDA), dated December 2024.
- Hogwood Farm, Finchampstead. Detailed Reptile Mitigation Strategy – Neighbourhood Centre. Ref 868.1 produced by Hankinson Duckett Associates (HDA), dated December 2024.
- Hogwood Farm, Finchampstead. Detailed Ecological Permeability Scheme- Neighbourhood Centre. Ref 868.1 produced by Hankinson Duckett Associates (HDA), dated December 2024.
- Hogwood Farm, Finchampstead. Landscape and Ecological Management Plan (LEMP) – Neighbourhood Centre, Ref 868.1 produced by Hankinson Duckett Associates (HDA), dated December 2024.

6.8.3 For completeness, copies of these reports are included in Appendix D.

6.8.4 It is expected that the mitigation measures, summarised in the table below, will be applied, however the Principal Contractor will also refer to the above documents.

6.8.5 Note that all work at the Neighbourhood Centre is to be undertaken in accordance with the requirements of the LEMP Report (as reference above), this includes grassland, tree planting and ornamental tree planting.

Table 6.1 Summary of potential impacts, mitigation and enhancement measures

Ecological Feature	Potential Impacts	Proposed Mitigation and Enhancement Measures
Scattered mature trees, hedgerows and scrub	None as no hedgerows, woodland belts or tree lines within the site. Scrub vegetation is present along the southern boundary.	"Stepping stone" habitats will be present in the Neighbourhood Centre – tree planting and ornamental shrubs and some trees.
Badger	Injury or death during construction/ loss of habitat.	[redacted]

Ecological Feature	Potential Impacts	Proposed Mitigation and Enhancement Measures
Bats	No suitable trees identified on site for roosting so direct impacts are not a potential impact on site. Loss of foraging/commuting habitat Impact of lighting during/post construction	It is understood that the scrub along the southern boundary will be lost and not replaced. Addition of plants favoured by bats invertebrate prey within soft landscaping. Three bat boxes are to be integrated into the Neighbourhood Centre building. Green corridors and additional hedgerows will be incorporated in to the SANG, green corridors and other phases of development. The site is not located within Lighting Exclusion / Restriction Zones but minimal safe level of lighting will be used.
Birds	Injury/death Destruction and/or disturbance of nests Loss of foraging habitat	3 no. bird boxes to be positioned on Neighbourhood Centre building. Stepping stone" habitats will be present in the Neighbourhood Centre – tree planting and ornamental shrubs and some trees.
Reptiles	Loss of habitat, injury/death	Whilst 2023 recorded no reptiles species present, Slow Worm and Grass Snake have previously been recorded. There will no creation of reptile habitat within the Neighbourhood Centre. However, Stage 1 and 2 management strategies outlined in the Reptile Mitigation Report will create alternative habitats such as SANG and Green Corridor, and manage any translocation necessary.
Plants	Loss of species	Planting will be incorporated into the proposed areas of soft landscaping.
Small animals (including hedgehogs, amphibians)	Loss of species	"Stepping stone" habitats will be present in the Neighbourhood Centre – tree planting and ornamental shrubs and some trees. Wildlife kerbs to offset gully pots and installation of gully pot ladders.

Ecological Feature	Potential Impacts	Proposed Mitigation and Enhancement Measures
Non-Invasive Species Moderate risk from Japanese Knotweed, Rhododendron sp, Cotoneaster sp, Variegated Yellow Archangel	Loss of natural species due to colonisation.	Consult project ecologist (HAD) if species are encountered to agree any actions and mitigation.

7 MATERIALS USE, WASTE MANAGEMENT AND PEST CONTROL

7.1 Materials Use and Waste Management

7.1.1 Although Site Waste Management Plans (SWMP) are no longer required by legalisation, it is recognised that such a plan or Construction Waste Management Plan supports the identification of actions to minimise construction waste from the redevelopment of the site being sent to landfills. Prior to commencement of the works a SWMP / CWMP will be prepared by the Principal Contractor.

7.1.2 Generally, the disposal of all waste or other material removed from the site will be undertaken in accordance with the COPA 1974, Environment Act 1995, Specials Waste Regulations 1996, Duty of Care Regulation 1991 and Environmental Permit requirements, and Government's Waste Strategy 2000.

7.1.3 Any recycled materials must be compliant with current waste legislation using a suitable system such as Waste Exemptions, Environmental Permitting or Definition of Waste Code of Practice (DoWCoP). These must be in place before any material is excavated or removed from site.

7.1.4 The main aim during demolition and construction will be to reduce the amount of waste generated and exported from site. This approach complies with the waste hierarchy whereby the intention is to first minimise, then to treat / recycle and finally dispose.

7.1.5 The generation of construction will, as a first priority be avoided. Any packaging used for transporting construction material delivered to site will be sent back with the delivery vehicle wherever practicable. If waste is generated on site, it will be sent for reuse and recovery in preference to disposal. Where practical, spoil, demolition material, arisings, pruning and surplus construction material will be reused.

7.1.6 Waste produced during all construction activities on site will be subject to the Duty of Care under the Environmental Protection Act 1990. It is the joint responsibility of the Principal Contractor and Developer to ensure that waste produced on site is disposed of in accordance with legislation.

7.1.7 Waste for final disposal will be transport by a Licensed Waster carrier to a local site which operates in accordance with the appropriate Waste Management Licenses issued by the EA under the Duty of Care Regulations, the receiving site must be authorised to accept the type and quantity of waste generated. Transport of wastes will be minimised by the selection of local licensed sites where available. No disposal of waste by open burning will be permitted on site.

7.1.8 The Principal Contractor will audit waste carriers and waste disposal facilities and maintain documentary evidence that these requirements are being met. A register of waste carried, disposal sites (Including transfer stations) and relevant licensing details will be produced and maintained on site.

7.1.9 All relevant contractors will be required to investigate opportunities to minimise and reduce waste generation, such as:

- Agreements with material suppliers to reduce the amount of packaging or to participate in a packaging take back schemes;

- Implementation of a 'just in time; material delivery system' to avoid materials being stockpiled;
- Attention to material quantity requirements to avoid over ordering and general of waste materials;
- Segregation of waste at source, where practical;
- Reuse of material on site where feasible and maximising the proportion of materials recycled: and
- Reuse and recycling of materials to offsite facilities where reuse on site is not practical.

7.1.10 Materials and waste will be stored in appropriate conditions to prevent damage or contamination of storage areas. All hazardous material including chemical, solvents etc, which will properly sealed in containers at the end of each day, prior to storage in appropriately protected and bunded storage areas. Containers should be sited away from drains or unsurfaced areas and should be regularly maintained and inspected for damage.

7.1.11 Waste will be segregated into different waste types, such as timber, copper, metals, paints etc, and be either disposed of into large skips or, if suitable, placed into a compactor to reduce the volume of the waste before it is taken off site.

7.2 Pest Control

7.2.1 In order to minimise the potential for a problem at the site, the following control measures will be implemented:

- Access to the site from exposed drainage should be prevented to ensure that rubbish or spoil is not left long enough to allow rodents to establish themselves above ground;
- Waste and storage areas shall be managed as detailed in Section 7.1 to discourage pests;
- Welfare facilities will be cleaned on a daily basis and maintained in a good condition. It is expected that the users behave appropriately towards the facilities;
- A suitable number of toilet facilities will be located at the site;
- All food and drink is to be consumed within an enclosed area or off the construction site;
- All food and drink will be disposed of in a lidded container and emptied on a weekly basis; and
- Any pest infestation of the construction site will be notified to WBC as soon as it reasonably practicable.

8 AUDITING MONITORING AND REVIEW

8.1 Environmental Monitoring Programme

8.1.1 Scheduled monitoring of environmental performance and formal compliance auditing will be conducted throughout the construction activities. This will enable the overall effectiveness of the environmental measures and compliance procedure to be assessed and allow areas of underperformance to be identified so corrective actions can be taken for improvement.

8.1.2 The monitoring programme proposed under this CEMP includes daily, event and monthly activities based in sections.

8.1.3 Routine daily visual inspections shall be undertaken by the Principal Contractor on all construction activities and work areas in order to check compliance with this CEMP and regulatory requirements. The results of these inspections shall be recorded on a Daily Site Environmental Form (DSEF), an example of a suitable form is provided in Appendix E.

8.1.4 Event based checks shall be conducted by the Project Manager / Construction Manager and Environmental Manager following any significant event such as heavy rainfall, high winds, receipt of a complaint, or any exceedance of monitoring results. Event based checks should be recorded on a separate inspection form detailing the reasons, observations, findings and outcomes of the inspection, this should be attached to the DSEF.

8.1.5 A monthly environmental monitoring report shall be prepared by the Construction Manager and submitted to the Developer and Project Team. The reports shall include a summary of environmental issues and actions during the period to ensure compliance with the CEMP, including any details of any actions, complaints, incidents and associated investigations and corrective actions, and environmental inductions and awareness training during the period.

8.1.6 All incidents including actual or near miss for injury or damage to equipment, property or the environment will be reported to the Project Manager or Construction Manager as soon as practicable after the occurrence. Regardless of how minor the incident appears, it will be reported. An Incident Investigation Report will be completed within eighteen hours of the incident. Prompt reporting will allow an immediate investigation to take placed and prevent similar situations occurring

8.1.7 The reporting of hazards is the responsibility of all personal and if a hazard or safety problem is identified, it will be brought to the attention of the Construction Manager immediately who will investigate and rectify the situation as soon as practicable.

8.1.8 The Developer, Principal Designer and Principal Contractor will ensure that controls outlined in this CEMP are properly implemented and regularly monitored to ensure their effectiveness. Changes to the controls will be instigated if they are not achieving their objectives. The CEMP shall be refined and refined in consultation with WBC, as required, to ensure it remains consistent with environmental regulatory requirements and the conditions of planning approval. Any revisions will be signed and dated in an addendum format forming part of the original CEMP.

9 CONSTRUCTION TRAFFIC MANAGEMENT

9.1 Access

9.1.1 All construction traffic will enter the site via access roads off the new Southern Bus Loop highway. Traffic marshals will be in place to monitor and direct traffic through the access gates and to reduce public interaction during the works. The traffic management plan is included in Appendix C. Off-site vehicles requiring access to the storage area (plant and material delivery vehicles, waste collection vehicles etc.) will use the same access route and be directed up to the storage area by the traffic marshals.

9.1.2 Off-site vehicles (site operatives and visitors) requiring access to the compound area will use the access the site off the Southern Bus Loop and utilise the first access point into the site compound and into the car parking areas shown on the compound layout plan included in Appendix C. There are two access points off the Southern Bus Loop, which are to be used as a one way system once the redevelopment is complete, however, this may be utilised during the site work. If so appropriate signage and direction will be provided.

9.1.3 On-site vehicles (e.g. excavators) that are stored overnight will use the northern most access point to enter the storage compound.

9.1.4 Traffic marshals will be in place to monitor and direct traffic through the access gates and to reduce public interaction during the works.

9.2 Management

9.2.1 To assist with the management of traffic the following will be implemented by the Contractor throughout the project:

- A permanent traffic marshal will be positioned at the site entrances off the Southern Bus Loop shown on the Construction Access Route included in Appendix C. They will direct traffic accordingly. In addition, the traffic marshal will maintain a log of all drivers that will include a written undertaken from them to adhere to the use of the approved routes for construction traffic;
- Directional signage will be placed at suitable locations to ensure that construction traffic adheres to the designated route, to minimise the effect on the surrounding road network;
- HGV movements will be restricted as far as reasonably possible to avoid peak traffic flow periods (08h00-09h00 and 17h00-18h00);
- To avoid traffic congestion along the haul road at once, the timing of deliveries will be such that they do not coincide with any soil haulage vehicles. In addition, soil haulage vehicle timings will also be staggered to avoid, where possible the parking up of vehicles;
- Construction traffic will adhere to the temporary haul routes as directed by the Contractor. These will be explained to staff during their inductions, and by way of updates should the routes around site change;
- Appropriate speed restrictions will apply to all traffic along the haul road and on site. Appropriate signage will be positioned to convey this. The HSE recommends that speed limits should be reduced to between 10, 15 and 20 mph to suit the site layout, hazardous on site and vehicles being used. Speed limits shall be included in the site rules;

- All vehicle operatives will adhere to safe working practices whilst driving / operating all vehicles and plant on-site; this will include the use of a designated banksman and where possible the avoidance of reversing vehicles;
- Suitably separated pedestrian route ways to access the site will be provided from the site compound and storage areas;
- An appropriate wheel wash facility will be positioned along the haul road that all traffic exiting the site must pass through; and
- In addition, all traffic management requirements shall be in accordance with the HSE publication Workplace Transport Safety (INDG199 (rev2), dated 05/13).

10 RELEVANT LEGISLATION

Environmental Legislation	Summary of Relevance to the Site
Hazardous Substances	
Control of Substances Hazardous to Health (COSHH) Regulations 2002 (and amended 2003, 2004)	The COSHH regulations provide a legal framework for controlling people's exposure to all 'very toxic, toxic, harmful, corrosive or irritant' substances and apply to all places of work. There are various requirements including an assessment of the risk to the health of employees arising from their work and what precautions are needed, introduction of appropriate measures to prevent or control the risk (ensuring that measures of control do not increase the overall risk to health and safety), use of control measures and maintenance of equipment.
Waste	
Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991	This legislation provides powers to control fly-tipping and prevents the unlicensed transport of waste materials. All carriers of controlled waste including the producers of building and demolition waste are required to be registered with the Environment Agency. Controlled waste is defined as household, industrial, radioactive or commercial waste other than agricultural, mineral/ quarrying or explosive wastes. This registration must be renewed every 3 years.
The Environmental Permitting (England and Wales) Regulations 2016	The Regulations consolidate the Pollution Prevention and Control and waste Management Licencing regulations to provide a more streamlined approach to environmental regulations, by allowing for a number of different activities to be regulated under one permit by the Environment Agency.
Hazardous Waste (England and Wales) Regulations 2005 (amended 2009)	The Regulations ensure the sound management, storage and safe disposal of hazardous wastes, to prevent environmental pollution and harm to human health. 'Hazardous' waste applies to wastes which contain any substance which: is listed a hazardous waste in the List of Waste Regulations 2005 (see below); is exceptionally classified as hazardous by the Secretary of State or any of the National Executives; or is declared hazardous by virtue of any regulations under section 62 of the Environmental Protection Act (EPA) 1990. All hazardous waste movements require pre-notification to the Environment Agency prior to any hazardous waste being produced (where possible). Producers are required to know and document the quantity, nature, origin and final destination of the Hazardous Waste and to certify that the waste carrier is registered under the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991. Copies of the completed consignment notes must be retained for at least 3 years by all those in the waste chain.
List of Waste (England) Regulations 2005 (amended 2005)	The List of Waste Regulations categorises wastes as hazardous, and provides a coding system of waste and hazardous waste. Wastes included in the list are subject to the provisions of Directive 75/442/ EEC. Under the List of Waste Regulations, a set of criteria are provided to determine whether or not a waste is classified as hazardous, e.g. if it has a flash point lower than 55ºC
The Waste (England and Wales) Regulations 2011	A legal duty of care is imposed on anyone – from producers, to carriers and disposers of waste, to ensure that:

	Waste is not illegally disposed of or dealt with without a licence or in breach of a licence or in any way that causes pollution or harm; Waste is transferred only to an 'authorised person', i.e. a local authority, registered carrier or a licensed disposer; and When waste is transferred, it is accompanied by a full written description which forms part of a waste transfer note (or consignment note for hazardous wastes). All persons subject to duty of care are required to ensure that neither they nor any other person commit an offence under the Regulations.
Environmental Protection Act (EPA) 1990: Part 2 – Waste on Land (amended 2010)	This Act builds on the system put in place by the Control of Pollution Act with stricter licensing controls and other provisions aimed at ensuring waste handling, disposal and recovery operations do not harm the environment. It reorganised Local Authority responsibilities for waste management, introduced a duty of care for producers and handlers of waste and described the offences of unauthorised storage, treatment and disposal of waste.
Environmental Protection Act (EPA) 1990: Part 2a	The section of the EPA created by the Environment Act 1995 setting out the legislative framework for identifying and dealing with contaminated land.
Environment Act 1995	Inserted Part '2a' to the EPA 1990 giving powers and responsibilities to Local Authorities regarding contaminated land.
Discharge to Water / Land	
Anti-Pollution Works Regulations 1999	Aimed at ensuring that site owners pay for the prevention and remediation of pollution arising from their activities. Notices can be served by the Environment Agency directing a site owner to undertake out anti-pollution works where any poisonous, noxious or polluting matter is likely to enter, or to be, or to have been present in any controlled waters.
Water Industry Act 1999	The Act prohibits certain discharges to sewers including: Any matter likely to injure the sewer or interfere with the free flow of its contents or to affect the treatment, disposal of its contents; Liquid waste or steam at a temperature higher than 110ºF or any other chemical waste which is dangerous, a nuisance or prejudicial to health; Any petroleum spirit; and Calcium carbide. Trade effluents may be discharged into public sewers only with the consent, or by agreement with, the sewerage undertaker (i.e. local water company). The consent may stipulate conditions relating to: Nature or composition of the effluent; Maximum daily volume allowed; Maximum daily rate of flow; and Sewer into which the effluent is discharged.
Water Resources Act 1991 (amended 2009)	The Act requires water abstractions to be licensed and certain discharges into controlled waters to be subject to Environment Agency consent. It is an offence under the Act 'to cause or knowingly permit: Poisonous, noxious or polluting matter, or any solid waste matter, to enter controlled waters Matter, other than trade or sewage effluent, to be discharged from a sewer in contravention of a relevant prohibition; Trade or sewage effluent to be discharged into controlled waters or through a pipe into the sea (beyond the controlled waters) Unauthorised work in a water protection zone; Trade or sewage effluent to be discharged onto land or into a lake or pond in contravention of a relevant prohibition or; Any matter to enter inland waters so as to cause or aggravate pollution by impeding flow.

	Pollution from individual discharges into water is controlled by a system of discharge consents which set legal limits on the type, concentration and total volume of discharge which can be released. If a pollution incident occurs, a description of the nature and extent of harm must be produced.
Water Act 2003 and 2014	The Water Act replaces parts of the Water Resources Act 1991 and will be fully implemented by 2012. The Water Act introduces a new abstraction licence system which reduces the number of licences and encourages the development of Catchment Abstraction Management Strategies (CAMS).
Groundwater Regulations 1998 (amended 2009)	The Regulations transpose the requirements of the Groundwater Directive into UK legislation. The Regulations aim to prevent and limit the pollution of groundwater by certain listed substances or groups of substances. The listed substances are the same as those in the Groundwater Directive. The Regulations aim to prevent entry of List I substances into groundwater and prevent groundwater pollution by List II substances. The direct or indirect discharge of List I or II substances must be subject to prior investigation and authorisation. The Regulations also allow notices to be served to control activities which might lead to an indirect discharge of List I substances or groundwater pollution by an indirect discharge of substances in List II.
Control of Pollution (Oil Storage) (England) Regulations 2001	These Regulations require a person having custody or control of oil to carry out certain works and to take certain precautions and other steps for preventing pollution of any waters which are controlled waters for the purposes of Part III of the Water Resources Act 1991. The Regulations impose general requirements in relation to the storage of oil and the types of container used. Where the Environment Agency considers that there is a significant risk of pollution of controlled waters from the oil in question it has the power to serve a notice on the person having custody or control to minimise the risk.
Contaminated Land (England) Regulations 2000 (as amended 2006 and 2012)	Local Authorities have a duty to inspect land, to identify contamination and to decide whether any such land should be designated a 'special site'. Public registers of contaminated land and special sites are kept by the local authority and the Environment Agency. Following designation of land as contaminated or a special site, the enforcing authority can serve a remediation notice on the appropriate person(s) specifying what needs to be done and the period within which remedial work should be completed. The appropriate person will be the person(s) who caused or permitted the contamination of the land. If this person cannot be identified then responsibility falls to the current occupier or owner of the land.
The Building Regulations 2010	The Regulations impose requirements upon people undertaking certain building operations, including new buildings, building extensions and a material change of use of land or a building. Building work must comply with Schedule 1 of the Regulations, which include minimum standards for various aspects including site preparation, toxic substances, drainage etc.
Emissions to Air / Noise	
Control of Pollution Act (COPA) 1974 (Sections 60, 61) (amended 1989)	Section 60 of COPA gives powers to the Local Authority to control noise and vibration from construction sites. The basis of the COPA legislation is that Best Practical Means should be used to control noise and vibration pollution. Control is by service of an abatement notice (under S60) on the person responsible for the noise requiring specific controls to minimise noise and vibration. The notice may specify types of plant and machinery, hours of work, boundary noise levels, etc.

	Section 61 provides for the Contractor to apply to the Local Authority for consent before works commence. This protects the contractor from action by the local authority under S60, but not from individual residents' complaints.
Clean Air Act 1993	The Act prohibits, subject to certain conditions, the emission of dark and black smoke from chimneys serving boilers and other industrial plant. Limits also apply to dust, grit, sulphur and car fume emissions. All new furnaces shall be so far as practicable, smokeless. The Local Authority is empowered to undertake an examination of a plant likely to be causing air pollution, taking into account the possible relevance of statutory exemptions.
Noise and Statutory Nuisance Act 1993	This Act amends the Environmental Protection Act (EPA) 1990 to make noise emitted from vehicles, machinery or equipment in the street a statutory nuisance. It gives the Local Authority powers to serve an abatement notice on the person responsible.
Noise Act 1996	Introduces a new procedure for Local Authorities to seize noisy equipment, in relation to statutory nuisance offences under the EPA 1990.
Control of Noise at Work Regulations 2005	Requires that all employers must conduct an assessment of the exposure and therefore of the risk of their employees to noise where they have reason to believe that any of the specified action levels for various noise exposures is or could be exceeded.
Construction Plant and Equipment (Harmonisation of Noise Emission Standards) Regulations 1985 (as amended 1995)	Provides for examination and certification of construction plant that comply with noise emission standards. The Regulations require that plant is certified by approved bodies. Various types of plant manufactured after the dates of the regulations are to meet noise emission standards and are certified as such.
Environmental Protection Act (EPA) 1990: Part 3 – Statutory Nuisance (section 80)	When a complaint of statutory nuisance is made to the Local Authority by a person living in its area, the Authority has to take steps to investigate the nuisance. Statutory nuisances include any premises maintained in such a state to be prejudicial to health or a nuisance; any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance. Noise emitted from premises so as to be prejudicial to health or a nuisance.
Vehicles	
Road Vehicles (Construction and Use) Regulations 1986 (as amended 2015)	It is an offence to use a vehicle if it is emitting 'smoke, visible vapour, grit, sparks, cinders or oily substances' in such a way as is likely to cause 'damage to any property or injury to any person'. It is an offence to use a vehicle in such a way as to cause excessive noise.
Road Traffic (Vehicle Emissions) (Fixed Penalty) Regulations 1997 (as amended 2002 and 2003)	These Regulations give powers to Local Authorities to enforce vehicle emission standards at the roadside as part of the implementation of the national air quality strategy. Under the Regulations, Local Authorities may issue fixed penalty notices to users of vehicles that do not comply with emissions standards set in the Road Vehicles (Construction and Use) Regulations 1986 as amended. Appropriately trained Local Authority officers can test emissions from vehicles with the help of a uniformed police officer to stop the vehicle. The Local Authority officer may also issue a fixed penalty notice to drivers who leave their engines running unnecessarily.

FIGURES

Figure 1: CEMP Team Organogram

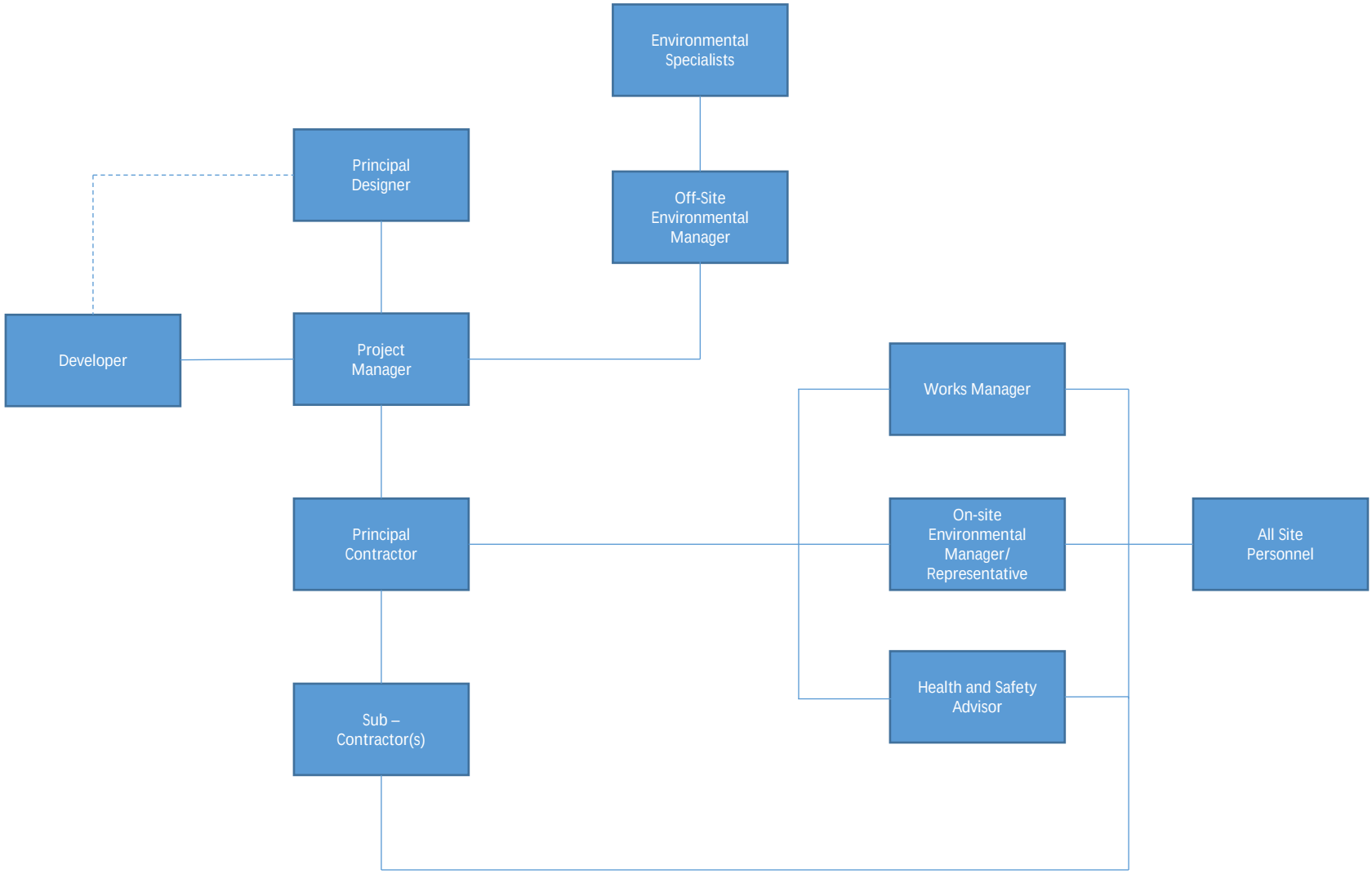
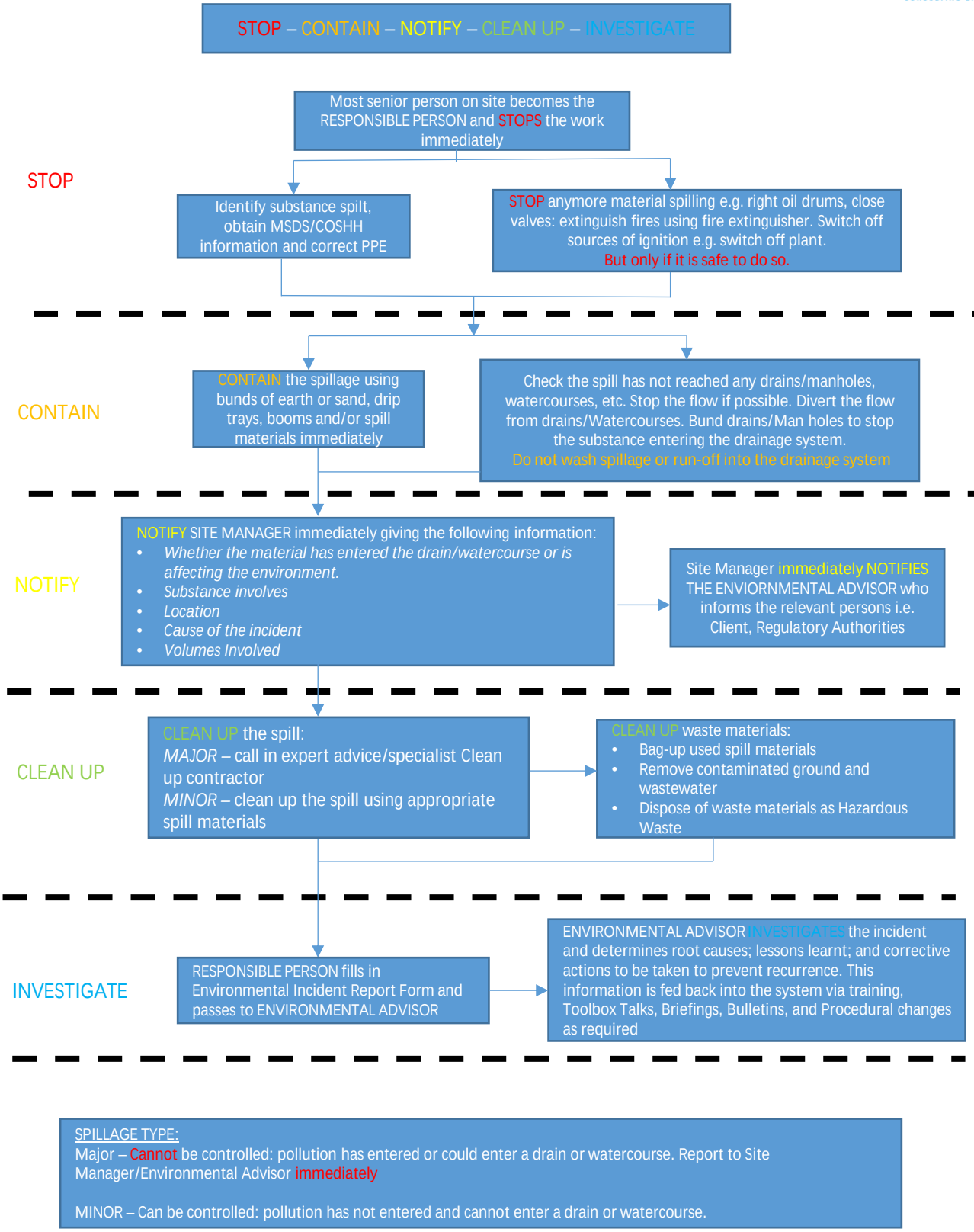


Figure 2: EMERGENCY SPILL RESPONSE PROCEDURE

What to do if you find a spillage of any substance on site



SPILLAGE TYPE:

Major – Cannot be controlled: pollution has entered or could enter a drain or watercourse. Report to Site Manager/Environmental Advisor immediately

MINOR – Can be controlled: pollution has not entered and cannot enter a drain or watercourse.

APPENDIX A: LIMITATIONS

INTRODUCTION

This report is confidential and has been prepared solely for the benefit of the client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from JNP Group; a charge may be levied against such approval. JNP Group accepts no responsibility or liability for the consequences of this document being used for any purpose or project other than for which it was commissioned, and: this document to any third party with whom and agreement has not been executed.

Any comments given within this report are based on the understanding that the proposed works to be undertaken will be as described in the introduction and the information referred to and provided by others and will be assumed to be correct and will not have been checked by JNP Group and JNP Group will not accept any liability or responsibility for any inaccuracy in such information.

Any deviation from the recommendations or conclusions contained in this report should be referred to JNP Group in writing for comment and JNP Group reserve the right to reconsider their recommendations and conclusions contained within. JNP Group will not accept any liability or responsibility for any changes or deviations from the recommendations noted in this report without prior consultation and our full approval.

The details contained within this report reflect the site conditions prevailing at the time of writing. JNP Group warrants the accuracy of this report up to and including that date. Additional information, improved practice or changes in legislation may necessitate this report having to be reviewed in whole or in part after that date. If necessary, this report should be referred back to JNP Group for re-assessment and, if necessary, re-appraisal.

This report is only valid when used in its entirety. Any information or advice included in the report should not be relied upon until considered in the context of the whole report. Whilst this report and the opinion made herein are correct to the best of JNP Group' belief, JNP Group cannot guarantee the accuracy or completeness of any information provided by third parties.

The report represents the finding and opinions of experience geotechnical and geo-environmental engineers. JNP Group does not provide legal advice and the advice of lawyers may also be required.

It should be noted that the following were not included as part of the agreed scope of works with the client: detailed ecological surveys and assessment; ground investigation; or geotechnical requirements etc.

JNP Group has provided advice and made recommendations based on the findings of the work undertaken, however this is subject to the approval / acceptance by the relevant Regulatory Authorities.

The report relies significantly on the information and proposals of others in relation to the site context and also the method by which the construction will be undertaken. The document is to remain live and JNP Group cannot be held responsible for alterations to site practices that affect the approach detailed herein.

The reference of legislation within this document is up to date as far as JNP Group are concerned, where these have been updated then the most recent version of any legislation should be utilised.

Objectives

The work undertaken to provide the basis of this report comprised a study of available documented information from a variety of sources (including the Client). The opinions given in this report have been dictated by the finite data on which they are based and are relevant only to the purpose for which the report was commissioned. The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions. Should additional information become available which may affect the opinions expressed in this report, JNP Group reserves the right to review such information and, if warranted, to modify the opinions accordingly. It should be noted that any risks identified in this report are perceived risks based on the information reviewed; actual risks can only be assessed following a physical investigation of the site.

APPENDIX B: PLANNING CONTEXT

NHS
Buckinghamshire, Oxfordshire and Berkshire West
Integrated Care Board

Planning Application Response

Council:	Wokingham Council
Application reference number:	242653
Description:	Full application for the proposed erection of 48 residential dwellings with associated access, internal roads, parking, landscaping, drainage and cycle storage.
Location:	Hogwood Farm, Sheerlands Road, Arborfield, Wokingham,
Proposal type:	Residential Dwellings
Proposal type: (Other)	*free text here - delete entire row if there is an option chosen above*
Number of dwellings:	48
Stage of development:	Full Planning Permission (FUL)
Expected start date:	

Local Primary Care Network:	Wokingham South		
GP practices:	Practice population as at: 01/10/2024		
	Finchampstead Surgery	Population:	18,669
	Practice 2 (delete row as necessary)	Population:	0
	Practice 3 (delete row as necessary)	Population:	0
	Practice 4 (delete row as necessary)	Population:	0
	Practice 5 (delete row as necessary)	Population:	0
	Practice 6 (delete row as necessary)	Population:	0
		Total:	18,669
Secondary Local PCN (Optional)	Please select from the dropdown		
GP practices:	Practice population as at: XX/XX/XX		
	Practice 1 (delete row as necessary)	Population:	0
	Practice 2 (delete row as necessary)	Population:	0
	Practice 3 (delete row as necessary)	Population:	0
	Practice 4 (delete row as necessary)	Population:	0
	Practice 5 (delete row as necessary)	Population:	0
	Practice 6 (delete row as necessary)	Population:	0

	Total: 0
Nearest practice to the location:	
Predicted population increase: Calculated by the formula (2.5 x number of proposed dwellings).	120
Capacity issues:	Significant
Accomodation issues:	Insufficient Consulting rooms to cope with increased population growth as a direct result of the increase in dwellings.
Proposed planning solution:	Developer contribution is requested towards primary care

s106 contribution requested: If there is no housing mix available, this is calculated by this formula (predicted population increase x £360). Funding to be index linked.	0	x 1 bed at £504 per dwelling	£0.00
	0	x 2 bed at £720 per dwelling	£0.00
	0	x 3 bed at £1,008 per dwelling	£0.00
	0	x 4 bed at £1,260 per dwellng	£0.00
	0	x 5 bed at £1,729 per dwelling	£0.00
		Total:	**£43,200.00**

BOB ICB Policy Document Link:	https://www.bucksoxonberksw.icb.nhs.uk/media/2406/oxfordshire-primary-care-estates-strategy-2020-2025-v20.pdf
Date response sent:	09/10/2024
Sent by:	Darren Wakefield
Additional comments:	This PCN area is already under pressure from nearby planning applications, and this application directly impacts on the ability of Finchampstead surgery in particular, to provide primary care services to the increasing population. Primary Care infrastructure funding is therefore requested to support local plans to surgery alterations or capital projects to support patient services. The funding will be invested into other capital projects which directly benefit this PCN location and the practices within it if a specific project in the area is not forthcoming.

Paste the PCN Practice Population Graph as an image here

Document Author: Will Johnsen, Primary Care Coordinator, BOB ICB
will.johnsen@nhs.net

Date: 13 November 2024
Our ref: 492921
Your ref: 242653

Wokingham Borough Council

BY EMAIL ONLY
planning.enquiries@wokingham.gov.uk

Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

Dear Sir/Madam

Planning consultation: Full application for the proposed erection of 48 residential dwellings with associated access, internal roads, parking, landscaping, drainage and cycle storage.
Location: Hogwood Farm, Sheerlands Road, Arborfield, Wokingham, RG40 4QY

Thank you for your consultation on the above dated 31 October 2024 which was received by Natural England on 31 October 2024

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

SUMMARY OF NATURAL ENGLAND'S ADVICE

FURTHER INFORMATION REQUIRED TO DETERMINE IMPACTS ON DESIGNATED SITES

The proposed development has the potential to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and those Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin.

Natural England's statutory advice on these potential impacts is set out below.

Designated sites

Further information required - recreational pressure impacts to European Sites (habitats sites)

This development site is within the zone of influence (ZoI) for recreational pressure impacts to one or more European Sites (habitats sites).

Within this ZoI, proposals for any net increase in residential units will have a likely significant effect on the qualifying features of the European Site(s) (habitats site(s)) through increased recreational pressure when considered either alone or in combination with other plans and projects.

Your authority has measures in place to manage these potential impacts through a strategic solution which Natural England considers will be effective in preventing adverse impacts on the integrity of the site(s).

Notwithstanding this, Natural England advises that these measures should be formally checked and confirmed by your authority, as the competent authority, via an **appropriate assessment** in view of

the Natural England Access to Evidence - Conservation Objectives for European Sites and in accordance with the Conservation of Habitats & Species Regulations 2017 (as amended).

Providing the appropriate assessment concludes that the measures can be secured, it is likely that Natural England will be satisfied that there will be no adverse effect on the integrity of the European Site(s) (habitats site(s)) in relation to recreational disturbance.

Where the proposal includes bespoke mitigation that falls outside of the strategic solution, Natural England should be consulted.

Reserved Matters applications, and in some cases the discharge/removal/variation of conditions, where the permission was granted prior to the introduction of the strategic approach, should also be subject to the requirements of the Conservation of Habitats & Species Regulations 2017 (as amended) and our advice above applies.

Discretionary Advice
Natural England may provide further advice to the applicant through the discretionary advice service (DAS). Refer to Developers: get environmental advice on your planning proposals - GOV.UK (www.gov.uk) for more information.

Impact Risk Zones for Sites of Special Scientific Interest
We publish Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs), a GIS-based tool designed for use during the planning application validation process to help local planning authorities to determine if a proposed development is likely to affect a terrestrial SSSSI and when to consult Natural England. For more information and to access the SSSI IRZs and user guidance, please visit the Natural England Open Data Geoportal.

Further general advice on the consideration of protected species and other natural environment issues is provided at Annex A.

We would be happy to comment further should the need arise but if in the meantime you have any queries, please do not hesitate to contact us.

For any queries regarding this letter, for new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours faithfully

Samuel Norton
Consultations Team

Annex A –Natural England general advice

Protected Landscapes
Paragraph 182 of the National Planning Policy Framework - GOV.UK (www.gov.uk) (NPPF) requires great weight to be given to conserving and enhancing landscape and scenic beauty within Areas of Outstanding Natural Beauty (known as National Landscapes), National Parks, and the Broads and states that the scale and extent of development within all these areas should be limited. Paragraph 183 requires exceptional circumstances to be demonstrated to justify major development within a designated landscape and sets out criteria which should be applied in considering relevant development proposals. Section 245 of the Levelling-up and Regeneration Act 2023 (legislation.gov.uk) places a duty on relevant authorities (including local planning authorities) to seek to further the statutory purposes of a National Park, the Broads or an Area of Outstanding Natural Beauty in England in exercising their functions. This duty also applies to proposals outside the designated area but impacting on its natural beauty.

The local planning authority should carefully consider any impacts on the statutory purposes of protected landscapes and their settings in line with the NPPF, relevant development plan policies and the Section 245 duty. The relevant National Landscape Partnership or Conservation Board may be able to offer advice on the impacts of the proposal on the natural beauty of the area and the aims and objectives of the statutory management plan, as well as environmental enhancement opportunities. Where available, a local Landscape Character Assessment can also be a helpful guide to the landscape's sensitivity to development and its capacity to accommodate proposed development.

Wider landscapes
Paragraph 180 of the NPPF highlights the need to protect and enhance valued landscapes through the planning system. This application may present opportunities to protect and enhance locally valued landscapes, including any local landscape designations. You may want to consider whether any local landscape features or characteristics (such as ponds, woodland, or dry-stone walls) could be incorporated into the development to respond to and enhance local landscape character and distinctiveness, in line with any local landscape character assessments. Where the impacts of development are likely to be significant, a Landscape and Visual Impact Assessment should be provided with the proposal to inform decision making. We refer you to the Guidelines for Landscape and Visual Impact Assessment (GLVIA3) - Landscape Institute for further guidance.

Biodiversity duty
Section 40 of the Natural Environment and Rural Communities Act 2006 (legislation.gov.uk) places a duty on the local planning authority to conserve and enhance biodiversity as part of its decision making. We refer you to the Complying with the biodiversity duty - GOV.UK (www.gov.uk) for further information.

Designated nature conservation sites
Paragraphs 186-188 of the NPPF set out the principles for determining applications impacting on Sites of Special Scientific Interest (SSSI) and habitats sites (Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). Both the direct and indirect impacts of the development should be considered.

A Habitats Regulations Assessment is needed where a proposal might affect a habitat site (see Habitats regulations assessments: protecting a European site - GOV.UK (www.gov.uk) and Natural England must be consulted on 'appropriate assessments' (see Appropriate assessment - GOV.UK (www.gov.uk) for more information for planning authorities).

Natural England must also be consulted where development is in or likely to affect a SSSI and provides advice on potential impacts on SSSIs either via the SSSI Impact Risk Zones (England) (arcgis.com) or as standard or bespoke consultation responses. Section 28G of the Wildlife and Countryside Act 1981 places a duty on all public bodies to take reasonable steps, consistent with the proper exercise of their functions, to further the conservation and enhancement of the features for which an SSSI has been notified (Sites of special scientific interest: public body responsibilities - GOV.UK (www.gov.uk).

Protected Species
Natural England has produced Protected species and development: advice for local planning authorities (gov.uk) (standing advice) to help planning authorities understand the impact of particular developments on protected species.

Annex A –Natural England general advice

Natural England will only provide bespoke advice on protected species where they form part of a Site of Special Scientific Interest or in exceptional circumstances. A protected species licence may be required in certain cases. We refer you to Wildlife licences: when you need to apply - GOV.UK (www.gov.uk) for more information.

Local sites and priority habitats and species
The local planning authority should consider the impacts of the proposed development on any local wildlife or geodiversity site, in line with paragraphs 180, 181 and 185 of the NPPF and any relevant development plan policy. There may also be opportunities to enhance local sites and improve their connectivity to help nature's recovery. Natural England does not hold locally specific information on local sites and recommends further information is obtained from appropriate bodies such as the local environmental records centre, wildlife trust, geoconservation groups or recording societies. Emerging Local nature recovery strategies - GOV.UK (www.gov.uk) may also provide further useful information.

Those habitats and species which are of particular importance for nature conservation are included as 'priority habitats and species' in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest on the Magic website or as Local Wildlife Sites. We refer you to Habitats and species of principal importance in England - GOV.UK (www.gov.uk) for a list of priority habitats and species in England. You should consider priority habitats and species when applying your 'biodiversity duty' to your policy or decision making

Natural England does not routinely hold priority species data. Such data should be collected when impacts on priority habitats or species are considered likely.

Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land. We refer you to the Brownfield Hub - Buglife for more information and Natural England's Open Mosaic Habitat (Draft) - data.gov.uk (Open Mosaic Habitat inventory), which can be used as the starting point for detailed brownfield land assessments.

Biodiversity and wider environmental gains
Development should provide net gains for biodiversity in line with the NPPF paragraphs 180(d), 185 and 186. Major development (defined in the National Planning Policy Framework (publishing.service.gov.uk) glossary) is required by law to deliver a biodiversity gain of at least 10% from 12 February 2024 and this requirement is expected to be extended to smaller scale development in spring 2024. For nationally significant infrastructure projects (NSIPs), it is anticipated that the requirement for biodiversity net gain will be implemented from 2025.

For further information on the timetable for mandatory biodiversity net gain, we refer you to Biodiversity Net Gain moves step closer with timetable set out - GOV.UK (www.gov.uk). Biodiversity net gain - GOV.UK (www.gov.uk) provides more information on biodiversity net gain and includes a link to the draft Biodiversity net gain - GOV.UK (www.gov.uk) Planning Practice Guidance.

The statutory biodiversity metric should be used to calculate biodiversity losses and gains for terrestrial and intertidal habitats and can be used to inform any development project. We refer you to Calculate biodiversity value with the statutory biodiversity metric - GOV.UK (www.gov.uk) for more information. For small development sites, The Small Sites Metric - JP040 (naturalengland.org.uk) may be used. This is a simplified version of the statutory biodiversity metric and is designed for use where certain criteria are met.

The mitigation hierarchy as set out in paragraph 186 of the NPPF should be followed to firstly consider what existing habitats within the site can be retained or enhanced. Where on-site measures are not possible, provision off-site will need to be considered.

Where off-site delivery of biodiversity gain is proposed on a special site designated for nature (e.g. a SSSI or habitats site) prior consent or assent may be required from Natural England. More information is available on Sites of Special Scientific Interest: managing your land

Annex A –Natural England general advice

Development also provides opportunities to secure wider biodiversity enhancements and environmental gains, as outlined in the NPPF (paragraphs 8, 74, 108, 124, 180, 181 and 186). Opportunities for enhancement might include incorporating features to support specific species within the design of new buildings such as swift or bat boxes or designing lighting to encourage wildlife.

The Environmental Benefits from Nature Tool - Beta Test Version - JP038 (naturalengland.org.uk) may be used to identify opportunities to enhance wider benefits from nature and to avoid and minimise any negative impacts. It is designed to work alongside the statutory biodiversity metric.

Natural environment - GOV.UK (www.gov.uk) provides further information on biodiversity net gain, the mitigation hierarchy and wider environmental net gain.

Ancient woodland, ancient and veteran trees
The local planning authority should consider any impacts on ancient woodland and ancient and veteran trees in line with paragraph 186 of the NPPF. The Natural England Access to Evidence - Ancient woodlands Map can help to identify ancient woodland. Natural England and the Forestry Commission have produced Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk) (standing advice) for planning authorities. It should be considered when determining relevant planning applications. Natural England will only provide bespoke advice on ancient woodland, ancient and veteran trees where they form part of a Site of Special Scientific Interest or in exceptional circumstances.

Best and most versatile agricultural land and soils
Local planning authorities are responsible for ensuring that they have sufficient detailed agricultural land classification (ALC) information to apply NPPF policies (Paragraphs 180 and 181). This is the case regardless of whether the proposed development is sufficiently large to consult Natural England. Further information is contained in the Guide to assessing development proposals on agricultural land - GOV.UK (www.gov.uk). Find open data - data.gov.uk on Agricultural Land Classification or use the information available on MAGIC (defra.gov.uk).

The Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (publishing.service.gov.uk) provides guidance on soil protection, and we recommend its use in the design and construction of development, including any planning conditions. For mineral working and landfilling, we refer you to Reclaim minerals extraction and landfill sites to agriculture - GOV.UK (www.gov.uk), which provides guidance on soil protection for site restoration and aftercare. The Soils Guidance (quarrying.org) provides detailed guidance on soil handling for mineral sites.

Should the development proceed, we advise that the developer uses an appropriately experienced soil specialist to advise on, and supervise soil handling, including identifying when soils are dry enough to be handled and how to make the best use of soils on site.

Green Infrastructure
For evidence-based advice and tools on how to design, deliver and manage green and blue infrastructure (GI) we refer you to Green Infrastructure Home (naturalengland.org.uk) (the Green Infrastructure Framework). GI should create and maintain green liveable places that enable people to experience and connect with nature, and that offer everyone, wherever they live, access to good quality parks, greenspaces, recreational, walking and cycling routes that are inclusive, safe, welcoming, well-managed and accessible for all. GI provision should enhance ecological networks, support ecosystems services and connect as a living network at local, regional and national scales.

Development should be designed to meet the 15 GI How Principles (naturalengland.org.uk). The GI Standards can be used to inform the quality, quantity and type of GI to be provided. Major development should have a GI plan including a long-term delivery and management plan. Relevant aspects of local authority GI strategies should be delivered where appropriate.

Annex A –Natural England general advice

The Green Infrastructure Map (naturalengland.org.uk) and GI Mapping Analysis (naturalengland.org.uk) are GI mapping resources that can be used to help assess deficiencies in greenspace provision and identify priority locations for new GI provision.

Access and Recreation
Natural England encourages any proposal to incorporate measures to help improve people's access to the natural environment. Measures such as reinstating existing footpaths, together with the creation of new footpaths and bridleways should be considered. Links to urban fringe areas should also be explored to strengthen access networks, reduce fragmentation, and promote wider green infrastructure.

Rights of Way, Access land, Coastal access and National Trails
Paragraphs 104 and 180 of the NPPF highlight the important of public rights of way and access. Development should consider potential impacts on access land, common land, rights of way and coastal access routes in the vicinity of the development. Consideration should also be given to the potential impacts on the any nearby National Trails. We refer you to Find your perfect trail, and discover the land of myths and legend - National Trails for information including contact details for the National Trail Officer. Appropriate mitigation measures should be incorporated for any adverse impacts.

Further information is set out in the Planning Practice Guidance on the Natural environment - GOV.UK (www.gov.uk).

3rd Party Planning Application – 242653

Wokingham District Council

P.O Box 157

Shute End

WOKINGHAM

Berks

RG40 1WR

Our DTS Ref: 78047

Your Ref: 242653

14 November 2024

Dear Sir/Madam

Re: STONES , PARK LANE, FINCHAMPSTEAD, WOKINGHAM, RG40 4QR

Waste Comments

Thames Water would advise that with regard to FOUL WATER sewerage network infrastructure capacity, we would not have any objection to the above planning application, based on the information provided.

Water Comments

With regard to water supply, this comes within the area covered by the South East Water Company. For your information the address to write to is - South East Water Company, Rocfort Road, Snodland, Kent, ME6 5AH, Tel: 01444-448200

Yours faithfully

Development Planning Department

Development Planning,

Thames Water,

Maple Lodge STW,

Denham Way,

Rickmansworth,

WD3 9SQ

Tel:020 3577 9998

Email: devcon.team@thameswater.co.uk

Daniel Washington C2010
Designing Out Crime Officer

Thames Valley Police
Headquarters South
Oxford Road
Kidlington
OX5 2NX

27 November 2024

Reference: 242653
Location: Hogwood Farm, Sheerlands Road, Arborfield, Wokingham, RG40 4QY

Dear Sir or Madam,

Thank you for consulting Thames Valley Police in relation to the above planning application. I have reviewed the submitted documents and crime statistics for the area and the following comments are provided to ensure the application meets the requirements of;

- The National Planning Policy Framework 2023 paragraph 96(b); which states that Planning policies and decisions should aim to achieve healthy, inclusive and safe places which are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion…
- The National Planning Policy Framework 2023, paragraph 135(f) which states that "Planning policies and decisions should ensure that developments create places that are safe, inclusive and accessible… and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience".

The layout of the site around plots 1048 – 1053 creates an issue from a designing out crime perspective. The proposed layout places plots 1049 and 1052 essentially within the centre of a perimeter block which exposes the vulnerable side and rear boundaries of a number of units to the public realm. Whilst plots 1049-1052 will provide a degree of overlooking of the exposed rear boundaries and it is noted that robust walls are proposed as boundary treatment in these locations, the rear elevations of properties are where the majority of burglaries are perpetrated and having rear/side elevation located adjacent to the public realm make the rear of the property more accessible to offenders. The side and rear boundaries also present blank frontages to the public realm which can be attractive to antisocial behaviour.

The issue with the layout in this location is exacerbated as plot 1048 does not have any windows proposed on its side elevation which, if included, could provide some additional active surveillance and reduce the amount of blank frontage. Also, the positioning of plot 1053 exposes the rear boundaries of plots 1031 and 1032. It is recommended that the layout of the scheme is amended so as to minimise the number of units with exposed side and/or rear boundaries.

With regards to boundary treatment, it is noted that the side and rear boundary to plot 1031 is proposed to be marked by hedgerow. Whilst hedgerows can provide defensive planting, it is essential that they are to an appropriate height if providing the primary boundary treatment (at least 1.8m) and must be reinforced with additional boundary treatment to ensure the boundary is sufficiently robust, particularly as the hedgerow matures. It is noted that brick walls are proposed throughout the development to define boundaries where they abut the public realm and it would be appropriate for the garden boundary for plot 1031 to also to be defined as such (in addition to the hedgerow).

The above comments are made on behalf of Thames Valley Police and relate to designing out crime only. I hope that you find these comments of assistance. If you have any queries relating to crime prevention design, please do not hesitate to contact myself.

Yours faithfully,

Dan Washington | Designing Out Crime Officer

Central Hub Fire Safety Office, Wokingham Fire Station, 11-13 Easthampstead Road, Wokingham, Berkshire, RG40 2EH
Direct Line 0118 938 4336 Switchboard 0118 945 2888
Royal Berkshire Fire and Rescue Service **rbfrs.co.uk**

Development Management & Compliance
P.O. Box 157
Shute End,
Wokingham
Berkshire, RG40 1BN

Your ref	242653
Our ref	MJ/403449
Ask for	Mansel Jackson
Date	19 November 2024

Email: planning.enquiries@wokingham.gov.uk

Dear Sir/Madam,

Re: Hogwood Farm, Sheerlands Road, Arborfield, Wokingham, RG40 4QY

Further to your letter dated 31 October 2024 and enclosed plan/s which you have forwarded, it is noted that this application has been made under the Town and Country Planning Acts.

At this stage there is no duty placed upon the Fire Authority under the aforementioned legislation to make any comment relative to your application.

Your proposals have, however, been cursorily examined and inasmuch as would affect the planning application and the following items, in general, will need to be incorporated in order to meet the basic principles of means of escape in case of fire.

Fire service access should comply with B5 of ADB Volume 2 2019 with additional local requirements below under the Berkshire Act 1986:

Fire service vehicles currently operated by Royal Berkshire Fire & Rescue Service exceed the requirements stated in the current edition of Approved Document B.

The applicant should be made aware of the following amendments:-

The minimum carrying capacity for a pumping appliance is 16 tonnes.

The minimum carrying capacity for a high reach appliance is 26 tonnes.

Structures such as bridges should have the full vehicle carrying capacity.

Any structural fire precautions and all means of escape provision will have to satisfy Building Regulation requirement. These matters are administered by the local authority Building Control or approved inspectors, who you are advised to contact in this regard.

Please be advised that any comments made by the Fire Authority in this letter must not be taken as formal approval that your plan/s confirm to the requirements and recommendations of current Guides or Codes of Practice for means of escape in case of fire.

Yours sincerely

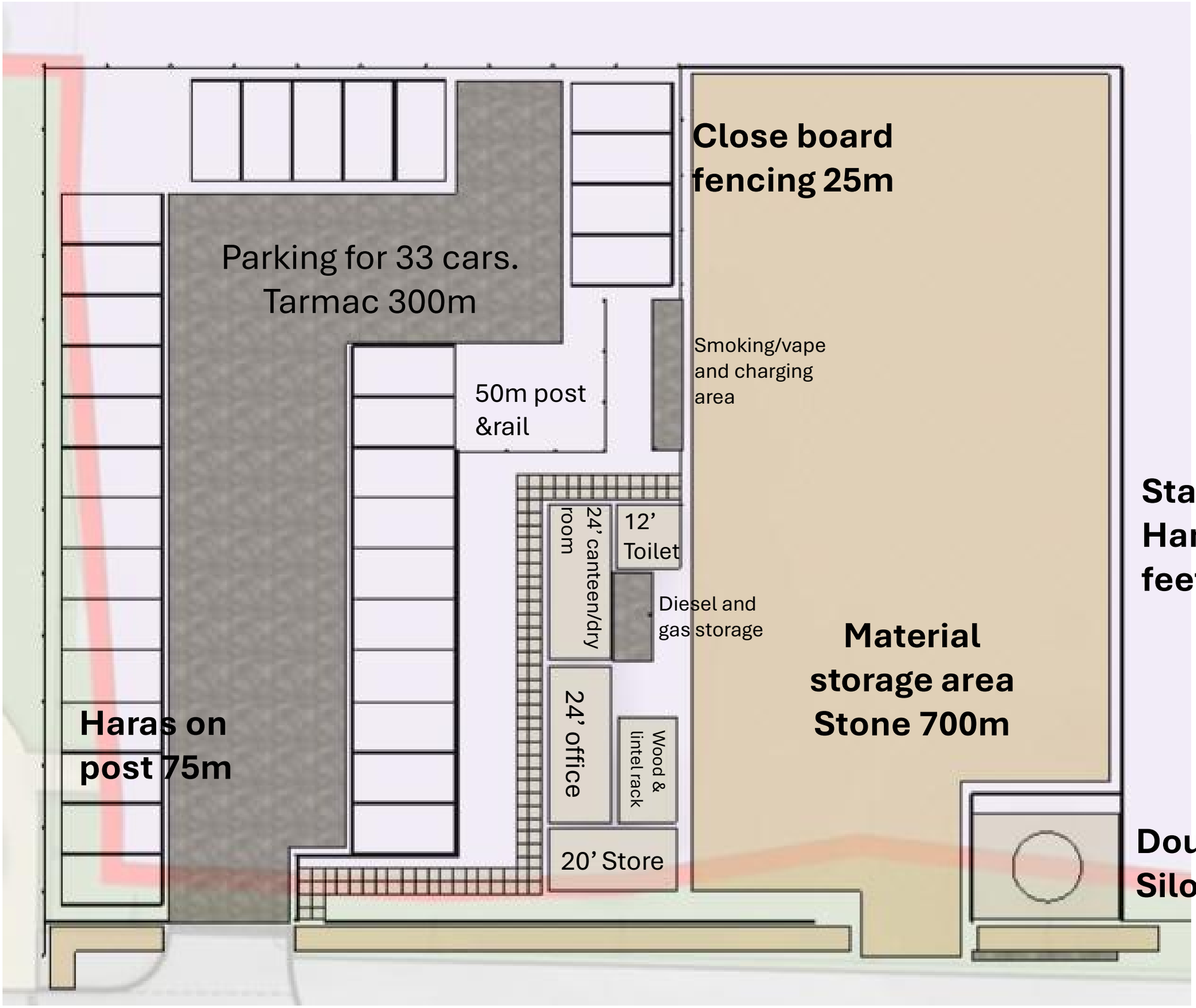
Mansel Jackson
Authorised Fire Safety Inspecting Officer
And on behalf of the Royal Berkshire Fire Authority

APPENDIX C: DRAWINGS

Finchampstead Neighbourhood Centre

Compound layout

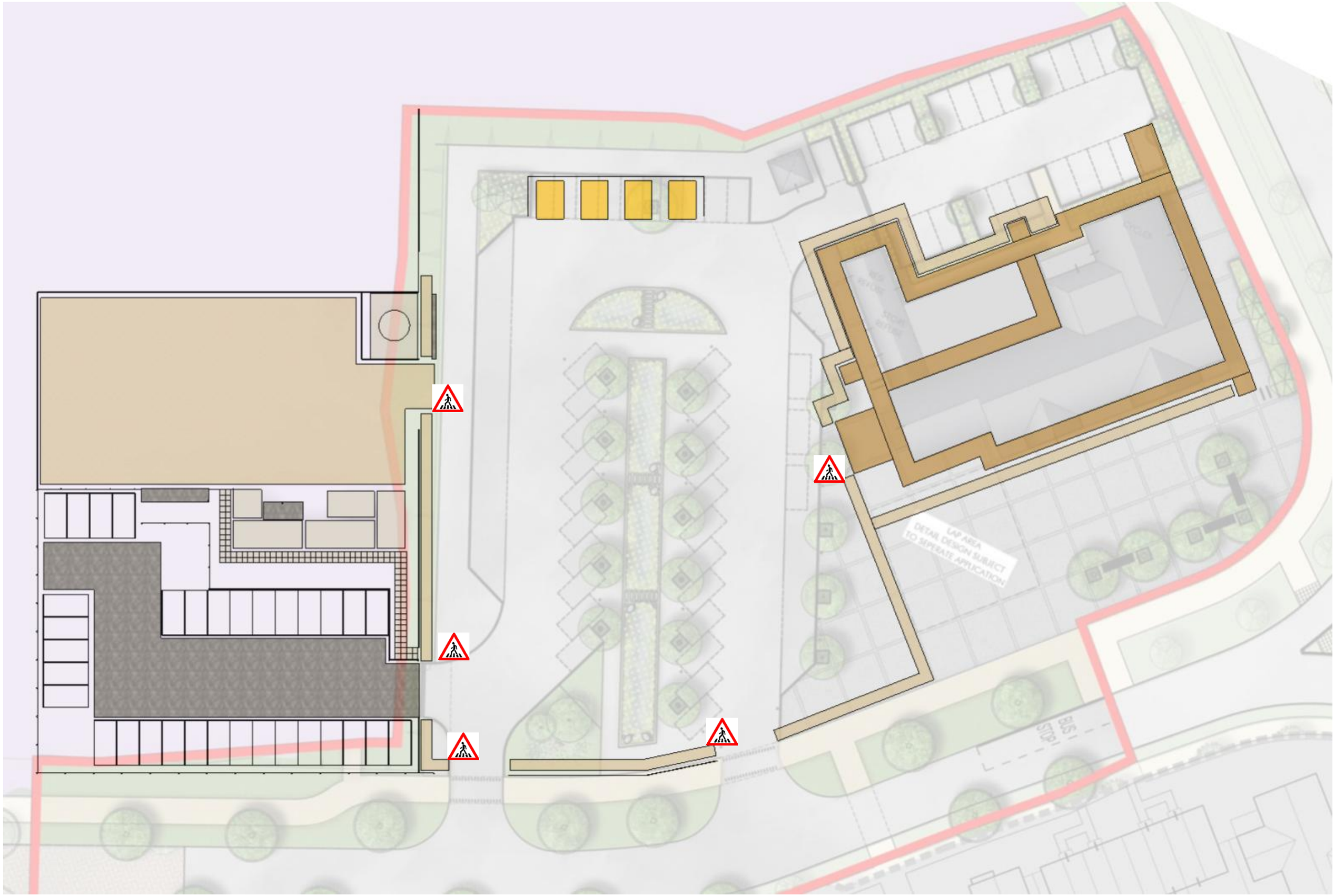
CALA



Finchampstead Neighbourhood Centre

Traffic management plan

CALA



APPENDIX D: ECOLOGICAL REPORTS

Landscape Architecture
Masterplanning
Ecology

hda

HOGWOOD FARM, FINCHAMPSTEAD

NON-NATIVE INVASIVE SPECIES MANAGEMENT PLAN – NEIGHBOURHOOD CENTRE

Prepared for CALA Homes Thames Ltd

by

Hankinson Duckett Associates

HDA ref: 868.1

December 2024

hankinson duckett associates
t 01491 838175 f 01491 838997 e consult@hda-enviro.co.uk w www.hda-enviro.co.uk
The Stables, Howbery Park, Benson Lane, Wallingford, Oxfordshire, OX10 8BA

CONTENTS **Page**

APPENDICES

1 INTRODUCTION

1.1 Site location and summary description

1.1.1 This Non-native Invasive Species Management Plan describes the approach to minimising the risk of spread of invasive, non-native species listed on Schedule 9 of the 1981 Wildlife and Countryside Act (as amended) in relation to the Neighbourhood Centre area of the development of approximately 110ha of land at Hogwood Farm, Finchampstead. The Neighbourhood Centre development area comprises approximately 0.9ha of land, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference SU 77146445. The Non-native Invasive Species Management Plan was commissioned by CALA Homes Thames Ltd in May 2024.

1.1.2 The Neighbourhood Centre development parcel is located to the north-west of the village of Finchampstead, Berkshire. In general terms, it is dominated by ruderal vegetation with a line of mixed scrub along the southern site boundary and bare ground along the eastern site boundary. The Neighbourhood Centre site is bordered to the east by the Nine Mile Ride Extension South (NMRES); to the south by the Southern Bus Loop road with Parcel 10 of the wider site beyond; and to the north and west by the proposed primary school which will be delivered separately by Wokingham Borough Council (WBC).

1.1.3 The Neighbourhood Centre site is part of a larger area covering a total of 110ha, hereinafter referred to as the 'wider site'. The wider site includes residential properties associated with Parcel 1 and a construction site associated with Parcel 2 in the north-west and a SANG in the south which comprises a mix of wetland, species-rich grassland, scrub and woodland habitats. In general terms, the western area of the wider site is comprised of three fields of disturbed ground dominated by short ruderal vegetation with scattered areas of tall ruderal vegetation and large spoil heaps bordered by mature trees and woodland with scrub field margins. The central and eastern areas of the site are comprised of areas of hardstanding, construction/disturbed ground and grassland fields bordered by mature treelines and woodland. Woodland shaws and copses are located in the northern, western and central areas of the site, including mixed, broadleaved and broadleaved plantation woodland types, some of which are included on Natural England's Inventory of Ancient Woodland. Wetland habitats within the site include drainage ditches and small streams associated with the field boundaries and several ponds in poor condition are located across the site. The wider site is bordered to the

north by a construction site, the Bohunt School and the Hogwood Industrial Estate; to the east by Park Lane beyond which lie residential dwellings and park homes; to the south by Park Lane and farmland; and to the west by A327 Reading Road and Sheerlands Road beyond which lie farmland and woodland. The wider area is dominated by agricultural land interspersed with woodland and residential properties.

1.1.4 Further information on the extent and composition of habitats across the Neighbourhood Centre site and the wider site is provided in the Phase 1 Habitat Survey and Target Notes (HDA, 2024a).

1.2 Background

1.2.1 A Non-native Invasive Species Management Plan is a key tool in preventing the spread of non-native, invasive plant species either on to or from a site. It is required to identify the biosecurity measures needed to minimise the risk of spreading invasive, non-native species across the site and the wider area. The Non-native Invasive Species Management Plan considers the risks posed by a species, based on the information available at the time of preparation.

1.3 Development proposals

1.3.1 Planning permission (O/2014/2179 and 140764) was granted in January 2017 for a hybrid application. This comprises:

- Outline permission for demolition of all existing buildings on site; up to 1,500 new dwellings; employment floor space; a Neighbourhood Centre; a primary school; sports pitches and associated pavilion building; highways infrastructure; associated landscaping, public realm, open/green space and sustainable urban drainage systems; and
- Full permission for a 29.7ha Suitable Alternative Natural Greenspace (SANG) in the south of the site.

The hybrid planning permission was subsequently amended by a Section 73 application (181194) which was approved in November 2018.

1.4 Scope and purpose of report

1.4.1 This Non-native Invasive Species Management Plan has been prepared in response to the identification of non-native invasive plant species within the wider site including Rhododendron and an unidentified Cotoneaster species during the initial Phase 1 habitat survey (HDA, 2018). In addition, during consultation with Natural England Japanese

Knotweed was identified in the wider area (Royal Haskoning, 2014) and during an updated Phase 1 habitat survey Variegated Yellow Archangel was recorded from the wider site boundary (HDA, 2018). An updated invasive species walkover survey was carried out in 2023 of Parcels 4, 5, 6, 11, 12, 13 and the proposed Neighbourhood Centre which recorded no species listed under Schedule 9 of the 1981 Wildlife and Countryside Act (as amended) (HDA, 2024b). Cotoneaster *Cotoneaster horizontalis*, Entire-leaved Cotoneaster *Cotoneaster integrifolius*, Himalayan Cotoneaster *Cotoneaster simonsii*, Hollyberry Cotoneaster *Cotoneaster bullatus*, Small-leaved Cotoneaster *Cotoneaster microphyllus*, Rhododendron *Rhododendron ponticum*, Variegated Yellow Archangel *Lamiastrum galeobdolon* and Japanese Knotweed *Fallopia japonica* are all listed under Schedule 9 of the 1981 Wildlife and Countryside Act (as amended). It is an offence to release, plant or cause to grow in the wild any plant included on this schedule of the Act.

1.4.2 Condition 30 of the planning consent for the development of the site, subsequently requires that:

"*All Reserved Matters applications for any sub phase of the development shall include a detailed non-native invasive species management plan for that phase of the development. The detailed non-native invasive species management plans shall be implemented in accordance with the submitted plans unless otherwise approved in writing by the local planning authority."*

1.4.3 No non-native plant species listed on Schedule 9 of the 1981 Wildlife and Countryside Act (as amended) were recorded within the site, during either the 2014 or 2017 Phase 1 habitat surveys (HDA, 2018) or the 2023 invasive species walkover survey (HDA, 2024b), however this should not be regarded as confirmation of absence or of the distribution of those species recorded[1].

1.4.4 The objective of this Non-native Invasive Species Management Plan is to identify, reduce and minimise the risk of spreading invasive, non-native plant species within the Neighbourhood Centre site, the wider site and the wider environment.

[1] The walkover surveys allows an indication of the likely presence/absence of invasive species within the Neighbourhood Centre development area, the survey should not however be regarded as confirmation of distribution of those species recorded or absence of species not recorded. Further certainty with regards to the

2 NON-NATIVE INVASIVE SPECIES MANAGEMENT PLAN

2.1 The Non-native Invasive Species Management Plan tabulates those species that have been identified as being on the Neighbourhood Centre development site or where current knowledge suggests there is reasonable risk of potential to be imported during construction. In view of the identified presence of an unidentified Cotoneaster species, Rhododendron, Yellow Archangel and Japanese Knotweed within the wider area, precautionary preventative measures are also given to prevent their spread within and from the wider site. The likely pathways and operational mitigation have also been identified. This document will be appended to the contractor's Construction Method Statement for use on site for construction of the Neighbourhood Centre area of the development. A guide to the identification of key non-native invasive plant species known to be present in the site, wider site and its surrounds is provided in *Appendix A*.

2.2 This Management Plan has been based on current knowledge of the extent of non-native invasive plant species present within the Neighbourhood Centre development site and its surrounds. Prior to development commencing however, an updated survey of the site will be undertaken at an optimal time of year (between May and August) to identify the presence, location and area covered by any non-native invasive species listed on Schedule 9 of the 1981 Wildlife and Countryside Act (as amended), not previously identified on site. If any plant species listed on Schedule 9 are identified during the update survey, this Management Plan will be updated accordingly and submitted to the local planning authority.

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presence/likely absence of invasive plant species could be achieved through multiple visits across the growing season.

Table 1. Biosecurity Risk Assessment for Hogwood Farm, Finchampstead

Species	Potential contamination route	Likelihood of risk	Operational Procedure
Cotoneaster sp. (Wall Cotoneaster *Cotoneaster horizontalis*, Entire-leaved Cotoneaster *Cotoneaster integrifolius*, Himalayan Cotoneaster *Cotoneaster simonsii*, Hollyberry Cotoneaster *Cotoneaster bullatus* and Small-leaved Cotoneaster *Cotoneaster microphyllus*)	Species present within wider site. Spread of species via construction machinery/movement of soil. Introduction of seed material via contaminated soil.	*Export/spread risk:* Moderate. Species is known to be present in wider site. *Import risk:* Low. If possible soil will not be imported.	Ensure contractors know what the non-native invasive Cotoneasters looks like and its identified presence in the wider site (see www.nonnativespecies.org) (see *Appendix A*). If any suspected plants are identified within the site, contact the project ecologist (HDA: 01491 838175). These seedling plants should be hand pulled and burnt on site. If there is a requirement to import soil, the soil will be to the BS 3882:2015 standards. All construction machinery tyres/wheels and soil/vegetation carrying equipment will be cleaned prior to entering and leaving the site.
Rhododendron *Rhododendron ponticum*	Species present within wider site. Spread of species via construction machinery/movement of soil. Introduction of seed material via contaminated soil.	*Export/spread risk:* Moderate. Species is known to be present in wider site. *Import risk:* Low. If possible soil will not be imported.	Ensure contractors know what Rhododendron looks like and its identified presence in the wider site (see www.nonnativespecies.org) (see *Appendix A*). If any suspected plants are identified within the site, contact the project ecologist (HDA: 01491 838175). These seedling plants should be hand pulled and burnt on site and/or managed by application of a glyphosate-based herbicide to the foliage during the spring or summer. If there is a requirement to import soil, the soil will be to the BS 3882:2015 standards. All construction machinery tyres/wheels and soil/vegetation carrying equipment will be cleaned prior to entering and leaving the site.

Species	Potential contamination route	Likelihood of risk	Operational Procedure
Variegated Yellow Archangel *Lamiastrum galeobdolon*	Species present within wider area. Spread of species via construction machinery/movement of soil. Introduction of seed material via contaminated soil.	*Export/spread risk:* Moderate. Species is known to be present in wider area. *Import risk:* Low. If possible soil will not be imported.	Ensure contractors know what Variegated Yellow Archangel looks like and its identified presence in the wider area (see www.nonnativespecies.org). If any suspected plants are identified inform the project ecologist (HDA: 01491 838175). These should be pulled up and left to dry before the seeds set (July/August) and/or managed by application of a glyphosate-based herbicide to the foliage during the spring or summer. If there is a requirement to import soil, the soil will be to the BS 3882:2015 standards. All construction machinery tyres/wheels and soil/vegetation carrying equipment will be cleaned prior to entering and leaving the site.
Japanese Knotweed *Fallopia japonica*	Species present within wider area. Spread of species via construction machinery/movement of soil. Introduction of seed material via contaminated soil.	*Export/spread risk:* Moderate. Species is known to be present in wider area. *Import risk:* Low. If possible soil will not be imported.	Ensure contractors know what Japanese Knotweed looks like and its identified presence in the wider area (see www.nonnativespecies.org). If any suspected plants are identified inform the project ecologist (HDA: 01491 838175) and refer to the Environment Agency's Japanese Knotweed Code of Practice[2]. If there is a requirement to import soil, the soil will be to the BS 3882:2015 standards. All construction machinery tyres/wheels and soil/vegetation carrying equipment will be cleaned prior to entering and leaving the site.

[2] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296930/LIT_2695_df1209.pdf

Species	Potential contamination route	Likelihood of risk	Operational Procedure
Himalayan Balsam *Impatiens glandulifera*	Spread of species via construction machinery/movement of soil. Introduction of seed material via contaminated soil.	*Export/spread risk:* Low. Not recorded as present on site or in vicinity of site. Albeit likely to occur in the wider area. *Import risk:* Low. If possible soil will not be imported.	Ensure contractors know what Himalayan Balsam looks like (see www.nonnativespecies.org). If any suspected plants are identified inform the project ecologist (HDA: 01491 838175). These should be pulled up and left to dry before the seeds set (July/August) and/or manage by application of a glyphosate-based herbicide to the foliage during the spring or summer. If there is a requirement to import soil, the soil will be to the BS 3882:2015 standards. All construction machinery tyres/wheels and soil/vegetation carrying equipment will be cleaned prior to entering and leaving the site.
Virginia Creeper *Parthenocissus quinquefolia*	Spread of species via construction machinery/movement of soil. Introduction of seed material via contaminated soil.	*Export/spread risk:* Low. Not recorded as present on site or in vicinity of site. *Import risk:* Low. If possible soil will not be imported.	Ensure contractors know what Virginia Creeper looks like (see www.nonnativespecies.org). If any suspected plants are identified, contact the project ecologist (HDA: 01491 838175). These should be pulled up (using gloves as the sap in the plant can cause irritation to skin) and burnt on site and/or manage by application of a glyphosate-based herbicide to the foliage during the spring or summer. If there is a requirement to import soil, the soil will be to the BS 3882:2015 standards. All construction machinery tyres/wheels and soil/vegetation carrying equipment will be cleaned prior to entering and leaving the site.

Species	Potential contamination route	Likelihood of risk	Operational Procedure
False Acacia* *Robinia pseudoacacia* * Note: False Acacia is not currently a Schedule 9 species in England. It is however invasive and can displace native vegetation.	Spread of species via construction machinery/movement of soil. Introduction of seed material via contaminated soil.	*Export/spread risk:* Low. Not recorded as present on site or in vicinity of site. *Import risk:* Low. If possible soil will not be imported.	Ensure contractors know what False Acacia looks like (see www.nonnativespecies.org). If any suspected plants are identified, contact the project ecologist (HDA: 01491 838175). It should be noted that this plant 'suckers' from the roots and may arise some distance from the trunk of a tree. Any suckers or saplings should be managed by applications of glyphosate based herbicides to the foliage during the spring or summer. If there is a requirement to import soil, the soil will be to the BS 3882:2015 standards. All construction machinery tyres/wheels and soil/vegetation carrying equipment will be cleaned prior to entering and leaving the site.
Garden escapes (e.g. Crocosmia and Spanish Bluebell)	Spread of species via construction machinery/movement of soil. Introduction of seed material via contaminated soil.	*Export/spread risk:* Low. None of these species are known to be present on site or in the vicinity of the site. *Import risk:* Low. If possible soil will not be imported.	If there is a requirement to import soil, the soil will be to the BS 3882:2015 standards. All construction machinery tyres/wheels and soil/vegetation carrying equipment will be cleaned prior to entering and leaving the site.

Species	Potential contamination route	Likelihood of risk	Operational Procedure
Water Fern *Azolla filiculoides*	Dispersal of species through movement of construction machinery. Introduction via aquatic planting of the waterbodies to be constructed on site.	*Export/spread risk:* Low. None of these species are known to be present on site or in the vicinity of the site. *Import risk:* Moderate. Many of these species are sold by plant suppliers.	All construction and appropriate operational staff to familiarise themselves with the species (see www.nonnativespecies.org). Contractor is to provide detail on where construction machinery has been previously used and confirmation that appropriate cleaning/antifouling has been carried out if machinery has been used in or around water within the past 3 months (or unknown). All construction machinery tyres/wheels and soil/vegetation carrying equipment will be cleaned prior to entering and leaving the site. Plants for planting of the SuDS features to be of native stock and checked for presence of alien species prior to planting.
Parrot's-feather *Myriophyllum aquaticum*			
Floating Pennywort *Hydrocotyle ranunculoides*			
New Zealand Pigmyweed/Australian Swamp-stonecrop *Crassula helmsii* (Also sold as *Tillaea recurva, Tillaea helmsii,* or *Crassula recurva*)			
Water Hyacinth *Eichornia crassipes*			
Water Primrose *Ludwigia peploides* (Also sold as *Jussiaea grandiflora*, *Ludwigia uruguayensis*)			
Canadian Waterweed *Elodea canadensis*			
Curly Waterweed *Lagarosiphon major*			
Nuttall's Waterweed *Elodea nuttallii*			
Waterweeds (other *Elodea*) *Elodea spp*			

3 REFERENCES

HDA (2018) *Hogwood Farm, Finchampstead: Phase 1 Habitat Survey Plan with target notes*. Hankinson Duckett Associates, Wallingford.

HDA (2024a) *Hogwood Farm, Finchampstead: Phase 1 Habitat Survey Plan with target notes*. Hankinson Duckett Associates, Wallingford.

HDA (2024b) *Hogwood Farm, Finchampstead: Summary of Parcels 4, 5 ,6 ,11, 12, 13 and NC Invasive Species Walkover Survey Findings*. Hankinson Duckett Associates, Wallingford.

NNSS (2020) *GB non-native species secretariat*. Website accessed on 2nd December 2020: http://www.nonnativespecies.org/home/index.cfm

Royal Haskoning (2014) *Hogwood Garden Village, Arborfield SDL, Hybrid Planning Application: Environmental Statement*. Royal Haskoning DHV.

Royal Haskoning (2014) *Hogwood Garden Village, Arborfield SDL, Hybrid Planning Application: Environmental Statement*. *Appendix I: Extended Phase 1 Habitat Survey.* Royal Haskoning DHV.

HDA Document Control and Quality Assurance Record

Project Title:	Arborfield Eco
Project Reference:	868.1
Document Title:	Non-native Invasive Species Management Plan – Neighbourhood Centre
Commissioning Party:	CALA Homes Thames Ltd

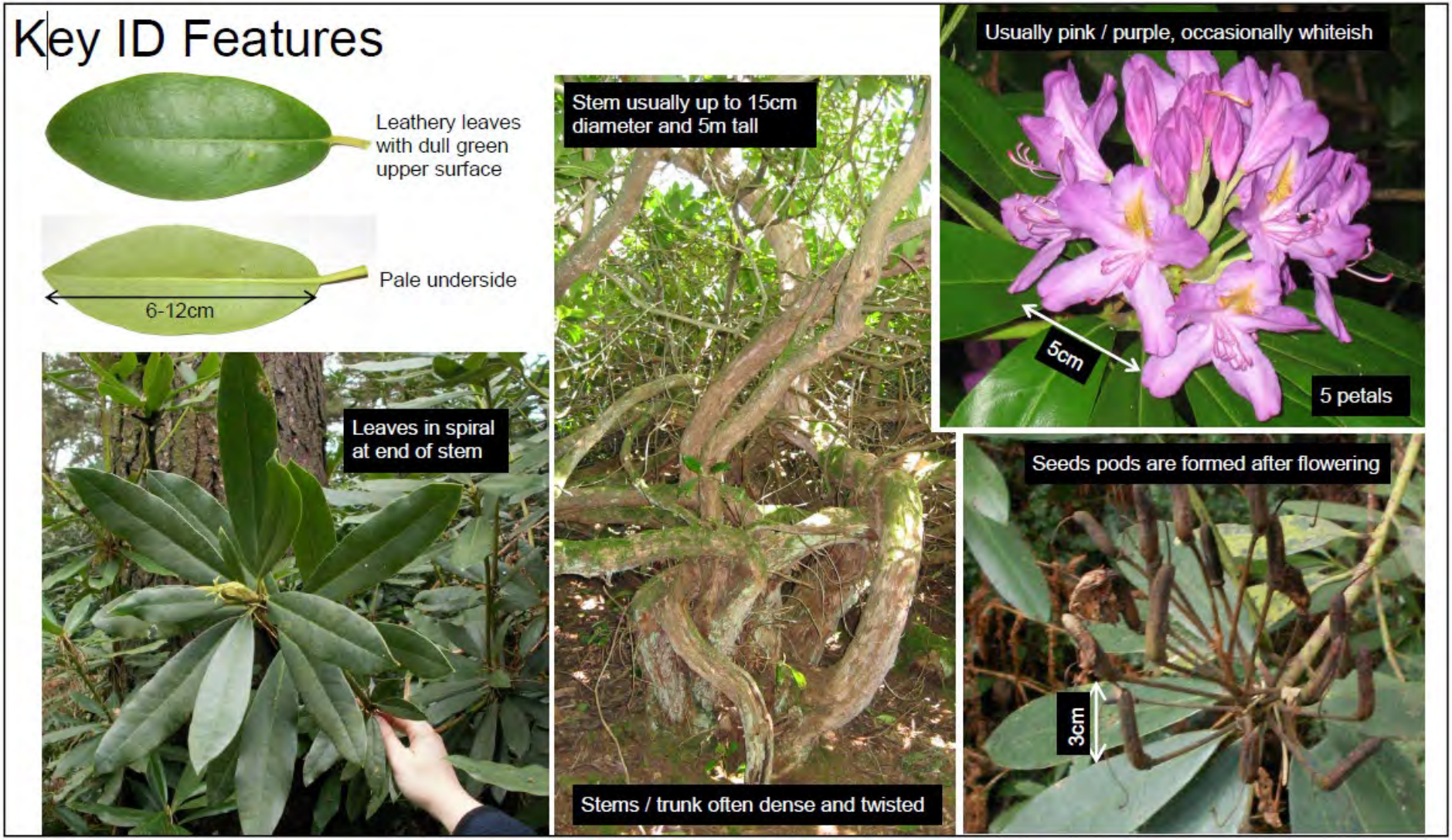
Issue	Description	Date of Issue	Signed
1	Non-native Invasive Species Management Plan – Neighbourhood Centre	December 2024	[redacted]

	Personnel	Position
Author	Clare Bird MCIEEM	Associate Ecologist
Approved for issue	Sarah Thornton-Mills MCIEEM	Principal Ecologist

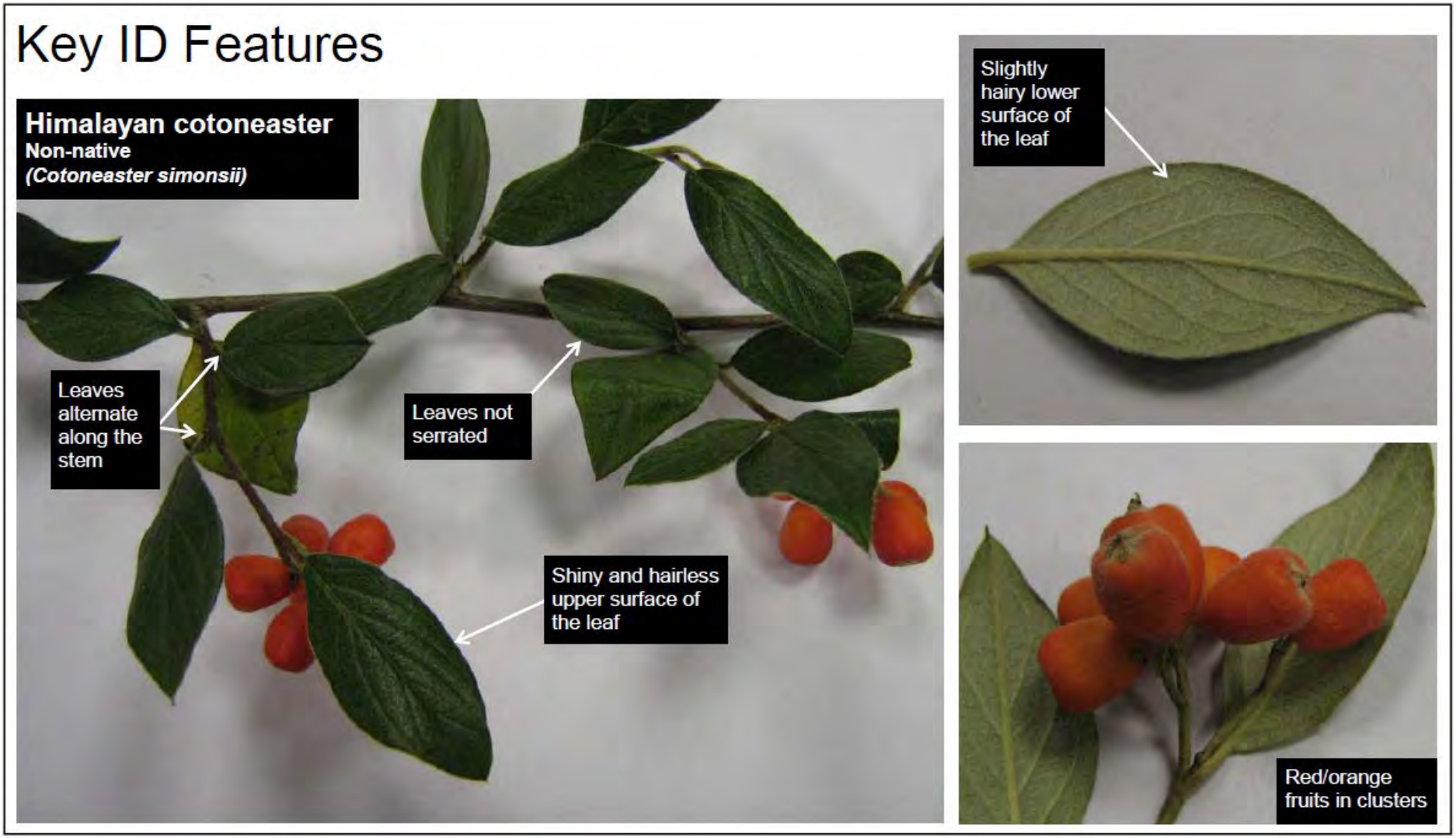
Appendix A

Key identification features of the invasive, non-native species recorded on the wider site or wider area

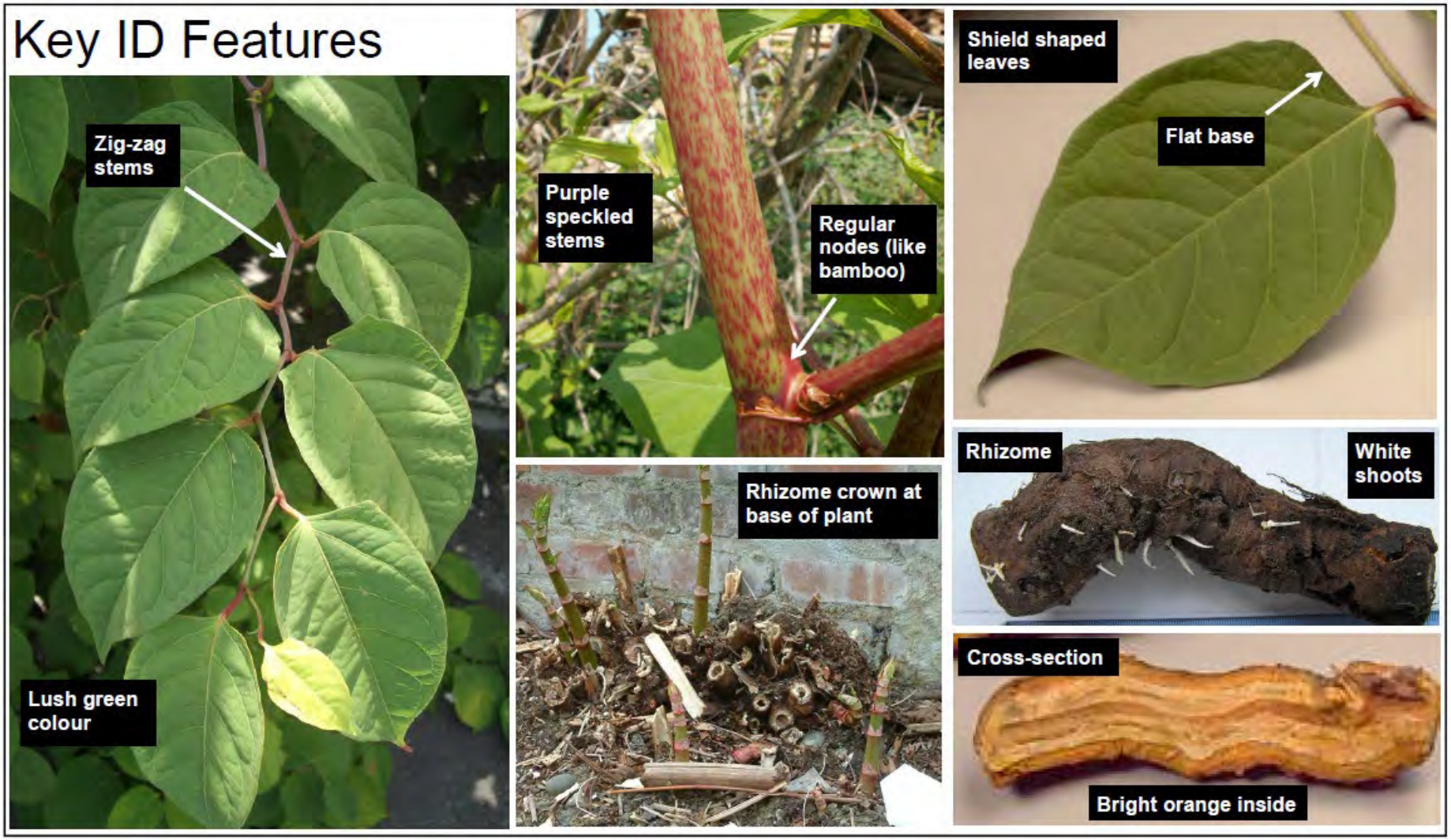
Rhododendron (www.nonnativespecies.org)

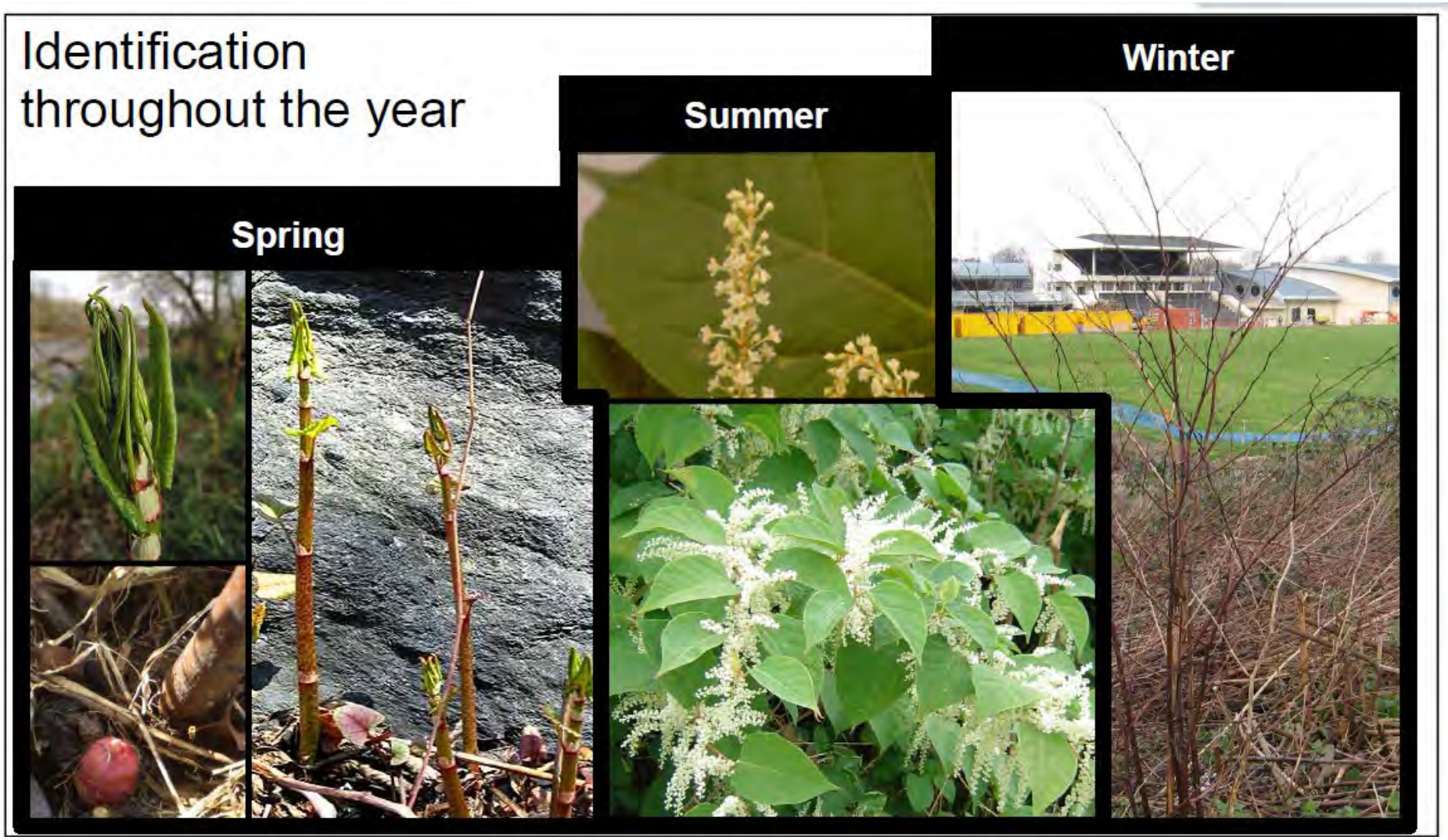


Cotoneaster (www.nonnativespecies.org)

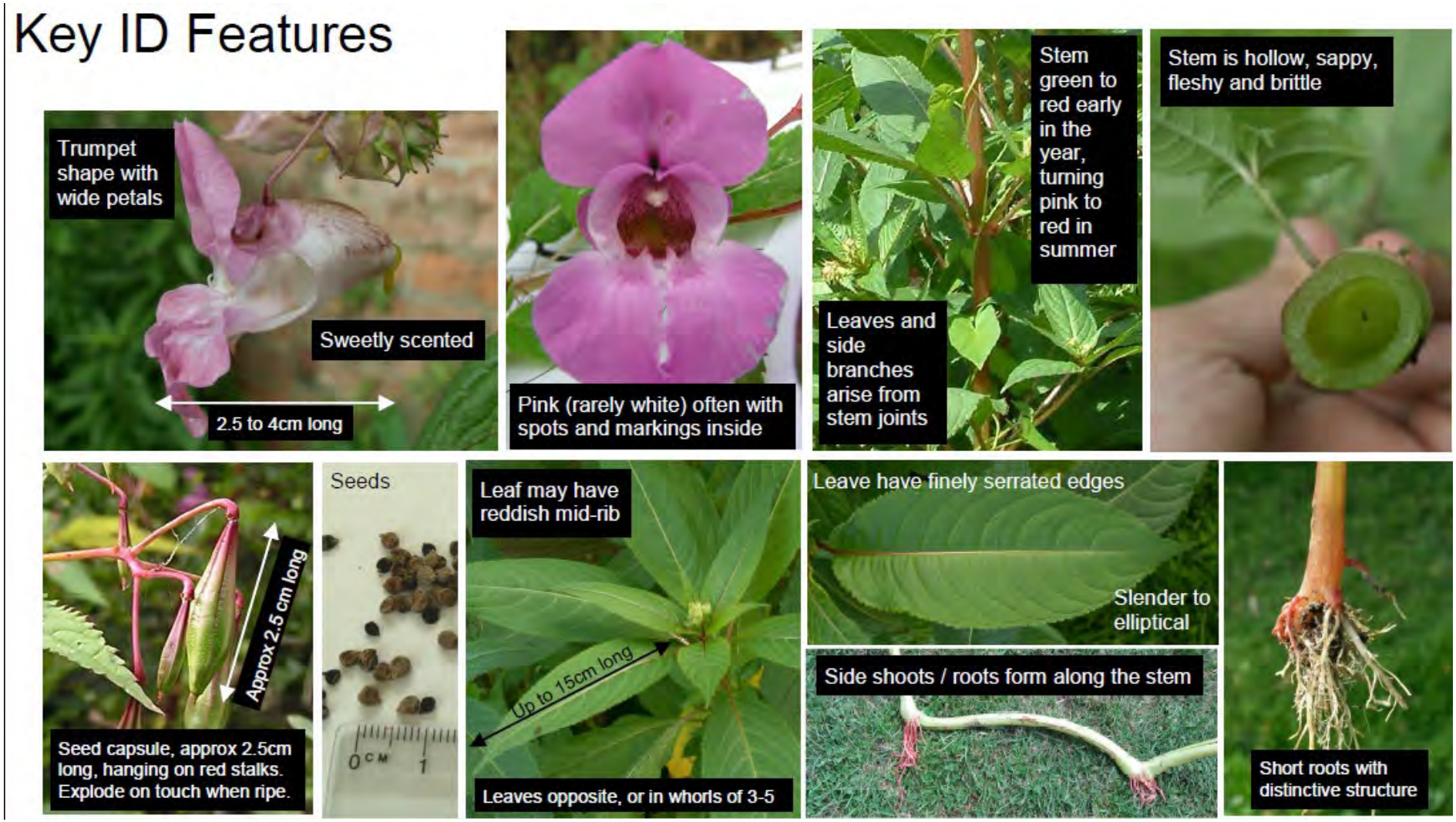


Japanese Knotweed (www.nonnativespecies.org)




Identification
throughout the year
Spring
Summer
Winter

Himalayan Balsam (www.nonnativespecies.org)



Variegated Yellow Archangel (www.nonnativespecies.org)

- Erect hairy perennial. The green variegated leaves have characteristic and distinctive silvery patches, they are hairy with toothed edges, growing in opposing pairs to a length of 4-7cm.
- Yellow flowers which are lipped and hooded, flowering from April to June.




Landscape Architecture
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HOGWOOD FARM, FINCHAMPSTEAD

DETAILED ECOLOGICAL PERMEABILITY SCHEME – NEIGHBOURHOOD CENTRE

Prepared for CALA Homes Thames Ltd

by

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HDA ref: 868.1

December 2024

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1 INTRODUCTION

1.1 Site location and summary description

1.1.1 This report describes a Detailed Ecological Permeability Scheme in relation to the Neighbourhood Centre area of the development of approximately 110ha of land at Hogwood Farm, Finchampstead. The Neighbourhood Centre development area comprises approximately 0.9ha of land, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference SU 77146445. The study was commissioned by CALA Homes Thames Ltd in May 2024.

1.1.2 The Neighbourhood Centre development parcel is located to the north-west of the village of Finchampstead, Berkshire. In general terms, it is dominated by ruderal vegetation with a line of mixed scrub along the southern site boundary and bare ground along the eastern site boundary. The Neighbourhood Centre site is bordered to the east by the Nine Mile Ride Extension South (NMRES); to the south by the Southern Bus Loop road with Parcel 10 of the wider site beyond; and to the north and west by the proposed primary school which will be delivered separately by Wokingham Borough Council (WBC). The location and boundary of the Neighbourhood Centre site is shown in *Appendix A*.

1.1.3 The Neighbourhood Centre site is part of a larger area covering a total of 110ha, hereinafter referred to as the 'wider site'. The wider site includes residential properties associated with Parcel 1 and a construction site associated with Parcel 2 in the north-west and a SANG in the south which comprises a mix of wetland, species-rich grassland, scrub and woodland habitats. In general terms, the western area of the wider site is comprised of three fields of disturbed ground dominated by short ruderal vegetation with scattered areas of tall ruderal vegetation and large spoil heaps bordered by mature trees and woodland with scrub field margins. The central and eastern areas of the site are comprised of areas of hardstanding, construction/disturbed ground and grassland fields bordered by mature treelines and woodland. Woodland shaws and copses are located in the northern, western and central areas of the site, including mixed, broadleaved and broadleaved plantation woodland types, some of which are included on Natural England's Inventory of Ancient Woodland. Wetland habitats within the site include drainage ditches and small streams associated with the field boundaries and several ponds in poor condition are located across the site. The wider site is bordered to the north by a construction site, the Bohunt School and the Hogwood Industrial Estate; to the east by Park Lane beyond which lie residential dwellings and park homes; to the south by Park Lane and farmland; and to the west by A327 Reading Road and Sheerlands Road beyond which lie farmland and woodland. The wider area is dominated by agricultural land interspersed with woodland and residential properties.

1.1.4 Further information on the extent and composition of habitats across the Neighbourhood Centre site and the wider site is provided in the Phase 1 Habitat Survey and Target Notes (HDA, 2024a).

1.2 Development proposals and context

1.2.1 Planning permission (O/2014/2179 and 140764) was granted in January 2017 for a hybrid application. This comprises:

- Outline permission for demolition of all existing buildings on site; up to 1,500 new dwellings; employment floor space; a Neighbourhood Centre; a primary school; sports pitches and associated pavilion building; highways infrastructure; associated landscaping, public realm, open/green space and sustainable urban drainage systems; and
- Full permission for a 29.7ha Suitable Alternative Natural Greenspace (SANG) in the south of the site.

The hybrid planning permission was subsequently amended by a Section 73 application (181194) which was approved in November 2018.

1.2.2 Condition 28 of the planning permission states that:

"*Prior to submission of any Reserved Matters application other than pertaining to the Nine Mile Ride Extension South an outline scheme to maintain or enhance the ecological permeability of the site (especially with regard to reptiles, amphibians and hedgehogs) shall be submitted to and approved in writing by the local planning authority. The mitigation and contingency measures contained within the plan shall be implemented in accordance with the approved plan unless otherwise approved in writing by the local planning authority. All Reserved Matters applications for any sub phase of the development shall include a detailed ecological permeability scheme that demonstrates how the relevant sub phases have been designed to incorporate the provisions of the outline ecological permeability scheme and the detailed mitigation strategies shall be implemented in accordance with the approved details unless otherwise approved in writing by the local planning authority.*"

1.2.3 In accordance with the requirements of Condition 28, this document provides a Detailed Ecological Permeability Scheme for the Neighbourhood Centre site. This has been produced to ensure measures to maintain the ecological permeability for wildlife are implemented within the development scheme. The measures identified are in keeping with the 'Outline Site-wide Ecological Permeability Scheme' prepared for the wider site and the Neighbourhood Centre site in its entirety (HDA, 2018a).

2 BASELINE CONDITIONS

Designated areas

2.1 No statutory or non-statutory designated areas are located within or adjacent to the Neighbourhood Centre site. In addition, no areas of woodland included on Natural England

Inventory of Ancient Woodland are located within or adjacent to the Neighbourhood Centre site.

Habitats and existing habitat corridors

2.3 In general terms, the Neighbourhood Centre site is currently dominated by ruderal vegetation with a line of recently established mixed scrub along the southern site boundary and bare ground along the eastern site boundary.

2.4 The Neighbourhood Centre site currently has limited connectivity to the wider site. Linear features directly associated with the site are limited to the recently established mixed scrub located along the southern site boundary, which connects to scrub and trees to the west of the site (associated with the Green Corridor in the wider site). However, this feature stops abruptly to the east of the site by the NMRE road. Further information on the extent and composition of these features is provided in the Habitat Survey and Target Notes included in *Appendix A.*

Existing lighting

2.5 A lighting strategy for the Neighbourhood Centre site and wider site was prepared to assess the likely effects of the proposed development on external artificial lighting levels, and includes information on the baseline lighting conditions within the site (MMA Lighting Consultancy, 2018).

2.6 The lighting strategy identifies that the environment surrounding the Neighbourhood Centre site has 'low district brightness', categorised as an E2 Environmental Zone in accordance with the ILP Guidance (See *Table 1* below).

Table 1: Environmental Zone table

Zone	Surrounding	Lighting Environment	Examples
E0	Protected	Dark	UNESCO Starlight Reserves, IDA Dark Sky Parks
E1	Natural	Intrinsically dark	National Parks, Areas of Outstanding Natural Beauty etc.
E2	Rural	Low district brightness	Village or relatively dark outer suburban locations
E3	Suburban	Medium district brightness	Small town centres or suburban locations
E4	Urban	High district brightness	Town/city centres

Hard landscaping

2.7 There is currently no hard landscaping present within the site as the areas of hardstanding present were removed as part of the removal of the Hogwood Farm Industrial Estate buildings in 2022.

3 ECOLOGICAL CONTEXT

3.1 The proposals for the development of the Neighbourhood Centre site have been informed by a number of detailed studies including an Environmental Statement (Royal Haskoning, 2014) and updated field surveys in relation to protected and notable habitats and species. This work has been used to inform a scheme for the avoidance and mitigation of potential effects of development on features of nature conservation interest.

3.2 With regard to the ecological permeability of the proposed development, the following receptors have been identified as being potentially sensitive and form the focus of this report:

- **Foraging and commuting bats:** Although bat foraging and commuting activity has generally been found to be low, it will be necessary to maintain foraging opportunities and commuting corridors across the Neighbourhood Centre development site. This is considered in this report in addition to the Detailed Bat Mitigation Strategy (HDA, 2024b) produced for the Neighbourhood Centre site in relation to Condition 24.
- **Roosting bats:** No bat roosts or features with bat roost potential were recorded within the Neighbourhood Centre site. The Detailed Bat Mitigation Strategy produced for the Neighbourhood Centre site includes the specific provision of additional bat roosting features within the development phase (HDA, 2024b). These are in keeping with the measures set out in this report.
- 
- **Reptiles:** Very low populations of Grass Snake, Slow-worm and Common Lizard have been recorded across the wider site (HDA, 2024d). However, no reptiles were recorded within the Neighbourhood Centre site during the 2023 reptile survey. The Neighbourhood Centre site is a small area of land currently dominated by negligible/low suitability habitats for reptiles, which is proposed to be a highly urbanised, developed area dominated by hardstanding and buildings.

[1] Following approval of a Natural England licence application to temporarily close four setts in the north-west of the wider site due to the proximity of the NMRE works (a main sett, the annex sett and two of the outlying setts), Stantec carried out temporary sett closures in 2020. As part of these works two replacement setts were constructed, one within the Green Corridor associated with Parcel 2 in the north-west of the wider site and one within the SANG .

Further to this, the site will be surrounded by habitats of negligible interest for reptiles including roads to the south and east of the site and a school to the north and west of the Neighbourhood Centre site. It is therefore not proposed that reptiles are encouraged into the site and subsequently creation of areas of reptile habitats within the Neighbourhood Centre site are not proposed.

- **Amphibians:** No evidence of Great Crested Newts has been recorded at the site or its surrounds, however it is likely that other species of amphibian such as Common Frog and Common Toad are present.
- **Hedgehogs**: Hedgehogs are a generalist species, found in a wide range of rural and urban habitats in the UK and as such are likely to be present within the Neighbourhood Centre site and wider site. In addition, they are a Species of Principal Importance identified under Section 41 of the 2006 NERC Act and is also listed as 'Vulnerable'[2] on the IUCN red list for Great Britain and regarded as 'Near Threatened' by the IUCN at a global level.

4 ECOLOGICAL PERMEABILITY OBJECTIVES

4.1 With regard to the baseline conditions and potentially sensitive ecological receptors described above, the following objectives for this ecological permeability scheme for the Neighbourhood Centre site have been identified:

- Provide and maintain a series of habitat corridors around the site;
- Ensure the functionality of proposed habitat corridors, through sensitive lighting design; and
- Include features within areas of hard and soft landscaping to facilitate the movement of wildlife within/across the proposed development.

5 HABITAT CORRIDORS

5.1 Habitat corridors currently associated with the Neighbourhood Centre site are limited to a recently established mixed scrub along the southern site boundary (see *Appendix A*).

5.2 The tall ruderal vegetation and scrub will be lost to the development. However, as demonstrated in the Landscape Masterplan (CSA, 2024a) and the Detailed Landscape and Ecological Management Plan (HDA, 2024e), 'stepping stone' habitats will be provided across the Neighbourhood Centre development area. These include:

- Small pockets of open space within the development area complimented by standard tree planting and ornamental shrub planting along roads, car parking and around the market square.

[2] **Vulnerable** (IUCN Red List, 2012): A taxon is Vulnerable when it is considered to be facing a high risk of extinction in the wild in Great Britain.

- A selection of extra heavy standard and semi-mature trees will be planted across the Neighbourhood Centre site.

5.3 The above habitat corridors will maintain connections to other corridors within the wider site and wider area including the Green Corridor to the west of the site within the wider site which connect to other areas of proposed public open space and the SANG.

5.4 Lighting proposals across the site will be subject to the sensitive design measures described in *Section 6* and measures to minimise effects on the movement of wildlife are identified in *Section 7* below.

6 LIGHTING

6.1 This section describes the strategy that the external lighting design of the Neighbourhood Centre development will employ, unless otherwise agreed with Local Planning Authority, in order to achieve the objectives set out in *Section 4* above.

6.2 In accordance with the lighting design and light spill plans set out in the MMA lighting report (MMA Lighting Consultancy, 2018), a Illustrative Lighting Parameters Plan (HDA, 2018a) has been prepared that identifies Lighting Exclusion Zones and Lighting Restriction Zones. The Neighbourhood Centre is not proposed to be within either the Lighting Exclusion Zones or Lighting Restriction Zones, and instead will be sensitively designed to achieve a minimum level of lighting required for public amenity and safety whilst restricting horizontal or vertical light spill into non-target areas.

6.3 Lighting design

6.3.1 Within the Neighbourhood Centre site measures to achieve a minimum level of lighting required for public amenity and safety whilst restricting horizontal or vertical light spill into non-target areas will include:

- LED lighting with a correlated 'warm' colour temperature of 4000 Kelvin, which will be lowered to 2700 Kelvin (where practical). LED light sources contain no UV wavelengths and the warmer colour temperatures reduce the light emitted beyond the 550 nanometer wavelengths. These requirements are consistent with the current research on the impact of artificial lighting on bats as published by the Bat Conservation Trust and Institution of Lighting Professionals (BCT & ILP, 2023)[3];
- Rear spill guards will be attached to luminaires to focus light onto target areas and away from habitat corridors; and

[3] Bats and Artificial Lighting in the UK. Available from: https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/

- LED luminaires are suitable for dimming. A Remote Monitoring System will be considered for lighting in sensitive locations to allow luminaires to be dimmed to an appropriate level and then dimmed back further after a late night curfew (c. 23:00) (or alternatively the luminaires will be switched off entirely when not in use).

6.4 **Ecological receptors**

Bats

6.4.1 3 bat boxes are proposed on the new building which will be located within areas subject to the sensitive lighting measures described in *Section 6.3.1* above.

6.4.2 Sensitive lighting proposals within the Neighbourhood Centre development area would also be expected to maintain opportunities for foraging and commuting bats in this area, and maintain connectivity between roost sites in buildings and foraging habitat in the wider site and its surrounds.

Other species

6.4.3 The above measures would be expected to maintain opportunities around the Neighbourhood Centre development site for a variety of other nocturnal species, together with limiting effects of lighting on diurnal species associated with the site and wider site.

7 HARD AND SOFT LANDSCAPING

7.1 This section describes features to be included in the hard and soft landscaping proposals for the Neighbourhood Centre site in order to allow small animals such as reptiles, amphibians and Hedgehogs, to safely cross the site and use all areas of the site of benefit to them. In addition, measures to be provided to increase opportunities for roosting bats and nesting birds are detailed.

7.2 Road crossing points

7.2.1 Facilitating the movement of wildlife across roads will involve measures to prevent animals becoming trapped in the carriageway and/or being run-over by vehicles.

Protection measures

7.2.2 The design of the road system includes the provision of kerbs for the road network to discourage drivers from parking/driving on footpaths and adjacent landscaping. Where the provision of kerbs is required, the following measures will be included to allow small animals to safely exit the carriageway.

7.2.3 *Dropped kerbs:*

Dropped kerbs will also be provided to assist pedestrians to cross roads safely and allow small animals to easily exit the carriageway in areas where animals are most likely to cross

roads or be trapped within the carriageway. The proposed locations of dropped kerbs within the Neighbourhood Centre development scheme are shown on the *Landscape General Arrangement* (CSA, 2024b).

7.2.4 *Wildlife kerbs and off-set gulley pots:*

Small animals, in particular amphibians, naturally follow the line of the kerb when trying to exit the carriage way until a feature such as a dropped kerb is encountered. Subsequently if a gulley pot is installed immediately adjacent to the kerb, when they reach a gully pot the animal may fall through into the gulley and be unable to escape. Wildlife kerbs (e.g. www.aco.co.uk/products/wildlife-kerb or similar) have a bypass recess in the front face allowing amphibians to safely bypass the gully pot.

(Image sourced from www.aco.co.uk)

An alternative to wildlife kerbs is locating gulley pots further into the road, rather than immediately adjacent to the kerb.

In addition to the dropped kerbs described above, wildlife kerbs and offset gully pots will be provided to avoid entrapment in the site drainage system.

7.3 Neighbourhood Centre permeability

7.3.1 To ensure the Neighbourhood Centre is of benefit to a range of wildlife, in addition to the planting proposals described in *Section 5.2* above and shown on the Neighbourhood Centre Planting Proposals (CSA, 2024c), a number of measures will be included in the Neighbourhood Centre development scheme to provide permeability and opportunities for roosting and nesting.

7.3.2 *Bird and box boxes:*

The inclusion of bat and bird roosting opportunities on the new building will enhance roosting/nesting opportunities for bats and birds within the Neighbourhood Centre site and improve the permeability of the site for these species. CALA Homes Thames Ltd have an 'Urban Wildlife Strategy' in place for all their new developments. As part of this strategy CALA Homes Thames Ltd will incorporate at least one bat roosting feature and one Swift nesting features within each house and apartment block. Although no houses or apartment

blocks are proposed as part of the Neighbourhood Centre development, bat roosting features and bird nesting features will be provided on the proposed building. The location of these features is shown in *Appendix B*.

Bird boxes:

A total of 3 bird nesting features will be included within Neighbourhood Centre site. These will comprise (or similar):

Manthorpe Swift nesting brick: Designed for Swifts, which inhabit cracks and crevices. Swift boxes have been selected as they are considered to support nesting features for a wide range of bird species. 	**Woodstone Swift nesting box:** Designed for Swifts, which inhabit cracks and crevices. Swift boxes have been selected as they are considered to support nesting features for a wide range of bird species. 

(Images sourced from nhbs.com, www.manthorpebp.co.uk).

Bat boxes:

A total of 3 bat roosting features will be included within the Neighbourhood Centre site. These will comprise (or similar):

Bat roosting features have been selected that require no maintenance or cleaning. These will comprise:	
Ibstock bat box type B: Designed specifically for Pipistrelle bats with several roosting zones being present within the box. Maintenance free with entrance at the base. 	**Wildcare soffit bat box:** Designed with two roost chambers with different properties, providing hanging areas which differ spatially and climatically: 

Ibstock bat box type C: Designed specifically for Pipistrelle bats with several roosting zones being present within the box. Maintenance free with entrance at the base. 	**Beaumaris Woodstone Bat Box:** Designed with a single narrow cavity, which makes it suitable for crevice roosting bats such as the Common Pipistrelle, Soprano Pipistrelle, Nathusius' Pipistrelle, Brandt's bat and Whiskered Bat. The interior of the box has a rough surface for bats to cling to. 

(Images sourced from ibstockbrick.co.uk, wildcare.co.uk and vivarapro.co.uk).

8 CONCLUSION

8.1 Through implementation of these safeguarding measures and the prescriptions detailed above, it is considered that the ecological permeability objectives for the Neighbourhood Centre site will be achieved and secured in the long-term, thereby maintaining opportunities for wildlife to move around and within the site, the wider site and the surrounding countryside throughout the operational phase of the proposed development.

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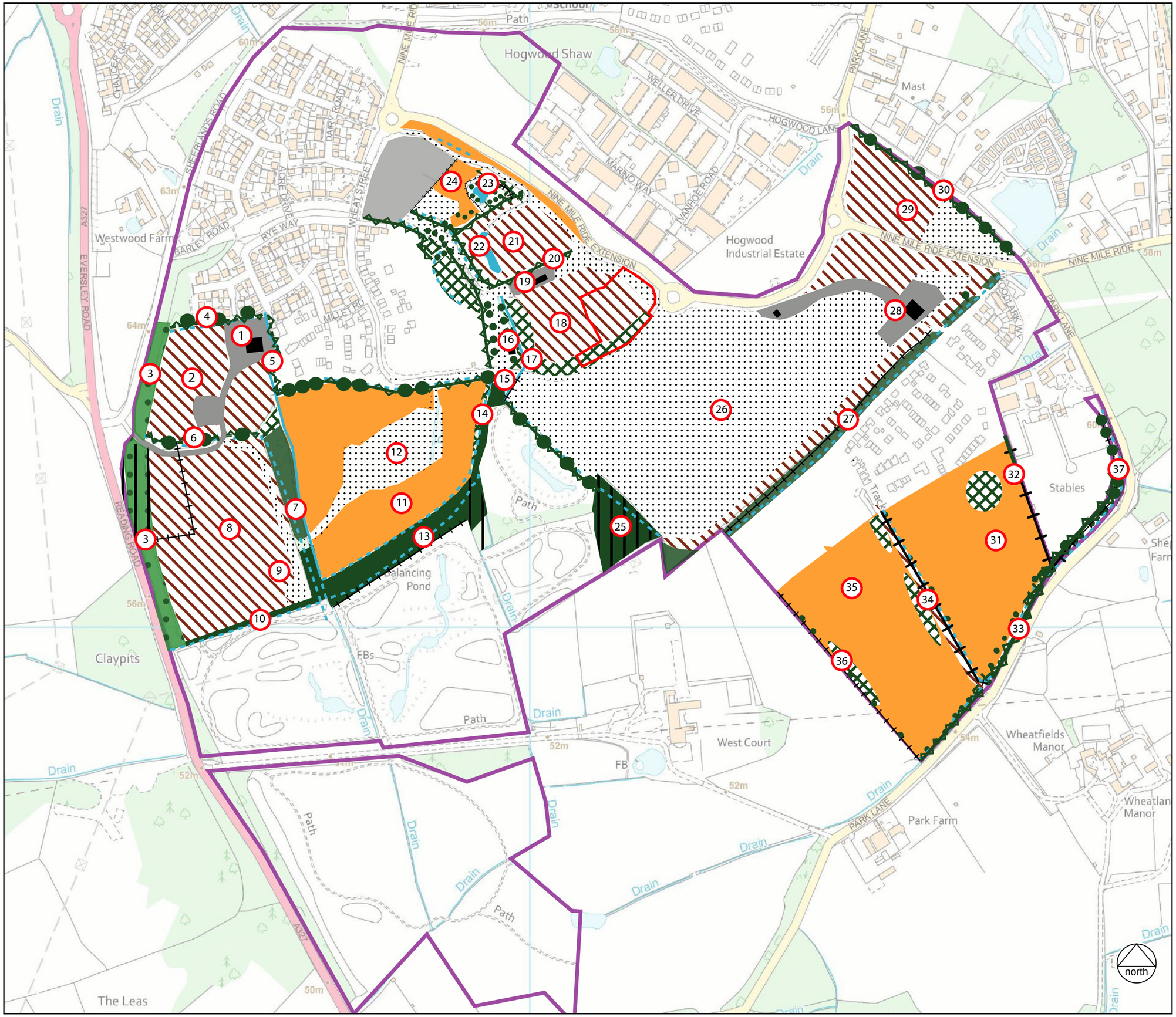
Issue	Description	Date of Issue	Signed
1	Detailed Ecological Permeability Scheme – Neighbourhood Centre	December 2024	[redacted]

	Personnel	Position
Author	Clare Bird MCIEEM	Associate Ecologist
Approved for issue	Sarah Thornton-Mills MCIEEM	Principal Ecologist

APPENDIX A

Existing Habitat Connectivity



KEY

- Neighbourhood Centre site boundary
- Wider site boundary
- Lowland mixed deciduous woodland (w1f)
- Other woodland - mixed - mainly broadleaved (w1h5)
- Other woodland - mixed - mainly broadleaved (w1h5)
- Scattered trees
- Native hedgerow (h2a)
- Non-native and ornamental hedgerow (h3b)
- Mixed scrub (h3h)
- Ruderal (81)
- Modified grassland (g4)
- Standing open water (r1)
- Wet ditch / dry ditch (50)
- Fence
- Building
- Developed land - sealed surface (u1b)
- 32 Target Notes

CLIENT:
CALA Homes (Thames) Ltd

PROJECT:
Hogwood Farm, Finchampstead

TITLE:
Phase 1 Habitat Survey Plan - Neighbourhood Centre

SCALE AT A3:
NTS

DATE:
December 2024

868.1/112

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Target Notes – Arborfield

1. Site yard comprised a hardstanding area with mobile cabins.

2. Relatively sparse ruderal vegetation dominated by Common Nettle *Urtica dioica*, Spear Thistle *Cirsium vulgare*, Common Ragwort *Senecio jacobaea*, Bristly Oxtongue *Helminthotheca echioides* and Common Dandelion *Taraxacum officinale*. Small areas of scattered bare ground/ recently disturbed ground are present. Field margins vary between 1 – 5m and are more densely vegetation with the above species with the inclusion of Annual Meadow Grass *Poa annua*, Red Fescue *Festuca rubra*, Cleavers *Galium aparine*, Broad-leaved Dock *Rumex obtusifolius*, Cut Leaved Cranes Bill *Geranium dissectum*, Field Forget-me-not *Geranium dissectum* and Scarlett Pimpernel *Anagallis arvensis*.

3. Mixed woodland along the western boundary with species including Ash *Fraxinus excelsior*, Larch *Larix decidua*, Scots Pine *Pinus sylvestris*, Beech *Fagus sylvatica*, Pedunculate Oak *Quercus robur* and Black Poplar *Populus nigra*. Some of the trees are mature and have suitable bat roosting features. The understorey is comprised of Elder *Sambucus nigra*, Hawthorn *Crataegus monogyna*, Holly *Ilex aquifolium*, Willow *Salix Sp.* and Hazel *Corylus avellana*. The ground layer is dominated by Bramble *Rubus fruticosus* and Common Nettle with Bracken *Pteridium aquilinum*, Ground Ivy *Glechoma hederacea*, Cleavers, Wood Avens *Geum urbanum*, Herb Robert *Geranium robertianium*, White Bryony *Bryonia dioica* and Black Bindweed *Fallopia convolvulus*. Part of the southern area of this woodland is listed on Natural England's Ancient Woodland Inventory; this area is especially dominated by Larch and other introduced coniferous species.

4. Native defunct hedgerow with trees comprising a hedgerow of Field Maple *Acer campestre*, Hazel, Blackthorn *Prunus spinosa* and Ash, with Ash and Oak mature trees and a dry ditch below.

5. Newly created culvert with a small area of standing water.

6. Treeline of mature Ash and Pedunculate Oak trees with relic species rich hedgerow of Hazel, Holly, Field Maple, Hawthorn and Blackthorn. Some of the mature trees have the potential to support roosting bats. The ground layer vegetation is sparse and mostly comprised of Bramble with occasional Cowslip *Primula veris* and Creeping Thistle *Cirsium arvense.*

7. Lowland mixed deciduous woodland comprised of Pedunculate Oak and coppiced Ash with Wild Cherry *Prunus avium*, Field Maple, Hazel, Hawthorn and Blackthorn. Mature trees are present, some of which have features of bat roosting potential. The ground layer includes Bramble, Cow Parsley *Anthriscus sylvestris*, Ground Ivy, Germander Speedwell *Anthriscus sylvestris*, Common Sorrel *Rumex acetosa* and Lords-and-ladies *Arum maculatum*. A dry ditch is present along the western boundary of the parcel and a ditch that was wet at the time of the survey along the eastern boundary.

8. A field of ruderal vegetation of varying height from 10cm to 50cm in height dominated by Spear Thistle, Common Nettle and Perennial Ryegrass and White Clover *Trifolium repens* with the occasional Creeping Buttercup *Ranunculus repens*, Common

Hogweed *Heracleum sphondylium*, Ragwort and Broad Leaved Dock and Cleavers. Small areas within the parcel are sparsely vegetated with areas of bare ground with occasional ruderal species mentioned above but include Scarlett Pimpernel and Bird Foot Trefoil *Lotus corniculatus*.

9. A small depression of bare ground that had standing water at the time of the survey with occasional Yellow Flag Iris present.

10. Plantation lowland mixed deciduous woodland comprised of White Poplar, Pedunculate Oak, Ash and Field Maple. Mature trees are present, some of which have features of bat roosting potential. Understorey comprised of Holly, Dog Rose *Rosa canina*, Common Nettle, Cow Parsley, Cleavers, Curled Dock *Rumex crispus*, Bramble and Ground Ivy. A dry ditch is present along the boundary along the southern boundary of the wooded strip.

11. Species poor modified grassland of varying sward length between 5cm – 40cm comprised of Perennial Ryegrass, Cocksfoot *Dactylis glomerata*, White Clover, Oxeye Daisy *Leucanthemum vulgare*, Creeping Buttercup with occasional Broad Leaved Dock, Dandelion and Scarlett Pimpernel. Field margins are approximately 4-6m wide and are comprised of Common Nettle, Spear Thistle, Common Vetch *Vicia sativa* and Cow Parsley.

12. Area of bare ground used for storage of construction materials.

13. Lowland mixed deciduous woodland comprised of Pedunculate Oak standards and coppiced Ash with Wild Cherry *Prunus avium*, White Poplar, Field Maple, Hazel, Willow, English Elm *Ulmus procera*, Holly, Hawthorn and Blackthorn. Mature trees are present, some of which have features of bat roosting potential. The ground layer includes Bramble, Wood Avens *Geum urbanum*, Herb Robert, Common Ivy, Wood Spurge *Euphorbia amygdaloides*, Violet *Viola sp.*, Greater Stitchwort *Stellaria holostea*, Common Nettle, Remote Sedge *Carex remota*, False Brome *Brachypodium sylvaticum* and Butcher's Broom *Ruscus aculeatus* present. Standing and fallen dead wood is present throughout the woodland area. The woodland becomes increasingly wet to the west where Willow becomes dominant and dry ditches border most of the woodland edges, a further dry ditch running centrally through the southern area of woodland is also present. The eastern area of this woodland is listed on Natural England's Ancient Woodland Inventory; here the dominant tree species is White Poplar in the south and Pedunculate Oak in the north. This area is demarcated in its western boundary by a small woodbank.

14. Mixed Scrub comprised of Bramble, Blackthorn, Dog Rose and Pendulate Oak samplings over a dry ditch.

[redacted]

16. A wooden bat barn set between treelines of Pendulate Oak, Ash and Hazel.

17. Mixed scrub comprised of Bramble, Elder and Holly with large amounts of deadwood above a steep-sided wet ditch. Towards the eastern end of the scrub parcel, Elder becomes the dominant species with the inclusion of ruderals in the ground layer including Common Nettle, Spear Thistle, Cleaver and Broad Leaved Dock.

18. Ruderal vegetation comprised of Perennial Rye Grass, Spear Thistle, Common poppy *Papaver rhoeas*, Cocks Foot, Rosebay Willowherb *Chamerion angustifolium*, Annual Sow Thistle *Sonchus oleraceus*, Common Nettle, and Curled Dock.

19. Listed building with multiple features with bat roost potential including lifted roof tiles and cracks in the brickwork. Situated on an area of concrete hardstanding. Surrounded by scaffolding at the time of the survey.

20. Species-rich native hedgerow comprised of Hawthorn, Hazel, Blackthorn, English Elm and Ash.

21. Ruderal vegetation similar to TN 20 with the inclusion of Oxeye Daisy at high densities and occasional Red Campion *Silene dioica*.

22. A SUDS pond within a parcel of ruderal vegetation described in TN21. Sloping earth banks with occasional Pendulous Sedge *Carex pendula*.

23. A shaded pond approximately 30cm in depth. Tussocks of Pendulous Sedge and patches of encroaching Bramble, Willow, Pedunculate Oak and Alder, border the edge of the pond. The pond area is enclosed by a chicken-wire fence.

24. Modified grassland with a short sward length of approximately 20cm in length comprised of Perennial Rye Grass, Cocks Foot, Red Fescue, Meadow Buttercup, Broadleaved Dock and Dandelion.

25. Lowland mixed deciduous woodland. Dominant species within the woodland include Ash, Pedunculate Oak and Alder with a Hawthorn and Field Maple understorey. The ground layer includes Bramble, Wood Avens, Herb Robert, Ground Ivy, and Hairy Brome *Bromopsis ramosa*. There are fallen wood and dead-wood piles throughout the woodland area and multiple trees with possible bat roosting potential. The woodland, in part, is listed on Natural England's Ancient Woodland Inventory.

26. Large parcel of bare ground with large spoil heaps. During the time of the survey, excavators were topping soil within the parcel. Field margins were sparsely vegetated with ruderal species including Bramble, Curly Dock, Spear Thistle, Ragwort and Common Nettle.

27. Lowland mixed deciduous woodland. A thin strip of broadleaved woodland plantation behind this comprised of Ash, Lombardy Poplar, Field Maple, White Willow, Grey Willow, Dogwood, Hazel, Hawthorn, Blackthorn and Bramble with Common Ivy and Cleavers dominating the ground layer. Some of the trees have features of possible bat roosting potential. A ditch that had small pools of standing water is present along the southern side of the wooded strip.

28. Site compound on hardstanding area.

29. Short ruderal vegetation within the northern end of the parcel similar in species composition to TN18 with the inclusion of Ribwort Plantain *Plantago lanceolata*, Timothy *Phleum pratense*, Musk Mallow *Malva moschata* and Bristly Oxtongue. Bare ground is present across the southern area of the parcel with small field margins

approximately 1m in width comprised of similar short ruderal species as the northern area.

30. A dense, intact, species-rich native hedgerow with trees comprising Pedunculate Oak, Beech, Ash, Goat Willow *Salix caprea*, Black Poplar *Populus nigra*, Field Maple, Dogwood, Hazel, Holly, Bramble and Common Broom *Sarothamnus scoparius*. The hedgerow is approximately 15 years old and tree guards are present on some individual plantings with some mature trees present along the roadside, especially within the southern section of the hedgerow.

31. Modified grassland with species including Yorkshire Fog, Perennial Rye-grass, False Oat-grass *Arrhenatherum elatius*, Cock's Foot, Red Fescue, Common Bent, Creeping Buttercup, White Clover, Doves-foot Cranesbill *Geranium molle*, Common Vetch, Common Mouse-ear *Cerastium fontanum*, Scentless Mayweed *Tripleurospermum inodorum*, Creeping Thistle, Spear Thistle, Common Sorrel, Ragwort, Greater Willowherb *Epilobium hirsutum*, Cleavers, Broad-leaved Dock, Common Knapweed *Centaurea nigra*, Meadow Vetchling *Lathyrus pratensis*, Forget-me-not sp., Fleabane *Pulicaria dysenterica* and Self-Heal *Prunella vulgaris*. Along the treeline to the south, Hemp Nettle *Galeopsis tetrahit*, Lady's Thumb *Persicaria maculosa*, Scentless Mayweed, Prickly Sow-Thistle and Clustered Dock with wet flushes of Sedge and Soft Rush. There are two soil bunds/soil storage piles with tall ruderals dominated by Spear Thistle, Common Nettle, Broadleaved Dock and Smooth Hawksbeard *Crepis capillaris* with large patches of scrub within the grassland with species including Bramble, Elder, Silver Birch and Dog-rose with Common Nettle. There are also piles of deadwood near and within the scrub.

32. Non-native and ornamental species-poor hedgerow comprising Cherry Laurel *Prunus laurocerasus*, Leylandii Cypress *Cupressus x leylandii* and Elder, broken by Bramble scrub on the north-eastern edge of the grassland field (TN 31). To the south of the hedgerow, continuing along the field boundary is a wooden post and electric wire fence which is overgrown with tall grasses and ruderal vegetation.

33. An outgrown, defunct native species-rich hedgerow with trees adjacent to Park Lane, with a dry ditch below. Species within the hedgerow include Pedunculate Oak, Black Poplar, Gorse (*Ulex europaeus*), Holly, Grey Willow, Blackthorn, Bracken and Bramble. A treeline of Pedunculate Oak is present approximately 5m into the field from the hedgerow.

34. A ditch that was dry at the time of survey with scattered Bramble scrub and trees including Willow and Pedunculate Oak, some of which have possible bat roosting potential. Behind the ditch is a fence and a dirt track, used as an access route into the site. A scrub line is present along the eastern side of the track and is 1-2m wide comprised of Grey Willow, Dog Rose, Oak and Bramble scrub. Track supports ephemeral vegetation including Scentless Mayweed, Cocks Foot, Smooth Hawksbeard, Common Yarrow, Hawthorn saplings, Common Bent and Spear Thistle.

35. Modified grassland field with a similar species composition to Target Note 31, with more Bent dominant in the north and False Oatgrass and Fescue sp. dominated to the south. Occasional species include Greater Plantain, Ribwort Plantain, Greater Birds-foot Trefoil, Common Hogweed, Cleavers, Meadow Vetchling, Mouse-ear, Common Vetch, Common Fleabane, Creeping Buttercup, Red Fescue and Soft Rush.

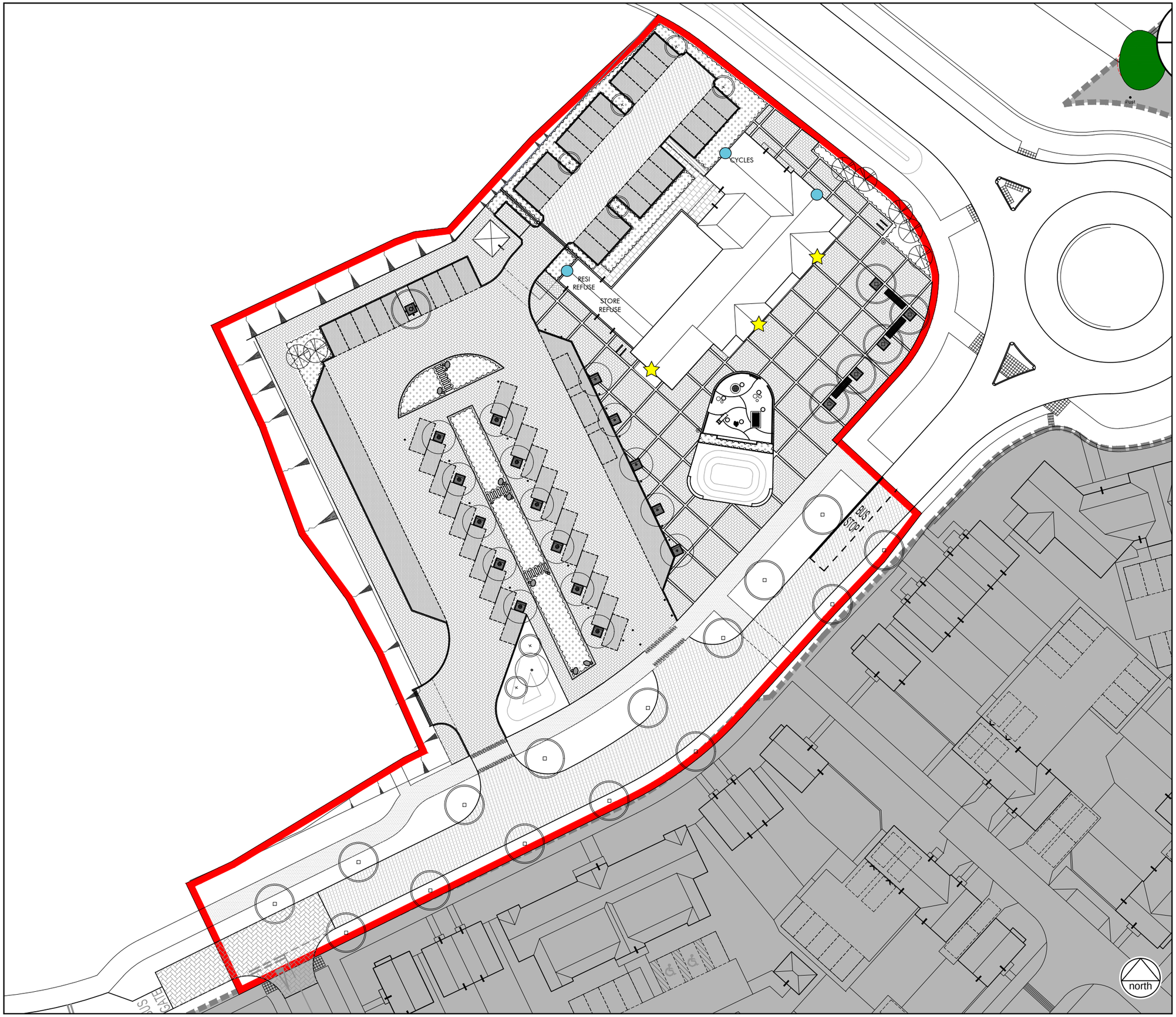
Bramble scrub is present along many of the field boundaries, with Common Nettle also present. A wet flush is present within the west of the field and contains Common Horsetail, Common Nettle, Sow Thistle, Soft Rush and occasional Hemp Nettle.

36. Scattered semi-mature trees and scattered areas of dense scrub along fence line. Species present include Oak, Ash, Blackthorn, Dog Rose, Bramble and Common Nettle.

37. A line of scrub and trees with a dry ditch bordering Park Lane.

APPENDIX B

Species Enhancement Plan



KEY

- Neighbourhood Centre site boundary
- Bat box location*
- Bird box location*

* Position indicative

CLIENT:
CALA Homes Thames Ltd

PROJECT:
Hogwood Farm, Finchampstead

TITLE:
Neighbourhood Centre: Species Enhancements Plan

SCALE AT A3:
NTS

DATE:
December 2024

868.1/114

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HOGWOOD FARM, FINCHAMPSTEAD

DETAILED REPTILE MITIGATION STRATEGY – NEIGHBOURHOOD CENTRE

Prepared for CALA Homes Thames Ltd

by

Hankinson Duckett Associates

HDA ref: 868.1

December 2024

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APPENDICES

1 INTRODUCTION

1.1 Site location and summary description

1.1.1 This report describes a Detailed Reptile Method Statement in relation to the Neighbourhood Centre area of the development of approximately 110ha of land at Hogwood Farm, Finchampstead. The Neighbourhood Centre development area comprises approximately 0.9ha of land, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference SU 77146445. The Detailed Reptile Method Statement was commissioned by CALA Homes Thames Ltd in May 2024.

1.1.2 The Neighbourhood Centre development parcel is located to the north-west of the village of Finchampstead, Berkshire. In general terms, it is dominated by ruderal vegetation with a line of mixed scrub along the southern site boundary and bare ground along the eastern site boundary. The Neighbourhood Centre site is bordered to the east by the Nine Mile Ride Extension South (NMRES); to the south by the Southern Bus Loop road with Parcel 10 of the wider site beyond; and to the north and west by the proposed primary school which will be delivered separately by Wokingham Borough Council (WBC). The location and boundary of the Neighbourhood Centre site is shown in *Appendix A*.

1.1.3 The Neighbourhood Centre site is part of a larger area covering a total of 110ha, hereinafter referred to as the 'wider site'. The wider site includes residential properties associated with Parcel 1 and a construction site associated with Parcel 2 in the north-west and a SANG in the south which comprises a mix of wetland, species-rich grassland, scrub and woodland habitats. In general terms, the western area of the wider site is comprised of three fields of disturbed ground dominated by short ruderal vegetation with scattered areas of tall ruderal vegetation and large spoil heaps bordered by mature trees and woodland with scrub field margins. The central and eastern areas of the site are comprised of areas of hardstanding, construction/disturbed ground and grassland fields bordered by mature treelines and woodland. Woodland shaws and copses are located in the northern, western and central areas of the site, including mixed, broadleaved and broadleaved plantation woodland types, some of which are included on Natural England's Inventory of Ancient Woodland. Wetland habitats within the site include drainage ditches and small streams associated with the field boundaries and several ponds in poor condition are located across the site. The wider site is bordered to the north by a construction site, the Bohunt School and the Hogwood Industrial Estate; to the east by Park Lane beyond which lie residential dwellings and park homes; to the south by Park Lane and farmland; and to the west by A327 Reading Road and Sheerlands Road beyond which lie farmland and woodland. The wider area is dominated by agricultural land interspersed with woodland and residential properties.

1.1.4 Further information on the extent and composition of habitats across the Neighbourhood Centre site and the wider site is provided in *Appendix A* (HDA, 2024a).

1.2 Background and legislative context

1.2.1 Four species of reptile are widespread in England: Grass Snake *Natrix natrix*, Slow-worm *Anguis fragilis*, Common Lizard *Zootoca vivipara,* and Adder *Vipera berus.* The Sand Lizard *Lacerta agilis* and Smooth Snake *Coronella austriaca* are restricted to certain sand dune and heathland sites.

1.2.2 Reptiles can be found in a range of habitats and typically require a mosaic of vegetation types. Habitat interfaces are important, with reptiles requiring woodland, scrub or hedgerow for shelter, longer vegetation for hunting and patches of sheltered short turf, bare ground or log piles for basking areas. Areas that catch the sun (i.e. those with a southerly aspect) are preferred over those where direct sunlight is absent for most of the day. In addition, Grass Snakes favour damp habitats such as those associated with still and running water, grazing marshes, mires etc.

1.2.3 All species of reptile are protected through Sections 9(1) and 9(5) of the 1981 Wildlife and Countryside Act (as amended). It is an offence to:

- Intentionally kill or injure any reptile; and/or
- Sell, offer for sale, possess or transport for the purposes of sale or publish advertisements to buy or sell any reptile.

Due to their rarity, Sand Lizards and Smooth Snakes have additional protection.

1.2.4 Reptiles across the UK have undergone significant declines in recent years and all species of reptile within the UK are listed as priority species on the UKBAP and listed as Species of Principal Importance under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act. Section 40 of the Act requires that these species are a material consideration in the planning process.

1.3 Development proposals

1.3.1 Planning permission (O/2014/2179 and 140764) was granted in January 2017 for a hybrid application. This comprises:

- Outline permission for demolition of all existing buildings on site; up to 1,500 new dwellings; employment floor space; a Neighbourhood Centre; a primary school; sports pitches and associated pavilion building; highways infrastructure; associated landscaping, public realm, open/green space and sustainable urban drainage systems; and
- Full permission for a 29.7ha Suitable Alternative Natural Greenspace (SANG) in the south of the site.

The hybrid planning permission was subsequently amended by a Section 73 application (181194) which was approved in November 2018.

1.4 Scope and purpose of the report

1.4.1 In December 2020, planning consent (202394) was granted for the demolition of the Hogwood Industrial Estate Buildings which were historically associated with this site. Since then the industrial estate buildings have been demolished and the site is now dominated by tall ruderal vegetation.

1.4.2 Reptile surveys of the site and wider site were conducted by HDA in 2017 (HDA, 2018a), 2021 (HDA, 2021a) and 2023 (HDA, 2024b). During the 2023 surveys no reptiles were recorded within the site or wider site. However, during the 2021 surveys a low number of Slow-worm were recorded within the wider site and the presence of Grass Snake was identified within the wider site in both 2017 and 2021. These update previous surveys of the site and wider site undertaken by Entec in 2008 and Amec in 2012 which identified 'low' populations of Common Lizard, Slow-worm and Grass Snake (Royal Haskoning DHV, 2014).

1.4.3 This Detailed Reptile Mitigation Strategy for the Neighbourhood Centre area of the proposed development has been produced as a result of Planning Condition 26, which states:

"Prior to submission of any Reserved Matters applications other than pertaining to the Nine Mile Ride Extension South an outline reptile mitigation strategy shall be submitted to and approved in writing by the local planning authority. All sub phases of the development shall thereafter be designed to incorporate the requirements identified in the approved outline reptile mitigation strategy. All Reserved Matters applications for any sub phase of the development shall include a detailed reptile mitigation strategy that demonstrates how the relevant sub phases have been designed to incorporate the provisions of the outline reptile mitigation strategy and the detailed mitigation strategies shall be implemented in accordance with the approved details unless otherwise approved in writing by the local planning authority."

1.4.4 In recognition of the historic presence of reptiles within the wider site and the requirements of Condition 26, this document provides a Detailed Reptile Mitigation Strategy for the Neighbourhood Centre development area that has been produced to ensure impact avoidance, minimisation and mitigation measures for reptiles are implemented within the Neighbourhood Centre scheme. The measures identified are in keeping with the *'2023 Reptile Survey and a Site-Wide Outline Reptile Mitigation Strategy'* prepared for the wider site and Neighbourhood Centre site in its entirety (HDA, 2024b).

2 NEIGHBOURHOOD CENTRE DETAILED REPTILE MITIGATION STRATEGY

2.1 Introduction

2.1.1 This section describes the methodology that will be employed to ensure that the Neighbourhood Centre development scheme complements the *Site-wide Outline Reptile Mitigation Strategy* (HDA, 2024b) to maintain compliance with nature conservation legislation afforded to reptiles and maintain the favourable conservation status of the local reptile population. This methodology will be employed during construction of Neighbourhood Centre development unless otherwise agreed with the Local Planning Authority.

2.1.2 Although no reptiles were recorded at the site during the updated 2023 reptile survey, previously low numbers of Slow-worm, Grass Snake and Common Lizard have been recorded within the wider site. On this basis it is conceivable that very low numbers of Slow-worm, Grass Snake and Common Lizard may remain present at the site. The site is therefore considered to support very low numbers of Slow-worm, Grass Snake and Common Lizard and as such does not qualify as a SSSI, SINC or Key Reptile Site. The site is considered to be of no more than site value for Slow-worm, Grass Snake and Common Lizard. Notwithstanding this, the legal protection afforded to all reptiles still applies.

2.1.3 In accordance with the *Site-wide Outline Reptile Mitigation Strategy* (HDA, 2024b), as only very low numbers of Grass Snake, Slow-worm and Common Lizard are likely to be associated with the Neighbourhood Centre site, the small size of the site and the suboptimal habitats present a full translocation exercise is not proposed for this phase of the development. Instead, a cautious approach to site clearance will be employed where suitable reptile habitat is to be lost, including the scrub along the southern site boundary, the ruderal vegetation present and any refuge opportunities such as rubble piles located within the site. This will involve manipulation of habitats to displace reptiles present into areas of contiguous and improved habitats, following the stages set out below:

2.2 Stage 1: Habitat enhancement works

2.2.1 In accordance with the outline reptile mitigation strategy for the Neighbourhood Centre development area and wider site (HDA, 2024b), the creation/enhancement of reptile receptor habitat focuses on the SANG which has been constructed and supports areas of grassland bordered by hedgerows and areas of woodland. Further areas of suitable reptile habitat will however be created in other areas of public open space within the wider site including the Green Corridor to the west of the site[1], currently connected to the site by a continuation of the band of scrub located with the site. The Green Corridor

comprises part of a key habitat corridor crossing north to south through the wider site leading from treelines and Hogwood Shaw Local Wildlife Site (LWS) in the north to the SANG and open countryside to the south, east and west of the wider site.

2.2.2 The Neighbourhood Centre site is a small area of land currently dominated by negligible/low suitability habitats for reptiles, which is proposed to be a highly urbanised, developed area dominated by hardstanding and buildings. Further to this the site will be surrounded by habitats of negligible interest for reptiles including roads to the south and east of the site and a school to the north and west of the Neighbourhood Centre site. It is therefore not proposed that reptiles are encouraged into the site and subsequently creation of areas of reptile habitats within the Neighbourhood Centre site are not proposed. The prescriptions for creation/enhancement of reptile habitats within the wider site and the management of these areas are detailed within the Outline Site-wide Landscape and Ecological Management Plan (HDA, 2018b) and the Landscape and Ecological Management Plan – Phase 2 (HDA, 2021c) and shown on the SANG Masterplan (RPS, 2018a) and Overarching Landscape Strategy (RPS, 2018b).

2.3 Stage 2: Habitat manipulation

2.3.1 Prior to development affecting areas of suitable reptile habitat within the Neighbourhood Centre site, the following habitat manipulation measures will be undertaken under an ecological watching brief by a suitably experienced ecologist, in order to encourage the movement of reptiles from the Neighbourhood Centre site into suitable habitats in the surrounding area.

- Firstly, vegetation cover will be reduced to minimum height of 150mm. This will take place at a time of year avoiding the bird breeding season (typically between March and September inclusive) or otherwise be preceded by a check of suitable habitat for active nests immediately prior to commencement of works by a suitably qualified ecologist or appropriate other. The vegetation clearance works will be undertaken from the east of the site towards the west of the site to encourage the movement of reptiles towards the Green Corridor located within the wider site.
- Where potential for reptiles to be present remains, a minimum period of 5 days with daytime temperatures of >12^{o}C will then be allowed to elapse prior to the second stage of vegetation clearance (see below).
- The second stage will involve clearance of all suitable vegetation to ground level (i.e. <75mm) by hand during mild temperatures (>14^{o}C) at a suitable time of year when reptiles are likely to be active (mid-March to early October inclusive). The vegetation clearance works will again be undertaken from the east of the site towards the west of the site to encourage the movement of reptiles towards the

[1] Details for the proposed reptile enhancement works within this area of the wider site are given in the '*Detailed Reptile Mitigation Strategy – Phase 2*' (HDA, 2021b).

Green Corridor located within the wider site. At this time any potential hibernacula or refugia encountered will be carefully dismantled by hand. This stage of clearance will be undertaken under the supervision of a suitably qualified ecologist who will capture and relocate any reptiles encountered to pre-established refugia in the wider site.

- Where potential for reptiles to be present remains, a further 5 days with daytime temperatures of >12^{o}C will then be allowed to elapse to enable any remaining reptiles to disperse from the area of works, prior to the destructive search.
- Following clearance of vegetation to ground level and removal of any refugia by hand, no suitable reptile habitat would remain and it is expected that any remaining reptiles would disperse from the area of works into adjacent habitat on their own accord.
- In order to be certain that no reptiles are present within the area of works, topsoil will then be progressively stripped from the area of works under the supervision of a suitably qualified ecologist, if required.
- In the event that the destructive search is delayed, the vegetation will be maintained at ground level until the destructive search is carried out. Similarly, following the destructive search, the land will be maintained as unsuitable for the recolonisation of reptiles prior to and throughout the proposed works.

3 CONCLUSION

3.1 Through implementation of the mitigation measures outlined above, the Neighbourhood Centre development would avoid injury or killing of any reptiles present. The loss of limited areas of reptile habitat is highly unlikely to be significant within a local context and the creation and enhancement of areas of reptile habitat within the wider site including the Green Corridor to the west of the site and the SANG would ensure long-term opportunities for reptiles the Hogwood Farm site, as a whole.

3.2 It is therefore concluded that subject to employment of the approach outlined above in line with the *Site-wide Outline Reptile Mitigation Strategy* (HDA, 2024b), the development would protect individual reptiles currently occurring within the Neighbourhood Centre site and ensure that the favourable conservation status of the local reptile population is maintained.

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HDA Document Control and Quality Assurance Record

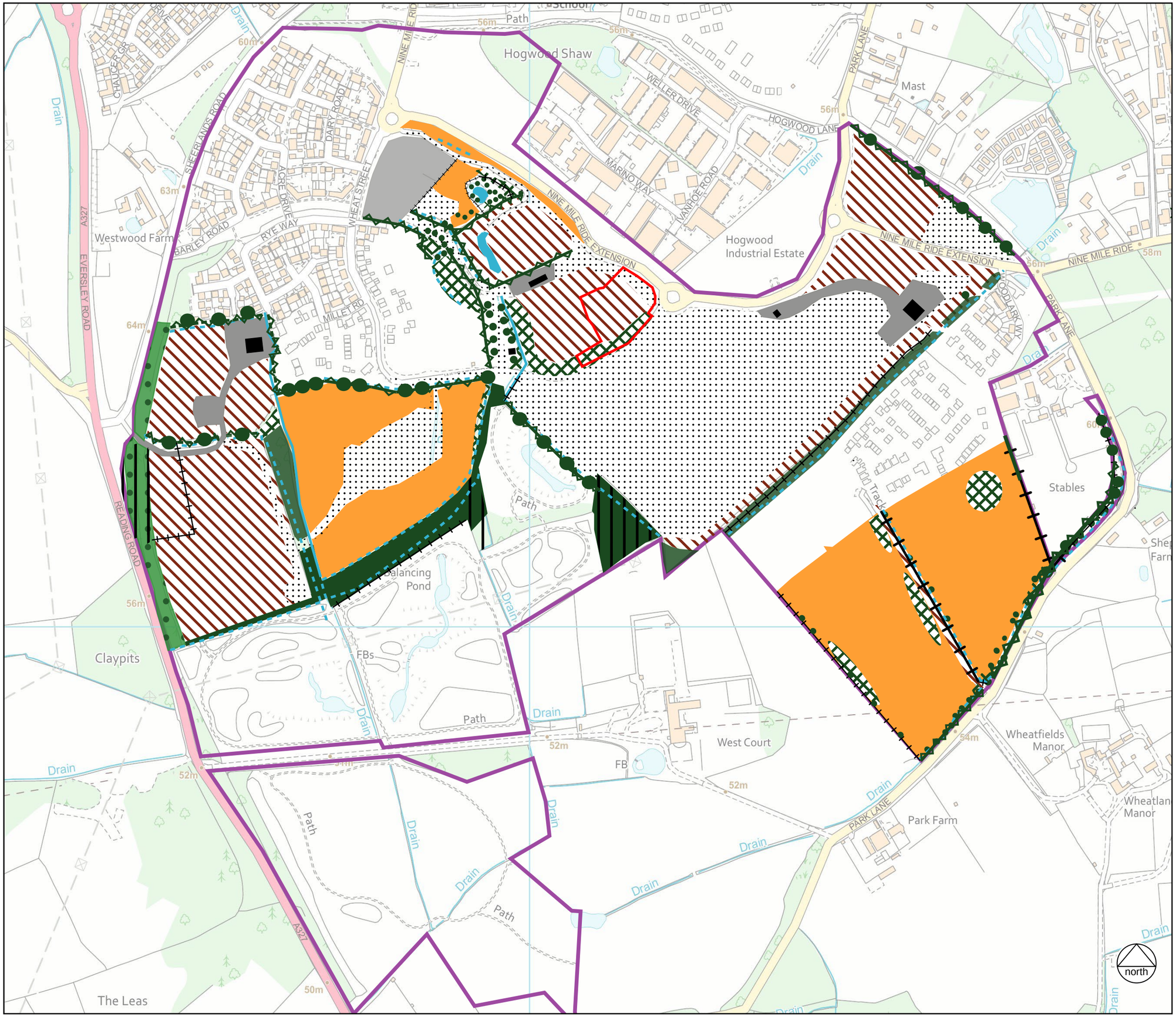
Project Title: Arborfield Eco
Project Reference: 868.1
Document Title: Detailed Reptile Mitigation Strategy – Neighbourhood Centre
Commissioning Party: CALA Homes Thames Ltd

Issue	Description	Date of Issue	Signed
1	Detailed Reptile Mitigation Strategy – Neighbourhood Centre	December 2024	[redacted]

	Personnel	Position
Author	Clare Bird MCIEEM	Associate Ecologist
Approved for issue	Sarah Thornton-Mills MCIEEM	Principal Ecologist

APPENDIX A

Phase 1 Habitat Survey Plan (showing Neighbourhood Centre development area and wider site)



KEY

- Neighbourhood Centre site boundary
- Wider site boundary
- Lowland mixed deciduous woodland (w1f)
- Other woodland - mixed - mainly broadleaved (w1h5)
- Other woodland - mixed - mainly broadleaved (w1h5)
- Scattered trees
- Native hedgerow (h2a)
- Non-native and ornamental hedgerow (h3b)
- Mixed scrub (h3h)
- Ruderal (81)
- Modified grassland (g4)
- Standing open water (r1)
- Wet ditch / dry ditch (50)
- Fence
- Building
- Developed land - sealed surface (u1b)

CLIENT:
CALA Homes (Thames) Ltd

PROJECT:
Hogwood Farm, Finchampstead

TITLE:
Phase 1 Habitat Survey Plan - Neighbourhood Centre

SCALE AT A3:
NTS

DATE:
December 2024

868.1/113

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HOGWOOD FARM, FINCHAMPSTEAD

HEDGEROW MITIGATION AND COMPENSATION STRATEGY – NEIGHBOURHOOD CENTRE

Prepared for CALA Homes Thames Ltd

by

Hankinson Duckett Associates

HDA ref: 868.1

December 2024

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1 INTRODUCTION

1.1 Site location and summary description

1.1.1 This report describes a Hedgerow Mitigation and Enhancement Strategy in relation to the Neighbourhood Centre area of the development of approximately 110ha of land at Hogwood Farm, Finchampstead. The Neighbourhood Centre development area comprises approximately 0.9ha of land, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference SU 77146445. The Hedgerow Mitigation and Enhancement Strategy was commissioned by CALA Homes Thames Ltd in May 2024.

1.1.2 The Neighbourhood Centre development parcel is located to the north-west of the village of Finchampstead, Berkshire. In general terms, it is dominated by ruderal vegetation with a line of mixed scrub along the southern site boundary and bare ground along the eastern site boundary. The Neighbourhood Centre site is bordered to the east by the Nine Mile Ride Extension South (NMRES); to the south by the Southern Bus Loop road with Parcel 10 of the wider site beyond; and to the north and west by the proposed primary school which will be delivered separately by Wokingham Borough Council (WBC). The location and boundary of the Neighbourhood Centre site is shown in *Appendix A*.

1.1.3 The Neighbourhood Centre site is part of a larger area covering a total of 110ha, hereinafter referred to as the 'wider site'. The wider site includes residential properties associated with Parcel 1 and a construction site associated with Parcel 2 in the north-west and a SANG in the south which comprises a mix of wetland, species-rich grassland, scrub and woodland habitats. In general terms, the western area of the wider site is comprised of three fields of disturbed ground dominated by short ruderal vegetation with scattered areas of tall ruderal vegetation and large spoil heaps bordered by mature trees and woodland with scrub field margins. The central and eastern areas of the site are comprised of areas of hardstanding, construction/disturbed ground and grassland fields bordered by mature treelines and woodland. Woodland shaws and copses are located in the northern, western and central areas of the site, including mixed, broadleaved and broadleaved plantation woodland types, some of which are included on Natural England's Inventory of Ancient Woodland. Wetland habitats within the site include drainage ditches and small streams associated with the field boundaries and several ponds in poor condition are located across the site. The wider site is bordered to the north by a construction site, the Bohunt School and the Hogwood Industrial Estate; to the east by Park Lane beyond which lie residential dwellings and park homes; to the south by Park Lane and farmland; and to the west by A327 Reading Road and Sheerlands Road beyond which lie farmland and woodland. The wider area is dominated by agricultural land interspersed with woodland and residential properties.

1.1.4 Further information on the extent and composition of existing habitats, including hedgerows, across the Neighbourhood Centre site and the wider site is provided in the Phase 1 Habitat Survey and Target Notes included as *Appendix A* (HDA, 2024a).

1.2 Development proposals and context

1.2.1 Planning permission (O/2014/2179 and 140764) was granted in January 2017 for a hybrid application. This comprises:

- Outline permission for demolition of all existing buildings on site; up to 1,500 new dwellings; employment floor space; a Neighbourhood Centre; a primary school; sports pitches and associated pavilion building; highways infrastructure; associated landscaping, public realm, open/green space and sustainable urban drainage systems; and
- Full permission for a 29.7ha Suitable Alternative Natural Greenspace (SANG) in the south of the site.

The hybrid planning permission was subsequently amended by a Section 73 application (181194) which was approved in November 2018.

1.2.2 Condition 23 of the planning permission states that:

"Prior to or concurrent with the submission of a Reserved Matters application for any sub phase of the development, a detailed hedgerow mitigation and compensation strategy shall be submitted to and approved in writing by the local planning authority for that sub phase of the development. Each detailed hedgerow mitigation and compensation strategy shall include the following:

(a) No loss of native species-rich hedgerows or other ecologically important hedgerows, unless necessary to facilitate the development and a package of mitigation and/or compensation is provided.

(b) Details of the buffer zones required to protected the retained important and/or species rich hedgerows, such buffer zones to be a minimum of 10m unless there are exceptional circumstances - The buffer zones required to protect the retained hedgerows should be free from any development including residential gardens.

(c) Details of measures to ensure that removal of any hedgerow does not adversely effect the ecological permeability of the site.

(d) A detailed method statement for the translocation of any important and/or species rich hedgerows to be removed as a result of the sub phase of the development, unless mitigation could be better achieved in ecological terms through new hedgerow creation.

(e) A detailed hedgerow compensation strategy to address all other significant negative impacts on the local hedgerow network as a result of the sub phase of the development.

(f) Management arrangements for the receptor site that will secure the long term future of the translocated habitats and species.

The mitigation and compensation strategy shall be implemented in accordance with the approved plans unless otherwise agreed in writing by the local planning authority.

1.2.3 In accordance with the requirements of Condition 23, this document provides a Hedgerow Mitigation and Compensation Strategy for the Neighbourhood Centre site. This has been produced to ensure that opportunities currently provided by hedgerows within the Neighbourhood Centre site are maintained following development.

2 BASELINE CONDITIONS

2.1 The Neighbourhood Centre site currently has no hedgerows, woodland belts or treelines within the site. The only linear habitat within Neighbourhood Centre site is a recently established line of Bramble, Elder and Holly scrub present along the southern boundary of the site. The location and description of the scrub is provided in the Phase 1 Habitat Survey Plan and Target Notes provided in *Appendix A*.

3 HEDGEROW MITIGATION AND COMPENSATION STRATEGY

3.1 Introduction

3.1.1 There are no hedgerows or treelines within Neighbourhood Centre site and therefore no requirement to avoid, mitigate or compensate for hedgerows/treelines within the Neighbourhood Centre site development.

3.2 Habitat creation

3.2.1 In order to enhance habitat connectivity within the site and wider site, planting has been included within the soft landscape proposals for the Neighbourhood Centre development area. Although no new hedgerow planting is proposed, tertiary green corridors including lines of tree will be provided across the built development area and additional hedgerow planting (along with other linear habitats such as woodland and scrub) have been incorporated into the SANG and will be incorporated into future phases of the development.

3.3 Additional measures to ensure functional connectivity

3.3.1 A Detailed Ecological Permeability Scheme has been prepared for the Neighbourhood Centre site development which describes measures to be incorporated into the hard and soft landscape to maintain continued functionality of the hedgerow network and other opportunities for the movement of wildlife across the Neighbourhood Centre site, the wider site and the surrounding area. Measures detailed in the scheme, not already described above are summarised below. Full details can be found in the 'Detailed Ecological Permeability Scheme – Neighbourhood Centre site' (HDA, 2024b):

Lighting:

3.3.2 A Illustrative Lighting Parameters Plan (HDA, 2018) has been prepared that identifies Lighting Exclusion Zones and Lighting Restriction Zones. The Neighbourhood Centre is

not proposed to be within either the Lighting Exclusion Zones or Lighting Restriction Zones, and instead will be sensitively designed to achieve a minimum level of lighting required for public amenity and safety whilst restricting horizontal or vertical light spill into non-target areas.

Road crossing points:

3.3.3 A number of measures will be included within the road system to: (i) reduce the likelihood of small animals entering the carriageway; and (ii) if in the event that small animals do enter the road system, that they can safely exit the carriageway. These include:

- Dropped kerbs will be provided to allow small animals crossing the road network to easily exit the carriageway.
- The carriageway will be designed to minimise risk of small animals becoming trapped in gully pots. This will involve the use of a selection of the following measures:
  - Provision of wildlife kerbs to allow animals to bypass gully pots.
  - Offsetting of gully pots to provide a gap between the kerb and the gully pot.
  - Installation of gully pot ladders to allow animals to escape.

4 SUMMARY AND CONCLUSION

4.1 The Neighbourhood Centre development scheme will result in no net loss in hedgerow habitat associated with this part of the Hogwood Farm site. The proposed habitat creation works across the site will however improve habitat connectivity for more mobile species (which is currently very limited).

4.2 In addition to the specific measures relating to the Neighbourhood Centre development area, the emerging landscape scheme for the wider site, including the 29.7ha SANG, provide substantial opportunity to provide new areas connective habitat and habitat for species associated with hedgerows.

4.3 Notwithstanding this, where appropriate the detailed landscape schemes for future development phases should seek to retain existing hedgerows and include new sections species-rich hedgerows as boundary features and within areas of informal open space with the aim of achieving no net loss in hedgerow habitats across the development area.

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HDA (2018) *Hogwood Farm, Finchampstead: Illustrative Lighting Parameter Plan*. Hankinson Duckett Associates, Wallingford.

HDA (2024a) *Hogwood Farm, Finchampstead: Phase 1 Habitat Plan and Target Notes.* Hankinson Duckett Associates, Wallingford.

HDA (2024b) *Hogwood Farm, Finchampstead: Detailed Ecological Permeability Scheme – Neighbourhood Centre.* Hankinson Duckett Associates, Wallingford.

HDA Document Control and Quality Assurance Record

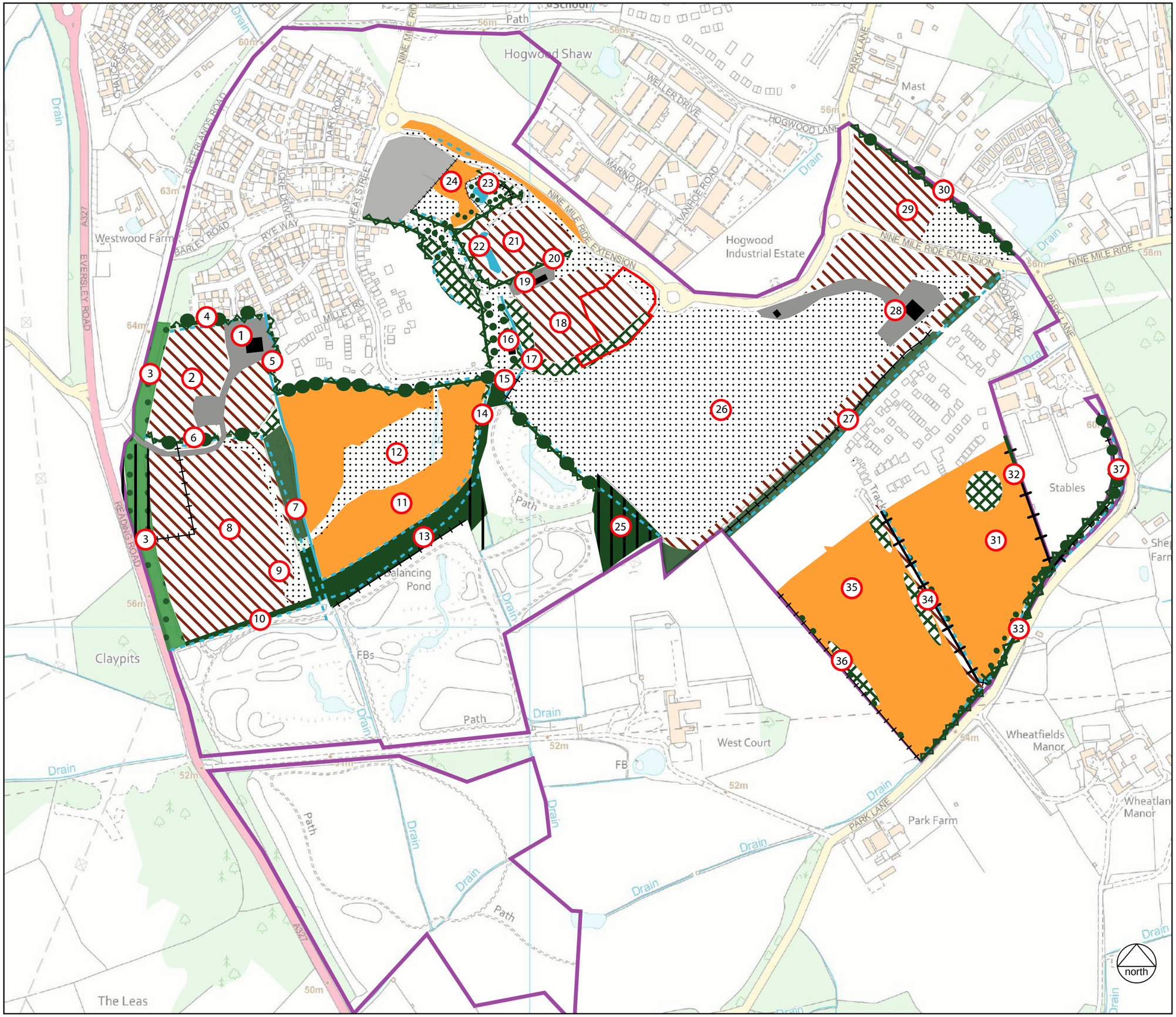
Project Title: Arborfield Eco
Project Reference: 868.1
Document Title: Hedgerow Mitigation and Compensation Strategy – Neighbourhood Centre
Commissioning Party: CALA Homes Thames Ltd

Issue	Description	Date of Issue	Signed
1	Hedgerow Mitigation and Compensation Strategy – Neighbourhood Centre	December 2024	[redacted]

	Personnel	Position
Author	Clare Bird MCIEEM	Associate Ecologist
Approved for issue	Sarah Thornton-Mills MCIEEM	Principal Ecologist

APPENDIX A

Phase 1 Habitat Survey and Target Notes



KEY

- Neighbourhood Centre site boundary
- Wider site boundary
- Lowland mixed deciduous woodland (w1f)
- Other woodland - mixed - mainly broadleaved (w1h5)
- Other woodland - mixed - mainly broadleaved (w1h5)
- Scattered trees
- Native hedgerow (h2a)
- Non-native and ornamental hedgerow (h3b)
- Mixed scrub (h3h)
- Ruderal (81)
- Modified grassland (g4)
- Standing open water (r1)
- Wet ditch / dry ditch (50)
- Fence
- Building
- Developed land - sealed surface (u1b)
- 32 Target Notes

CLIENT:
CALA Homes (Thames) Ltd

PROJECT:
Hogwood Farm, Finchampstead

TITLE:
Phase 1 Habitat Survey Plan - Neighbourhood Centre

SCALE AT A3:
NTS

DATE:
December 2024

868.1/112

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Target Notes – Arborfield

1. Site yard comprised a hardstanding area with mobile cabins.

2. Relatively sparse ruderal vegetation dominated by Common Nettle *Urtica dioica*, Spear Thistle *Cirsium vulgare*, Common Ragwort *Senecio jacobaea*, Bristly Oxtongue *Helminthotheca echioides* and Common Dandelion *Taraxacum officinale*. Small areas of scattered bare ground/ recently disturbed ground are present. Field margins vary between 1 – 5m and are more densely vegetation with the above species with the inclusion of Annual Meadow Grass *Poa annua*, Red Fescue *Festuca rubra*, Cleavers *Galium aparine*, Broad-leaved Dock *Rumex obtusifolius*, Cut Leaved Cranes Bill *Geranium dissectum*, Field Forget-me-not *Geranium dissectum* and Scarlett Pimpernel *Anagallis arvensis*.

3. Mixed woodland along the western boundary with species including Ash *Fraxinus excelsior*, Larch *Larix decidua*, Scots Pine *Pinus sylvestris*, Beech *Fagus sylvatica*, Pedunculate Oak *Quercus robur* and Black Poplar *Populus nigra*. Some of the trees are mature and have suitable bat roosting features. The understorey is comprised of Elder *Sambucus nigra*, Hawthorn *Crataegus monogyna*, Holly *Ilex aquifolium*, Willow *Salix Sp.* and Hazel *Corylus avellana*. The ground layer is dominated by Bramble *Rubus fruticosus* and Common Nettle with Bracken *Pteridium aquilinum*, Ground Ivy *Glechoma hederacea*, Cleavers, Wood Avens *Geum urbanum*, Herb Robert *Geranium robertianium*, White Bryony *Bryonia dioica* and Black Bindweed *Fallopia convolvulus*. Part of the southern area of this woodland is listed on Natural England's Ancient Woodland Inventory; this area is especially dominated by Larch and other introduced coniferous species.

4. Native defunct hedgerow with trees comprising a hedgerow of Field Maple *Acer campestre*, Hazel, Blackthorn *Prunus spinosa* and Ash, with Ash and Oak mature trees and a dry ditch below.

5. Newly created culvert with a small area of standing water.

6. Treeline of mature Ash and Pedunculate Oak trees with relic species rich hedgerow of Hazel, Holly, Field Maple, Hawthorn and Blackthorn. Some of the mature trees have the potential to support roosting bats. The ground layer vegetation is sparse and mostly comprised of Bramble with occasional Cowslip *Primula veris* and Creeping Thistle *Cirsium arvense.*

7. Lowland mixed deciduous woodland comprised of Pedunculate Oak and coppiced Ash with Wild Cherry *Prunus avium*, Field Maple, Hazel, Hawthorn and Blackthorn. Mature trees are present, some of which have features of bat roosting potential. The ground layer includes Bramble, Cow Parsley *Anthriscus sylvestris*, Ground Ivy, Germander Speedwell *Anthriscus sylvestris*, Common Sorrel *Rumex acetosa* and Lords-and-ladies *Arum maculatum*. A dry ditch is present along the western boundary of the parcel and a ditch that was wet at the time of the survey along the eastern boundary.

8. A field of ruderal vegetation of varying height from 10cm to 50cm in height dominated by Spear Thistle, Common Nettle and Perennial Ryegrass and White Clover *Trifolium repens* with the occasional Creeping Buttercup *Ranunculus repens*, Common

Hogweed *Heracleum sphondylium*, Ragwort and Broad Leaved Dock and Cleavers. Small areas within the parcel are sparsely vegetated with areas of bare ground with occasional ruderal species mentioned above but include Scarlett Pimpernel and Bird Foot Trefoil *Lotus corniculatus*.

9. A small depression of bare ground that had standing water at the time of the survey with occasional Yellow Flag Iris present.

10. Plantation lowland mixed deciduous woodland comprised of White Poplar, Pedunculate Oak, Ash and Field Maple. Mature trees are present, some of which have features of bat roosting potential. Understorey comprised of Holly, Dog Rose *Rosa canina*, Common Nettle, Cow Parsley, Cleavers, Curled Dock *Rumex crispus*, Bramble and Ground Ivy. A dry ditch is present along the boundary along the southern boundary of the wooded strip.

11. Species poor modified grassland of varying sward length between 5cm – 40cm comprised of Perennial Ryegrass, Cocksfoot *Dactylis glomerata*, White Clover, Oxeye Daisy *Leucanthemum vulgare*, Creeping Buttercup with occasional Broad Leaved Dock, Dandelion and Scarlett Pimpernel. Field margins are approximately 4-6m wide and are comprised of Common Nettle, Spear Thistle, Common Vetch *Vicia sativa* and Cow Parsley.

12. Area of bare ground used for storage of construction materials.

13. Lowland mixed deciduous woodland comprised of Pedunculate Oak standards and coppiced Ash with Wild Cherry *Prunus avium*, White Poplar, Field Maple, Hazel, Willow, English Elm *Ulmus procera*, Holly, Hawthorn and Blackthorn. Mature trees are present, some of which have features of bat roosting potential. The ground layer includes Bramble, Wood Avens *Geum urbanum*, Herb Robert, Common Ivy, Wood Spurge *Euphorbia amygdaloides*, Violet *Viola sp.*, Greater Stitchwort *Stellaria holostea*, Common Nettle, Remote Sedge *Carex remota*, False Brome *Brachypodium sylvaticum* and Butcher's Broom *Ruscus aculeatus* present. Standing and fallen dead wood is present throughout the woodland area. The woodland becomes increasingly wet to the west where Willow becomes dominant and dry ditches border most of the woodland edges, a further dry ditch running centrally through the southern area of woodland is also present. The eastern area of this woodland is listed on Natural England's Ancient Woodland Inventory; here the dominant tree species is White Poplar in the south and Pedunculate Oak in the north. This area is demarcated in its western boundary by a small woodbank.

14. Mixed Scrub comprised of Bramble, Blackthorn, Dog Rose and Pendulate Oak samplings over a dry ditch.

[redacted]

16. A wooden bat barn set between treelines of Pendulate Oak, Ash and Hazel.

17. Mixed scrub comprised of Bramble, Elder and Holly with large amounts of deadwood above a steep-sided wet ditch. Towards the eastern end of the scrub parcel, Elder becomes the dominant species with the inclusion of ruderals in the ground layer including Common Nettle, Spear Thistle, Cleaver and Broad Leaved Dock.

18. Ruderal vegetation comprised of Perennial Rye Grass, Spear Thistle, Common poppy *Papaver rhoeas*, Cocks Foot, Rosebay Willowherb *Chamerion angustifolium*, Annual Sow Thistle *Sonchus oleraceus*, Common Nettle, and Curled Dock.

19. Listed building with multiple features with bat roost potential including lifted roof tiles and cracks in the brickwork. Situated on an area of concrete hardstanding. Surrounded by scaffolding at the time of the survey.

20. Species-rich native hedgerow comprised of Hawthorn, Hazel, Blackthorn, English Elm and Ash.

21. Ruderal vegetation similar to TN 20 with the inclusion of Oxeye Daisy at high densities and occasional Red Campion *Silene dioica*.

22. A SUDS pond within a parcel of ruderal vegetation described in TN21. Sloping earth banks with occasional Pendulous Sedge *Carex pendula*.

23. A shaded pond approximately 30cm in depth. Tussocks of Pendulous Sedge and patches of encroaching Bramble, Willow, Pedunculate Oak and Alder, border the edge of the pond. The pond area is enclosed by a chicken-wire fence.

24. Modified grassland with a short sward length of approximately 20cm in length comprised of Perennial Rye Grass, Cocks Foot, Red Fescue, Meadow Buttercup, Broadleaved Dock and Dandelion.

25. Lowland mixed deciduous woodland. Dominant species within the woodland include Ash, Pedunculate Oak and Alder with a Hawthorn and Field Maple understorey. The ground layer includes Bramble, Wood Avens, Herb Robert, Ground Ivy, and Hairy Brome *Bromopsis ramosa*. There are fallen wood and dead-wood piles throughout the woodland area and multiple trees with possible bat roosting potential. The woodland, in part, is listed on Natural England's Ancient Woodland Inventory.

26. Large parcel of bare ground with large spoil heaps. During the time of the survey, excavators were topping soil within the parcel. Field margins were sparsely vegetated with ruderal species including Bramble, Curly Dock, Spear Thistle, Ragwort and Common Nettle.

27. Lowland mixed deciduous woodland. A thin strip of broadleaved woodland plantation behind this comprised of Ash, Lombardy Poplar, Field Maple, White Willow, Grey Willow, Dogwood, Hazel, Hawthorn, Blackthorn and Bramble with Common Ivy and Cleavers dominating the ground layer. Some of the trees have features of possible bat roosting potential. A ditch that had small pools of standing water is present along the southern side of the wooded strip.

28. Site compound on hardstanding area.

29. Short ruderal vegetation within the northern end of the parcel similar in species composition to TN18 with the inclusion of Ribwort Plantain *Plantago lanceolata*, Timothy *Phleum pratense*, Musk Mallow *Malva moschata* and Bristly Oxtongue. Bare ground is present across the southern area of the parcel with small field margins

approximately 1m in width comprised of similar short ruderal species as the northern area.

30. A dense, intact, species-rich native hedgerow with trees comprising Pedunculate Oak, Beech, Ash, Goat Willow *Salix caprea*, Black Poplar *Populus nigra*, Field Maple, Dogwood, Hazel, Holly, Bramble and Common Broom *Sarothamnus scoparius*. The hedgerow is approximately 15 years old and tree guards are present on some individual plantings with some mature trees present along the roadside, especially within the southern section of the hedgerow.

31. Modified grassland with species including Yorkshire Fog, Perennial Rye-grass, False Oat-grass *Arrhenatherum elatius*, Cock's Foot, Red Fescue, Common Bent, Creeping Buttercup, White Clover, Doves-foot Cranesbill *Geranium molle*, Common Vetch, Common Mouse-ear *Cerastium fontanum*, Scentless Mayweed *Tripleurospermum inodorum*, Creeping Thistle, Spear Thistle, Common Sorrel, Ragwort, Greater Willowherb *Epilobium hirsutum*, Cleavers, Broad-leaved Dock, Common Knapweed *Centaurea nigra*, Meadow Vetchling *Lathyrus pratensis*, Forget-me-not sp., Fleabane *Pulicaria dysenterica* and Self-Heal *Prunella vulgaris*. Along the treeline to the south, Hemp Nettle *Galeopsis tetrahit*, Lady's Thumb *Persicaria maculosa*, Scentless Mayweed, Prickly Sow-Thistle and Clustered Dock with wet flushes of Sedge and Soft Rush. There are two soil bunds/soil storage piles with tall ruderals dominated by Spear Thistle, Common Nettle, Broadleaved Dock and Smooth Hawksbeard *Crepis capillaris* with large patches of scrub within the grassland with species including Bramble, Elder, Silver Birch and Dog-rose with Common Nettle. There are also piles of deadwood near and within the scrub.

32. Non-native and ornamental species-poor hedgerow comprising Cherry Laurel *Prunus laurocerasus*, Leylandii Cypress *Cupressus x leylandii* and Elder, broken by Bramble scrub on the north-eastern edge of the grassland field (TN 31). To the south of the hedgerow, continuing along the field boundary is a wooden post and electric wire fence which is overgrown with tall grasses and ruderal vegetation.

33. An outgrown, defunct native species-rich hedgerow with trees adjacent to Park Lane, with a dry ditch below. Species within the hedgerow include Pedunculate Oak, Black Poplar, Gorse (*Ulex europaeus*), Holly, Grey Willow, Blackthorn, Bracken and Bramble. A treeline of Pedunculate Oak is present approximately 5m into the field from the hedgerow.

34. A ditch that was dry at the time of survey with scattered Bramble scrub and trees including Willow and Pedunculate Oak, some of which have possible bat roosting potential. Behind the ditch is a fence and a dirt track, used as an access route into the site. A scrub line is present along the eastern side of the track and is 1-2m wide comprised of Grey Willow, Dog Rose, Oak and Bramble scrub. Track supports ephemeral vegetation including Scentless Mayweed, Cocks Foot, Smooth Hawksbeard, Common Yarrow, Hawthorn saplings, Common Bent and Spear Thistle.

35. Modified grassland field with a similar species composition to Target Note 31, with more Bent dominant in the north and False Oatgrass and Fescue sp. dominated to the south. Occasional species include Greater Plantain, Ribwort Plantain, Greater Birds-foot Trefoil, Common Hogweed, Cleavers, Meadow Vetchling, Mouse-ear, Common Vetch, Common Fleabane, Creeping Buttercup, Red Fescue and Soft Rush.

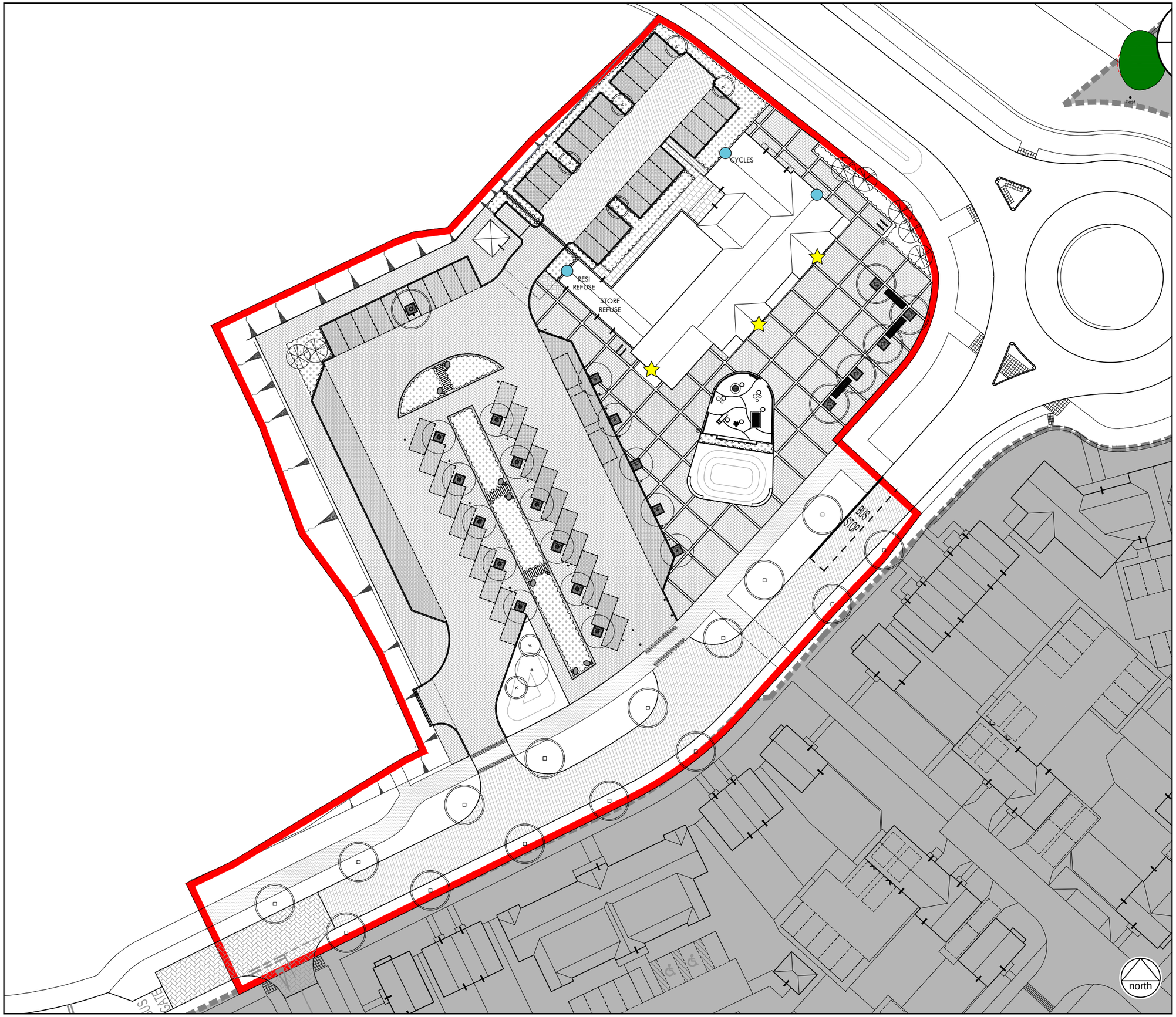
Bramble scrub is present along many of the field boundaries, with Common Nettle also present. A wet flush is present within the west of the field and contains Common Horsetail, Common Nettle, Sow Thistle, Soft Rush and occasional Hemp Nettle.

36. Scattered semi-mature trees and scattered areas of dense scrub along fence line. Species present include Oak, Ash, Blackthorn, Dog Rose, Bramble and Common Nettle.

37. A line of scrub and trees with a dry ditch bordering Park Lane.

APPENDIX B

Species Enhancements Plan



KEY

- Neighbourhood Centre site boundary
- Bat box location*
- Bird box location*

* Position indicative

CLIENT:
CALA Homes Thames Ltd

PROJECT:
Hogwood Farm, Finchampstead

TITLE:
Neighbourhood Centre: Species Enhancements Plan

SCALE AT A3:
NTS

DATE:
December 2024

868.1/114

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HOGWOOD FARM, FINCHAMPSTEAD

DETAILED BAT MITIGATION STRATEGY – NEIGHBOURHOOD CENTRE

Prepared for CALA Homes Thames Ltd

by

Hankinson Duckett Associates

HDA ref: 868.1

December 2024

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APPENDICES

1 INTRODUCTION

1.1 Site location and summary description

1.1.1 This report describes a Detailed Bat Mitigation Strategy in relation to the Neighbourhood Centre area of the development of approximately 110ha of land at Hogwood Farm, Finchampstead. The Neighbourhood Centre development area comprises approximately 0.9ha of land, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference SU 77146445. The Detailed Bat Mitigation Strategy was commissioned by CALA Homes Thames Ltd in May 2024.

1.1.2 The Neighbourhood Centre development parcel is located to the north-west of the village of Finchampstead, Berkshire. In general terms, it is dominated by ruderal vegetation with a line of mixed scrub along the southern site boundary and bare ground along the eastern site boundary. The Neighbourhood Centre site is bordered to the east by the Nine Mile Ride Extension South (NMRES); to the south by the Southern Bus Loop road with Parcel 10 of the wider site beyond; and to the north and west by the proposed primary school which will be delivered separately by Wokingham Borough Council (WBC). The location and boundary of the Neighbourhood Centre site is shown in *Appendix A*.

1.1.3 Neighbourhood Centre site is part of a larger area covering a total of 110ha, hereinafter referred to as the 'wider site'. The wider site includes residential properties associated with Parcel 1 and a construction site associated with Parcel 2 in the north-west and a SANG in the south which comprises a mix of wetland, species-rich grassland, scrub and woodland habitats. In general terms, the western area of the wider site is comprised of three fields of disturbed ground dominated by short ruderal vegetation with scattered areas of tall ruderal vegetation and large spoil heaps bordered by mature trees and woodland with scrub field margins. The central and eastern areas of the site are comprised of areas of hardstanding, construction/disturbed ground and grassland fields bordered by mature treelines and woodland. Woodland shaws and copses are located in the northern, western and central areas of the site, including mixed, broadleaved and broadleaved plantation woodland types, some of which are included on Natural England's Inventory of Ancient Woodland. Wetland habitats within the site include drainage ditches and small streams associated with the field boundaries and several ponds in poor condition are located across the site. The wider site is bordered to the north by a construction site, the Bohunt School and the Hogwood Industrial Estate; to the east by Park Lane beyond which lie residential dwellings and park homes; to the south by Park Lane and farmland; and to the west by A327 Reading Road and Sheerlands Road beyond which lie farmland and woodland. The wider area is dominated by agricultural land interspersed with woodland and residential properties.

1.1.4 Further information on the extent and composition of habitats across the Neighbourhood Centre site and the wider site is provided in *Appendix A* (HDA, 2024a).

1.2 Legislative context

1.2.1 All UK bat species are 'European Protected Species' (EPSs) protected under the 2017 Conservation of Habitats and Species Regulations (as amended). In relation to an EPSs, unless subject of an appropriate Natural England derogation licence the 2017 Regulations make it an offence to:

- Deliberately capture, injure or kill any wild animal of an EPS;
- Deliberately disturb wild animals of any such species, in particular any disturbance which is likely to: (i) impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or to hibernate or migrate; (ii) affect significantly the local distribution or abundance of the species to which they belong;
- Damage or destroy a breeding site or resting place of such an animal; and/or
- To (a) be in possession of, or to control; (b) to transport any live or dead animal or any part of an animal; (c) to sell or exchange or (d) offer for sale or exchange any live or dead animal or part of an animal of an EPS.

1.2.2 In addition, all UK bats are protected under the 1981 Wildlife and Countryside Act (as amended). All species are listed on Schedule 5 of the Act and are subject to the provisions of Sections 9.4b and 9.4c, which make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection; and/or
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat.

1.2.3 If works are planned that are likely to constitute an offence under the current legislation, an application for a derogation licence should be made to Natural England.

1.2.4 Seven species of bat (Barbastelle, Bechstein's, Noctule, Soprano Pipistrelle, Brown Long-eared, Greater Horseshoe and Lesser Horseshoe) are also identified as Species of Principal Importance under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act. This requires planning authorities to regard these species as a material consideration in the planning process.

1.3 Development proposals

1.3.1 Planning permission (O/2014/2179 and 140764) was granted in January 2017 for a hybrid application. This comprises:

- Outline permission for demolition of all existing buildings on site; up to 1,500 new dwellings; employment floor space; a Neighbourhood Centre; a primary school; sports pitches and associated pavilion building; highways infrastructure; associated landscaping, public realm, open/green space and sustainable urban drainage systems; and

- Full permission for a 29.7ha Suitable Alternative Natural Greenspace (SANG) in the south of the site.

The hybrid planning permission was subsequently amended by a Section 73 application (181194) which was approved in November 2018.

1.4 Scope and purpose of the report

1.4.1 In December 2020, planning consent (202394) was granted for the demolition of the Hogwood Industrial Estate Buildings which were partially located within the site. A number of the buildings within the Hogwood Industrial Estate supported roosting bats, including maternity roosts for Brown Long-eared bat and Common Pipistrelle within B7 and low status, non-breeding roosts for Common Pipistrelle and Soprano Pipistrelle within B7, B17, B22, B25 and B30. An EPS licence (2022-60110-EPS-MIT) was subsequently granted for the demolition of the buildings supporting roosting bats and as part of the mitigation a replacement bat building was constructed (B39). Since then the industrial estate buildings have been demolished and the site is now dominated by tall ruderal vegetation (See *Appendix B* for the locations of these buildings).

1.4.2 Surveys of the Neighbourhood Centre site and wider site undertaken by Entec in 2008 and Amec in 2012 identified features suitable for roosting and foraging bats. During subsequent bat activity surveys, species recorded included Common Pipistrelle, Soprano Pipistrelle, Nathusius' Pipistrelle, *Myotis* sp., Brown Long-eared bat, Noctule and Serotine (Royal Haskoning DHV, 2014). Further survey work was carried out between 2017-2021 by HDA to assess the suitability of buildings and trees within the site and wider site to support roosting, foraging and commuting bats (HDA, 2019; HDA, 2020).

1.4.3 In recognition of the potential of the wider site to support bats, the time that has passed since the original surveys were undertaken and within the legislative context set out in *Section 1.2*, an updated Phase 1 bat roost scoping survey and Phase 2 bat activity survey were carried out by HDA in 2022 to assess the suitability of buildings and trees within the wider site to support roosting, foraging and commuting bats[1]. Together with the work undertaken in 2008, 2012 and 2017-2021 this information has been used to inform this Detailed Bat Mitigation Strategy for the Neighbourhood Centre area of the proposed development.

1.4.4 This Detailed Bat Mitigation Strategy describes the results of the suite of bat surveys, provides an assessment of the likely effects of the proposed development on bats, and identifies measures to maintain and, where possible, enhance the value of the site for the local bat population. Specifically, the aims of the study are:

[1] At the time of the 2022 surveys, the Neighbourhood Centre site was dominated by bare earth and highly disturbed due to the adjacent NMRE construction site and as such it was considered of negligible suitability for bats.

i) To identify potential bat roost sites within the Neighbourhood Centre site;
ii) To determine the need for any further surveys prior to development commencing to identify the presence/likely absence of roosting bats within suitable features where affected by the proposed development, and identify species and numbers present;
iii) To determine levels of bat foraging and commuting activity within habitat potentially affected by the Neighbourhood Centre development;
iv) To determine the requirement, if any, for licensing in respect of bats; and
v) To identify appropriate mitigation and/or enhancement measures to ensure that the Neighbourhood Centre development avoids adverse impacts on bats, and, where possible, provides enhancements to support the long-term favourable conservation status of bats in accordance with nature conservation legislation, planning policy and the 2006 NERC Act.

1.4.5 With respect to the Neighbourhood Centre development, this Detailed Bat Mitigation Strategy for the Neighbourhood Centre site also addresses Planning Condition 24, which requires that:

"Prior to or concurrent with the submission of a reserved matters application for any sub phase of the development a detailed bat mitigation strategy shall be submitted to and approved in writing by the local planning authority for that sub phase of the development. Each detailed bat mitigation strategy shall include an appropriate detailed lighting scheme that maintains the dark corridors as set out in Appendix 1 Recommended Dark Corridor Locations Plan of the submitted Hogwood Garden Village Bat Activity Survey Report - Revision: 02/Final (Royal Haskoning DHV, 10th September 2015) and should be in accordance with the submitted Hogwood Garden Village Bat Activity Survey Report - Revision: 02/Final (Royal Haskoning DHV, 10th September 2015). The mitigation, contingency and enhancement measures contained within each of the submitted detailed bat mitigation strategies shall be implemented in accordance with the approved plan unless otherwise approved in writing by the local planning authority."

2 METHODOLOGY

2.1 Introduction

2.1.1 The methodology followed by HDA in relation to all updated bat survey work undertaken at the site is consistent with current legislation and good practice guidelines set out by the Bat Conservation Trust, at the time of the survey (BCT, 2016). The following sections detail the suite of surveys undertaken to date to inform the development of the Neighbourhood Centre site and the wider site and the results of these surveys are provided in *Section 3*.

2.2 Phase 1 bat scoping survey

2.2.1 Land to the immediate south of the site, as part of a survey of approximately 58.5ha of the wider site, was subject to a Phase 1 bat scoping survey by Fiona Muir of HDA on the 1st and 7th April, 4th May and 29th July 2022 (HDA, 2023). At the time of the 2022 surveys, the Neighbourhood Centre site was dominated by bare earth and highly disturbed due to the adjacent NMRE construction site and as such it was considered of negligible

suitability for roosting bats. No buildings or trees are currently located within the Neighbourhood Centre site (See *Section 1.4.1* above).

2.3 Phase 2 bat activity survey

Bat activity transects

2.3.1 Land to the immediate south of the site, as part of a survey of approximately 58.5ha of the wider site, was subject to a suite of dusk and dawn bat activity surveys most recently undertaken between May and September 2022. Due to the size of the survey area, the survey area was divided into two survey area transects of which land to the immediate south of the site was located within Transect 2. Surveyors carrying hand-held bat detectors walked transects of the wider site, with listening stops at regular intervals for periods of up to 5 minutes. Visual observations of bats and bat call registrations were noted, recording time, location, activity and, where known, species. Recordings of foraging and/or commuting activity made using digital devices were subsequently analysed to determine the identity of any unconfirmed species recorded during the surveys. Times and dates of surveys carried out are given in *Table 1* below, along with weather conditions.

Table 1: Details of bat activity surveys of Transect 2 (located to the immediate south of the Neighbourhood Centre site)

Date	Sunset / sunrise	Time	Weather conditions
04/05/2022	20.30	20.30 - 22.30	100% cloud cover, Beaufort Scale = 0, dry, 13-10ºC
20/07/2022	21.08	21.08 - 23.08	100% cloud cover, Beaufort Scale = 2, light rain showers between 21.30 - 22.15, 20ºC
13/09/2022	06.35	04.35 - 06.35	80% cloud cover, Beaufort Scale = 1, dry, 15ºC

Automated surveys

2.3.2 Automated surveys were carried out as a supplement to the activity transect surveys and to gain further information on the species and frequency of bat activity at the Neighbourhood Centre site and wider site. Two programmable electronic bat detectors[2] were positioned in suitable habitat and left in place on three occasions between May and October 2022. The detectors were programmed to record all bat activity. Details of the times and dates of automated bat detector deployments are provided in *Table 2* below.

Table 2: Details of automated bat detector deployment

Location	Deployment and collection date	Sunset / Sunrise	Temp. Max. / Min. (ºC)
A & B*	04.04.2022 – 05.04.2022	19:42 / 06:30	13 / 9
	05.04.2022 – 06.04.2022	19:43 / 06:28	11/ 8.
	06.04.2022 - 07.04.2022	19:45 / 06:26	9/ 7
	07.04.2022 - 08.04.2022	19:47 / 06:23	7 / 4

[2] Anabat Express with remote microphone and 'Analook' software.

Location	Deployment and collection date	Sunset / Sunrise	Temp. Max. / Min. (ºC)
	08.04.2022 - 09.04.2022	19:48 / 06:21	8 / 2
	09.04.2022 - 10.04.2022	19:50 / 06:19	9 / 2
C & D	14.07.2022 - 15.07.2022	21:15 / 05:04	20 / 9
	15.07.2022 - 16.07.2022	21:14 / 05:05	21 / 11
	16.07.2022 - 17.07.2022	21:13 / 05:06	23 / 12
	17.07.2022 - 18.07.2022	21:12 / 05:08	24 / 14
	18.07.2022 - 19.07.2022	21:11 / 05:09	28/ 18
E & F	28.09.2022 - 29.09.2022	18:48 / 07:01	18 / 3
	29.09.2022 - 30.09.2022	18:46 / 07:02	15 / 4
	30.09.2022 - 01.10.2022	18:44 / 07:04	14 / 11
	01.10.2022 - 02.10.2022	18:41 / 07:05	16 / 12
	02.10.2022 – 03.10.2022	18:39 / 07:07	17 / 5

** The static at Location B recorded one less night than the static at Location A (i.e. until the 09.04.2022).*

2.3.3 The results of the updated bat activity transect and automated detector surveys have been used to support the earlier assessment of bat foraging and commuting activity made in the Ecology Chapter of the Environmental Assessment submitted in support of the planning application (Royal Haskoning, 2014) and the bat activity surveys undertaken by HDA between 2017 to 2018 (HDA, 2019).

2.4 Limitations of surveys

2.4.1 Although the most recent bat surveys were associated with the land to the immediate south of the site, rather than the site itself, the site is dominated by ruderal vegetation with a line of mixed scrub along the southern site boundary and bare ground along the eastern site boundary (*Appendix A*). As such, there are no habitats suitable to support roosting bats and the habitat of highest interest for foraging and commuting bats associated with the site comprises the line of mixed scrub along the southern site boundary which would have been subject to survey during the bat activity transect survey of the wider site in 2022.

2.4.2 With due consideration to the limitation given above, all surveys followed best practice guidelines at the time of the surveys (BCT, 2016) and were conducted at an appropriate time of year, under favourable weather conditions and with an appropriate level of survey effort both in terms of the number of surveyors used and number of survey visits undertaken. Although periods of rain were experienced on one of the bat activity surveys, this was not found to have affected levels of bat activity and is not considered a constraint to the findings of the Phase 2 surveys. The surveys are therefore considered sufficient to allow a robust assessment of the likely effects of the proposed development on bats and to inform the recommendations provided in *Section 5* of this report.

3 RESULTS

3.1 Phase 1 bat roost scoping survey

3.1.1 No buildings or trees are currently located within the Neighbourhood Centre site.

3.2 Phase 2 activity transect surveys

3.2.1 Details of the date and time of bat activity transect surveys carried out, along with weather conditions and sunset/sunrise times, are provided in *Table 1*. The areas covered during each survey visit included the line of scrub along the southern boundary of the Neighbourhood Centre site, as part of a survey of the wider site.

3.2.2 A visual summary of bat foraging and commuting activity recorded during the surveys of the wider site has been provided in *Appendix C*. In total, one species was recorded during the transect surveys of this area: Noctule. A summary of Noctule activity and an estimation of numbers using the Neighbourhood Centre site and wider site during any one survey is provided in *Table 3* below.

Table 3: Summary of bat activity during transect surveys

Species	Activity summary	Approx. number recorded*
Noctule	Noctule activity was scattered across the wider site, with activity focused on a line of scrub and tall ruderal vegetation associated with the southern boundary of the Neighbourhood Centre site. Noctules were also recorded on a less frequent basis using hedgerows and woodlands bordering the grassland and arable fields in the remainder of the wider site. The remainder of recordings were largely associated with high level passes by individuals crossing the wider site. It is expected that up to 2 Noctule bat could have been using the Neighbourhood Centre site at any one time during the survey and that the Neighbourhood Centre site forms part of a much larger foraging range for a low number of individuals of this species.	2

**This is an approximation of the number of bats of any one species estimated to have been using the Neighbourhood Centre site during any one visit*.

3.3 Phase 2 automated activity surveys

3.3.1 The dates during which the automated detector was deployed, along with sunset/sunrise times and temperatures, are provided in *Table 2*.

3.3.2 The automated detectors were placed in six separate locations within the wider site to give an indication of the species and relative levels of activity throughout the night. A summary of bat activity recorded during the automated surveys in each location is provided below in *Table 4*. In total, five species/species groups were recorded during the automated surveys; Common Pipistrelle, Soprano Pipistrelle, Noctule, Brown Long-eared bat and *Myotis* sp. bat.

Table 4: Summary of bat activity recorded by the automated detector

Location	Activity summary
A	The automated detector at Location A recorded bat activity along a woodland belt aligned east-west in the east of the wider site, approximately 355m to the south of the Neighbourhood Centre site. A total of 336 bat passes were recorded over 6 nights; an average of 56 bat recordings per night. Soprano Pipistrelle the most frequently recorded species (63.1% of the bat recordings), with occasional to regular foraging activity recorded during every night. Common Pipistrelle was the second most frequently recorded species (22.9% of the bat recordings), with occasional foraging activity recorded during every night. Occasional passes by Noctule and *Myotis* sp. bat were also recorded (12.5% and 1.5% of passes, respectively).
B	The automated detector at Location B recorded bat activity associated with a woodland belt aligned north-south in the west of the wider site, approximately 500m to the west of the Neighbourhood Centre site. A total of 684 bat passes were recorded over 5 nights; an average of 137 bat recordings per night. Common Pipistrelle was the most frequently recorded species (55.7% of the bat recordings), with occasional to regular foraging activity recorded during every night. Soprano Pipistrelle was the second most frequently recorded species (32.6% of the bat recordings) with occasional to regular foraging activity recorded during every night in which bats were recorded. Occasional passes by Noctule, Brown Long-eared bat and *Myotis* sp. bat were also recorded (7.9%, 2.9% and 0.9% passes, respectively).
C	The automated detector at Location C recorded bat activity at the junction of a woodland belt and adjoining hedgerow in the east of the wider site, approximately 420m to the south-east of the Neighbourhood Centre site. A total of 609 bat passes were recorded over 5 nights; an average of 122 bat recordings per night. Common Pipistrelle was the most frequently recorded species (80.8% of the bat recordings), with occasional to regular foraging activity recorded during most night. Soprano Pipistrelle was the second most frequently recorded species (17.7% of the bat recordings), with occasional foraging activity recorded during most nights. Occasional passes by Brown Long-eared bat and *Myotis* sp. bat were also recorded (0.5% and 0.1% of passes, respectively).

Location	Activity summary
D	The automated detector at Location D recorded bat activity along a woodland margin located in the centre of the wider site, approximately 310m to the south of the Neighbourhood Centre site. A total of 1194 bat passes were recorded over 5 nights; an average of 239 bat recordings per night. Soprano Pipistrelle was the most frequently recorded species (69.3% of the bat recordings), with occasional to regular foraging activity recorded during most nights. Common Pipistrelle was the second most frequently recorded species (31.4% of the bat recordings), with occasional foraging activity recorded on all nights. Occasional passes by Brown Long-eared bat, Noctule and *Myotis* sp. bat were also recorded (0.8%, 0.3% and 0.1% of passes, respectively).
E	The automated detector at Location E recorded bat activity associated with a tree group in the centre of the wider site, approximately 130m to the west of the Neighbourhood Centre site. A total of 49 bat passes were recorded over 5 nights; an average of 10 bat recordings per night. Common Pipistrelle and Soprano Pipistrelle were the most frequently recorded species (44.9 and 30.6% of the bat recordings), with occasional foraging activity recorded during most nights. Occasional passes by Noctule and Brown Long-eared bat were also recorded (14.3% and 10.2% of passes, respectively).
F	The automated detector at Location F recorded bat activity associated with the treeline and hedgerow in the south-east of the wider site, approximately 760m to the south of the Neighbourhood Centre site. A total of 46 bat passes were recorded over 5 nights; an average of 9 bat recordings per night. Common Pipistrelle was the most frequently recorded species (80.4% of the bat recordings) with occasional foraging activity recorded during every night. Soprano Pipistrelle being the second most frequent recorded species (17.4% of bat recordings) with occasional foraging activity recorded during most nights. Occasional passes by *Myotis* sp. bat were also recorded (2.2% of passes).

3.3.3 In summary, the static detectors recorded Common Pipistrelle and Soprano Pipistrelle at all locations the remote detectors were deployed. *Myotis* sp. bat were recorded at all locations except Location E. Noctule bats were recorded at all locations except from Locations C and F. Brown Long-eared bats were recorded at all locations except from Locations A and F.

3.3.4 The greatest number of bat recordings was recorded at Location D and the highest diversity of bat species was recorded at Location B and D. The fewest number of bat recordings per night and lowest diversity of bat species was recorded at Location F. Soprano Pipistrelle and Common Pipistrelle were the most frequently recorded species

relating to 47.8% and 46.7% of all bat passes recorded, respectively, with all locations being used by foraging bats of these species on at least an occasional basis on each night. Noctule, followed by Brown Long-eared bat and *Myotis* sp. bats, were the next most recorded bat species/species groups (3.6%, 1.4% and 0.5% of all bat recordings, respectively), with similar patterns of activity to the Soprano and Common Pipistrelle bats however at much lower numbers.

4 SUMMARY AND IMPACT ASSESSMENT

4.1 Bat roosting habitat

4.1.1 In relation to the Neighbourhood Centre site, no features with the potential to support roosting bats are now present within the site. Current knowledge therefore suggests that no bat roosts will be lost as a result of the proposed development

4.2 Foraging and commuting activity

4.2.1 Moderate levels of Noctule foraging activity has been recorded in proximity to the Neighbourhood Centre site, with up to two individuals considered to be using the site at any one time. The plan in *Appendix C* provides an overview of bat activity recorded during the transect surveys.

4.2.2 During the automated detector surveys (and transect surveys of the wider site), Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared bat and *Myotis* sp. bats were also recorded and it is anticipated that these species/species group may use the Neighbourhood Centre site on an occasional basis as a small part of a much wider foraging territory for individuals of this species/species group.

4.2.3 Overall the level of bat activity recorded was generally considered to be low, relative to the size of the site, and similar and higher quality foraging and commuting opportunities are relatively widespread in the wider area. As a whole the Neighbourhood Centre site is therefore considered to be of no more than site interest for foraging bats.

4.2.4 Notwithstanding this, development proposals should seek to maintain and, where possible, enhance roosting, foraging and commuting opportunities for bats using the site in accordance with nature conservation legislation, planning policy and the 2006 NERC Act. Recommendations to maintain and enhance the value of the Neighbourhood Centre site for bats are provided in *Section 5* below.

5 MITIGATION STRATEGY

5.1 This section identifies measures to be implemented during development of the Neighbourhood Centre site in order to avoid, mitigate and compensate potential impacts on bats, and to maintain the favourable conservation status of the local bat population.

These measures will be implemented unless otherwise agreed with Natural England and/or the local planning authority. In addition, measures for long-term maintenance and enhancement of opportunities at the Neighbourhood Centre site for roosting, foraging and commuting bats are included in accordance with the 2024 National Planning Policy Framework (NPPF) and the 2006 NERC Act.

5.2 Roosting bats

5.2.1 No buildings or trees suitable for roosting bats were recorded within the Neighbourhood Centre site. Current knowledge therefore suggests that no bat roosts will be lost as a result of the proposed development.

Enhancement of opportunities for roosting bats

5.2.2 Development of the site will provide opportunities to enhance its current value for roosting bats in accordance with planning policy and the 2006 NERC Act through the provision of a range of new bat roosting features. CALA Homes Thames Ltd have an 'Urban Wildlife Strategy' in place for all their new developments. As part of this strategy CALA Homes Thames Ltd will incorporate at least one bat roosting features within each house and apartment block. The Neighbourhood Centre will include new residential apartments and subsequently bat roosting features will be provided on the Neighbourhood Centre. In order to provide a variety of bat roosting opportunities suitable for a range of bat species, roost enhancement will consist of (or similar):

- 3 x bat boxes on the Neighbourhood Centre comprising Ibstock bat boxes, Wildcare soffit bat boxes or Beaumaris Woodstone bat boxes will be incorporated into/on the building (suitable for crevice dwelling bat species).

The locations of these is shown on the *Neighbourhood Centre: Species Enhancements Plan* provided in *Appendix D*.

5.2.3 By providing a variety of roosting opportunities in different locations and orientations across the new building, a range of roost spaces with varied microclimates will be provided by the new development, which would offer roosting opportunities for bats throughout the year and enhance the future long-term potential of the Neighbourhood Centre site (and wider site) to support roosting bats.

5.3 Foraging and commuting bats

5.3.1 The Neighbourhood Centre site is considered as a whole to be of no more than site importance for foraging bats. The site comprises a low proportion of foraging habitat for low numbers of Noctule bats and provides foraging habitat for individual Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared bat and *Myotis* sp. bats on a more occasional or infrequent basis.

5.3.2 A number of the bat species identified within the Neighbourhood Centre site and wider site (Soprano Pipistrelle, Noctule and Brown Long-eared bat) are listed as Species of Principal Importance under Section 41 of the 2006 NERC Act and therefore the effects of development on foraging and commuting habitat are a material consideration in the planning process.

5.3.3 The development proposals indicated on the *Neighbourhood Centre: Species Enhancements Plan* in *Appendix D* show that the line of scrub associated with the southern site boundary will be lost. In order to maintain habitat connectivity within the site and wider site, planting has been included within the soft landscape proposals for the Neighbourhood Centre development area. Although no new hedgerow or scrub planting is proposed, tertiary green corridors including lines of tree will be provided across the built development area and additional hedgerow planting (along with other linear habitats such as woodland and scrub) have been incorporated into the SANG, Green Corridor and other phases of the development.

5.3.4 A lighting assessment has been produced for the site and wider site (MMA Lighting Consultancy, 2018) which assessed that the site currently has limited light spill from off-site residential areas (MMA Lighting Consultancy assessed the site as having an E2 - Low District Brightness Areas). The lighting assessment details measures to achieve a minimum level of lighting required for public amenity and safety whilst restricting horizontal or vertical light spill into non-target areas. External lighting will be limited to the carpark, road and footpath network and be designed to accord with WBC specifications to ensure public safety. Within the necessary safety requirements, in accordance with the lighting design and light spill plans set out in the MMA lighting report (MMA Lighting Consultancy, 2018), an Illustrative Lighting Parameters Plan (HDA, 2018) has been prepared that identifies Lighting Exclusion Zones and Lighting Restriction Zones. The Neighbourhood Centre is not proposed to be within either the Lighting Exclusion Zones or Lighting Restriction Zones, and instead will be sensitively designed to achieve a minimum level of lighting required for public amenity and safety whilst restricting horizontal or vertical light spill into non-target areas. Within the Neighbourhood Centre site measures to achieve a minimum level of lighting required for public amenity and safety whilst restricting horizontal or vertical light spill into non-target areas will include:

- LED lighting with a correlated ‘warm’ colour temperature of 4000 Kelvin, which will be lowered to 2700 Kelvin (where practical).
- LED light sources contain no UV wavelengths and the warmer colour temperatures reduce the light emitted beyond the 550 nanometer wavelengths. These requirements are consistent with the current research on the impact of artificial lighting on bats as published by the Bat Conservation Trust and Institution of Lighting Professionals (BCT & ILP, 2023);

- The lighting columns will be 8m for the prime spine road and 6m for subsidiary roads;
- Rear spill guards can be employed to focus light onto target areas;
- LED luminaires are suitable for dimming. A Remote Monitoring System will be considered for lighting in sensitive locations to allow luminaires to be dimmed to an appropriate level and then dimmed back further after a late night curfew (c. 23:00) (or alternatively the luminaires will be switched off entirely when not in use); and
- Pedestrian only footpaths/cycleways will be unlit with the exception of bollard lighting at nodal points, fitted with LED luminaires and rear spill guards/louvres/cowls, as appropriate.

5.3.5 Furthermore, in addition to the above measures to maintain opportunities for foraging and commuting bats within and adjacent to the site, the proposed areas of informal public open space and SANG will provide extensive opportunities to enhance these areas of the wider site for bats through the creation and enhancement of meadow grassland, scrub, hedgerow and woodland habitats and the creation of new wetland features.

6 CONCLUSION

6.1 The bat survey work carried out at the site identified low activity within the Neighbourhood Centre site. Development proposals seek to enhance opportunities for roosting bats within the site as described in *Section 5* above, through the provision of newly created roosting opportunities on the Neighbourhood Centre building.

6.2 Measures are also described for the maintenance of current opportunities provided by the site for foraging and commuting bats. These include sensitive lighting design and planting and habitat creation works. The development area is currently dominated by ruderal vegetation and bare ground with a line of mixed scrub along the southern site boundary of limited value for foraging bats and it is likely that these measures could maintain the value of the site in the long-term for this group.

6.3 Subject to the implementation of the measures described in *Section 5*, it is considered that the favourable conservation status of the local bat population would be maintained and, through long-term provision of higher quality roosting habitats, potentially enhanced. This would ensure compliance with the nature conservation objectives of the 2017 Conservation of Habitats and Species Regulations (as amended), the 2006 NERC Act and the guidance underpinning the 2024 National Planning Policy Framework.

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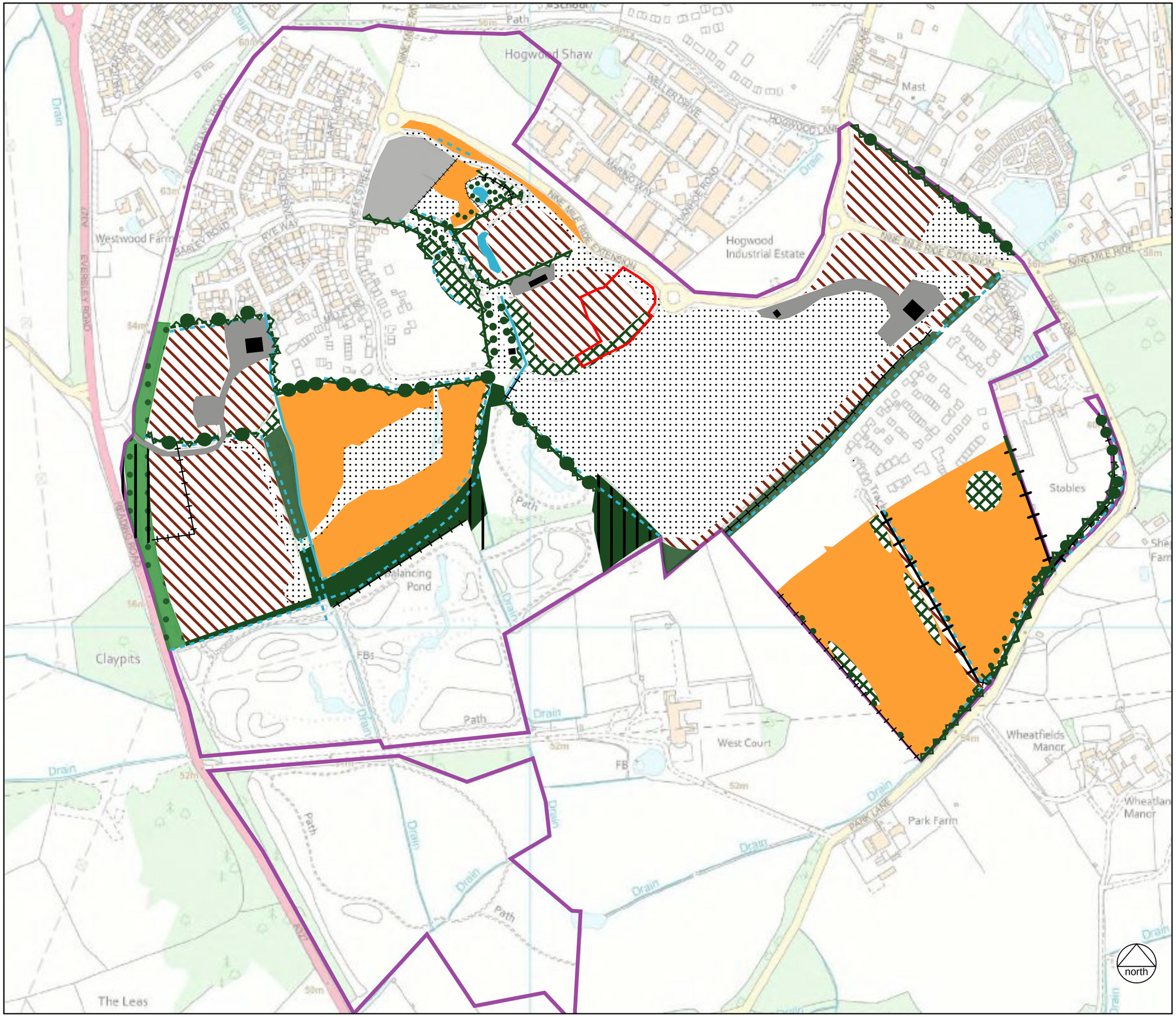
1	Detailed Bat Mitigation Strategy – Neighbourhood Centre	December 2024	[redacted]

	Personnel	Position
Author	Clare Bird MCIEEM	Associate Ecologist
Approved for issue	Sarah Thornton-Mills MCIEEM	Principal Ecologist

APPENDIX A

Phase 1 Habitat Survey Plan (showing Neighbourhood Centre development area and wider site)



KEY

- Neighbourhood Centre site boundary
- Wider site boundary
- Lowland mixed deciduous woodland (w1f)
- Other woodland - mixed - mainly broadleaved (w1h5)
- Other woodland - mixed - mainly broadleaved (w1h5)
- Scattered trees
- Native hedgerow (h2a)
- Non-native and ornamental hedgerow (h3b)
- Mixed scrub (h3h)
- Ruderal (81)
- Modified grassland (g4)
- Standing open water (r1)
- Wet ditch / dry ditch (50)
- Fence
- Building
- Developed land - sealed surface (u1b)

CLIENT:
CALA Homes (Thames) Ltd

PROJECT:
Hogwood Farm, Finchampstead

TITLE:
Phase 1 Habitat Survey Plan - Neighbourhood Centre

SCALE AT A3:
NTS

DATE:
December 2024

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APPENDIX B

Bat Roost Survey Summary Plan – Neighbourhood Centre