Construction Environmental Management Plan

Client: GPS Estates Ltd

Project: Cromwell Road, PE19 1QL

Ref: 13143a

5th August 2024

Version: V1.4





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Date:	05/08/2024

Version Control Record				
Description of Status	Date	Author Initials	Reviewer Initials	Amended Sections and Highlight Colour
V1	05/08/2024	GH	DW	
V1.1	11/09/2024	GH	DW	Soil Man. Strat. added
V1.2	27/01/2025	AS	AC	Section 6.1 & Appendix F.
V1.3	26/02/2025	ISM	AC	Section 2.4, 2.7 & 4.4
V1.4	18/03/2025	ISM	LA	Section 4.1, 4.3, Appendix E and Appendix F
V1.5	30/04/2025	ISM	LA	Section 4.2, 10.1 and Appendix F

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1. Introduction

1.1. Background

A Construction Environmental Management Plan (CEMP) has been procured from WPS Compliance Consulting Ltd by GPS Estates Ltd to accompany the planning application for Cromwell Road, St Neots, PE19 1QL.

This is to be considered as a “Live” document and has been fully updated prior to the commencement of the project, this will then be submitted to Huntingdonshire District Council for approval.

A provisional program of works has been included but will be revised prior to the commencement of the project when full information is known.

1.2. Objectives

This report has been prepared to discharge conditions 17 & 18 of the planning application 20/00896/OUT for the proposed development at Cromwell Road, St Neots, PE19 1QL. The overall objective of a CEMP is to ensure that robust management policies and procedures are implemented throughout the construction phases at the site, referencing the revised National Planning Policy Framework updated in February 2023.

This report provides an overview of the effects of the construction.

- Protecting the environment and achieving compliance with environmental legislation.
- Protecting the adjacent neighbors from noise, dust and vibration nuisance from plant or machinery.
- Protecting the nearby residential properties from the potential of artificial light intrusion.
- Reducing vehicle emissions and noise levels.
- Improve the safety of road users.
- Reduce the number of vehicle trips, particularly in peak periods.
- Promote more efficient work and delivery practices.
- Developing good neighbor relationships and heightened employee morale.

1.3. Site Location

The grid reference for the center of the site is TL 19403 60089

The development area is located to the west of Cromwell Road, approximately 2km north of the A428, and 750m south of St Neots train station. The development comprises of two distinct areas, to the north and south of an existing footpath (as shown in Fig.1), and is currently an undeveloped brownfield site, formerly a now demolished industrial complex. The only currently developed area of the site is a small car park in the center of the application area, although this too is now disused.

1.4. Site Location Map



Figure 1: Site Location

1.5. Development Proposal

The proposed development is the construction of a development of 83 residential properties including affordable and accessible homes, including landscaping, infrastructure and ancillary development.

1.6. Management of the Construction Environmental Management Plan (CEMP)

GPS Estates Ltd, as the developer and main contractor, will be onsite during the construction period to ensure that all contractors and material suppliers are aware of this CEMP and are safely implementing it. They will also liaise with council officials, stakeholders and neighboring businesses and any nearby construction sites.

The CEMP is a live document and will be regularly reviewed to ensure it is being implemented correctly and this will be recorded.

1.7. Context, Considerations and References

This sets out the relevant national and local guidance that has informed the development of this CEMP.

1.7.1. The National Planning Policy Framework 2023 (NPPF)

The National Planning Policy Framework sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced.

The NPPF aims to promote the use of sustainable transport throughout the UK, safe road design and the efficient and sustainable delivery of goods and supplies.

1.7.2. The Huntingdonshire Local Plan

The Huntingdonshire Local Plan was adopted in 2019 and covers the period up to 2036. Its two key objectives are to identify key areas of development land, and to provide the framework around which planning decisions are based.

This document provides a summary of key policies and their requirements for:

- Air Quality
- Carbon Emissions and Energy Reduction
- Green Infrastructure
- Waste and a Circular Economy
- Fire and Life Safety
- Noise

This CEMP is designed to ensure that the development is compliant with policies LP12, LP14, and LP17 of the Huntingdonshire Local Plan.

2. CEMP Strategy

2.1. Overview

This CEMP provides an overview of the construction process, the type and size of vehicles expected to be used on site, access arrangements and any necessary highway works and traffic management orders. It considers and addresses the following:

- Site Manager
- Program
- Working hours
- Site Arrangement
- Site Hoardings
- Authorizations and/or licenses
- Traffic Management Principles

- Vehicle Types

2.2. Site Manager

- The Project Manager will assume all responsibility for implementing the measures in the CEMP, including air quality and dust mitigation. The contact details for the Company and the Project Manager will be displayed on the hoarding and at the site and published on any temporary licenses granted by the Council (e.g., for hoarding or scaffolds).
- The Project Manager will liaise with local stakeholders and the project managers for other construction activity in the local area where it is relevant to do so. The Project Manager will also be responsible for monitoring and reviewing this CEMP on an ongoing basis to reflect the changing needs of the project and/or any changes to the local road network.
- The Project Manager will act as a point of contact between local stakeholders / businesses, so that in the event of issues/concerns arising during the construction process, action can be taken as quickly as possible.
- Information boards highlighting key personnel on site and their contact details will be displayed at the site.
- A 24-hour emergency contact number will also be displayed on the hoarding. Local neighbors will be able to call the site office to raise any concerns and the Project Manager will deal with any complaints or comments to ensure that they are resolved quickly.
- Any comment or complaint will be dealt with and will be recorded in a log which will be in the site office. This will be made available to the local council if requested.

2.3. Program

A full program of works is yet to be finalized, but the anticipated start date is Q1 2025, with an estimated duration of between 24-36 months. The development program will incorporate the following stages, with different areas developed in phases:

- Site set up – to include the installation of welfare facilities, clearance of the site and construction of new entrances. It is likely to also include construction of initial infrastructure.
- Excavation and piling – excavation and piling of foundations for dwellings.
- Substructure – this will include below ground works including foundations.
- Super Structure – this will include above ground works including the structural elements of the building including floors.
- Cladding – this will include the external elements of the building including the façade, roof, and glazing.
- Fit out, testing and commissioning - this will include all mechanical, electrical, and plumbing installation and testing of newly installed systems.

The following vehicles will be utilized during the construction phase:

- Forklift trucks
- Excavators
- Dumpers
- Vans

- Rigid lorries
- Articulated lorries

2.4. Hours of Operations

The hours of operation will be as follows:
Weekdays: 07:30-17:30
Saturdays: 07:30-13:30
Sunday & Bank Holiday: No activity unless prior agreement has been received from the council.

All vehicle activities will be scheduled and undertaken in accordance with Huntingdonshire District Council policies, in particular Local Plan policy LP17. Vehicle movements will primarily take place outside peak periods to minimise disruption to the local road network.

During the construction period it may be necessary, in exceptional circumstances, to work outside the prescribed working hours. Should this occur, the hours and duration of these works will be subject to consultation with Huntingdonshire District Council. Noted circumstances for example are to meet Police traffic restrictions, in an emergency or in other interests of Public Safety.

2.5. Site Arrangement

A site office and welfare facilities will be provided on site for staff and operatives. Initially this will be constructed to suit the needs of the Principal Contractor and will be located on the existing car park area.

2.6. Site Hoarding/Fencing

Barriers, platforms, and hoardings will be erected, adapted, and maintained throughout the construction phase to completely segregate the public from the construction activity.
Heras fencing/hoarding will be installed around the perimeter of the site and remain throughout the construction phase. This will prevent unauthorised site access, allow the installation of safety lighting, and will be made of suitable materials from a sustainable source.

The hoarding erected will be regularly maintained and replaced as required. It will also incorporate decorative elements and viewing facilities for members of the public so far as appropriate along public facing sections. This move will help with community engagement and will seek to minimise the visual disturbance of the hoarding.

The Site Manager or Project Manager will be available on the published number during all operational hours and will be authorized to resolve any problem or complaint that may arise.

2.7. Authorization and/or License Issues

Below identifies activities, plant or equipment that will require authorization and/or license to be issued by Huntingdonshire District Council:

- Skips
- Scaffolding
- Hoardings

- Temporary Structures
- Footway Closure
- Mobile Crushers

2.8. Traffic Management Principals

2.8.1. Vehicle Scheduling

When each contactor/sub-contractor is procured onto the project their terms and conditions of procurement will include the necessity for them to provide a Schedule of Predicted Site Traffic Movements (SPSTM), which will define for each movement the date and time, type of vehicle, its designated route to site and the estimated duration of stay.

This information will then be used by the Designated Site Traffic Manager (DSTM)/Planner (usually the site manager) to create an overall daily Site Traffic Management/Monitoring Schedule, which will instantly highlight any conflicts which can then be avoided by re-scheduling.

When an acceptable/workable schedule is finalized, a copy will be circulated to all interested parties, i.e., the various sub-contractors expecting vehicle access for each day.

No exception to this schedule will be permitted, except for Emergency Services vehicles which will always be exempt from any plan of this type.

As part of the SPSTM each movement will be categorized by vehicle type using a Traffic Light System, as follows:

- **Red** – Large vehicle, causing either partial or full road coverage during delivery/approach.
- **Amber** – Medium sized vehicle, causing partial road coverage during delivery.
- **Green** – Smaller vehicles that will sit on the site footprint during delivery.

These vehicles only impinge on the CEMP due to scheduling necessities, in order that no more than one vehicle of any type is attending site at any one time.

This Traffic Light System will be used by the DSTM to encourage ‘Red’ and ‘Amber’ type vehicles to attend the site outside of peak times and school opening and closing times. The DSTM will ensure that sufficient notice is given for this procedure to be effective. All deliveries will need to be booked in.

When a vehicle is approaching the site (approx. 30 minutes ETA from site) the driver will contact the DSTM to advise of the vehicle’s ETA and obtain final approval from the DSTM that the vehicle may complete its journey to the site.

The DSTM must ensure that the site approach will be clear of all other site related vehicles by the ETA, thus providing clear access for this approaching vehicle.

2.8.2. Road Routes

The road route to be used by each sub-contractor vehicle will be identified in their SPSTM (see above), however, they will be informed of any route restrictions to which they must adhere.

The proposed route from the site to A428/A1

- Upon egress from the site, vehicles will head north along Cromwell Road
- Turn right to travel east along Cambridge Road towards the A428
- Upon reaching the junction with the A428, vehicles can proceed east towards Cambridge, or head southwest to link up with the A1.

Access to the site will be the reverse of this route with most traffic anticipated from either the A428 or A1.

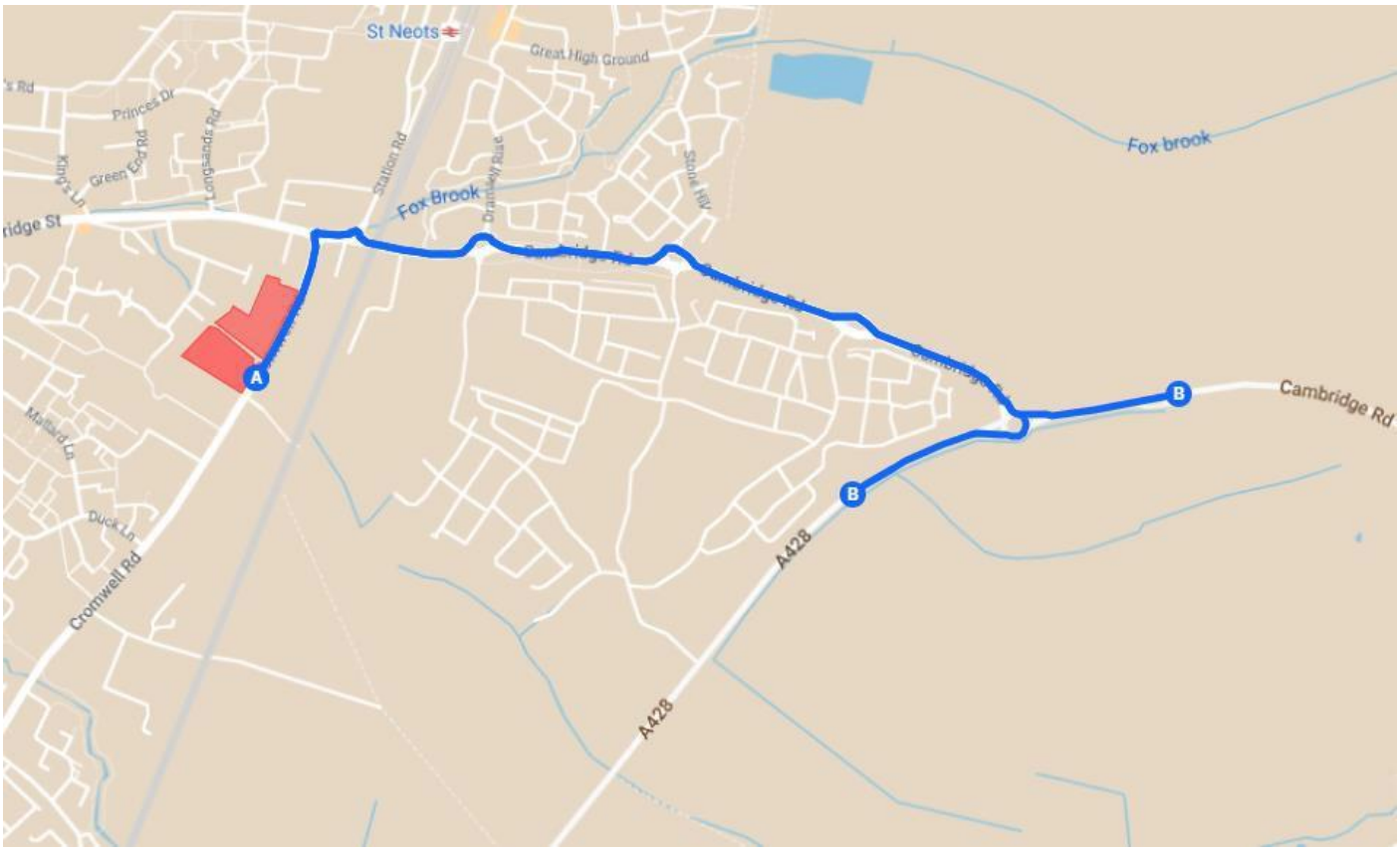


Figure 2: Route to and from A428

2.8.3. Site Access and Management on Arrival

The site is to have a register system. Operatives and visitors will be required to sign in via the site offices. Induction/briefings to be given to all site operatives and all visiting personnel who enter the site.

During any vehicle and plant movements to the site a Banksman will be placed at the unloading area to ensure the safety of all pedestrian users as well as the traffic using the highway. All site personnel and drivers of delivery vehicles are to be aware of the width of the road and the potential of other vehicles using the road.

All subcontractors will be made aware that all vehicles attending the site must be FORS and CLOCS compliant for relevant vehicles. Fors Silver is preferable as this ensures CLOCS compliance.

Our Site Manager will ensure FORS and CLOCS compliance are implemented, managed and checks are monitored in accordance with the Levels of Compliance: Checking and Monitoring Process. One example of how this will be managed on site is that one of our Banksman will be using the CLOCS checklist to ensure that all vehicles entering the site are complying.

Vehicle engines will be switched off whilst off-loading as per the no idling policy.

Date	Trade	Company Name	FORS compliant	Audit and Compliance checked
18/01/19	DEMO Contractor	ABC Sample	Yes	Yes

Table 1: Example of how FORS Management will be recorded on site.

Date	Time Vehicle Arrived on Site	Vehicle Registration	Trade	Company Name	FORS Compliant	CLOCS Vehicle Checking (3 Stages)

Table 2: Example of how CLOCS is being complied with on site.

2.8.4. Loading/Unloading Procedures.

Banksmen will be used during each delivery to stop all pedestrian movement whilst the vehicle accesses the loading/unloading area. Additionally, more banksmen will be assigned to monitor and control the traffic during the vehicle's maneuvers.

All delivery vehicles will access the site and unload within the designated area. Deliveries will be staggered and carefully arranged to avoid congestion and unnecessary disruption. No vehicles will be allowed to queue along Cromwell Road.

'Red Vehicles' should be able to be unloaded in approximately 45 – 60 minutes.
'Amber Vehicles' should be able to be unloaded in approximately 30 minutes.
'Green Vehicles' should be able to be unloaded in 15 minutes.

3. Construction Planning

3.1. Construction Planning

Works are expected to commence in early 2025. Each of the procured Contractors/Sub-Contractors will be required to inform their vehicular movements and timescales before commencing works on site.

Main Contractor: GPS Estates Ltd

Project Manager: Jordan Fender

Site Manager: Darren Gill

3.2. Construction Vehicles

It is anticipated that the following vehicles will be utilized during the project, among others:

- Dumpers
- Forklifts
- Vans
- Tipper lorries
- Rigids
- Articulated lorries

4. Access Arrangements for Vehicles

4.1. General

All personnel responsible for delivering material to and/or transporting material away from the site will be advised in writing of the proposed/agreed vehicle access route. It is very important that the route is followed and that all construction vehicles approach the site from the A428 to the North.

Vehicle arrivals/departures will be programmed and staggered to reduce the potential for unnecessary delay and congestion at the site.
The scheduling of material deliveries and waste collection will be managed to avoid excessive vehicles seeking to deliver/collect at any time, using a booking in system.

Suppliers will be given instructions asking the vehicle driver to call approximately 30 minutes ahead to ensure that the site is ready to receive a vehicle. In addition, verbal briefings of the access route will be provided to all suppliers, contractors and visitors prior to them undertaking a journey.

Staff and visitor parking will initially utilize the existing car park area, but a designated parking area will be established as the development phases progress.

Wheel washing facilities will be provided at all entrances and accesses so that debris does not leave the site and pollute the roads and areas near to the site. Wheel washes will be hard standing with pressure wash and tank for washdown water. These will be emptied by a tanker.

Photographs of the nearby roads should be taken prior to any work commencing and any damage seen afterwards will be addressed.

4.2. Loading/Unloading Arrangements

All deliveries and collections must be booked at least 24 hours in advance, so they can be scheduled in. All

deliveries will be made to a designated delivery area within the site footprint.

Drivers should ring 30 minutes before arriving on site to ensure there are no problems and that they will be able to load/unload. No vehicles will be allowed to queue.

When the vehicle has been loaded/unloaded, the banksmen will ensure that the vehicle is safe to move

away and will escort the vehicle as required whilst it moves away from the site, controlling the traffic and pedestrians as required.

Prior to the delivery of the construction vehicles the banksmen will be positioned to ensure control and safe conduct of the public and vehicles using the highway.

Deliveries to site will be split to suit the phases of development as appropriate to the North and South site entrances. No transfer of materials between the sites will be made via Cromwell Road.

4.3. Public Highway

Protection of pedestrians/vulnerable road users is of the highest importance to the Client and therefore if it is required that the pedestrian pavement be closed, all the appropriate licenses will be applied for, and all necessary paperwork will be put up and clearly visible.

The developer will agree a schedule which details the condition of the public highway in the immediate vicinity of the site with the Highway Authority prior to works commencing.

The entrances and access to the site will be constructed in such a manner that it will not affect the visibility of cyclists and vehicles using the road. It will be carried out under a short form 278 agreement with the Highway Authority.

4.4. Pedestrian and Cyclist Safety

Construction traffic poses a potential risk to pedestrian and cyclist/scooter safety. Vulnerable road users' safety will always be paramount. The use of Banksmen during all periods of operations at the site will assist pedestrian and cyclist safety. Additionally, the vehicles could be fitted with broadband reversing alarms rather than the traditional tonal beeps to alert pedestrians, cyclists and workers when the vehicle is reversing. The site is in an industrial area, so it is anticipated that pedestrian use is relatively low. Cromwell Road has pavement on either side, separated from the roadway by grass verges.

Cromwell Road is also designated as a cycle trail.

A dedicated traffic marshal/banksman will supervise all arrivals and departures of construction traffic.

All contractors and suppliers will be required to achieve accreditation for FORS (Fleet Operator Recognition Scheme) where applicable and to be signatories of CLOCS (Standard for Construction Logistics: Managing Work Related Road Risk).

4.5. Abnormal Loads

Several cranes are expected to be used on this project, and if short term road closures are required to undertake any element of the works, then the appropriate consents and licenses will be obtained. If required, road closures and pavement closures will be planned, in accordance with the relevant authorities and in compliance with prescribed notice periods.

Notice regarding planned closures and diversions of roads and footpaths forming part of the site will be given to the Council, the Police, Fire Brigade, and other emergency services.

5. Sustainability

The Client takes a very conscientious attitude towards the sustainability of all its projects, and its impact on the environment both globally and locally. Commencing at the design stage of the project, many sustainability related decisions have been made, which impact directly upon the traffic movements to and from the site and minimization of such movements by both commercial and domestic vehicles.

Although some parking will be available on site, operatives should be encouraged to utilize public transport as much as possible. The site is well connected with St Neots train station less than 1km away, and several bus routes servicing Cromwell Road. The nearest bus stop is Cromwell Gardens, located immediately outside the site boundary.

The site will be seeking to reduce their carbon usage at every opportunity. The decision, although not having a direct impact on the CEMP, contributes to the overall striving for optimization of sustainability targets and intentions as well as supporting the other sustainability aims and objectives of the project.

6. Vulnerable Receptors

The Client is aware that the site borders both industrial and residential properties and therefore these neighboring residents are the nearest vulnerable receptors. These neighbors will be the most at risk from any dust or noise created during this project, however the Client has also recognized the following as some of the other vulnerable receptors in the vicinity of the site.

- Residents - <50m
- Local businesses - <50m
- Community Centre – 90m
- Local Schools - 100-300m
- Hembrook House Care Home – 100m

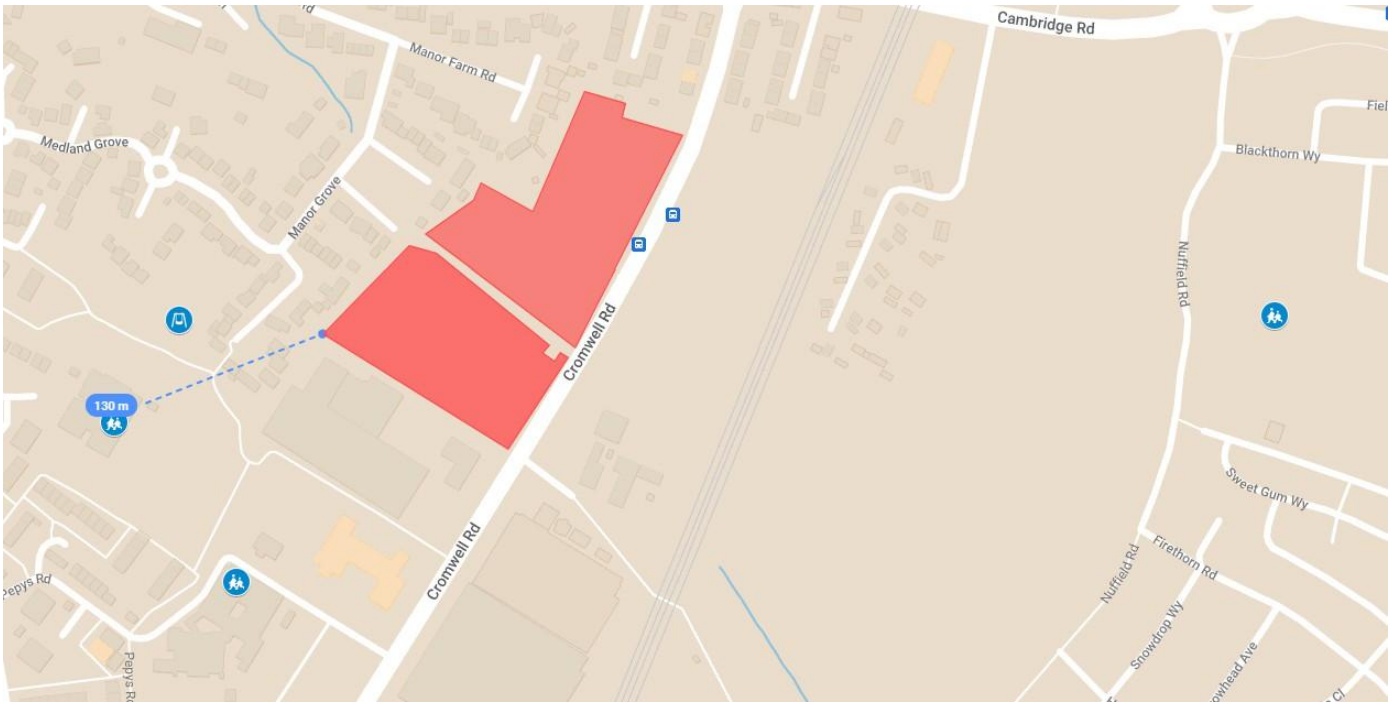


Figure 3: Sample of Sensitive Receptors

The sensitive receptors within 500m of the site will be contacted as part of the Stakeholder communication plan. As part of this plan, they will be sent a newsletter which will include contact details for the site.

This will be for their use, should the occupiers have any issues or complaints they want registered, as well as communicating the program of works and the nature of the construction work that will be carried out. The Site Manager or appointed Community Liaison Manager will continue to update these receptors throughout the project, maintaining a good relationship with all local groups necessary.

At least three weeks before any construction work begins on site, all neighboring occupants will be informed in writing of the type and duration of the work that will be carried out on site. Contact details for the site's Community Liaison Manager will be displayed on the site hoarding for inquiries and complaints

throughout the duration of the work. Regular progress updates should also be provided to neighboring occupants. Any complaints will be promptly addressed.

6.1. Dust and Dirt Minimization

Air pollution and nuisance dust emissions from construction activities are issues that require close attention and consideration.

Dusty emissions escaping the work area may cause nuisance through, for example, surface soiling, loss of visibility due to deposition, and effects on flora and fauna. Since it is difficult to suppress dust once it is airborne, it is preferable, where possible to prevent dust from being generated in the first place. Therefore, a philosophy for the prevention of dust formation in the first place should be adopted. Dealing with dust should follow the regime:

- Prevention
- Suppression
- Containment

These three principles are well established and central to the dust control strategies. They follow a hierarchy to control the emissions.

The Client will ensure that their own employees working on the site and all sub-contractors will always follow the best practice to control and limit emissions of gaseous and particulate pollutants into the atmosphere from the construction activity.

The following Best Practicable Means (BPM) will be implemented, in accordance with the Supplementary Planning Guidance by the GLA (2014) for the Control of Dust and Emissions:

- All construction vehicles removing demolition spoil and soil will be sheeted over before leaving and the sheeting checked to see that it is in good condition.
- The site manager will ensure that the perimeter of the site is patrolled twice a day to ensure that the footways are kept clear of any construction debris and the hoarding/Heras fencing is clean.
- The hoarding and Heras fencing will be regularly cleaned using wet methods, where possible to prevent re-suspension of particulate.
- The site manager will also undertake weekly on and off-site inspections where receptors are within 100m of the site boundary to check for soiling. Any cleaning will be carried out where necessary.
- Contact details for the site Community Liaison Manager will be displayed on the site boundary so that local residents and businesses are able to contact the developer to raise any complaints.
- Machinery and dust generating activities will be located furthest away from receptors where possible.
- All vehicles leaving the site will be subject to inspection for dust and dirt. Wheel washing facilities will be present at all entrances/exits to allow the cleaning of wheels and vehicles.
- Each access route will incorporate an asphalt surface for a minimum of 20m from the junction with the public highway.
- Road sweeping to clean the roads or footpaths in the vicinity of the site will be used if required.
- Sufficient bins and waste facilities will be installed on the site.
- Dry sweeping of large areas will be avoided.

- Any materials that have the potential to produce dust will be removed as soon as possible.
- Sand and aggregates which are to be stored will not be allowed to dry out.
- Stockpiles will be covered to prevent wind and whipping. Any loose materials will be removed as soon as possible.
- The site will have spillage kits readily available. Any spillages will be cleaned using wet handling methods.
- Facilities to minimise the formation and spread of dust by continuous fine water spray will be used if necessary.
- Specific operations which have high potential to produce dust will be fully enclosed.
- Any cutting equipment will use water as a dust suppressant or suitable local extract ventilation.
- Any chutes used will be enclosed and skips covered.
- No materials will be burnt on site. All excess material will be reused or recycled on or off-site.
- Cement, sand, fine aggregates, and other fine powders will be sealed after use and, where necessary, stored in an enclosed or bunded container.
- Where possible, materials will be kept damp to reduce the risk of drying out.

6.2. Dust Management Controls

The Client is conscious of the effect that the construction work has on the air quality and therefore, management controls will be implemented throughout the construction phases to mitigate any nuisance caused by dust, these will as a minimum:

- Where practicable, ready mixed materials (e.g., use of ready mixed concrete) will be used to replace those that would otherwise have the potential to produce dust.
- Material stockpiles (e.g., granular materials, topsoil, excavated soils) will be minimized and positioned away from sensitive receptors where possible.
- Vehicles transporting materials capable of generating dust to and from site will be suitably sheeted on each journey to prevent release of materials and particulate matter. The sheeting material will be maintained in good order, free from excessive rips and tears.

6.3. Dust Control Monitoring

Other than monitoring the activities outlined above, it is not anticipated that specific monitoring to assess environmental nuisance will be required during the construction works, provided the control measures outlined above are put in place. However, in the event of a complaint, the Client will take the appropriate action to deal with the problem.

The Site Manager will keep records of the result of any monitoring undertaken. Additionally, a record of all environmental incidents that result in air pollution and remedial action taken will be recorded in an Environmental Incident Log. Complaints received will be recorded and investigated by the Site Manager and recorded together with any action taken in the incident log. This will be kept in the Site Office and made available to the council if requested.

6.4. Waste Minimization

6.4.1. Site Waste Management Plan

A Site Waste Management Plan (SWMP) will be implemented for this project. A SWMP is intended to define roles and responsibilities for the construction project with respect to waste management and minimization. The SWMP will identify waste streams and re-use, recycling, and reduction targets.

It is an active document that will be updated regularly and will be used to track waste movements, ensuring that Duty of Care has been complied with. It will also provide a method of compiling this information into an auditable document.

6.4.2. Solid Waste

Works carried out during the construction phase must consider the waste hierarchy, therefore there is a need to consider reducing the amount of waste produced during the works.

Prior to commencing construction, the Client will identify the means of reducing waste, including (but not limited to) consideration of the following:

- Use of offsite manufacture for products, i.e., timber frames.
- Use of returnable pallets.
- Retention of materials in their packaging until required.
- Ensure surplus materials are returned to suppliers.
- Segregation of waste at source where practical.
- Re-use and recycling of materials off-site where re-use on site is not practical.

6.4.3. Material Storage

A designated material storage area will be provided with appropriately segregated areas for storage of different waste materials, each of which will be provided with secondary containment, typically 110% of the volume of material stored. The Client will establish a dedicated hazardous material storage area within its site compound (e.g., for fuels and oils).

Spill kits will be available in the materials storage area and around the site.

All COSHH items are to be clearly marked and stored safely. Records of all COSHH items being used will be recorded within the site files.

Material storage areas will be inspected on a regular basis, but at least once a week as part of the scheduled site audit.

7. Noise

Noise and vibration caused by site activities will be controlled as far as reasonably practicable so that surrounding residents and vulnerable receptors are protected from excessive levels arising from the construction process.

All hand operated tools and equipment shall be effectively silenced and will bear the manufacturer's guaranteed maximum sound level generated.

The recommendations made in BS5228:2009 "Code of Practice for Noise and Vibration control on Construction and Open Sites" will be adopted by the Client as well as all contractors and subcontractors.

The contractor will work under the guidelines set out in the legislation below:

- Public Health Act 1961
- Health and safety at Work Act 1974
- Control of Pollution Act 1974
- Environmental protection Act 1990
- The Noise at Work Regulations 2005
- British Standard 5228

The Contractor will aim to keep noise levels to a minimum. This will be carried out by the following:

- All works will be carried out using Best Practice Methods (BPM), in accordance with BS5228-1&2:2009+A1:2014
- Ensuring all plant is fitted with the correct working exhaust mufflers and noise suppression kits.
- Changing where possible, methods and processes to keep noise levels low.
- Position plant as far away from residential property as physically possible.
- Limit the hours worked on noisy operations.
- All engines of vehicles will be switched off when not in use as per site rules regarding anti-idling.
- All vehicles, compressors and plant will be equipped with effective silencers and noise reducing insulation in accordance with BS5228:2099 part 1.

Guidance provided by the Health & Safety Executive indicates a safe working level of less than 80dB, before ear protection is required by operatives. In the case of sensitive receptors, a maximum of 65dB at the receptor is considered best practice (The Association of Noise Controllers).

8. Vibration

8.1. General Guidance

Guidance given to BS 5228-2 2009 will be used to assess the likely impact of vibration on building occupants and is reproduced below.

Vibration Level (PPV)	Effect
0.14 mm/s	Vibration might be perceptible to the most sensitive situation for most vibration frequencies associated with construction. At lower frequencies, people are less sensitive to vibration.
0.3 mm/s	Vibration might be just perceptible in residential developments.
1.0 mm/s	It is likely that vibration at this level in residential / commercial environments will cause complaints but can be tolerated if prior warning and explanation has been given to major stakeholders.
10.0 mm/s	Vibration is likely to be intolerable for any more than a brief exposure at this level.

The activities which cause the most vibration on a construction site are piling activities using heavy plant. It is anticipated that piling activities will be present at different times during the development, given the phased nature of the construction. It is also anticipated that other mechanical plant, such as bulldozers, cranes etc. will be present for most of the development.

8.2. Construction Phases

The Main Contractor will ensure that vibration nuisance is kept to a minimum and will be within the acceptable level of 1mm/s PPV.

However, should they receive a complaint, monitoring equipment will be installed to measure the level of vibration being caused and if it is deemed necessary, measures will be implemented to reduce the nuisance of vibration.

8.3. Relevant Documents

BS 5228-2 2009+a1:2014 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration.

Should any vibration-related complaints be received, they must be relayed to the Site Manager who will investigate each complaint and keep a record of all environmental incidents and remedial action taken in an environmental incident logbook.

9. Artificial Lighting Management

9.1. General Guidance

The potential sources of artificial light intrusion whilst work is carried out in connection with the construction of this project are likely to include (but not restricted to):

- Artificial lighting usage on site
- Vehicle deliveries

The Main Contractor will implement the necessary management and operational controls to minimise any adverse effects of artificial lighting on the local community from works' activities, referencing the guidelines from the Institute of Lighting Professionals.

9.2. Artificial Light Management Controls

A Lighting Scheme and Artificial Light Management Controls will be made in accordance with Guidance Notes for the Reduction of Obtrusive Light from the Institute of Lighting Professionals, particularly the objective to keep glare to a minimum by ensuring that the main beam of all lights directed towards any potential observer is not more than 70°.

Lighting will be designed to limit obtrusive light to sensitive receptors surrounding the Project site whilst considering national, regional and local planning policies. Sensitive receptors include residents, business and key ecological factors (bats, birds).

The general design principles that will be used to minimise the impact of key lighting receptors and to meet environmental requirements are:

- To design for optimal light levels which provide enough illumination to safely undertake operational activities while limiting their impact on sensitive receptors.
- To locate significant sources of light away from sensitive landscape and ecological receptors.
- To include full horizontal cut-off luminaires to prevent upward light with shields and baffles that can be directed downwards rather than horizontal to limit light pollution onto sensitive areas.
- To use columns of a minimum height. When lighting a large area, preference will be given to several lower units rather than a tall wide beam lighting unit to limit trespass, glare and skyglow.
- To use controls to avoid unnecessary illumination and to ensure efficient luminaires are used.
- To use automated devices to switch lights on and off according to activity and ambient levels.
- To direct light to the area where it is needed to avoid reflectance from buildings and structures and to avoid illumination building facades.
- The lighting will incorporate festoon lighting and portable LED lighting powered by a temporary mains electricity supply. This is envisaged to maintain the minimum lux levels for the required job specifics but minimize light pollution.
- All security lighting will be PIR controlled.

9.3. Details of Timings of Lighting Requirements

Artificial lights may be required during the following hours dependent upon season: Monday to Friday 4.00pm-6.00pm. Some low-level lighting may be required outside of these hours to allow security staff to safely patrol the site.

Depending on the conditions in the workplace, illumination may be required during other periods of the day, but best endeavors will be made to keep these to a minimum.

10. Water Management

10.1. General Guidance

It is vital that surface water effluent discharge is properly managed and controlled on-site to protect the environment. Any pollutants entering surface water drains could end up in the nearby streams or rivers.

Throughout the construction phase, the pollution prevention measures detailed below will be required to be implemented. The measures detailed in the following sections will be protective of sensitive receptors and ensure compliance with applicable regulations (as presented in Appendix C).

This scheme has been submitted to the Lead Local Flood Authority (LLFA).

10.2. Site Drainage

10.2.1. Drainage Systems

A surface drainage plan will be submitted for approval (if required).

10.2.2. Materials Storage Area

The Main Contractor will establish a dedicated hazardous material storage area within its site compound (e.g., for fuels and oils).

The material storage area will be provided with appropriately segregated areas for storage of different materials, each of which will be provided with secondary containment, typically to 110% of the volume of material stored (or to meet the requirements of applicable regulations, see Appendix C).

Spill kits will be available in areas of material storage. All COSHH items to be clearly marked and stored safely. Records of all COSHH items being used will be recorded within the site files.

Materials storage areas will be inspected on a regular basis, but at least once per week as part of the scheduled site audit.

It will be ensured that refueling is carried out, away from water sources and drains, if possible, in accordance with the following general principles:

- An emergency spill kit containing sand or suitable absorbent materials is to be kept readily available in case of spillage in the main fuel storage area. All personnel will be trained on the use of these spill kits and any other emergency procedures.

- All bowsers must be equipped with an automatic cut-off mechanism.
- All refueling operations must be supervised by trained personnel.
- Valves and taps must not be left open unattended and must be locked when not in use.
- Personnel carrying out refueling are to be made aware of this code of practice.

10.2.3. Plant Maintenance Area

Plant maintenance will, in general, be carried out off-site.

Daily inspections of plant by the plant operator will identify whether maintenance is required.

Routine minor maintenance such as refueling and oil top up will be carried out on-site, with suitable precautions taken, e.g., away from surface water courses, on areas of hard standing and in accordance with the refueling principle.

11. Ecology

11.1. Previous Ecology Reports

A Preliminary Ecological Assessment (PEA) and an Arboricultural Implications Assessment (AIA) were carried out at the site in 2022. The findings of said reports will be discussed below. Details of the reports can be found in 11.5.

11.2. Considerations and Constraints

The table below details the potential importance of the site for key species as determined by the PEA.

Important /Protected Species/Species Group	Geographical Value	Possible Important Receptor/Feature
Plants	Negligible	No
Invertebrates	Negligible	No
Amphibians	Negligible	No
Reptiles	Negligible	No
Birds	Negligible	No
Bats	Negligible	No
Hedgehog	Negligible	No
Badgers	Negligible	No

As noted in the PEA, the site is considered to have low ecological quality and be of negligible importance to any of the key marker species.

11.3. Ecological Protection Measures

11.3.1. Animals

No further surveys were considered necessary, but certain mitigations were suggested. Where possible, clearance of any shrubs within the site will take place outside of the bird nesting season (March-September). Where this is not possible, a certified ecologist will walk the site prior to any works commencing, to determine the presence of nesting birds. If nests are found, works will be delayed until such time as the ecologist advises otherwise.

Additionally, a walkover for the presence of hedgehogs will take place at the same time, should the work be carried out in peak season. Should hedgehogs be found, they will be moved to a safe area, without disruption to the works. Checks for hibernating hedgehogs will also be undertaken should any clearance work take place in the winter months.

11.3.2. Trees

The Arboricultural Implications Assessment provides details of the trees on site and advises on those that are viable for removal and those that should be retained. Several trees are recommended for removal, some because of their condition, others because of their location within the proposed development. All trees on site are considered of low importance, being mainly young or semi-mature. The PEA concluded no viability for bat roosts.

Careful management of the site will take place to ensure retained trees are sufficiently protected, and works will be timed to minimise the disturbance on any tree structures.

The proposed development will see a significant improvement in the biodiversity of the site, with a predicted biodiversity increase as much as 75%.

11.3.3. Soil Management

The site contains a significant area of undeveloped land, the topsoil of which is to be retained. A Soil Management Strategy, including a Method Statement, will be implemented at the site. This will involve the stripping and reuse of existing topsoil, including stockpiling the material on site. The Soil Management Strategy can be found in Appendix G, with key considerations detailed below.

The Soil Management Strategy will be implemented on site, including but not limited to the following considerations:

- Soil handling will only take place when soil is in a friable state
- Unnecessary compaction by trampling or trafficking will be avoided
- Should damage occur to the soil structure, cultivation works will be carried out
- Vegetation will be cleared from the soil prior to its removal
- A loose-tip method will be employed

- Topsoil stockpiles will be in an area where it can be left undisturbed. Stockpiles will be fenced off from other site activities
- Once stockpiled the soil will be sown with ryegrass seeds to stabilize the surface of the stockpile

11.4. Roles and Responsibilities

It is necessary to ensure that the project team and site operatives are aware of the details of personnel and lines of communication necessary for the full implementation of this CEMP.

The CEMP document will be reviewed by the Site Manger (TBC) whose duties will include:

- Oversee the implementation of the CEMP on site.
- Arrange appropriate inspections to ensure compliance with the CEMP.
- Monitor and record implementation of any corrective action required.
- Monitor the developer's management of environmental complaints.
- Ensure that all appropriate ecological reports etc. are kept in the site office available for reference at any time.
- Arrange a "Toolbox talk" for any operatives undertaking work with risk of damaging any ecological features mentioned within this document. This will include a summary of the CEMP and appropriate precautions to be implemented.

11.5. Relevant Documentation.

- British Standards Institution (2013). BS42020 – Biodiversity – Code of practice for planning and development.
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey. A technique for environmental audit.
- Ministry of Housing, Communities and Local Government (2019). National Planning Policy Framework.
- Natural England (2011). Horizon-scanning for invasive non-native plants in Great Britain. Natural England Commissioned Report NECR053.
- Preliminary Ecological Appraisal – ELMAW Consulting – March 2020
- Arboricultural Implications Assessment – Andrew Belson – May 2020
- Soil Management Strategy - TBC

12. Complaints

The Client is committed to delivering a well-managed construction project and promoting excellent neighbor relations. If any complaint is received in relation to the work or behavior on the construction site, then it will be dealt with by the Site Manager.

A response time of no longer than 24 hours will be implemented when responding to complaints received by the Client.

A record of the complaint together with the results of any investigation and any actions taken will be recorded in an Incident log kept in the site office. This will be available to the council upon request.

13. Considerate Constructors Scheme

The Client will carefully consider the viability of signing up to the Considerate Constructors Scheme.

Participation in the scheme will ensure and commit the construction project and its workers to provide competent management, efficiency and awareness of environmental issues. In addition, appropriate monitoring will be undertaken to review practices and assess performance.

Appendix A: Relevant Air Legislation

Relevant Legislation	Description
Clean Air Act 1993	Bans emission of dark smoke from chimneys and furnaces, sets minimum chimney heights, and creates smoke control zones.
Clean Air Strategy 2019	This strategy sets out our aim to reduce particulate matter emissions by 30% by 2020, and by 46% by 2030.
Climate Change Act 2008	Sets 2050 as the target for reducing greenhouse gas emissions outlines a carbon budgeting system, greenhouse gas emissions trading schemes, financial incentives for businesses to reduce waste and recycle more and powers to charge for single use bags.
Environmental Permitting (England and Wales) Regulations 2007 SI 3538	Introduces a system for environmental permits (and exemptions) for industrial activities and waste operations, including landfill and waste incineration, and sets out the powers, functions, and duties of the regulator.
Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2002 SI 528	Controls the production, marketing, use of, trade in, emission and transport of specified ozone-depleting substances.
Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2005 SI 2773	Sets maximum levels of organic solvents that can be contained in paints, varnishes and vehicle refinishing products (such as cleaners, primers and fillers).

Appendix B: Relevant Noise Legislation

Relevant Legislation	Description
Control of Pollution Act 1974 SI 1974/40	Part III of COPA sets out control of noise pollution, and specifically sections 60-61 set out requirements for construction sites.
Control of Noise (Codes of Practice for Construction and Open Sites) (England) Order 2002 SI 2002/461	Approves four British Standards Institution codes of practice for appropriate methods of minimizing noise and vibration from construction and open sites in England. Compliance with the British Standards cited in the Order ensures compliances with COPA.
Environmental Protection Act 1990 (sections 79-81) SI 1990/43	Defines within England, Scotland, and Wales the legal framework for duty of care for waste, contaminated land and statutory nuisance which includes noise. Local authorities are empowered to deal with noise nuisance.
Clean Neighborhoods and Environment Act 2005 SI 2005/16	Sets out mechanisms by which noise nuisance caused by intruder alarms may be dealt with.
Noise Emission in the Environment by Equipment for Use Outdoors Regulations 2001 SI 1701 (as amended)	Establishes maximum noise levels for equipment used outdoors, mainly in construction and land maintenance, such as generators, lawn mowers, and compaction machines and concrete breakers.

Appendix C: Relevant Water Legislation

Relevant Legislation	Description
Water Resources Act 1991	Sets up the regime, now controlled by the Environment Agency, to conserve, manage and control pollution of water resources, abstraction and impoundment, and offences for contravening and organizing flood defenses.
Water Industry Act 1991	Consolidates previous legislation on water supply and sewerage services (including trade effluent consents) and opens the market to allow private sector companies to compete to be appointed as water and sewerage undertakers.
Anti-Pollution Works Regulations 2999 SI 1006	Made under the WRA 1991. Sets out the contents of anti-polluting works notices, how to appeal against such notices, and how to claim compensation for access rights in connection with anti-pollution works.
Control of Pollution (Applications, Appeals and Registers) Regulations 1996 SI 2971	Made under the WRA 1991. Sets out procedures for applying for or varying consents for discharge into controlled waters and appeals to the Secretary of State. Details the information the Environment Agency must keep in water pollution control registers.
Control of Pollution (Oil Storage) (England) Regulations 2001 SI 2954	Imposes general requirements for preventing pollution of controlled waters from oil storage, particularly fixed tanks, or mobile bowsers, by setting out minimum standards for tank construction and secondary containment. Makes contravention a criminal offence.
Groundwater Regulations 1998 SI 2746	Empowers the Environment Agency in England and Wales and SEPA in Scotland to prevent direct or indirect discharge of certain dangerous substances to groundwater and control pollution resulting from the discharge of those and other substances.
Water Act 2003	Sets out the framework for abstraction licensing, regulates impoundments, increases competition in water supply and includes measures for drought management and flood defense work in England and Wales.
Environmental Damage (Prevention and Remediation) Regulations 2009 SI 153	Implemented the European Directive on Environmental Liability. Makes operators responsible for an imminent threat of, or actual, environmental damage, as defined in the Regulations. With respect to the controlled waters environmental damage includes an adverse effect that could result in deterioration.

Appendix D: Wildlife Law and Planning Policy

Species	Legislation
Bats	All species of bat and their breeding sites or resting places (roosts) are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and Section 9 of the Wildlife and Countryside Act 1981. It is an offence for anyone intentionally to kill, injure or handle a bat, to possess a bat (whether live or dead), disturb a roosting bat, or sell or offer a bat for sale without a license. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.
Badgers	Badgers and their setts are protected under the Protection of Badgers Act 1992 which makes it an offence to kill, injure or possess a badger; interfere with, damage, or destroy a badger sett including obstructing access to a badger sett; cruelly treat or harm a badger; or disturb a badger in a sett.
Birds	All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to kill, injure or take wild birds; take, damage, or destroy the nest of wild birds while it is in use or being built; or take or destroy the eggs of wild birds. Certain bird species are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (as amended). Under this legislation they are afforded the same protection as all wild birds and are also protected against disturbance whilst building a nest, or on or near a nest containing eggs and or unfledged young.

The planning policy imposes responsibilities on planning applicants to consider protected species and habitats at development sites, with the goal of avoiding a decrease in the diversity of species and habitats that are considered priorities in the UK because of development.

Legislation	Description
National Planning Policy Framework (NPPF)	The National Planning Policy Framework requires the promotion of sustainable development, including the achievement of net gains for nature and the conservation and enhancement of the natural environment and reduction of pollution through planning. Planning should prioritize preserving and restoring priority habitats, species populations and ecological networks, and if significant harm from a development cannot be avoided, mitigated, or compensated for, planning permission should be denied.
Natural Environment and Rural Communities Act (NERC Act)	Section 40 of the Natural Environment and Rural Communities Act 2006 places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity.

Priority Habitats and Species	The NPPF 2023 defines priority habitats and species as those included in the England Biodiversity List published by the Secretary of State under the NERC Act 2006. The S41 list guides decision-makers in preserving biodiversity when carrying out their functions. The S41 list includes 56 habitats and 943 species of principal importance, identified as conservation priorities in the UK Biodiversity Action Plan and the UK Post-2010 Biodiversity Framework. The habitats range from upland hay meadows to lowlands mixed deciduous woodland, and freshwater and marine habitats. Hen Harrier has also been added to the list due to concerns over its low population in England.
ODPM Circular 06/2005	This 2005 Government Circular provides guidance on nature conservation in the planning system in England. The impact of development on priority habitats and species, along with England Biodiversity Strategy policies, can influence the preparation of planning strategies and decisions. The presence of a protected species is a key factor in granting planning permission, and ecological surveys should be conducted if the species is likely to be affected. Surveys should not be required unless there's a reasonable chance the species is present. If it is, measures to protect it should be established before permission is granted.

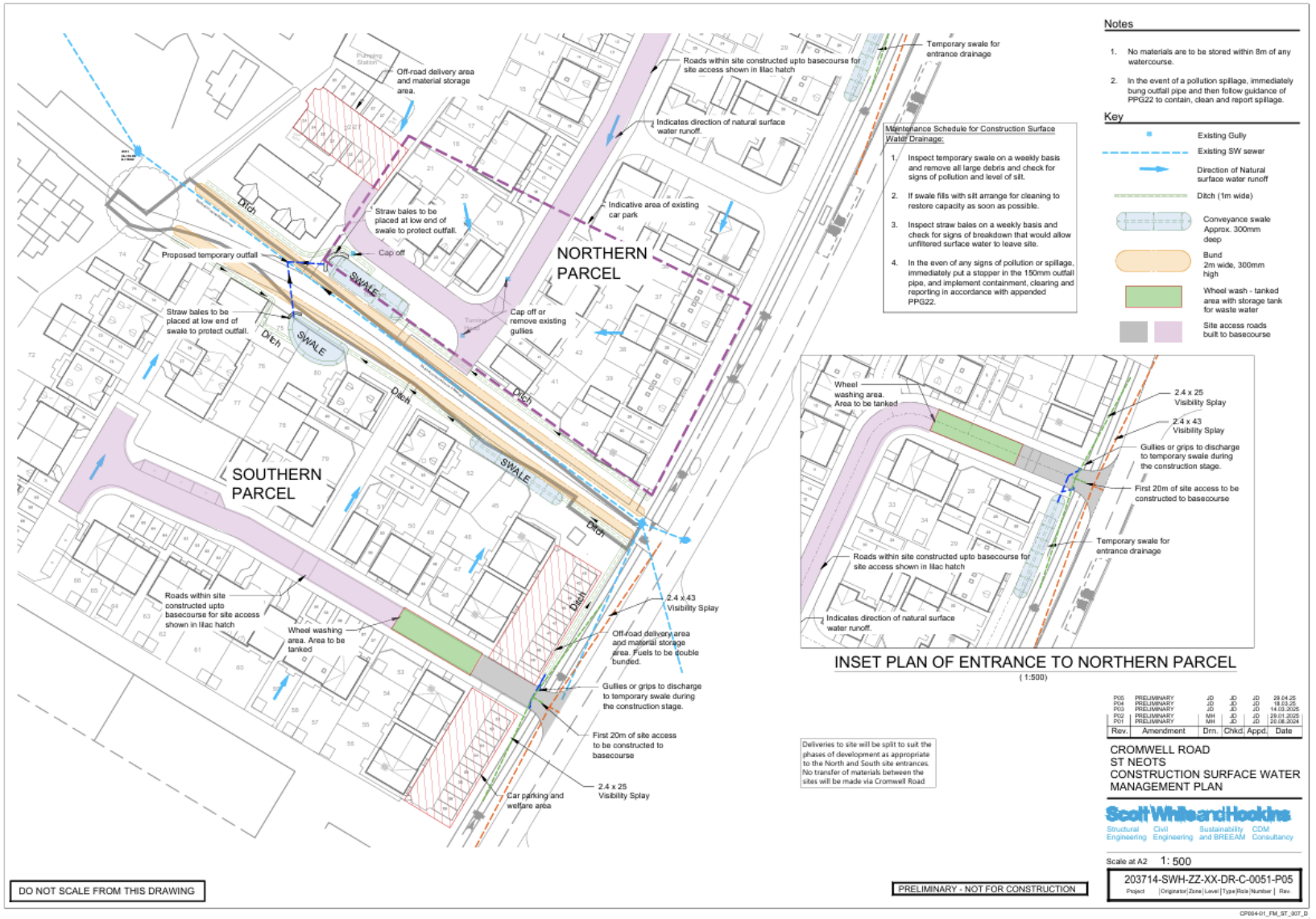
Appendix E: Initial Site Set Up & Layout

Initial set up will largely incorporate existing hard standing areas for locations of material and waste storage, along with site welfare facilities.

As the development progresses, it will become necessary for designated areas to be incorporated into the south site.



Appendix F: Updated Site Set Up & Layout



Appendix G: Soil Management Strategy

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LAND AT CROMWELL ROAD, ST NEOTS

SOIL MANAGEMENT STRATGEY

Prepared on behalf of:

GPS ESTATES LTD

TOHA Document Ref:	TOHA/24/4517/HM
Document Issue:	Issue 1
Document Issue Date:	September 2024

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1.0 INTRODUCTION

Tim O'Hare Associates LLP (TOHA) was commissioned by GPS Estates Ltd to prepare a Soil Management Strategy for the Land at Cromwell Road site in St Neots.

The authority to carry out the work was confirmed in an email from Jordan Fender of GPS Estates dated 29th August 2024.

1.1 Purpose

It is understood that the Land at Cromwell Road site includes a new residential development with associated infrastructure and soft landscaping.

The supplied *Condition 18 xii* requires a Soil Management Strategy to be prepared to support the Construction Environmental Management Plan.

Clause xii states:

"Soil Management Strategy including a method statement for the stripping of top soil for reuse; raising of land levels (if required); and arrangements (including height and location of stockpiles) for temporary topsoil and subsoil storage to BS3882:2015."

1.2 Actions

To inform the Soil Management Strategy, a desk study review of available information provided by GPS Estates Ltd was conducted to determine the baseline soil conditions of the site. This information was used to inform guidance on topsoil stripping and stockpiling methodologies to help preserve soil quality for future landscape re-use.

Matters relating to geotechnical and geo-environmental issues are outside the scope of this document.

2.0 DESK STUDY REVIEW

2.1 Documents Reviewed

The following documents were reviewed:

- *GPS Estates Ltd – Ground Investigation Report – Report No. 19.12.013 - dated March 2020;*
- *GPS Estates Ltd – Cromwell Road, St Neots – Soft Landscape Plan – Drw No. 3961.Cromwell.GPS.LS, dated 11/06/2024*

2.2 Ground Conditions

The ground investigation report contains a series of trial pit logs. A summary of the ground conditions recorded to a maximum depth of 1.0m within the Ground Investigation report is presented in Table 1 below.

Table 1: Summary of Ground Conditions

Depth (m bgl)	Strata	Description
0.00 – 0.10/0.50m Average 0.29m	Topsoil	Dark brown, slightly sandy organic silty clay with gravel. Gravel comprises of flint, quartzite, chalk and wood.
0.15/1.20m – 0.20/ 2.20m	Alluvium	Soft to firm brown, slightly sandy slightly gravelly silt clay with gravel of chalk and flint with pockets of organic matter/ decaying wood.
0.10/1.40m – 0.20/1.80m	River Terrace Deposits	Medium dense brown and light brown silty very sandy gravel with low cobble content.
0.20/2.50m – 0.20/2.50m	Oadby Member	Slightly gravelly silty clay with gravel of flint and chalk.

2.3 Proposed Landscape Design

The supplied *GPS Estates Ltd – Soft Landscape Plan – June 2024* anticipates the following landscape types will be established in the new landscape areas.

- tree planting (containerised, 8-10cm, 10-12cm, 12-14cm girth and dwarfing rootstocks)
- shrubs planting (containerised, 1L, 1.5L, 2L, 3L pots)
- hedge planting (containerised, 2L pots, and bareroot, 45cm-60cm, 1.2m height)
- amenity grass (turf)

These landscape environments will require the reinstated soil to have a well defined soil structure, with adequate drainage and aeration properties.

3. TOPSOIL STRIP & STOCKPILING

3.1 Soil Handling Principles

The site topsoil and subsoil (alluvium) are considered to be heavy in texture (dominated by clay and silt-sized particles). Such soils are heavily dependent on having a well-defined soil structure in order to provide adequate aeration and drainage for plant root function and growth.

It is therefore important to maintain the physical condition of the soil and avoid structural damage during all phases of soil handling (e.g. stripping, stockpiling, respreading, cultivating, planting/turfing).

Soil handling operations should be carried out when the soil is in a *Non-Plastic* (friable) state. This is defined when the *Soil Moisture Content* of the soil is at least 5% below its *Lower Plastic Limit*.

It is important to ensure that the soil is not unnecessarily compacted by trampling or trafficking by site machinery, and soil handling should be stopped during and after heavy rainfall and not continued until the soil is friable in consistency. During the execution of the works, trafficking should be kept to a minimum and every effort should be made to ensure that as little damage as possible is done to the soil structure.

If the soil is structurally damaged and compacted at any stage during the course of soiling or landscaping works, it should be cultivated appropriately to relieve compaction and to restore the soil's structure prior to any planting, turfing or seeding.

3.2 Pre-treatment of Vegetation

It is good practice to minimise the quantity of vegetation entering the topsoil stockpile in order to minimise the formation of anaerobic conditions during storage and to avoid increasing the carbon to nitrogen ratio of the topsoil. As such, in advance of soil stripping, the topsoil should be cleared of any surface vegetation by a method suited to the vegetation type present.

3.3 Topsoil Strip Method

Any large stones, waste or non-topsoil materials (>100mm) should be removed from the area(s) to be stripped prior to topsoil stripping.

The loose-tip method, using a hydraulic excavator and dump trucks, is recommended to strip, transport and stockpile the topsoil.

The loose-tipping method involves the use of a tracked hydraulic excavator, fitted with a flat edged grading bucket to strip the topsoil and load it into a dump truck (when the soil is in a *Non-Plastic* (friable) state).

The dump truck, running along a pre-designated route, then transports the topsoil to the desired stockpile location.

This operation should be monitored to ensure that the topsoil is recovered without the inclusion of subsoil. Cross contamination with other soil could significantly degrade the quality of the topsoil.

3.4 Depth of Topsoil Strip

The depth of strip could be provisionally set at **290mm** (the average topsoil thickness) to enable the topsoil to be recovered without the inclusion of significant quantities of subsoil. However, when using an excavator to strip the topsoil, the colour differences between the topsoil and the subsoil layers can often be seen by the machine operator carrying out the topsoil strip so that some discretion can be made.

3.5 Topsoil Stockpile Location

The topsoil should be stored in an area(s) of the site where it will not interfere with other site operations so that it can be left undisturbed during other earthwork and construction activities. Records should be kept identifying the topsoil source and stockpile location.

The topsoil should be stored separately to subsoil and other site-won excavated materials.

In advance of the topsoil strip, the area that is to be used for storing the topsoil should be cleared of vegetation and any other debris that could reduce the quality of the stored topsoil.

3.6 Topsoil Stockpiling Method

The stockpiling method is described below and is illustrated in **Figure 1** overleaf.

a) The process requires the topsoil to be transported to the storage area in a dump truck, where it is 'loose tipped' in a line of heaps.

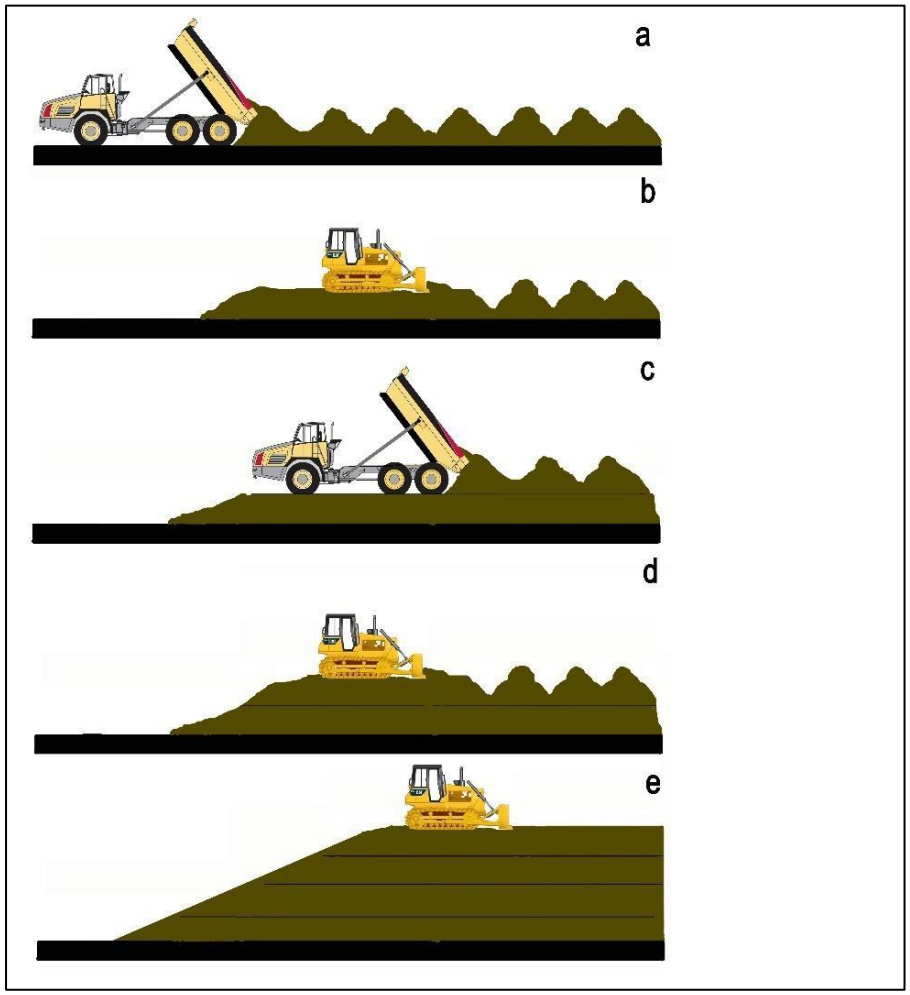
b) and **c)** Once the heaps cover the footprint of the entire storage area, a tracked dozer or excavator should level the heaps to form a level, stable platform for dump trucks to travel across to tip a second layer of topsoil.

d) This sequence can be repeated until the necessary stockpile height is achieved. A maximum height of 4m is considered acceptable for dry, non-plastic topsoil (health & safety permitting).

As an alternative to traversing dump trucks on the heap, the topsoil can be lifted onto the heap using a large, tracked excavator to "hay make" the topsoil up to achieve the target stockpile height.

e) To protect from wet weather once the final height is achieved, the excavator or dozer should re-grade the sides and top of the stockpile to form a smooth gradient to encourage water to run off and not puddle. The outer surface should also be firmed, for example by tracking across it or by smoothing down with an excavator bucket. The aim is to seal in the dry topsoil and reduce rainfall infiltration during the storage period.

Figure 1: Topsoil Stockpiling Method



3.7 Stockpile Management

Once the stockpile(s) has been completed the area should be fenced off to prevent any disturbance or contamination by other site activities.

The sides and top of the topsoil stockpile(s) should be sown with a quick germinating perennial ryegrass seed mix to stabilise the surface and reduce the risk of erosion.

Any emergent weeds (eg. thistle, dock, nettle) should be mown/strimmed or hand-pulled on a sufficiently regular basis during the growing season to prevent them from forming seed heads and shedding their seeds.

Document Qualifications

This document considers the recovery and storage of the topsoil at the Land at Cromwell Street site in St Neots. It shall not therefore be relied on for alternative end-uses or for other schemes. This report has been prepared solely for the benefit of our client GPS Estates Ltd. No warranty is provided to any third party and no responsibility or liability will be accepted for any loss or damage in the event that this report is relied upon by a third party or is used in circumstances for which it was not originally intended.