CONSTRUCTION ENVIRONMENT MANAGEMENT PLAN

Willow Mead

Rev B

For Mr T Brennan

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1. INTRODUCTION

This Construction Environment Management Plan (CEMP) provides the project specific measures that are in place & procedures to be followed for the scope of construction works, both permanent & temporary, for the project. This Plan forms part of the planning application documents for the project and provides details on the requirements for the management of environmental impacts associated with the construction phase of the project.

The CEMP will detail how construction works will be undertaken and managed in accordance with the Planning Application, Planning Conditions, contractual and legislative requirements and construction industry best.

1.1 Scope

The Construction Environment Management Plan contains the approach to environmental and construction management at the site during the construction phase. Compliance with the CEMP, the procedures, work practices & controls is mandatory & must be adhered to by all personnel & contractors employed on the construction phase of the project**.**

1.2 Project Description

The Site is located on the West side of Wildern Lane, Hedge End. The Site is currently vacant land surrounded by residential properties, with an older person's accommodation in 2 blocks to the North West. The development is 4 new 1 Bed flats contained in a 2 storey block.

The works will comprise of:

i) erection of secure 2.0m Heras fencing around the perimeter of the site.
ii) site clearance.
iii) Foundations/ excavations
iv) Construction of building envelope
v) Internal first fix work
vi) Internal second fix work
vii) External works
viii) Hard & Soft landscaping

- *All works shall be carried out employing Best Practicable Means according to the Control of Pollution Act 1974 with reference to BS 5228 "Code of practice for noise and vibration control on construction and open sites'' and the Greater London Authority's Supplementary Planning Guidance "The Control of Dust and Emissions During Construction and Demolition". In the case of a complaint about construction pollution, the contractor shall implement effective remedial actions within 24 hours or cease work until they can be implemented effectively.'*

Site-Specific Considerations for Wildern Lane

1. Introduction

The methodology addresses potential impacts from construction activities. The site is located within a residential area, necessitating robust mitigation measures for noise, dust, and light pollution. These measures align with environmental regulations and community needs.

2. Site Assessment and Planning

Baseline Assessment

Prior to commencement Conduct a visual survey of the site and surrounding environment, focusing on nearby residential properties, Road traffic, and any sensitive receptors.

Engage with Neighbours to understand their concerns regarding noise, dust, and lighting impacts during construction.

Conduct an initial survey to measure existing noise and dust levels in and around the site.

Identify activities that contribute to dust and noise, including demolition, earthworks, excavation, material movement, and the operation of machinery.

- **Key Sensitive Receptors**

  Residential Areas: Homes located directly on Wildern Lane & the Site itself.

  Schools & Facilities: Wildern Secondary school.

  Commercial: Not in Zone of influence

  Public Rights of Way: Adjacent public Footpath

  Industrial: Not in Zone of influence

Noise, Dust, and Light Spill Control Measures Specific to Willowmead

Noise Control Adjustments

1. **Community Engagement**

Reduce the requirement for Noisy Works.

Notify neighbouring residents and businesses on Wildern Lane and adjacent streets of planned unavoidable noisy activities.

Employ Electric plant, excavators and mixers are readily available in electric versions.

2. **Traffic Noise Mitigation**

Coordinate with suppliers to avoid excessive construction vehicle idling and route vehicles away from residential streets wherever possible.

Dust Control Adjustments

1. **Sensitive Receptors**

Monitor air quality around sensitive areas, particularly during excavation and demolition phases.

Light Spill Adjustments

1. **Site Layout and Shielding**

Position security lights and floodlights to avoid direct spill onto neighbouring property, reducing glare for residents.

Use shielding to prevent light from spilling into nearby properties.

Try to avoid late working altogether.

2. **Community-Friendly Night Work**

If nighttime lighting is required, limit the use of bright floodlights to areas where active work is occurring.

Use warm-toned LED lights to minimize disruption to circadian rhythms for residents and wildlife.

Try to avoid late working altogether.

Compliance and Stakeholder Communication

1. **Community Feedback Channels**

Provide a dedicated contact point (e.g., site office phone or email) for residents and businesses to report issues related to noise, dust, or lighting.

Distribute periodic updates on construction progress and mitigation measures through word of mouth, leaflets or online platforms.

Engage directly with the Retirement Home manager, Only provide individual residents with agreed relevant information which can be determined by a weekly meeting with the retirement Home manager.

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1.3 Supporting Information

The following documents have been commissioned for the site.

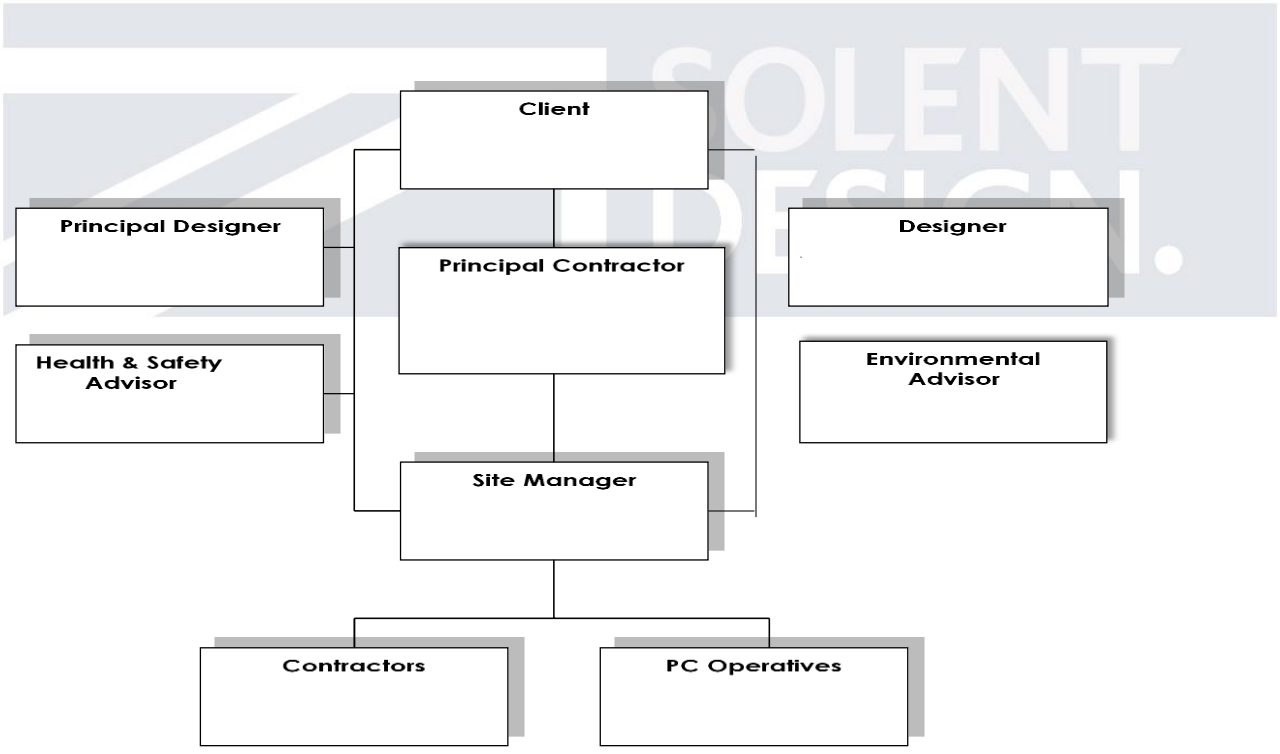
The development will be carried out in line with:

i) The Approved Planning drawings
ii) Structural Engineers design
iii) Site Layout plan

1.4 Construction Management Plan Responsibilities

The Construction Management Plan defines the role and responsibilities of the project team.

It also indicates the lines of communication between the Client, his Advisors, the Principal Contractor and his Manager on site



2 PROPOSED PHASED ELEMENTS OF SITE WORKS

Preliminary Programme

It is envisaged that the duration of the forthcoming works described will be 8 months.

The works have been and are to be phased as follows:

Stage 1 works - Erection of a secure perimeter

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Stage 2 works – Site Clearance

Stage 3 works - Foundations/ Excavations

Stage 4 works – Construction of the Building Envelope

Stage 5 works – Internal first and second fix work

Stage 6 works – External works

The build works on site to start 1st October 2027

The anticipated build programme going forward for the whole site is 13 months with practical completion due in December 2027

3 OPERATIONAL CONTROL

Site works will be checked against the Construction Environmental Management Plan requirements. Any mitigation measures that have been agreed with the Statutory Authorities, or are part of planning conditions, will be put into place prior to the undertaking of the works for which they are required and all relevant staff will be briefed accordingly. Method statements thatare prepared for the works will be reviewed / approved by the Clients Management teamand where necessary the relevant Environmental Specialist.

4 CONSTRUCTION MANAGEMENT PLAN ACTION

The following sections outline the key elements for consideration and demonstrates our commitment to manage, control and where possible mitigate the impact of the project on neighbours, the local community and infrastructure.

Many of the matters identified will be developed in more detail and dealt with at the appropriate construction stage by detailed site-based method statements. Method statements will be prepared and agreed for all major site operations in advance of the relevant works commencing

4.1 Health and Safety

A Construction Health and Safety Plan will be prepared for the works in accordance with the CDM Regulations. Risk Assessments will be developed and agreed. Sub-contractors' detailed method statements will also be produced and safe methods of work established for each element of the works.

Site inductions will be held for all new site personnel to establish the site rules and to enforce safety procedures. All site personnel will be required to read the emergency procedures when signing in for the first time, and sign to the effect that they have read and understood the procedures. These will include any relevant neighbourly issues.

All direct contractor employees, subcontractors & other site personnel on the project to:

Adhere to the HSE current legislation, recommended guidelines and Codes of Practice
Conduct all their activities in a manner consistent with regulatory & bestsafety practice
Provide RAMS for authorisation for elements of the works they are involved in
Provide evidence of their competence and ability to carry out the tasks

4.2 Communications:

The site is in an area of both commercial and residential properties. The Client and Principal Contractor currently have and seek to maintain good neighbourly relations. Such relations are assisted greatly by good communication, and by keeping neighbours and appropriate third parties regularly informed of site activities likely to impact on residents close by. The contractors' representatives and the management team will be receptive to all reasonable concerns of the neighbours and local community and will demonstrate a considerate and professional approach, so as to maintain a well-balanced relationship with neighbours, and the local public during project execution.

Periodic meetings will be held between the team members to discuss performance to date, the need for improvements (if any), results of inspections and any complaints received. Upcoming work operations will be reviewed in order to plan any necessary actions to mitigate risks and to disseminate information on best practice. If necessary, representatives of the Statutory Authorities may also be invited to attend such meetings, as and when required.

4.3. Site Establishment:

Prior to commencement of the works the site will be set out in accordance with the attached construction phase plan indicating the position for the site accommodation compound, material storage area, on site vehicle parking, and vehicles access and turning points.
The plan will be retained on site and relayed in the Induction given to all contractors on first arrival and to be prominently on display in the Site Office.

Hoarding and Heras fencing will be erected to ensure full site segregation and establish a secure perimeter to the site.

A site office, welfare & storage facility will be established within the site area.

4.4 Working Hours:

The construction site will be open to contractors for work. Monday – Friday 08:00 – 18.00. Any requests for additional hours are to be made to the PC in advance provide justification & resource requirements.

4.5 Security

The entrance into the site will be monitored and controlled during operating hours to allow access only for authorised personnel.

All site personnel will have to sign in on arrival and sign out before leaving the site. This will be incorporated into the Site Rules and included as part of the site induction process.

The front hoarding and perimeter fence will be regularly inspected to ensure it remains secure. A robust padlock to be on the site entrance gates, securely locked out of hours when the site is not working.

Sentry Pod security cameras shall be installed in the positions indicated on the CMP drawing.

4.6 Dust

Cutting activities will use water as a dust suppressant;
Adjacent road surfaces will be swept clean if any dirt
leaves site;
All loads delivered to or collected from the site will be covered where appropriate;
All road vehicles will be requested to comply with set emission standards;
All skips will be securely covered
A wheel wash consisting of hose and brush will be employed as necessary to keep the adjacent road clean

4.7 Noise and Vibration:

All reasonable steps will be taken to minimise any noise disruption to adjacent occupiers. Where it is necessary to carry out noisy activities these to be identified in advance and notice given to anyone who may be affected.

Where possible all plant used on the site is to be effectively silenced.

On-Site Noise Monitoring Methodology

Purpose

The purpose of on-site noise monitoring is to measure and evaluate noise levels generated by construction activities to ensure compliance with agreed target noise levels and local authority regulations. The methodology will assess noise contributions from all plant and equipment used on site and calculate the **LAeq, 10hr** (equivalent continuous noise level over a 10-hour working day).

Monitoring Strategy

Noise Monitoring Locations

Identify monitoring positions at the site boundary and near sensitive receptors such as residential properties.

Fixed or portable noise monitoring equipment will be used to capture real-time noise levels.

Monitoring Equipment

Use **Type 1 or Type 2 sound level meters** capable of recording A-weighted noise levels.

Equipment will record:

- **LAeq**: Equivalent continuous noise level over specified periods (e.g., 1hr, 10hr).
- **Lmax**: Maximum noise level recorded during monitoring.
- **LA90**: Background noise level for the area (pre-construction).

Monitoring Schedule

Conduct periodic noise monitoring during working hours.

Supplement with periodic spot measurements when specific noisy activities (e.g., demolition) occur.

Sound Data Collection and Plant 'On Times'

Plant and Equipment Inventory

Maintain a detailed log of all plant and machinery used on site, including:

- Equipment type (e.g., excavator, generator, concrete mixer, piling rig).
- Manufacturer's noise emission data (dB(A) at source).

Operational 'On Times'

Record the **'on time'** for each plant during daily site operations. This includes the duration (in minutes or hours) that each piece of equipment is operational.

Use plant logbooks, daily activity sheets, or site diaries to record operational timings.

Combining Sound Data

Use the following formula to calculate the total **LAeq** (equivalent continuous sound level) contribution for multiple noise sources operating over time:

$$LAeq = 10 \log_{10} \left(\frac{1}{T} \sum_{i=1}^{n} t_i \cdot 10^{\frac{L_{Aeq,i}}{10}} \right)$$

Where:

LAeqLAeqLAeq: Equivalent continuous noise level for the assessment period (e.g., 10hr).

TTT: Total time period (e.g., 10 hours = 36,000 seconds).

tit_iti: Operational 'on time' for each plant (in seconds).

LAeq,iL_{Aeq,i}LAeq,i: Noise level of individual equipment (in dB(A)).

nnn: Total number of equipment operating on site.

Summarise the results in daily noise reports, including the **calculated LAeq, 10hr** for the entire site.

Target Noise Levels and Compliance

Establish target noise levels based on baseline background noise surveys and limits agreed with the Council or in line with **BS 5228-1: 2009**.

Example target noise limits:

- **65 dB(A) LAeq, 10hr** during daytime working hours.

Compare the calculated **LAeq, 10hr** for the site against the target noise level.

If noise levels approach or exceed the target, implement mitigation measures such as:

- Reducing simultaneous use of high-noise equipment.
- Relocating noisy plant further from sensitive receptors.
- Installing temporary acoustic barriers.

Regular Noise Reports

Prepare weekly noise monitoring reports summarizing:

- **Measured noise levels**: LAeq, Lmax, LA90.
- **Calculated LAeq, 10hr** based on plant operational 'on times.'
- Plant and equipment logs (noise emission levels and durations).
- Comparison against target noise levels.
- Actions taken to reduce noise where exceedances occurred.

Stakeholder Communication

Share monitoring results with local authorities and stakeholders if required.

Address complaints and concerns promptly, adjusting operations as needed.

- Review noise monitoring data weekly to identify trends and patterns.
- Adjust construction schedules, plant usage, and mitigation measures to ensure ongoing compliance with target noise levels.
- Update the **Noise Management Plan** as the project progresses to reflect new activities or noise challenges.

This methodology ensures robust on-site noise monitoring, accurate data collection for plant 'on times,' and precise **LAeq, 10hr** calculations. By implementing these measures, the site team will remain compliant with target noise limits, minimizing disruption to the local environment and community.

4.8 Waste:

The aim is to minimise the generation of waste within the site and to ensure that any waste generated is handled, segregated, stored, transported disposed/recycled or recovered in accordance with current regulatory requirements.

4.9 Traffic:

The entrance into the site is accessed from the existing entrance for Willow Mead Retirement Complex, entrance on Wildern Lane. Delivery vehicles are not to park on the surrounding road network, delivery vehicles will be taken directly into the site.

Procedures will be in place to ensure the road is kept open and clear of obstruction at all times including banksmen to assist in direction of delivery vehicles.

Delivery vehicles will be instructed at the time of ordering to approach the site from either direction and guided to the offload area by banksman
Access to the site for delivery of materials & plant will be restricted to avoid peak travel periods and school drop off and pick up times to minimise impact to passing traffic. A call forward system will be used by all large vehicles to mitigate against traffic hold ups on the main road.

Delivery vehicles must not park up and obstruct the highway or residential/emergency access routes at any time.

Delivery & Storage Area: deliveries & works will be planned & coordinated to minimise vehicle movements around the site, avoid unnecessary deliveries To achieve this aim, the following will be implemented:

A banksman will control access & egress from site for deliveries.

The banksman will ensure that sight lines and the site access are kept clear of obstruction

Delivery of materials is to be restricted to outside the hours of: -
08:00 - 09:15 & 15:00 – 16.30 to avoid residential traffic & other congestion.

No Abnormally large vehicles are envisaged during the project. In the event of abnormal vehicles being required the access & egress routes would be as above but only with pre-arranged access to the site.

Dust dampening down procedures will be enforced if vehicle movements on site are creating dust and a potential health hazard.

Assess weather conditions, such as wind direction and speed, that may affect dust dispersion.

Use water sprays, misters, or dust cannons to suppress dust during demolition, excavation, and material movement.

Cover stockpiles of sand, soil, or construction materials with tarpaulins or geotextile fabric.
Install screens or windbreaks to limit the spread of airborne dust.

Avoid unnecessary idling of vehicles and machinery.

Regularly sweep or vacuum paved areas to control settled dust.

Implement a dust inspection checklist for daily monitoring and cleaning.

Use particulate monitors (readily available from Amazon or Hire tool Companies) to measure dust levels (PM10 and PM2.5) in real time.
Maintain a record of all monitoring data, inspections, and mitigation actions.
Record daily dust levels and ensure they comply with environmental guidelines

Light Spill Control Measures

Use lighting equipment specifically designed to minimize light pollution, such as LED lights with adjustable beam angles and shields.

Ensure all security and floodlights are equipped with directional hoods or baffles to focus light only on the required areas.

Positioning and Alignment

Direct lights downward (below the horizontal plane) to reduce upward light spill and skyglow.

Position lights away from nearby residential or sensitive areas to minimize intrusion.

Ensure all lighting is mounted at an appropriate height and angled to illuminate only the worksite or security zones.

Timed and Adaptive Controls

Use motion sensors or timers on security lights to ensure they are only active when needed.

Install dimmable lights that reduce brightness levels during non-operational hours.

Night Work Mitigation

Avoid unnecessary night work to reduce the impact of light pollution on surrounding areas.

For essential nighttime activities, provide task-specific lighting rather than high-powered floodlights for the entire site.

Monitoring and Compliance

Conduct light spill assessments using lux meters at the site boundary to ensure compliance with applicable guidelines (e.g., the **Institution of Lighting Professionals (ILP) Guidance Notes for the Reduction of Obtrusive Light**).

Adjust lighting setups promptly if spillover exceeds acceptable thresholds.

Regular inspection of the highway will be carried out and if deemed necessary will be cleaned by a road sweeper as and when required.

4.10 Ecology:

To ensure the protection of any unknown wildlife No vegetation will be cleared during Bird Nesting Season.

The Site is not on or adjacent to a RAMSAR site

The Site is not on or adjacent to a Special Area of Conservation or SINC

Magic does not show any protected species located on or near to the site.

The site owner/site manager will ensure that anyone (including sub-contractors and visitors) undertaking construction, demolition and landscaping (both creation and management), is made aware of the potential for protected species to enter the site, where to expect them, their protected status and the procedure to follow in the unlikely event that protected species are discovered during works. Where applicable, this advice will be given through written statement prior to arrival, site inductions and tool box talks.

Any vegetation clearance (i.e. removal of trees, scrub, hedgerows) or works to buildings shall not commence until a careful check for nesting birds has been completed, particularly during the main breeding season (months of March to August). If bird nests are found then works in the area must stop until the chicks have fledged the nest.

Clearance of walls, logs, brash, stones, rocks or piles of similar debris will be undertaken carefully and by hand.

Any trenches left overnight will be covered or provided with ramps to prevent animals falling into the trenches and being trapped. Excavations left overnight should be checked prior to filling. Any open pipes left overnight will be covered.

Should any protected species (i.e. common toads, reptiles, birds, hedgehogs and badger) be discovered during construction or other works on site, which are likely to be affected by the development, works will cease immediately. The owner/ site manager will then seek the advice of a suitably qualified and experienced ecologist and works will only proceed in accordance with the advice they provide

Any building materials such as bricks, stone etc. will be stored on pallets to discourage reptiles from using them as shelter. Any demolition materials will be stored in skips or similar containers rather than in piles on ground.

There are no rare species of plants, trees or other foliage on or adjacent to the site that would need to be removed to carry out the works.

Scaffolding will only be erected to the height necessary to complete the works.

All cutting breaking and digging equipment will be supressed for noise and vibration purposes. A 1 ton electric excavator is advised for foundation works (JCB 19C-I E-Tech)

Use Electric and manual hand tools.

No Site Radios Externally (internally the volume level will be set by the site manager)

Use premixed Concrete.

Only use Electric mixers for mortar.

5 MONITORING AND REVIEW

A review of the Construction Environment Management Plan will be carried out at planned intervals by a member of the management team to ensure continuing suitability, adequacy and effectiveness of the management system.

The outputs from management review will include any decisions and actions consistent with the commitment to continued improvement.

6 SUMMARY

This Construction Environment Management Plan forms part of the planning application proposals and envisage guiding their execution. Throughout the project, we will regularly review the plan and maintain a communicative relationship with the Council advising them of such changes and/or improvements to the Plan as may occur. The Plan's proposals shall enable third parties to understand the nature of the works and the various construction activities associated with the development.

This Construction Environment Management Plan has been prepared with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and have been accepted in good faith as being accurate and valid.

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