



Construction Environmental Management Plan (CEMP)

Oakhurst, Maypole Road, East Grinstead, RH19 1HL



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1. INTRODUCTION

1.1 Overview

This Construction Environmental Management Plan has been prepared to address Condition 5 of the Planning Decision Notice ref DM/20/0015, issued by MID Sussex District Council, on 28 April 2020.

Condition 5 states:

“Prior to the demolition and the commencement of construction, a Construction Environmental Management Plan (CEMP) shall be submitted to and approved in writing by the Local Planning Authority. The Construction Environmental Management Plan shall include amongst other matters details of: measures to control noise or vibration affecting nearby residents; artificial illumination; dust control measures; pollution incident control and site contact details in case of complaints. The demolition/construction works shall thereafter be carried out at all times in accordance with the approved Construction Environmental Management Plan, unless any variations are otherwise first submitted to and approved in writing by the Local Planning Authority.

Reason: To protect neighbouring residents and residences from noise, vibration and dust and to accord with Policies DP26 and DP29 of the Mid Sussex District Plan 2014 - 2031.”

Condition 7 states:

'No development, including demolition, shall commence until a licence has been obtained from Natural England to permit destruction of a bat roost and evidence of this licence has been submitted to the Local Planning Authority.'

Whilst the details submitted with this application provides details of the application to Natural England for the licence and Ecology Reports including Bat surveys, no details have been provided showing that Natural England have accepted this and issued a licence. Please can a copy of the licence from Natural England this be submitted.

2. CONSTRUCTION ACTIVITIES

1.2 Overview

This reports sets out the proposals for monitoring the environmental impacts during the construction phase for Oakhurst, Maypole Road, East Grinstead, RH19 1HL.

The development which will be carried out at Maypole Road, consists in the demolition of an existing residential building containing 2 units and the construction of a replacement 10 unit residential building with associated landscaping works.

3. REGISTER OF ENVIRONMENTAL IMPACTS

3.1 Environmental management system

It will be a pre requisite for the appointment of the Contractor to have an Environmental Management system in place as part of this a Project Environmental plan will be developed by the Contractor that will enhance and re-enforce the measures required by this report. This will form part of the Contractor's Construction Phase Health and Safety plan.

The Project Environmental plan will be reviewed on a regular basis throughout the construction period by the Client and the design team to comply with Islington Councils code of practice. A copy will be held in the Contractors site accommodation and will be used in the induction of all site operatives.

3.2 Noise

All works will be conducted in compliance with the requirements of the Control of Noise at Work Regulations 2005 and BS5228.

The project includes demolition works to the existing buildings within the site demise which is to be undertaken by hand, mitigating the generation of noise. There will be breaking up of slabs with breakers that will be fitted with silencers. The existing boundary wall will assist in restricting the outbreak of noise.

The project will be managed using the following guidelines for the controlling of noise:

- For short-term daytime demolition and construction noise, a limit of 70 dB LAeq, will be applied in the vicinity of the nearest noise sensitive property, which should prove acceptable for a total of up to 8 weeks per year throughout the course of the site's development.
- All sub-contract works to conform to BS5228:2009 which identifies suggested mitigation measures which allow for the reduction of noise generated through training, supervision and control.
- Noise related assessment of the work activity should be assessed and noted down when drawing up of activity related Method Statements/Risk Assessment's. These will be assessed prior to works starting to ensure that any mitigation measures required are covered.
- Sub-contractors will be responsible in ensuring that all construction activities and plant/vehicle movements abide by the conditions set above.
- As part of the monitoring regime, noise monitoring will be undertaken daily during two set alternating times of 10 am and 3 pm at specific locations to the on the site.
- Demolition will be largely undertaken by hand using scaffolding and access towers to safely demolish the structure.
- Breakers on the mini excavator will be utilised to the break up the concrete slabs and hard surfaces. Pneumatic tools will be used where necessary.

An assessment of the noise impact has been undertaken based upon the plant and equipment, scheduled construction potential activities, and the programme of works as presented in this document.

The table below outlines the proposed noise threshold level. This level has been adopted as it is outlined as a target limit and existing ambient noise levels have not been confirmed as greater than 65 dB.

Week period	Relevant time period	Average time/Hr	Threshold trigger level dB
Monday to Saturday	09:00 AM to 16:00 PM	7	70

Construction activity noise levels have been predicted assuming source locations in both the site and delivery areas. Appropriate screening from buildings and other local barriers has been applied;

Considering the size of the site, we will rely on good practice to minimise noise generated during demolition/construction, as below:

MONITORING			
ACTIONS	REQUIREMENTS	RESPONSIBILITY	TIMING
	all significant noise generating activities will be undertaken between Mon-Fri 9.00am to 16:00pm, Sat 9am to 1pm	Site Manager	Throughout construction works
PERFORMANCE INDICATORS	no complaints regarding noise from workers / neighbours / community members	Site Manager	Throughout construction works
MONITORING	complaint based monitoring	Site Manager	Throughout construction works
REPORTING	reporting to site manager.	All staff	Throughout construction works
CORRECTIVE ACTIONS	corrective actions and implementation time frame	Site Manager	Throughout construction works

It shall be the responsibility of the Site and visiting Managers to monitor and control the Construction Environmental Management plan and ensure its implementation.

Contractors must ensure that they are familiar with and observe this plan. Communication methods will include inductions, toolbox talks, briefings, Letters/memos and review meetings. The relevance of CEMP elements will be routinely reviewed by the Site and visiting Managers. This review will focus on the need for the type and level of monitoring and the appropriateness of management measures, monitoring methods and reporting systems. Alternatively a construction site and boundary noise monitoring system will be put in place, using a sound level meter in order to do spot checks of the noise situation around a

building site. These meters make all the measurements that are usually needed and are easy to use. This kind of technology will help us to do the regular noise assessments on the site, in case the level exceeds the requirement of the occupational noise regulations.

3.3 Dust control

On any construction site dust is a potential issue and is defined as a statutory nuisance in the Environmental Protection Act. During demolition and construction COSHH Assessments for Dust and Fume will be undertaken and actions implemented. All activities will take all reasonably practicable precautions to prevent the build-up and spread of dust.

- All Sub-Contractors will take a pro-active approach to pollution by dust or airborne particles to minimise risk and disturbance to the site operatives and the general public etc. All cutting operations, will take place in a controlled area of the site and all debris will be removed on completion of the cutting works.
- All Contractors will provide method statements and risk assessments which will be reviewed prior to issue to ensure compliance is achieved.
- The waste will be stored in skips and transported to the waste disposal site.

The level of dust and emission risk attached to a construction site is dependent not only on the size and scale of a development, but also the activities, the timing of works (seasonality) and the sensitivity of the surrounding area. No significant emissions of oxides of nitrogen are associated with the construction works for this proposed development.

High sensitivity receptors within 100 m of the site are predominately residential.

The distance from source to sensitive receptor is a key factor for determining the potential dust effects from the construction site. As a general guide, the main effects are at distances of less than 100 m. The distances from source that dust effects are felt is dependent on the extent and nature of mitigation measures, prevailing wind conditions and the presence of natural screening by, for example, vegetation or existing physical screening such as boundary walls and buildings.

The dust emission potential is small for all activities except construction where the working of concrete gives a medium dust emission magnitude.

On the site, there will be no heavy earth moving vehicles and the total material moved will be less than 10,000 tonnes and as such the dust emission magnitude for Earthworks is considered as small. .

The number of vehicles accessing the site is less than 10 per day and the dust emission magnitude for track out is considered as small.

Dust mitigation measures will be followed during the works. The risk to ecological receptors is negligible; the risk of health effects or dust soiling effects is at low risk.

Visual monitoring of dust is recommended throughout the works and should be supplemented with dust deposition and/or soiling monitoring during the construction phase when working with concrete.

General Noise, Dust and Vibration Control Measures

BPM will be used to reduce noise and vibration levels at all times. Where practicable the control measures set out in BS 5228:2009 + A1:2014 Part 1, BS 5228:2009 + A1:2014 Part 2, Section 8 will be implemented.

General noise, dust and vibration control measures, where appropriate, include:

-details of the site personnel responsible for noise, dust and vibration, the head office, the duration of the project and site working hours, will be displayed on the site boundary;

-letter drops to neighbouring residents before work begins giving the information identified

Site information and contact email address will be provided;

-liaison with neighbouring construction sites to co-ordinate works as far as practicable, particularly off- site vehicle movements, to avoid waiting vehicles;

-establish contact with the relevant residents' association, meetings with residents at appropriate intervals, minutes of meeting and agreed actions circulated to residents;

Site will keep an observations, investigations and complaints log, to be made available on request;

All complaints will be responded to.

- Choice of methodology/technique for operations (including site layout) will be considered in order to eliminate or reduce emissions at sensitive locations;
- Fixed items of construction plant will be electrically powered where practicable in preference to diesel or petrol driven;
- Noisy plant will be kept as far away as possible from sensitive areas;
- Each item of plant used will comply with the noise limits quoted in the relevant European Commission
- Equipment will be well-maintained and will be used in the mode of operation that minimises noise;
- Wherever practicable fabrication will be undertaken off site;
- Dust generated by the construction process will be suppressed by a fine directional spray jet of water aimed at the source or damping down;
- Avoid site run-off;
- Cutting equipment to be used with water suppressant and/or suitable extract systems;

- Water sprays, 'Dust Boss'-type equipment, and pressure washers (which can be used to generate a fine airborne water mist) should be used during demolition work and other activities that generate high levels of dust;
- Stockpiles of sand or similar dust-generating materials should be covered;
- The building will be enclosed with suitable scaffold sheeting, particularly during demolition works and/or where windows have been removed;
- Skips, chutes and conveyors should be completely covered and, if necessary, completely enclosed to ensure that dust does not escape. Similarly, drop heights will be minimised to control the fall of materials and the impact that results;
- Good housekeeping measures (i.e. regular sweeping, cleaning, vacuuming etc.) will be adopted and implanted by the contractor to ensure that construction sites are in good order;
- Closing of doors and windows (and sealing with tape, if necessary) during particularly dusty internal works;
- Haul routes on open sites will be damped down at regular intervals during periods of dry weather;

- Hoardings, fencing, barriers and scaffolding will be regularly cleaned regularly using wet methods, where practicable, to prevent re-suspension of particulates;
- Cement, sand, fine aggregates and other fine powders will be sealed after use and if necessary stored in enclosed or containers or silos. Some materials will be kept damp to reduce the risk of drying out;
- All materials will be handled in a manner that minimises dust;
- Immediate clean-up of spillages of dusty materials
- Contact details for the person responsible for dust and emissions generated from the site should be displayed clearly on the site boundary so that local residents and businesses are able to contact the developer and/or contractor to raise any issues that they may have and report complaints;
- Machinery and dust generating activities will be located away from receptors;
- No burning of waste wood or other materials on site;
- Wet brushing techniques will be used for cleaning;
- Investigations into the causes of visible dust emissions will be undertaken;
- Regular checks for visual observation of dust and soiling within 100 m of site; and
- Monitoring of dust deposition and soiling if valid complaints are received.
- Equipment will be shut down when not in use or throttled down to a minimum during waiting periods;
- Vehicles shall not wait or queue on the public highway with engines running (unless the engine is required to power the operation of the vehicle e.g. concrete wagon);
- Deliveries will be co-ordinated to prevent vehicles queuing outside site;
- Where possible and safe the vehicle reversing alarms will be switched off and banksman will be used to guide the vehicles to the site; and

Site Specific Noise and Vibration Control Measures

Control measures detailed below have been developed following consideration of the site plans:

- Where breakers are required, multiple breakers will be employed such that the usage period is reduced;
- Where percussive breaking techniques are required, concrete slabs will be cut, where possible, to isolate the slab, thus reducing the transmission of vibration;
- Where powered tools are required they are to be screened as far as reasonably practicable to reduce potential impact;
- Compressors and generators will be isolated from the floor where reasonably practicable;
- Spoil is to be transported into tipper lorries. Vehicles being loaded are to sit with their engines off to minimise noise emitted;
- Spoil will be loaded into lorries in a such a manner as to minimise impact noise;
- Static dewatering plant will be located in semi-permanent enclosures;
- Robust vehicle management procedures will be required to avoid vehicles arriving in an unscheduled manner, to ensure only one vehicle is at site at any one time. Deliveries to site will be restricted to agreed times
- Inspections to be carried out during works to ensure the condition of surrounding buildings is not impaired;

3.4 Smoke and odour

- Care will be taken by the Architect in the specification of the materials to be used in the construction of the development to avoid the use of Volatile Organic Compounds.
- Loading and unloading: when off loading the delivery vehicles will be required to turn off their engines. Deliveries will be between the allowable working hours of 9.00am to 4pm weekdays and 9.00am to 1.00pm on Saturdays.

3.5 Vibration

There will be no heavy equipment involved in the construction of this development and therefore there are no plans to monitor and record vibration on the site. However, in the event of any complaints vibration monitoring equipment will be installed.

3.6 TV reception

There will be no site based cranes used in the construction of the building, mobile phones will be used rather than hand held radios and therefore there should be no impact on TV reception to the neighbouring properties.

3.7 Lighting

All site lighting will be downward facing and within the site. The boundary wall and surrounding buildings will provide a partial barrier to stray light. Lights will be switched off outside of the site working hours.

3.8 Waste recycling

A site waste management plan with suitable procedures will be developed to ensure that the construction and demolition waste from the project is dealt with accordingly.

The procedures will:

- Take all reasonable steps to ensure that waste management controls are observed including a Duty of Care.
- Minimise the amount of waste generated and maximise the amount of waste reused and recycled.
- Reuse as much waste as possible on-site. Where reuse on-site is not possible to identify the most appropriate waste management option in line with the waste hierarchy.
- Manage waste as close as possible to the site location.
- Due to the site constraints, waste material taken from the site by skip will be segregated off site and recorded.
- All waste in vehicle leaving site will be secured and skips will be covered.
- Waste transfer will be accompanied by a full description of the waste and a waste transfer note and be disposed of lawfully.

4. PROJECT ENVIRONMENTAL REQUIREMENTS

4.1 Site working hours

The Control of Pollution Act 1974 contains specific provisions for dealing with noise from construction sites.

The locally adopted hours that normally apply to construction works are:

- Monday to Friday 09:00 AM to 16:00 PM
- Saturdays 09:00 AM to 13:00 PM
- Sundays and Public Holidays - no noisy activities allowed

These hours relate to noisy works which are audible beyond the site boundary. No plant, machinery or equipment associated with such works shall be started up or operational on the development site outside of these permitted hours.

- Bank and Public holidays for this purpose shall be: Christmas Day;
- Boxing Day; New Year's Day; Good Friday; Easter Monday; May Day; spring
- Bank Holiday Monday and August Bank Holiday Monday.

All sub-contractors including suppliers shall be made aware of the permitted working hours as the restrictions also apply to deliveries.

4.2 Site security and Tree protection

Prior to commencement on site all site boundaries shall be made secure and tree protective fencing installed. The site will be enclosed with 2m high hoarding board which shall be maintained in position and good repair throughout the development. Lockable gated access points across Maypole Road will be installed at which pedestrian and vehicular access to the site can be controlled.

4.3 Protective equipment

Contractors and visitors wishing to access the site work environment must wear the following PPE: - Safety helmets, hi visibility clothing, gloves, safety footwear & Glasses.

Contractor's task specific risk assessment shall be carried out and protective equipment identified in that assessment shall be worn.

4.4 Materials delivery and storage

Loading and unloading of plant and materials shall take place only within the boundaries of the construction site. Loading and storage areas will be created on site allowing sufficient area for the requirements of the project.

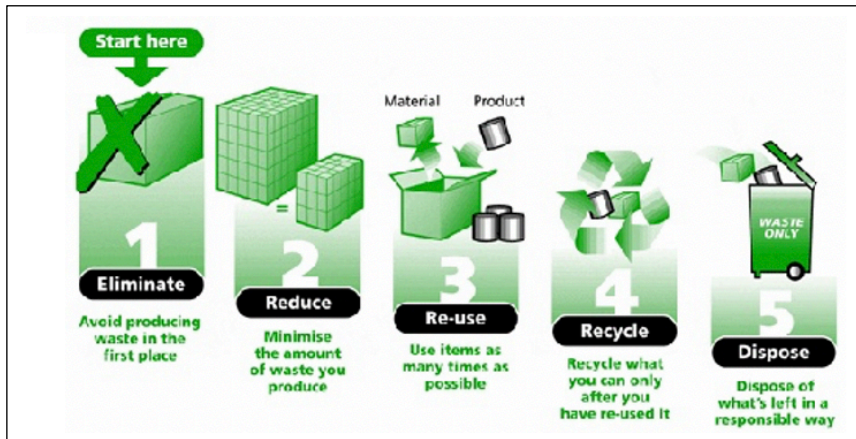
Lorry movements will be fully considered, ensuring safe reversing / manoeuvring, access and egress.

When materials are delivered to the work area they shall be positioned so as not to obstruct vehicular or pedestrian routes or reduce visibility of site traffic and pedestrians. Materials shall be positioned outside of the root protection area of existing trees.

4.5 Waste management

The appointed site manager will manage waste generated by the development which shall be monitored by a bespoke version of the Building Research Establishment (BRE) SMARTWaste Plan. The project team will use this plan to identify waste streams, forecast waste volumes and identify suitable methods to eliminate, or where this is not practicable, reduce waste generated by the project.

When considering management options for identified waste streams, Kier and supply chain members will adhere to the principles outlined in the waste hierarchy below.



Containers shall be in good condition and, where required, covered to prevent dust and litter being blown out. If there is any likelihood of stored waste contaminating the surrounding environs, all necessary steps will be taken to ensure no contamination occurs. This may include the use of containment bunds with rain shelters and the use of sealed containers, i.e. clip-top drums and fluorescent tube coffins.

The project team and, where applicable, subcontractors will ensure that the removal of all inert / non-hazardous waste is recorded on Waste Transfer Notes. These documents must be kept for a minimum of two years. These documents will be stored on site and made available on request.

4.6 Emergency and incident preparedness

Given the nature of the works and the environmental sensitivity of the site it is possible, although unlikely, that environmental incidents could occur. Such incidents could include:

- Hydrocarbon spillages into surface or groundwater;
- Silty contaminated runoff into surface or groundwater;
- Fires; and / or
- Extreme dust events.

In order to minimise the risk of a pollution incident, subcontractors must ensure all operatives understand the environmental risks associated with their work activity and what control measures are in place to eliminate or reduce negative environmental impact.

4.7 Monitoring and control

It shall be the responsibility of the Site and visiting Managers to monitor and control the Construction Environmental Management plan and ensure its implementation. Contractors must ensure that they are familiar with and observe this plan.

Communication methods will include inductions, toolbox talks, briefings, Letters/memos and review meetings.

5.CONCLUSION

A noise, dust and vibration management plan has been prepared to assess the risk associated with the construction for the development at Oakhurst, Maypole Road, East Grinstead, RH19 1HL.

A construction methodology has been prepared in consultation with project specific documentation and control measures have been presented for noise, dust and vibration.

Noise predictions using the methodology prepared have shown that there are exceedances of the noise criteria. These exceedances are predicted to occur during the removal of internal walls, underpinning and excavation activities. BPM will be fully implemented at all times during the construction to restrict the noise impact.

Attended noise and vibration monitoring should be undertaken to ensure that threshold criteria are not exceeded at sensitive receptors and to ensure BPM is being adhered to during sensitive phases of construction.

The outcome of dust risk assessment presented show the risk to ecological receptors is negligible, the risk of health effects is low risk and the risk of dust soiling effects is low risk.

With the control measures described in this report the potential for significant noise, dust and vibration related adverse effects will be minimised.