

Construction Environmental Management Plan

Address: Bradley Elms Farm Cheadle Road Alton Staffordshire
ST10 4RB

Project: Formation of a single dwelling from three dwellings
granted planning permission under application
SMD/2018/0524

Document Control Sheet

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1. Introduction

1.1 Background

Hewitt&Carr Services has been instructed by Mick Carney to prepare a Construction Environmental Management Plan (CEMP) for Bradley Elms Farm Cheadle Road Alton Staffordshire ST10 4RB

The planning application related to this CEMP is for permission for the formation of a single dwelling from three dwellings granted planning permission under application SMD/2018/0524

It is essential that the environmental management of the construction works associated with the scheme shall be delivered through the CEMP and this CEMP shall form the basis of the Principal Contractor's (the 'Contractor') CEMP and describes how construction activities should be undertaken and managed.

The CEMP will form part of the site induction which will be mandatory for all employees, contractors and visitors attending the Bradley Elms Farm Cheadle Road Alton Staffordshire ST10 4RB construction site (hereafter referred to as the 'site'). All employees and contractors will be required to familiarise themselves with the contents of the CEMP

The Contractor shall be responsible for reviewing the environmental requirements in this CEMP, developing the construction methodology in light of those requirements, and updating the CEMP in greater detail prior to construction commencing should this be required. Once this exercise has been completed the document is then referred to as the Contractor's CEMP. The Contractor will be responsible for safeguarding the environment and for mitigating the effects of the construction works (the 'works') by implementing the general environmental requirements of the CEMP. The Contractor will regularly review and update the CEMP and incorporate it into the Contractor's Quality Management System (QMS) and/or Environmental Management System (EMS).

In preparing this report, Hewitt&Carr Services has relied upon, and presumed accurate, any information (or confirmation of the absence thereof) provided by the Client and/or from other sources. Except as otherwise stated in the report, Hewitt&Carr Services has not attempted to verify the accuracy or completeness of any such information. If the information is subsequently determined to be false, inaccurate, or incomplete then it is possible that our observations and conclusions as expressed in this report may change.

1.2 Scheme Location and Description

The area impacted by the scheme (total construction area) is referred to as 'the site'.

The site is located at Bradley Elms Farm, Cheadle Road, Alton, Staffordshire, ST10 4RB

The development comprises of the formation of a single dwelling from three dwellings granted planning permission under application SMD/2018/0524



1.3 Purpose and Scope

The CEMP document provides a comprehensive framework for the environmental management during the construction works and provides the following:

- A summary of the construction effects on sensitive receptors
- Any suggested mitigation measures to reduce construction effects on sensitive receptors
- Recommendations of further works, such as monitoring, to be undertaken prior to/during the works.

The CEMP also ensures:

- Compliance with all relevant legislation and statutory controls including planning conditions, agreements and landowner/client environmental requirements
- Delivery of the best practicable environmental performance by preventing pollution, minimising adverse environmental impacts and achieving higher standards of environmental performance on a construction site.

All documentation in relation to the environmental management of the works shall be maintained by the Contractor and made available to the Client/Project Manager throughout the length of the project.

Emergency contact details for the construction works must be clearly displayed on the site entrance in sight of the public.

The CEMP is a live document and must be reviewed regularly and updated by the Contractor during both the pre-construction and construction phases. Upon any amendments and electronic version of the updated CEMP must be distributed to all individuals who hold a role of responsibility on the project.

The performance of the Contractor's CEMP in meeting environmental objectives and targets, mitigating environmental effects and in achieving effective environmental management shall be subject to review by the Project Manager at least every two months until the end of the project.

The purpose of this document is to outline and describe how the contractor will manage and where possible minimise the impact of the developer's construction upon the neighbouring buildings and residents. The contractor will be committed to achieving high environmental standards throughout the development period.

2. Project Team

2.1 Construction Team

To fulfil the aims of the CEMP and to ensure that all the environmental commitments for the construction are met, it is important to ensure that the roles of all staff are clearly set out, and that prior to, and throughout the works, they are made aware of the environmental sensitivities and commitments that are required to be adhered to.

Roles for the project should include:

- Project Manager
- Site Manager.

2.2 Environmental Team Requirements

This section provides further details on the roles of the key members of the Contractor's project environmental team. It is anticipated that for the project the following roles may be included:

- Project Manager
- Site Manager
- Environmental Site Officer
- All Staff / Sub-contractors

2.3 Roles and Responsibilities

The success of the CEMP will depend on its implementation, which will be achieved by good leadership, management, communication, and training. Individuals responsible for commitments in the CEMP have been and will be involved in its evolution and, therefore, will be advocates for the process and measures included in this CEMP to be implemented.

An overview of the key roles and responsibilities:

The Applicant / Employer

Responsible for the appointment / allocation of a Project Manager, Principal Contractor, Site Manager and Environmental Site Officer, and holds overall responsibility for activities on-site and the implementation of the CEMP.

Project Manager

The Project Manager is responsible for directing the Principal Contractor on the project and also:

- Leads the responsibility on contractual appointments and budget matters
- Checks that the Principal Contractor has allocated sufficient resources to deliver the works in accordance with the requirements of the CEMP
- Assigns specific requirement / duties to competent members of the Project Team
- Co-ordinates communication with key stakeholders and other third parties as required
- Reviews the findings of the monitoring programme and directs the Principal Contractor / Environmental Site Officer as required.

Principal Contractor

Responsible for the day-to-day management of construction activities on-site, ensuring the activities adhere to the actions set out in the CEMP, including:

- Ensuring that the demolition and construction activities are carried out in compliance with the CEMP
- Checking the qualifications and competence of the contractors / sub-contractors are appropriate for their appointment
- Ensuring that all site workers undertake environmental awareness training (including an induction for all site workers / contractors to support the implementation of the CEMP) and are provided with sufficient supervision and instruction to fulfil this requirement
- Ensuring that all contractor's allocated specific environmental responsibilities are notified during their appointment and confirm that their responsibilities are clearly understood
- Monitor the performance of contractors / sub-contractors and provides guidance as and when required
- With the Environmental Site Officer, undertake a monthly audit of the CEMP; and undertake corrective actions in the event of non-compliances.

Site Manager

The Site Manager's responsibilities include, but are not limited to:

- Leading the practical demolition and construction of the development, including the day-to-day co-ordination of the contractors
- Co-ordinating with the Project Manager and Principal Contractor the management of construction and demolition activities.
- Implementing all construction and demolition activities in accordance with the CEMP
- Liaising with the Environmental Site Officer to ensure adequate resources are made available to undertake all works in accordance with the CEMP
- Ensuring that the risk assessments for the control of substances hazardous to health regulations (COSHH), noise and environmental risks are prepared and effectively monitored, reviewed and communicated on site
- Managing the preparation and implementation of method statements and ensuring that the Environmental Site Officer reviews all method statements and that all relevant environmental protocols are implemented on site.

Environmental Site Officer

The Environmental Site Officer is responsible for the co-ordination, monitoring and reporting of the CEMP, through liaison with the Principal Contractor and other parties as appropriate and for ensuring that the works are undertaken in accordance with the commitments provided in the CEMP. Responsibilities will include:

- Checking that the CEMP is audited and reported back to the client on a monthly basis
- Reviewing the CEMP and other complementary plans and procedures to ensure they are compliant with the CEMP
- Monitoring the Principal Contractor to ensure that all relevant legal consents, licences etc. are implemented prior to works commence, and that all mitigation requirements are adhered to
- Co-ordinating the technical and environmental specialists as part of the implementation of the monitoring schedule to monitor and record the effects arising from demolition and construction activities
- Acting as the first point of contact for any environmental issues encountered by the Principal Contractor
- Investigating all environmental incidents and ensuring that they are recorded and reported, with corrective / preventative actions undertaken. Undertake the review of root causes with the Project Team to prevent incidents recurring
- Input into method statements and all environmental aspects of the project

- Contributing to the communication on environmental matters between the Project Team and relevant consultees / stakeholders
- Co-ordinating the CEMP review process
- Ensuring that the objectives of the CEMP are being achieved and are not contrary to any relevant legal requirements

All Staff (Contractors / Sub-Contractors)

All staff will have a role to play in implementing the CEMP and have a deputy to protect the environment from unnecessary damage. All staff responsibilities include but are not limited to:

- Working in accordance with approved plans, method statements and procedures specified within the CEMP to minimise environmental impacts
- Understand the importance of avoiding pollution on-site, including noise and dust, and how to act in response to an incident event
- Reporting all incidents immediately to their line manager
- Monitoring the workplace for potential environmental risks and alerts their line manager if any are observed.

3. Construction Activities

3.1 Overview

The development comprises of the formation of a single dwelling from three dwellings granted planning permission under application SMD/2018/0524

All construction activities shall be carried out in compliance with this Construction Environmental Management Plan, a copy of which shall be kept within the site office along with the Construction Health & Safety plan for the lifetime of the development.

Typical construction activities may include but are not limited to:

Site establishment

- Installation of site security fencing and tree protection barriers
- Permitted felling/ pruning of any existing trees and hedges
- Site clearance and removal of waste arising from site
- Installation of site accommodation, welfare facilities and contractor onsite parking

Ground works

- Demolition and removal of any existing structures to be removed
- Construction of new roads, paths and parking
- Excavations for and casting of concrete foundations and new drainage
- Suspended ground floor construction
- Excavations for installation and connection of new utility services

Super structure works

- External wall construction
- Scaffolding
- Carpentry
- Roof tiling
- Cladding and rendering
- Plumbing and electrics
- Plastering
- Flooring and tiling
- Decoration.

External works

- Fencing
- Landscaping

Typical construction traffic:

- Cars, vans, trucks, lorries, excavators, dumpers, piling rig, tele handlers, mobile cranes, road sweepers

3.2 Anticipated Construction Programme

The anticipated programme for construction is detailed below, but this will be subject to planning, surveys, labour and material availability and may be subject to change.

<u>Stage</u>	<u>Expected Date</u>
Site compound set-up	TBC
Site Clearance including any demolition.	TBC
Construction of the formation of a single dwelling from three dwellings granted planning permission under application SMD/2018/0524	TBC
Car Park and Landscaping	TBC
External works and landscaping	TBC

3.3 Construction Methodology

The construction of the Scheme will include the following elements:

- Set up construction compound and access
- Installation of temporary fencing and/or hoarding
- Site Clearance
- Demolition on site (if required)
- Excavation and earthworks including footing and new ground slab.
- Construction of Formation of a single dwelling from three dwellings granted planning permission under application SMD/2018/052
- Infrastructure associated with scheme to be commissioned.
- Landscaping.
- External works.

As with all areas involved in the development of this CEMP, as the design is progressed and as construction commences, the Contractor will be responsible for providing further details to the above.

3.4 Construction Site Compound

There will be one site compound used during construction of the Scheme.
The compound may be split into areas such as:

Area A - for the location of the main site offices, localised staff parking, meetings, contract admin, welfare etc.

Area B - for site staff, welfare and some plant and materials.

3.5 Construction Traffic Management Plan

Most of the scheme will be constructed within FENCED/GATED boundary, which will ensure minimal impacts to the existing road network.

Details of any issues will be addressed via a Construction Traffic Management Plan (CTMP) to be prepared by the Contractor

3.6 Risk Assessments and Method Statements

Method statements and risk assessments will be created, considering impacts to the surrounding environment such as dust, dirt and noise, etc.

All construction works will be undertaken using appropriate suppression methods to minimise both the impact to the environment and the Health & Safety risks for the operatives on site.

All activities undertaken on site shall be subject to a risk assessment. Risk assessments will be undertaken by trained staff following an approved procedure and the findings of the risk assessment and in particular the necessary controls will be explained to all operatives before the commencement of the relevant tasks. The risk assessments will:

- Identify the significant environmental and Health & Safety impacts that can be anticipated.
- Assess the risk from the identified impacts;
- Identify the control measures to be taken and re-calculate the risk;
- Report where an inappropriate level of residual risk is identified so that action can be taken through design changes, re-scheduling of work or alternative methods of working in order to reduce the risk to an acceptable level;
- The results of risk assessments, and their residual risks are only considered acceptable if; the severity of outcome is reduced to the lowest practical level; the number of risk exposures are minimised; all reasonably practical measures have been taken and the residual risk rating is reduced to a minimum.

All site managers will have noise level monitoring equipment available if necessary. Risk assessments will highlight possible high levels of noise for certain operations. If highlighted, construction baffles will be used to mitigate the disturbance to neighbouring residences and public.

During dry periods dust suppression will be used on site to reduce possible nuisance dust. A number of methods will be used including: hose pipes to damp down works areas, dust suppression equipment on disc cutters etc, bowsters to damp down traffic routes.

Prior to construction commencing, the Developer and its appointed Principal Contractor will produce a detailed Construction Method Statement (CMS) outlining the methods and procedures which will be implemented during construction. This will be prepared in conjunction with this CEMP to ensure the Method Statement and the CEMP work in conjunction with each other.

Method Statements must contain as a minimum:

- Location of the activity and access/egress arrangements;
- Work to be undertaken and methods of construction;
- Plant and materials to be used;
- Labour and supervision requirements;
- Health, safety and environmental considerations; and
- Permit or consent requirements.

4. Construction Activities

4.1 Communication

The Principal Contractor shall be responsible for communication with the community during the construction period.

A letter drop will be carried out to all local residents. This will provide contact details should a local resident have any complaint or concerns. The letter will contain details of the contractor so that any resident who may not wish to liaise with site has a direct link with the contractor. Client details will also be included.

Any complaints will be recorded on the site monitoring sheets along with how they were dealt with.

The fencing/site entrance will house the appropriate decorative displays with site Health & Safety details and site contractor information for public information.

In case of emergencies contact:

Mick Carney
mickcarney70@gmail.com
 07309026828

4.2 Welfare Facilities / PPE

Adequate welfare facilities will be made available on site for all employees and sub-contractors prior to the commencement of any work.

The facilities will be expected to follow the guidelines as per the table to ensure the CDM Regulations 2015 are conformed to.

Sanitary Convenience	Separate provision for male and female personnel on the following basis.		
	No of persons on site.	No of WCs.	No of urinals.
	1-25	1	2
Washing Facilities	Hot and cold running water		
	Supplies of soap and towels/dryers		
	Wash basins, suitable for the immersion of the hand and forearm, on the basis of		
	No of persons on site.		No of wash basins.
	1-25		2
Drinking Water	- Freely available supply - Cups and beakers		
Accommodation for changing clothes	- Drying room/storage room for protective clothing - lockers		
Rest Room/Area	- Facilities for break times. Must be heated and provide shelter from weather elements. - Facilities for boiling water - Facilities for providing hot food.		

There are sufficient onsite facilities available for all workers to utilise.

Construction workers will wear appropriate PPE for the task being completed. The contractor and site manager will ensure that PPE is worn at all times on site and issue PPE if required.

4.3 Site Working Hours

The normal working hours for all construction activity including site deliveries will be from 8.00am to 6.00pm Monday to Friday and 8.00am-1.00pm on a Saturday. There will be no construction activity undertaken on bank holidays or Sundays.

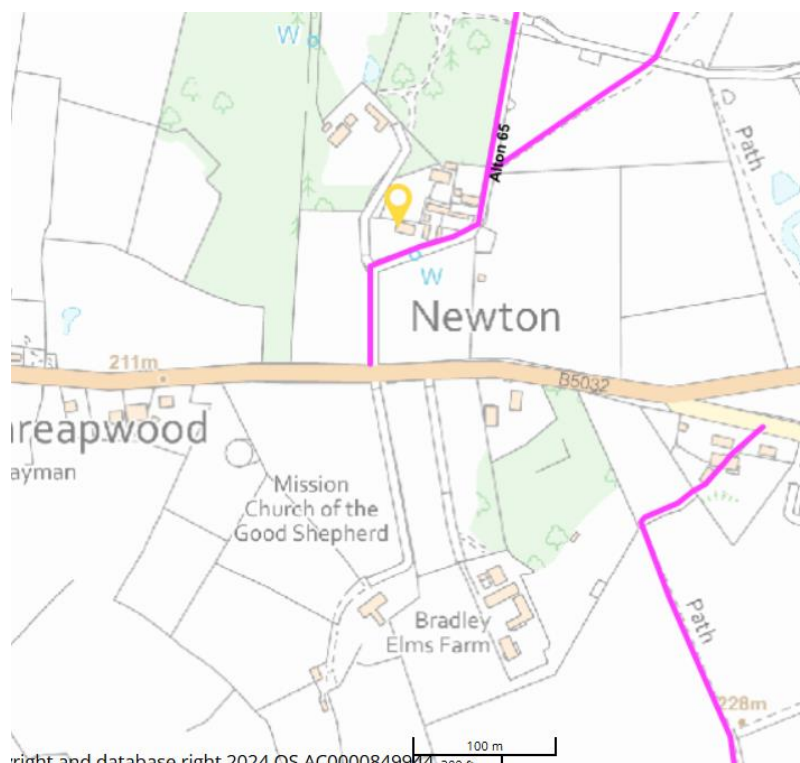
Should access lighting be required at any point, this will be highlighted during the risk assessments and lighting baffles if needed will be integrated.

4.4 Site Access

The primary access to the site compound and works area for all construction traffic will be from the existing highway network. Access to the site compound will be from B5032 where a high percentage of materials/plant will be delivered.

The site will be secured to ensure there is no pedestrian access to the site. All construction works will be carried out free from the neighbouring pedestrian routes whenever possible. Closures will be applied for as and when required.

The closest identified public footpaths to the site are:



4.5 Site Parking and vehicle movements

The site compound area will consist of main site offices, skip locations, storage areas and vehicle parking.

An area will be made available for contractor parking. Construction related vehicles are not to park in resident spaces under any circumstances.

Due to the nature of the project, it is anticipated that operatives will only need parking for vans and cars. Refuge areas off public roads will be available for deliveries to avoid large vehicles causing issues on public roads.

Only a limited number of car and HGV construction movements typically occur during the peak hours. The working hours of most operatives should not coincide with the network peak and construction processes will be programmed to avoid reliance on deliveries of concrete and bituminous materials during the more congested periods and delivery drivers would wish to avoid being on the network at congested times of the day when drivable hours used are disproportionate to the quantities of goods deliverable.

It is to be ensured that all vehicles switch off engines when stationary - no idling vehicles and wherever possible the use of diesel or petrol powered generators should be avoided, using mains electricity or battery powered equipment where possible.

A list of possible plant to be used on site is provided below:

- Earth Moving Equipment
- Dozer
- Tracked Loader
- Hydraulic Excavator
- Vibratory Compactor
- Road Making Equipment
- Roller
- Road Paver
- Hauling Equipment
- Tractors/trailers
- Trucks
- Tipper
- Crane
- Concreting Equipment:
- Mixers
- Dumpers

Only trained, certified, competent operatives will be allowed to operate the plant machinery. A record of all operatives' certificates should be kept in the site office.

All plant should come to site with a current and up to date record of service and an annual inspection sheet. An onsite weekly inspection will be carried out by the Site Agent of all operated plant and recorded. All plant maintenance is to take place in the site compound only. Refuelling of all plant is to take place in the compound and drip trays are to be employed during the fuelling process.

4.6 Material Compound storage and deliveries

There will be a designated area within the site compound for material storage only. Best practice approach of ordering materials Just In Time will be adopted wherever possible to reduce the amount of materials stored on site at any time.

Where possible, deliveries will be made between 9.30am and 3.00pm. Before starting any unloading, all delivery drivers must report to the Site Manager. These times also apply to Contractor deliveries of equipment and plant. Plant and Materials will be stored in designated areas within the site only.

Delivery vehicles will supply and remove materials from site using B5032

If circumstances allow and to reduce vehicular movements, deliveries will be made direct to the work zone to mitigate double handling and double vehicular movements.

Delivery vehicles whenever practical will avoid 'peak public traffic hours' to reduce traffic congestion and nuisance to the existing road and highway network. To avoid construction traffic congestion and nuisance to the surrounding area all suppliers and contractors will be made aware of traffic routes. Site entrances will be maintained and kept clean and clear.

All materials will be loaded within the site compound/boundary of the working zone to minimise congestion.

For environmental and road safety all materials containers leaving site will be appropriately covered to avoid soiling of the roads and highway.

Engines of all vehicles, mobile and fixed plant on site will not be left running unnecessarily.

Low emission vehicles and plant fitted with catalysts, diesel particulate filters or similar devices will be used, along with using ultra low sulphur fuels in plant and vehicles where possible.

A construction traffic co-ordinator will be appointed during the construction period to monitor heavy goods vehicle deliveries and collections of construction materials to and from the site to ensure compliance so far as practicable by contractors with the above requirements.

4.7 Site Security

The site will be secured by a mix of solid hoarding and Heras temporary fence panels, accessed by padlocked vehicle gates.

Relevant pedestrian and vehicle access gates will be incorporated to meet the site and Health & Safety regulation requirements, and the delivery and personnel access gates will be controlled by the Site Management team.

The fencing will be maintained to a high standard throughout the development and will be checked and maintained in line with temporary works procedures and recorded within the site managers weekly site tour. The fencing will house the appropriate decorative displays with site Health & Safety details and site contractor information.

4.8 Wheel washing facilities

To restrict the amount of debris carried out of site, the contractor will aim to clean down the site traffic vehicles as they leave site. If necessary site wheels will be cleaned off using a high pressure hose and at regular intervals the road will be mechanically swept by a subcontracted street sweeper

This will be monitored by the site manager who will action cleaning down operations if deemed necessary. An order will be placed with the road sweeping contractor which the site manager will call in as necessary.

4.9 Waste Management

Throughout the development process best attempts will be made to reduce the amount of waste going to landfill and to maximise the use of recycling facilities and the opportunity to re-use materials. All waste streams will be segregated where possible on site before being removed by a licensed carrier. Any mixed waste will be processed at a licenced transfer station to segregate and assist with recycling/reusing waste to avoid land fill

There will be no burning of waste materials permitted on site at any time. All waste materials will be disposed of in line with this Plan.

4.10 Hazardous Materials

Risk assessments for the control of substances hazardous to health regulations (COSHH), noise and environmental risks will be prepared and effectively monitored, reviewed and communicated on site

Oils and hazardous waste (if applicable) will be stored appropriately to minimise pollution risk including compulsory use of bunded fuel browsers, drip trays and spill kits on site

4.11 Dust Control

Best practicable means shall be used to minimise dust and mud generation and where relevant, site speed limits shall be adhered to.

Stockpiles of dusty materials shall be minimised and shall as far as possible be contained within silos or other appropriate arrangements. Soil stockpiles shall be profiled to minimise wind whipping and shall if left for any length of time be seeded or covered.

The cutting of paving slabs, bricks, blocks and tiles shall only be undertaken with a wet saw or other suitable methods to minimise dust.

The access road into and out of the site will be monitored for excessive dust build up. Should surface dust build up the road will swept.

During dry periods dust suppression will be used on site to reduce possible nuisance dust. A number of methods will be used including : hose pipes to damp down works areas, dust suppression equipment on disc cutters etc, bowsers to damp down traffic routes.

4.12 Noise / Acoustic Considerations

All site managers will have noise level monitoring equipment available and risk assessments will highlight possible high levels of noise for certain operations.

If highlighted, construction baffles will be used to mitigate the disturbance to neighbouring residences and the public.

No generators are expected to be used on site during the construction phase. However, should a generator be required, AVM's will be fitted and a sound attenuating or acoustic enclosure will be used to reduce the levels of noise for the surrounding properties. The generator will only be used during the outlined construction hours.

All equipment will be maintained in good working order and any associated noise attenuation such as engine casing and exhaust silencers shall remain fitted at all times. Noise related mitigation will include, but not be limited to, the avoidance of the unnecessary revving of engines; use of rubber linings in, for example, chutes and dumpers; and screening will be used as appropriate.

4.13 Ecology Management

Construction activity will be controlled in a way which mitigates damage or destruction to animals and their habitats

Should any bats or other protected species be found during the project, all works should cease until advice has been sought from an Ecologist.

4.14 Piling Works

With regards to the piling of foundations, should this be required, noise and vibration effects will be minimised as far as reasonably practicable. Piling works will be carried out between the hours of 9.00am – 4.00pm only and regular reviews of noise and vibration will be carried out during the works to ensure where possible that noise and vibration effects during these works are minimised.

A Piling Risk Assessment will be carried out prior to the works should this be necessary and recommendations to protect the aquifers will be incorporated into the Construction Method Statement.

4.15 Light Management

Given the proposed size and scope of the proposed development, it is most likely that the construction timetable will require elements of the works to be undertaken during periods of the year when natural daylight is limited.

Temporary Site lighting maybe required for specific activities to ensure safe working conditions, but will be carried out within the limits of the permissible working hours (8.00am to 6.00pm Monday to Friday and 8.00am-1.00pm on a Saturday). Control of lighting to minimise impacts on sensitive views will be required and it is intended the type of lighting will be non-intrusive and specifically designed to negate or minimise any affect to local properties and any other sensitive or valued environmental features.

The use of artificial lighting may include vehicle and plant headlights; compound lighting; office complex lighting; and localised floodlights / mobile lighting units. There will be fewer requirements for artificial lighting in the summer months when natural lighting will be present during normal working hours. It is not known of any issues with regards to the limit of lighting levels in this area, but lighting will be provided to meet the required lighting levels for the respective works which are being undertaken, especially where there is plant and

machinery involved. Any issues identified with regards to limiting the lighting levels, either the lux values, or the time / duration of the lighting will be taken into consideration.

Due to the nature of the works and surrounding residential properties no perimeter lighting will be provided, the lighting will be provided by existing street lights. Temporary lighting will be required within the compound and will be managed via timers to minimise the effect on surrounding residents. Task lighting will be used on a need by need basis in the form of florescent strip lighting, this lighting will be switched off during non-working hours

4.16 Heritage / Archaeology

Any known assets which are deemed at risk of accidental damage, due to their proximity to construction works, will be marked with a visible barrier during construction. Appropriate measures will be put in place to prevent uncontrolled plant movement which could otherwise damage heritage assets located further away from the construction footprint.

5. Conclusions

This CEMP provides a comprehensive list of mitigation measures and monitoring procedures for the demolition and construction phase of the Proposed Development. At this stage it includes mitigation measures committed to as a result of the Environmental Impact Assessment work. However, it is a 'live' document and will be updated regularly as more information on the Proposed Development becomes available.

As part of the monitoring process, an appointed Environmental Site Officer will be present on-site during key / new demolition and construction activities. The appointed Environmental Site Officer will observe site activities and update this CEMP as and where necessary. A brief report to the principal contractor and client will be produced during the demolition and construction phase of any updates to the CEMP and this can take the form of a short memorandum, letter or e-mail and any corrective actions will be implemented.

6. Appendices

Appendix A – DRAWINGS – 1043 – AL(0)02, 1043 – AL(0)05 REV E