

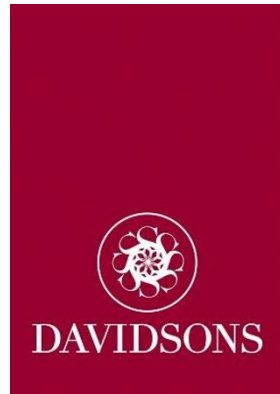
Davidsons Homes

Condition 06 – Construction Environmental Management Plan

Land at Wykin Lane, Stoke Golding

Document Issue History

Revision	Issue Date	Author	Comments
01	09/05/2023	HK/CY	
02	27/06/2023	KS	Updated in line with comments received.
03	25/07/2023	KS	Updated in line with Hinkley & Bosworth Borough Council – A Contractors Guide – Construction Environmental Management.
04	07/08/2023	KS	Piling information included within Appendix A.
05	21/08/2023	KS	Additional piling information & scope of works added to Appendix A.
06	05/09/2023	KS	Additional details referring to mitigation measures, vibration levels & vibration monitoring proposals added to Appendix A.



This document sets out the related activities being undertaken and provides details of the relevant measures and procedures being undertaken to ensure that construction activity follows best practice.

This document is submitted pursuant to Condition 6 of the Outline Planning Consent reference number 22/00595/CONDIT for the above development which states that:

No development shall commence until a Construction Environmental Management Plan has been submitted to and approved in writing by the Local Planning Authority. The plan shall detail how, during the site preparation and construction phase of the development, the impact on existing and proposed residential premises and the environment shall be prevented or mitigated from dust, odour, noise, smoke, light and land contamination. The plan shall detail how such controls will be monitored and how construction traffic will be routed. The plan will provide a procedure for the investigation of complaints. The approved details shall be implemented throughout the course of the development.

Site Works

The initial works will see the creation of the temporary site access followed by site clearance, roads, sewers, infrastructure works, erection of houses and then open space areas.

The delivery of the 55 houses in this development will be phased over several years.

a) Parking of site operatives and visitors

Dedicated car parking for all site staff, operatives and visitors will be provided adjacent to the site compounds. See drawing 1189_601_Compound Plan P02. A temporary parking area with welfare facilities will be installed at the start of the project in advance of the main compound works. The parking area provided within the site will discourage vehicles from parking on Wykin Lane to keep the adjacent access to the cemetery clear.

The location of parking is also indicated on the plan.

b) Loading and unloading of plant materials

Areas will be provided adjacent to the site compounds as detailed on the Build and Traffic Route Plan. This will be sized to allow sufficient room for the turning circles of the largest delivery vehicles.

Materials will generally be delivered close to the working areas to minimise the need for double handling which can lead to damage, exposure to the elements and excessive wastage. A 'just in time' approach will be adopted to the scheduling of material deliveries for each house plot in accordance with our compound storage capacity, to avoid the site becoming inundated with excess materials.

Delivery vehicles will incorporate mechanical handling equipment such as a tail lift, Hiab crane or a Moffett Mounty forklift truck to provide a safe means of unloading thereby avoiding the need for manual handling of heavy components.

The site will also be provided with its own tele-handler to assist with unloading duties, the stacking of materials inside the compound and the onwards distribution of the materials around the housing development. The telehandler will also be used for bringing the waste skips (segregated into the different waste streams), back to the central waste management area in the compound for recycling.

c) Storage of oils, chemicals plant and materials.

A designated area for storage of plant materials will be allocated. Refer to drawing 1189_600_Compound Plan.

Fuel oil will be stored inside lockable, double skinned and bunded fuel tanks which also incorporates the associated dispensing equipment (pump, hose and nozzle), each storage tank is also provided with its own spill kit for emergency use. The main storage tank is located inside the site compound, smaller fuel bowsers will be available to replenish the larger items of earthmoving equipment on site and returned to the compound when not in use.

Drip trays will be provided under all static items of equipment such as generators to contain any spillages. The volume of any oils (engine / hydraulic / transmission) stored on site will be minimal, as service engineers will bring their own supply of fluids when undertaken service visits for each item of equipment and takeaway the old fluids for disposal offsite whenever they leave site.

A lockable COSHH cupboard will be available to store all hazardous materials, the quantities of these products stored on site will be minimised wherever possible to reduce the risk. All plant and equipment will be returned to the compound when not in use, smaller items of plant, equipment and small tools will be stored inside storage containers.

The regular monthly health & safety audits will focus on the environmental compliance of the site team with regards to the safe storage, distribution, use, disposal and the emergency arrangements for the hazardous materials used on the project.

At least two freestanding mortar silos' will be located in the compound, the dry blended mortar contained in the silo is mixed with water at the outlet point and transferred into mortar tubs for distribution to each dwelling, thereby eliminating any dust particles. The silo will be replenished by a bulk tanker delivery which minimises the potential for airborne transmission.

d) Construction Hours

Construction Hours Monday to Friday 7.30 am – 6.00 pm/ Saturday 8.00 am – 1.00 pm, No Construction work on Sundays or Bank Holidays.

Site Opening Times Monday to Friday 7.00 am – 6.00 pm/ Saturday 7.30 am – 1.00 pm, Not open on Sundays or Bank Holidays.

No waiting allowed and no parking allowed along Wykin Lane. Suppliers of materials and services to site will be provided with delivery route details, Site Manager contact details and advised of the site opening hours via works orders issued from Davidsons.

They will be advised to contact the Site Manager prior to delivery to ensure there is sufficient space on site to make the delivery to avoid any waiting on Wykin Lane. Drivers can then be asked to wait outside of the village in a suitable location until they can access site.

e) Proposed temporary traffic restrictions.

Temporary traffic restrictions will be required to construct the site access and service connections, and these will be agreed with highways authority.

f) Vehicle turning

Lorries shall enter and exit the site in a forward direction except where space restrictions do not allow this. We have provided suitable vehicle turning within the site, please refer to 1189_601_Compound Plan P02.

g) Noise

Noise will be appropriately considered during the construction period. Davidsons will implement measures to control noise including using modern, quiet, and well-maintained plant and equipment, and shutting down plant when not in use to minimise noise disturbance. Plant and Equipment where it is stationary will be positioned as far as possible away from sensitive receptors.

Other than potentially at the site set up stage (where we may need to use generators) we will endeavour to use mains electric supply which will ensure a quieter noise environment. We encourage hand tools to be electrically powered rather than petrol or diesel driven. Deliveries will arrive during normal site hours and engines are to be switched off whilst unloading.

To reduce the noise impact on residential amenity, noisy plant or equipment shall be sited as far away as is practicable from neighbouring properties. The use of barriers, such as soil mounds, site compound containers or partitions to deflect noise away from noise sensitive areas, is to be employed wherever practicable.

Vehicles and mechanical plant used for the purpose of the works shall be fitted with effective exhaust silencers, maintained in good and efficient working order, and operated to minimise noise emissions.

The contractor shall ensure that all plant complies with the relevant statutory and manufacturers' requirements.

Care shall be taken when loading or unloading vehicles, dismantling scaffolding, or moving materials etc. to reduce impact noise. The use of radios shall be minimised when near to noise sensitive premises and the volume limited to a level where it does not cause disturbance.

h) Lighting

Lighting will be implemented across the site to ensure the safety of employees during operations, particularly during the winter months and in areas of limited natural light when the site is operational.

Where possible lighting will be designed to be energy efficient and used only when required with all lights requested to be LED's and split circuit lighting to allow for control of light requirement by location.

Censored security lighting will be implemented for safety and security around site with overriding switches for security to control localised area lighting as necessary.

Where possible lighting will be directed into the site boundary, with the use of directional cowls to prevent nuisance for neighbours of the site and wildlife in the surrounding area.

i) Delivery Routing

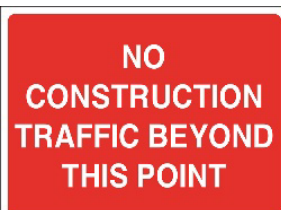
Refer to construction traffic routing plan 1189_601 which accompanies this document.

Signage will be erected at the site entrance and exit. This will direct all traffic to turn left into site and turn right upon exit.

Example signage to be installed opposite the site exit.



Example signage to be installed on Wykin Lane next to the site entrance to stop vehicles continuing to travel along Stoke Lane.



j) Delivery Times

Delivery Hours Monday to Friday 7.30 am – 5.30 pm/ Saturday 8.00 am – 12.30 pm,

No deliveries during school hours between 8.15-8.45am & between 3.30-4pm.

No deliveries on Sundays or Bank Holidays.

k) Site Compound

The compound has been located on the adjacent field on the eastern boundary of the site to minimise visual, lighting and noise impact to neighbouring properties on Wykin Lane, Stoneley Road & Arnold Road. The existing field gate access into the field will be removed and infill planted, the new access to the compound will be formed to the end of the turning head to accommodate the positioning of the proposed pumping station. Refer to compound plan 1189_601 Compound Plan P02.

Toilet and washing facilities will be provided.

l) Erection and maintenance of security hoarding

The permanent compound area will be enclosed by modular metal hoarding panels which are pre-finished in Davidson's red paint. Both vehicular and pedestrian access gates will be provided onto the compound to provide a safe means of access and egress.

Hoardings shall be frequently inspected and repaired as necessary.



m) Wheel washing

Davidsons shall ensure that the area around the site, including the public highway, is regularly and adequately swept to prevent any accumulation of dust and dirt.

A manually operated pressure washer will be provided before exit of site on to Wykin Lane. Details of the location are shown on drawing Construction Traffic Management Plan 1189_600. This will ensure that any mud/debris is suitably removed prior to vehicles leaving the site and entering the public highway. If necessary, road sweepers will be utilised.

n) Measures to control emissions of dust and dirt.

Topsoil will be removed at the start of site works; it will be retained and protected to minimise the potential for dust to be disturbed by the wind and blown across the site.

Bulk earthwork operations will generally be undertaken over the late spring, summer, and early autumn (traditionally known as the muck shifting season), although the precise timing is always weather dependant each year. This is to control the moisture content of the fill materials, as achieving an effective compaction density, is dependent on maintaining the optimum moisture content for each different classification of soil type.

Mobile water bowsers will be used to add water to each layer of fill material if required and to undertake dust suppression duties.

The permanent roads will be constructed up to basecourse level at an early stage, for this distribution of equipment and materials around the site. These roads will provide a solid sealed surface to minimise the amount of mud collected by the tyres, and also enable the road to be cleaned effectively by the road sweeper, the frequency of these visits will be adjusted to suit the ongoing site activities and the prevailing weather conditions.

Skips and removal vehicles shall be properly covered when leaving the site. Materials should be handled in such a way so that it does not give rise to excessive dust. Watering of rubble chutes shall be undertaken where necessary to prevent dust emission.

The resident site management team (Site Manager and an Assistant Site Manager) on the development will oversee these measures daily.

o) Odour and Smoke

No fires will be permitted to be lit on site

Davidsons shall take all necessary precautions to prevent the occurrence of smoke emissions or fumes from the site plant or stored fuel oils for safety reasons and to prevent such emissions or fumes drifting into residential areas.

p) Recycling and disposing of waste

During the construction phase, all waste will be returned to the site compound and segregated into the different waste streams. A specialist waste management company will be used for the disposal of the waste. The specialist will provide reports on the quantities of the different

Great emphasis is placed on managing the call off, unloading, storage, distribution and use of the incoming materials to minimise wastage, together with the adoption of modular design solutions and components such as the prefabricated chimney stacks used on our developments to minimise the potential to generate excessive quantities of waste.

Any site litter should be stored securely, and regular litter picks undertaken to ensure that litter does not cause an issue.

Waste shall be removed at frequent intervals and the site kept clean and tidy.

q) Ecology

Davidsons shall comply with the provisions of the current Wildlife and Countryside Act and any conditions attached to planning permissions. The first priority is to maintain habitats intact and undisturbed and, if possible, to make improvements to enhance natural habitats.

Davidsons will work alongside an ecologist for supervised works required.

r) Publicity

Davidsons will liaise with local residents who may be affected by the construction works. The local residents will be informed of the nature of the works and be given the name and telephone number of a main contact.

Piling Foundations & Associated Controls

The plots to have piled foundations have been identified on E23130-100(P1) Foundation Schedule 1 of 3. Should the piling technique/proposals need to be amended, notification will be provided to the Environmental Health team accordingly.

Please refer to Appendix A for our piling scope of works.

Management of Surface Water during Construction

During the construction term of the development, surface water will be managed on site by means of a number of overland flow routes which are to be provided (E1189-ENG-1050 – Contour Layout) Extract below.

All the overflow water onsite is directed towards the proposed pond which is located to the east of the site. The development of roads and adoptable drainage before any further construction of individual housing plots takes place. Hessian bags of straw will be utilized in gullies to prevent silt getting into the SUDs features.

The storm outfall along with the gullies, will be checked weekly to see if any maintenance needs to be carried out to prevent flooding from blockages that will impede the flow. All surface water during the construction period can therefore be treated in the appropriate manner, minimising the risk of flooding and maintaining the existing surface water runoff quality.



Monitoring and complaints

DDL will provide details of the site construction team prior to commencement. Relevant contact details will be posted on the site entrance as well as being provided to the Parish Council. Until such time, please contact Katie Stanyard.

Email – Kstanyard@davidsonsgroup.co.uk

Phone – 07557 744450

Environmental health will be notified of site start and invited to visit the site.

All complaints should be directed to Katie Stanyard in the first instance. Any actions/ responses can then be actioned accordingly.

Conclusion

The proposed measures and practices within the CEMP should ensure that the site is well managed and operated professionally daily. Accordingly, Davidsons request that Condition 6 is discharged.

Appendix A – Piling Scope of Works

Mitigation Measures

Upon receipt of detailed foundation designs, we will instruct a vibration assessment to determine the potential influence of driven piles for the proposed plots. The plans and calculations will show any existing properties which could potentially be affected. The report will suggest that where existing properties coincide with the vibration thresholds, they will request for dilapidation surveys to be carried out, before and after the proposed piling operation at the site.

A copy of the vibration assessment will be sent to Environmental Health Officer at LPA for information/comment.

Should dilapidation surveys find potential structural frailties to nearby buildings of the piling locations at the site, then vibration mitigation measures should be considered (e.g. trenches [open or filled] as vibration wave barriers). We will also carry out a letter drop to warn occupants prior to the piling operations at the site.

Vibration Levels

We will aim to control vibration levels to 1mm/s under BS5228: 2009+A1: 2014 guidance.

Vibration Monitoring

We will monitor the vibration levels throughout the works regularly by a suitably qualified person appointed specifically for the purpose, particularly if changes in machinery or project designs are introduced.

Should vibration levels be exceeded, works will be halted until a reasonable solution can be found to prevent any nuisance to neighbouring properties.

Contractor

The contractor is to carry out steel driven Piling, precast / in-situ piles caps and pre-cast beams,

*Working hours are **08:00 – 16:30 Monday to Friday with Saturdays on request.***

Full welfare facilities are located on site sufficient to the number of operatives working on site provided by Davidsons.

The on-site supervisor foreman for each discipline of works:

Piling Foreman – TBC

Beaming Foreman – TBC

All works are to be carried out within the designated plots and access route to and from the plots.

All works being carried out will be on the piling platform provided by Davidsons, all non-contractor personnel on site will be briefed to maintain exclusion zones around the rig and to not enter the working area without personnel consent – minimum 11m exclusion zone at all times around piling rig. Any specific traffic routes etc. will be pointed out in the site induction.

Resources

Piling will be carried out using a driven rig based on current findings from ground investigation.

Other attending plant: Telehandler

All plant will have the relevant certification available for inspection at the induction or upon delivery.

Health & Safety Requirements

All operatives are equipped with P.P.E. and will correctly use as identified in the risk assessments appertaining to the work being undertaken, head, gloves, hearing and foot protection are mandatory at all times.

- *Hard Hat*
- *Safety Glasses*
- *Gloves BS EN 1651*
- *Safety Boots*
- *Hi-visibility Clothing*
- *No shorts to be worn at any times*
- *Dust Mask FFP3 – all operatives to have carried out a face fit test.*

The appointed first aid operative to these works may be the appointed rig operator and beaming foreman for this contract. (These may change during the contract period).

First aid kit and fire extinguisher will be located in the piling van / on the rig / beaming gang's van. The emergency procedure regarding muster points when the fire alarm is raised will be briefed during the site induction carried out by Davidsons.

Operations Briefing

Before operations begin the operatives will be issued with a start-up pack which will contain all the information, they require to carry out the pile installation and beaming works. This will be briefed to all operatives prior to commencing works by the supervisor. This will either be the contracts manager or the on-site engineer. A toolbox talk will be carried out on the first day of works and regular relevant to task toolbox talks carried out throughout the contract.

Deliveries

All deliveries, including the piling rig / concrete wagons / beam deliveries etc. are to use the site access of the main site road. Once parked up the driver should un-strap the wagon and stand clear while the vehicle is being unloaded. Cones should be used to identify the danger zone behind the wagon.

Site Organisation

Principle Contractor: Davidsons

Davidsons Contact – Gareth Easom

Piling Contractor - Contracts Manager: TBC

Piling Contractor - Setting Out Engineer: TBC

Piling Contractor - Site Foreman Piling: TBC

Piling Contractor - Site Foreman Beaming: TBC

Piling Contractor - Safety Officer: TBC

Introduction

This Site-specific Method Statement provides an outline description of the work methods to be adopted for the piling and beaming on this site. Refer to required method statement for each task undertaken. Particular attention has been placed on the services located in the main road and access and egress.

Personnel

All work carried out will be executed by the contractor's labour force and supervised by the contractor. All training certificates, CPCs /CSCS etc. will be presented at the site induction.

Inspection / Tests / Checks

3% dynamic testing on the piles.

Each Zone will be set out and surveyed by the Setting out Engineer. Beaming operatives to check the in-situ works as they are installing, carrying out tape and level checks. The Setting Out engineer will then tape and level checks before the work zone is then handed over to Davidsons.

For the pre-cast beam one set of cubes will be taken for every 300m of beam installed.

Control measures to be used / Monitoring & Compliance

- *Working Platform Certificate to be signed prior to works commencing, platform to be installed, tested and maintained in accordance with the engineer's specification.*
- *Underground permit to dig*
- *Pre-Start Site inspection.*
- *Risk assessments and Method statements to be issued and approved prior to starting. These will be updated where required throughout the contract to reflect changes in the site environment.*
- *Site induction to be carried out by Davidsons.*
- *The work area will not be entered by none contractor personnel whilst works are being carried out without consent of the piling / beaming foreman.*
- *Daily Five safes to be carried out by the piling and beaming operatives. Any hazards highlighted for the daily works are to be rectified prior to starting.*

- A weekly site safety will be completed by the Piling foreman and the beaming foreman and reported back to the supervisor to rectify and highlighted issues.
- The contractor's Contracts Manager to visit site a minimum of once a week.
- Daily plant and equipment sheets will be filled out on a daily basis and any defect reported rectified immediately.

Reporting of accident, incident, near miss & unsafe situation reporting

All accidents, incidents, near misses and unsafe situation reporting will be carried out following the procedures of the contractor. Site personnel are actively encouraged to report situation at risk reports through the app on the foreman's phone.

Waste Disposal

Contractor to remove all waste to designated skips provided by Davidsons. All pallets / transit chocks and excess product will be returned periodically throughout the contract.

Segregated skips will be provided by Davidsons and tipper skips placed within works area to clear waste.

Due to the proposed works, minimal waste will be generated due to the use of off-site batched concrete and pre-cast beams.

Programme of Works

Works will commence following site setup, installation of roads & sewers. The piling programme will be kept to a short time frame to allow all plots to be piled during the same period. This will assist with keeping any possible disruption to a minimum.

Brief Method of Works

On arriving on site, a brief will be undertaken by the supervisor highlighting all the risks associated with the contract. Periodic toolbox talks will be carried out on the following subject as they have been highlighted to be the greatest risk;

- Services located backside of road
- Access / Egress
- Low platforms

The rig operator will use the piling platform to rig up and carryout all pre-use checks. All checks are to be recorded on the daily check sheets and any defects reported to the supervisor immediately.

The Rig will use the haul road located on the plan below to access with the rig and forklift.

All piling deliveries to be unloaded at the end of the haul road and materials moved to the piling areas.

All works to take place from the rear of the properties.

Beam deliveries to be taken on from the shared access drive outside plot 53. Under no circumstances should the excavator track over the services to access the road.

All wagons to ensure that they are segregated from other trades whilst unloading by means of a banksman or fencing provided by Davidsons at the front / back and rear of the wagon.

Site and equipment maintenance

All plant and equipment will be maintained as per the manufacture's recommendations. Yearly checks will be carried out on the excavator and the piling rig. Daily checks will be carried out any defects reported to the supervisor.

Records

Pile logs provided at the start of each day for the previous day's work signed by Davidson Homes representative. Dynamic tests / concrete cubes / as built drawings etc. to be supplied at the end of the contract.

Services

Services located at the back side of the tarmacked site road, no digging into the bank / contractor to complete permit to dig prior to starting. Area to be CAT scanned by Davidsons representative with the details of the Cat scan recorded on the contractor's permit.

HAVs / Occupational Health

Tools have been selected to reduce the level of vibration emitted to operatives. To reduce the exposure of hand arm vibration monolithic caps have been selected to avoid breaking down the concrete piles. Operatives to rotate tasks to avoid exceeding the ELV. Occupational health medicals are carried out on a regular basis with all operatives. Where concrete cutting is required a dust suppression kit will be utilised.

Warranty & Building Control

We need to be mindful of the requirements of the NHBC and Local Authority Building Control where plots are affected by piled foundations.