# CONSTRUCTION ENVIRONMENTAL MANAGEMENT AND DEMOLITION PLAN
# LAND OFF HINCHLEY ROAD, CHARLESTOWN

## Introduction

This Construction and Environmental Management Plan has been prepared by Miller Homes to enable support of the Reserved Matters planning application for 106 new residential units.

This statement seeks to deal with the following:

- **Times of construction activities on Site / Working Restrictions Extended within Hours**
- **Location of the Site Compound**
- **The Parking of Vehicles of Site Operatives and Visitors**
- **Loading & Unloading of Plant and Materials**
- **Storage of Plant and Materials used in constructing the Development**
- **Water Resources and Flood Risk**
- **Wheel Wash Facilities**
- **Measures to control the emission of dust and dirt during construction**
- **A Scheme for Recycling/Disposing of Waste Resulting from Demolition & Construction Works**
- **Stockpiles and Storage Mounds**
- **Noise and Vibration**
- **Mitigation measures for the Construction Phase of the Development:**
- **Site Monitoring**
- **Generators**
- **Ecology**
- **Route of Build Plan**

The scheme shall include details of all dust suppression measures and the methods to monitor emissions of dust arising from the development. The approved Construction and Environment Management Plan shall be implemented and in force throughout the construction phase of the development.

## Times of construction activities on Site

Construction works associated with the development herby permitted which are audible at the site boundary shall not take place except between the hours of Monday to Friday (07.30 to 18.00) and Saturdays (08.30 to 14.00).
No construction activities or deliveries shall take place on Sundays or Public and Bank holidays.

## Working Restrictions within Extended Hours

1. No piling activities to take place before 8:30am or after 17:30. These operations are to be within normal working hours.
2. All deliveries are to arrive only in agreed working hours as stated above.
3. No construction activities or deliveries shall take place on Sundays or Public and Bank holidays.
4. No external works after 18:00.
5. Internal works within these extended hours to comprise of joinery, plastering, electrical, plumbing and decorating. No activities with high noise levels/disturbance such as power tools,

electric saws etc are to be used as these will cause complaints.
7. Leaflet drop to surrounding residents – containing description of the works that will take place out of normal hours, together with a contact name / number.

**Location of the Site Compound**

The location of the site compound has been positioned in the north of the development and there will be a temporary compound in the southwestern corner of the development while remediation works take place. Construction vehicles should only access the site via Caspian Road to provide safe travel and to avoid passing occupied dwellings within the development where possible. Refer to Route of Build Plan for location of compound, contractor car parking and build route.

**The Parking of Vehicles of Site Operatives and Visitors**

All site operatives and visitors must park their vehicles on site. A temporary designated car park will be constructed on site. All visitors and site operatives must utilise the car park only, there is to be no parking on any of the surrounding street (Caspian Road / Hinchley Road) for site operatives. If additional parking is required, this is to be provided within the development. Please see the attached Route of Build Plan for further details and location.

**Loading & Unloading of Plant and Materials**

Vehicular and pedestrian access to the site compound will be from site access point, served off Caspian Road. Delivery vehicles will be provided with directions to the site and be required to turn off engines to avoid nuisance upon arrival. Area for turning to enable vehicles to exit the site onto Wood Lane in forward gear is determined by the development road infrastructure that to the left of the proposed compound. A delivery vehicle lay-by and wash down area will be provided at the entrance of the site compound. Delivery constraints will be identified to all suppliers and trade contractors. There are to be no deliveries between the hours of 8:30 – 9:30 and 14:30 – 16:00 to avoid school drop off and collection times, during term times.

**Storage of Plant and Materials used in constructing the Development**

The location of the store and plant materials has been carefully located to minimise noise disruption to residents. These will be stored in a secured compound. Please see the attached Route of Build Plan for exact location.

Oil and Chemical Storage – These are to be stored within our site compound area (compound location noted on the attached Route of Build Plan). All fuel will be stored in a double skinned tank or a tank in a suitable bunded area in compliance with the Control of Pollution (Oil Storage) (England) Regulations 2001. Refuelling activities will only be undertaken by suitably qualified persons and spill kits will be available within the site compound.
All hazardous liquids e.g., oils, lubricants, chemicals, and tins of paint be stored in a segregated area in a suitable locked COSHH container. COSHH assessments will be available nearby for information in the event of a spillage.

**Water Resources and Flood Risk**

Surface water and ground water resources could be impacted from pollution, for example fuel spillages, dust, and waste.

**Mitigation: -**
Measures to manage spillages, dust and waste are detailed in other sections of this document. All the diesel tanks will be bunded and diesel spill response kits will be in high-risk areas susceptible to spills. Fuel spill kits are stored in the site compound and at appropriate locations across the development site.

All options are to be considered for occurrence of silt/sediment runoff. These include:

- Leaving grassy areas as catchment or settlement areas.
- Battering or sheeting oil stockpiles and locating them away from the watercourses
- and drains, where possible.
- Protection of drains.
- Use of grips and straw bales.
- Silt fencing; and
- Dewatering.

**Wheel Wash Facilities**

During construction works an appropriate wheel-washing system will be provided to remove mud, stones and any other extraneous materials from the wheels and chassis of construction vehicles exiting the site and all loads of construction materials, excavation spoil or other such matter shall be fully covered in order to ensure that no material leaves the site attached to the vehicle which might subsequently be deposited on the highway. The exit from the wheel washing system shall be constructed from a hard, nonporous surfacing material and sited as far away from the exit to the highway as is possible given the constraints of the site and the surface shall be always kept clean.

Given the scale of the project, the system that will be installed will be a one man operated power hose that will be used when needed. This is to be located adjacent to the site compound at the construction site entrance. No wastewater from this process is to be discharged via a watercourse. All highway gullies on site are to be fitted with gully bags to act as a filter to prevent any debris entering the system.

Waste water resulting from the wheel washing system shall be disposed of onsite and shall not be allowed discharge into the public sewerage system without prior removal of soil, stones and any other suspended material. Wheel washing will be kept under weekly review, with additional measure taken as necessary based on current site conditions and activities. Visual checks on wheels and bodies of HGVs leaving site shall be carried out to prevent mud (and then dust) being carried off site. Build of mud and dirt will be removed from the vehicle wheels using a pressurised hose available to all personnel on site.

Wheel washing will be kept under weekly review, with additional measures taken as necessary based on current site conditions and activities.

In addition to providing active wheel wash facilities at the site exit, Miller Homes will also arrange for regular (daily or weekly, depending on the time of year and activities on site) visits by road sweepers/cleaners. They will also be brought in to deal with any emergency issues.

**Measures to control the emission of dust and dirt during construction**

This section has been written in line with the "The control of dust and emissions from construction and demolition, Best practice guidance".

Site management team will be responsible for all dust monitoring to be undertaken daily within the site boundary and daily monitoring will be undertaken were any dust over sails the development boundary externally. All dust monitoring will be recorded on site as and when required, especially during early construction phase and dryer months of the year.

Management of dust and dirt during construction will be given a high priority as to avoid the spread onto any highways accessing the site. The main area of concern is the spread by vehicles entering and leaving the site, this will be managed by ensuring our access roads are dampened down which will be undertaken by a bowser towed behind a vehicle.

Methods of dust suppression during manual works are to be taken into consideration within the Contractors method statements. This includes dust suppression kits using water where applicable to minimise the amount of dust created etc.

**A Scheme for Recycling/Disposing of Waste Resulting from Demolition & Construction Works**

Miller Homes is acutely aware of the effects that the disposal of waste can have on the environment and our policy is clearly to reduce wastage in all possible areas. One of the key principles of the approach is to make the operatives more responsible for waste and waste management. This is embodied in the preference for each sub-contractor to be responsible for supplying its own materials – this ownership results in the minimising of unnecessary waste. These concepts will be incorporated within the sub-contract documentation, such that each sub-contractor considers the most environmentally acceptable solution to the packaging to their deliveries. A management plan will be developed to organise the segregation of waste into separate containers so that recyclable items such as metals and timber can be recovered.

- Implementation of a 'just-in-time' material delivery system to avoid materials being stockpiled, which increases the risk of their damage and disposal as waste;
- Attention to material quantity requirements to avoid over-ordering and generation of waste materials.
- Re-use of materials wherever feasible i.e. re-use of excavated soil for landscaping.
- Segregation of waste at source where practical; and re-use and recycling of materials off-site where re-use on-site is not practical (e.g. through use of an off-site waste segregation facility and re-sale for direct re-use or reprocessing Burning of wastes or unwanted materials will not be permitted on-site. All hazardous materials including chemicals, cleaning agents, solvents and solvent containing products will be properly sealed in containers at the end of each day prior to storage in appropriately protected and bundled storage areas.

As the new buildings become enclosed, the rubbish will be collected in lightweight floor based wheeled skips that can manoeuvre around the configuration of the units. The skips will then be taken to ground floor level by hoist, and either disposed of into larger skips, or if suitable, placed into a compactor to reduce the volume of the waste before it is taken off-site.

**Stockpiles and Storage Mounds**

Miller Homes will make best endeavours to avoid the use of long-term stockpiles on site wherever possible. If necessary, the following measures will be put in place:

- Ensure that stockpiles exist for the shortest possible time.
- Do not build steep sided stockpiles or mounds or those that have sharp changes in shape.
- Whenever possible keep stockpiles or mounds away from site boundary, sensitive receptors, watercourses and surface drains.
- Re-use hard core material where possible to avoid unnecessary vehicle trips.

On this development temporary soil stockpiles will be located within the plot boundaries and away from the highway, drainage, and any existing watercourse. Any topsoil stockpiles are to be grass seeded as to increase in stability of soil.

**Noise and Vibration**

Noise and vibration will be caused during the construction of the proposed development. Some of the site activities producing this are: -

- Traffic movements.
- Plant movements.
- Demolition operations.
- Drilling and piling operations.
- Excavating operations.
- General construction activities; and
- Emergency sirens.

To avoid nuisance been caused by any of these activities the following mitigation measure will be in place throughout the construction of the development: -

The development will seek to not exceed maximum noise levels of 1.0mm/s/ppv at the development boundary and monitoring loggers will be installed at the periphery of the development boundary as required.

Should noise or vibration levels exceed the maximum noise levels of 1.0mm/s/ppv, work will cease until the cause of the exceedance has been identified and the problem has been resolved or an alternative method of work which is less intrusive has been established.

- During the early initial remediation, groundworks and plot piling phase of the development, the approved principal contractor will provide and install noise and vibration monitoring prior to commencement & operate during agreed working hours only.
- Logs will be kept for all noise and vibration monitoring during this phase
- The piling phase of the scheme will be considered the construction phase and activity that is likely to produce the highest levels of noise.
- As a Miller Homes standard and when Miller Homes operate as principal contractor following the early initial remediation, ground works & plot piling on the development, noise and vibration will be limited to the core working hours previously defined.
- Contractors must use “best practicable means” (BPM) to minimise the nuisance from noise and vibration. ***See appendices for typical Vibration monitoring system that will be used.***
- The maintenance and location of plant will be planned to minimise noise levels and screening will be used where necessary.

- Adherence to noise limits should be included in contractual agreements with contractors. General induction training for site operatives and specific training for staff having responsibility for aspects of controlling noise from the site.
- Use of most environmentally acceptable and quietly operating plant and equipment appropriate to the works with emission levels limited to relevant EC Directive/UK Statutory Instrument levels and levels quoted in BS5228.
- Intermittently operating plant will be shut down in the intervening periods between operations.
- Any compressors brought on to site would be silenced or sound reduced models fitted with acoustic enclosures.
- All pneumatic tools will be fitted with silencers or mufflers.
- The excavation and demolition of existing structures will, wherever possible, be undertaken without the use of pneumatic breakers.
- Wherever possible, the use of hydraulic attachments or other means of crushing concrete and hard materials will be used in preference to pneumatic breakers.
- Where the use of impact hammers is necessary, their attachment to larger and heavier excavators will be employed to reduce the level of vibration.
- Care will be taken when erecting or striking scaffolds to avoid impact noise from banging steel. All operatives undertaking such activities will be instructed on the importance of handling the scaffolds to reduce noise to a minimum.
- Deliveries will be programmed to arrive during daytime hours only. Care will be taken when unloading vehicles to minimise noise. Delivery vehicles would be routed so as to minimise disturbance to local residents. Delivery vehicles will be prohibited from waiting on the highway or within the site with their engines running.
- For complaints and consultation with the surrounding public a Miller 'Respect letter' will be issued to all neighbouring properties. Number included within the letter and on-site perimeter signage.
- All complaints are responded to within **12 hours** (depending on time of the complaint being issued outside of working hours, then any complaint would be responded to within **24 hours).**
- Where response is not accepted, an escalation process is in place to ensure the complaint is dealt with before it is closed out in full. i.e. Manager first response, CM second response, Director's response if further action is required.

**Mitigation measures for the Construction Phase of the Development:**

| Issue | Control Measure |
|---|---|
| Site planning | • Erect solid barriers to site boundary<br>• No bonfires<br>• Plan site layout - machinery and dust causing activities should be located away from sensitive receptors<br>• All site personnel to be fully trained<br>• Trained and responsible manager on site during working times to maintain logbook and carry out site inspections<br>• Hard surface site haul routes |
| Construction traffic | • All vehicles to switch off engines - no idling vehicles<br>• Effective vehicle cleaning and specific wheel-washing on leaving site and damping down of haul routes<br>• All loads entering and leaving site to be covered<br>• No site runoff of water or mud<br>• On-road vehicles to comply to set emission standards<br>• All non-road mobile machinery (NRMM) to use ultra-low sulphur tax-exempt diesel (ULSD) where available<br>• Minimise movement of construction traffic around site<br>• Hard surfacing and effective cleaning of haul routes and appropriate speed limit around site |
| Earth moving works | • Minimise dust generating activities<br>• Use water as dust suppressant where applicable<br>• Cover, seed or fence stockpiles to prevent wind whipping<br>• Re-vegetate earthworks and exposed areas<br>• If applicable, ensure concrete crusher or concrete batcher has permit to operate |

**Site Monitoring**

If best practicable means are followed correctly, then formation of dust and harmful emissions from the sites should be minimised as much as possible. However, Miller Homes will look to continuous site monitoring to manage dust and emissions from the construction.

Although we will use our best endeavours to minimise and manage the dust and dirt during construction there may be a minimal amount which would spread from the site, this will be managed by a road sweep which will attend site and ensure all highways are cleaned of any construction dirt.

Road sweepers will be present on 2 x ½ day per week as a minimum, all times during muck shift where Miller Homes are Principal contractor.

Also, water cubes used to dampen down during dry weather conditions & site speed limited to 10mph to reduce dust when driving through site roads. Tickets will be made available for sweepers to confirm attendance and duration, based on the required duration above
Miller will also monitor through SHE inspections with any issues recorded and actioned.

Additional sweepers called off as and when required to maintain site roads and routes to site (agree distance). Site Manager can monitor and log using the Miller Homes internal app on ad hoc basis to ensure thorough monitoring is being undertaken.

To allow us to monitor the overall impact of our construction on the neighbouring occupiers an information board will be placed at the front of the site with the site details and contact number for residents to contact Miller Homes' customer care department through our "Miller Respect" scheme.

Miller will monitor Noise levels through SHE inspections with anu issues recorded and actioned & Site Manager will monitor and log using the internal Miller app on ad hoc basis.

**Generators**

Where required generators will be used between the hours stated in above section regarding working hours. Generators will be manually switched on and off, timers will not be used.

**Ecology**

To inform the site preparation and construction activities it is recommended that the following measures described below are accommodated by the Construction Environment Management Plan.

Nesting Birds:

- All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended) while they are nesting. It is advised that works such as vegetation clearance that will affect habitats suitable for use by nesting birds are scheduled to commence outside the bird nesting season. Commencement of works in the nesting season must be informed by a preworks nesting bird survey, carried out by a suitably experienced ecologist. The bird breeding season typically extends between March to August inclusive.

- If breeding birds are detected an ecologist will issue guidance in relation to the protection of the nesting birds in conjunction with the scheduled works. This may involve cordoning off an area of the site until the young birds have fledged.

Lighting:

- During the construction phase, any temporary lighting associated with the site compound or site entrance must involve the use of appropriate products and screening, where necessary, to ensure no excessive artificial lighting shines over any retained habitats particularly along the surrounding tree belts or areas of landscape planting, as lighting overspill may deter use by wildlife such as foraging bats.

Protection of existing vegetation:

- During the construction phase, temporary protective demarcation fencing will be used to protect the trees and shrubs to be retained. The fencing must extend outside the canopy of the retained trees and shrubs and must remain in position until all construction operations are completed to ensure protection is provided throughout the construction phase. The fencing and associated signs will be in accordance with BS5837:2012.

Measures for the protection of other wildlife:

- For the protection of other wildlife at the site, during the site preparation works and construction operations it is essential that the following best practice and Reasonable Avoidance Measures are applied:
- Installation of bird boxes on retained trees should take place prior to clearance works to reduce potential short-term nesting habitat loses.
- Dense vegetation must only be cleared following an inspection for nesting and hibernating hedgehog (dependent on the time of year).
- Any trenches or holes left open overnight must be fitted with a means of escape (such as ramped edge or a sloping plank of timber). This will ensure that any inquisitive animals do not become trapped.
- Any pipes must be stored with caps on (to prevent animal entry);
- No fires must be lit at the site; and
- Any chemicals or harmful materials must be stored so that they cannot be accessed by inquisitive animals.

Measures for the methods for felling trees categorised as of low bat roost potential:

- A Toolbox Talk to be given to contactors prior to tree works.
- The felling work will be undertaken during weather conditions suitable for bats to be active, avoiding the main hibernation period (October-March), to minimise the risk of significant disturbance.
- A supervising ecologist with appropriate experience will be present on site to advise on felling methods and what to do in the event bats are encountered.
- Sections of the tree containing features suitable for roosting bats, i.e. thick ivy stems, will be softly lowered to the ground, following which these will be subject to a more detailed inspection by the supervising ecologist to confirm absence of bats; and
- After felling, the sections of the tree supporting thick ivy stems will be retained in a suitable location overnight allowing bats to disperse, in the unlikely event that any are present but undetectable.

Refer to Ascerta Ecology Report for further information.

For any complaints and consultation with the surrounding public a Miller ‘Respect letter’ will be issued to all neighbouring properties. Contract number included within the letter and on site perimeter signage (location of perimeter signage to be determined on site).

- All complaints are responded to within **12 hours.**
- Where response is not accepted, an escalation process is in place to ensure the complaint is dealt with before it is closed out in full. i.e. Manager first response, CM second response, Director’s response if further action is required.
- Complaints received will be logged and any action taken will be recorded and documented for future reference.