

CONSTRUCTION MANAGEMENT PLAN

Darton Lane, Barnsley, S75 5AH



INTRODUCTION

This Construction Management Plan has been prepared to demonstrate how the development will be constructed in a safe manner to the satisfaction of all parties.

1.0 PROCEDURES

The construction of the Site will be implemented and managed in accordance with Duchy Homes' management structures, processes and procedures throughout the duration of the delivery of the Site. All works procured in relation to the Site will be in accordance with ISO 14001 Environmental Management System.

2.0 SITE MANAGEMENT

Duchy Homes development sites comprise a core team of site-based management and staff along with a team of selected sub-contractors and suppliers. The following core members of staff will deliver this site:

- 1no Site Manager
- 1no Assistant Site Manager / Finishes Foreman (part duration)
- 1no Fork Lift Driver / 1no Fork Lift Driver (part duration)
- 1no Labourer / Material Controller / 1no Labourer (part duration)

The Divisional Head of Construction will be responsible for the overview and management of the site based team, and will visit the Site on a regular basis to manage the delivery of the build programme and deal with any compliance issues.

3.0 THE TIME OF CONSTRUCTION ACTIVITIES & DELIVERIES ON SITE

Construction activities, deliveries, removal of plant, equipment, machinery and waste from the site will take place at the following times only:

- Monday - Friday: 08-00 – 18:00
- Saturdays: 08-00 – 13:00
- Sundays: No works planned presently
- Bank Holidays: No works planned presently

Should we require deviation away from the above times, permission will be sought from the LPA.

4.0 SCOPE OF WORKS

The works comprise of the construction of 46no. residential units consisting of 1, 2, 3 & 4 bedroom homes, together with associated highway works, drainage works, external works and landscaping.

CONSTRUCTION MANAGEMENT PLAN

Darton Lane, Barnsley, S75 5AH



5.0 ENABLING WORKS/FORMATION OF SITE PERIMETER

The establishment of the Site, compound, welfare facilities and general site set-up arrangements are to be implemented in accordance with Duchy Homes standard processes and procedures, and the company QA procedures, accredited to ISO 9001:2015.

Duchy Homes processes and procedures ensures the establishment of a build route and location of site compound area to ensure that on site works are safely and securely (segregated as far as is physically possible) from residents and potential purchasers visiting the sales arena.

Due to the shape of the site, with a large section fronting on to Darton Lane, it is proposed to utilise the permanent site access for construction traffic and create a haul road internally with the potential to utilise the eastern access point adjacent to Plot 1 where needed. This will avoid construction vehicles utilising all of the approved access points to make access and egress on the Darton Lane, as well as making the main road safer for public road users.

Once setup, the site will be secured, and all visitors will be directed to the Site Compound to report to the Site Manager. A temporary licence will be put in place with the adjacent landowner that will enable us to construct the Compound, Car Park, Material Store and Welfare facilities off site as indicated on the Site Execution Plan within the Appendices. Pedestrian walking areas and dedicated crossing points will be provided on site. The Site will be secured with heras fencing and/or timber hoarding to suit the scheme and operations being carried out at the time. This fencing will be provided to the perimeter of the Site at the commencement of the development. The area of fencing is gradually reduced throughout the build period as and when dwellings are completed and handed over to residents, ensuring build properties are segregated from the live construction area.

6.0 MANAGEMENT OF VEHICLE ACCESS/EGRESS & DELIVERIES

Once the enabling works are completed, access will be via the permanent adoptable site access from Darton Lane, adjacent to Plot 37. Parking will be provided in the dedicated on site car park, which provides for a suitable surface for all plant and deliveries, to ensure the surrounded highways remain in a clean condition throughout the construction of the development.

All subcontractors and suppliers are provided with information showing the access, egress and parking arrangements for the site as part of their works order. Confirmation of such matters will be presented through the Site Induction process to confirm these arrangements. No other existing roads will be used for accessing the Site.

The parking of all site operatives and site visitors will be provide on site within the purpose built car park. Site staff and visitors parking is separate to the Sales.

7.0 SITE PARKING & STORAGE OF PLANT & MATERIALS

All contractor's vehicles will park within the site area designated parking area on hardstanding. All materials and plant will be stored on site within a secured Materials and Plant Store.

8.0 WHEEL WASH FACILITY

Wheel cleaning facilities will be provided on Site to deal with construction vehicles leaving the Site ensuring, as much as practically possible, that soil is not transferred from the Site onto the adjacent adoptable highway. In addition, road sweepers will be employed if necessary, to ensure the existing roads leading to and from the Site are kept in a clean and safe condition. During the period of build when earthworks operations are ongoing, the frequency and duration of the use of road sweepers will be increased if required.

CONSTRUCTION MANAGEMENT PLAN

Darton Lane, Barnsley, S75 5AH



With the existing highway being used for access and egress to site and with the measures outlined above, dirt being carried on to the nearby adopted highways will be kept to a minimum.

9.0 ENVIRONMENTAL CONTROL MEASURE

All fuel storage will be within suitable and sufficient containers to ensure that spills are prevented. These containers will be situated within an adequately bunded area, well away from any watercourse and drainage inlets, to ensure that any potential spillage is contained. All site vehicles will be regularly inspected, and correctly maintained, to ensure that the risk of fuel leaking is minimised.

10.0 SITE LIGHTING

Any artificial lighting provided on the site will be installed in such a way as to cause no light trespass beyond the site boundary or annoyance from glare at nearby sensitive receptors. Where appropriate, consideration will be given to light screening and directionality to achieve this. If complaints are received by the Local Planning Authority in relation to light nuisance from the site, immediate action should be taken to avoid any further light issues.

11.0 PROTECTION OF EXISTING TREES

Protection will be provided in accordance with the submitted Arboricultural Impact Assessment and BS 5837:2012. Prior to site start, Heras fencing will be installed around all trees/hedgerows which are to be retained to prevent and plant and machinery from accessing the trees root protection zones. The protective fencing will remain in place for the duration of the construction works.

12.0 COMPLAINTS /LIASON WITH THE PUBLIC & THE COUNCIL

Details of the contractor will be visible on the hoarding, allowing people to get in contact with them easily for any queries or complaints.

Should noise, vibration and dust complaints arise from the building works, the cause will be identified/investigated in a timely manner and any mitigation works carried out will be recorded.

If complaints or activities with a high potential to cause complaints were/are to arise, additional environmental monitoring of noise, vibration and dust and setting of control targets/limits may be required. This would be the responsibility of the site operator and would need to be agreed with the Local Planning Authority and carried out by suitably trained personnel.

All site staff are to be briefed regarding the complaint's procedure.

Elevated Noise Levels

Any elevated levels of noise identified by the complaint's procedure should be mitigated as follows:

- The Site Manager will investigate the source of the noise and carry out a range of checks at the identified source of the elevated levels if it is found to be originating from within the Site. As part of these checks the Site Manager will consider the need for quantitative noise monitoring.
- All noise monitoring should be completed with due regard paid towards the methodology prescribed in British Standard 5228+A1 (2014) (BS5228): 'Code of practice for noise and vibration on construction and open sites – Part 1: Noise'. Noise monitoring locations should be agreed with the Local Planning Authority.

CONSTRUCTION MANAGEMENT PLAN

Darton Lane, Barnsley, S75 5AH



- The results of any monitoring will determine whether construction activities are causing an unacceptable noise impact at the receptor location; and, Liaison with local residents who may be affected by construction works is required. Local residents will be informed of the nature of the works, proposed hours of work and their expected duration.
- The Site Manager will then ensure that construction activities are being undertaken in accordance with the manufacturer's specifications, to the requirements set out in this Noise and Vibration Management Plan and ensure that any improvements required to minimise the noise levels are made.

To further mitigate the elevated noise levels, the following actions shall also be considered:

- The modification or replacement of equipment identified as generating excess noise.
- Installation of temporary barriers around the noise generating equipment/processes; and
- Once the improvements identified by the Site Manager have been completed, the manager will commission a further set of monitoring to ensure that the improvements have met the required standard. If the noise rating levels are still not being met, then the manager will repeat the request for improvements and subsequent monitoring until the noise limits are achieved.

If operational failings are identified, the re-training of employees will take place to ensure that all employees operate to the required standards. The Site Manager will ensure a close liaison with the Local Authority throughout all stages of the process following a complaint related to elevated noise levels.

Elevated Vibration Levels

Any elevated levels of vibration identified by the complaint's procedure, either through human perception or measurement, should be mitigated as follows:

- The Site Manager will investigate the source of the vibration and carry out a range of checks at the identified source of the elevated levels if it is found to be originating from within the Site. As part of these checks the Site Manager will consider the need for quantitative vibration monitoring.
- All vibration monitoring should be completed with due regard paid towards the methodology prescribed in British Standards 6472-1:2008 'Guide to evaluation of human exposure to vibration in buildings. Part 1: Vibration sources other than blasting' and 5228+A1 (2014) (BS5228): 'Code of practice for noise and vibration on construction and open sites – Part 2: Vibration'. Vibration monitoring locations should be agreed with the Local Planning Authority and should be as close as possible to the garden/building envelope of the complaint's property.
- The results of any monitoring will determine whether construction activities are causing an unacceptable vibration impact at the receptor location. Real-time results will be required in the event of any structural damage criteria being met or exceeded during operations; and
- The Site Manager will then ensure that construction activities are being undertaken in accordance with the manufacturer's specifications, to the requirements set out in this Management Plan and ensure that any improvements required to minimise the vibration levels are made.

CONSTRUCTION MANAGEMENT PLAN

Darton Lane, Barnsley, S75 5AH



In the event of elevated levels of noise being identified, the event will be reported into an appropriate management system by a member of operational staff, i.e. the Construction Director. The completed form should then be distributed for review at operational, management and health and safety meetings.

Reporting Measures

If any noise or vibration complaints are reported, then these will be investigated immediately with the relevant contractor.

The results of the investigation, along with details of any mitigation methods implemented or work practice that has been modified and how complainants have been kept informed will also be sent to Environmental Protection Team as soon as possible.

All site staff are to be briefed regarding the complaint's procedure.

Liaison Procedures

Communication to local residents will include notification letters, including the name and telephone number of the principal contractor. The principal contractor will be able to give further information to the caller and deal with any complaints or emergencies that may arise.

Additionally, the contact details of those accountable for environmental issues, the principal contractor and the contractor's regional/head office to assist in dealing with complaints if they were to arise during the works.

13.0 LOADING AND UNLOADING OF PLANT AND MATERIALS

Deliveries for plant and materials will access the site via the construction access off the new Spine Road and be loaded/unloaded in the proposed compound area which is indicated on the appended Site Execution Plan (DAR/002/SEP).

14.0 PROTECTION OF EXISTING TREES

Protection will be provided in accordance with the submitted Arboricultural Impact Assessment and BS 5837:2012. Prior to site start, Heras fencing will be installed around all trees/hedgerows which are to be retained to prevent and plant and machinery from accessing the trees root protection zones. The protective fencing will remain in place for the duration of the construction works.

15.0 DUST SUPPRESSION, MITIGATION AND AVOIDANCE MEASURE

"THE CONTROL OF DUST AND EMISSIONS DURING CONSTRUCTION AND DEMOLITION SPG" has been produced to provide guidance for developers to specify and adopt site specific measures. Our developments includes the following activities that have the potential to generate dust;

- Earthworks.
- Construction; and
- Vehicle Movements and Trackout.

To deal with the above, the following measures will be in implemented in order to minimise and mitigate the control of dust;

CONSTRUCTION MANAGEMENT PLAN

Darton Lane, Barnsley, S75 5AH



EARTHWORK ACTIVITIES - Following earthwork activities it is important to reduce the generation and resuspension of dust through re-vegetating exposed areas and soil stockpiles to stabilise surfaces. Where this is not possible, the use of hessian and/or mulches to re-vegetate or cover with topsoil will be implemented.

CONSTRUCTION ACTIVITIES - It is important that cement, sand, fine aggregates and other fine powders are sealed after use and if necessary stored in enclosed or banded containers or silos. Some materials should be kept damp to reduce the risk of drying out.

VEHICLE MOVEMENTS AND TRACKOUT - Unpaved haul routes can account for a significant proportion of fugitive dust emissions, especially in dry or windy conditions, when the generation of dust through the movement of vehicles is exacerbated. Due to this, as far as possible we will ensure that hard surfaces or paving will be used for all haul routes, even if routes are temporary.

Notwithstanding the above, it is recommended that this guidance and its risk assessment methodology be followed for each activity by the person accountable for environmental issues.

Potential impacts are described as annoyance due to dust soiling; health effects due to an increase in exposure to PM10; and harm to ecological receptors.

These impacts will be given a risk rating based on the scale and nature of the works taking place and the sensitivity of the site. Risk ratings will be described in terms of being low, medium, or high and site-specific mitigation measures will be put in place, proportionate to the level of risk identified.

The SPG details approaches to monitoring dust throughout the construction phase of a development, and it is recommended that this be followed where able.

Where there is evidence of airborne dust from the building construction activities the site, the principal contractor should conduct inspections and assessment. When conditions likely to increase the risk of dust release occur i.e. higher wind speeds and/or site operations with increased dust generation; the frequency of visual assessments should be increased and where necessary, monitoring should be undertaken. Once the source of the emission is known, site-specific mitigation measures must be undertaken. Observations and associated mitigation methods should always be recorded in a formal site log.

Consideration should be given to the siting of aggregate stockpiles, based upon such factors as the prevailing winds, proximity of site boundary and proximity of neighbours.

Areas where there is vehicular movement should have a consolidated surface which should be kept in good repair.

Activities that cause dust to be produced should not be undertaken during periods of high winds to avoid excessive mobilisation of particulate matter from the site.

The main principles for preventing dust emissions are containment of dust and suppression of dust using water or proprietary suppressants. Suppression techniques should be properly designed, used, and maintained, to be effective.

Effective preventative maintenance should be employed on all aspects of the construction works including all plant, vehicles, buildings, and the equipment concerned with the control of emissions to air.

Important management techniques for effective control of emissions include proper management, supervision, and training for process operations; proper use of equipment; effective preventative maintenance on all plant and equipment concerned with the control of emissions to the air; and it is good practice to ensure that spares are available on site to fix breakdowns quickly.



16.0 PILING ACTIVITIES

Where piling is to be used as part of the development noise and vibration mitigation measures will be in place for the duration of the piling activities. These include:

- Control at the source (e.g. silencers, vibration dampers, enclosure, and the use of alternative piling methods such as press-in piling).
- Control along path of noise from source to receiver (e.g. barriers, screening, and location of plant); and,
- Adequate maintenance of plant and equipment – ensuring inspection and records of inspections.

17.0 NOISE & VIBRATION CONTROL

Site Preparation, Design and Layout

It is important to consider the impact of the construction site on the local environment. This includes understanding where the nearest sensitive resource or residential receptor is, the general ambient noise level in the area and understanding what the impacts will be, given the duration, scale and type of construction and demolition required.

Where practicable we will implement the following:

- Locate the site access and the material storage away from sensitive receptors.
- Position site huts to provide additional screening of works.
- Provide turning space within the site, or create a through road, avoiding the need to reverse and reducing the associated noise from reverse warning systems.
- Delivery routes and vehicle holding areas will be chosen to avoid diverting traffic.
- Establish an electricity supply to the site. This will limit the requirement for diesel generators which can have a localised noise and air quality impact; and,
- Ensure adequate planning within the project to prevent noise generating from double handling of materials and overlapping of high noise activities.

Operations

Any plant and equipment, including any on hire, is to be checked to ensure it is in good working order and conforms to the standards of the manufacturer. Equipment is to be properly silenced and meet statutory emission standards. Defective items are not to be used.

All large concrete pours are started within normal hours, to avoid overruns. Before works commence, the site workforce will be fully briefed on the need to keep all noise generated to a minimum. The opening and closing of the site access will be minimised through good coordination of deliveries and vehicle movements.

Consideration should be given to excavations close to neighbouring structures including roadways and pavements with respect to adverse effects from vibratory plant.

CONSTRUCTION MANAGEMENT PLAN

Darton Lane, Barnsley, S75 5AH



Plant and Equipment

Noisy plant or equipment will be sited as far away as is practically possible from sensitive receptors. The use of barriers such as site huts and acoustic sheds or partitions to deflect noise away from noise sensitive areas are to be employed wherever practicable.

Wherever practicable, all plant and equipment will be powered by mains electricity in preference to locally powered sources such as diesel generators. Hand tools will also be electrically powered rather than petrol or diesel driven.

Vehicles and mechanical plant used for the purpose of the works will be fitted with effective exhaust silencers, maintained in good and efficient working order, and operated to minimise noise emissions. The contractor will ensure that all plant complies with the relevant statutory and manufacturers' requirements.

For works consented to occur outside of normal working hours, where practicable, a broad-band reverse warning system will be used on all vehicles and at any time where it is safe to do so, all sirens and alarms will be disengaged.

Machines in intermittent use will be shut down in the intervening periods between works or throttled down to a minimum. Noise emitting equipment that is required to run continuously may have to be housed in suitable enclosures.

Compressors will be "sound reduced" models fitted with properly lined and sealed acoustic covers that will be kept closed whenever the machines are in use.

Equipment which breaks concrete, brickwork, or masonry by bending or by bursting will be used in preference to percussive tools as far as practicable.

Pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers.

During backfilling and ground compaction work, dead rollers will be used in preference to vibrating rollers where practicable in accordance with compaction capabilities.

Where practicable, rotary drills and bursters actuated by hydraulic, chemical, or electrical power will be used for excavating hard or extrusive material.

Plant will be maintained in good working condition so that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum.

Care will be taken when loading or unloading vehicles, dismantling scaffolding, or moving materials etc. to reduce impact noise.

The types of equipment are yet to be confirmed however the equipment to be used on site will be detailed within the construction phase plan.

CONSTRUCTION MANAGEMENT PLAN

Darton Lane, Barnsley, S75 5AH



APPENDIX 1

Site Execution Plan

CONSTRUCTION MANAGEMENT PLAN

Darton Lane, Barnsley, S75 5AH



APPENDIX 2

Anticipated Routes to Site

CONSTRUCTION MANAGEMENT PLAN

Darton Lane, Barnsley, S75 5AH

