



Construction Management Plan
KEYMER TILES - PHASE 3&4,
BURGESS HILL, WEST SUSSEX.

**CONSTRUCTION MANAGEMENT PLAN
FOR THE REDEVELOPMENT OF PHASE 3&4
OF THE REDUNDANT KEYMER BRICK & TILE Co.**

**NYE ROAD
BURGESS HILL
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DATE: DECEMBER 2016

ISSUE NO.: 03

DOCUMENT REVISION RECORD

ISSUE NUMBER	DATE	REVISION DETAILS	REVISION AUTHOR
01	December 2016	Issued for discharge of planning Condition No.12.	John Wallis
02	March 2018	Section 3.5 'Air and Dust Management' updated in response to comments from LPA EHO.	Dan Chapman
03	September 2018	References to Phase 2 amended to Phase 3&4 to confirm CMP applicable to future phases. Other minor amendments made throughout to update construction status.	Dan Chapman

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INTRODUCTION

This Construction Management Plan (CMP) has been prepared for submission to Mid Sussex District Council (MSDC) on behalf of Croudace Homes Ltd, it seeks to discharge 'Condition 12'. The details contained within this CMP relate to 'Phase 3&4' of the development.

The CMP describes the key construction activities and proposed programme for the development of 'Phase 3&4'. It details the steps that will be taken during the construction phase of the project to help avoid adverse impact on highway safety and the amenity of the neighbouring area. It also outlines how it will support the ideals of sustainable development through careful waste management, and demonstrates that construction materials, labour and plant can access and park in the site in a safe and efficient manner. To address these issues the document covers the following topics: -

- The Site
- Description of the Work
- Vehicular Access to site
- Public Safety, Amenity & Site Security
- Hours of Operation
- Noise and Vibration Controls
- Air & Dust Management
- Stormwater and Sediment Control – protection of highway
- Traffic Management
- Waste and Material Reuse

The CMP forms part of the overall Project Management of the scheme, and as such activities described within this plan will be integrated with other Quality, Sustainability, and Health & Safety management documentation and processes.

This site will fully engage the local population.

1.0 THE SITE

The site is located on the eastern edge of Burgess Hill, and covers approximately 19.2 hectares. The land formerly comprised factory buildings and offices to the western third of the site, and a clay quarry in the eastern two thirds of the site, of the former Keymer Tiles Ltd.

The site is bounded by Kings Way to the east; Cants Lane along the northern boundary; the River Adur to the west and the South Central railway line (London to Hastings service) to the south. Access to the Tile works was historically achieved from the west via Nye Road. The site is fenced for reasons of security and safety.

2.0 DESCRIPTION OF THE WORK

This CMP relates to 'Phase 3&4', which approximately covers the north-east section of the site. The construction activities comprise construction of 180 new dwellings along with their associated infrastructure. The construction programme will span approximately 48 months.

Traditional housing trades will then be present on site to first construct the sub-structure works and then the superstructure works of the homes. Highway, utility and housing works will then progress gradually over the site until the Phase 3&4 areas are complete.

The table below summarises the main programme activities to be undertaken, and the approximate duration of the works:

Activity	Duration
Infrastructure Works	3 months
Substructure	7 months
Superstructure	38 months

Table 1: Key Construction Activities & Anticipated Durations

3.0 CONSTRUCTION MANAGEMENT PLAN

3.1 VEHICULAR ACCESS TO THE SITE

All construction traffic for 'Phase 3&4' of the development will be served via Kings Way.

Site specific delivery instructions and directions will be distributed with all material orders, and will form part of the terms of sale.

In addition, signage will be provided (in locations to be agreed with WSCC) to direct traffic to and from the site in accordance with the routing strategy. The Principal Contractor for the works will be required to liaise with the local highway officer before and during implementation of the plan.

3.2 PUBLIC SAFETY, AMENITY & SITE SECURITY

3.2.1 Site Safety

The Principal Contractor will be responsible for safety of all personnel and visitors on site, and must operate in accordance with all current Safety Regulations. This includes the approval of all Risk Assessments, Method Statements and the development of the Construction Phase Health and Safety Plan, in accordance with the Construction (Design & Management) Regulations.

Clear procedures will be imposed for all persons entering and leaving the construction site. All new visitors will be required to attend a site safety induction, or appointed with an escort to ensure their safety during one-off visits.

3.2.2 Visitor Access

The following arrangements will be instigated by the Principal Contractor to ensure all visitors are safeguarded: -

- An area for visitor car parking will be allocated within the global compound; (Appendix A)
- A safe non PPE (Personal Protective Equipment) route will allow pedestrian access from the visitor car park to the site office and welfare facilities;
- All visitors will be directed to the site office for registration, and site induction procedures as necessary;
- At no time will any visitors be allowed to access areas where construction works are in progress without proper authorisation;
- The Principal Contractor will ensure that an adequate range of protective clothing, hard hats, boots and other appropriate items of PPE are available within the site office for use by visitors at all times. These will be kept separate to those required for use by the Contractors site staff.

It should be noted that few visitors are expected to the site who are not directly connected with the construction works, and therefore familiar with the risks associated with building sites.

3.2.3 Site Security Control

Security gates will be maintained at the construction entrance with Kings Way, which will be locked at night, and monitored throughout the working day to prevent unauthorised access.

3.2.4 Site Welfare Facilities

Welfare facilities for both site staff and visitors will be located within the global compound. This will consist of 32 'jack leg' units doubled stacked to provide office and welfare, canteen facilities First aid facilities will also be located within this site welfare accommodation for use by all in the event of an accident.

An emergency assembly point is positioned within the car park of the global compound, where all visitors and staff are to congregate as a place of safety in the event of a major incident on the site, such as a fire. This location will be identified during all site inductions.

3.2.5 *Site Security Fencing*

The general public will be excluded from the site using appropriate fencing and signage. Hoarding will be erected on frontages with existing residential areas to prevent unauthorised access, and to create a visual barrier from the works at these public interfaces. The proposed locations for hoarding are on the boundaries to Cants Lane and Kings Way. The remaining existing fencing around the site perimeter will be checked at regular intervals to ensure it remains undamaged and fit for purpose as the works progress.

3.2.6 *Public Relations*

A 24-hour dedicated point of contact will be identified within the Principals Contractors management team that will be responsible for all communications with residents, and any out-of-hours incidents and emergencies. The contact details of this person, and location of site offices, will be communicated to the local resident's interest groups, through letter and e-mail correspondence.

3.2.7 *Lighting Controls during Construction*

Construction work will be undertaken during day-light hours only, in accordance with the agreed working hour's restrictions (see Section 3.3). Task lighting may be employed during internal works, fabrication of the proposed dwellings, which will not result in light spill to areas outside the site boundary. If during the works it is considered that security lighting becomes necessary, it will be positioned so that there is no direct light spill to areas outside the site boundary.

3.3 **HOURS OF OPERATION DURING CONSTRUCTION**

All work for the implementation of the development shall be undertaken between the hours of 08:00 and 18.00 hours on Mondays to Fridays inclusive, and between 09.00 hours and 13.00 hours on Saturdays, unless otherwise agreed in writing by the Local Authority. Similarly, no work is permitted on Sundays or Bank Holidays unless otherwise agreed in writing by the Local Authority.

3.4 **NOISE AND VIBRATION CONTROLS**

Several safeguards exist to minimise the effects of construction noise and these will be applied during construction. The safeguards include:

- The various EC Directives and UK Statutory Instruments that limit noise emissions of a variety of construction plant;
- Guidance set out in BS5228:Part 1:1997, that covers noise control on construction sites; and
- The powers that exist for local authorities under Sections 60 and 61 of the Control of Pollution Act 1974 to control environmental noise and pollution on construction sites.

Generic measures below are given to illustrate the range of techniques available. The adoption of Best Practicable Means, as defined in the Control of Pollution Act 1974 is usually the most effective means of controlling noise from construction sites.

- Any compressors brought on to site should be silenced or sound reduced models fitted with acoustic enclosures;

- All pneumatic tools should be fitted with silencers or mufflers;
- Deliveries should be programmed to arrive during daytime hours only. Care should be taken when unloading vehicles to minimise disturbance to local residents. Delivery vehicles should be prohibited from waiting within the site with their engines running;
- All plant items should be properly maintained and operated according to the manufacturers' recommendations in such a manner as to avoid causing excessive noise. All plant should be sited so that the noise impact to nearby properties is minimised;
- Local hoarding, screens or barriers should be erected as necessary to shield particularly noisy activities; and
- Problems concerning noise from construction works can sometimes be avoided by taking a considerate and neighbourly approach to relations with local residents. Works should not be undertaken outside of the hours agreed with the local authority.

Experience from other sites has shown that by implementing these best practice measures, typical noise levels from construction works can be reduced by 5dB(A) or more. As construction works are temporary and noise levels have been calculated for a worst-case situation no further mitigation measures are considered necessary as the predicted increase in the ambient noise climate would lead to a minor, barely perceptible impact on surrounding properties.

Vibration during construction operations is unlikely to be perceptible at any of the nearby properties due to their distance from the site. It is however recommended that construction vibration levels are subject to a watching brief with vibration measurements taken if necessary.

3.5 AIR & DUST MANAGEMENT

3.5.1 Demolition

There are no demolition works situated within the Phase 3&4 site.

3.5.2 Earthworks

Air and dust management as a result of the earthworks within the Phase 3&4 site will be undertaken in accordance with the Hydrock Construction Environmental Management Plan, which has already been reviewed and approved by the Local Planning Authority (Ref HC13038 – 25/01/16).

3.5.3 Construction Works

In excessively dry weather site activities may produce fine dust, along with build up of fine debris. To prevent the spread of excessive dust and debris outside of the site the boundary will be fenced against adjoining residents, and the main site gates will be kept closed during work operations that could cause considerable dust. During these periods regular inspections of the surrounding area will also be undertaken (to a maximum of 100m of the site boundary) to monitor dust spread. Where necessary window cleaning services will be offered to properties that have been directly affected by the site to an unreasonable, at the expense of Croudace.

Cutting grinding and sawing will be avoided where possible (for instance by the use of prefabricated elements). To help prevent the spread of dust locally, the 'damping' method of suppression will be employed to contain the dust within the immediate works area. Care will also be taken when moving

dust borne material on site and any material leaving site will be sheeted. Waste materials stored and transported in skips, chutes and conveyors will be covered, and where necessary enclosed, to minimise dust spread. Drop heights will also be kept to a minimum.

Hard surfaces will be used for haul routes wherever possible. Construction materials which are likely to create dust, such as capping material, will be delivered directly to the works area where it will be stockpiled and depleted as quickly as possible. Dampening methods will also be used to control dust arising from stockpiles as necessary. Any build up on site roads will be swept using a Road Suction Sweeper, which will dampen the dust before extracting it via suction. Stockpiles of construction material, and construction plant, will be stored as far away from neighbouring properties as possible.

Under no circumstances will the burning of any waste be permitted on the site.

3.6 STORMWATER AND SEDIMENT CONTROL – PROTECTION OF HIGHWAY

3.6.1 Protection of the Highway

The Principal Contractor will be responsible for keeping the public highway adjacent to the site entrance via Kings Way, clean and free from debris resulting from the 'Phase 3&4' development works.

The core policy for the site will be to remain proactive, and control all mud deposits at source. On occasions where this may not be possible a number of alternative methods will be employed as necessary:

- (a) Jet Washing - A portable jet washer, utilising a suitable water supply, will be set up at the site construction access. This can be employed to clean construction vehicles before leaving site, as necessary.
- (b) Forklift Road Brush - A brush attachment will be held on site, and will be used as a regular means of maintaining the cleanliness of the site roads and car parks. This will help reduce the amount of debris that is collect by construction vehicles during their visit to the site.
- (c) Road Suction Sweeper - A road sweeper can be used as an additional cleaning mechanism to the forklift brush attachment for 'polishing up' of site roads. It is envisaged this will visit the 'Phase 2' development two times per week (dependent on site and weather conditions), and could also be utilised along the road network outside the site boundary if necessary.

Forklift trucks used for the bulk of material handling will be prohibited from leaving any hard-standing or surfaced road.

3.6.2 Flood Risk during Construction

A Flood Risk Assessment was carried out at the planning stage of the project. During this exercise it was identified that the western boundary of the site, alongside the River Adur, was partly at risk of flooding within the 1 in 100 (1%) annual probability event according to the EA Flood Zone Map. As a result, further modelling of the existing site was undertaken which showed that the extent of the 1% annual probability flood plain, including an allowance for climate change (+ 30%), is largely confined to the EA 8m byelaw strip adjacent to the watercourse.

As the proposed development will not reduce the levels within this 8m byelaw strip the existing situation is unaltered. As such, the site and surrounding area is not at any additional risk from flooding during the construction phase or use of the development.

3.7 TRAFFIC MANAGEMENT INCLUDING OPERATIVE AND GOODS VEHICLES

3.7.1 Location of Construction Traffic Routes

As stated in Section 3.1; all deliveries will approach / depart the site from the Kings Way entrance. To ensure this is achieved, site specific details and directions will be distributed with all orders, and will form part of the terms of sale. In addition, signage will be provided (in locations to be agreed with WSCC) to direct traffic to and from the site in accordance with the routing strategy.

3.7.2 Management of Construction Traffic

Deliveries will be phased and controlled on a “just in time” basis, all being clearly marked to show their destination. This will minimise travel time around the site and any associated noise. All transportation to and from the site will be on rubber tyre vehicles. Tracked vehicles will only operate within the site.

It is anticipated that a workforce of approximately 50-70 people at peak will be employed, working for either Croudace Homes Ltd, subcontractors, suppliers or other organisations. Cars and other vehicles used by workers will be parked within the site. Restrictions on parking on neighbouring roads will be strictly enforced. The CMP Site Layout, as shown in Appendix A, identifies the location of the global compound, parking areas for visitors and construction workers, along with areas for material storage and plant / equipment storage.

3.7.3 Signage

A clear signage strategy will be developed by the Principal Contractor and implemented to ensure that construction traffic utilises the designated routes to minimise the impact on the surrounding road network. A Traffic Management Plan (TMP) will be agreed in advance with WSCC, and monitored at regular intervals throughout the works to ensure it remains effective. Liaison with the local highway officer will be undertaken prior to submission of the TMP. Contact details for the Principal Contractor will also be provided at this time so that any arising issues can be communicated and dealt with quickly, and if felt necessary a regular joint review regime can be agreed and scheduled.

3.7.4 Construction Vehicle Types

Consideration has been given to the types of plant that are likely to be used during the construction works. The plant and equipment associated with each key element of the construction process is set out in Table 2 below.

	Infrastructure Works	Substructure & Superstructure Works
Tracked 360 degree excavators	*	*
Tracked Dozers		
Dumpers	*	*
Mobile Crane	*	*
Air Compressors	*	*
Power Tools	*	*
Hand Tools	*	*
Wheel Washing Plant	*	*
Scaffold		*
Mobile Access Platforms		*
Delivery Vehicles	*	*
Skips & Skip Vehicles	*	*
Forklift Trucks		*

Table 2: Anticipated Construction Plant

3.7.5 Large Vehicles

HGV movements will be restricted as far as reasonably possible so as to avoid peak traffic flow periods (i.e. from 08:00 – 09:00 and 17:00 to 18:00).

3.7.6 On-Site Parking

The CMP Site Layout drawing, as shown in Appendix A, indicates the area provisionally identified for vehicle parking on-site. These fall into the following categories:

- Visitor Car Parking – Car parking for construction visitors has been positioned within the global compound area.
- Parking for Construction Staff – Car parking will be within the global compound. Contractors will be encouraged to use multiple occupancy vehicles and minibuses to bring labour to site, to reduce the number of vehicle movements.

On-site parking will be strictly controlled. Parking on the surrounding public highway is prohibited.

3.7.7 Monitoring and Enforcement of Traffic Routes

The access routes to the site will be defined when the orders are placed. This will safeguard the adverse impacts on local minor roads which are unsuitable for construction deliveries. Attempts will be made to use regular supplies and drivers where practical to promote familiarity with the agreed route.

The 24 hour site contact details, and local liaison with residents, will allow any complaints about vehicle routing to be handled quickly and appropriately.

3.8 WASTE MANAGEMENT

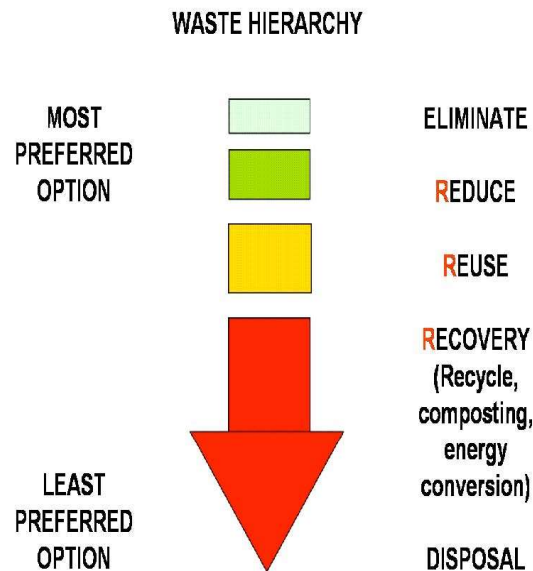
3.8.1 Storage on Site

All material storage areas will be contained within the global compound area. The location of the main storage area will be as shown in Appendix A. It should be noted that the vast majority of materials will be brought onto the site on a 'just in time basis', to help reduce the storage area requirement.

3.8.2 Control of Waste and Re-Use of Material on Site

Croudace Homes Ltd. are committed to waste minimisation as part of our Corporate Social Responsibility agenda. Croudace Homes Ltd. expects subcontractors to enter into the waste management initiatives with commitment.

Croudace Homes Ltd. is striving to achieve elimination, as at the top of the waste hierarchy... Waste management options are -



Croudace Homes Ltd will manage 3 types of waste onsite:

- Inert waste: chemically inert, non-combustible, non-biodegradable and non-polluting
- Non-hazardous: by default is neither hazardous nor inert.
- Hazardous waste: contains dangerous substances that could make it harmful to human health.

From a legal perspective – for Croudace Homes Ltd to be in compliance with their duty of care – Croudace Homes Ltd have a responsibility to dispose of the site waste at a licensed and suitable site under Section 34(1) of the Environmental Protection Act 1990.

Subcontractors will be required to keep their area of works clean and tidy. A clean and tidy site is a safe site because it reduces the potential for trips, slips and falls. As such, all waste will be deposited immediately into collection receptacles provided by the individual subcontractors for their waste.

Subcontractors will include an allowance in their budget tender prices for waste management and waste disposal. They will either provide their own bins for collection and movement to a central location or Croudace Homes Ltd will provide vessels to all subcontractors. The preferred option on this project is outlined below.

Each Subcontractor will provide wheelie bins or tipping skips (hereafter referred to as vessels) to collect waste. These vessels will be positioned at the point of the waste creation or at a location designated by Croudace Homes Ltd near to the workplace. Subcontractors will also include costs for labour time to move waste to the central waste station area and disposal of waste in their budget. It is the responsibility of the subcontractor to:

- Collect and decant their own waste into vessels at the point of waste creation. The waste will be collected segregated into waste streams decided by Croudace Homes Ltd.
- To move the vessels from their place of waste collection – using their own labour – to the central waste station area, which will be located at a position decided by Croudace Homes Ltd.
- To empty the waste into the colour coded skips or bins provided at the central waste station area using their own labour. The waste must be segregated by subcontractor operatives into the skips/bins provided at the waste station area.

3.8.3 Spoil on Site

The development has been designed to balance the cut and fill of natural soils across the site, so there will be no spoil removed off-site.

4.0 OTHER RELEVANT ISSUES RELATED TO CONSTRUCTION MANAGEMENT

4.1 *Project Management*

Careful selection of Contractors will be a fundamental requirement of the project. This will include pre-tender interviews to assess organisations working policies, procedures and practices. For the majority of the works Croudace Homes Ltd will employ Contractors with a long established working history with the company.

Croudace Homes Ltd will establish a management team for the site which will consist of:

- Building Manager
- Project Manager
- Site Manager
- Assistant Site Manager

This team will continuously review the content and delivery of the CMP to ensure it is delivering its objectives, amongst other site responsibilities.

All visitors to the site will be briefed on the relevant requirements of the Construction Management Plan and the importance of its implementation.

5.0 SUMMARY

The construction programme will span approximately 48 months.

The works to the initial 'Phase 3&4' of this development will involve infrastructure works, substructure works and the construction works of the 180 dwellings.

Plant and equipment to be used during construction has been identified, together with measures to protect the highway.

Waste will be dealt with in line with the table of hierarchy, and at the least will be segregated before removal from site.

Noise levels will be minimum, however if nuisance is reported measures will be put in place.

APPENDIX A

CONSTRUCTION MANAGEMENT PLAN – COMPOUND LAYOUT

Please note; the Phase 2 compound will be retained for use during the construction of the Phase 3&4 development areas.