Construction Environmental Management Plan

Project: Kingston Wharf, Brighton, BN43 6RN



Introduction:

The Construction Environmental Management Plan (CEMP) sets out the responsibilities with regard to compliance and legislation and to implement any mitigation measures.

This CEMP details management measures to minimise environmental impact from the construction phase of the development.

Furthermore, it provides a framework within which the measures will be implemented throughout the project.

The CEMP provides project-specific management measures and is a dynamic document which should be reviewed if activities or conditions onsite change that may influence management measures, such as traffic management and we will work with / cooperate with reasonable advice from the highway authority. This document has been developed to avoid, minimise and mitigate against any construction effects on the environment and surrounding community. It should be considered a living document with reviews being undertaken at set intervals and new information added as appropriate.

For the purposes of this document, the working area is defined as any area where there will be a requirement for temporary or permanent works to facilitate the construction of the development. This includes areas required for access, temporary construction and temporary storage areas.

This CEMP examines the following aspects with relation to the project execution:

- Vehicular Congestion
- Community
- Noise
- Dust & Air Quality
- Light pollution
- Water Consumption, Drainage & Environment
- Waste
- Sustainability

Project Overview:

The site is located on Kingston Wharf, Hove, BN43 6RN

The project involves the demolition of existing redundant industrial units and erection of 255, 1-2-3 bed Apartments, with associated parking and landscaping and 2 commercial spaces with associated parking.

The site will be fully enclosed by existing boundaries, chain link and 3 wire barb wire, palisade fencing and x 2 entrances with metal gates to prevent unauthorised entry.

Site security will be covered by a CCTV system that will be externally monitored. Exact timing of the implementation of this system will be at the discretion of PMC.

The scheme will be registered under the considerate constructors' scheme with site contact details clearly displayed on the site boundary.

An Introductory letter will be sent out to neighbouring properties informing them of our proposed start on site approximately 2 weeks prior to any works commencing.

It is the main contractors' intention' to build relationships with the neighbouring residents as to ensure that the minimum amount of disruption is caused to them during the construction programme. We have an open-door policy and look to engage with residents locally with meetings and updates on a quarterly basis or as and where applicable. We would further commit to resolving/reverting back/closing out any neighbourly issues should they arise.

All drivers and qualified banksmen will be made aware of the risks of busy road the site is accessed from.

Key Site Personnel

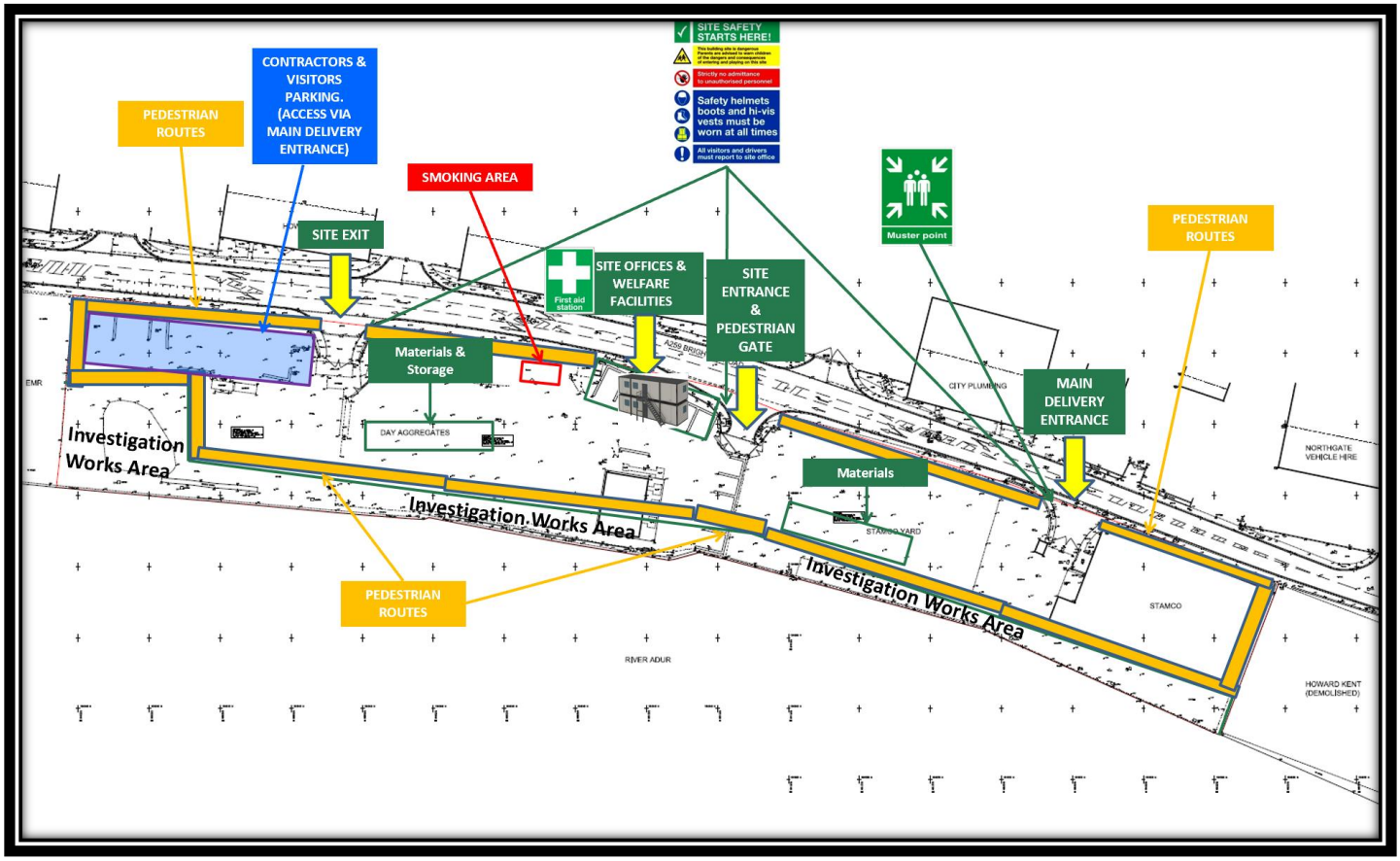
Construction/Contracts Manager	Robert Clarke
Project Manager	Dave Gill
Project Manager	Mick Hopper
Site Manager	Steve Zaffaresse
Site Manager	Mathew Bailey

The Qualified Banksman to be confirmed by the Site Manager on day of induction

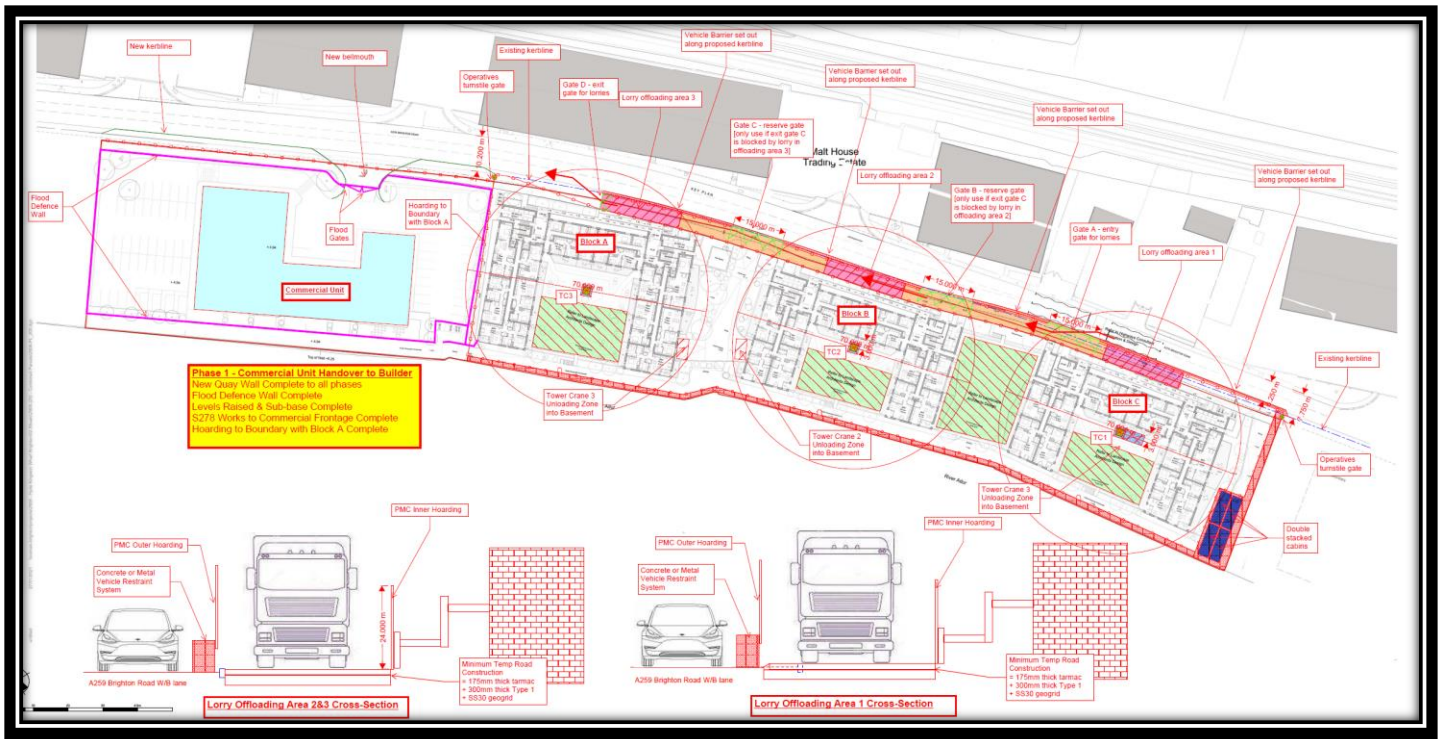
The site management reserve the right to stop work where it is deemed unsafe work practices are taking place.

Site Logistic Plans:

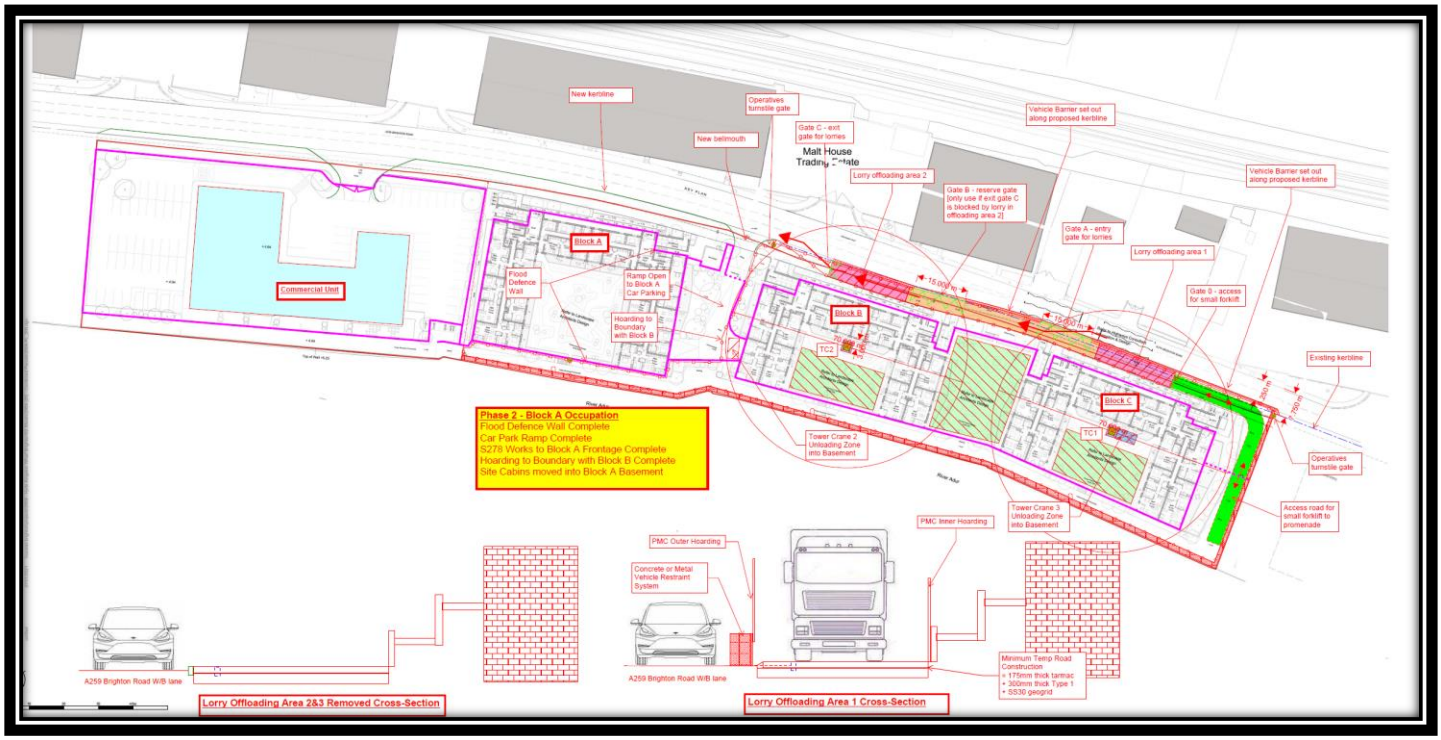
Commencement / Enabling Works Phase:



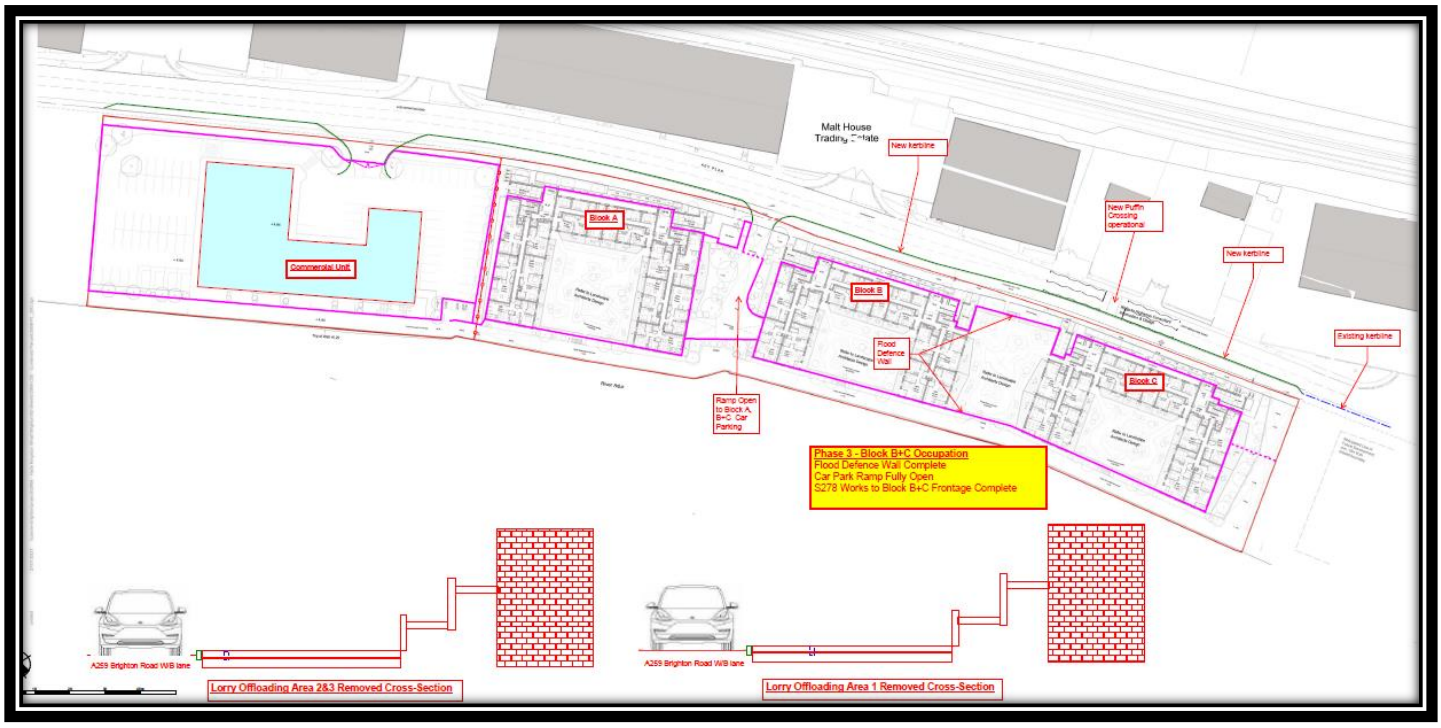
Phase 1 – Commercial Unit Handover:



Phase 2 – Block A Occupation:



Phase 3 – Block B&C Occupation:



Community Consideration - Vehicular Congestion:

Where possible, deliveries are to be made on small rigid trucks to minimise impact on site / surrounding roads. Working hours are to be from 07.30 - 18.00 Monday to Friday; and 08:00 – 13:00 on Saturday. There shall be no working on Sundays or public holidays unless by prior agreement with the local authority.

All delivery vehicles are to follow major roads where possible and minimise use of quiet / narrow residential roads surrounding the site. All vehicles will either use the temporary lorry lane or enter through a sentry position at site entrances with a trained banksman / traffic marshal who will guide each vehicle to its destination and then allow safe exit. Delivery vehicles must not enter the site until a banksman is present.

All drivers making deliveries to the site must be in compliance with current road regulations and hold the appropriate licences for the vehicles they are driving.

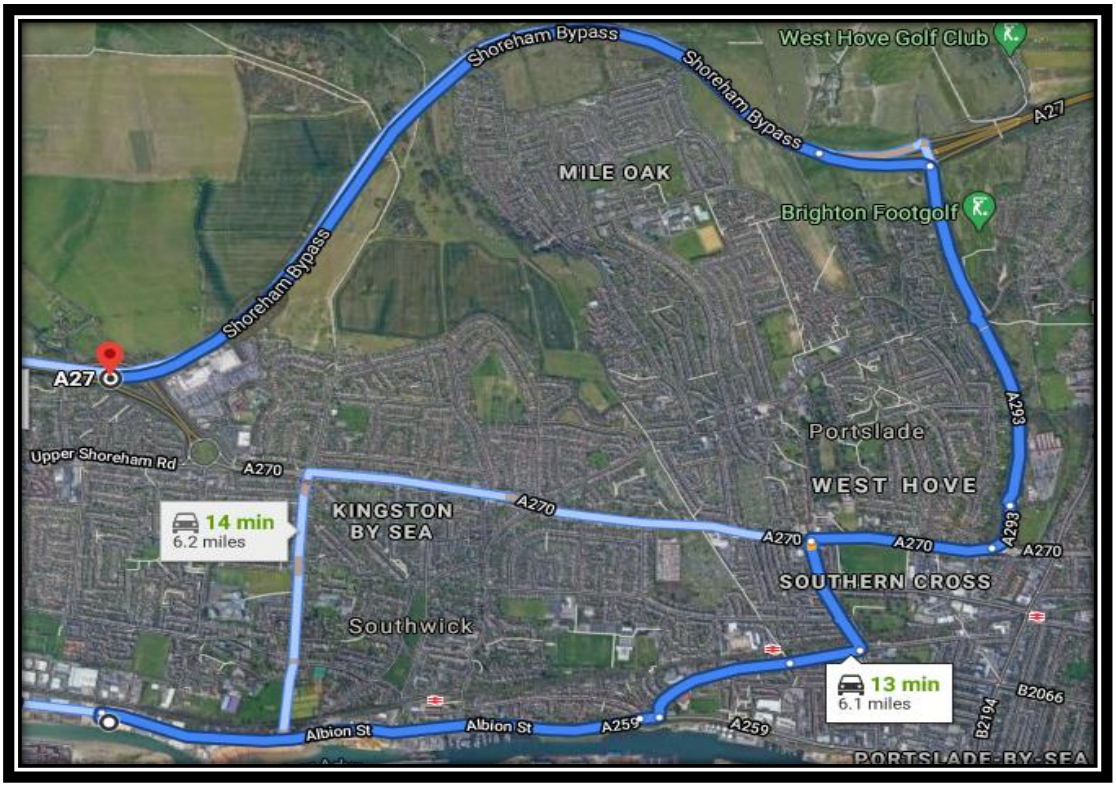
All loading and unloading of materials and or plant / machinery will be within the confines of the delivery lane, site or within the hoarding line. No materials will be unloaded directly off the highway except within the confines of the approved road closure area shown on the plan below. The vehicle delivery route from A259 via Albion Road then onto Brighton Road.

Site personnel will not be permitted to park around the site boundary as this will cause a nuisance to local residents and lead to disruption to deliveries. We will be encouraging operatives to car share and arrange pick-ups. Also, on-site parking will initially be on the commercial area of the site for 40 vehicles, and then, as the works develop, on-site parking will be moved into the basement carparks in accordance with the phased approach to the works shown above. This will provide sufficient space for all the parking requirements on site.

It is likely that when excavating the basement area rigid lorries are likely to be in the region of 40-50 lorry movements per day. We then have a relaxation periods whilst piling and rigid lorries would drop to circa 5 per day. The main frame would see rigid lorry activity rise again to circa 10 per day. Throughout the remaining construction period we would expect to see a range of both rigid and articulated lorry arrivals of between 2-5 per day.

On Approach to the Site:

All large delivery vehicles will make contact with Site Management before arrival. Delivery vehicles are to then find a safe parking area on approach when approximately 10 minutes away from the site. The Site Manager will then arrange for the banksman to be available to coordinate vehicle movements in to the vehicle lane.



Community Consideration - Communication:

PMC will operate a pro-active approach and contact local community representatives and residents, either in writing or a personal visit [as may be required], if noisy, vibrating or dusty works are to be conducted. PMC will also under take a letter drop which will include a programme summary, and assurance of our consideration during the course of the works along with contact details in the event of any queries.

Dates of visits and communication will be documented in the site diary.

Community Consideration – Noise & Dust:

Generic control measures operated by PMC:

PMC Construction & Development Services Ltd will adopt best practice policies in relation to air (dust) pollution.

Best practice is defined in section 72 of the control of pollution act 1974 and section 79 of the Environmental Protection Act 1990 to reduce noise and vibration to a minimum.

Acknowledging the local residents on Brighton Road and the other side of the river, all vehicles and mechanical plant shall be fitted with effective exhaust silencers.

All compressors shall be 'sound reduced' models any pneumatic percussion tools shall be fitted with mufflers or silencers of a type recommended by the manufacturer.

Machines in intermittent use shall be shut down when not in use.

All plant shall be regularly maintained and documented weekly plant inspection sheets kept by the site manager.

Stationary plant is to be sited away from noise sensitive areas where practicable. Plant which emits noise predominantly in one direction shall be orientated so that this noise is directed away from such sensitive areas.

No plant will be left working outside normal working hours.

All site accommodation and welfare are main electric and do not require generators

Specific site processes and mitigation measures:

- *Methods of construction are concrete frame with metsec infill, brickwork to facades, many components are manufactured off site and brought to site preassembled requiring on site fixing therefore minimizing on site processes and noise pollution.*
- Materials are scheduled for delivery just in time and distributed using on site tower crane or mobile crane to reduce site haulage routes, material cross handling
- There will be a hazard information board listing the permitted plant activities of the day and a cross check at induction to ensure the plant being used is as that identified on the RAMS.
- All materials will be handled in a way to minimise noise pollution and distributed throughout the site and placed onto staged landing boards specific to the floor level.
- Mix large quantities of concrete in enclosed areas to avoid generating dust
- Minimise cutting and grinding on site where possible
- Use of dust extraction systems to be used and wet cut where possible

- Water suppression to be used during cutting of paving slabs
- Use of block splitter where practicable
- Damp down earthworks during dry weather by use of water cannons
- Store dusty materials away from site boundaries, main site access roads and downwind of sensitive receptors
- Locate stockpiles out of the wind (or provide wind breaks) to minimize dust generation
- Spill kits and trained personnel will act upon any spillages that may occur to include containment and clean up, all diesel will be stored in double bunded tanks.

Preventing Emissions and Odours

Plant & Vehicles
- Plant and vehicles should be maintained in good working order
- Control deliveries to minimise queuing
- Ensure engines are switched off when not in use
- Keep refueling areas away from the public
- Where practically possible engine idling will be kept to a minimum

No Fires on Site
- There are no exceptions

Waste Storage
- Use covered containers for organic waste (e.g., weeds & vegetation) and remove frequently

Chemicals on Site
- Take account of wind conditions when planning activities likely to emit aerosols, fumes, odours or smoke
- Position site toilets with effluent tanks away from residential area.

Monitoring:

The site will have a noise monitoring station, located at the rear site boundary adjacent to noise sensitive areas to monitor and record sound levels between hours of 7am and 7pm. Sound levels identified in BS5228 part 1 state that noise levels for

Daytime hours of working (07.00-18.00) and Saturdays (08.00-13.00)
Category A (65dB)
Category B (70dB)
Category C (75dB)

All noted 1 M from site boundary adjacent to noise sensitive areas.

Instrumentation:

The instrumentation system should be designed to determine equivalent continuous A-weighted sound pressure level. The instrumentation should conform to the requirements for integrating averaging sound level meters, preferably of type 1 as specified in BS 7580-1:1997, but at least of type 2 as specified in BS 7580-2:1997, with verification of conformity being undertaken by periodic testing in accordance with these standards. Alternatively, instrumentation conforming to BS EN 61672-1:2013, preferably of class 1, but at least of class 2, should be used and should be periodically tested in accordance with BS EN 61672-3:2013.

Sampling:

Sampling will be carried out in accordance with Table G1 BS5228 part 1. Sampling will be every hour and duration of 20min to ensure ±1.5dB accuracy in data.

If these noise level exceed levels noted above for category A, B and C on two consecutive days PMC will employ

additional mitigation measures which include acoustic screening to attenuate and deflect sound from sensitive areas.

Community Consideration – Light Pollution:

Construction Lighting

In determining the lighting arrangement on site, consideration will be given to residents and other sensitive receptors that may experience a nuisance of light.

Where appropriate, measures will be implemented to reduce obtrusive light with the Ports Authority being consulted prior to lights being installed on site. We are mindful of the close proximity of the navigational shipping channel.

Where possible a daylight only construction schedule will be adopted to minimise adverse lighting. It is unavoidable that construction work may require work during the hours of twilight or darkness in consideration of shorter daylight availability during winter months.

Where appropriate the following measures will be considered for implementation

> • Dim or switch off lights where it is safe to do so • Use specifically designed equipment • Position lights sensibly.

Note: It is not anticipated that any construction works will be carried out at night.

Community Consideration – Water Consumption:

Effective construction management can deliver major savings in water use, water supply and wastewater treatment. This can be achieved without compromising the performance and user acceptability of the project.

Typically, the use of water will take place in the following areas.

Dust suppression • Vehicular dust suppression • Stockpiles of soil • Demolition operations

Cleaning • Road sweepers • Boot wash • Drive-on wheel wash • High pressure washing will be utilised as and when required. We will also be installing a lorry lane to manage activities and this significantly reduce the number of off-road movements, during the ground works phase.

Domestic and Welfare facilities • Toilets • Food preparation • Canteens • Drinking water

Construction • Mortar mixing • block work • screeding • plastering • Cleaning

The project should where appropriate utilise the following examples of best practice, or equivalent.

Enable monitoring of water use: e.g., install meters which are easy to read, or pulsed meters for connecting to a Building Management System; or sub metering (pulsed) of areas of major water consumption.

Ensure all areas of site water consumption are quantified. • Consider splitting welfare and “site-based” water consumption. • Record site water consumption on a regular basis for review at project progress meetings • Regular meter readings should be taken from all meters, submeters and metered standpipes (weekly is recommended)

Minimise the risk of leakage: leak detection equipment (including pulsed meters for regular monitoring); ensure valves and overflows are visible for early detection of water loss and easy to access for maintenance.

Influence user behaviour: Creating a culture that changes attitude and behaviour to accepting ownership of water efficiency is fundamental to improving the use of water in an efficient manner.

Good housekeeping (e.g., reporting/repairing leaks, turning off taps which are not in use, and generally using water in an efficient manner) can assist the site reduce its overall water use. The provision of information on appropriate use of fittings and appliances; awareness raising of the costs and environmental importance of water efficiency via Tool Box Talks; guidance on processes for identifying and reporting water leakage / poorly-performing fittings; method for providing feedback to building occupants on water.

Community Consideration – Construction Waste:

The Construction Site Waste Management Plan (SWMP) will be completed and maintained on site by the Project/Site Manager. It should be made available to all personnel on site as appropriate. The SWMP data sheet template to be used can be found on PMC's document storage portal.

Other industry guidance such as the CIRIA Waste Minimisation in Construction will be utilised as required. This is available online at www.ciria.org.

Site waste is also monitored and all waste generated and removed form site will be entered into the BRE SMARTWaste system online.
For further information on this please visit http://www.bresitesmart.com/products/smartwaste/

Construction and Demolition Waste

Quantities of general construction and demolition wastes are made up of waste such as wood, packaging, metals, plastics, bricks, blocks, canteen waste, hazardous waste (e.g., oils, paints and adhesives), site clearance and residual waste which are generated during the construction phase.

The Waste Hierarchy which should be implemented on site is as follows:

• Prevention/Reduction: • Re-use: Products and material can sometimes be used again, for the same or a different purpose. • Recycling and composting- Resources can often be recovered from waste. • Energy recovery- Value can also be recovered by generating energy from waste. • Disposal- Only if none of the above options offer an appropriate solution should waste be disposed of.

Use toolbox talks and posters to keep waste 'on the agenda' for all.

Work with suppliers to reduce packaging as Packaging is a major contributor to waste.

Site Waste Management Plan (SWMP)

A SWMP should identify the personnel and their roles and responsibilities. This includes maintaining records of waste transfers. The appointed site manager should also ensure compliance within any permits and record keeping. PMC will ensure all controlled waste is managed in accordance with the following Duty of Care requirements: • Ensure all waste is correctly assessed and categorised; • Prevent the illegal deposit or handling of controlled waste by any other person; • Prevent waste material from escaping our control;

Only transfer controlled waste to an "authorised person" (Waste Collection Authority, the holder of an Environmental Permit, Registered Water Carrier or Waste Disposal Authority). • Ensure that non-hazardous waste is transferred under a Waste Transfer Note which must be retained for two years. • Hazardous waste is moved under a waste consignment note that provides a clear description of the waste material. The consignment note must be retained for three years. • The waste is the responsibility of the company until it has been fully recovered or finally disposed of.

All suppliers on the approved supplier list will have undergone an initial desktop duty of care audit and will be risk rated. Risk is determined based on spend with any one supplier and local knowledge or expertise.

Community Consideration – Sustainability:

Use sustainably source materials and supply chains

Accurate measurement and ordering to reduce wastage

Use of local labour.

Community Consideration – Hoarding:

The hoarding line will be constructed of solid 2.4m high painted panels, which will include viewing windows, details of the development, Client marketing / regeneration information, Considerate Contractors Scheme Registration, Contact details [including out of hours]. We will undertake periodic maintenance of the hoarding and repairs as and when required.

Summary of Key Aims

The Construction Site

- Core working hours are kept to 07:00 to 18:00 on weekdays and 08:00 to 13:00 on Saturday.
- The site is secure and prevents unauthorised access, especially by children.
- The site is set up and serviced so as to minimise impacts.
- Emergency access, procedures and fire prevention measures are in place.
- The use of energy is minimised.

Health and Safety

- Public protection around the site is ensured.
- Emergency contact procedures are in place.

Traffic and Transport

- Works to roads and footpaths offer safe diversions or similar provisions.
- Access and egress routes are designated and kept to.
- Lorry parking within the vicinity of the construction site is controlled

Noise and Vibration

- Noise is kept to a minimum and monitored to avoid nuisance,
- Selection and use of noise reducing equipment to be employed as best practice techniques.
- Vibrations to be closely monitored.
- No noisy works or use of plant before 7:30 on Mon -Friday and 08:00 on a Saturday, no works on Sunday unless agreed with client.

Dust and Air Pollution

- Dust is to be minimised.
- Asbestos is disposed of as prescribed by Regulations.
- Air quality is maintained.
- No fires on site will be permitted.

Waste Disposal and Re-use

- Arrangements for storage and disposal meet all legislative requirements.
- Contaminated wastes are handled and disposed of safely.
- Construction materials are re-used / re-cycled.

Protection of Water Quality

- The disposal of seepage, wastewater and groundwater is controlled.
- Measures are in place to avoid the spillage of contaminants into waterways/water courses.

In the event of any issues on site, the out of hours email address is: enquiries@pmcconstruction.co.uk