

Client: Guru Nanak Homes GB 2 Ltd
Document: Construction & Environmental Management Plan
Reference: CEMP/Bradstone/01
Planning Ref: CDN/22/0402

Construction and Environmental Management Plan

On behalf of

Guru Nanak Homes GB 2 Ltd

For the

Construction of 3 x three-storey buildings to form 19 Cash and Carry units (Sui Generis Use), cash and carry use at ground floor, with associated ancillary storage to first and second floors, together with associated waste management, car parking and servicing via gated access road, following demolition of the existing building.

at:

3 Bradstone Road Manchester M8 8WA



Prepared by: Tony Williams

Position: Health and Safety Consultant

Issue Date: 15th November 2023

1. Introduction

This provisional Construction and Environmental Management Plan has been prepared for Guru Nanak Homes GB 2 Limited, the project's Developer/Contractor and is to be submitted to allow for the discharge of planning condition 15 issued by Manchester City Council Planning Authority in regard to the Decision Notice CDN/22/0402.

- During the mobilisation, preparation and construction phases of the project, materials, equipment and personnel will be required on site. This provisional plan describes how these movements will be managed. The project vehicle numbers quoted within the plan are based upon the developers experience and knowledge of previous developments within the Manchester area.
- The construction period is projected to last 52 weeks.
- **Details of the project programme and contact details for Guru Nanak Homes GB 2 Ltd Site Manager and responsible Director will be displayed at the site entrance on the Information Notice Board.**
- **At all times a suitably experienced Project Manager will be on site.**
- **The site entrances will be located on Bradstone Road at the Northern boundary of the site.**

Bradstone Road

Bradstone Road surrounds the site at the north and west boundaries and provides a connection to Broughton Street to the south. Bradstone Road is a cul-de-sac and has an approximate 10m wide carriageway which benefits from street lighting columns as well as footways on both sides of the road. Bradstone Road is subject to a 20mph speed limit with no parking restrictions in place. The location is a purely commercial area with no residential properties within 0.5 km.

To the south of the site, Bradstone Road forms the minor arm of a simple major / minor priority controlled junction with Broughton Street. Broughton Street has a speed limit of 20mph and benefits from street lighting and footways along both sides of the carriageway, with on-street parking observed to occur. Broughton Street provides a connection between the A665 Cheetham Hill Road and Sherbourne street.

We will ensure that all Licenses and Permits are issued prior to works commencing.

Reference:

- Highways License – Hoarding & Scaffolding
- Section 50 - To lay new or maintain existing apparatus in the public highway for non-statutory undertakers.
- Section 171 – No Excavation
- Section 184 - Vehicle access for new developments

2. Project Commencement & Site Working Hours

The development will commence on the discharge of all pre commencement planning conditions.

Site Working hours are to be restricted to:

- **0730Hrs to 1800hrs - Monday - Friday**
- **0900 to 1400 hours - Saturday.**
- **No work at any other time including Sundays and Public Holidays.**

3. Provisional Construction Traffic Management Plan

During the site preparation and construction phases of the project, materials, equipment and personnel will require movement to and from the site. The provisional plan describes how these movements will be managed. The traffic numbers quoted within the plan are based upon the experience and knowledge of previous developments within the local area. All construction, including site setup, will not be permitted before 8am, however the site will be accessible for pedestrian and small vehicle access.

The construction period is projected to last approximately 52 weeks.

Reference: Proposed Site Plan - appendixes

4. Primary Site Entrance and Exit

The project entrance will be constructed to allow for the safe movement of pedestrians and construction traffic and plant. The entrance will be designed with double gates and a single pedestrian gate, all gates will be locked when not in use.

We will ensure the upkeep of the entrances and will ensure that all vehicles accessing and egressing site are of the correct dimensions to safely use the entrance. Large vehicle movements will be planned for quieter periods to reduce the risk of traffic delays. All deliveries will be pre booked and will be marshalled on and off site.

We will afford further risk mitigation controls by the positioning of Warning signage upon the curtilage of the site in compliance with all regulatory requirements and by having in place the required management controls for all project vehicle movements.

At the site entrance there will be a designated wheel wash facility and all vehicles leaving site will be subject to a wheel wash. In the event of any mud or debris being deposited onto the public highway, we will enter into an agreement with a Manchester city Council approved contractor to undertake all necessary highway cleaning.

An emergency exit will be located to the western elevation fronting Bradstone Street.

5. Delivery Management and Routing

Our onsite Construction Manager will have full responsibility for the coordination and management of deliveries to and from site. Our project manager will ensure the appointment of a project traffic Marshall to coordinate all site traffic to ensure the safety of all on site personnel, the occupants of neighbouring properties, traffic users and the general public. We will advise delivery drivers of the most appropriate routes to and from site, the most suitable times of deliveries and of any local restrictions on vehicle heights and widths and proposed events etc.

All loading/unloading will take place within the site boundaries. All waste vehicles will be sheeted.

Vehicle movements between peak travel hours will be so far as practicably kept to a minimum. All traffic will comply with local rules and traffic conditions.



Image showing routes to the local A roads.

6. Deliveries to site

Deliveries of plant, materials and equipment will be made by a combination of articulated vehicles and smaller rigid vehicles. To assist with the deliveries, an on-site Telescopic Handler will be used as well as delivery vehicles having self contained Hiab Crane attachment.

Table 1 & 2 show the estimated vehicle movements on site. These values are based upon the information from previous similar developments.

No loading and unloading activities of materials shall take place on the public highways.

All large deliveries shall pre-arranged with the site manager ensuring the delivering operator can contact the site manager in anticipation of their arrival so that provision can be made to minimize any disruption. As far as practicable there will be No Queuing of vehicles on Bradstone Road.

Where practicable all materials, plant and equipment will be sourced from local suppliers to minimise the impact upon the highway network.

The hours of deliveries to the site of the development will be restricted to 0730 to 1800 hours on Monday to Friday, 0900 to 1400 hours on Saturday, with no work at any other time including Sundays and Public Holidays.

Table 1 Delivery of Heavy machinery

Description	Vehicle Type	Estimated Number of vehicles
Temporary offices, welfare	Trailer	3 – remain on site
Generators	Trailer	1- Remain on site
Excavator	Trailer	2- Remain on site- during groundworks phases
Teleporter	Self-Propelled	2-Remain on site for construction phase
Cranage Concrete Pumps	Self-Propelled	2 - at key stages of contract during construction phase

Table 2 Delivery of materials and equipment to and from site

General Waste from site	10 tonne max load	2 per week
Aggregates for construction work	10 tonne max load	60 in total
Concrete deliveries	10 Tonne max Load	50 in total
Waste containers and materials during construction	8 tonne max load	90
Delivery vehicles	10 tonne max	Max of 3 per day during specific periods
Site personnel traffic- Site preparation & construction	Vans <2Tonne Cars	5 per day 5 per day
Site personnel traffic- Finishing	Vans <2Tonnes	3 per day

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7. Daily Traffic Movements

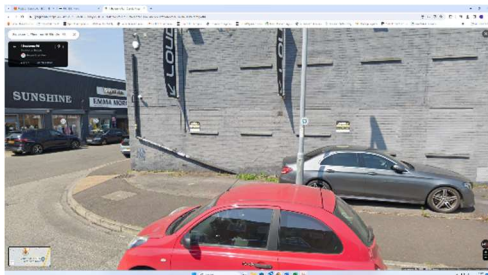
During the site preparation and construction phase, it is anticipated that the workforce will generally be between 5-20 (employees and contractors). To reduce the number of trade vehicles, vehicle sharing will be utilised and we will ensure that only essential vehicles park on site.

8. Site vehicle Movements and Parking

All vehicles will park in the onsite designated car park. We will reduce the number of project vehicles and ensure that any highway parking is restricted to the minimum number of vehicles. We will ensure that all vehicles will park in compliance with local traffic management rules and in a manner that does not restrict the operation of the local highway network, local residents and businesses. We will ensure that there is a turning circle or suitable room is available to allow for the turning /reversing of vehicles. Reversing will be kept to a minimum, all vehicles entering and leaving site will be managed by a suitably trained marshal.

9. Fire Safety

There will be NO waste burnt on site. A specific on and off-site Fire Risk assessment will be compiled for the undertaking of all construction related activities. A Public Fire Hydrant is located on Bradstone Road with its junction with Broughton Street. An emergency vehicle/pedestrian exit will be located at the western elevation fronting Bradstone Road.



Public Fire Hydrant

10. Public Road Cleanliness & Environmental Measures

A temporary jet wash facility will be available at the Exit Gates and any vehicle leaving site will be suitably cleaned. The site will be hard cored to reduce the transfer of dirt and debris. In the event of the public highway being affected we will enter into an agreement with a local supplier to ensure the affected area is cleaned.

Where mud could be potentially deposit onto highway, we will deploy a street cleansing vehicle during the activity. Signs will be displayed warning of 'mud on road'.

All gullies new and existing will be fitted with silt bags to ensure no pollution to water sources.

Any double skinned fuel tank stored on site shall be 110% bunded along with spill kits and drip trays available.

Local businesses, schools and nurseries will be invited to a pre commencement meeting and will be regularly updated of progress.

11. Site Security

The site will be secured by the erection of Temporary Hoarding and the construction of security gates and a pedestrian gate.

Monitored CCTV will be installed to further afford site security if necessary.

The following information to be made available for members of the public.

- Warning Notices and Company information will be displayed at the site entrance.
- Guru Nanak Homes GB 2 Ltd Contact Details
- Site Manager & Project Director Contact details.

12. Site Storage

A designated storage and laydown compound will be established, all materials will be stored to ensure their integrity and stored in a manner that does not put at risk the wellbeing of site and non-site personnel. All materials will be stored in compliance with the manufacturer's storage instructions. All fuel stored will be within an approved storage facility with a 110% bund facility. Spill Kits will be available at all times.

13. Ecology

All environmental protective measures will be in place as determined by the requirements of the following report.

- Your Environment Desk Top Phase 1 Study
- All the relevant planning conditions imposed within the Planning Notice.

14. Environmental Strategy - The Control of Dust and Emissions from Site Preparation and Construction

Health and Safety at Work Act 1974

The provisions of the Health and Safety at Work Act 1974 apply at all times on demolition and construction sites. The Health and Safety Executive (HSE) is the enforcing authority. Research is continuing into the health effects of airborne pollutants and exposure to PM10, though evidence is emerging that smaller particles within this fraction - below PM2.5 - may be the most harmful. As a first step to protect a worker's health and safety, emissions of airborne pollutants should always be minimized. However, where this cannot be achieved personal protective equipment should be provided and used. Proper planning should be undertaken, and appropriate mitigation decided for demolition and construction projects that will potentially generate large quantities of dust or emissions.

The Building Act 1984

This Act and subsequent Building Regulations 2000 aim to ensure the safety of those within and close to a building during works. They are the main mechanism for a LPA to control the impact of demolition. Under the regulations the LPA must be informed of any proposed demolition at least six weeks before work is due to begin. It will then grant a notice for demolition prior to work commencing. Section 82(J) of the Building Act 1984 can be used by the LPA to place conditions on the demolition notice to ensure that effective dust management options are undertaken. To facilitate a smooth application process, developers should consider and suggest to the LPA management techniques for dust control during demolition prior to their application.

Environmental Protection Act 1990

Under Part III of the Environmental Protection Act (EPA) 1990, emission of dust, fumes and other effluvia from construction sites can be identified as a statutory nuisance if prejudicial to health or a nuisance. Control of a statutory nuisance is contained within section 80 and a local authority is under a mandatory duty to serve an abatement notice on the person responsible for the nuisance (or the owner or occupier of the premises on which the statutory nuisance is present) if it is satisfied that a statutory nuisance exists or is likely to occur or recur.

15. Project Waste Management

All waste will be segregated into the respective waste streams in the respective skips. The waste skips will be stored on an impermeable surface and will be covered at all times. All waste skips and waste vehicles leaving site will be covered and transported to a Licensed Off-Site facility.

16. Local Air Pollution Prevention and Control (LAPPC)

These regulations apply to smaller industrial activities, known as Part B Installations, such as concrete batching or concrete crushing. Local authorities, as the regulators, are responsible for controlling emissions from these premises and set conditions in permits they issue to achieve this. Conditions are based on Best Available Techniques (BAT), which require that the cost of applying a technique is not excessive in relation to the environmental protection it provides. The Secretary of State for Environment, Food and Rural Affairs has produced Process Guidance Notes, which form the statutory guidance on what constitutes BAT for each regulated process. If the regulator believes the operator has contravened, or is likely to contravene any permit conditions, enforcement action can be taken.

Note: By following this Best Practice Guidance are identifying good practice methods for demolition, site clearance and construction activities. Compliance with this document does not necessarily offer exemptions from prosecution under any of the legislation impacting upon demolition and construction, though it should be recognised that using Best Practicable Means (BPM) could be used as a defence from prosecution under the S.80 of the Environmental Protection Act 1990.

17. Demolition Site preparation activities dust and emissions control measures.

Best Practice Methodology

- All legal duties complied with all permissions and agreements in place.
- All utilities disconnected and protected
- All ecology conditions complied with- Mere Protection measures in place
- Water Suppression during breaking, cutting up of cementitious materials.- water to be captured by the positioning of pollution booms within the working zone.
- No Works during windy conditions that could impact the local residents and the Mere. Local weather conditions will be monitored by the project manager, in the vent of windy conditions all loose materials will be secured and all waste spoils will be covered and secured.
- Haul Roads to be wetted during dry conditions
- Wheel Wash facility at the site exit- within bunded zone
- No Open Fires
- All stockpiles of materials and waste will be securely covered and all loads leaving site will be covered
- The site will be hard cored to reduce the transfer of dirt and debris.
- In the event of the public highway being affected we will enter into an agreement with a local supplier to ensure the affected area is cleaned.

Nb: The demolition works have been completed.

18. Asbestos

All asbestos containing materials were removed in compliance with the Control of Asbestos Regulations 2012.

19. General Dust Controls

We will undertake industry standard best practice to minimise dust generated on the site, to include covering waste skips, water suppression, segregation and exclusion using impermeable barriers, and avoidance of allowing equipment to run dry whilst engaged in operation. All vehicles carrying waste will be sheeted.

Haul roads will initially be hardcore/crushed material construction and can be sprayed to minimize dust. Once surface bound, they will be swept on a regular basis, the Site Manager will decide the necessary frequency based on the conditions on site. This will allow delivery trucks to be kept relatively clean and significantly reduce the likelihood of dust on roads outside the site.

Cleaning of surfaced site roads will be carried out weekly by a contracted road sweeper, however frequency will increase or decrease as the manager feels necessary. This would include site entrances and the immediate highway. It is important to recognise that this needs to be monitored consistently throughout the contract, in light of site operations and weather conditions and not just in the early stages.

The Site Manager must monitor dust production at regular intervals during the day and record their findings, records to be kept on file in the site office. These records must be made available to the EHO upon request.

Materials will be stored on site. These will include reclaimed materials, and this will be closely monitored to reduce the potential for airborne dust. Material intended for the filling of the low area will be placed as soon as practical. In prolonged periods of dry weather, measures will be taken to keep the material in a damp condition by water spraying.

Dust suppression will be implemented on small plant when operations are being carried out adjacent to existing properties. Cutting and grinding on site should be kept to a minimum but where necessary; it should be carried out using equipment fitted with silencers and water suppression devices.

We will minimise creation of dust by Elimination – Substitution – Isolation – Control measures. This will be done by shutting plant down when not in use to eliminate the problem. If excessive dust was still a problem, then the problem should be isolated by moving plant to another area of site so as to isolate the problem away from neighbours. If the plant cannot be moved anywhere else, we will then control by erecting screens or enclosures.

In the event of a complaint however received, the Site Manager will be responsible for following the complaint through to resolution and initiating any necessary enforcement or corrective action. Remedial action will then be taken to reduce levels and the Site Manager will check and verify that the corrective action has been successful in reducing dust production.

20. Noise & Vibration

Reference BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites

Vibration

Prior to starting any works which would create excessive vibration, site management will notify neighbours as to what we plan to do and for how long. Generally, there shouldn't be any operations that create excessive vibration. However, In the event of a complaint however received, the Site Manager will be responsible for following the complaint through to resolution and initiating any necessary corrective action. Prior to starting any works which may affect surrounding properties, site management will carry out an existing condition survey of adjacent buildings externally and boundary structures to ensure the existing condition is maintained.

So far as is reasonably practicable all crushers and breakers will be sited upon crushed or soft materials to reduce the effects of vibration. Vibration limits will not exceed 1.0

Noise Control

We will use the 'best practical means' to minimise noise from our activities. This is a very broad (and complicated) area and can include matters ranging from the prohibition of the use of radios on site to the proper maintenance of plant and equipment. It can also include matters such as the choice of appropriate plant for a particular task or putting up noise barriers or screens.

Poorly maintained plant and equipment can give rise to excessive noise and the failure to use the built-in noise control shielding on plant can cause problems.

We encourage the use of mains powered electrical equipment (rather than using generators) and hydraulic breaking or bursting techniques are preferable to impact breaking methods for demolition.

Best practice methods will be used at all times reference BS5228.

Where any traffic management measures are envisaged on the highway, this is to be communicated with the Local Highway Authority as soon as reasonably possible.

Simple Purpose-Built Screens and Enclosures

Materials such as plywood or chipboard panels can be lined with sound-absorbing material such as mineral wool to create noise containing screens or enclosures. The length of the barrier should be greater than its height. If possible, the noise source should not be visible, and the barrier located as close as possible to either the source or the receiver. Simple portable screens, located very close together, can effectively reduce the effects of noisy work in small areas, including jack hammering or plate compaction.

Screening may be essential when any noisy work is proposed outside of standard construction hours.

Concrete Pouring

To avoid the need to extend construction hours, architects and engineers may be able to incorporate reduced slab sizes in the design. The use of accelerants and heaters should also be considered to reduce setting times. Concrete pumping should be located away from sensitive boundaries.

Breaking of Concrete

Use of traditional rock breakers attached to excavators is one of the most common causes of noise complaints, especially if it takes place on or near to a common, or shared wall of an occupied building. Where possible use equipment that breaks concrete by crushing it rather than drilling through it. Always consult the occupants of adjoining properties before work starts. Hydraulic and chemical expansion methods are less noisy methods worth considering. Even explosive methods can be tailor-made for the job and may be appropriate.

Plant and Machinery

The rating level (LAeq,T) from any plant and equipment associated with the development, when operating simultaneously, shall not exceed the background noise level (LA90,T) at any time when measured at the nearest noise sensitive premises at the quietest time that the equipment would be operating/in use. Noise measurements and assessments will be compliant with BS 4142:2014 "Rating industrial noise affecting mixed residential and industrial areas".

Do not leave engines running when not in use, noisy mufflers on plant and noisy site radios. Make sure that unnecessary metallic impact noise is avoided from dropping scaffolding poles, placement of roading plates, moving metal fencing and the clanking of chains on crane hoists. Ensure that machines are maintained regularly – they will be quieter. Simple maintenance can reduce noise levels by as much as 50 per cent. Check for noise problems if you notice workers having to shout at arms-length to converse. This indicates that the noise level may be above 90 dBA at this location.

Move static plant and equipment as far as possible from sensitive boundaries, as work allows. A distance of four times further away lowers the noise by 12 dBA. A reduction of 10 dBA will sound half as loud. In some cases, quiet plant and machines are available which are specifically designed to produce less noise. Examples are muffled breakers (the noise of a typical silenced breaker can be reduced by 16 dBA if a purpose-made muffler is fitted) and silenced diesel generators and compressors (some units are up to 15 dBA quieter). Generally, electrically powered equipment such as chain saws and cranes are noticeably quieter than diesel-powered equipment and hydraulically powered equipment is quieter than pneumatic power.

Cutting metal using gas cutters is far less noisy than using grinding methods to dismantle metal structures. When replacing exhaust and intake mufflers, ask for quieter options which are often available. Similarly, specified plant and equipment such as excavators can also operate at very different noise levels. Keep machinery covers and panels closed and well-fitted. Bolts and fasteners should be done up tightly to avoid rattles. Avoid equipment that is either over or under powered.

Saw Cutting of Pavers and Pavement Slabs

A cutting station should be established with the saw enclosed in an acoustic enclosure. A simple screen is unlikely to be effective in residential streets due to reflected noise effects. A water supply should always be made available and the saw blade changed regularly to avoid an annoying high pitched “whining” noise from developing. For any saw cutting choose a saw blade with the greatest number of teeth and of the smallest width. Choose a blade with gullets as small as possible. Choose a blade with built in vibration dampening slots.

Drop Hammer Piling

This is potentially the noisiest construction site activity. We will choose quieter types such as augured or vibratory piling as a first option. Unless it is shown that there are good engineering reasons to confirm that the ground conditions are not suitable, the choice of drop hammer rigs should be a last resort. Where drop hammer piling is shown to be the only suitable type, other noise reducing techniques should be adopted. These options include reducing the noise from the contact of the hammer with the pile helmet by using purpose-made dollies or blocks of plywood. The design of the equipment and the pile helmet should ensure that damping can be utilised in this way. It is also possible to add shrouds to help contain noise at the hammer or enclose the entire pile and hammer. Planned breaks may be necessary to fit in with the business or activities happening in neighbouring properties.

Audible Reversing Signals

These signals are very penetrating by design and can be turned off, or the tone changed in some circumstances, but talk with the company safety advisor first to ensure that site safety requirements are maintained.

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21. Conclusion

It is considered that with this proposed Construction and Environmental Management Plan and the site layout traffic management controls, there will be a considerable reduction in risk to all road users, the neighbouring business properties and to the general public and project personnel.

Guru Nanak Homes GB 2 Ltd have accepted, that if circumstances change which result in changes to the proposed project construction and environmental management plan, they will enter into discussions of the proposed changes with the local authority and ensure that the necessary permissions are granted to allow for those changes to take place.

Name: Tony Williams



Position: H&S Consultant - Pre-Construction Stage.

Issue Date: 15.11.2023

cc. by email. Guru Nanak Homes GB 2 Ltd

A copy of this document will be kept within the site office and be available for inspection by Cheshire East Local Authority Officers should the need arise.



- Site Hoarding
- Fire Point
- Site Traffic Route