Demolition and Construction/Environmental Method Statement
51 - 65 Wensley Road

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- Appendix B – 2951 – 51-65 Wensley Road Garages - Traffic Management Plan

1. Brief

This Construction Environmental Method Statement has been prepared for the exclusive use of Glenman Corporation Ltd, and their advisors for the purpose of assisting them in defining suitable environmental noise dust and vibration control measures to be adopted during construction works.

1.1 Introduction

The report has been compiled, in support of the planning application for the above development, to advise on the measures, in accordance with the best practicable means, to be used to minimise construction noise, vibration and dust that could arise as a result of these works. This plan will also detail information regarding the design and provision of site hoarding, traffic management, temporary access and public consultation and liaison.

The purpose of the report is to provide information on the potential sources of noise, vibration and dust that may arise from the construction of these new Dwellings at this location, together with recommendations for mitigating or preventing potential nuisance as also defined in Reading's Code of Practice for Construction Sites.

Once the planning condition has been discharged, Glenman will be fully responsible for the implementation of this plan and it will be necessary to resubmit this plan on the basis changes may arise, following the detailed engineering design of the works; the actual construction programme and proposed methodology; or conditions prevailing at that time.

This document provides details of the likely works and best practice methods that will be adopted to minimise the potential nuisance during construction.

This report shall access all impacts during the construction phase of the development on nearby residents and other occupiers together with means of mitigating any identified impacts. The development shall be carried out strictly in accordance with the details so approved and no change therefrom shall take place without prior written consent of the Local Planning Authority. This is adhered to in the interests of residential amenity, highway safety and the free flow of traffic on streets, and to mitigate the impacts of the development.

This document should be read in conjunction with the Construction Phase Plan and the following documents:

- Traffic Management & Logistic plans.
- Planning Application Drawings.

The project comprises the design and construction of 46 new dwelling units, including the provision of affordable homes, provided in a mixture of houses and apartments (1 bed / 2 bed / 3 bed / 4 bed) in blocks of between 2.5 to 4 storeys, and the provision of bicycle parking spaces, car parking spaces and public realm works. Including demolition of the existing garages.

The works also includes site roads, footpaths, fencing, screen walling, parking areas, landscaping, drainage, service connections and all works detailed on the drawings.

The site is in close proximity to a number of potentially sensitive noise dust and vibration receptors and these include:

- Residential properties.
- Local School and Hospital.
- Public allotments.
- The general public.

The most sensitive time periods are likely to be during peak rush hour times and/or 08.00 – 10.00am and 14.00 – 16.00 in conjunction with school opening/closing times.

At this stage the construction will commence on 1st March 2021 and works will be completed by 12th December 2022. Total project duration is 93 weeks.

Glenman will be responsible for determining the most appropriate method of construction for various aspects of the works and finalising the plant and equipment to be used. This document, however, draws on information from the Design team and site visits undertaken, and subsequently determines the likely approach to construction works.

This report is divided into the following sections:

- Legislation, Planning Policy and Guidance
- Description of site setting and receptors and current conditions;
- Description of works - Key Activities;
- Mitigation and best practice methods.

2. Legislation Planning and Guidance

2.1 Legislation

Various strands of national, regional and local planning policy and guidance are relevant to the Development. These include (but are not limited to) the following:

- Environmental Protection Act 1990 and Environmental Permitting (England and Wales) 2007.
- Noise and Dust nuisance is defined as a statutory nuisance in Part III of the act, Sections 79-82 address Statutory Nuisance Control of Pollution Act 1974.
- The principal legislation relating to noise is derived from the Control of Pollution Act 1974, although law related to both Statutory and Common Law can be relevant in the event that excessive noise nuisance is caused by an activity. Powers are given to local authorities under the Control of Pollution Act 1974 (COPA) for the control of noise from construction sites. Sections 59A, 60 and 61 of COPA 1974, allow councils to serve notices imposing requirements about the way in which work is conducted. Although it is a criminal offence to contravene such a notice without a reasonable excuse, it is a defence that the work was carried out under a consent issued under Section 61 of the Act.

- Such consents may be applied for in advance of construction work being carried out. Regulations can be made to control noise from plant or machinery under Section 68 of COPA 1974 but the policy preference has been to use codes of practise which have been issued under Section 71 to minimise noise. Although breach of a code of practise is not a criminal offence, these may be taken into account in legal proceedings. Under COPA 1974 a local authority may designate all or part of its area as a noise abatement zone. The consequence of this is that noise levels are recorded and entered into a public register. Noise levels may only be exceeded with the authority's consent, in effect setting an upper limit on noise levels.
- The Noise Emission in the Environment by Equipment for Outdoor Use Regulations 2001.
- The intention of the legislation is to control and monitor noise of equipment for use outdoors so as to reduce noise nuisance. The scope of the Outdoor Noise Directive comprises a wide range of construction plant and equipment, equipment for gardens, for lifting, pumps, drills, saws etc.
- Clean Air Act 1993 Emitting dark smoke from bonfires is an offence under this act.
- Building Act 1984 Applies to demolition of buildings and requires prior notification to the local authority and production of a method statement before the work begins.
- Environment Act 1995 and Air Quality Regulations 2010.
- The Air Quality Strategy set standards and objectives for air pollutants under Part IV of the Environment Act 1995.
- Health and Safety at Work Act 1974 the purpose of this act is to ensure the health, safety and welfare of persons at work and to protect against any risk to other persons, as a result of these activities. Under this act the Health and Safety Executive (HSE) issue sets of guidance notes.
- Control of Asbestos Regulations 2012 Activities involving asbestos must be reduced to as far below the control limit asbestos (0.1 asbestos fibres per cubic centimetre of air) as possible.
- The Non-Road Mobile Machinery (Emissions of Gaseous and Particulate Pollutants) (Amendment) Regulations 2011.

2.2 Policy

National Planning Policy Framework States that planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account the Presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas.

Core Strategy Basements Submission Planning Policy (April 2014) and Further Modifications Emphasises the relevance of CE6 part B, makes reference to the potential construction impacts.

2.3 Guidance

BS 6069 Part 2 'Characterization of air quality' Dust is the generic term which the British Standard document
BS 6069 (Part Two) uses to describe particulate matter in the size range 1 – 75µm (micrometres) in diameter.
BS 7445: 2003 'Description and Measurement of Environmental Noise, Part 2: Guide to the acquisition of Data Pertinent to Land Use' Defines parameters, procedures and instrumentation required for noise measurement and analysis.

BS5228-1: 2009 Noise and Vibration Control on Construction and Open Sites Part 1 Noise, Part 2 Vibration. Part 1 Annex C provides guidance on noise levels produced by site equipment and activities and Part 1 Annex D provides a method for estimating noise from construction sites;
Part 2 provides a guide to vibration levels produced by site equipment and activities.
BS 8233:2014 'Guidance on sound Insulation and Noise Reduction for Buildings-Code of Practice'. Provides criteria for the assessment of internal noise levels for various uses, including dwellings and commercial properties and recommended internal noise levels.
GLA and London Councils 2006' 'Best Practice Guidance: The Control of dust and emissions from construction and demolition. Provides best practice guidance on the control of dust from sites.

BS 6472-1:2008 'Guide to Evaluation of Human Exposure to Vibration in Buildings, Part 1: Vibration Sources Other Than Blasting', Presents recommended frequency weighted vibration spectra (for continuous vibration) and vibration dose values (VDV) (for intermittent vibration) above which adverse comment is likely to occur in residential properties.
BS 5228:2009 Part 1 Noise, Part 2 Vibration 'Noise and Vibration Control on Construction and Open Sites' Provides an industry accepted guide for noise and vibration control and includes sound level data for individual plant as well as a calculation method for noise from construction activities. The standard also provides advice on potential noise limits from construction sites.
BS 7385:1993: 'Evaluation and Measurement for Vibration in Buildings - Part 2: Guide to Damage Levels from Ground Borne Vibration', Presents guide values or limits for transient vibration, above which there is a likelihood of cosmetic damage.

2.4 Standards to be adopted

Preliminary target criteria are proposed below for dust, noise and vibration however, it is acknowledged that best practice methods should be adopted at all times to minimise the potential for dust, noise and vibration.

Considerate Constructors Scheme - The site will be registered with the scheme and adopt the principles outlined within the scheme as detailed below:

- Care about Appearance.
- Respect the Community.
- Protect the Environment.
- Secure Everyone's Safety.
- Value their workforce.

Dust is the generic term which the British Standard document BS 6069 (Part Two) uses to describe particulate matter in the size range 1 – 75µm (micrometres) in diameter. Dust nuisance is the result of the perception of the soiling of surfaces by excessive rates of dust deposition.
There are currently no standards or guidelines for dust nuisance in the UK and this reflects the uncertainties in dust monitoring technology, and the highly subjective relationship between deposition events, surface soiling and the perception of such events as a nuisance.
Under provisions in the Environmental Protection Act 1990, dust nuisance is defined as a statutory nuisance. Complaints about excessive dust deposition would have to be investigated by the local authority and any complaint upheld in law for a statutory nuisance to occur.
The regulation of dust deposition is, however, generally managed by suitable on-site practices and mitigation rather than by the determination of statutory nuisance and/or prosecution or enforcement notice(s).

The Dust site action level required for the development in Wensley Road is to be 190 µg/m3, measured as a 1-hour mean. Dust will be controlled at source by on tool extraction and where this is not technically feasible, dust will be controlled by water suppression.

Glenman staff and personnel shall implore the best practical means available to minimise any resulting dust and air quality impacts.

Noise, in the context of this plan, can be defined as unwanted or undesirable sound derived from sources such as road traffic, industries or construction works, for example, that interfere with normal activities, including conversation, sleep or recreation. Vibration is related to noise resulting from the transmission of low frequency energy through, typically, the medium of ground or buildings. It results in small movements of the transmitting medium, which can cause discomfort if the movements are large enough. In this document the potential for noise and vibration to be generated during demolition and construction is considered.

Noise will be controlled by the use of acoustic barriers and Noise generating works shall only be carried out during specified times, with local residents notified beforehand.

BS 5228 provides practical information on noise and vibration reduction measures, and promotes a 'best practice means' approach to control noise and vibration. The calculation method provided in BS 5228 is based on the number and types of equipment operating, their associated sound levels, and the distance to receptors, together with the effects of any screening.

The types and numbers of construction plant will be finalised following the completion of the engineering design and in discussion with our specialist subcontractors. Ultimately there will be a trade-off between maximising the number of plant and equipment on site within the constraints of the site and project programme.

BS 5228 provides further guidance on acceptable levels of construction noise within Annex E and provides example criteria for the assessment of significance of construction noise impacts. One of the potential suggested criteria within BS 5228 refers to the DoE Leaflet AL72: Noise Control on Building Sites from 1976. Whilst this was published in 1976 and out of print, it is often still used to define suitable target values.

Facade Target Noise Levels for Occupied Buildings during Core Working Hours:

- Monday-Friday 0800-1800 Hrs – 75(db)
- Saturday 0900 -13.00 5 Hrs – 75 (db)
- No works will be undertaken on Sundays & Bank Holidays

NOTES:
(a)The LAeq Tr noise level is the A-weighted equivalent continuous sound level, measured over the relevant time period quoted above.
(b) The above noise limit relates to noise from the construction process at a point 1m in front of the facade of any occupied building.

The above targets are recommended for this assessment as the basis for identifying potential construction noise impacts, where the typical 'worse case' daily noise level prevails for a period greater than one month, and where the baseline ambient noise level is predicted to increase by 3 dB or more due to construction noise.

The correct timing of construction operations is expected to be critical in avoiding noise and vibration nuisance to surrounding areas and premises. Glenman will be responsible for identifying particularly sensitive periods in the works, so that potential problems can be minimised and good early public relations amongst the adjacent tenants and occupants of neighbouring buildings is essential.

Vibration from construction activities may impact on adjacent buildings. The target criteria used in this assessment relates to the potential for cosmetic damage, not structural damage. For this development, Piled foundations are proposed especially where foundation depths become uneconomical due to tree planting and/or deep made ground. For the purpose of this development, Continuous Flight Augured Piles (CFA's) shall be implemented to minimise the vibration and possible disruption to neighbouring citizens.

As a result of this, it would be anticipated that vibration sources fall in the mid to high magnitude range for as minimal a duration as is attainable possible.

Glenman aims to carry out any and all noise and vibration impacting work to the best practicable means possible, as defined in Reading's Code of Practice for Construction Sites. As a result, Contractors will undertake noise risk assessment, state the risk category and employ best practicable measures in line with the designated risk category defined in the Code of Practice. Noise, dust and vibration recording and calculation techniques shall be employed, with additional recording/measuring devices located on site and in the Site managers office. It is also advised that a weekly noise, dust and vibration monitoring summary be sent to the EPPP team as outlined in Reading's Code of Practice for Construction sites.

BS 7385 establishes the basic principles for carrying out vibration measurements and processing the data, with regard to evaluating vibration effects on buildings.
The vibration dose value (VDV) is a measure of the amount of vibration that is experienced over a specified period, and was defined so as to quantify the human response to vibration in terms of comfort and annoyance.

3. Description of the Site and Receptors

The site is located at 51-65 Wensley Road.

4. Description of the Works

Full details of the proposed development and construction methods are provided in the planning application drawings and supporting information, including the Structural Engineering Planning Report, that provides a construction method statement, shall also be included. These provide details of the Demolition, excavation, temporary works and any other construction techniques.

4.1 Demolition

Prior to demolition, a full precondition survey will be undertaken to adjacent boundaries and structures as appropriate, and all residents likely to be affected by the works will be advised.

As agreed with Reading Borough Council Housing Repairs Team and Pest Control Contractor, before the demolition to the garages occurs, Glenman Site Manager will contact the Reading Borough Council Pest Control Contractor and implement any actions as set out by the Pest Control Contractor after they have reviewed the garages. In addition to this, following the demolition and Ground Works, a survey will be undertaken to ensure that there are no redundant uncapped drains and no rat burrows – within the Glenman site boundary. Furthermore, to limit the impact on the number of vermin, due to the works, Glenman will ensure that all food waste from site is put within the skips in the storage area and that all bins are cleaned and emptied daily. Glenman have also discussed, with Reading Borough Council Pest Contractor, the use of Bait boxes and Bins to be used around the site perimeter, throughout the development.

Please note: All Demolition works and respective measures undertaken shall adhere to the relevant standards and conditions as set out by Reading Borough Council prior to site possession being undertake by Glenman Corporation.

4.2 Excavation

It is proposed that all excavation shall be carried out by a suitably sized excavator. The soil will be transferred to trucks on a wait and load basis and removed safely and efficiently from site. Wheel wash facilities shall be provided to prevent the unwanted transfer of mud and debris onto adjacent roads.

5. Mitigation

Glenman will be undertaking the project and details of the contractor will be displayed on the site hoarding, as defined in the Site Logistics Plan (Phase 1). It is anticipated that a list of suitable contractors will be drawn up. From this list, those with whom the Glenman team have had good previous working experience and/or knowledge of, will be best suited for the task at hand.

The evaluation of the suitability of the contractors to undertake the project will include an assessment of the ability of the contractors to manage their own works in an environmentally responsible manner, that preserves the reputation of the Client and is protective and respectful of the public and the surrounding neighbourhood.

This Construction Management Plan will be provided to subcontractors tendering for the works and they will be required to adopt the recommendations of said document as and where necessary.
In the event that changes to the working method are proposed by the contractors; the contractor will, following authorisation of the Client team, submit and agree the changes with local authority.

As part of the tender requirements the contractor will be required to conform to all relevant legislation and guidance including British Standards.
A full photographic precondition survey of the highway and footpaths immediately fronting the site will also be undertaken in advance of any site works commencing.

Also noted at this point is the fact that all site operatives must wear ID badges and Contractor Logo based Hi-Viz at all times.

5.1 Neighbourhood Liaison

It is recognised that early liaison and effective communication between the contractor and those who may be affected by the works, is essential with regards to maintaining good ongoing neighbourhood relations.

The maintenance of said good relations between neighbours and the contractor, along with the implementation of a programme of ongoing liaison and respect with regards to the local environment and residences, will form an important aspect of the successful management of the overall project.

The contractor will be focused on engaging with the community to provide all appropriate information and the Site Manager will be the first point of contact to resolve any issues or concerns, that may present themselves. The names, contact telephone numbers and email addresses of all Site personnel with responsibilities for both supervision and management of the construction Works, shall be displayed on the site notice located on the site hoarding as defined in the Site Logistics Plan (Phase 1).

Once pre-commencement planning consent has been obtained, formal contact will be established between residential neighbours and those who could potentially be affected by the demolition of the existing buildings on site and the construction of the Proposed Development. This will include a deal of consultation and discussion on this Construction Management Plan and include identifying any impact regarding particularly sensitive times of the day.

Outside normal working hours, the Contracts Manager and Site Manager will act as the main point of contact via a dedicated phone number / hot line. Any complaints will be logged, fully investigated, and responded to quickly and efficiently in a professional manner, advising what action has been taken. If necessary, complaints will be reported to the relevant authority. Complaints can either be transferred to the Site Manager and logged on attendance or alternatively, complaints and additional comments can be logged directly at the site entrance via the Post Box provided.

Public notice boards will be established at site entrances providing contact details of the person(s) accountable for neighbourhood liaison including environmental matters.

A monthly newsletter will be devised by the Contracts Manager. This will then be distributed to local residents and businesses, along with an update as to how the works are progressing and the possibility of any works that may cause disruption. Glenman will ensure that disruptions are kept to an absolute minimum wherever possible.

5.2 Baseline Monitoring

Glenman shall follow a clearly devised risk assessment approach of the London Good Practice Guide for Noise and Vibration Control for Demolition and Construction and therefore employ all monitoring regimes in accordance with this. Glenman shall adhere to undertake relevant monitoring of noise, vibration and dust, where there are receptors nearby that are likely to be affected by these issues. Particular phases of the works that are known to cause noise, vibration or dust, should be identified for targeted monitoring, and results then used in return to identify problems as early as possible and aid in evaluating complaints.

5.2.2 Air Quality and Dust Risk Assessment

A Dust Risk Assessment has been undertaken for the project at this planning stage, to provide a summary of the risk to soiling, health and the natural environment from the earthworks, construction and track out activities.
The control measures outlined in the Risk Assessment are:

- On tool extraction will be used on tools to control dust at source. where this is not technically feasible, a constant water suppression will be used to control dust
- Natural or artificial wind breaks will be implemented to prevent dust movement
- Earthmoving tasks will be restricted during extremely windy conditions.
- Speed limits will be implemented on site on unpaved areas which will reduce dust emissions by up to 22%
- Wheel wash will be implemented at vehicle entry and exit points and access and egress roads will be swept down and jet washed at regular intervals

Earthworks- The scale of the earthworks is relatively High due to demolition works and is predominantly contained within the site boundary, as depicted in the Site Logistics Plan highlighted in red. Small numbers of controlled earth moving equipment will be used, with the total material to be moved being circa 1200m^3

Construction - The scale of the construction falls in the Low/Small Risk category .

Trackout – The potential impact on the local surroundings is Low, as the materials shall be directly transferred into skips, with no tracking what so ever to be performed on the road by any excavation plant.

The Ecological Sensitivity of the area is considered to be Medium, due to surrounding public health care facilities, nursery school and a community gardening project.

5.3 Construction Monitoring

Throughout construction, a programme of monitoring shall be implemented, to ensure that condition limits are not exceeded.

A dust, noise and vibration monitoring programme shall be developed in consultation with local authority to ensure that dust, noise and vibration at sensitive receptors is adequately monitored, managed and controlled.

The site management shall carry out regular site inspections to monitor compliance with air quality and dust control procedures, thereby recording inspection results and making an inspection log available to the local authority, as and when requested. It may be adequate to Increase the frequency of such monitoring, if certain circumstances occur which may result in higher emissions being created (e.g. prolonged dry spells followed by windy weather).

Glenman's Health, Safety, Environmental & Quality Manager will also conduct monthly visits and an Environmental, Health & Safety Audit and Quality Audit will also be carried out. This information will then be communicated to the Contracts Manager and the respective Site Team. If actions are required, they will be assigned to individuals, with time frames clearly defined as to when these actions are to be closed out.

Glenman will also appoint independent consultants to monitor certain works, as and when required. An Arboriculturist will be appointed to monitor tree protection works and advise on works within Root Protection Zones. The arboriculturist will also construct a report on all trees being felled and a method statement for the maintenance and protection works required for the retained trees. In addition to this an Ecologist will be in attendance conducting a watching brief before and during any tree felling works. The ecologist will review trees to determine if any wildlife is active in them before they are felled. Once the ecologist confirms they are satisfied the trees will be felled.

5.4 Training

All contractors operating on site will be expected to demonstrate that they have undertaken appropriate training of their staff, to ensure that they are aware of the measures that are to be taken on site to minimise noise, vibration and dust generation.

All employees should be advised regularly of the following, as part of their training:
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- The proper use and maintenance of tools and equipment and in particular, sound-reduction equipment.
- The positioning of machinery on site to control noise emissions to the adjoining neighbourhood and to site personnel.
- The avoidance of unnecessary noise when carrying out manual operations and when operating plant and equipment (i.e. Machines left running when not in use).
- The protection of all persons, both site and public, against noise.
- The operation of sound measuring equipment (selected personnel).

5.5 General Measures to be adopted

5.5.1 Site Hoarding

The site will be protected with a timber hoarding that will be 2.4 metres high along the front and side perimeter of the site. All site hoarding will be erected by the demolition team, with Glenman

then taking on the responsibility of maintaining the hoarding for the duration of the construction works and replacing elements as they deem fit and/or necessary. The hoarding is to be painted in colours to be agreed by the CR.

5.5.2 Scaffolding

If scaffolding is required for the construction of the new garages at 51-65 Wensley Road, it shall encompass the following methods;

- The scaffold will be provided with brick guards / debris netting /monoflex.
- The scaffold will be fitted with double boarded and monoflexed fans over all entrances /exits to the properties.
- The scaffold lifts immediately above walkways will be double boarded and monoflexed / covered with plywood / roof felt.

5.5.3 Hours of Work

The following standard permitted hours are to be followed for Site work:

- 08.00 to 18.00 hours (Monday to Friday);
- 09.00 to 13.00 hours (Saturday) only when agreed with the Principle Designer, CFST and the Client prior to the commencement of any work on site.
- No construction, demolition or associated deliveries shall take place outside the hours of 0800hrs to 1800hrs Mondays to Fridays, and 0900hrs to 1300hrs on Saturdays, and not at any time on Sundays and Bank or Statutory Holidays without prior written approval from the Local Planning Authority.

5.5.4 Lorry Movements

There shall be no Lorry movements to and from Site outside of the following hours:

- Between the hours of 08.00am and 17.30pm - Mondays to Fridays; with special consideration being given to busy drop off and collection times, of the nearby school.
- Between the hours of 09.00am and 13.00pm on Saturdays, (again only when agreed in advance with the Principle Designer, CFST and the Client).
- No construction, demolition or associated deliveries shall take place outside the hours of 0800hrs to 1800hrs Mondays to Fridays, and 0900hrs to 1300hrs on Saturdays, and not at any time on Sundays and Bank or Statutory Holidays without prior written approval from the Local Planning Authority.
- All deliveries to site will be on a just in time, pre-scheduled basis, with all unscheduled deliveries being sent away upon arrival.
- NO Deliveries will be made to site during School Arrival and Exit times.
- A timely organised and efficient schedule for deliveries shall be adhered to once planned, with deliveries being booked at least 1 week in advance, so as to avoid any congestion or possible neighbourhood disruption.
- The Fleet Operator Recognition Scheme (FORS) Principles shall be adopted for all vehicle movements to and from site.
- All vehicles are to be sheeted, for easy unloading.
- All vehicles will unload and load within the site boundary, in the clearly defined areas and there will be no holding and strictly no queuing of vehicles on the public highway.
- All Vehicles shall be assisted by a banksman at all times, with great care and diligence being given to considering the impact on pedestrians and essentially safeguarding them from any potential hazards that may arise.

- Vehicle wheel wash facilities are to be provided, in order to prevent the transfer of mud and debris onto the adjacent Roads.
- All plant must meet the relevant euro emission stage and in return, keep an up to date inventory with equipment clearly marked with the relevant emission standards.

Please Note: All Plant and Vehicles must confirm to the specified Vehicle route to site which is clearly detailed as follows;

Vehicle routes to site are defined in Appendix B attached.

5.5.5 Percussive Work

Every effort should be made to reduce noise and vibration caused by percussive works, but where such work cannot be avoided, the recommended hours of work are as follows:

- Between the hours of 08.00am – 10.00am, 12.00 – 14.00pm and 16.00 – 18.00pm (Monday to Friday).
- Not permitted on weekends or public/bank holidays.

Noise monitoring should be carried out where noise is likely to exceed action levels. This will be carried out by the site manager and the HSEQ Manager, who will undertake noise readings using a noise level meter. Control measures to reduce noise will be constantly reviewed to ensure they remain suitable and sufficient.

The effects of noisy work can be reduced by implementing a range of control measures that should start with tackling the source and end in the provision of personal protection. All residents must be informed of time and duration of noisy work and why this work is necessary. Suitable noise refuge and buffer zones may need to be considered in some instances. Control measures are within Appendix A, further actions are also listed:

- Residents will be notified in advance by letters and notices erected on notice boards of when works which generate noise will be undertaken.

- Acoustic barriers will be erected around the working area to reduce sound emissions

- When plant and vehicles are not in use, engines will be turned off

- Deliveries will be scheduled outside peak hours. Suppliers and Sub-Contractors will be required to notify site management of planned deliveries to include in a delivery schedule to ensure that they are planned and organised so as not to cause disruption. Delivery drivers will be required to contact site management 30 minutes prior to arrival.

- Plant and machinery will receive regular servicing and maintenance to ensure that noise action values do not increase due to deterioration.

Glenman will also apply for consent under section 61 of the Control of Pollution Act 1974 to agree noise control measures with the Environmental Protection and Nuisance team at Reading Borough Council.

The High Risk control measures that will be in place on site include:

- Plan site layout to ensure that reversing is kept to a practicable minimum, and where practicable eliminated altogether. Where reversing is required, use broadband reverse sirens / white noise alarms or, where it is safe to do so, disengage all sirens and alarms and use banks-men.
- Rubber/ Neoprene (or similar non- metal lining material) matting to line the inside of material transportation vehicles to avoid the 'first drop' high noise levels.
- Where site space is limited and volume of vehicles attending site is high, seek vehicle holding bay(s) to use with 'Just in time' delivery management systems.
- Space planning for stockpiling of material (over weekends and, evening and nights) within the site to allow removal during normal working hours only.
- If working out of hours on safety grounds, limit high noise/vibration demolition activities to normal hours wherever practicable.
- Avoid demolition activities outside of normal working hours using temporary measures, such as safety / protection fences, to enable works to be conducted during normal working hours.
- Use rotary drills and "bursters" activated by hydraulic or electrical power, or chemically based expansion compounds, to facilitate fragmentation and excavation of hard material.
- Avoid the transfer of noise and vibration from demolition activities to adjoining occupied buildings through cutting any vibration transmission path or by structural separation of buildings.
- Rather than breaking in-situ, consider the removal of larger sections by lifting them out and breaking them down either in an area away from sensitive receptors or off-site.
- If working outside of normal hours on safety grounds, limit major excavation works to normal working hours.
- Monitor noise continuously during demolition, piling, excavation and sub- and superstructure works at agreed locations and report to the local authority at agreed intervals.
- Monitor vibration continuously during demolition, piling, excavation, and sub-structure works at agreed locations and report to the local authority at agreed intervals.
- Appraise and review working methods, procedures and logistics on a regular basis to ensure continuous development of BPM.
- Establish level trigger alerts in agreement with the local authority and guided by BS5228. Monitor noise and vibration to trigger text alerts; where levels exceed the triggers then inform the local authority, review work practices, and agree additional mitigation measures with the local authority.
- Use monitoring equipment with web access capabilities to view and inspect real time measurement and/or audio data.
- Send regular updates at appropriate intervals to all identified affected neighbours via newsletter and posting information on the site hoarding. Also make information available via email when requested.
- Develop and maintain a website to provide information about the project and to receive feedback.
- Arrange regular community liaison meetings at appropriate intervals including prior to commencement of project. Respond to issues raised and report back to attendees.

- Arrange meetings and communicate on a regular basis with neighbouring construction sites to ensure activities are coordinated to minimise any potential cumulative issues. Subject to COVID restrictions.
- Arrange meetings and communicate on a regular basis with the local authority to monitor the progress of the works and to consider any concerns or complaints raised by the local community.

5.5.6 Pre-site preparation

Prior to the commencement of site works, the specialist ground works contractor will provide detailed method statements for all aspects of the construction, with these details then being issued for approval by the engineer.

These statements will address all the site-specific procedures described in the previous sections to minimise any noise and vibration that may affect the neighbouring properties.

The contractor shall, in addition to these site-specific procedures, also adhere to the following:

- Designate a responsible person to oversee all environmental matters.
- Erect solid safety barriers at the site boundary.
- Display main site contact details at the site entrance, clearly visible for all persons to see.
- Erect effective barriers around dusty / noisy activities.
- Ensure machinery, fuel and chemical storage and dust generating activities are not located close to boundaries and sensitive receptors where possible, as defined in the Construction Phase Plan.
- Designated plant and material storage areas are to be identified within the site logistics plan.
- Site pre-condition photographs are to be taken in advance of any works commencing, to define the pre-working conditions of the existing site and its surroundings.
- A pre-condition survey must also be taken of the highway and any other junctions in the immediate vicinity of the site.

5.5.7 Traffic Management

The frequency of vehicle movement will be confirmed by the chosen contractor and approved by Glenman, before any site works commence, the following procedures and precautions will be put in place during the constructions works:

- Liaison with the Highway Authority to discuss the preliminary Traffic management plan, with emphasis on routing of lorries and any signage which may be required to be erected on the public highway.
- All suppliers will be advised in advance of traffic routes and delivery restrictions.
- Avoid unnecessary revving of engines, all vehicles should switch off engines when not in use - no idling.
- Delivery drivers are to contact the site team at least 30 minutes before arrival to ensure that a banksman is in place and ready to direct the vehicle safely into the site compound, limiting the disruption caused to local pedestrians.
- Delivery times will be restricted to avoid busy times such as school opening and closing.
- NO Deliveries will be made to site during School Arrival and Exit times.

- Hoarded/heras fenced panels are to be kept closed at all times. They should only be opened by the banksman to allow vehicles access and egress to site where necessary.
- Plant and vehicles should be started up sequentially rather than all together.
- Care should be taken to position site equipment away from noise-sensitive areas.
- Where possible, loading and unloading should be carried out away from noise sensitive areas also.
- The movement of plant onto and around the site must be done with special attention paid to the normal operating hours of the site, with the location of any noise sensitive receptors kept as far as is reasonably practicable.
- Where possible, minimise noise from audible reversing alarms by planning vehicle movement routes in advance around the site.
- If reversing is unavoidable - all permanent plant on site. E.g telehandler will have broadband/white noise reverse alarms installed. Delivery vehicles are exempt of this requirement.
- All loads entering and leaving site, are to be sheeted and covered as appropriate.
- If heavy plant has to be used, acoustic barriers and/or sound insulation shall be installed around plant and machinery, to reduce any unwanted sound emissions.
- Due to the restricted nature of the site, operative parking is non-existent and shall be detailed as so, within the site-specific Traffic Management plan. Resident parking permits only.
- If the contractor needs to suspend any parking bays, then an application must be made in advance to Reading Council street parking division. All subcontract trades will be advised on the use of public transport as required.

Please Note: all Construction work will be carried out on-site and not on the highway, so as to avoid any unwanted congestion or disruption to the Daily traffic flow.

5.5.8 Equipment

- Compressors and generators – the compressor or generator Manufacturers' enclosure panels need to be kept closed, where possible the metal casing should be acoustically dampened and an acoustic screen shall be placed between the equipment and noise sensitive areas. It is noted that generators should only be used as a complete last resort.
- Concrete Breakers, hydraulic breakers and 'munchers' shall be used where appropriate.
- Concrete mixing and batching – where possible this should be done behind a barrier and when filling with aggregate, this should not be allowed to fall from an excessive height. Concrete mixer drums must not be hammered.
- Noise Reduction Enclosures – where noise reduction enclosures are employed, they shall follow the guidance provided in section B2 of BS5228-1 to the satisfaction of the Director of Environmental Health, or Officers who have been nominated by him.

5.5.9 Prevention of mud transfer and other materials onto the public highway

- Wheel washing facilities will be installed immediately inside the site entrance at the vehicle entrance/exit route from the site. Wheel wash facilities must have a suitable catchment pit / drainage area to prevent fluid discharge onto the public Highway. (See site Traffic Management plan).
- If the wheel washing facilities are not controlling the transfer of mud and other debris directly onto the highway, a road sweeper will be employed to clean the roads.

- Pavements will be kept clean and will be jet washed and swept down.

5.5.10 Managing the production of waste and re-use of materials

- A site waste management plan shall be drawn up and adopted by all Glenman staff before any work commences on site.
- Waste will be disposed of in segregated skips as defined in the Site Logistics Plan (Phase 1).
- Glenman will adopt a strict waste management system whereby all volumes of waste are closely monitored and measured before new materials are ordered, in an attempt to reduce the amount of waste from site.
- Left over materials will be transferred to other Glenman sites, to reduce the amount of waste and materials being ordered where possible.
- Waste materials must be recycled via means of separating the metals, woods, glass etc. or by off-site sorting of recyclable materials.
- Disposal of waste materials to land fill must be avoided wherever possible.
- Contractors are expected to implement an environmental management system and comply with current environmental legislation.
- Contractors are also expected to avoid pollution by the effective utilisation of sufficient resources made available to them.
- Contractors are expected to source sustainable products through supply chain management and should highlight and maximise opportunities for sustainable development wherever possible.
- Appropriate systems must be set in place to deal with spills of chemicals, paints or oils etc. to avoid contaminated run-off and possible pollution of rivers, streams or groundwater.
- Biodiversity must be protected, enhanced and promoted wherever practicable.
- Environmentally friendly transport modes should be adopted and promoted wherever possible also.

Please note: Details of the dedicated refuse / recycling enclosure(s) shown on the approved plans shall be submitted to and approved in writing by Local Planning Authority prior to superstructure works commencing on site. The refuse and recycling enclosures and waste shall be managed and carried out at all times in accordance with the details so approved in an attempt to secure the necessary physical waste enclosures to support the development and to ensure that responsible waste management practices are adhered to.

Materials procured for the development should be selected to be sustainably sourced and otherwise minimise their environmental impact, including through maximisation of recycled content, use of local suppliers and by reference to the BRE's Green Guide Specification.

5.5.11 Excavation and earthworks

- All dusty activities will be dampened down whilst any earth is being moved on site, especially during prolonged dry periods.
- Earthworks will be temporarily covered if and where possible.
- Protective barriers shall be used to protect open areas, with segregated pedestrian rotes being provided in this instance.
- Minimise drop heights to control the fall of materials.
- Only remove secure covers in small areas during work and not all at once.

5.5.12 Minimise the potential of pollution of groundwater and surface water

- Where stockpiles or hazardous materials are being used near sensitive receptors such as drainage systems, drain covers will be installed.
- Excavated earth will not be stockpiled in close proximity to ground water or drainage systems.
- Appropriate systems must be set in place to deal with spills of chemicals, paints or oils etc. to avoid contaminated run-off and possible pollution of rivers, streams or groundwater. Spill kits will be located in various areas on site where there is a risk of pollution or contamination.
- Glenman's waste management plan shall be communicated to all workers on site.

Please Note: A Groundwater Risk Management Permit from Thames Water will be required for discharging groundwater into a public sewer. Any discharge made without a permit is deemed illegal and may result in prosecution under the provisions of the Water Industry Act 1991.

5.5.13 Cutting and grinding

- Wherever possible, materials will be pre-fabricated off site and made to measure. This will reduce the amount of cutting, grinding and welding that is required on site.
- Wherever possible, all tools must incorporate a vacuum extraction system to control at source. Where this is not technically feasible, water suppression must be used. All operatives carrying out works which generate dust, will be required to wear RPE which is FFP3 as a minimum and is face fit tested.
- Glenman will ensure that tool box talks and bulletins are briefed out to all operatives on a regular basis regarding dust control.

5.5.14 Concrete Pours

In order to avoid overruns past the site operating hours, the pour size and concrete workability shall be considered. The Site shall enter into a protocol with the concrete supplier regarding timing of deliveries to ensure works can be completed within the permitted hours thus reducing the impact on the highway and surrounding residential areas. Concrete pour cards shall be strictly adhered to and good site management will be key in this respect.

5.5.15 Licencing Arrangements

In the event that licence arrangements are required, Glenman will liaise directly with Reading Borough Council and arrange as appropriate in advance of any associated works commencing.

Appendix A – 2951- 51-65 Wensley Road - Site Noise Risk Assessment

Site Noise Risk Assessment

Site Address: **51-65 Wensley Road, Reading, RG1 6AE**

Contractor: Glenman Corporation Limited

Date: 26/01/2021

Completed by: John Doyle

Signature: ***John Doyle***

One of the key measures in ensuring that adequate noise and vibration mitigation is provided is careful planning before the start of the works to ensure that appropriate mitigation is factored into the programme and cost model.

The London Good Practice Guide on Noise & Vibration Control for Demolition and Construction clearly sets out a method for risk assessment. Reading's risk assessment method has been based upon this and provides an initial identification of the overall noise and vibration risk associated with the site and the proposed works. This enables early identification for developers and contractors of generic and specific noise or vibration mitigation measures likely to be required, procedures which may need to be developed and any external consents which may be required.

This risk assessment tool requires the developer and/or contractor to assess the site location in part A and the works information in part B as below in Tables 1 and 2 and the total in Table 3.

		Low	Medium	High
Locality / Site information	**Programme Duration**			
	<6 months			
	6 months to 12 months			
	> 12 months			✓
	Proximity of nearest sensitive receptors			
	>50m from the site boundary			
	Between 25m and 50m			
	<25m			✓
	Day-time Ambient Noise Level			
	High ambient noise level	✓		
	Medium ambient noise level			
	Low ambient noise level			
	Working hours			
	Normal working hours only^	✓		
	Some extended evening or weekend working			
	Some night-time working			
	SUBTOTAL A Add up the number of ticks in each column	2	0	2

Table 1: Site location

Works information		Low	Medium	High
	Location of works			
	Majority within existing complete building envelope			
	Majority of works external			✓
	External demolition			
	Limited to 2 weeks[1]	N/A		
	External demolition between 2 weeks and 3 months[1]		N/A	
	External demolition greater than 3 months[1]			N/A
	Ground works			
	Limited to non-percussive methods (i.e. hand tools / small excavator / small backhoe)	✓		
	Percussive methods[2] less than 3 months[1]			
	Percussive methods greater than 3 months[1]			
	Vibration generating activities			
	Limited to less than 1 week			
	Between 1 week and 1 month		✓	
	Greater than 1 month			
	Street management			
	Required for less than 1 week / or not at all	✓		
	Required for less than 1 month			
	Required for greater than 1 month			
	SUBTOTAL B Add up the number of ticks in each column	3	1	1

[1] Total across entire programme.
[2] For example, breaking out using hydraulic or pneumatic breakers

Table 2: Works information

	Low	Medium	High
Risk Assessment A – Locality / Site Information Carry over SUBTOTAL A	2	0	2
Risk Assessment B - Works information For the highest number of ticks in SUBTOTAL B add one tick to the equivalent risk column	4	1	1
TOTAL	6	1	3

Table 3:Risk assessment total

The identified total risk category for the site is then the higher of A and B.

Once the risk allocation is known, the Good Practice Measures tables in Section 6 of the Code of Practice for Construction Sites (and reproduced below) are used to identify specific measures expected for the site. There are minimum considerations that are presented at the top of the tables that are applicable for all risk sites.

Developers and/or contractors are advised to carry out this risk assessment prior to any works commencing on site.

Mitigation measures

General Considerations
General considerations are measures which apply to all sites, to be considered when planning the site, prior to commencement of works or those which are not identified by the other categories.

Mitigation for all Risk Sites
Designated site-based staff shall have the authority to take the steps necessary on behalf of the contractor(s) to ensure noise and vibration is adequately controlled and managed, according to the circumstances associated with each worksite.
At the commencement of their appointment on a project (or prior to start of works on site), all site staff are to be briefed on their responsibilities to the application of BPM to minimise construction noise and vibration and the content of any planning consents, codes of construction or other legal agreements. The performance of the training should then be regularly reviewed and repeated throughout the construction programme as appropriate.
Site hoarding to be built and maintained to maximise the reduction in noise levels to sensitive buildings and land uses.
Display contact details of contractor and responsible site manager as well as working hours and other site information on the hoarding.
Locate the site access away from noise sensitive receptors.
Keep internal haul routes well maintained and avoid steep gradients.
Limit material and plant loading and unloading to normal working hours.
Reduce loading / unloading heights for muck away and material movement to mitigate impact noise.
Handle all material in a manner that minimises noise.
Join the Considerate Constructors Scheme for the site (see Appendix 6 for further information).
Consult the respective Borough's Code of Construction Practice / Technical Guidance.

Mitigation Measures to be Considered	Low Risk	Medium Risk	High Risk
Submit a Section 61 consent application to the local authority (see Appendix 2)[3].	◇	○	●
Adhere to 'quiet hours' as agreed and/or adopted by the local authority.	○	○	●

[4] For low risk sites (refer to 'risk assessment approach' on page 6 for a definition) a formal Section 61 consent application would not typically be necessary, but the contractor can submit details to the local authority (see Appendix 1 for details).

Maximise the screening effect of buildings and temporary stockpiles through programming / phasing of works.	◇	○	●
Use rubber linings in chutes, dumpers and hoppers to reduce impact noise.	○	●	●
Minimise opening and closing of site access gates through good coordination of deliveries and vehicle movements.	○	●	●
See Vehicle Activity for additional good practice with regards to the transportation of material.	○	●	●

● **Highly Recommended** ○ **Desirable** ◇ **Not applicable**

Table 4: General considerations

Plant

Construction plant and equipment, in one form or another, will be used on a construction site throughout the duration of a project. They are a source of noise and vibration and can disturb local residents and users of other receptors and form the basis of a large proportion of complaints received by a local authority.

It is important that the appropriate plant and equipment for the task is selected and the correct procedures are followed to ensure the plant is used at its most effective and efficient.

Mitigation for All Risk Sites

Ensure that each item of plant and equipment complies with the noise limits quoted in the relevant European Commission Directive 2000/14/EC, United Kingdom Statutory Instrument (SI) 2001/1701.
Fit all plant and equipment with appropriate mufflers or silencers of the type recommended by the manufacturer.
Follow manufacturer's guidance and measures to operate plant and equipment and use it in a manner which minimises noise.
Use all plant and equipment only for tasks for which it has been designed for.
Shut down all plant and equipment in intermittent use in the intervening periods between works or throttle it down to a minimum.

Mitigation Measures to be Considered	Low Risk	Medium Risk	High Risk
If possible power all plant and equipment by mains electricity or other quieter technology rather than locally powered sources such as generators.	○	●	●
Maximise screening from existing features / structures, or employ the use of full or partial enclosures for fixed plant. The enclosures should be well maintained. Fixed plant can include generators, compressors, pumps, batching plant and ventilation plant.	○	●	●
Locate and orientate fixed or semi-static plant away from noise sensitive receptors.	○	●	●
Consider additional measures to control noise for any plant required to operate on a 24 hour basis; for example, dewatering pumps or generators used to power site security.	○	●	●
Vibratory compaction equipment shall be used in a mode which minimises the incident vibration at nearby residential and other sensitive properties. Consideration should be given to engaging concentric weights only when running at speed to avoid run up, run down resonances, the use of smaller equipment, or turning off the	○	●	●

mechanical vibration on vibratory rollers and undertaking more passes for areas where there is a particular risk that disruption may occur at neighbouring properties.			

● **Highly Recommended** ○ **Desirable** ◇ **Not applicable**

Table 5

Vehicle Activity
Material deliveries and removals are major noise sources that can have an impact on receptors both close to and at a distance away from a construction site. Measures to minimise this impact should be considered as early as possible in the planning stage of a project, so site layout and logistical plans can be developed accordingly. Measures are especially necessary for sites close to schools or where a number of construction sites are operating within close proximity to each other.
Mitigation for all Risk Sites
Ensure all vehicle movements occur within normal hours or at agreed times, taking into account the primary function of sensitive receptors in the vicinity (i.e. avoiding school drop-off/pick-up periods).
Maximise the reuse of any waste arising on site to minimise vehicle movements.
Plan deliveries and vehicle movements so that vehicles are not waiting or queuing on the public highway. If waiting or queuing is unavoidable then engines should be turned off.
Minimise opening and closing of site access through good coordination of deliveries and vehicle movements.

Mitigation Measures to be Considered	Low Risk	Medium Risk	High Risk
Plan site layout to ensure that reversing is kept to a practicable minimum, and where practicable eliminated altogether.	○	○	●
Where reversing is required, use broadband reverse sirens / alarms or, where it is safe to do so, disengage all sirens and alarms and use banks-men.	○	○	●
Produce a robust Construction Traffic Management Plan which may also be required by the Local Planning Authority to plan, manage and minimise vehicle movements. Avoid unnecessary impact on sensitive receptors, traffic diversions via other sensitive areas or bottlenecks (see TfL guidance[4]).	○	●	●
Consider potential accumulation of traffic from other local construction sites and plan delivery routes and times to avoid congestion.	○	●	●

[4] Construction Logistics Plan Guidance for Developer
http://www.tfl.gov.uk/cdn/static/cms/documents/construction-logistics-plan-guidance-for-developers.pdf

Rubber/ Neoprene (or similar non- metal lining material) matting to line the inside of material transportation vehicles so as to avoid the 'first drop' high noise levels.	◇	○	●
Where site space is limited and volume of vehicles attending site is high, seek vehicle holding bay(s) to use with 'Just in time' delivery management systems[5].	◇	○	●
Space planning for stockpiling of material (over weekends and, evening and nights) within the site to allow removal during normal working hours only.	◇	○	●
Consider alternative means of transport, e.g. river and rail.	◇	○	●

Table 6: Vehicle activity

Demolition[6] Phase
Demolition has the potential to cause the most disruption to a neighbouring receptor. Modern non-percussive demolition techniques need to be considered wherever practicable to limit its noise and vibration impact. Where these methods are not possible, due to site or other constraints[7], then measures to minimise the amount and intensity of percussive breaking on site should be given priority. Percussive demolition methods have been used for years to dismantle buildings and break up the resulting concrete and brickwork. These methods can be particularly intrusive and can have a major impact on the local environment with only limited noise mitigation measures available.
Mitigation for all Risk Sites
Employ the use of acoustic screening; this can include planning the demolition sequence to utilise screening afforded by buildings to be demolished.

Mitigation Measures to be Considered	Low Risk	Medium Risk	High Risk
If working out of hours on safety grounds, limit high noise/vibration demolition activities to normal hours wherever practicable.	○	○	●
Avoid demolition activities outside of normal working hours through the use of temporary measures, such as safety / protection fences, to enable works to be conducted during normal working hours.	○	○	●
Utilise low impact demolition methods such as non – percussive plant wherever practicable[8].	◇	●	●

[5] Consult with EPPP team for possible locations.
[6] Including removal of temporary structures
[7] Including cost
[8] Lower noise impact demolition or mitigation measures may include pulverisers (munchers), saws and rotary drills and "busters" activated by hydraulic or electrical power and hydraulic cracking or splitting.

Use rotary drills and "bursters" activated by hydraulic or electrical power, or chemically based expansion compounds, to facilitate fragmentation and excavation of hard material.	◇	○	●
Avoid the transfer of noise and vibration from demolition activities to adjoining occupied buildings through cutting any vibration transmission path or by structural separation of buildings.	◇	○	●
Rather than breaking in-situ, consider the removal of larger sections by lifting them out and breaking them down either in an area away from sensitive receptors or off-site.	◇	○	●

● **Highly Recommended** ○ **Desirable** ◇ **Not applicable**

Table 7: Demolition phase

Construction Phase
During the construction phase many of the problems can be minimised or even removed by careful planning and organisation of the site. As the height of the building structure increases receptors further away from the site can potentially become more exposed to noise due to removal of shielding effects of neighbouring buildings. Each site and building method will offer its own opportunities to reduce its impact on local receptors.
Mitigation for all Risk Sites
When working within a building ensure all openings (e.g. windows and doors) are closed or sealed up.
Plan the site layout to maximise screening from existing features / structures.

Mitigation Measures to be Considered	Low Risk	Medium Risk	High Risk
Use prefabricated building structures or elements to minimise noise on site.	◇	○	●
Where on-site fabrication is unavoidable, all high noise level works should be carried out within normal hours.	◇	○	●
Consider concrete pour sizes and plan the start of concrete pours as early as possible within normal working hours to	○	●	●

avoid overruns. Confirm site cut off time for latest possible pour start.			
Where practicable consider using an on- site, noise attenuated, concrete batching plant to minimise overruns and disturbance from queuing delivery wagons from off-site and remote facilities.	◇	○	●
Obtain and agree a protocol with concrete suppliers and sub-contractor with measures to ensure that as far as practicable overruns on concrete pours do not occur.	○	●	●
Use plasma cutting for steel cutting operations.	○	●	●

Table 9: Construction phase

Monitoring
Monitoring may include either physical measurement or observational on-site monitoring. Noise and vibration monitoring is the most obvious way of demonstrating to a local authority that you are complying with the noise and vibration levels presented within any agreements (see Appendix 2 for Section 61 example) and works are being carried out in accordance with the British Standard BS5228. Any monitoring regime should be agreed with the local authority prior to being implemented to avoid unnecessary costs. Any personnel undertaking noise and vibration monitoring shall be able to demonstrate their competency for the task. Any monitoring undertaken should be readily available for the local authority to review upon request.
Mitigation for all Risk Sites
Establish pre-existing levels of ambient noise.
Carry out attended noise monitoring at the start of any new phase of works, to check source sound emission data from plant on-site and following any complaints.
Carry out regular on site observation monitoring and checks/ audits to ensure that BPM is being employed at all times. Such checks should include: • Hours of working • Presence of mitigation measures, equipment (engine doors closed, airlines not leaking, etc.) and screening (location and condition of local screening, etc.) • Number and type of plant • Construction method, and • Where applicable, any specific Section 61 consent conditions. The site reviews should be logged and any remedial actions recorded.

Mitigation Measures to be Considered	Low Risk	Medium Risk	High Risk

Monitor noise continuously during demolition, piling, excavation and sub- and superstructure works at agreed locations and report to the local authority at agreed intervals.	◇	○	●
Monitor vibration continuously during demolition, piling, excavation and sub-structure works at agreed locations and report to the local authority at agreed intervals.	◇	○	●
Appraise and review working methods, procedures and logistics on a regular basis to ensure continuous development of BPM.	◇	○	●
Establish level trigger alerts in agreement with the local authority and guided by BS5228. Monitor noise and vibration to trigger text alerts; where levels exceed the triggers then inform the local authority, review work practices and agree additional mitigation measures with the local authority.	◇	○	●
Use monitoring equipment with web access capabilities to view and inspect real time measurement and/or audio data.	◇	○	●

Table 10: Monitoring

Communication and Liaison
It is important that good relations are built with people living and working within the vicinity of the worksite. The developer or contractor should communicate with neighbours on all planned works, especially for periods outside of normal working hours, where agreed. Methods of communication, as a minimum would involve letter drops prior to and during works. Other forms of communication could include newsletters, meetings which residents or community groups can attend, notice boards, websites or social media, depending on the size of the project. All correspondence to be sent to residents or other neighbouring receptors should be forwarded to the local authority prior to its distribution, ideally for comment. The local authority can also provide guidance on the area to be included within the letter drops.
Mitigation for all Risk Sites
Develop a Community Liaison Plan. Develop a Complaint Procedure (see Appendix 6) with timescales for responses and a nominated liaison person to engage with residents and to handle complaints. These should be agreed with the local authority.
Display contact details for the site manager and liaison officer prominently on the site hoarding.
Brief all site staff regarding the complaints procedure and mitigation requirements and their responsibilities to register and escalate complaints received.

Mitigation Measures to be Considered	Low Risk	Medium Risk	High Risk

Send regular updates at appropriate intervals to all identified affected neighbours via newsletter and posting information on the site hoarding. Also make information available via email when requested.	◇	○	●
Develop and maintain a website to provide information about the project and to receive feedback.	◇	○	●
Arrange regular community liaison meetings at appropriate intervals including prior to commencement of project. Respond to issues raised and report back to attendees.	◇	○	●
Arrange meetings and communicate on a regular basis with neighbouring construction sites to ensure activities are coordinated to minimise any potential cumulative issues.	◇	○	●
Advise neighbours about reasons for and duration of any permitted works outside of normal working hours.	○	●	●
Arrange meetings and communicate on a regular basis with the local authority to monitor the progress of the works and to consider any concerns or complaints raised by the local community.	◇	○	●

● **Highly Recommended** ○ **Desirable** ◇ **Not applicable**

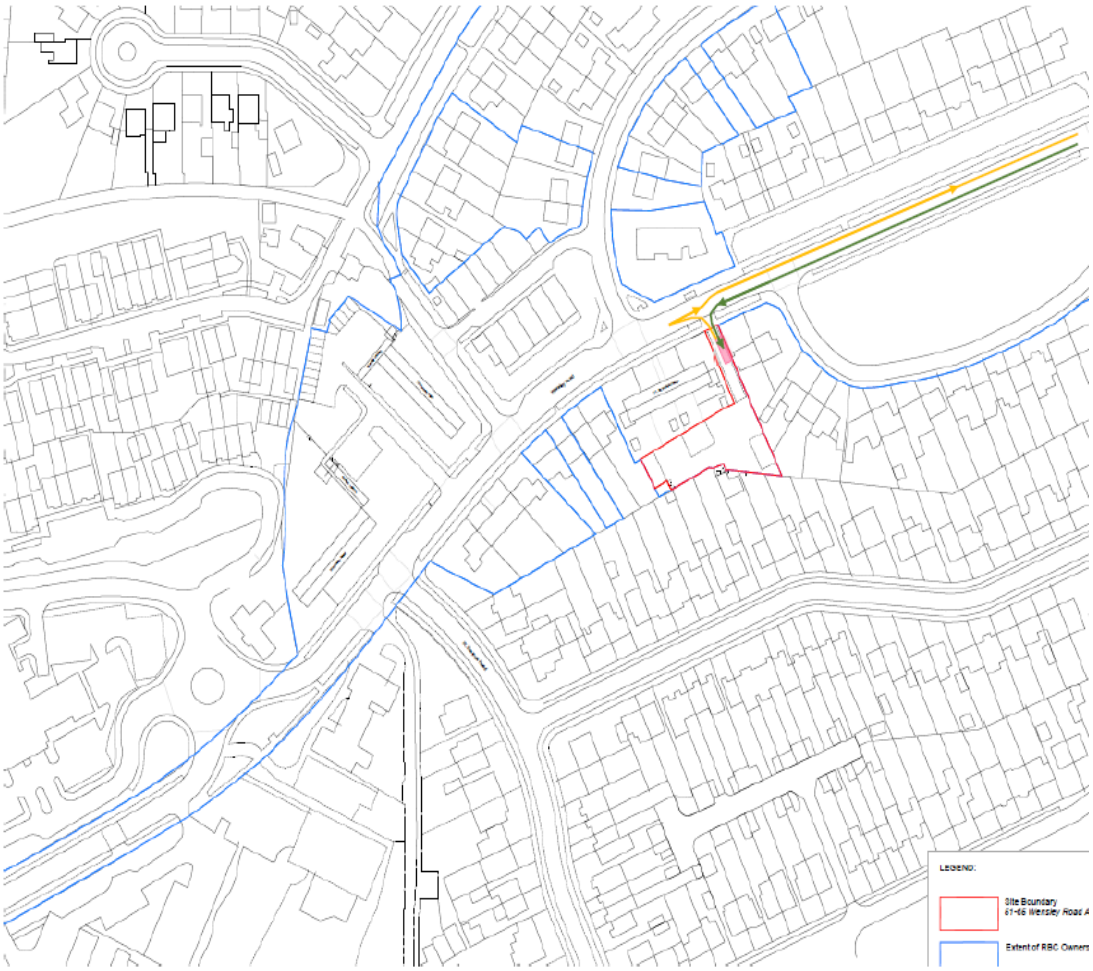
Appendix B – 51-65 Wensley Road – Traffic Management Plan

GCSK-002: 51-65 WENSLEY ROAD TRAFFIC MANAGEMENT PLAN

Stage-1 Approach:
Construction traffic for deliveries will be via Wensley Road into the site through gates. The Access/egress will be controlled by the banksman at all times.

Stage-2 Site Access:
The trucks will come straight towards the staging area via entrance gate.

Stage- 3 Truck Staging Area
The truck is located on the site and the gatesman closes the site gates to avoid crossing over or unauthorised access with pedestrians. The truck is unloaded in the onsite truck unloading areas (marked in pink). It is then inspected before leaving the site.

Stage- 4 Site Departure:
The trucks will be reversed back on the road for exiting by the gatesman to ensure all pedestrians on street as well as on site are clear and safe and will be directed back towards the Wensley Rd.

Site Boundary
Site Access route
Site Departure route
Truck Staging Area