

CONSTRUCTION MANAGEMENT PLAN

PENTLANDS
NEW MILL ROAD
HOLMFIRTH
HUDDERSFIELD
HD9 7LN

Introduction

This Construction Management Plan has been prepared with respect to Planning Application Number: 2020/62/91896/W.

The Construction Management Plan details plans, mechanisms, tools, resources that will be used to complete the development. The development is anticipated to be completed within a period of 18 months.

The Construction Management Plan is to be read in conjunction with the attached:

- **Construction Phase (Health and Safety) Plan** prepared ProActive dated 05 September 2023, which addresses several important points relating to the development including health and safety, site security, site management, use of equipment and traffic management.
- **Acoustic Report** prepared by Paul Horsley Acoustics Ltd., dated 09 September 2023, which details construction noise mitigation measures that will be adopted.

Key Parties

Principal Contractor GSM Developments Limited
6 Westfield Court
Mirfield
WF14 9PT
Tel: 01924 631056

Site Manager Gareth Lyttle
Tel: 07702681317

Resident Liaison Officer John Lyttle
Tel: 07702 683073

Health and Safety Consultants ProActive
ProActive House
Sidings Court
White Rose Way
Doncaster
South Yorkshire
DN4 5NU
Tel: 01302 341344

Site Access

Access to the site will be provided via the existing driveway from New Mill Road, which provides adequate visibility splays. Allocated areas as detailed below will be provided for skips, parking, loading, store, wheel wash and site cabin.

**Site Security**

Site security is maintained by perimeter fencing (HERAS or equivalent). Entrance to the site is controlled by padlock and chain. Where applicable, the fencing will also display warning notices to warn members of the public of the potential hazards.

Signage

Signage will be installed providing contact details. Signage relating to health and safety will be installed as detailed in the attached Construction Phase (Health and Safety) Plan.

Deliveries

Deliveries of materials will be during working hours via the existing driveway via Mill Road. Loading, unloading and storage of all plant and materials will be on site in a dedicated area.

All deliveries will be coordinated by Site Management. The Site Manager will liaise with all Contractors to ensure deliveries are timed to prevent vehicular build up around the site. No deliveries will be made with articulated vehicles. If required, a Banksman and Signalers will be used for traffic management.

Site Management will ensure any vehicles leaving site during excavations and foundations are clean of spoil and ensure the highway is kept clear of mud, stones etc. Wheel washing facilities will be provided as detailed above.

The Site Manager will monitor and co-ordinate with the delivery companies to ensure they are aware of the delivery times and will check roadworks and any hot spots and liaise with them regarding any changes.

Site Waste

Site Waste will be managed through a local waste management company with the aim of reusing or recycling as much as possible. All Contractors will be encouraged to eliminate waste at source.

Site Pollution

Site Pollution will be managed to prevent spills into the existing drainage system and highway. Dust Suppression will be used, and machinery noise managed to prevent disruption to the neighboring properties.

Noise Pollution

To minimize the potential impact of the noise generated from construction, impact mitigation measures will be adopted as detailed in Section 12 of the attached Acoustic Report prepared by Paul Horsley Acoustics Ltd., dated 09 September 2023.

**Neighborhood
Engagement**

The Resident Liaison Officer will personally visit neighboring properties and explain the proposed works and provide his contact details.

ProActive

Construction Phase (Health and Safety) Plan For: Pentlands (New Mill Rd, Holmfirth HD9 7LN) Construction of 15 Dwellings

Developed from Construction (Design and Management Regulations) 2015 and
GSM Developments Ltd-construction Information.

Issue History

Date	Review Number	Section Reviewed	Amended by	Checked by	Approved by
05/09/2023	01	New Document	Richard Wadkin CMIOSH ProActive Risk Consultant 	Ken Stevens ProActive CMIOSH ProActive Risk Manager 	Gareth Lyttle Director GSM Developments Ltd 

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Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 1 of 33

ProActive



CONSTRUCTION PHASE (HEALTH AND SAFETY) PLAN

1.0 GENERAL DETAIL

- 1.1 Description of Project
- 1.2 General Project Scope
- 1.3 Programme
- 1.4 Duty Holders and Contact Information
- 1.5 Notifications
- 1.6 Existing Environment and Available Information
 - 1.6.1 Land Use
 - 1.6.2 Site Restrictions
 - 1.6.3 Local Traffic Restrictions
 - 1.6.4 Client's Restrictions and Available Information

2.0 MANAGEMENT OF THE WORK

- 2.1 Health and Safety Responsibilities
- 2.2 Site Management
- 2.3 Health and Safety Objectives
- 2.4 Communication Arrangements
 - 2.4.1 with the Project Team
 - 2.4.2 with the Client
 - 2.4.3 with the Principal Designer
- 2.5 Consultation with Site Workers
- 2.6 Construction Phase Design and Design Information Exchange
- 2.7 Sub-contractors
 - 2.7.1 Selection
 - 2.7.2 Control
- 2.8 Site Security
- 2.9 Training and Induction
 - 2.9.1 Site Management
 - 2.9.2 Skills Training
 - 2.9.3 Vehicles, Plant and Equipment
 - 2.9.4 Site Induction Training
 - 2.9.5 Risk Assessments and Method Statements (RAMS)
 - 2.9.6 Tool Box Talks
- 2.10 Welfare Facilities

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 2 of 33

- 2.11 First Aid
- 2.12 Reporting and Investigation of Accidents Incidents and Near Misses
- 2.13 Emergency Procedures
 - 2.13.1 Means of Escape and Fire Assembly Points
 - 2.13.2 Fire Alarm and Fire Fighting Equipment
 - 2.13.3 Emergency Control
 - 2.13.4 Emergency Drills
- 2.14 Plant, Machinery and Equipment Suppliers
- 2.15 Site Considerations and Controls

3.0 ARRANGEMENTS FOR CONTROLLING SITE SAFETY HAZARDS

- 3.1 Materials
 - 3.1.1 Public Safety during Deliveries
 - 3.1.2 Loading and Unloading Arrangements
 - 3.1.3 Storage of Materials
 - 3.1.4 Transport of Materials
 - 3.1.5 Site Tidiness and Waste Disposal / Pollution Control
- 3.2 Services
 - 3.2.1 Overhead Services
- 3.3 Accommodation Adjacent Land Use
- 3.4 Stability of Structures
- 3.5 Preventing Falls
 - 3.5.1 Access Equipment for Work at Height
- 3.6 Work With or Near Fragile Materials
- 3.7 Control of Lifting Operations
- 3.8 Plant and Equipment
- 3.9 Excavation
- 3.10 Work in Confined Spaces
- 3.11 Vehicles, Traffic Routes and Pedestrian Segregation
- 3.12 Street Works
- 3.13 Demolition of Structures

4.0 ARRANGEMENTS FOR CONTROLLING SITE HEALTH HAZARDS

- 4.1 Contaminated Land
 - 4.1.1 Asbestos
 - 4.1.2 Pest Control
- 4.2 Manual Handling
- 4.3 Use of Hazardous Substances
- 4.4 Exposure to Noise and Vibration
 - 4.4.1 Noise
 - 4.4.2 Vibration
- 4.4.3 Dust / Respirable Crystalline Silica
- 4.5 Exposure to UV Radiation (From the Sun)

5.0 HEALTH AND SAFETY FILE

6.0 MONITORING AND REVIEW (Safety Plan and Construction Activities)

- 6.1 Health and Safety Assistance
- 6.2 Prohibition and Improvement Notices

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 3 of 33

7.0 The Health and Safety File

7.1 Layout and Format

7.2 Arrangements for the Collection and Gathering of Information

7.3 Storage of Information

8.0 Appendices

Appendix 1: Site Rules

Appendix 2: Displaying of Notices and Information

Appendix 3: Fire Procedures

Appendix 4: Accident and Emergency Procedures

1.0 GENERAL DETAIL

1.1 Description of Project

The site is located on land off the A635 New Mill Rd, near the new build works by Prestige Homes, Holmfirth. HD9 7LN, West Yorkshire.

1.2 General Project Scope

The project involves construction of 15 new build residential houses. The properties will be of a traditional stone and block construction, timber roof trusses and slate roofing. Works are to include but may not be limited to:

- Security of the site
- Provision of welfare facilities
- Site clearance (trees and shrubs)
- Demolition of the existing detached house
- Temporary site access
- Installation of drainage and amenity services
- Excavation of foundations and associated ground works
- New entrance and roadways to amenity
- Construction of new residential buildings
- Infrastructure works / retaining walls / hard and soft landscaping
- Full connection to services including allied mechanical and electrical services
- Full decoration / joinery of new structures

1.3 Programme

The key dates are:

Projected Start: 10/23

Projected Duration: 18 months

Projected Completion: May 2025

Completion of H&S File: TBC

The working hours are:

Monday to Friday – 08:00 – 17:00

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 4 of 33

ProActive

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 5 of 33

1.4 Duty Holders and Contact Information

Role	Name and Address	Contact
Client	Millroyd Homes Ltd 2 Kingsbridge Road Huddersfield HD1 3FX	John Lyttle T: 077026836073 Email: john.gsmdevelopmentsltd@gmail.com Gareth Lyttle Mohamed Shaikh
Principal Contractor	GSM Developments Ltd 6 Westfield Court Mirfield WF14 9PT	Gareth Lyttle Tel: 07702681317 Email: gareth@gsmdevelopments.co.uk
Principal Designer Architects	Lonie Lozano Ltd Gresham House 5-7 St Pauls Street Leeds LS1 2JG	Scott Lonie Tel: 07971167737 Email: scottlonie@lonielozano.co.uk
Structural Engineers	Avie Consulting Ltd Killingbeck Court Killingbeck Office Village Leeds LS14 6FD	TBA Tel: 01132497416 Email: admin@avie-consulting.co.uk
Health and Safety Consultants	ProActive ProActive House Sidings Court White Rose Way Doncaster South Yorkshire DN4 5NU	Richard Wadkin Tel: 01302 341344 Mobile: 07525 593 967 Email: richardwadkin@proactive.co.uk
Local Authority	Kirklees Borough Council See web address	Tel. 01484 221 000. Email TBA Web Address: TBA
Regional HSE Office	Sheffield Offices Foundry House 3 Millsands, Sheffield S3 8NH	Tel: 08453 450055 Tel 01142 912 390
RIDDOR	Incident Contact Centre	Tel: 0845 300 9923 Email: riddor@natbrit.com

1.5 Notifications

The project includes the following details GSM Developments Ltd (GSMDL) as Principal Contractor for our client Millroyd Homes Ltd Huddersfield. The Principal Designer is Lonie Lozano Ltd Architectural practice, the notification was made by ProActive on behalf of the client on form F10 (Notification No ea71371718 updated 17-02-2023) to the Health and Safety Executive. A copy will be displayed on site and within the site H&S folder.

1.6 Existing Environment and Available Information

We GSM Developments Ltd have been made aware that there is no existing Health and Safety File available for the land as it is a dwelling within gardens on a previously undeveloped site. We will utilise all the relevant information made available by the Local Authority and Services as required.

Existing Drawings are provided in the Principal Designers (PD) information pack. GSMDL will consult with the PD to ensure that all appropriate risk assessments are completed for significant design risks along with any residual risks that are found. This information will be kept within the site health and safety file for record keeping.

On the site there are services to the existing dwelling consisting of water, power and drainage which will need to be removed / isolated/ removed and installed to meet the new site infrastructure and the as built drawings will reflect this.

Details of existing service routes into the land are known and will be identified when construction works begin. GSMDL will make enquiries and in conjunction with existing service drawings obtained from utilities companies, undertake a CAT scan of the area of the works to locate the position of all potential buried services.

1.6.1 Land Use

The land use was previously as a site for a single dwelling with gardens. The land will be cleared for the proposed development. 15 homes to be completed with associated access road and gardens. There are residential houses to the rear and left-hand side of the site and on the other side of the road. Access will be directly off the A635 into the hoarded site.

1.6.2 Site Restrictions

There are no site restrictions. The site is accessed directly off the A635 New Mill Rd into the site. An entrance will be located in the middle of the site with a one-way system adopted to ease traffic flow where available. The site will be laid out to allow suitable safe movement of vehicles for deliveries and egress from the site.

1.6.3 Local Traffic Restrictions

There are no local traffic restrictions affecting the scope of this project. However, we will have a system in place to ensure the other road users are not compromised by our access arrangements. Access roads will be kept free of mud and debris which may come off the land via delivery vehicles. Where required, a banksman will assist vehicles entering and leaving site.

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 7 of 33

1.6.4 Client's Restrictions and Requirements

- No smoking on site, a smoking area will be designated
- No fires on site
- Hot works, confined spaces, high voltage electrical work and any other high-risk activities to be controlled by the Principal Contractor's Permit to Work system
- Site PPE – Hi-visibility Vest, Safety Boots and Helmets must be worn at all times
- Site PPE - Coveralls, Safety Glasses / Goggles, Hearing protection where identified by task Risk Assessments
- All operatives on site must have received the site induction training which will be recorded.
- All operatives on site must sign in and out daily
- Operatives must only use equipment that they have been trained to use, considered competent in their use and have been authorised to use e.g.: excavators, forklift truck, telehandler, dumpers etc.
- All operatives must report any accident / incident immediately to the site manager
- All operatives must follow the Principal Contractor's site rules.

2.0 MANAGEMENT OF THE WORK

2.1 Health and Safety Responsibilities

GSM DL will be responsible for Health and Safety throughout the CDM Project. Day to day running of the CDM project will be delegated to the Site Manager/Director (Gareth Lyttle), who will be present on site, as far as is practicable, at all times during CDM project work. If the Site Manager has to leave site, then a Deputy will be nominated who will have suitable training and experience with which to undertake the role.

The organisational responsibilities of Directors, Management and site staff are described in detail in the Company Health and Safety Policy. The Site Manager has delegated responsibilities for all site activities and operations including the continuing development of this Construction Health and Safety Plan.

2.2 Site Management

Site / Project Manager: Gareth Lyttle

Mobile: 07702 681317

The Site / Project Manager will:

- Carry out the site induction for all site operatives and visitors
- Keep a record of all persons on site
- Have control of site safety
- Carry out regular site inspections
- Ensure site rules are adhered to
- Complete all site health and safety documentation
- Develop the Health and Safety Plan
- Collect information for the Health and Safety File
- Ensure compulsory health and safety documents are displayed
- Obtain and check Contractors risk assessments and site applicable documentation
- Enter injuries into accident book and notify the Project Manager / Health and Safety Co-ordinator
- Assist the Health and Safety Advisor with RIDDOR reports and investigations

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 8 of 33

Project Manager: John Lyttle

Tel: 07702 683073

The Project Manager will:

- Arrange for co-ordination and implementation of the Health and Safety Plan
- Ensure all sub-contractors are competent and have sufficient resources to carry out their health and safety duties
- Assist the Site Manager in carrying out his duties
- Ensure that all plant and equipment obtained is in good condition, suitable and sufficient for the work and certified as necessary

Director: Gareth Lyttle

Tel: 07702 681317

The Director will:

- Ensure that sufficient resources are available and in place to comply with the Company's health and safety duties
- Obtain the assistance of the Company's Health and Safety Advisor when necessary

Health and Safety Advisor: (Richard Wadkin) ProActive Telephone: 01302 341344
07525 593967

The Health and Safety Advisor will, when requested by the Directors / Management team:

- Give general advice on health and safety including where necessary training
- Carry out random monthly health and safety site inspections
- Assist in carrying out RIDDOR reports and investigations
- Obtain information for the Health and Safety File

2.3 Health and Safety Objectives

GSMDL's stated aim is to undertake and complete the works to the highest health, safety and environmental standards. We shall ensure that adequate resources are allocated in order that this aim is achieved and will:

- Safeguard the health, safety and welfare of all persons working on the CDM project
- Operate systems and processes which identify sources of risk, assess their consequences and likelihood then evaluate and implement suitable prevention and mitigation measures
- Involve and encourage all CDM project workers, including those of sub-contractors, to understand and accept the responsibilities placed upon them; to prevent injury, minimise the risk of incidents and safeguard third parties and their property
- Ensure that CDM project workers are competent to undertake the work they have been assigned to do
- Encourage the communication of information between employees, sub-contractors and associated third parties
- Determine the competency of sub-contractors and ensure their activities are integrated into CDM project operations and controls
- Ensure training and information is provided where new plant or processes are to be used
- Meet all relevant current legislative requirements pertaining to Health and Safety
- Aim for no accidents and achieve "TARGET ZERO"
- Provide Quality, Health, Safety and Environmental Training to all personnel involved in the CDM project

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 9 of 33

- Verify that Health and Safety Audit / Inspection actions are dealt with and closed out within the agreed timescales

2.4 Communication Arrangements

The company openly encourages communication and consultation between its workforce and in-line management with regard to health and safety matters, insofar as, they affect the works and the safety culture of the project.

We seek to consult and co-operate with all persons on site to assist in developing and improving their health and safety management systems where reasonably practical. Where direct works contractors are engaged, we will co-operate and co-ordinate their activities with such contractors.

2.4.1 with the CDM Project Team

Methods for Communication of health and safety issues:

- Monthly Team meeting, attended by Site Manager, Sub-contractor Representatives
- Early morning meetings with key personnel
- Lunchtime briefing
- Formal correspondence
- Senior Management site visits

2.4.2 with the Client

Communications with the client will be maintained by:

- Telephone and email
And by direct communication.

2.4.3 with the Principal Designer

Methods of communication of Health and Safety issues to the Principal Designer:

- Regular telephone and email contact
- Formal correspondence
- Monthly, or as required review meetings

2.5 Consultation with Site Workers

Communications with site workers will be maintained by:

- Health and Safety induction
- Tool box talks
- Site safety notice board
- Signs and posters and during informal walkabouts by the management team.
Workers will have the opportunity to raise any issue during toolbox talks or any site briefing. Site Manager giving the briefing will record issues for action the Principal Contractor.

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 10 of 33

2.6 Construction Phase Design and Design Information Exchange

Monthly project team meetings including design exchange information

2.7 Sub-contractors

2.7.1 Selection

New subcontractors will be vetted and will complete the sub-contractor's Health and Safety Questionnaire. GSMDL may audit potential sub-contractors where required. Vetting is used to ensure that sub-contractors employed on the CDM project have demonstrated the competence and resources to comply with Health and Safety requirements.

Generally sub-contractors used will be known to GSMDL and will have satisfactorily completed work on this or previous projects. Contractors that have been approved on this or other projects within the last 12 months will not need to requalify.

Sub-contractors will be expected to submit Risk Assessments and Method Statements to us for approval and record keeping. Wherever possible these documents should be submitted seven days in advance of the start of works to allow time for amendments to be made if required.

2.7.2 Control

Sub-contractors will either be working under their own Team Leader / Supervisor or allocated to the Site Manager. Methods for communication of Health and Safety issues with sub-contractors are the same as for the project team:

- Early morning meetings with key personnel e.g. Site Manager
- Lunchtime briefing
- Formal correspondence
- Management site visits. The Site Manager will ensure that the work of sub-contractors and employees are co-ordinated on site and that relevant Health and Safety information is exchanged

2.8 Site Security

Site security is maintained by perimeter fencing (HERAS or equivalent). Entrance to the site is controlled by padlock and chain. The fencing will also display warning notices to warn members of the public of the potential hazards. As far as is reasonably practicable, hazards will be removed or controlled during non-working hours.

Where possible, all plant, equipment and materials will be stored inside the as built buildings or in secure storage containers overnight. Large items of plant will be secured and locked. During inclement conditions, all loose equipment and materials will be properly secured.

The Site Manager will conduct a site perimeter check at the end of each shift to ensure site security is maintained throughout the duration of the project to prevent unauthorised access.

2.9 Training and Induction

Training certificates and records will be available in the site file held by the Site Manager. All

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 11 of 33

ProActive

operatives will hold qualifications applicable to the activities they engage in. As a minimum site operatives will hold a CPCS, CSCS cards or equivalent.

No person will be allowed to commence work unless they have attended a safety induction meeting. The induction will be implemented by the Site Manager and will include where necessary:

- Site management structure
- General health and safety precautions
- Site Rules
- Site specific issues
- Client restrictions – including hot works permit requirements
- Welfare, first aid and accident procedures
- Emergency procedures

Records of induction will be kept and operatives are to sign to say that they understand and that they agree to abide by the content.

2.9.1 Site Management

All site management / supervision will have received relevant training in Health and Safety matters and hold an IOSH / SMSTS or equivalent qualification.

2.9.2 Skills Training

All Operatives will have received appropriate skills training to do their job. Trainees will be under the direct supervision of a Team Leader / Supervisor at all times. Where specific skills shortages are identified, training will be provided either internally or by recognised external training organisations. The following trained personnel will be required for these works:

- Electrical / Mechanical contractors
- Plant operators
- Scaffolders
- Lifting and slinging will be controlled by a trained slingers signaller

Note: This list is not exhaustive!

2.9.3 Vehicles, Plant and Equipment

The following plant and equipment may be utilised for this work and require the operator to have accredited training:

- Tele-handler
- Excavator
- Dumper
- Roller

The following plant and equipment may be used by competent operators. The Site Manager will control this and give on the job training where required:

- Powered Hand Tools Only
- Authorised drivers may drive company vehicles either on or off road
- Drivers will have a current valid licence relevant to the class of vehicle being driven

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 12 of 33

2.9.4 Site Induction Training

All persons commencing work on the site, including sub-contractor personnel will receive site induction training. The site manager will give the induction course. A record of all attendees will be kept in the site file. Visitors and delivery drivers will not require induction but will be supervised and escorted at all times whilst on site by an employee who has received the full site induction.

2.9.5 Risk Assessments and Method Statements (RAMS)

'Risk Assessments' and 'Method Statements' must be briefed to the relevant personnel endorsed by signature and a record kept for each phase of the project. The Project Manager may simply highlight any changes from the norm for routine works to the Site Manager, who in turn will brief the Operatives. This is designed to keep operative briefings focused to project specific differences from standard working practices.

Sub-contractors will be asked to supply Method Statements and accompanying Risk Assessments electronically to the Site Manager as a minimum of 48 hours prior to starting work. The following project tasks will require specific Method Statements:

- Electrical work
- Ground works
- Roof truss erection
- Working at height

Note: All work activities will be required to be Risk Assessed. Where Risk Assessment identifies areas that require specific controls, then Method Statements following a safe system of work will need to be formulated. All RAMS must be communicated to the applicable site operatives and signed and dated once communicated by all operatives.

2.9.6 Tool box Talks

"Toolbox talks" will be held with all site personnel to reinforce aspects of site rules and safe working methods, practices and general responsibility. The Site Manager will give "toolbox talks". A registration of all "toolbox talks" held and attendees will be held in the site Health and Safety file. Toolbox talks will be held at least once monthly on applicable items, for example actions identified through the monthly site health and safety visits.

Sub-contractors will be expected to carry out "toolbox talks" relevant to their working methods and site rules with their employees and a copy of attendees forwarded to the Principal Contractor for inclusion in the site Health and Safety file. On occasions it will be required for all site personnel, including sub-contractors on site, to attend "toolbox talks" held by the Site Manager, where serious health and safety breaches have been identified.

2.10 Welfare Facilities

Welfare facilities are provided by the Principal Contractor and will be available as follows for the duration of the project: (As per schedule 2 of CDM 2015)

- Toilets facilities with wash basins
- Canteen facilities with kitchen area for making hot drinks and heating food, including a seating area

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 13 of 33

- A plentiful supply of drinking water and disposable drinking vessels
- Site inspections shall ensure facilities remain in good order

2.11 First Aid

GSMDL will ensure that there is adequate first aid provision on site at all times. In addition to this a First Aid box will be positioned inside our main office on site. The Site Manager or appointed First Aiders will be responsible for ensuring that the contents are replaced as necessary. First Aiders for the project will be posted on all site notice boards and advised to personnel during induction. The level of First Aid provision will follow the guidance in SHY's Health and Safety Policy. As a minimum there will be one trained first aid personnel on site at all times.

Sub-contractors with more than five personnel on site will be expected to provide trained first aid personnel appropriate to their work activities. Copies of their training certificates will be retained by the Site Manager in the site Health and Safety file.

2.12 Reporting and Investigation of Accidents Incidents and Near Misses

Initial notification of accidents, incidents, and near misses will be to the Site Manager in charge of the works. The Site Manager will then report these to the Project Manager. The Site Manager will investigate all accidents / incidents initially and fill in an accident report / investigation form and the BI 510 Accident Book.

Accident or incidents deemed of a serious nature and / or RIDDOR reportable will be notified to the ProActive Health and Safety Advisor at the earliest opportunity, where advice will be given for appropriate action. All reporting under the requirements of RIDDOR 2013 will be made by the ProActive Health and Safety Advisor.

2.13 Emergency Procedures

The site emergency action plan is contained in Appendix 1. This will be displayed on all project notice boards and advised to all personnel during induction training. The Site Fire Action procedures are contained in Appendix 3.

For the duration of this project all operatives and sub-contractors will follow and abide by emergency procedures as notified during induction.

2.13.1 Means of Escape and Fire Assembly Points

Prior to the commencement of the contract a fire planning meeting will be held. The Site Manager will assess the risk of fire occurring on the site and neighbouring properties and where appropriate detailed arrangements will be developed for fire prevention in the areas under refurbishment will be developed and will include the following:

- The appointment of a fire warden
- Producing a site fire plan
- Producing a site fire action poster
- Arrangements for fire-fighting equipment
- Arrangements for material storage
- Arrangements for signage
- Introduction of a permit systems
- Reviewing induction and site rules

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 14 of 33

The Project Manager is to prepare a procedure for site that will include emergency arrangements in the event of arson. This will be displayed on the Site Notice Board. Fire prevention procedures and Hot Work Permits will be incorporated into safe methods of work where appropriate and will be discussed with Contractors during pre-let and site meetings. GSMDL will comply with the Joint Code of Practice 'Fire Prevention of Construction Sites'. Fire precautions and emergency procedures will become part of any site induction.

A Fire Plan showing escape routes and the position of fire-fighting equipment will be produced by the Project Manager and displayed on the site in prominent positions. All contractors will be made aware of the fire plan and its procedures upon induction. The muster point will be situated primarily in the main compound within the secure area. This will be utilised during any drills conducted and can be accessed from anywhere on the premises.

Access and egress routes will be maintained at all times and kept clear of obstruction. For the purpose of drills and in the event of an emergency signage will be installed and maintained in prominent positions to indicate the location of fire access routes and the position of fire extinguishers.

The premises / buildings will be designated no smoking. All contractors and visitors will be made aware of this upon induction to the site. Signs will be positioned in prominent locations to notify people. No burning of any materials will be permitted on site at any time. All contractors will be informed of escape routes. The site fire assembly point will be situated in a designated area of the site.

2.13.2 Fire Alarm and Fire Fighting Equipment

The fire warning system is via a verbal "FIRE / FIRE / FIRE" call from the person discovering the fire or the use of the site evacuator system situated within the main site office. This will be communicated at induction. Positioned at all entrances and exits are fire extinguishers in the form of CO₂ and foam units. Staff will be informed of the locations of all entrances, exits and fire extinguishers during site induction training and reaffirmed during "toolbox talks". The alarm is not just for fire but any emergency. A fire extinguisher will be provided at the point of work for all hot works on site.

2.13.3 Emergency Control

The Site Manager will take control of any emergency on site. Employee and contractor mobile phones will be used. An emergency and CDM project telephone numbers list will be compiled and displayed on notice boards throughout the site. Suitable employees will be identified and nominated for training to act as fire safety wardens.

For the duration of this CDM project all operatives will follow our emergency procedures as notified during induction and through applicable notice board information.

2.13.4 Emergency Drill

Emergency drills will be conducted at six monthly intervals throughout the duration of the project and evacuation times recorded. All operatives will be notified of the emergency drill upon induction by the Site Manager.

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 15 of 33

2.14 Plant, Machinery and Equipment Suppliers

All plant, machinery and equipment will be properly maintained and suitable for the job. Operating and maintenance manuals will be provided for all Plant, Machinery and Equipment.

Certain plant machinery and equipment require statutory certification, this will be provided on delivery or provided to by the Owner / Supplier and kept on site file (non-receipt will cause the item unusable until received).

On arrival at site, all plant, machinery and equipment will be inspected by the Site Manager or sub-contractor Team Leader / Supervisor. This will be recorded on a "Site Plant, Machinery and Equipment Check List". Copies of these completed checklists will be kept within the site Health and Safety file.

2.15 Site Considerations and Controls

Management have identified the following areas of concern and controls recorded here for probable solution to these:

1. **Run off water at low end of site – A trench will be cut to capture run off water so that it soaks back into the ground and prevents contamination of the existing water courses.
2. Mud on the Road – During the winter months this is a foreseeable problem; GSMDL will inspect vehicles leaving the site and wash wheels off as necessary to prevent highway problems. The internal haul road will be kept as clean as reasonably possible during the works.
3. Contaminated Ground – A survey has been completed and there are no areas of contaminated land.
4. Ground Considerations re- Strata Type – The site at the front left (from the road) is made up of self-supporting rock and sandstone which will not require any retaining structures between the road and the houses; the ground to the lower end of the site has been inspected and considered as suitable and not requiring supporting structures; the geotechnical information received has shown that the construction we will employ for the foundations will be sufficient to control foreseen gases emitted from the ground (i.e. low levels of methane and radon).
5. Demolition of the existing dwelling will be controlled removal and reclaim materials for reuse as needed. The internals of the building will be removed from site.
6. The asbestos within the above building will be removed prior to the demolition of the structure.
7. De vegetation of the site is substantial and will include removal of trees and shrubs; there are no trees with preservation orders on them, however, some trees will need to be identified and retained within the development. The works will be outside of bird nesting season.
8. A bat survey has been completed and there are no bats or roosting bats in the development.
- 9.

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 16 of 33

3.0 ARRANGEMENTS FOR CONTROLLING SITE SAFETY HAZARDS

3.1 Materials

3.1.1 Safety during Deliveries

A designated area will be set aside to be used as a delivery area. Consideration will be taken regarding parking and access e.g. not blocking roads etc. The site entrance is controlled by the Site Manager and will be kept shut once the delivery has accessed site to prevent unauthorised access. All deliveries should be scheduled through the Site Manager to avoid various sub-contractors having deliveries at the same time.

3.1.2 Loading and Unloading Arrangements

The Site Manager will identify areas and times for unloading of materials. During unloading a dedicated banksman should be in attendance to watch out for vehicles and pedestrians. Locations will be identified for skips, bulk materials and pallets. Drivers of delivery vehicles will stand in a safe location during unloading and loading as directed by the banks man. Driver's keys will be removed from the vehicle and retained by the banksman until the loading / unloading operation is complete. The banksman is responsible for checking that all necessary parking brake / outriggers (if fitted) are applied prior to loading and unloading.

3.1.3 Storage of Materials

All materials will be stored in designated areas. Stacked and palletised materials will be stored on level ground no more than two high. Damaged pallets or packs will be re-palletised or restacked. Storage will be organised to allow ready access to materials. Where possible, materials will be stored or secured in containers. Flammable materials will be stored in securable flammable storage facilities in well ventilated areas. Gas cylinders will be segregated by type and stored in gas storage cages; these will be suitably signed to identify the contents of each cage. Empty gas cylinders will be segregated from full cylinders. All COSHH related items will be stored in appropriate containers and within a bund capable of containing 110% of the largest container.

3.1.4 Transport of Materials

Material will be moved around the site by lifting aids or delivery vehicle to minimise manual handling. Vehicles and plant will be loaded by the most suitable plant and not by hand where reasonably practicable. Loads will be safe and not overhanging, loads will be secured e.g. strapped down, even for short trips.

3.1.5 Site Tidiness and Waste Disposal / Pollution Control

Waste will be segregated into skips to await removal by competent waste disposal contractors. Skip contents will be clearly identified to prevent mixed waste. A site record will be maintained of all waste transfer notes and respective licences. There will be no burning of rubbish on site. Two weekly collections or as necessary will be undertaken. All waste collections must be notified to the site manager.

3.2 Services

GSMDL acknowledges the significant risks from services which may be affected by the

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 17 of 33

ProActive

works and overhead services during plant and vehicle movement. The Site Manager will obtain all available information on buried or above ground services within the scope of the project. Sources will include:

- Plans obtained from service providers and local authorities

Contact numbers for dealing with emergencies with services:

- Electric – TBA
- Gas – TBA
- Water – TBA

3.2.1 Overhead Services

Where moving any overhead cable or service is impractical then precautions in accordance with HSG6 'Avoidance of Danger from Overhead Electric Power Lines' will be implemented. Information will be obtained from the electricity companies on the required separation distances. Where work cannot be avoided goal posts, bunting and barriers will be erected as required, mobile plant will be fitted with height restrictors and or controlled by a banksman.

3.3 Accommodating Adjacent Land Use

Adjacent land use includes: residential homes only. Adjacent and near-by premises may be affected by noise from the project and a noise survey has been completed (J3216 5-6th Sept 2023 by PHA Ltd). Continual liaison with the owners / occupiers of these premises will take place to ensure disturbances can be reduced to an acceptable level. Public complaints will be recorded and actions taken to rectify.

3.4 Stability of Structures

The stability of the adjacent building structures will not be affected by the scope of this CDM project.

3.5 Preventing Falls

Work at height is to be avoided wherever possible, however it is recognised that there will be phases of this CDM project that will require Work at Height activities. Work at height will take place ensuring the work at hierarchy of Avoid / Prevent / Minimise is followed at all times.

The Site Manager will ensure that where work at height cannot be avoided it is properly planned and suitable control measures implemented in accordance with the Health and Safety Policy. The Site Manager will ensure that the correct equipment and trained personnel are available to carry out Work at Height.

Specific risk assessments and where determined, method statements will be produced before the works commence. The risk assessments must consider and determine the most suitable access equipment to use. No one is to work at height unless:

- A risk assessment has identified that the work cannot be completed from the ground
- A safe place of work has been provided
- There is a suitable means of access and egress provided onto a stable and secure platform, for example scaffold or mobile elevated work platform

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 18 of 33

ProActive

- Collective fall protection is in position
- Personal fall protection is in position
- All those required to work at height have suitable information, instruction and training to do so.
- All work at height will be suspended during inclement weather, for example windy, heavy rain and / or icy conditions

All work at height will be undertaken with the appropriate equipment. GSMDL will ensure that work from ladders is kept to a minimum and appropriate alternatives used, for example platforms and hop ups.

All roof work will be treated as fragile until confirmed by a Structural Engineer prior to works commencing. Adequate warning signs will be in position to notify people of the potential hazards. At no time will work be allowed on or pass over fragile areas without the provision of a proprietary support and platform system that will be agreed with a Structural Engineer prior to works commencing.

Before commencing any roof works, risk assessment and method statements will be completed detailing the scope of work. Liaison with the Principal Designer will be ensured to notify of any potential changes to the scope of works.

3.5.1 Access Equipment for Work at Height

Scaffolding will only be erected, altered and removed by competent Scaffolding Contractors. All scaffolds will be inspected before use, every seven days thereafter and following bad weather or an incident affecting the scaffold and the results entered in the 'Record of Inspections of Scaffolding' book.

Scaffold towers will only be erected by trained and competent operatives and shall be set on firm and solid ground, with double handrails and toe boards and where necessary tied to the structure for stability / outriggers deployed for support.

Ladders will be industrial class, in good condition, tied, set at the correct angle and exceed one metre above the landing level. Operatives will only carry out one handed, short-term work on ladders and will not overreach. Before a ladder is used a risk assessment must be provided to show no suitable alternative can be used.

Stepladders will be class 1 industrial, in good condition and fully extended on a firm level base. Operatives shall not stand on the top step, will be facing their work and will not overreach. Before stepladders are used a risk assessment must be carried out showing that they are safe to use and that no alternative suitable access equipment can be used.

Work stands are to be used only in the same conditions as stepladders, therefore giving limited use.

Podium Steps shall be used in preference to stepladders.

Where anyone including sub-contractors and direct contractors do not comply with the Working at Height Regulations 2005 they will be asked to stop working until a safe working method is devised.

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 19 of 33

3.6 Work With or Near Fragile Materials

Fragile materials will be identified and marked with suitable protection and signage. Where work on or near fragile materials is required this will be controlled under a permit to work system.

3.7 Control of Lifting Operations

A tele-handler will be used to unload and manoeuvre materials to and from work and storage areas. All lifts will be carried out by trained competent operators and used in accordance with manufacturers' instructions and operator training.

The Site Manager will ensure the operator is aware of the weights of all materials to be lifted. A lift plan will be completed and communicated for all lifts. The operator will ensure these are within the rated capacity for the machine at the proposed lifting radius. The operator will ensure suitable, certified lifting accessories are available where required and that these are visually checked for serviceability before use.

A crane or telehandler will be used to lift roof trusses into position. The PC will ensure that all lifting works are correctly managed on site. Should a lift plan be required, the lift plan will be supported by relevant risk assessments / method statements and statutory documentation for the crane and driver. All lifting operations will be undertaken following the Lifting Operations and Lifting Equipment Regulations 1998:

- No lift work will be undertaken without first there being a lift plan completed by an appointed person
- All lift operations will be under the supervision of an appointed person / trained and competent slinger / signaller
- The crane selected will be able to handle the maximum anticipated load with capacity to spare
- The crane will not be operated without confirmation of the relevant documentation
- The crane will be positioned on firm stable ground and have its outriggers fully deployed
- The driver will have a clear view of operations
- There will be sufficient operating space to keep clear of contact with structures, people and overhead power lines
- The lift area marked out will be cordoned off and all non-essential personnel will be kept clear of the lift area
- Suitable signage will be in place to warn others of the potential hazards
- Communication will be maintained at all times between the slinger / signaller and the landing area
- Slewing will be undertaken slowly to prevent swinging and under wind speeds specified for the safe operation by the manufacturer
- The crane will be fitted with an automatic safe load indicator which will be checked in line with the drivers daily vehicle inspection to ensure correct working

The crane will be operated by a trained and competent driver who will produce the following forms to be kept in the site health and safety file:

- Record of weekly examinations
- Record of thorough examinations of accessories and plant
- Record of daily / weekly checks

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 20 of 33

ProActive

- CPCS authorised operator training for the category / type of crane

3.8 Plant and Equipment

GSMDL and its sub-contractors will ensure that all equipment used in the workplace is safe and suitable for the purpose for which it is to be used. Risk assessments will be undertaken before work equipment is purchased to determine the best and safest equipment for the task.

All workers will be provided with information and training to enable them to use work equipment safely. The use of higher risk plant and equipment will be restricted to authorised trained persons only.

All work equipment will be maintained in good working order and repair. Operators will ensure that all guards and safety devices are properly fitted and in full working order before use.

Hired plant and equipment is to be sourced from reputable companies. The Site Manager will visually check hire equipment when it arrives on site, defective equipment will be quarantined and reported to the supplier. Only trained mechanical fitters or electricians will undertake repairs or modification of equipment.

Operators may only carry out routine 'user' maintenance covered by their training and the suppliers operating instructions. All mains electrical tools and site lighting will be battery operated or 110 volt. All portable electrical equipment will be subject to regular Portable Appliance Testing where appropriate. This will be conducted at three monthly intervals.

Fixed electrical installations will be periodically inspected and tested. Where 240v equipment is required, this must be supported by Risk Assessment and only used in conjunction with a 30mA residual circuit device (RCD).

3.9 Excavation

Excavations must be correctly sectioned off to prevent persons or equipment falling into the excavation. Excavation work will be carefully planned. GSMDL will ensure method statements are submitted to the Principal Designer as part of the Construction Phase Health and Safety Plan. The following procedures will be adopted and followed:

- The location of buried services will be guided by the use of existing service drawings
- The use of electronic locating devices will be used as an additional check for buried services
- Where practicable, all underground services will be fully isolated prior to commencement
- Where this is not practicable, 'live' underground services will be clearly marked and made safe
- Hand digging only should be carried out within 500mm of any identified live underground service
- Prevention of any falls into open excavations by both persons or plant will be prevented by the erection of robust barriers and signage warning of the hazard
- Where necessary temporary support will be provided to excavation sides
- Back filling of excavations will take place as soon as is reasonably practicable

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 21 of 33

3.10 Work in Confined Spaces

A confined or restricted space is defined in the Confined Spaces Regulations 1997. It is used to describe a working place that has restricted means of access and that may have little or no ventilation or there are other difficulties which could result in the atmosphere becoming toxic or dangerously low in oxygen content.

All work in Confined Spaces is high risk. Work will be planned and carried out in accordance with a job specific Method Statements. Work in confined spaces will be controlled by a Permit to Work system.

Any confined space work should have been identified at the planning stage. However, if a confined space is identified later on; the Site Manager will inform the Health and Safety Advisor for actions to be taken. No entry will take place until the work has been properly Risk Assessed and planned. A confined space for the scope of this project would be an excavation and a loft space.

3.11 Vehicles, Traffic Routes and Pedestrian Segregation

The Site Manager will assess traffic risks including:

- Restriction on delivery routes to site e.g. low bridges
- Restriction on delivery times due to rush hour traffic or local schools
- The site layout including entrance for vehicles and pedestrians, car parking areas, unloading area, delivery vehicle turning area and site pedestrian routes e.g. near cabins and storage areas

The Site Manager will ensure that access and egress to designated routes is maintained at all times. Any restriction on delivery routes will be notified to suppliers by the Project Manager. Where reversing cannot be avoided, banksman will be used at all times.

Hired plant must have rear visibility aids e.g. CCTV or blind spot mirrors. Tele-handlers and similar plant operating in restricted spaces should have a dedicated trained banksman. Unrelated work activity should not take place in areas where plant or vehicles are operating unless the two tasks are physically separated by barriers or similar. All drivers must be trained and authorised for the vehicle or plant they are operating. Mobile phones must not be used whilst driving vehicles or plant.

4.0 ARRANGEMENTS FOR CONTROLLING SITE HEALTH HAZARDS

4.1 Contaminated Land

Contaminated land is not thought to be a factor in the scope of this CDM project. Where previously unknown contamination is found during the work, work will stop and expert advice will sought prior to work restarting. A revised Method Statement and or specialist contractor will be used where indicated by advice.

There are no existing hazardous substances, however, it has been notified to the Principal Designer that any other specific health and safety risks identified by the design consultant will be provided.

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 22 of 33

4.1.1 Asbestos:

A refurbishment / demolition survey has been completed on 30-08-2023 by Graph Contract Services (ref survey number 7511) which has identified asbestos materials within the existing Pentlands house.

The details are apparent within the survey and the ACMs will be removed w/c 18th September 2023 by a specialist contractor who will then issue a clearance certificate for the buildings.

There are no other asbestos materials within the site boundary / buildings.

Upon discovering any materials that GSMDL considers suspicious, all work will cease in the area immediately and the Principal Designer notified immediately.

Before any works are permitted, we will liaise directly with the Principal Designer in regard to necessary encapsulations, removals or further management of ACMs.

4.1.2 Pest Control

If there is evidence of vermin during the works a suitable contractor will be contacted.

Employment of specialist contractors will be sought and provision of a detailed risk assessment and method of working made.

Should this be required the Site Manager will contact the relevant pest control company.

This is due to the bait box contents being toxic and the need to have the bait boxes removed by a licensed contractor. Tool Box talks will be held by the site manager for the topic of Leptospirosis as there is evidence of vermin from the drainage ditch areas.

4.2 Manual Handling

Where there is a risk of injury, manual handling operations will be avoided as far as is reasonably practicable. Normal planning will identify mechanical or assistive devices that can eliminate or reduce the risk. This will be included within the relevant Risk Assessments and Method Statements.

It is not possible to avoid all manual handling operations. The variety of locations and tasks involved in our work often makes written manual handling Risk Assessments impractical. The Site Manager and operatives will therefore be trained in safe lifting techniques and making 'on the job' Risk Assessments. These will take into account the task, the load, the working environment and the capability of the individual concerned. Where team lifting is required one person will take control and coordinate the lifting task.

4.3 Use of Hazardous Substances

All hazardous substances brought onto and used on site will be accompanied with the appropriate Material Safety Data Sheet. All substances marked with a hazardous warning label will undergo a COSHH Assessment. Appropriate controls will be implemented and enforced by site management. The Site Manager will deal with their safe removal and disposal from site.

Suitable COSHH assessments will be required for Hazardous substances and materials used on the project, details of these will be kept in the site Health and Safety file. Sub-contractors must provide the Project Manager with copies of their COSHH Assessments for inclusion into the site Health and Safety file; non receipt will cause the material to be

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 23 of 33

unusable until the required documents are received.

4.4 Exposure to Noise and Vibration

4.4.1 Noise

Normal work activities do not give rise to continuous levels of noise that may damage hearing. Certain items of plant and equipment will give rise to localised high noise levels for short durations. Equipment operators and those in the immediate area will use hearing protection when required. Plant and equipment requiring the use of hearing protection will be identified in the relevant Risk Assessments and Method Statements.

4.4.2 Vibration

Equipment such as drills and angle grinders expose workers to vibration during normal operation. Risk Assessments of the vibration risk from equipment will be made. Where practicable vibration will be reduced or eliminated for example by the use of alternative equipment with lower vibration levels or non-powered tools.

Vibration performance will be an important consideration when selecting equipment for hire or purchase. Equipment will be regularly maintained as wear increases vibration. Where exposure cannot be avoided it will be controlled to below the action levels by limiting exposure time. Training will be given on the vibration risks and the correct use of equipment to reduce vibration exposure.

4.4.3 Dust / Respirable Crystalline Silica

Construction dust is not just a nuisance; it can seriously damage people's health and some types can eventually even kill. Regularly breathing these dusts over a long time can therefore cause life-changing lung diseases.

The PC will assess the risks linked to the work and materials, for example the cutting of concrete and roof tiles. High dust levels are caused by one or more of the following:

- task – the more energy the work involves, the bigger the risk. High-energy tools like cut-off saws, grinders and grit blasters produce a lot of dust in a very short time;
- work area – the more enclosed a space, the more the dust will build up. However, do not assume that dust levels will be low when working outside with high-energy tools;
- time – the longer the work takes the more dust there will be;
- frequency – regularly doing the same workday after day increases the risks.

The PC will ensure that the risks from dust are controlled.

Before work starts:

- we will look at ways of stopping or reducing the amount of dust created. Use different materials, less powerful tools or other work methods, for example:
- the right size of building materials so less cutting or preparation is needed;
- a less powerful tool – e.g. a block splitter instead of a cut-off saw;
- a different method of work altogether – e.g. a direct fastening system.

To prevent the dust getting into the air, we will ensure employees and sub-contractors use the following method:

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 24 of 33

ProActive

- Water – water damps down dust clouds. However, it needs to be used correctly. This means enough water supplied at the right levels for the whole time that the work is being done. Just wetting the material beforehand does not work.

All operatives potentially exposed to dust will be required to wear the correct Respiratory Protection (RPE). For Silica operatives / sub-contractors must wear FFP3 RPE. All operatives / sub-contractors must be “face fit” trained in the selection, use and maintenance of the RPE worn.

Also see Health Alert – Silicon Dust – displayed in office and mess-room.

4.5 Exposure to UV Radiation (From the Sun)

During hot weather an additional toolbox talk will be given on the dangers from prolonged sun exposure. Workers outside will be required to keep their shirts on. Sunscreen will be provided where appropriate. Additional short rest breaks and drinking water will be constantly available to reduce the risks of heat exhaustion occurring.

5.0 Health and Safety File

The Project Manager will ensure that information required for the Health and Safety file is collected. The Health and Safety file will be prepared in accordance with GSMDL’s requirements provided by the Principal Designer.

Sub-contractors are required to hand over any documentation required for inclusion into the site Health and Safety file. This may include drawings, plans, instruction manuals, and maintenance manuals, Risk Assessments, Method Statements, Material Safety Data Sheets and COSHH Assessments.

6.0 Monitoring and Review of the Safety Plan and Construction Activities

6.1 Health and Safety Assistance

GSMDL’s external Health and Safety Advisors ProActive will advise management and site personnel on compliance with current Health and Safety legislation and best practices. There will be periodic site visits made by the Health and Safety advisor. Issues noted by the Health and Safety Advisor will be dealt with on the spot where possible. All issues will be notified to the Project Manager / Site Manager with advice on suitable corrective actions.

Site inspections and audits will be undertaken by the Site Manager and the Health and Safety Advisor on a regular basis throughout the project. Reports of inspections and audits will be compiled and made available to third parties upon request and kept in the site Health and Safety file.

6.2 Prohibition and Improvement Notices

If a Prohibition or Improvement Notice is issued by an Inspector of an Enforcement Authority (Health and Safety Executive, Local Authority), the person to whom it is issued must comply immediately with any instructions on the notice and contact the Project Manager immediately.

GSMDL’s senior management and ProActive must be informed by the Site Manager immediately and will be asked to provide advice on the measures necessary to comply with the Notice.

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 25 of 33

ProActive

When remedial measures have been taken the Site Manager will contact the Inspector who issued the Notice to inform them of the corrective action taken. This will be confirmed in writing.

7.0 The Health and Safety File

The File is to be prepared by the Client / Principal Designer from the information received.

7.1 Arrangements for the Collection and Gathering of Information

GSMDL will obtain information from its suppliers and contractors throughout the contract and will forward this to the Principal Designer after the completion of the contract.

The Principal Designer to obtain information from any Client's Direct Contractors.

The Principal Designer to obtain structural information and drawings from the Architects.

7.2 Format

Required information:

- One hard copy
- One electronic copy

To be provided within two weeks of handover to the Principal Designer.

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 26 of 33

ProActive

8.0 Appendices

Appendix 1: Site Rules

Appendix 2: Displaying of Notices and Information

Appendix 3: Fire Procedures

Appendix 4: Accident and Emergency Procedures

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 27 of 33

Appendix 1 – Site Rules

Site Rules

Site rules will be included in the induction for all project personnel. A copy of the site rules will be posted on the Health and Safety board, given to all sub-contractors and the Site Manager will make a record of issue. Any visitors / operatives on site will read and understand the site rules prior to going on site, and when on site will abide by these rules. Failure to do so will result in them being removed from site. The Site Manager will be responsible for this. Copies of site rules will be located on CDM project notice boards.

Rules Applicable to All Persons on Site

The Site Manager will ensure that everyone on site comply with all the site safety rules.

Drug and Alcohol Testing may be carried out at any time. Positive results for drugs or excess alcohol, or refusal to take a test could result in termination or contract or refusal of entry to site. If you use any medication that could affect your ability to work safely, notify your employer and the Site Manager to allow for assessment to be completed.

Safety Inductions must be satisfactorily completed by all persons before starting work.

ANY gross misconduct will result in a person being removed from site and a contractor review will be undertaken as a result.

The contractors on the CDM project are required to manage their work so that they comply with all the relevant requirements of this plan. They are also required to comply with all agreed safe Methods of Work and ensure that those under their control are competently supervised to ensure compliance with all relevant site safety rules.

Rules for site workers

All people working on site are required to comply with the following site safety rules:

- All work areas will be designated no smoking areas, a designated smoking area will be identified (if in doubt ask)
- Site operatives must sign into the site and sign out at all times when leaving site. This includes during the working day, such as at lunch break or when leaving site to collect supplies. It is essential that accurate records are maintained of who is on site at any one time, as this information may be required in an emergency situation. At the end of the day the Site Manager must ensure that all operatives have been accounted for and have left site
- All operatives and visitors must know the emergency plan which they will be informed of the requirements upon induction indicating key contacts in the event of an emergency
- Sub-contractors will comply with the Principal Contractor's requirements in respect of induction procedures, safety awareness, training, contractors' policy documents and risk assessments / method statements
- Sub-contractors shall provide and ensure the use of suitable and sufficient personal protective equipment, appropriate to the varying construction activities in operation on the site
- Sub-contractors will put up notices on the site to warn other operatives and sub-contractor employees against the dangers to their work activities on site, for example

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 28 of 33

ProActive

- the correct completion of scaffold tag notices
- The following PPE is mandatory: Safety Boots (with ankle support), High-visibility jacket or vest. Eye, hearing and head protection will also be required for certain working procedures as identified in the Risk Assessment. Other items of PPE will be identified through the Risk Assessment process and where stipulated by the PC.
- GSMDL and its sub-contractors will ensure that noise from site operations are controlled and kept to a minimum as far as reasonably practical
- Working areas will be kept in a clean and tidy state
- All operatives will strictly follow all the agreed Risk Assessments, Method Statements and workplace instructions
- Stop working if instructed by the Project Manager, Site Manager, Health and Safety Advisor or Health and Safety Executive or Local Authority Inspector
- Small tools such as portable appliances and hand tools must be selected and operated carefully, ensure that adequate guards are fitted and used
- Training in the use and maintenance must have been provided before using equipment and plant
- Stop working in unsafe or unhealthy conditions and notify your Site Manager immediately
- Operatives suspected of bringing onto site, or being under the influence of drugs or alcohol, will be immediately removed from site and readmission denied with the Project Manager notified immediately
- Site workers using prescribed or non-prescribed medication that may affect their ability to work safely must notify their employer and the Site Manager
- Food and drink may only be consumed in the designated areas
- Persons found to be fighting or indulging in horseplay will be removed from site and subject to disciplinary procedures as in the Company Policy
- GSMDL shall establish any additional site rules they consider necessary for the safe working of the site

Rules for Drivers

All drivers on site are required to comply with the relevant site worker rules and the following site safety rules:

- Drivers must adhere to any speed restrictions imposed on site
- Drivers must use the designated traffic routes on or around site All drivers on site must wear high-visibility vest / jacket and safety footwear when their enclosed cab does not protect them
- Drivers who have not attended the specific health and safety induction must remain with their vehicles unless escorted Site limits, one-way systems, prohibited areas and reversing procedures must be strictly adhered to
- The instructions of banksmen must be followed
- All vehicle / plant lights, warning lights and other warning devices must be fully operational
- When instructed, wheel wash facilities must be used
- The use of mandatory reversing alarms, where this has been considered necessary
- Smoking is not permitted in any Company Vehicles

Arrangements for Ensuring the Safety of Visitors:

Where visitors have not attended the full specific health and safety induction, the PC has made the following arrangements to ensure their safety:

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 29 of 33

ProActive

- Visitors must be directed to the Site Manager via a safe route
- Visitors must sign in and sign out of the site 'Sign in' Book
- Visitors to the site must not be allowed to enter the designated work areas of the site without being escorted at all times by a person who has attended the full specific Health and Safety induction
- Health and Safety instructions must be given by the escort
- The visitors escort must provide any required Personal Protective Equipment (PPE)

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 30 of 33

Appendix 2

Displaying of Notices and Information

Legal requirements and Company Policy require the display of Notices and Information. This will be in the form of a 'Site Notice Board', which will be erected in a prominent and easily accessible place, usually in the main site office. The following will be displayed as a minimum requirement:

- Health and Safety Law Poster
- F10 Notification
- Copy of the Employer's Liability Insurance Certificate
- Site Rules
- Health, Safety and Environmental Policy Statements
- Emergency Procedures and location of nearest hospital
- Emergency Contact Telephone numbers
- Names of First Aiders
- Location of First aid facilities e.g. first aid box
- Location of BI 510 Accident Book

Additional Documentation

The following documentation will be held in the site file, which should be read in conjunction with this Construction Phase Health and Safety Plan. Some of the contents may also be incorporated into the Plan when required.

Principal Contractor:

- Health and Safety Policy, Systems and Procedures
- Risk Assessments and Method Statements
- Company Standard Operating Procedures
- COSHH Assessments
- Training records
- Statutory Inspections and Thorough Examinations

Sub-contractor:

- Health and Safety Policy
- Risk Assessments
- Method Statements
- COSHH Assessments
- Training Records

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 31 of 33

Appendix 3

Fire Procedures

On hearing the Fire Alarm / Bell

- On hearing the fire warning system / the call of “FIRE / FIRE / FIRE” at any time, you should immediately leave the site and assemble at the designated fire assembly point area
- Do not stop to put anything away or collect personal belongings
- Do not run
- Do not call the Fire Brigade: The Site Manager will carry out this action or in his absence the deputy. Only call 999 if there is a requirement for an ambulance
- Take the closest available exit from the building and report to the Fire Assembly Point. After reporting there a role call will take place to confirm that you have reached the point of safety
- Do not re-enter the buildings until advised by the Chief Fire Officer that it is safe to do so

On Discovering a Fire

- Shout that you have discovered a fire by shouting ‘FIRE / FIRE / FIRE’
- Sound one of the fire warning system
- Take the closest available exit from the building and report to the Fire Assembly Point.
- After reporting there, a role call will take place to confirm that you are out of the building
- Fire Wardens and their deputies will be trained to use Fire Extinguishers – other staff should not attempt to tackle the fire unless they are trained to do so and / or it obscures their only escape route

Fire Wardens

Fire Wardens are responsible for checking that all persons have left the building / premises ensuring that the building / premises is evacuated in the event of the fire air horn sounding. The fire wardens for this site are:

- The Site Manager Gareth Lyttle

Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 32 of 33

Appendix 4

Accident and Emergency Procedures

Nearest Accident and Emergency Hospital

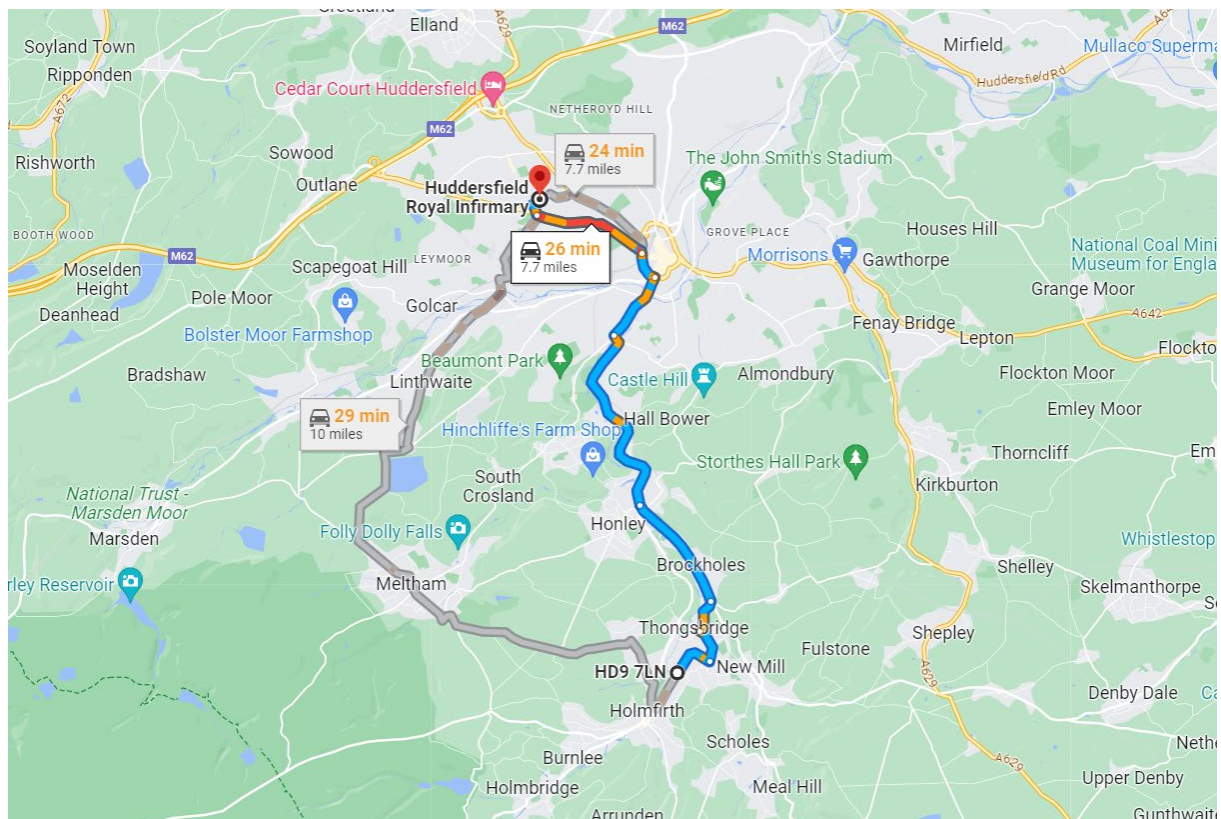
In an emergency it may be necessary to take the injured person by car rather than wait for any ambulance (Hospital must be notified that an emergency case is being sent). As such, the Site Manager should determine the location and quickest route.

Huddersfield Royal Infirmary
Tel: 01484342000

Distance: 7.7 miles
Approximate journey time: 26 minutes

HD9 7LN
New Mill Rd, Holmfirth
Head north-east on New Mill Rd/A635 towards Woodland Grove 1 min (0.5 mi)
Continue on Springwood Rd to New Mill Rd/A616 3 min (0.8 mi)
Follow A616 and A640 to Acre St in Lindley, Huddersfield 18 min (6.3 mi)
At the roundabout, take the 3rd exit onto Acre St 43 sec (0.1 mi) to

Huddersfield Royal Infirmary
Acre St, Lindley, Huddersfield HD3 3EA



Project Title:	Document No.:	Principal Contractor:	Revision:	
New Mill Rd Holmfirth	GSM DL-PRO-001	GSM Developments Ltd	01	Page 33 of 33

Acoustic Report

Environmental Noise Survey Proposed Residential Development of Land at Pentlands, New Mill Road, Holmfirth, HD9 7LN

Our Reference – J3216

Revision - 0

Survey Date – 5th to 6th September 2023

Survey and Report by – Paul Horsley MIOA

DOCUMENT ISSUE RECORD

Revision	Date of Issue	Status	Mods	Author:	Checked:	Approved:
0	09.09.23	Report	N/A	Paul Horsley MIOA	Paul Horsley MIOA	Paul Horsley MIOA
						

Limitations

The assessments and interpretation have been made in line with legislation and guidelines in force at the time of writing, representing best practice at that time.

All of the comments and opinions contained in this report, including any conclusions, are based on the information obtained by Paul Horsley Acoustics Ltd during our investigations.

There may be other conditions prevailing on the site which have not been disclosed by this investigation and which have not been considered by this report. Responsibility cannot be accepted for conditions not revealed by the investigation.

Any diagram or opinion of the possible configuration of the findings is conjectural and given for guidance only and confirmation of intermediate ground conditions should be considered if deemed necessary.

Except as otherwise requested by the Client, Paul Horsley Acoustics Ltd is not obliged and disclaims any obligation to update the report for events taking place after:

- a) the date on which this assessment was undertaken; and
- b) the date on which the final report is delivered.

Paul Horsley Acoustics Ltd makes no representation whatsoever concerning the legal significance of its findings or to other legal matters referred to in the following report.

This report has been prepared for the sole use of the Client. No other third parties may rely upon or reproduce the contents of this report without the written permission of Paul Horsley Acoustics Ltd. If any unauthorised third party comes into possession of this report, they rely on it at their own risk and the authors do not owe them any Duty of Care or Skill.

CONTENTS

1.0	Client
2.0	Subject
3.0	Aims
4.0	Location and Description of Specific Existing Noise Sources
5.0	Guidance on the Assessment of Noise levels
5.1	British Standard 4142:2014+A1:2019
5.2	British Standard 8233:2014
5.3	National Planning Policy Framework, NPPF
5.4	Noise Policy Statement for England, NPSE
5.5	Pro-PG Planning and Noise: New Residential Development
5.6	World Health Organization 1999
5.7	Building Regulations AD-O, 2021 – Overheating Mitigation
5.8	Subjective Impressions of Noise Changes
6.0	Survey Equipment
7.0	Survey Method
8.0	Prevailing Weather Conditions
9.0	Noise Survey Results
10.0	Noise Survey Results Table Overview
11.0	Results Analysis
12.0	Mitigating Circumstances
12.1	Construction Phase Noise (Temporary)
12.1.1	Construction Noise Mitigation
12.1.2	Noise Action Plan
12.1.3	Site Training / Instruction
12.1.4	Plant Maintenance
12.2	Building Fabric Construction
12.2.1	External Building Envelope
12.2.2	Glazing Units
12.2.3	Ventilation Considerations – AE-O Overheating Mitigation
12.3	External Recreational Areas
12.4	BS8233:2014 Noise Ingress Assessment
13.0	Report Summary
Appendix A	Locational Outline and Monitoring Location
Appendix B	Proposal Outline Drawing
Appendix C	Survey Results Frequency Analysis
Appendix D	BS8233 Noise Ingress Assessment Calculations

1.0 Client

GSM Developments Limited
6 Westfield Court
Mirfield
WF14 9PT

2.0 Subject

Proposed residential development of 15 No new build homes on land at Pentlands, New Mill Road, Holmfirth, HD9 7LN.

3.0 Aims

The aim of this report is to determine the existing baseline background noise environment levels affecting the proposed development location in relation to noise to inform and allow discharge of Condition No 16 relating to noise for the planning application 2020/62/91896.

Condition No 16 states:

16. Before development commences a report specifying the measures to be taken to protect the occupiers of the dwellings from traffic noise along the A635 New Mill Road shall be submitted to and approved in writing by the Local Planning Authority. The report shall:

a) Determine the existing noise climate

b) Predict the noise climate in gardens (daytime), bedrooms (night-time) and other habitable rooms of the development

c) Detail the proposed attenuation/design necessary to protect the amenity of the occupants of the new residences (including ventilation if required).

Provide an assessment of the results in accordance with the recommendations laid down in the National Planning Policy Framework, NPPF, for the proposed development site with respect to noise.

Provide mitigating noise control advice relating to the achievement of an acceptable internal environment for the development as recommended with World Health Organization's "Guidance for Community Noise, 1999" and relevant Standards and Guidelines.

4.0 Location and Description of Existing Noise Sources

The development site is located at Pentlands a plot of land to the west of New Mill Road in Holmfirth.

The planning application No 2020/62/91896 is for the development of the land with the erection of 15 No residential properties. Access to the site will be from New Mill Road to the east of the site via a formed road. The existing detached property positioned on site will be demolished accordingly to allow development of the land.

The site is positioned on sloping land with site sloping down from east to west from New Mill Road at the eastern boundary. The land is best described as rectangular occupying an area measuring approximately 110m x 68m.

The site is bounded to the north by a single residential dwelling, with an extensive new residential development located beyond the access road to the property. The eastern site boundary is formed by the A635, New Mill Road, which is a primary access route between Barnsley to the east and Oldham to the west. There are existing residential premises located on the opposite side of the road. The southern site boundary is formed by residential premises along New Mill Road with Holmfirth town centre positioned approximately 1km further along the road. The western site boundary is formed by wooded land down to the valley floor and the River Calder.

The primary noise source within the vicinity of the site is predominantly due to traffic passing the site along New Mill Road. Residential activity was also observed during daytime periods. Owls and periodic aircraft were audible at night.

5.0 Guidance on the Assessment of Noise Levels

The purpose of any criterion or standard for environmental noise should be to safeguard against unacceptable levels of community response, deemed as a feeling of annoyance during daytime or disturbance at night. WHO defines annoyance as “a feeling of displeasure evoked by noise”.

The main source of information relating to noise and the community response are field studies including noise measurements and social surveys. These surveys attempt to establish a correlation between the two sets of results.

In the absence of any definitive guidance and to establish suitable noise criteria, it is necessary to rely on general guidance and assessment methods used for community noise sources. Discussions on the current methods are given below.

5.1 BS4142:2014 'Method for Rating and Assessing Industrial and Commercial Sound'

This recently revised standard provides a method for rating and assessing sound of an industrial and/or commercial nature. The method uses outdoor sound levels to assess the likely effect of sound on people who might be inside or outside a dwelling or premises used for residential purposes. It is limited to applicable sounds and is not intended for noise amounting to nuisance or rating noise outside the scope of the Standard.

Unlike the previous version of the Standard, rating levels are not prescriptive, but more context based, with the following applicable to rating values:

- Typically, the greater this difference (variance between impact of background and rating level), the greater the magnitude of impact.
- A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending upon the context.
- A difference of around +5 dB is an indication of an adverse impact, depending upon the context.
- The lower the rating level is relative to the measured sound level, the less it is that the specific sound source will have an adverse impact or a significant impact. Where the rating does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending upon context.

The Standard introduces additional rating elements, these being subject assessments of tonality, and impulsivity of a sound source, with weighted rating values accordingly applied at the judgment of the assessor.

The introduction of Uncertainty has been applied to the measured values; again, consideration of this is left to the professional executing the survey and assessment. However, steps are provided within the Standard for the reduction of uncertainty in both measurement and calculations of the sound source and rating value.

Actual meteorological conditions are now required to be recorded and reported upon for the survey and report.

5.2 British Standard 8233:2014

The scope of British Standard 8233: 2014: *Sound insulation and noise reduction for buildings* is the provision of guidance for the control of noise in and around buildings. It suggests appropriate criteria and limits for different situations; the primary intention of these is to guide the design of new buildings or refurbished buildings undergoing a change of use rather than to assess the effect of changes in the external noise climate.

The standard suggests suitable internal noise levels within different types of buildings, including residential dwellings, as shown in Table below.

Indoor Ambient Noise Levels in Spaces When They Are Unoccupied

Activity	Typical Situations	Design Range LAeq, T dB	
		0700h to 2300h	2300h to 0700h
Resting	Living rooms	35	--
Dining	Dining Room / Area	40	--
Sleeping	Bedrooms	35	30

BS8233 states in Note 4 that:

"Regular individual noise events (for example, scheduled aircraft or passing trains) can cause sleep disturbance. A guideline value may be set in terms of SEL or $L_{Amax, F}$ depending on the character and number of events per night. Sporadic noise events could require separate values."

As such it has been considered appropriate to define a limit for regular maximum indoor noise levels of 45 dB(A) with sporadic events not exceeding 50 dB(A).

BS8233 also suggests noise limits for external areas or a property such as gardens or balconies. It states that:

'For traditional external areas that are used for amenity space, such as gardens and patios, it is desirable that the external noise level does not exceed 50 dB $L_{Aeq, T}$, with an upper guideline value of 55 dB $L_{Aeq, T}$ which would be acceptable in noisier environments. However, it is also recognized that these guideline values are not achievable in all circumstances where development might be desirable. In higher noise areas, such as city centre's or urban areas adjoining the strategic transport network, a compromise between elevated noise levels and other factors, such as the convenience of living in these locations or making efficient use of land resources to ensure development needs can be met, might be warranted. In such a situation, development should be designed to achieve the lowest practicable levels in these external amenity spaces but should not be prohibited.'

5.3 National Planning Policy Framework, NPPF.

The newly incumbent National Planning Policy Framework, NPPF, provides advice to planning authorities in England on how they must seek to minimise the adverse impact of noisy activities on noise sensitive receptors. This NPPF, replacing PPG 24, and is not prescriptive with respect to specific noise levels, and is mainly concerned with the advising on good practice for environmental noise assessment.

In the absence of definitive noise criterion within the NPPF most Local Authorities in England default to the daytime noise levels inside dwellings not to exceed NR 35; and NR 25, to be achieved inside dwellings at night to avoid sleep disturbance, based upon ingress of external noise sources.

5.4 Noise Policy Statement for England, NPSE.

The document "Noise Policy Statement for England" sets out the following vision for ongoing noise policy: *"Promote good health and a quality of life through the effective management of noise within the context of Government policy on sustainable development."*

This vision should be achieved through the following Noise Policy Aims:

"Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:"

"avoid significant adverse impacts on health and quality of life;"

"mitigate and minimise adverse impacts on health and quality of life; and"

"where possible, contribute to the improvement of health and quality of life."

To achieve this vision the Noise Policy Statement sets three noise levels to be defined by the assessor:

NOEL – No Observed Effect Level

This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.

LOAEL – Lowest Observed Adverse Effect Level

This is the level above which adverse effects on health and quality of life can be detected.

SOAEL – Significant Observed Adverse Effect Level

This is the level above which significant adverse effects on health and quality of life occur.

The Noise Policy Statement considers that noise levels above the SOAEL would be seen to have, by definition, significant adverse effects and would be considered unacceptable. Where the assessed noise levels fall between the LOAEL and the SOAEL Noise levels, the Policy Statement requires that:

"all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development.... This does not mean that such adverse effects cannot occur."

Where noise levels are below the LOAEL it is considered there will be no adverse effect. Once noise levels are below the NOEL there will be no observable change.

5.5 Pro-PG Planning and Noise: New Residential Development

Pro-PG Planning and Noise: New Residential Development (Pro-PG) was published in May 2017 by the Association of Noise Consultants, Institute of Acoustics, and the Chartered Institute of Environmental Health.

Stage 2: Element 2 of Pro-PG sets indoor ambient noise levels for residential dwellings based on the guidance contained in British Standard 8233:2014 'Guidance on Sound Insulation and Noise Reduction for Buildings' (see table above in Section 5.2).

Note 4 to the above table states:

"A guideline value may be set in terms of SEL or LAFmax, depending on the character and number of events per night. Sporadic noise events could require separate values. In most circumstances in noise sensitive rooms at night (e.g., bedrooms) good acoustic design can be used so that individual noise events do not normally exceed **45 dB LAFmax more than 10 times a night.**"

Note 5 to the above table states:

"Where it is not possible to meet internal target levels with windows open, internal noise levels can be assessed with windows closed, however any façade openings used to provide whole dwelling ventilation (e.g., trickle ventilators) should be assessed in the "open" position and, in this scenario, the internal LAeq target levels should not normally be exceeded, subject to the further advice in Note 7'.

This is consistent with the guidance contained within the PPG, which states that:

'... consideration should also be given to whether adverse internal effects can be completely removed by closing windows and, in the case of new residential development, if the proposed mitigation relies on windows being kept closed most of the time. In both cases a suitable alternative means of ventilation is likely to be necessary. Further information on ventilation can be found in the Building Regulations'.

Based on the above, the following criteria (with windows closed and an alternative means of ventilation provided) are considered appropriate for the proposed residential development and considered to represent good resting and sleeping conditions:

* ≤ 35 dB LAeq (0700-2300) during the daytime.

* ≤ 30 dB LAeq (2300-0700) and 45 dB LAFMax not regularly exceeded during the nighttime.

5.6 World Health Organization 1999 "Guidance for Community Noise"

This document provides a review of the effects of noise and a description of the principles of the WHO health criteria and guidelines for Community Noise.

The effects of noise in dwellings are identified as sleep disturbance, annoyance, and speech interference. For bedrooms, the critical effect is sleep disturbance. Indoor guideline values for bedrooms are 30 dB LAeq for continuous noise and 45 dB LAMax for sound events. At nighttime, outside sound levels about 1 metre from facades of living spaces should not exceed 45 dB LAeq, so that people may sleep with

bedroom windows open. This value is equivalent to that specifies in the Criteria 12 document; however, it is now assumed that the noise reduction from outside to inside with the window open is 15 dB.

To enable casual conversation indoors during the daytime, the sound level of the interfering noise should not exceed 35 dB LAeq.

To protect the majority of people from being **seriously** annoyed during the daytime, the outdoor sound level from steady, continuous noise should not exceed 55dB LAeq on balconies, terraces and in outdoor living areas. To protect the majority of people from being **moderately** annoyed during the daytime, the outdoor sound level should not exceed 50 dB LAeq.

Table 1 of the document summarises the guideline values for community noise in specific environments and includes the noise indices to be adopted. Significantly, the corresponding time base to be used for the assessment is also included.

The relevant extracts of Table 1 are reproduced thus:

Specific Environment	Critical health effect (s)	LAeq dB	Time Base hours	LAMax dB
Outdoor living area	Serious annoyance, daytime, and evening	55	16	-
	Moderate Annoyance, Daytime, and evening	50	16	-
Dwelling, Indoors	Speech intelligibility & moderate annoyance daytime & evening.	35	16	-
	Sleep Disturbance, night-time	30	8	45
Outside Bedroom	Sleep disturbance, window open (Outdoor Values)	45	8	60

5.7 Building Regulations AD-O, 2021 – Overheating Mitigation

The latest version of the Building Regulation 2010 includes a section 'Overheating' Approved Document O, as per 2021 edition – for use in England.

Section 3 of the Regulation relates to noise and the mitigation strategy to be considered as part of the planning and design stage of the development.

Below is the relevant section relating to noise included within Building Regulations AD-O

O1(2)(a)

ONLINE VERSION

Section 3: Ensuring the overheating mitigation strategy is usable

3.1 The standards in this section may mean that the standards of the simplified method cannot be met. For example, if external noise is an issue, it is unlikely that windows would be opened by an occupant and therefore the minimum free areas of the simplified method cannot be met. In such cases, *dynamic thermal modelling* should be used.

Noise

3.2 In locations where external noise may be an issue (for example, where the local planning authority considered external noise to be an issue at the planning stage), the overheating mitigation strategy should take account of the likelihood that windows will be closed during sleeping hours (11pm to 7am).

3.3 Windows are likely to be closed during sleeping hours if noise within bedrooms exceeds the following limits.

- 40dB $L_{Aeq,1h}$ averaged over 8 hours (between 11pm and 7am).
- 55dB L_{A1max} , more than 10 times a night (between 11pm and 7am).

3.4 Where in-situ noise measurements are used as evidence that these limits are not exceeded, measurements should be taken in accordance with the Association of Noise Consultants' *Measurement of Sound Levels in Buildings* with the overheating mitigation strategy in use.

NOTE: Guidance on reducing the passage of external noise into buildings can be found in the *National Model Design Code: Part 2 – Guidance Notes* (MHCLG, 2021) and the Association of Noise Consultants' *Acoustics, Ventilation and Overheating: Residential Design Guide* (2020).

Where noise is likely to be considered detrimental to opening a window, i.e., where noise exceeds those values noted above, an alternative method of ventilation is required to avoid overheating within the dwelling.

Guidance on ventilation and associated acoustic considerations is also indicated in Acoustic Ventilation and Overheating – Residential Design Guide [AVO] issued jointly by the Association of Noise Consultants and the Institute of Acoustics.

In this guide, the need for ventilation (as falls under the requirements of Approved Document F [ADF] are covered in three main requirements as follows:

- **Whole Dwelling Ventilation**
General ventilation – continuous ventilation of rooms or spaces at a relatively low rate
- **Extract Ventilation**
Removal of air from a space or spaces (typically stale air from bathrooms or kitchens) to outside
- **Purge Ventilation**
Manually controlled removal of air at a high rate to eliminate fumes and odours, e.g., during painting and decorating or from burnt food. May be provided by natural or mechanical means.

Four main template systems for providing each of the above AD-F ventilation requirements are summarised in the AVO guide as shown in the table below.

Ventilation System	Method of Whole Dwelling Ventilation	Method of Extract Ventilation	Method of Purge Ventilation
System 1 <i>[Background ventilators and intermittent extract fans]</i>	Background ventilators (trickle vents)	Intermittent extract fans	Typically provided by opening windows
System 2 <i>[Passive Stack]</i>	Background ventilators (trickle vents) & passive stack	Continuous via passive stack	Typically provided by opening windows
System 3 <i>[Continuous Mechanical Extract (MEV)]</i>	Continuous mechanical extract (low rate), trickle vents provide fresh air	Continuous mechanical extract (high rate), trickle vents provide fresh air	Typically provided by opening windows
System 4 <i>[Continuously mechanical supply and extract with heat recovery (MVHR)]</i>	Continuous mechanical supply and extract (low rate)	Continuous mechanical supply and extract (high rate)	Typically provided by opening windows

Where possible, natural forms of ventilation are typically preferred. However, in high noise areas, it may be necessary to recommend System 3 or 4 installation, to minimise penetrations through the external building façade, which weaken the overall sound reduction performance.

Ventilation requirements will be assessed with consideration to the above systems.

5.8 Subjective Impression of Noise Changes

The following Table provides a semantic scale that may be used to “subjectively” rate changes in sound pressure level.

Table 1: Subjective effect of changes in sound pressure level

Change in sound level dB	Change in Power		Change in apparent loudness
	Decrease	Increase	
3	1/2	2	Just perceptible
5	1/3	3	Clearly noticeable
10	1/10	10	Half / Twice as loud
20	1/100	100	Much quieter / louder

After Bies and Hansen

This table is taken from Professor Colin H Hansen’s publication “Fundamentals of Acoustics” page 41, for the Department of Mechanical Engineering, University of Adelaide.

This table also appears in “Engineering Noise Control” by Colin Hansen and David Bies, a comprehensive reference book, amongst others.

6.0 Survey Equipment

Integrating Sound Level Meter, RION NA-27, Type 1, Serial No 431986

RION UC-53A Microphone Serial No 307060

RION NC-74 Calibrator Serial No 530712

Windshield, Tripod

Svante Sound and Vibration Analyser, SVAN 979, Type 1, Serial No 92932, Calibration Date 19.07.21

Svante Preamplifier, SV 17 Microphone Serial No 106523, Calibration Date 19.07.21

GRAS Pre-Amplifier, Type GRAS 40AE, Serial No 370153

RION NC-74 Calibrator Serial No 530712

Windshield

Tripod

7.0 Survey Method

The writer carried out an attended baseline noise survey on 19th to 20th July 2022 covering daytime and nighttime periods to ascertain a representative "Baseline" noise climate for the site locations selected. This assessment was executed in accordance with the requirements of BS4142:2014+A1:2019, "Methods for Rating and Assessing Industrial and Commercial Sound".

The monitoring was executed at 2 No locations on the site.

LA_{eq} , LA_{10eq} , LA_{90} and LAF_{max} indices sound measurements were taken using the sound analyser.

The measurement indices noted above are defined as follows:

- LA_{eq}, T the "A" weighted equivalent continuous noise level of sample period T.
- LA_{10}, T the "A" weighted level exceeded for 10% of sample period T.
- LA_{90}, T the "A" weighted level exceeded for 90% of sample period T.
- LAF_{max} The "A" weighted maximum level during the sample period T.

The sound level meters were both calibrated before and after the measurements using the calibrator to ensure accuracy of the results. No variations were noted between calibrations and the results obtained can be deemed to be an accurate representation of the levels recorded.

Refer to Appendix A for a marked up locational plan of the survey points.

8.0 Prevailing Weather Conditions

Date	Period	Temp °C	Relative Humidity Rh %	Barometric Pressure mb	Wind Speed mph	Wind Direction	Precipitation	Cloud Cover %
05-06.09.23	Day	29	59%	1019	0-1	SSE	None	5%
	Night	16	90%	1020	0-2	ENE	None	5%

9.0 Noise Survey Results

During the monitoring period noise samples were recorded using a 1/1 Octave Centre Band analysis. These monitoring samples were collected from the site location described below. This was to establish the baseline noise climate for the site.

The tables of results on the following pages indicate the noise levels recorded during the monitoring period, with a brief description of the noise sources contributing to the monitored noise levels recorded.

An overview of monitoring positions is given below: -

1. Location 1 relates to the position mid-way along the eastern site boundary approximately 10m from the boundary wall.

The above monitoring location should be read in conjunction with the site layout appearing in Appendix A of this report.

Refer to Appendix C for the survey results frequency analysis table.

10.0 Noise Survey Results Table Overview

The data table below is a logarithmic average of the monitoring periods derived from the raw data collected during the assessment sessions.

Table 1 Overview Results

Location	Period	LAMax dB	11th Highest LAMax dB Value	LAeq dB	LA10 dB	LA90 dB
1	Daytime (07.00 - 23.00)	76.5	N/A	54.0	57.6	40.9
	Nighttime (23.00 - 07.00)	72.5	61.5	42.5	36.4	18.3

Table 2 Time History - Daytime

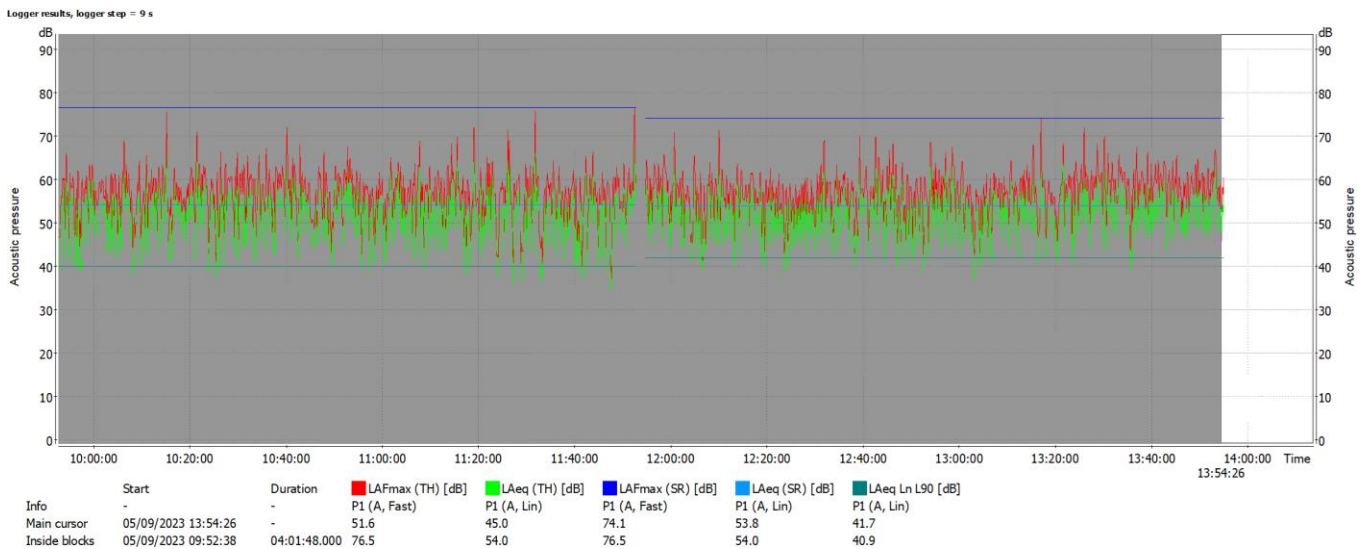
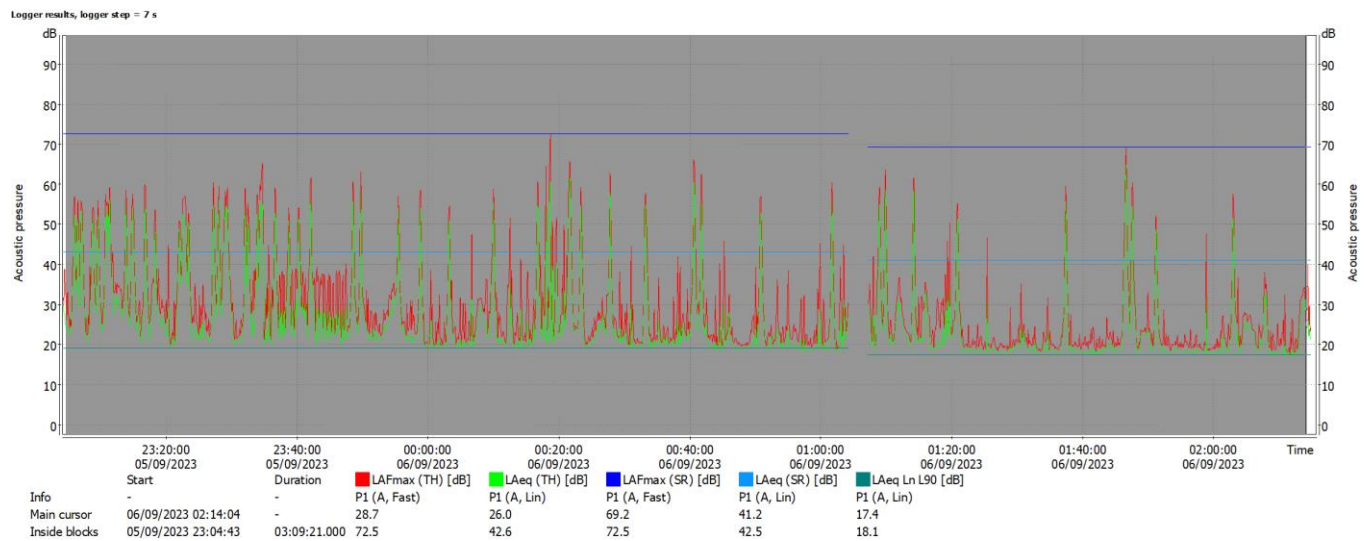


Table 3 Time History - Nighttime



Refer to Appendix C for frequency analysis details.

11.0 Results Analysis

The above noise survey, carried out between 5th and 6th September 2023, was chosen as a representative weekday period to reflect the typical noise climate for the area surrounding the development site.

The noise survey results obtained for the site can, therefore, be deemed to be representative of normal activities for the area and will be used as the base for analysis and assessment purposes below.

Assessments of the individual results indicate that the monitoring positions selected are affected primarily by traffic noise sources from the movements along New Mill Road and the local road network. Construction noise was audible intermittently from the nearby site located to the north. Owls and aircraft were audible at night, with intermittent traffic passing the site.

From the data acquired during the various assessment periods the following exposure noise levels have been established for the site.

Table of Exposure Levels

Location	Period	Noise Level
1	Daytime (0700 – 2300 Hrs)	L _{Aeq} , 16 Hours - 54 dB
	Night-time (2300 – 0700 Hrs)	L _{Aeq} , 8 Hours - 43 dB L _{AFmax} – 62 dB (11 th Highest Value) ⁽¹⁾

(1) As recommended within Pro-PG

12.0 Mitigating Circumstances

The proposal for the development site is for the demolition of the existing property and the erection of 15 No residential properties, including semi-detached and terraced housing, as indicated on the site proposal sketch. See Appendix B for details.

There are 5 main areas to consider within the development to ensure that the building provides adequate attenuation against the ingress of external noise sources that are likely to affect the comfort and amenity of the residents.

- Construction Phase (Temporary)
- Building Fabric Construction
- Ventilation
- Glazing Units
- External Recreational Areas

12.1 Construction Phase Noise (Temporary)

It is common practice that construction will take place during typical daytime hours only, assumed to be 07.30 to 18.00 hours during weekdays only and Saturday 08.00 to 13.00 hours. No construction work assumed for Sunday or Public Holidays.

There are items of plant, such as generators that may operate 24 hours dependent upon their function and these plant items may unduly affect the existing amenity of the nearby residential premises.

Noise generated by construction work has the potential to increase the noise levels at the nearby noise sensitive residential premises due to the operation of plant and equipment associated with the construction phase of the development. The level of potential increase will depend on many factors, including locality of the activities on site relative to the recipient, type of activity being undertaken, and control measures implemented.

To minimize the potential impact of the noise impact mitigation measures are proposed for the construction phase as noted below.

12.1.1 Construction Noise Mitigation

Construction noise is an inevitable part of any development, however, the change in noise levels is usually short term and temporary during the construction phase of the project only.

12.1.2 Noise Action Plan

It is recommended that a Noise Action Plan is implemented for the development, addressing all aspects of the construction, including mitigation measures and procedures for dealing with on-site activities and complaints, should any arise.

The Control of Pollution Act and BS 5228 define a set of Best Practice working methods and mitigation measures, referred to as Best Practicable Means (BPM).

The following are examples of what could be included within a Noise Action Plan.

- Selective location temporary plant so that it is screened by on-site structures, such as site cabins.
- Using modern equipment and ensuring such equipment is properly maintained and correctly operated by trained staff.
- Acoustically enclosing noisy equipment if possible
- Ensure that mobile plant is well maintained and there are no excessive rattles or vibrations that can be addressed.
- Ensuring plant machinery is turned off when not in use.
- Provide local residents with 24-hour contact details for a site representative.
- Inform local residents about the works advising of any specific noisy events and provide a contact telephone number, as noted above.
- Keep noisy deliveries to the midday period where possible.

12.1.3 Site Training / Instruction

The site training and induction programme, including site specific rules will include good working practice instructions for site staff, managers, visitors, and contractors to minimise noise whilst working on the site. Good working practice guidelines/instructions should include the following points as a minimum requirement:

- Avoid unnecessary revving of plant and equipment engines.
- Intermittently used plant should be isolated between operational periods.
- Avoid reversing unnecessarily using tonal reverse horns, fit broad band warning horns where possible.
- Report any defective equipment/plant immediately so that corrective maintenance can be completed.
- Minimise noise when handling or moving materials on site.

12.1.4 Plant Maintenance

All temporary plant items arriving on site should be in good working order and have written proof of maintenance prior to use.

Maintenance of temporary plant on site should be carried out routinely and in accordance with the manufacturers' guidance and recommendations.

Regular inspection of all plant and equipment must be undertaken to ensure that:

- all plant is in a good state of repair and operating correctly.
- any plant found to require maintenance has been identified and isolated until maintenance has been completed.
- acoustic enclosures fitted to plant are in a good state of repair and correctly fitting.
- doors and covers remain closed during operation.
- all repairs should be completed by a fully qualified maintenance engineer for the specific plant item under consideration.

Although the above are mainly procedural recommendations and not fully quantifiable it is possible that they could reduce perceived noise levels on the site by about -5 dB.

12.2 Building Fabric Construction

The Building Regulation, relating to the minimum acoustic requirements for the various areas of the development, must be met.

12.2.1 External Building Envelope

Based upon the external baseline noise levels recorded, primarily due to traffic noise, the minimum weighted sound reduction, R_w , of the external façades will need to be R_w 45 dB to ensure that an internal specification of 30 $L_{Aeq, 8\text{hours}}$ dB maximum, (equivalent to NR 25), is met within the noise sensitive dwelling areas during nighttime periods, as determined within the WHO recommendations. The worst case LAF_{max} of 73 dB will be attenuated such that the internal level will be up to a maximum value of 28 LAF_{max} dB, again in line with the specific requirements of WHO.

Based upon the proposed wall construction, the envelope will comprise of a stone cavity block external envelope, the following performance would be expected from the external façade construction:

Frequency in Hz	63	125	250	500	1000	2000	4000
R _w of Facade	40	41	45	45	54	58	65

12.2.2 Glazing Units

The primary weakness in any building envelope is usually due to windows, ventilation louvres and other apertures.

The development will not be noted as having air conditioning installed within the noise sensitive residential areas of this development, other than extraction from bathrooms which are not within the noise sensitive bedroom areas and therefore the only area of concern are the proposed window systems.

In order to provide adequate attenuation against the sound levels in the area and achieve the Building Regulations and WHO criteria, it is recommended that the formed apertures are fitted with suitable acoustic glazing units.

Using the sound exposure levels assessed for the worst case position on site, Location 1, site the minimum recommended R_w dB rating for the glazing systems for the site should be as follows.

Period	Noise Exposure Level	Internal Living Space / Bedroom Target Level	Minimum R _w Values Required
Daytime (0700 – 2300 Hrs)	L _{Aeq} , 16 Hours – 54 dB	L _{Aeq} , 16 Hours – 35 dB	R_w 19 dB
Night-time (2300 – 0700 Hrs)	L _{Aeq} , 8 Hours – 43 dB L _{Amax} - 62 dB	L _{Aeq} , 8 Hours – 30 dB L _{Amax} - 45 dB	R_w 13 dB R_w 17 dB

Based upon Standard Float Glass data for glazing systems, it is possible to provide the necessary sound insulation using an a 4mm Float Glass – 20mm wide Argon Filled Airspace – 4mm Float Glass. This system has certified acoustic values of R_w 31 dB, with an R_{w+C} 30 dB and R_{w+Ctr} 25 dB.

Since the standard double glazing system is adequate for the worst case scenario location on site, that of Location 1, it follows that the same glazing specification will be more than adequate for the remainder of the dwellings on site.

Therefore, this is the recommendation for all elevations of the development and the acoustic properties of this type of glazing is provided below for reference.

Glazing type	Frequency in Hz	63	125	250	500	1000	2000	4000
4/20/4	R _w of Facade	18	24	20	25	34	37	43

12.2.3 Ventilation Considerations – AE-O Overheating Mitigation

If we consider opening a window within a dwelling room such as living space or bedroom to provide additional room ventilation, the accepted attenuation value of the partially open window is -15 dB, we can determine if the noise ingress would be within acceptable levels, when compared against the Building Regulations AD-O and BS8233 limits.

Below is a table indicating the noise ingress for an open window scenario at the 2 No site locations used within the noise monitoring regime.

Location	Period	Open Window Adjusted Noise Exposure Level	AD-O Internal Limit Values	BS8233 Internal Limit Values	Targets Achieved Y/N
1	Daytime (0700 – 2300 Hrs)	LAeq, 16 Hours – 39 dB	45 dB	40 dB	Y
	Night-time (2300 – 0700 Hrs)	LAeq, 8 Hours – 28 dB LAmax - 47 dB	40 dB 55 dB	35 dB 45 dB	Y Y - N

As can be seen from the above results, noise ingress with a window open scenario does not result in excessive internal values above the limits set within the latest version of the Building Regulation Approved Document O, however, it indicates that noise limits are being exceeded at night for WHO, BS8233 and Pro-PG, set at 45 dB for an open window scenario, therefore, additional mitigation measures will be required for the introduced premises bedrooms.

The recommended action would be for a MEV, Type 3, system to be included within the bedroom of the dwellings to provide the necessary ventilation and comply with the latest Approved Document O of the Building Regulations. The system will need to be selected or attenuated such that the noise ingress through the vents, or produced by the mechanical unit itself, do not exceed the noise criteria for the dwelling space being served accordingly.

12.3 External Recreational Areas

Since the development is to include external recreational areas, these areas would be subject to the recorded noise climate for the site. The recorded external levels of 54 LAeq dB at the eastern side of the site.

A noise level of this magnitude is above the recommended noise criteria for outdoor areas set at 50 LAeq dB, therefore, mitigation will be required for the external spaces to achieve the limits as indicated within WHO in section 5 above.

To reduce the noise levels within the gardens to below 50 LAeq dB, it is recommended that the site perimeter is afforded a 1.8m high solid wooden fences acting as an acoustic barrier.

This type of barrier should have a superficial mass of at least 18 kg/m² which is achievable with a double boarding wooden fence and staggered joints or single boarding with cover strips over the joints. The base of the fencing should have a solid barge board that is installed at finished floor level and ensuring that there are no gaps between the fence and ground upon which it is installed. A standard sound tested acoustic fencing as supplied by Jackson Fencing using their Jakoustic Barrier System would also be acceptable in this instance.

Inclusion of the acoustic barrier would reduce the specific noise levels by up to 10 dBA, achieving a maximum 44 LAeq dB inside the gardens due to traffic sources, a noise level that is below the annoyance threshold experienced by the incumbent residents.

12.4 BS8233:2014 Noise Ingress Assessment

To provide further evidence that the above recommended mitigation measures will be adequate to achieve a comfortable internal environment within the dwellings once occupied, a BS8233:2014 assessment will be completed.

This assessment will account for the daytime, nighttime and maximum nighttime values recorded for the worst-case facades of the development and compare the results against the limiting criteria necessary to demonstrate an acceptable internal environment without giving rise to any undue loss of amenity to the incumbent residents.

Below is an overview of the results of the calculations completed.

Location	Daytime	Nighttime	Nighttime Maximum	Comments
Limiting Values	35 dBA (NR 30)	30 dBA (NR 25)	45 dBA (NR 40)	
Location 1	33 dBA (NR 30)	22 dBA (NR 18)	41 dBA (NR 42) * 29 dBA (NR 25) **	Design Target Met

Notes - * Without mitigation and opening a window for additional ventilation for bedrooms overlooking New Mill Road. ** With inclusion of System 3 MEV ventilation system and acoustic trickle vents for the bedroom windows overlooking New Mill Road only.

As can be seen from the above overview with inclusion of the mitigation recommendations will allow the internal noise criterion to be fully achieved.

Refer to Appendix D for details of the full calculation data sheets.

13.0 Report Summary

An attended pre-development acoustic assessment of the existing noise levels on land to the west of New Mill Road, Holmfirth has been completed to inform the Planning No 2020/62/91896 to allow discharge of Condition No 16 for the site with respect to noise.

The noise survey established the pre-existing noise climate and sources for the area, which are primarily due to traffic movements locally and at a distance.

To achieve an acceptable and comfortable internal noise climate for the potential residents the WHO guidance on community noise has been utilised for the acoustic target levels for the internal criteria of the dwelling areas of the development. The National Planning Policy Framework has been considered, with NR 30 daytime and NR 25 nighttime internal limits being utilised since the NPPF is not prescriptive in its noise limits.

Mandatory mitigating recommendations are necessary to provide adequate protection against intrusion from external noise sources and achieve the WHO guidelines for the internal noise climate of the residences.

Recommendations have been proposed for the glazing systems to be employed on this development, to achieve the internal dwelling room design target exposure levels as determined within WHO recommendations.

To provide background ventilation, opening windows is acceptable across the site and not likely to result in adverse comment from the incumbent residents or result in disturbed sleep due to the external noise sources identified. However, the bedroom windows overlooking New Mill Road will require additional mitigation in the form of a System 3 MEV installation to attenuate against the ingress of LAMax dB noise sources.

The development is noted as having external recreational areas and as such it is recommended that acoustic barriers in the form of solid fencing is provided around the formed garden boundaries.

Provided that the recommended mitigation measures have been incorporated into the development of the site, the amenity of the incumbent residents will be achieved, allowing discharge of Condition No 16 of Planning No 2020/62/91896.

Appendix A Locational Outline and Monitoring Location



Appendix B Proposal Outline Drawing



Appendix C Survey Results Frequency Analysis

Location	Period	LAMax dB	11th Highest LAMax dB Value	LAeq dB	LA10 dB	LA90 dB	Linear Leq dB in Frequency Hz								11th Highest LMax dB in Frequency Hz							
							63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
1	Daytime (07.00 - 23.00)	76.5	N/A	54.0	57.6	40.9	62.3	54.4	49.0	51.2	50.6	45.7	38.4	33.0	87.7	81.1	77.2	77.9	72.4	70.2	72.4	67.4
	Nighttime (23.00 - 07.00)	72.5	61.5	42.5	36.4	18.3	49.7	41.5	38.4	38.6	39.4	34.7	27.6	17.4	72.1	63.9	60.0	55.4	49.9	54.1	58.0	54.9

Appendix D BS8233 Noise Ingress Assessment Calculations

BS8233:2014 NOISE INGRESS CALCULATION - LOCATION 1

Position Assessment - Living Space	Leq Octave band noise levels (dB)							dBA
	63	125	250	500	1K	2K	4K	
	Hz	Hz	Hz	Hz	Hz	Hz	Hz	
Façade - Daytime								
Average façade noise levels	62	54	49	51	51	46	38	54
Noise reduction through façade elements								
SRI External solid wall	-40	-41	-45	-45	-54	-58	-65	
absorption area	-3	-3	-3	-3	-3	-3	-3	
noise level through wall	19	10	0	0	0	0	0	7
SRI windows - glazing (4 - 6-20 - 4)	-18	-24	-20	-25	-34	-37	-43	
absorption area - Window 1.2m x 1.8m	-7	-7	-7	-7	-7	-7	-7	
noise through windows	38	24	22	19	10	0	0	20
Open Window Scenario	-15	-15	-15	-15	-15	-15	-15	
absorption area - 0.18sq.m	-6	-6	-6	-6	-6	-6	-6	
noise level through vent	41	33	28	30	30	25	17	33
Total noise internally								
through wall	19	10	0	0	0	0	0	7
through glazing	38	24	22	19	10	0	0	20
through vent	41	33	28	30	30	25	17	33
Combined total	43	34	29	30	30	25	18	33
Criteria - Living Room - Daytime								35
NR 30 Criteria	59	48	40	34	30	27	25	
Variance and Actual NR Value Achieved	-16	-14	-11	-4	0	-2	-7	NR 30

Position Assessment - Bedroom	Leq Octave band noise levels (dB)							dBA
	63	125	250	500	1K	2K	4K	
	Hz	Hz	Hz	Hz	Hz	Hz	Hz	
Façade - Nighttime								
Nighttime façade noise levels	50	41	38	39	39	35	28	43
Noise reduction through façade elements								
SRI External solid wall	-40	-41	-45	-45	-54	-58	-65	
absorption area	-3	-3	-3	-3	-3	-3	-3	
noise level through wall	0	0	0	0	0	0	0	0
SRI windows - glazing (4 - 6-20 - 4)	-18	-24	-20	-25	-34	-37	-43	
absorption area - Window 1.2m x 1.8m	-7	-7	-7	-7	-7	-7	-7	
noise through windows	25	11	12	7	0	0	0	10
Open Window Scenario	-15	-15	-15	-15	-15	-15	-15	
absorption area - 0.18sq.m	-6	-6	-6	-6	-6	-6	-6	
noise level through vent	29	20	17	18	18	14	0	22
Total noise internally								
through wall	0	0	0	0	0	0	0	6
through glazing	25	11	12	7	0	0	0	10
through open window	29	20	17	18	18	14	0	22
Combined total	30	21	19	18	19	14	5	22
Criteria - Bedroom - Nighttime								30
NR 25 Criteria	55	44	35	29	25	22	20	
Variance and Actual NR Value Achieved	-25	-23	-16	-11	-6	-8	-15	NR 18

BS8233:2014 NOISE INGRESS CALCULATION - LOCATION 1

Position Assessment - Bedroom	Leq Octave band noise levels (dB)							dBA
	63	125	250	500	1K	2K	4K	
	Hz	Hz	Hz	Hz	Hz	Hz	Hz	
Façade - Nighttime								
11th Highest MAX façade noise levels	72	64	60	55	50	54	58	62
Noise reduction through façade elements								
SRI External solid wall	-40	-41	-45	-45	-54	-58	-65	
absorption area	-3	-3	-3	-3	-3	-3	-3	
noise level through wall	29	20	12	7	0	0	0	11
SRI windows - glazing (4 - 6-20 - 4)								
absorption area - Window 1.2m x 1.8m	-7	-7	-7	-7	-7	-7	-7	
noise through windows	47	33	33	23	9	10	8	28
Open Window Scenario								
absorption area - 0.18sq.m	-6	-6	-6	-6	-6	-6	-6	
noise level through vent	51	43	39	34	29	33	37	41
Total noise internally								
through wall	29	20	12	7	0	0	0	11
through glazing	47	33	33	23	9	10	8	28
through vent	51	43	39	34	29	33	37	41
Combined total	52	43	40	34	29	33	37	41
Criteria - Bedroom - Nighttime								45
NR 40 Criteria	67	57	49	44	40	37	35	
Variance and Actual NR Value Achieved	-15	-14	-9	-10	-11	-4	2	NR 42

BS8233:2014 NOISE INGRESS CALCULATION - LOCATION 1

Position Assessment - Bedroom	Leq Octave band noise levels (dB)							dBA
	63	125	250	500	1K	2K	4K	
	Hz	Hz	Hz	Hz	Hz	Hz	Hz	
Façade - Nighttime								
11th Highest MAX façade noise levels	72	64	60	55	50	54	58	62
Noise reduction through façade elements								
SRI External solid wall	-40	-41	-45	-45	-54	-58	-65	
absorption area	-3	-3	-3	-3	-3	-3	-3	
noise level through wall	29	20	12	7	0	0	0	11
SRI windows - glazing (4 - 6-20 - 4)								
absorption area - Window 1.2m x 1.8m	-7	-7	-7	-7	-7	-7	-7	
noise through windows	47	33	33	23	9	10	8	28
Closed Window Scenario with MEV system 3								
absorption area - 0.18sq.m	0	0	0	0	0	0	0	
noise level through vent	42	32	26	19	14	14	13	24
Total noise internally								
through wall	29	20	12	7	0	0	0	11
through glazing	47	33	33	23	9	10	8	28
through vent	42	32	26	19	14	14	13	24
Combined total	48	36	34	25	15	16	14	29
Criteria - Bedroom - Nighttime								45
NR 40 Criteria	67	57	49	44	40	37	35	
Variance and Actual NR Value Achieved	-19	-21	-15	-19	-25	-21	-21	NR 25