

Linfield Construction Ltd

Construction Phase Environmental, Health and Safety management Plan

Site Address: New Road, Chingford, Waltham Forest, E4

Client: Larkswood Developments LLP, Lindhill House, Knapp Close, Letchworth Garden City, SG6 1AQ

Date Health & Safety Plan Produced: November 2022

Proposed contract start date: TBC

Proposed contract end date: TBC

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Document Revision Statement and Table

Along with the Health and Safety at Work Act 1974, The Management of Health & Safety at Work Regulations 1999 (as amended) and The Construction (Design and Management) Regulations 2015, the PC Linfield Construction Ltd will review this construction phase health and safety plan throughout the life of the project. Any alterations to this plan will be recorded below.

Revision No.	Date	Details	Reviewed by
First Draught	November 2022	New document	Richard Moore

1. STATEMENT OF HEALTH AND SAFETY PRINCIPLES AND OBJECTIVES FOR THE PROJECT

We intend to ensure that the Construction Phase Plan will continue the development process of the pre-construction information pack in accordance with the CDM Regulations 2015

The Plan identifies the Company's approach to be adopted for managing and monitoring Health and Safety on site. This will include, in addition to the Principal Contractor and his employees, all other contractors, designers, suppliers, etc. involved in the project and any other category of person involved in or contributing to the work in the Construction Phase directly or indirectly.

We will update the Construction Phase Plan as necessary but at periods of no longer than 3 months to incorporate further information concerning the scheme and any additional hazards considered relevant by our company.

It will be our objective to put our Health and Safety Policy Statement into practical effect and thereby to ensure the acceptance of responsibility towards Health and Safety objectives by all involved with the contract and to develop further good Health and Safety management practices by ensuring that high standards of health and safety performances are achieved.

As the Principal Contractor we have established a safety strategy for the works with the following health and safety related goals for the project:

- A target of zero accidents and incidents of all types
- No work to commence without risk assessments and method statements (RAMS) in place
- Evaluation sign off sheets completed for all RAMS received from package contractors
- Zero complaints from residents regarding health and safety related impacts on their safety
- 100% compliance with the wearing of PPE in line with site rules and RAMS
- 100% compliance of the CSCS card scheme or evidence of application in progress
- Achieving the minimum level of Safety Health & Environmental compliance as set by PC

Linfield Construction Ltd Director's target for contract as part of the independent Health and safety inspections

- 100% completion of weekly recorded project Safety Health & Environmental inspections by site supervisory staff
- 100% evidence of power operated tools having in date formal inspection and testing data.
- All Contractors working on the site will be expected to achieve a similar minimum standard and provide outline procedures for inspecting and auditing during the project.

2. PROJECT DETAILS

CLIENT: Larkswood Developments

LLP, Lindhill House, Knap Close, Letchworth Garden

City, Herts, SG6 1AQ

Tel: 01462 416845

Contact Name: Mr Lee Fitzpatrick Email: lee@lindhill.co.uk

<u>Principal Designer:</u> Larkswood Developments LLP

Lindhill House Knap Close Letchworth

Herts SG6 1AQ

Tel: 01462 416845

Contact Name: Mr Lee Fitzpatrick Email: lee@lindhill.co.uk

Principal Contractor:

Contact Name: Mr Steven Morris

Address: Linfield Construction Ltd

House 3 Rhode Island Suite Lynderswood Business Park

Lynderswood Lane

Braintree.

Tel: **01245 360911**

Email: steven.morris@linfieldconstruction.co.uk

HEALTH AND SAFETY EXECUTIVE: Tel: 0300 003 1647

3. SITE LOCATION



4. DESCRIPTION OF WORKS:

This development comprises the demolition of the existing buildings and the redevelopment of the site including the erection of a new residential building of up to 7 story's to provide 72 apartments.

The main works operations will include:

- Refurbishment and demolition survey
- Removal of asbestos containing materials
- Crushing and reuse of brick/concrete waste
- Installation of piling mat
- Concrete piling works
- Erection and Installation of Tower Crane
- Erection of the concrete frame
- Traditional external brick works
- General internal works including first and second fix and partitioning

5. HOURS OF SITE OPERATION

No works shall be carried out, no machinery shall be operated, and no deliveries taken at or dispatched from the site outside the following times

 $08:00 - 18:30\,$ Monday To Friday and $08:00 - 13:00\,$ Saturdays Nor at any time on Sundays, Bank or Public Holidays

All Contractors are responsible for ensuring their deliveries do not park or wait at the delivery gate or on any surrounding roads outside of these hours.

Any works outside these hours are by the request only and must be made 48 hours in advance.

6. PARKING OF SITE PERSONNEL & VISITORS

There will be no parking available on site for operatives or Linfield Staff and Visitors. All will be advised to utilise public transport with easy access via tube and bus links.

A Public Pay & Display car park is situated on New Road near to the site–0.1 miles 2 minutes' walk from the site.

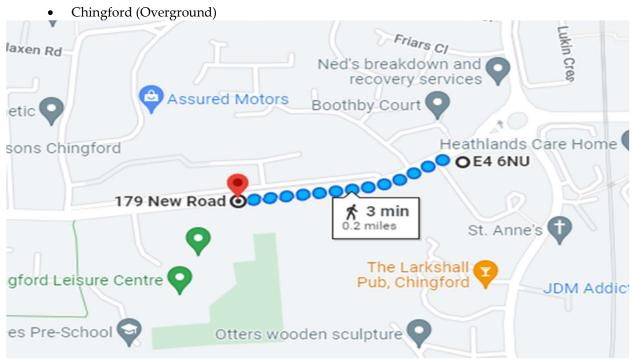
During the site safety induction personnel will also be warned that parking on the local streets is not permitted and they will be encouraged to use public transport.

7. NEAREST TRANSPORT LINKS:

Overground / Underground:

- Highams Park (Overground)
- Chingford (Overground)
- Woodford (Underground)

National Rail:



8. SITE ACCESS ARRANGEMENTS FOR VEHICLES

The primary site vehicular access will be via New Road site Entrance marked on the site logistics plan. This Route will be used for the entire project and will be utilised by HGV's and met by the gateman/banksman to allow authorised access. Discussions will take place with the relevant authority to obtain a temporary stopping up order for the proposed offloading area and relevant signage/barriers will be put in place to safely redirect pedestrians.

All deliveries of plant and materials will be arranged appropriately to provide minimum disruption to the

existing residential/commercial premises and members of the public. A vehicle booking system will be put in place to ensure that the number of HGV's are limited on site at any one time. Using "JUST IN TIME DELIVERY METHOD"

9. PROPOSED DELIVERY AND EXIT ROUTE:

- Travel to destination via A1009 New Road
- Enter Site Via Gate Marked on plan
- Exit Site Via Gate Marked on plan

• Turn Left/Right onto A1009 New Road

10. LOADING & UNLOADING:

Loading and unloading will take place within the site boundary.

Lorries will be held within this area and loaded/unloaded with the use of a tower crane located within the courtyard area as detailed on the site logistics plan. Materials will either be transported directly to allocated materials storage areas or place of use within the boundary using tower crane.

11. SITE LOGISTICS PLAN:

The site will be secured to prevent unauthorised access to the perimeter on all boundaries by a 2.4m high Timber hoarding. At the site entrances hoarding will display site contact information and health & safety warnings to inform the public and prevent unauthorised access.

Pedestrian access to the site will be kept separate from the vehicular access for safety reasons. Entrances will be clearly signed and controlled by a gateman.

Secure pedestrian access will be controlled by a coded entry system which is active during site working hours. Access outside of these hours will be further restricted by use of high-grade padlocks to all access/egress points.

A manual signing in process will be in place and located in the signing in office for all operative to sign in on entry to site.

Walkways will be clearly marked around site and barriers with gates will be installed to separate pedestrians from delivery vehicles.

Safe Walkways will also be marked within the building and emergency stairs and exits will be signed and luminated. This will be reviewed and amended to reflect progress on a regular basis. Any changes will be highlighted on site via co-ordination, logistics meetings held weekly and daily as a start of shift briefing (SOS), hazard boards or operative toolbox talks. This will include site & emergency contact numbers which will be clearly displayed.

CCTV will be in operation from commencement of Construction. The vehicle access/egress gates will be managed by trained and qualified banksman who will be responsible for controlling access and egress of all vehicles.



12. DEMOLITION:

The demolition contractor will be made principal contractor throughout the duration of their works.

Demolition will consist of the following scope

- Disconnection & Diversion of all site services
- Pre-demolition Surveys and Inspections
- Asbestos Removal (Pending Survey)
- Soft Strip of Buildings
- Demolition of Buildings
- Removal of Foundations & Footings
- Reduced Level Excavation
- Installation of Piling Mat

Outline Methodology

Removal/Disposal of Hazardous Substance

All unidentified cylinders, drums, containers will be collected and stored in secured fenced off area on the site. All COSHH substances will be catalogued and appropriately disposed of offsite by a specialist contractor.

Asbestos:

Pending Site Investigations, all asbestos (if found) will be removed and disposed of by a specialist contractor.

Demolition Scaffolding

Scaffolding will be erected to act as protection to areas directly adjacent to neighbouring properties or within 2 meters of an existing road/footpath.

Demolition Preparation

Before any operations begin Heras, fencing will be erected around the structure to segregate the works from the rest of the site or public areas. Prior to demolition an asbestos clearance certificate must be obtained and issued to relevant parties.

Work and access areas will be managed daily to ensure that they are kept in a safe condition. An exclusion zone around the building will be devised.

The demolition will be carried out utilising a suitably sized 360 tracked excavator fitted with sufficient long boom equipped with various rotating attachments.

Prior to delivery of heavy machinery, the proposed position of the machinery will be established, and existing ground conditions accessed.

It is intended that the masonry material created from the demolition will be crushed on site using water as dust suppression and utilised for forming the required piling mat and hard standing areas. Any excess material will be transported from site by a licensed carrier.

13. PILING

All piling activities will be in accordance with the piling contractor's design & method statement which will be submitted and agreed by Linfield Construction Ltd prior to commencement.

Noise and vibration monitoring will be in operation at sensitive receptors which will detect any noise or vibration that exceeds pre-agreed levels and could potentially pollute the local vicinity. Neighbours and residents will be notified via monthly newsletters before piling commences.

14. STORAGE OF PLANT & MATERIALS

Materials will be stored in allocated areas on the ground basement slab areas and will be accessible by pallet truck.

Trade contractors shall ensure that appropriate Manual Handling assessments are in place for all activities, any equipment used is suitable for the task and fit for purpose and in addition any required training is in place.

Each trade contractor is required to ensure that deliveries are clearly marked with their destination to allow efficient unloading and distribution. Packaging of loads shall be specific to suit the work areas being undertaken and in time with the programme. (Just in time delivery's)

All storage containers, stillage's, pipe racks etc. are to be suitably sized to fit into the goods hoists.

Material containers, stillage's, pipe racks etc. are to be recycled where possible and mounted on wheels to all easy movement. All other materials are to be stored on pallets to allow easy relocation where necessary. The subcontractor is responsible for erecting and maintaining the storage area.

Any material that presents a fire load will need to be kept in minimal quantities on site. The responsible trade contractor will ensure that materials are covered with flame retardant materials to comply with the Project Fire and Emergency Plan.

Due to space restrictions on site, site deliveries should be 'just in time' basis, with only sufficient materials being stored on site at any one time.

15. TYPE OF CONSTRUCTION VEHICLES

	STAGE					
Plant / Equipment	Enabling Works & Demolition	Substructure	Superstructure	Fit Out		
Tracked / Wheeled 360						
Excavators						
Breakers						
Crushers		i i				
Dumpers						
Concrete Crushing Plant			ii ii			
Mobile / Tower Cranes						
Muck Away Trucks						
Air Compressors						
Diamond Cuting Tools /						
Saws						
Hand / Power Tools				i .		
Wheel Washing Plant						
Piling Rigs		j j				
Scaffolding						
Mobile Access Platforms						
Goods / Passenger Hoists						
Delivery Trucks		ja j				
Skips & Skip Strucks						
Forklift Trucks						

16. SITE DELIVERY MANAGEMENT

All deliveries will be carefully planned & reviewed in terms of frequencies and bulk deliveries to minimise the impact construction freight will have on the local infrastructure whilst ensuring that the number of vehicles arriving to make a delivery do not exceed the space available on site.

Deliveries to site can be made between 08.00 - 17.30 Mondays to Friday and 08.00 - 13.00 Saturdays. Permission of deliveries and/or collections of abnormal loads (outside of the hours of 08.00-18:30) need to be agreed with Waltham Forest Council before being undertaken.

This requirement will be included on all Supplier and Subcontractor orders.

Measures to encourage more deliveries during the inter-peak - broadly 10:00-15:00 would be welcome. Generally, deliveries will be pre-booked on a specific time slot and materials will be scheduled on a 'just in time' basis to reduce the requirements for storage and the risk of damage occurring and therefore waste. All access to flatbed wagons / lorries must be carried out in accordance with the 'Project Fall Prevention Plan' i.e., nobody will be allowed on the back of wagons unprotected.

Linfield Construction anticipate there to be circa 45 traffic movements per month (deliveries and muck away) during the demolition process. In addition to this, Linfield Construction anticipate there to be circa 60 traffic movements per month during the construction process.

All delivery drivers will be expected to obey the site rules, and these will be explained in a brief driver induction by the relevant Traffic Marshall.

Suppliers will be encouraged to consider all environmental impacts that deliveries will generate.

17. SOURCING OF MATERIALS

Responsible Sourcing of Construction Products is demonstrated through an ethos of supply chain management and product stewardship and encompasses social, economic and environmental dimensions.

18. TRADE CONTRACTORS ACCOMODATION LOCATION

Space will be made available as indicated on the site logistics plan.

As the Project progresses, the welfare will be relocated at least once to commercial areas.

19. SITE CRANEAGE – operational dates subject to change

Crane	Radius	Out of	Jib	Erect	Dismantle	Tower
		Service				Crane
		Radius				Height
TC1	60m	9m	Luffing	TBC	TBC	36m

Crane operating times are subject to; breakdowns, routine maintenance and adverse weather conditions. For more details of the crane procedures', please contact Linfield Construction's Appointed Person for the project

20. SITE GOODS/PASSENGER HOIST PROVISION - Operational Dates Subject to change

Linfield Construction will be operating the hoists during normal site working hours.

Hoist operators break periods will be staggered to minimise disruption and site logistics.

Note: The hoist will be closed during hoist operator's breaks (2 half hour breaks per day), adverse weather conditions, routine maintenance, breakdowns and climbing and dismantling periods.

Hoists will not be available during the final stages of a block. At this stage materials will be pre-loaded, and operatives asked to use the public passenger lift which will be operated under beneficial use.

Hoist	Location	Erected From	Туре	Erect	Dismantle	Operating Time
Hoist 1	TBC	Ground	Double Goods/Passenger	TBC	TBC	8:00 – 17:30

21. PROPOSED TYPICAL HOIST SPECIFICATION

Rack & Pinion 20/32 TD Passenger Goods Hoist

Hoist Technical Specification

Capacity

Pay-load capacity 2000kg
Passengers 20
Speed 40m/min
Max. lifting height 150m

Cage Dimensions

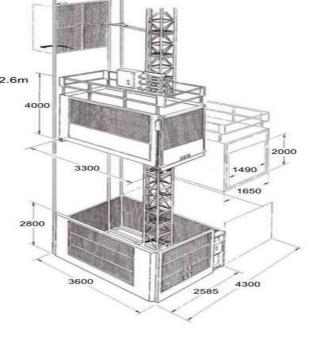
Internal width x length x height
Door opening width x height
1.5m x 3.2m x 2.6m
1.49m x 2.0m

Electrical Data

Options Available With This Hoist

Embedment frame
Steel base plate
Landing protection panels
Landing infill plates
Heavy duty base ramps
Landing bridges
Top hat
Drop down flaps
Metal floors
"C" Door (will add 175mm to the
width of the ground enclosure)





10 Nene Valley Business Park Oundle, Peterborough, PE8 4HN

Tel: 01832 272 408 Fax: 01832 272 484 Email: hire@gbaccess.co.uk Website: www.gbaccess.co.uk

22. WASTE MANAGEMENT & ENVIRONMENTAL IMPACT CONSIDERATION

We are committed to high levels of environmental management and sustainability. We are aware of the various environmental legislations, which could impact on our activities such as (not exhaustive):

- Environmental Protection Act 1990
- Hazardous Waste (England and Wales) Regulations 2005
- The Waste (England and Wales) Regulations 2011
- Controlled Waste (England and Wales) Regulations 2012
- Waste Electrical and Electronic Equipment Regulations 2013
- Control of Waste (Dealing with Seized Property) (England and Wales) Regulations 2015

We will produce an environmental impact assessment of our activities and where possible, we will endeavor to use the most appropriate means to manage our waste streams using the hierarchy of control and avoid potential environmental pollution. We will only use licensed waste handling companies to transport our waste streams. The waste itself will be stored appropriately for example in skips, waste bags or site containers ready for safe disposal to a registered waste receiving site. We will take steps to track the destination of our waste.

In all cases, we will retain any documented evidence of correct disposal of waste (e.g. waste transfer notes, consignments note or invoices in a secure location at our head office, with our buying department for future reference as necessary.

To minimise the overall creation of waste, specific control measures are in place including:

- · Reducing the quantity of material sent to landfill during construction through effective waste management segregation.
- · Recycling / Utilising existing materials into the proposed project
- · Effective design
- · Effective procurement
- Reduce over ordering
- · Minimal packaging on delivered materials

In accordance with the Waste Management Plan for England 2013, a principal aim during demolition and construction will be to reduce the amount of waste generated. It is inevitable that some materials to be used will be classed as hazardous, e/g/ adhesives, mastics, diesel oil, etc. key waste management procedures include:

- · Determine wherever there is an alternative material that is less hazardous
- · Before any materials are delivered to site the manufactures Control of Substances Hazardous to Health (COSHH) data sheets will be obtained to ensure suitable storage facilities are available on site, the operatives are fully briefed in the use of the material.
- · Where space permits on site, waste will be segregated into labelled and colour coded containers. Where space does not permit segregation on site, waste will be taken to a licenced waste recycling station to be processed.

All sub-contractors working on the project will be briefed during induction to ensure all waste streams are segregated.

Recyclable material will be stored on site and removed on a weekly basis with remaining non-hazardous waste streams being collected via skip containers that will be provided to optimise payloads and reduce vehicle movements. Hazardous waste will be stored in approved UN containers and removed from site as required.

23. ENVIRONMENTAL MANAGEMENT OF WOODLAND

Linfield Construction understand that woodlands are one of the UK's most precious natural assets. These sites have evolved into our richest, most bio-diverse land habitats and need protection during the construction process and beyond.

Linfield Construction will erect and maintain a 4-meter high monoflex barrier between the woodland and the site which we will control, Dust and all pollution, this will be controlled and maintained on a daily basis as works progress. The creation of vegetated buffer zone between the access road and the new accommodation to reduce chemical and disturbance will also be implemented on completion of the project. Please see below, our Environmental Measures section for plant and machinery.

Each sub-contractor is responsible for clearing away its waste daily to ensure no contamination, into the bins and skips provided. This will also include the segregation of waste material for recycling purposes, or for specialist disposal of hazardous materials.

These arrangements will be covered in the respective work package subcontract agreements.

General operatives employed by Linfield Construction are responsible for ensuring that the bins are emptied regularly to avoid a build-up of waste which will in turn control any contamination which would have normally contaminated the woodland. At the first sign of standards slipping, trades are notified and are charged for rubbish removed on their behalf. Notice of charges will be emailed to the respective subcontractor supervisor.

All trade contractors are expected to co-ordinate their requirements with Linfield Construction that enough waste containers are in the required locations and to ensure that housekeeping is maintained. Lack of bins will not be accepted as a reasonable excuse for poor housekeeping.

In addition, any materials left outside of agreed storage areas will, at the end of each day, be considered as rubbish and Linfield Construction reserves the right to place it in rubbish containers and remove it from site and may seek to recover the expense.

Scaffold

Scaffold will be fully netted to prevent any construction materials falling onto public highways. Mono flex will deliver the following benefits:

- Weather protection with additional acoustic absorption.
- Enhances security for the workers on the scaffold.
- Serves as a climate shield to protect workers, machinery and open constructions against rain, wind, snow etc.

- Ensures a stable working climate on the scaffold so deadlines can be respected regardless of the weather.
- Protects surroundings from any inconveniences e.g., particles or building dust from sandblasting or water jetting from façade works as well as the noise levels associated with using high dB machinery.
- Helps reduce noise levels and provides a climate shield in colder periods.
- Provides a climate shield on scaffolding not just against rain and snow but also against the effects of cold weather thanks to its high-performance foam.
- Flame retardant.

Poor standards in housekeeping is the cause of a large percentage of incidents. It is a high priority topic for Linfield construction management and should be considered as such by all.

24. ENVIRONMENTAL MEASURES

The Environmental Management Plan sets out guidelines for dealing with occurrences that could impact on the environment and forms part of this live document. As such it should be read in conjunction with safe systems of work developed for the project to ensure that interfaces between quality, health, safety and the environment are adequately managed.

All artificial lighting on site will comply with the ILP's guidance for the reduction of obtrusive light. All artificial lighting will be installed so that local sensitive receptors are not affected.

All works on site will be undertaken following Waltham Forest Council's & Linfield's Environmental policies and best practice. The following best practices mitigation measures shall be implemented as a minimum on the development:

A - Techniques to control PM10 and NOx emissions from vehicles and plant:

- Low emission plant fitted with catalysts, diesel particulate filters or similar devices
- Plant shall be well maintained, with routine servicing
- Avoid the use of diesel- or petrol-powered generators (use main or battery power)
- Non-road mobile machinery shall use ultra-low Sulphur tax exempt diesel
- Plant & vehicles shall be located away from closest receptors or closed environments
- Plant & vehicles will be switched off when not in use.
- Toolbox talks will be held to educate & understand the impacts
- No burning of materials permitted.

B - Techniques to control dust emissions from construction & demolition:

- Keep site fencing, barriers & scaffolding clean using wet methods
- Provide easily cleaned hard standing for vehicles and clean using wet sweeping
- Provide the use of wheel-wash facilities near the site exit
- Inspect internal haul routes for integrity and instigate necessary repairs
- Routinely clean the public highways and accesses using wet sweeping methods
- Impose & signpost maximum speed limits of 10mph on surfaced haul routes
- Ensure all vehicles carrying lose or potentially dusty material to or from site are sheeted
- Store materials with the potential to produce dust away from site boundaries
- Sheet, seal or damp down stockpiles of excavated material held on site
- Any loose materials bought onto the site shall be protected by appropriate covering
- The site shall be dampened down during the working day and at the end of the day
- Ensure water suppression is used during demolition operations
- Ensure mobile crushing and screening plant and cement batching plant are regulated under the local air pollution prevention and control regime operate in compliance with a part B permit. This shall be submitted to the local authority prior to operation.
- Site personnel shall be trained in dust mitigation and a manager shall be present for managing dust on site.

25. AIR QUALITY MONITORING

Details of the proposed method, frequency, location of air quality monitoring levels will be considered prior to construction commencement. Linfield will undertake monitoring at key location(s) around the site in order to ensure compliance with Waltham Forest Council's limits.

Should odours emit from the site. Odour control equipment will be deployed which neutralises odours from air rather than temporary masking them.

26. DUST MITIGATION MEASURES

- Demolition will be undertaken in accordance with the Best Practice Guidance Note 'The Control of Dust & Emissions from Construction & Demolition' (2006). This outlines BPM to effectively man-age construction work in order to mitigate air pollution emissions.
- When carrying out demolition work during periods of dry or windy weather, there can often be dust problems on sites bordered by homes. Measures will be taken to reduce the formation and spread of dust. Dust will be controlled at source by using a continuous fine water spray. A suitable water supply will be provided ensuring there are enough hoses to reach all parts of the site and a way of getting rid of wastewater.
- There will be adequate screening with sheeted scaffold and damping down during all demolition activities and other site preparations and activities. The site boundary walls and hoarding will provide screening where practicable.
- All scaffolding will be enclosed with appropriate sheeting material
- An easy to clean hard standings will be provided for all vehicles
- All heavily used areas will be cleaned by brushing vehicles and spraying water regularly
- All cutting or grinding of materials will be controlled on the site
- Suitable water supply provided
- Buildings or structures that are being demolished must be damped down using high pressured hoses
- Use of water bowsers on large areas to damp down
- All materials will be always enclosed, and dusty materials damped down using water sprays during dry weather
- All materials that create dust, including soil, will be stored away from the site boundary, screened to prevent wind spreading the dust and damped down where practical
- Paved roads near to the exits must be kept clean. Vehicles transporting materials onto or off the site must be suitably covered where necessary to prevent dust.
- Use rubble chutes and skips where appropriate. There must be an effective close-fitting cover over the skips to contain all the dust and other rubbish. The chutes must be continuous until they reach the skip, with no gaps, and maintained in good condition.
- No rubbish and waste materials will be allowed to build up on site
- Reducing dust, fumes or other nuisance or environmental effects, which may cause offence to the local community or environment.
- Reduce environmental effects which may cause offence to the local community by promoting proactive community relations.

27. MONITORING PROPOSALS NOISE, VIBRATION & DUST

Noise monitoring

It is proposed that Noise monitoring will be undertaken throughout the duration of the demolition and groundwork's element of the programme typically using unattended, continuous semi-permanent noise monitors with SMS/email alert systems.

As the construction works progress, we will implement a 'Best Practical Means' (BPM) policy throughout the contract to minimise the effects of noise and vibration.

Data obtained from the noise monitors will be used to assess any noise impacts arising as a result of the demolition and/or construction works. SMS/email alerts will be sent to the relevant personnel (e.g., site manager) upon exceedance of a pre-defined trigger level.

Results will be analysed, and data reports subsequently issued on a monthly basis.

The monitoring equipment will also be capable of remote downloading of stored data for regular reporting/analysis.

The measured noise levels shall be compared against the noise limits set down by the London Borough of Waltham Forest as follows:

• 75 dB LAeq,10hr (08:00 – 18:00 Monday to Friday) and 75 dB LAeq,5hr (08:00-13:00) Saturday at any noise sensitive receptor.

GREEN LAeq,1hr < Local Authority Limit ok to continue

RED Local Authority Limit < LAeq,1hr A. Review the works being undertaken on site to determine whether the works are being undertaken in accordance with BPM and amend accordingly.

B. Where works are being undertaken in accordance with BPM, monitor remaining hourly periods within the day and consider respite periods should further exceedances occur.

Vibration Monitoring

It is proposed that localised, short-term vibration monitoring will be undertaken as and when it is considered necessary, e.g., during Piling & Groundworks Phase.

Where monitoring is undertaken, the following methodologies will be followed:

Peak Particle Velocity (PPV) levels in excess of 1 mm/s may be considered to represent a significant impact on the occupants of residential buildings; and 2 mm/s for commercial premises (although higher levels may be tolerated in certain instances). Where vibration monitoring is required, measurements and calibration of equipment shall be made following the guidance in BS 5228-2:2009+A1:2014.

For residential premises, Table B.1 of BS 5228-2:2009+A1:2014 provides guidance on the effect of vibration levels on residences and states that a level of 1mm/s "It is likely that vibration of this level in residential environments will cause complaint but can be tolerated if prior warning and explanation has been given to residents".

Regarding building damage, according to BS 7385-2, for residential or light commercial buildings, the threshold for the onset of potential cosmetic damage (i.e., formation of hairline cracks on drywall surfaces or the growth of existing cracks in player or drywall surfaces) to buildings varies with frequency. This ranges from a PPV (component) of 15mm/s at 4Hz, rising to 20mm/s at 15Hz, and to 50mm/s at above 40Hz. BS 7385-2 also states that the probability of building damage tends towards zero at 12.5mm/s peak component particle velocity.

As well as the results of the vibration monitoring, detailed observations of various factors shall be recorded, including:

- condition of the building.
- construction activities which may give rise to significant vibration.
- other extraneous vibration inducing activities (e.g., HGV movements);
- indicative ambient vibration levels, including transient event peaks.
- mitigation measures in place; and
- whether Best Practicable Means are in use at the time of the vibration monitoring.

GREEN PPV levels < 1mm/s OK to continue

AMBER 1mm/s • PPV levels < 3mm/s OK to continue however review and consider further mitigation measures.

RED

3mm/s ⊚⊚ PPVStop works and assess the potential for additional mitigation methods and/or alternative working methods.

Dust Monitoring

Dust monitoring is proposed to be undertaken throughout the duration of the demolition and groundworks element of the programme using unattended, continuous semi-permanent particulate monitors with SMS/email alert systems.

As the construction works progress, we will seek to comply with the best practice guidelines from 'The Institute of Air Quality Management of demolition and construction sites.

Data obtained from the particulate monitors will be used to assess any impacts arising as a result of the demolition and/or groundworks. SMS/email alerts will be sent to the relevant personnel (e.g. site manager) upon exceedance of a pre-defined action level.

Results will be analysed, and data reports subsequently issued on a monthly basis.

The monitoring equipment will also be capable of remote downloading of stored data for regular reporting/analysis.

The measured particulate levels shall be compared against the recommended thresholds as per the Supplementary Planning Guidance document – The Control of Dust and Emissions during Construction and Demolition, Greater London Authority (2014). In addition, it is recommended that an early warning alert system is also used to inform the site team of increasing concentrations of particulate matter. The recommended alerts are as follows:

- 150µgm-3 as a 15-minute mean for PM10 concentrations (Warning Level)
- 250µgm-3 as a 15-minute mean for PM10 concentrations (Action Level)

28. WHEEL WASHING FACILITIES & ROAD CLEANING

Wheel wash facilities (jet washer) will be used prior to vehicles exiting site during groundworks and winter periods to avoid airings from spilling onto local roads. All wheel washing activities will take place on a hard standing area to reduce highway contamination. A road sweeper will be on standby and deployed when necessary to keep the perimeter roads clean on a as required basis.

29. MANAGEMENT ARRANGEMENTS

PRINCIPAL CONTRACTOR: Linfield Construction Ltd

Telephone: 01245 360911

MANAGING DIRECTOR: Mr Steven Morris

Mobile: 07814 - 151668

CONSTRUCTION DIRECTOR: Richard Moore Mobile: 07552733007

PROJECT MANAGER: TBC Mobile: TBC

30. HEALTH AND SAFETY STANDARDS

The management of Linfield Construction Ltd continually strive to improve our working practices and quality control procedures to achieve constantly high levels of employee safety and wellbeing and customer satisfaction.

We will review our risk management system at appropriate intervals and enhance it as necessary based on both internal measures and external input from stakeholders.

All works will be undertaken in compliance with the statutory requirements as follows:

- The Health and Safety at Work etc. Act 1974
- The Construction (Design and Management) Regulations 2015
- The Work at Height Regulations 2005
- The Control of Vibration at Work Regulations 2005
- The Control of Noise at Work Regulations 2005
- The Control of Asbestos Regulations 2012
- The Management of Health and Safety at Work Regulations 1999 (as amended)
- Provision and Use of Work Equipment Regulations 1998
- The Manual Handling Operations Regulations 1992 (as amended)
- All other relevant Statutory Provisions.

The Company's Health and Safety Policy, COSHH, Risk Assessments and Method Statements (as included in the Appendix) also form part of the Plan and all works will be carried out in accordance with the standards therein.

31. INFORMING PACKAGE CONTRACTOR OF RISKS

We will via our project management identify potential hazards and significant risks at an early stage (e.g. site visit, historical information, contract documents, past experiences, HSE website etc.); at the pre-order meetings, any issues identified will be discussed with the relevant package contractor. We will record any agreed actions for future reference and discussion.

We will hold regular Health and Safety meetings with all contractors during the course of the project (i.e. at least monthly). These meetings will be used to inform package contractors of any changes to the original specifications and discuss any on-going health and safety concerns. Any new or revised assessments, etc. produced, as a result of these meetings will be circulated and/or communicated to all persons concerned (via email, hard copy, site induction, toolbox talks etc.). All contractors will have access to the Construction Phase Plan.

32. SELECTION PROCEDURES

All contractors will be required to supply such resources as will be necessary for them to complete their work safely and without risk to others.

In order to assess and evaluate the competency of any contractor, the company requires the completion of our internal Health and Safety Assessment Questionnaire designed to assist the company in making an informed decision on the employment of any such contractor. Once the questionnaire has been completed successfully, the package contractor will be added to our database.

We will regularly monitor (i.e. daily, weekly and monthly) any contractors used during the life of the project. Supervisors and Contract Managers will have responsibility for conducting proactive monitoring tasks in order to assess compliance with their RAMS, site rules and project documentation. Any shortfalls will be challenged by Linfield Construction Ltd supervisory staff for remedial action.

Contract/Project Managers and Supervisors will ask suppliers to provide suitable and current Health and Safety information to support their products.

We will consult suppliers prior to the purchase or hire of equipment/plant in order that we receive the correct equipment for a given task, which includes any maintenance instructions and necessary training.

33. NOTIFICATION TO LOCAL RESIDENTS

Prior to the commencement of works, all residents will be notified by letter drop of the work commencing. Monthly letter drops may be required to keep local residents of work progress and activities that are ongoing. Linfield Construction Ltd will issue monthly newsletters to keep residents informed of current progress.

Our letter will also introduce the company and provide contact telephone numbers for the residents use in case of emergency, to discuss concerns or issues surrounding access and security arrangements

34. COMMUNICATION AND CO-OPERATION

A system of regular communications and liaison will operate between all parties to ensure that any difficulties or changes in circumstances and conditions of work are dealt with promptly and arrangements revised accordingly.

We will use the following resources to maintain a flow of information between all parties involved in the project:

- Email (via iPads and office-based IT)
- Telephone (including out of hours details)
- Mobile Phones (including out of hours details)
- Dropbox

In addition to the above we will hold monthly project meetings with the project representatives to discuss the ongoing success and delivery timetables for the project:

We will ensure that minutes of the meeting are communicated to site personnel as is relevant to them. Any health and safety related information that has an impact on their safety we will review and revise accordingly.

In addition to the above, our site register has the facility for trade staff to sign in each day and at the same time, discuss any issues they have with regards to health, safety and welfare. This is reviewed by our site team, and dependent on what is raised, be included for discussion as part of the daily informal encounters with trade personnel covering the work scheduled for the day.

35. ACTIVITIES WITH RISKS TO HEALTH AND SAFETY

The main areas of risk evaluated as applicable (or not applicable) to this project are as follows (we will apply the principles of prevention as appropriate to the risks involved):

Area of risk	Applicable	Not applicable
Asbestos	✓	
Bricklaying/blockwork	✓	
Carpentry	✓	
Confined spaces or restricted spaces		✓
Dust	✓	
Demolition/deconstructing	✓	
Electricity	✓	
Excavations	✓	
Fire	✓	
Gas	✓	
Hazardous substances (including lead-based products)	✓	
Housekeeping	✓	
Hop-ups and/or podiums	✓	
Heat producing equipment/processes	✓	
Ladders	✓	
Lifting Operations (Tower Crane)	✓	

Lifting Operations (General)	✓	
Mobile towers (including easi-dec system or similar)	✓	
Mobile Elevated Work Platforms (MEWPS)	✓	
Manual handling	✓	
Noise	✓	
Non-powered hand tools	✓	
Occupied premises	✓	
Power cradles		✓
Powered hand tools	✓	
Pedestrian traffic routes	✓	
Contact with the public	✓	
Painting and decorating	✓	
Plastering	✓	
Plumbing	✓	
Roofing	✓	
Rendering	✓	
Scaffolding	✓	
Stepladders	✓	
Site security	✓	
Vibration	√	
Vehicle traffic routes	✓	
Working at height	✓	
Waste and environmental pollution	✓	

We are aware from the contract documentation that asbestos or asbestos containing material could be found at some locations. We will make use of the refurbishment and demolition survey to gain further information on any known asbestos. If, during the execution of the work, we discover any previously unidentified material that we believe may contain asbestos, work **shall cease immediately** All staff will be removed from the area and the site management team will be informed at which point we will await further guidance.

If we suspect that there has been an uncontrolled release of asbestos due to inadvertent exposure, then we will follow the accepted protocol laid out by the HSE, in their guidance document "<u>EM1 – What to do if you uncover or damage materials that contain asbestos"</u>.

We will ensure that all staff and supervisory personnel have been trained in basic asbestos awareness as defined by regulation 10 of the Control of Asbestos Regulations 2012. This will be supplemented with safety toolbox talks.

36. PUBLIC PROTECTION

We are aware that a key area of control and risk management will be the process of interacting with residents and the general public (in particular the elderly, persons with disability, children etc).

The risk assessments and method statements will take onboard how we control the potential risk of accidents to others not in our employment. We will use a range of approaches based on our assessment such as (not exhaustive):

- Heras fencing, barriers, cones and tape to segregate our work
- Site safety signs erected to compounds, scaffolding, work areas to warn of work in progress
- Protective fans
- Alarming access equipment (as required)
- Protecting/highlighting the base of scaffolds where people need to pass
- Keeping traffic routes clear of trip/slip hazards
- Securing down dust sheets in areas where they could present a trip/slip hazard
- Re routing/fixing down cables where used
- Pre-notification of the work so they are fully aware of what is going on

37. WORK AT HEIGHT

We are aware that work at height is a significant cause of fatalities and major injuries in our industry, with this in mind we will comply with the requirements of the Work at Height Regulations 2005:

- Avoid work at height if possible
- Where it cannot be avoided, we will conduct a risk assessment and select the appropriate access equipment
- Priority will be given to collective fall prevention measures (such as scaffolding, mobile towers, mobile elevated work platform)
- Provisions to mitigate the distance and/or consequences of a fall (such as fall arrest systems)
- Additional training and instruction where ladders/steps are used (covering the selection, inspection and use of ladders safety attachments etc)

Regardless of the equipment selected (based on the assessment process), we will ensure that it is used by competent people and/or used by people under the supervision of a competent person.

Finally, it will be the responsibility of the contract supervisor and the site foreperson to ensure that all access equipment has evidence of suitable maintenance and inspection.

See appendix for copies of Risk Assessments, Method Statements, COSHH Assessments, and other specific assessments (as applicable).

38. EMERGENCY PROCEDURES

Emergency arrangements in the event of fire, dangerous occurrence, or injuries are laid down in the Emergency Procedures (see Appendix), copies of which will be available on site. These lay down details of evacuation and assembly.

It is important that emergency procedures are co-ordinated with the Client to ensure safe and efficient handling of any emergency.

Where necessary, residents will be informed by our site management team of the Emergency Procedures to be used during the Contract.

We are aware of the following guidance documents and will reflect the relevant parts of these guides into our fire safety strategy and emergency evacuation procedures:

- Fire Prevention on Construction Sites 9th Edition October 2015
- HSG 168 Fire Safety in Construction 2nd Edition October 2010

39. ACCIDENT REPORTING AND PROCEDURES & FIRST AID

First aid facilities will be provided and kept on site. Trained first aiders and/or appointed persons will be present on site whilst works are in progress and will be contactable by mobile phone when necessary. The location of the nearest hospital with Accident and Emergency facilities will be advised during the induction (the information will be displayed on our site safety notice board and/or site safety folder).

When an accident occurs, however minor and whether or not there are any apparent injuries involving staff, members of public or contractors in connection with the work activities it shall be reported to the Site Supervisor or Contracts/Project Manager as soon as possible.

Details of the accident must be entered into the Accident Record Book and a copy of the Accident Report sent to the Project Manager. All accidents and incidents will be investigated. The depth of the investigation will be dependent on the actual or potential gravity of the accident/incident.

The following information should be recorded:

- Time and date of the accident
- Location of the accident
- Name of the person injured and occupation at the time of the accident
- The nature of the accident
- The extent of the injuries
- What first aid treatment was required and given
- Whether reported to the HSE under RIDDOR (see below)
- The name and capacity of the person entering the report.

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 require that the Incident Contact Centre (Telephone Number: 0845 300 9923) must be notified by telephone as soon as is practicable if:

- Any person dies as a result of an accident arising out of, or in connection with, work.
- Any person suffers a specified injury.

<u>Other reportable incidents must be done online only within 15 days using the appropriate form</u> Online notification will be for the following:

- Any person not at work suffers an injury out of or in connection with work and is taken from site for treatment at hospital
- Any person is unable to carry out their normal work for more than seven consecutive days following an accident at work (not including the day of the accident, but non-working days e.g. weekends)
- Any listed occupational disease as confirmed in writing by a registered doctor

Any RIDDOR related accidents will be reported to the incident contact centre by the company health and safety department.

40. WELFARE ARRANGEMENTS

Provisions in relation to this project

Hot water
Cold water
Drinking water

Hand cleanser
Paper towels

Clothes storage

Drying room

Soap

Seating Tables

Linfield Construction Ltd will have in place appropriate welfare provisions based on staff numbers, site location, and site space restrictions. Regardless of these factors, we will comply with the requirements of regulations 13(c) and schedule 2 of the CDM Regulations 2015 and guidance document CIS 59 "Welfare Facilities on Construction Projects" Provisions will be provided as detailed below. All of which will be within acceptable distance for site staff and operatives.

The site management team have identified the following provisions in relation to this project:

Applicable

✓

✓

✓

Not applicable

√

 \checkmark Office and general welfare including canteen and drying room Self-powered Oasis unit or similar with built in provisions Mobile welfare van with built in facilities Non-powered split steel container **√** Generator to provide power ✓ Temporary supply provided and commissioned by electrician Toilets Male & Female Microwave Calor gas cooker Kettle **√** Fridge Heating

A fenced off-site compound will be established in the agreed location. Access to the main office will be segregated from traffic.

The site management team will ensure that a cleaning schedule is set up and monitored to keep the provisions in acceptable condition. As part of the induction process, we will instruct all site personnel to play their part in maintaining the facilities in an appropriate condition.

41. INFORMATION AND TRAINING ON SITE & PPE/RPE

Use of local amenities (with written agreement)

Based on the site rules and safety documentation the following PPE/RPE will be worn Safety Helmets, overalls, gloves, goggles, safety footwear, ear defenders and Respiratory Protective Equipment as necessary. All operatives will be trained in correct use, maintenance and storage of PPE/RPE.

All new employees receive formal Health and Safety induction training on joining the company. All employees, contractors and visitors will receive induction training prior to commencing any work or visits on site. This will include:

- Safe access / egress to working areas
- Site restrictions
- Emergency Procedures
- Identification of specific risks and hazards
- Welfare
- Site Rules
- Requirements for method statement compliance
- How to record or raise any Safety, Health and Environmental concerns
- Any identification of further training needs
- Waste management

Further training needs will be assessed and arranged as necessary

Training certificates will be requested and logged as required (e.g., scaffolding, asbestos, plant, etc.)

Toolbox talks may be undertaken or requested to address specific areas and will be arranged by the site management team.

Statutory Notices should be displayed on site including:

• Form 10 (revised) Notification to HSE and the Health and Safety Law poster

Documentation to be held on site will include:

• Company Safety Policy Statement, Copy of Liability Insurance, Copy of Safety Plan, Emergency Procedures, Site Rules, Risk Assessments, COSHH Assessments, Method Statements, Site induction record, Safety suggestion record, Visitors Register, Accident incident forms (book to be held by Site Foreperson and Contract Supervisors), and SHEQ Committee members.

The above information will be on display on the notice board and/or site safety folder

42. CONSULTATION WITH PEOPLE ON SITE

Structured consultation will take place through regular safety meetings and Contractor coordination meetings. This does not preclude day-to-day consultation.

The Company project Manager will attempt to meet as many site personnel as possible during site visits in order to obtain feedback and suggestions on Health and Safety matters. They will also be available by telephone or at the office for consultation at any time. Any suggestions received, will be noted and discussed with management, and implemented as necessary.

The Company also operates an 'Open Door' policy where operatives can speak directly to members of Site Management regarding safety concerns. All comments will be taken seriously, and action taken where appropriate.

In addition, we have integrated within the trade staff sign in sheet the facility for them to discuss any comments they have regarding health, safety and wellbeing concerns. It is the responsibility of the site manager to ensure comments and action taken where applicable.

As well as the above consultation routes, the company as a formal Safety Health & Environment (SHE) meeting which has trade staff representation and provides a formal environment where

their health and safety concerns can be heard by people representing all levels of business function. Minutes of the meetings and results for action will be past back to all company personnel.

43. SITE RULES

A copy of the Site Rules will be available on site and will form part of any site induction. It is essential that all employees, contractors and visitors sign to say that they have read and understood them and adhere strictly to the rules whilst on the project.

Failure to comply with these rules will result in warnings being issued and eventual removal of repeat offenders from the project.

44. HEALTH AND SAFETY FILE & HANDLING DESIGN CHANGES

Exchange of design information

Where design calculations or the production of working drawings is undertaken by subcontractors or consultants, then the following arrangements will apply:

Relevant information produced by the professional team will be passed onto the subcontractor prior to the design work commencing (written confirmation of receipt via email will be requested by our management team). This information may be included in the initial project H&S plan or produced subsequently by the design team. Where hazards have been identified, but the risk assessment for the hazards has not been carried out, then either;

- 1. The subcontractor will be asked to undertake the assessment and incorporate the relevant aspects of the outcome within their contract documents.
- 2. The Linfield Construction Ltd will in conjunction with the sub-contractor complete the risk assessments and instruct the subcontractor as to the appropriate safe system of work to apply to the work.
- 3. A combination of the above will be used.

Regardless of the above, subcontractors who will be carrying out design work will be required to carry out evaluation of their work in accordance with the regulations pertaining to designer's duties under the CDM Regulations (this will also consider the principles of prevention). The output of their evaluation is required to be submitted to Linfield Construction Ltd as evidence—of their compliance. A further evaluation will be made by our project management team as to whether it will be necessary to pass on relevant information to other subcontractors.

Handling design changes

Where changes/variations are required by the client or their representatives during the construction phase, we will ensure that this information is formally notified to the contractors/trade workers concerned (They will be required to email back to the project management team confirmation of receipt and acceptance of the information). When we have verified and agreed this information with the Contractor(s) we will discuss any implications on the contract works to the Principal Designer and update the Health and Safety Plan accordingly.

Any design information passed to contactors will be followed up with an email from the project management team, which will require a response from them in writing to confirm acknowledgement and acceptance. All design information will be provided with receipt dates and latest design number and date.

Ongoing discussion with all parties will be held during the project phase to ensure that everyone is working to the correct design information.

Final design information will be held by the Project Manager for inclusion in the health and safety file.

The requirement to forward information for the Health and Safety File is to be included in all subcontract orders. Where this has not been provided, reminders will be sent by the contract manager or their assistant.

The Health and Safety File should be passed to the Principal Designer upon completion of the project (where the principal designer has no further input at the construction phase, then we will take responsibility for collating and passing the information to the client and/or their representative.

All members of the project management team are responsible for forwarding any relevant information to the Principal Designer. As mentioned previously, in the event that the principal designer's input ceases before the completion of the work, then Linfield Construction Ltd management team for the project will take responsibility for completing the file and handing it over to the client.

45. MONITORING ARRANGEMENTS & SITE MANAGEMENT

Site Management: The site will be under the daily control of the Contract Supervisor (assisted by site forepersons as the project demands). His/her tasks will include direct supervision of all trade personnel, quality control and all safety matters pertaining to the site. In his/her absence, the Deputy Site Supervisor will fulfil these duties.

The site will also be inspected by the Company SHE consultant representatives on a regular basis to ensure safety controls are in place and being followed, advise on safety issues, and carrying out inspections of access equipment as required by the regulations.

The Contract/Project Manager will visit site on a regular basis to discuss variations to specifications, attend site meetings, etc., and provide general oversight of the project.

Throughout the duration of the project, the following individuals will be directly responsible for monitoring safety on site:

Name	Position	Contact details
Steven Morris	Project Director	07814 - 151668
TBC	Project Manager	ТВС
TBC	Logistics Manager	TBC
TBC	Senior Site Manager	TBC
TBC	Site Manager	TBC
Nick Pulham	H&S Advisor	07720 468639

The site will be visited on a regular basis to ensure safe methods of work are being followed and maintained as detailed in Risk Assessments, COSHH Assessments, and Method Statements. (See Appendix)

The Company also operates a site SHEQ surveillance scheme administered by the Company SHEQ Director and SHEQ Advisors/Inspectors who carry out unannounced inspections on site at any time and record / take action on any aspect of Health and Safety giving cause for concern. Investigations of accidents/incidents (whether causing injury, loss or 'near miss') or complaints will be carried out as necessary and any findings used to improve safety levels on site.

46. PROJECT REVIEW

Reviews of the Construction Phase Plan will be carried out by out site management team throughout the project as different trades complete their work or phases of work are completed. Any changes in methods of work or materials shall be examined in order to assess further Health and Safety implications. Risk Assessments, etc. will be produced by our project management team or package contractors and issued as necessary.

We will monitor package contractors through regular inspections and assess them against the information given in their assessment questionnaire.