

Gray's Lane, Hitchin Construction Phasing and Environmental Management Plan

Subject: Construction Phasing and Environmental Management Plan

Section 1: Introduction to the project – include resident liaison details

Section 2: Site Layout, significant points

Section 3: Main duty holders

Section 4: Contractor's selection procedure

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Section 6: Traffic management plans

Section 1: Introduction to the project

Gray's Lane, Hitchin

The new build construction of 47 homes, 28 private and 19 affordable, with associated drainage, roads and landscaping infrastructure.

PROJECT INFORMATION

SITE ADDRESS

Hill Site

Gray's Lane
Hitchin
Hertfordshire
SG5 2HN

What3words reference: *winks.rooms.yards*

T: 0208 527 1400

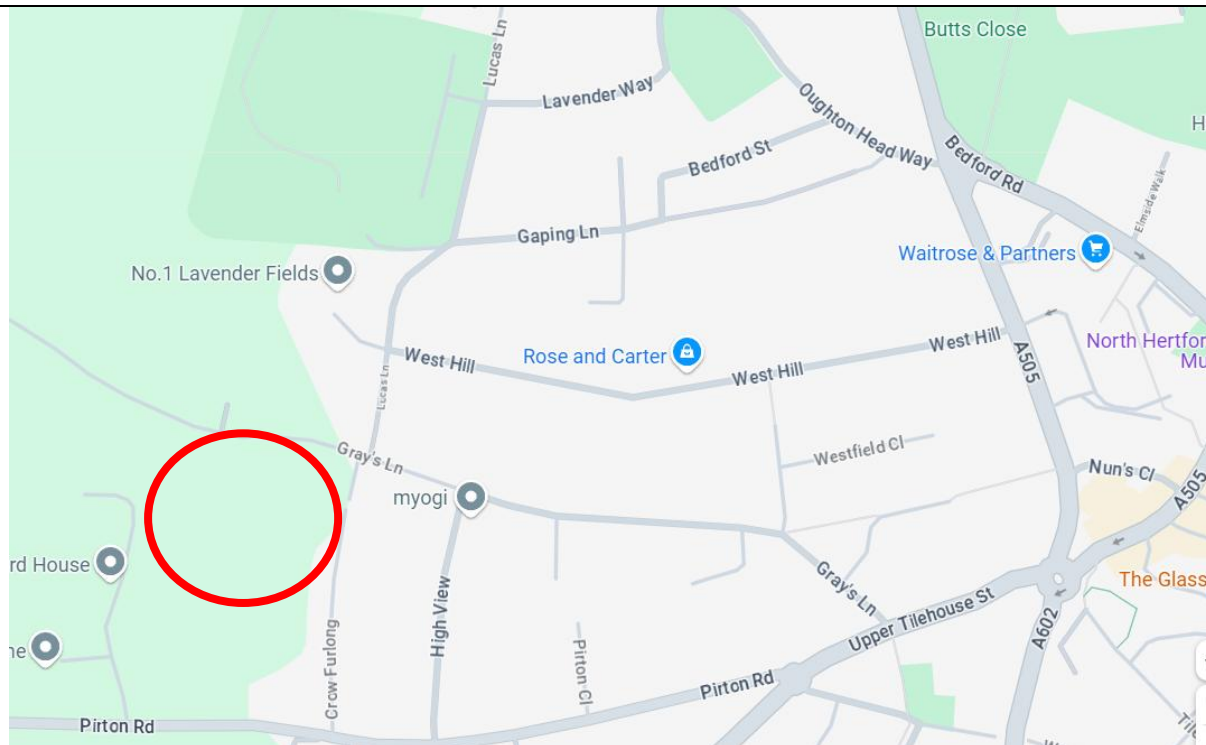
Details of Nominated Resident Liaison Representative to be circulated to those residents consulted on the application. This person will act as first point of contact for residents who have any problems or questions related to the ongoing development.

Resident Liaison Manager – Kelly Player
24/7 Resident contact number: 08000326760
Email: residents@hill.co.uk
Address: The Powerhouse
Gunpowder Mill
Powdermill Lane
Waltham Abbey
Essex
EN9 1BN

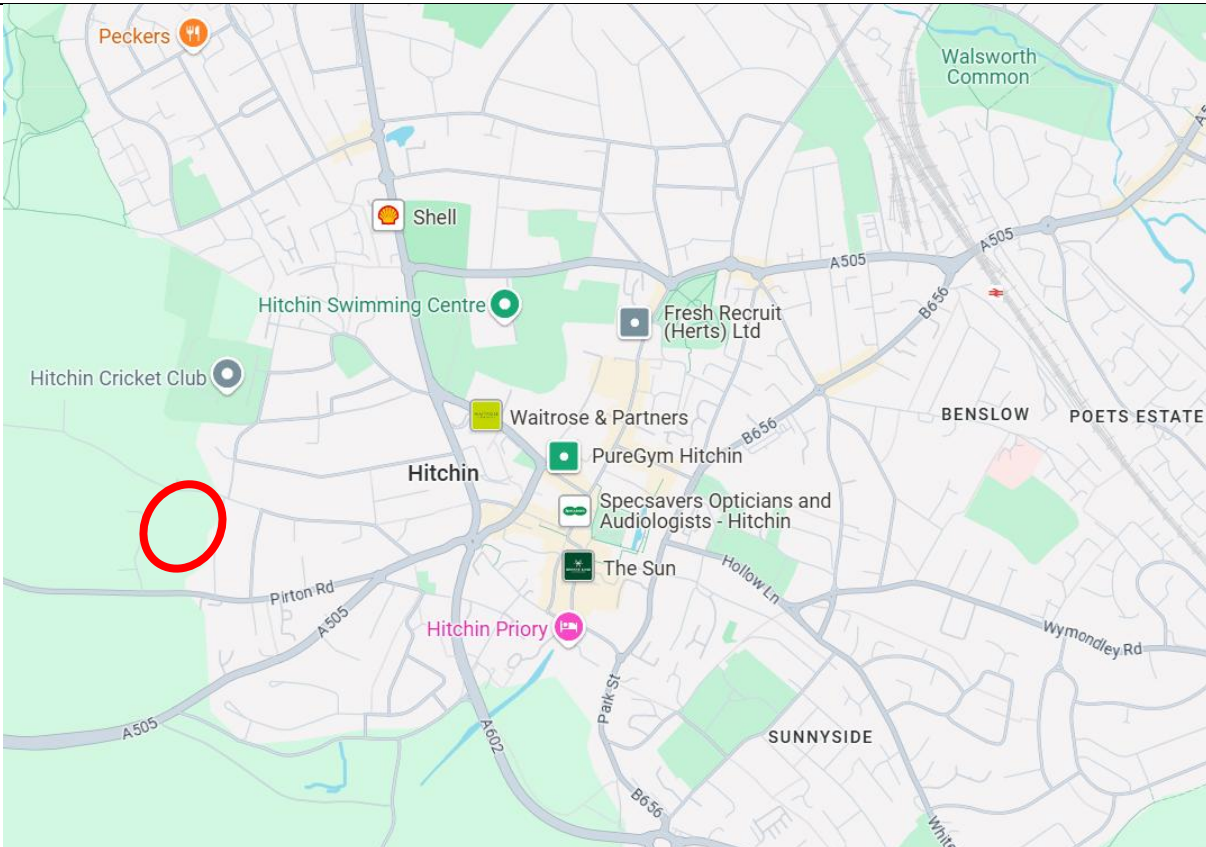
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SITE LOCATION PLAN

Site Close Up:



Local Area Detail:



BRIEF DESCRIPTION OF THE SITE:

The site is located on land south of Gray's Lane, Hitchin, Hertfordshire and is centred approximately at National Grid Reference 517434 229118.

The site is approximately 4.3Ha in area and comprises a roughly rectangular shaped grassed field bounded by hedgerows and mature deciduous trees to the north, east and west and by a mature to semi-mature woodland to the south.

Further surrounding the site is Gray's Lane to the north, Crow Furlong to the east and Pirton Road to the south. Residential dwellings are located largely further east and west with grassed agricultural fields elsewhere.

DESCRIPTION OF THE PROPOSED WORKS:

Site clearance, topsoil strip and cut and fill before building 47 private 2 storey houses, with associated roads and drainage infrastructure as well as hard and soft landscaping. Site includes some areas of open space and footpaths.

Section 2: Site Layout, significant points

SITE LAYOUT - SIGNIFICANT POINTS	
Access/Egress:	Access into Grays Lane shall be off the existing farmers access into the North Eastern corner of the site, off Grays Lane. The existing access shall be used until the S278 entrance is formed in the same position. This shall then form the permanent access into the development. Deliveries from further afield shall be requested to use the A1(M) then A602 to gain access to A505 to Gray's Lane. We will also look to use local suppliers where possible, who may look to use Grove Road, A505, Fishponds Road, Bedford Road to gain access to Gray's Lane.
Compound:	For initial site set up: A first compound set up shall be just inside the existing access by plot 1, including a welfare unit, site office, materials unloading area and car park. Once infrastructure through the site has been installed, a compound for the duration of the works shall be set up adjacent to plot 7. Parking shall be provided on site, utilising the installed development roads and areas adjacent to plot 7 and plots 26-29 & 34-35. Compound will consist of a stacked welfare and office plus toilet block set up.

Materials Storage:	
Materials areas shall be established, with some garages built early for storage. Open space area adjacent to Plot 1, to the north of Plots 40 – 43, adjacent to Plots 30 – 32 and to the south of Plots 38 - 47 shall be the primary materials storage areas. All materials shall be fed from materials storage areas using a telehandler moving store via the designated routes to the build plots. Plant shall be delivered to site within working hours and loaded / unloaded in a safe manner.	
Build Sequence:	
Works shall start with clearing / stripping the site and where required removing topsoil to onsite heaps for re-use at a later point. Infrastructure work to S278 access, drainage, services, and roads will follow alongside the commencement of plot substructure and superstructure build.	
Security Hoardings:	
A mixture of ply hoarding, to most prominent areas, herras on timber posts and herras on feet shall be used to secure the site. All main entrances shall have metal gates, kept locked when not in use. Hoardings shall be painted in company colours and decorated with sales branding where appropriate. All fencing shall be regularly inspected to insure it is kept to a safe, well-maintained standard.	
Construction Vehicles:	
Material deliveries will be ridged and /or articulated lorries. Plant shall be delivered on low – loaders. Muck away shall be carried out with 8-wheel 20 Tonne lorries. Construction workers will arrive in either cars or vans. Car sharing shall be encouraged to reduce the number of vehicles on site as much as possible. Estimated 1 – 20 deliveries per day. 10-30 construction cars / vans.	
Public Rights of Way:	
The site is bordered by one public rights of way; along the Northern Boundary, Gray's Lane is Public Bridleway 4 This shall remain open, clean and maintained always throughout construction upon the development. Whilst the S278 works to the site entrance on Gray's Lane are in progress Public Bridlepath 4 shall be required to be diverted. Relevant Highways permissions shall be sought to carry out this work.	

Section 3: Main duty holders

Client

Name Hill Residential
Address The Courtyard
Abbey Barns
Ickleton
Postcode CB10 1SX
Phone 01223 792700

Principal Contractor

Name Hill Partnerships Ltd
Address The Power House,
Gunpowder Mill,
Powdermill Lane,
Waltham Abbey,
Essex
Postcode EN9 1BN
Phone 020 8527 1400
Fax 020 8501 8770

CDM Designer

Name Hill Partnerships Ltd
Address The Power House,
Gunpowder Mill,
Powdermill Lane,
Waltham Abbey,
Essex
Postcode EN9 1BN
Phone 020 8527 1400

Architect

Name T.B.C
Address
Postcode
Phone

Engineers

Name T.B.C
Address
Postcode
Phone

Section 4: Contractor's selection procedure

CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2018

PROCEDURE FOR PRE-ASSESSING CONTRACTORS/SUB-CONTRACTORS

The CDM Regulations require that the Principal Contractor makes 'reasonable enquiries' to establish the commitment to health and safety and the ability and resources to manage health and safety of contractors. It is also necessary for the Principal Contractor to be able to demonstrate that the 'reasonable enquiries' have been made to ensure compliance with Appendix 4 core criteria for pre assessing sub contractors. As a minimum the following will be carried out to meet these statutory duties:

1 INTRODUCTION

- 1.1 The Hill ("The Company") recognises that there is a legal requirement to ensure that they only appoint subcontractors who have the necessary health and safety competence and resources to carry out their work in a safe manner.
- 1.2 We are committed to engaging our subcontractors in jointly promoting the continuous improvement of our health and safety performance, and we are determined that everyone employed on our projects will be suitably informed, supervised and competent to carry out their duties.
- 1.3 The Company has Preferred Lists of Subcontractors who are selected and appointed in line with company procedures and who have demonstrated technical and health and safety competence.
- 1.4 The detailed subcontract procedures and guidance on their implementation are available on Intranet – Safety.

2 SCOPE

- 2.1 The subcontract procedures are applicable to contractors and designers who would be engaged in the undernoted processes.
 - Concept and feasibility studies.
 - Planning.
 - Outline Design.
 - Detailed Design.
 - Construction and Installation.
 - Commissioning.
 - Maintenance.

3 Pre-qualification Assessment

- 3.1 Management must ensure that any prospective subcontractor, not already approved by the Company, has the necessary health and safety arrangements in place to support us to the required level.
- 3.2 The Company Performa "Subcontractors Health and Safety Assessment for Acceptance for Approved Subcontractor" must be completed for each subcontractor (Appendix HS/05/02). If the subcontractor is deemed to have suitable health and safety competencies they should be graded in terms of their arrangements and the scope of their activities.
- 3.3 There are three grading levels, with Grade 1 being a subcontractor who is competent to manage the health and safety aspects of their activities; Grade 2 being a subcontractor who has health and safety arrangements in place, but who requires input from Hill; and Grade 3 who are subcontractors who are not approved to work within the Hill.
- 3.4 The pre-qualification and selection process will normally be conducted and managed by a person appointed by the Divisional Director at Regional Offices, it is therefore vital that the relevant information is passed onto Project Managers.

The Performa representing the summary of a detailed operation process. A fully documented file in support of the assessment must be maintained in divisional records.

- 3.5 The pre-qualification process relates to the first application to be included on the Preferred List, thereafter re-submissions will be at the Company's discretion.

INFORMATION FOR CONTRACTORS

So far as it is relevant to the activities of particular contractors and so far as information is available, sections of the Health and Safety Plan, together with design information and the health and safety standards that apply, are presented as a part of the tendering documentation. Subsequent to appointment and as it becomes available relevant information is passed to the contractor to facilitate the compilation of pertinent risk assessments/method statements.

SELECTION PROCEDURES

1. CONTRACTORS AND DESIGNERS

Hill select contractors, designers and sub-contractors from those who, from previous experience, are known to adopt an approach to health and safety that is commensurate with the stringent criteria imposed by the company. Those where there is no previous experience are subjected to an enquiry procedure prior to being considered for selection. The criteria adopted in these cases are summarised as follows:

a) DESIGNERS SUB-CONTRACTORS

A primary requirement is membership of a bona fide professional body. This must be supported by successful experience in the type of contract and environment for which the designer is being considered. Sufficient suitable qualified people and sufficient resources must be available to enable the standards imposed to be achieved and the designer must have adequate knowledge of health and safety and associated legislation.

b) CONTRACTORS/SUB-CONTRACTORS

When considered against the degree of inherent risk, which the contract contains, a contractor/sub-contractor, to be eligible, must be able to demonstrate:

- A commitment to the health and safety philosophy
- A capacity to manage health and safety adequately by on site supervision
- The ability and resources necessary to develop and implement the health and safety plan and to deal with high risk elements
- The ability and resources necessary to ensure compliance with the health and safety regime of the project

2. MATERIALS AND SUBSTANCES

Within the contracts undertaken by Hill reasonable efforts are made to use only materials and substances that are low risk so far as the user, others who may be affected and the end user are concerned. In all cases the duties imposed by the COSHH Regulations are fulfilled. During the construction phase all necessary COSHH assessments are provided by the relevant sub-contractor and copies maintained on site. Information concerning hazardous materials and substances, which cannot be avoided by substitution, is incorporated into the Health and Safety File.

3. MACHINERY AND PLANT

The site management must check all machinery and plant supplied for use on the project, before it can be used. Particular inspection items include:

- Suitability of the item when considered against the use for which it is intended
- The availability and validity of documentation provided with the item The general serviceability of the item and where it is necessary, the availability of a suitably trained and qualified operator

- Stored fuels are to have designated areas and suitable bunds for drip trays and spills which are to be maintained and cleared when necessary, which may also require diesel spill kits under the Group Environmental Policy

During use plant and machinery is regularly monitored to ensure continued serviceability and the operator is observed to ensure competence and to avoid malpractice.

All machinery and plant must comply with the Provision and use of Workplace Equipment Regulations 1998 and/or any subsequent amendments.

Section 5: Activities with risks to Health and Safety and the Environment

SITE WIDE ACTIVITIES

Activities with site wide implications, e.g. traffic control, materials storage and movement, access routes, site security and personal safety, etc., and activities which may affect the general public, are planned prior to the project commencing. Management of these is a component of the management of the site and is monitored during safety visits by the Safety Advisor/Manager.

Operational activities are assessed in writing by the project management team to determine hazards and risks. Contractors are required to carry out detailed risk assessments and to produce methods by which identified risks may be either avoided or minimised. Certain high-risk operations, e.g. demolition, deep excavation, working in confined spaces, etc., are exempt from this procedure since they will automatically require detailed method statements to be produced.

Before the operations are allowed to commence, the methods proposed are submitted to the site management for agreement and, in the case of all high-risk activities, must be formally approved by the Safety Manager.

These can include:

- Storage and distribution of materials
- Movement of vehicles on site, particularly as this may affect pedestrian and vehicular safety
- Control and disposal of waste
- Provision and use of common means of access and places of work for all on site staff and visitors
- Provision and use of mechanical plant, which is used by a number of contractors
- Provision and use of temporary support services
- Temporary support structures, e.g. falsework
- Commissioning, including use of permits, etc.
- Protection from falling materials
- Exclusion of unauthorised people
- Protection of the public/information for local residents
- Personal security*
- Environmental matters as listed at para 12 below

* When a contract is located in an area where a genuine concern exists about employees 'off site' personal safety, the Safety Advisor/Manager is to carry out risk assessments to ensure that control measures are in place to identify and effectively mitigate these risks.

Control measures are to be clearly set out, including protection of the public.

PROPOSED MANAGEMENT OF HEALTH AND SAFETY DURING THE CONSTRUCTION PHASE

We believe that the following proposals will help us to mitigate the risks as the work progresses:

1. **TRAFFIC MOVEMENT**

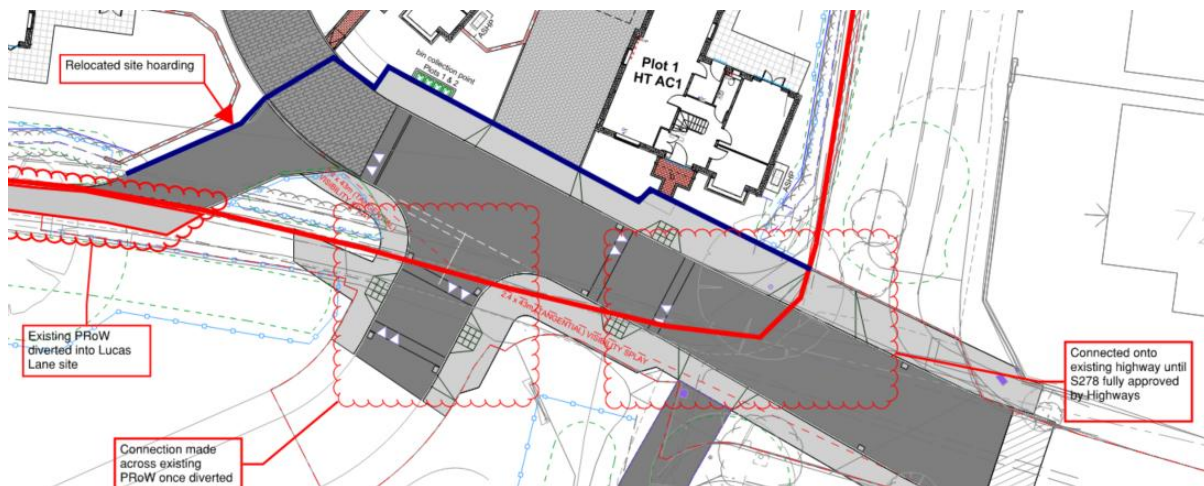
- a) Wherever practical the layout of the site will include separate routes for vehicular traffic and pedestrians with priority given to safe access and egress to pedestrians. This principle will include for the elimination of reversing vehicles wherever possible. The traffic plan is to be made available to all suppliers and contractors working on site.
- b) Any existing fencing to the shared site boundary will be thoroughly examined to ensure that it conforms to HSG 151 and if not will be repaired or replaced accordingly
- c) Heras fencing may be required as a temporary measure and at these times will be 2 meters high with anti-climb mesh.
- d) Ply hoarding or heras fencing shall be used to fence off the site from the public.
- e) Construction activities audible beyond the boundary of the site should not be carried out than between the following times:
 - a. Monday-Friday 08.00am – 6.00pm
 - b. Saturday 8.00am – 1.00pm
- f) Delivery and removal of waste allowable times:
 - a. Monday-Friday 09.30am – 14.30pm
 - b. Saturday 8.00am – 13.00pm
- g) Adequate signage will be displayed directing traffic to/from site and traffic movements into/out of site will be controlled by a trained banksman/ signaller. Signage plan can be found in Section 6: Traffic Management Plan
- h) All deliveries will be either ridged or articulated Lorries via Gray's Lane.
- i) Audible warning devices will be fitted to vehicles that need to reverse, and they will be supervised by a banksman.
- j) A traffic layout plan is contained at the end of this section.

- k) Forklift trucks maybe required to travel on public highways. When doing so, they will not exceed 10mph and will use a fixed flashing beacon to warn members of the public of their presence.
- l) Public Right of Way
 - 1) Grays Lane is a public right of way (PRoW) where the highway ends leading down to two properties to the West. This is to remain open at all time. To enable this the entrance into site shall first be accessed through the existing access off the Highway on Grays Lane, preventing the need to for vehicular access to the (PRoW), as set put in Phase 1 below.
 - 2) The second Phase of the works shall be to install all of the S278 works within with adjacent Lucas Lane development to allow the (PRoW) to be diverted into and out of the Lucas Lane site, as per the approved plans, and for construction traffic to enter into the Lucas Lane site, turning left into the Grays Lane development.
 - 3) The third and final phase shall be to complete the S278 works on the Highway, once local Highways authority has approved the works, providing full permanent access into both developments.

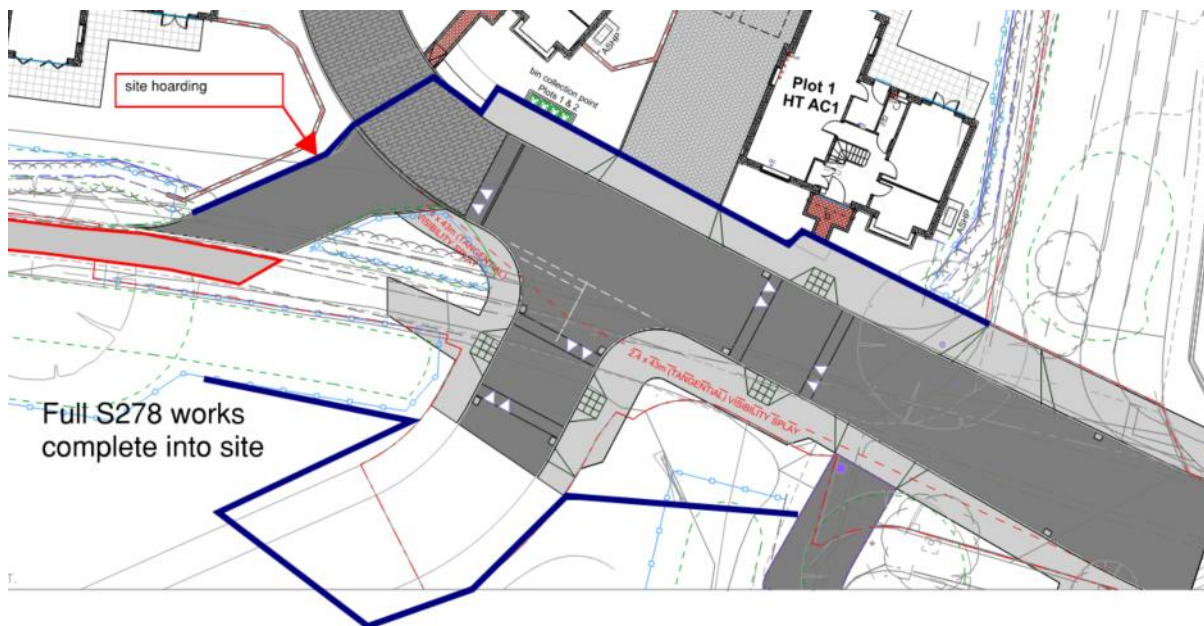
Phase 1 Site Access.



Phase 2 Site Access.



Phase 3 Site Access



2. ACCESS TO/FROM SITE

- a) Site traffic will be directed onto site via Gray's Lane. The approach routes to site are shown on the Construction traffic route plan.
- b) Construction traffic route plan will be issued to all subcontractors and supplies at order stage.

- c) Vehicles arriving and/or exiting site will use the established routes designated with adequate signage. A one-way system, where practically possible, will be established to reduce the congestion of site traffic.
- d) Site vehicles will not be allowed to park outside the site, unless in emergency situations.
- e) Routes for ambulances and fire engines will be kept clear at all times.
- f) The access gates to the site will be securely locked outside normal working hours.
- g) A Pressure Washer shall be available at the main site entrance to clean off any vehicles requiring so before they exit the site. This shall be suitably drained upon the site.
- h) Public roads and roads upon the site shall be road swept as and when required.
- i) Public rights of way are to be maintained at all times.
- j) Following construction working areas and temporary accesses will be restored/reinstated in full. Prior to commencement a highway condition survey will be submitted to highways.
- k) Signage to be installed as per signage signs below, for all phases of entrance works.
- l) All vehicles will be able to comfortably access and egress the site in forward gear, without impacting on Grey's Lane. This shall be done via the entrance phasing plans above and can the tracking plan in section 8 of this report.

3. **UNDERGROUND SERVICES**

All necessary steps will be taken to accurately locate and identify existing underground services prior to any excavation taking place. These steps will include:

- a) Referral to all relevant statutory authority drawings.
- b) Communication with the relevant authorities in order to accurately locate services on site.
- c) Cable Avoidance Tool (CAT) and Genny surveys of all areas prior to excavation work.
- d) Issue of a Permit to Dig by the site manager.
- e) Where necessary a non-intrusive radar survey will be completed.

4. **DUST, NOISE, DISTURBANCE**

- a) Most building operations are inherently noisy and/or dusty, but we will endeavour to keep these to a minimum by the use of sprays where applicable and by ensuring that all plant used on site has the appropriate silencers, baffles, etc.
- b) Dust should not present any great problems, but we will liaise with local representatives regarding any particularly noisy or dusty operations. When working close to the existing buildings temporary dust screens will be erected as required to ensure that dust contamination is kept to an absolute minimum. This will be monitored by the site manager and modified if required.
- c) Noise surveys will be carried out if and when conditions dictate and a copy of such surveys will be kept on site.
- d) Surplus materials will be placed in skips, for removal from site to a registered tip. All excavated material that is not required will be loaded onto suitable lorries and deposited under licence. All demolition materials will be removed similarly.
- f) We will not allow any fires on site for the burning of materials.
- g) Site roads, site, entrance and adjacent public highways shall be regularly cleaned via a road sweep to keep all clean with additional visits as construction activities may require.
- h) Roads and material storage shall be checked at the end of each day to ensure protection of the site outside the hours of construction.
- i) CCTV monitoring shall be set up on site to protect the site out of hours of construction.
- j) Construction activities shall be designed and undertaken in accordance with the code of best practice set out in British Standard 5228 1997.
- k) Waste shall be handled via forklift tipping skips and 6/8/12 yard skips placed in suitable areas upon the site. Skips will be general waste that are sorted for recycling at the waste handlers' facilities. Skips for plasterboard only will also be on site.
- l) Skips shall be changed regularly to prevent overflowing.
- m) Hardcore waste shall be segregated into clean, tidy heaps before being removed from site for recycling.

5. **MANUAL HANDLING**

- a) Designers have a duty under CDM to design out high-risk activities wherever possible, which should include the 'weight' implications of materials specified.
- b) Notwithstanding item 5 (a) above, all 'heavy' materials will be mechanically off-loaded and whenever possible transported around site by mechanical means, i.e. fork lift trucks, pallet trucks, sack trucks, wheelbarrows, etc.

- c) Where risks are identified then contractors will carry out written manual handling assessments, which will be prepared in accordance with Manual Handling Regulations. The assessments must be attached to the method statements.
- d) The manual handling of kerbs and slabs is not permitted and mechanical means will be used wherever practical. If mechanical means are not practical then a detailed risk assessment will be carried out.

6. **PERMITS TO WORK**

Where necessary, the following permits will be issued by Hill:

- a) Permit to Work
- b) Permit to Enter (Confined Spaces)
- c) Hot Works
- d) Permit to Dig
- e) Permit to Lift

7. **COSHH**

- a) Any necessary COSHH Assessments will be made by the relevant contractors and attached to their method statements.
- b) The site manager has overall responsibility to ensure that COSHH assessments are completed and to ensure that all relevant parties on site are aware of any operation that may affect other persons.

8. **METHOD STATEMENTS, RISK ASSESSMENTS**

- a) All necessary Method Statements and Risk Assessments will be prepared and kept in separate method statement files, which are held on site.
- b) We work on the principle of 'He who creates the risk - creates the necessary Method Statement/Risk Assessment'.
- c) The requirement for a Method Statement will be highlighted to the sub-contractor by the Contracts Manager, at the pre-order meeting and the requirement thereof forms part of the contract documents.
- d) All such Method Statements/Risk Assessments must be available on site prior to that operation commencing. These will comply with the requirement of the Health and safety Policy to ensure that they are sufficient in detail and, if acceptable, will be signed on site by all operatives who will agree to comply with the Method statement/Risk assessment at all times. If at any stage of the work the Statement requires revision then work will not be permitted to continue until the revision is in writing and again all concerned have signed it.

9. **PERSONAL PROTECTIVE EQUIPMENT**

Any necessary Personal Protective Equipment (PPE) will be supplied by the relevant employer and must be worn as, when and where necessary. As a minimum, helmets, safety footwear and hi-viz clothing must be worn by all persons on site including visitors who must report to the site office on arrival.

10. PROJECT SPECIFIC ACTIVITIES

The following activities have been identified as containing significant risk and as such these activities will require detailed risk assessment and method statements:

- a) Demolition
- b) Asbestos Removal
- c) Excavations
- d) Contaminated Ground
- e) Falsework
- f) Steel Erection
- g) Scaffolding
- h) Roofwork
- i) Lifting Operations
- j) Confined Spaces
- k) Wall cladding
- l) Installing safety nets
- m) Hand Arm Vibration (HAV) *
- n) Work at Height (WAH)
- o) WBV Whole Body Vibration
- p) Noise
- q) Environmental Matters

* With regards to the above it is the responsibility of the contractor/sub-contractor to provide comprehensive methods and safe systems of work. They should, for example, provide details of all pneumatic tools vibration levels, exposure limits and the same tools noise levels. It is the principal contractor's duty to ensure these are provided.

11. PROTECTION OF THE PUBLIC

In addition to measures previously mentioned, the following actions are to be taken:

- a) Letter drops to close neighbours to keep informed of construction activities
- b) Meetings with concerned parties
- c) Talks to schools

12. ENVIRONMENTAL MATTERS

Construction projects generate many environmental matters that require control measures. To ensure that these matters are controlled the Environmental Tool box talks as listed below will be considered as 'Activities with Risk to Health and Safety' and will be part of the H&S Advisors/Managers inspections regime.

- a) Spill Controls
- b) Water Pollution Prevention (Fuel and Oils)
- c) Dust and Air Quality

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- d) Noise and Vibration
- e) Water Pollution –SILT
- f) Water Pollution- Cement and Concrete
- g) Tree Protection
- h) Storage of Waste
- i) Storage and use of Petroleum, Diesel and Oils
- j) Bentonite
- k) Pumping and Over Pumping
- l) Washing down Plant and Machinery
- m) Be a Good Neighbour
- n) Working on Previously Developed Land

Section 6: Traffic Management plans

Subject: Construction Management Plan

Initial Traffic Management Plan



Subject: Construction Management Plan

Traffic Management Plan, from Grey's Lane entrance



Subject: Construction Management Plan

Traffic Management Plan, Signage Plan



Subject: Construction Management Plan

Traffic Management Plan, Signage Plan, further afield



Section 7: Traffic Routes to Site

Traffic Routes to site



Section 8: Entrance Swept Path Analysis

