

Appendix: Demolition and Construction

Annex 1: Outline Construction Environmental Management Plan (CEMP)

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Construction Environmental Management Plan

ABERFELDY VILLAGE MASTERPLAN

1.0

INTRODUCTION

This outline Construction Environmental Management Plan (CEMP) has been prepared by Blue Sky Building and is submitted in support of a hybrid planning application for the Aberfeldy Village Masterplan. The hybrid planning application is made in relation to the north of East India Dock Road (A13), east of the Blackwall Tunnel Northern Approach Road (A12) and to the southwest of Abbot Road (the "Site") on behalf of The Aberfeldy New Village LLP' ("The Applicant"). The hybrid planning application is formed of detailed development proposals in respect of Phase A for which no matters are reserved ("Detailed Proposals"), and outline development proposals for the remainder of the Site, with all matters reserved ("Outline Proposals"). The Detailed Proposals and Outline Proposals together are referred to as the "Proposed Development".

The Proposed Development comprises the comprehensive redevelopment of the Site. The Proposed Development will provide new retail and workspace floorspace along with residential dwellings and the pedestrianisation of the A12 Abbott Road vehicular underpass to create a new east to west route. The Development will also provide significant, high quality public realm, including a new Town Square, a new High Street and a public park.

The purpose of the CEMP is to outline how the Aberfeldy Village Masterplan construction project will avoid, minimise or mitigate effects on the environment and surrounding area.

It is anticipated that the Final CEMP will be considered a 'living' document. As such, the document will be subject to regular reviews and updates to reflect the actual activities associated with the construction works, particularly where they change throughout the works. This will be prepared by the appointed Contractors.

Framework of this Outline CEMP

This Outline CEMP aims to provide an overarching and strategic framework for the management of environmental effects and the implementation of measures prior to, and during, the construction phase of the Proposed Development. It is based on the London Borough of Tower Hamlets (LBTH) Code of Construction Practice and established good management principles. It includes the following information:

- Information pertaining to data management, roles and responsibilities, structure, mitigation and monitoring, auditing, and non-compliance and corrective actions;
- Information pertaining to staff training, health and safety, community liaison;
- Information relating to the Site and the Proposed Development;
- Outline of the construction works, timing and duration;
- Environmental management measures, for the following elements:
 - Transport;
 - Noise and Vibration;
 - Air Quality;
 - Waste;
 - Ground Conditions;
 - Ecology;
 - Surface Water Management; and
 - Schedule of Environmental Legislation.

2.0

THE FINAL CEMP

Principal Contractor Requirements

The Contractor will identify in the Final CEMP how compliance with the requirements of LBTH Code of Construction Practice (CoCP) will be achieved.

There is a large body of environmental and safety requirements relevant to construction projects, in the form of primary legislation (Acts of Parliament), secondary legislation (Statutory Instruments, including Regulations and Orders), statutory guidance and Codes of Practice. The Contractors will be responsible for identifying new legislation and regulation and complying with all prevailing legislation at the time of construction including any requirements under Health and Safety regulations.

In addition to the environmental requirements described, the Contractors will be responsible for obtaining licences from LBTH before erecting any scaffolding, hoardings, gantries, temporary crossings or fences or depositing a skip on the highway.

A suitably qualified environmental professional will be appointed by the Principal Contractor to prepare the Final CEMP.

Document Control

The Final CEMP will be held and maintained electronically, with the latest revisions identified with a document reference.

Site Management – Roles and Responsibilities

An outline of the anticipated key roles and responsibilities are listed overleaf in Table 1.

Mitigation and Management Measures

The mitigation and management measures outlined in the following sections are to be included within the Principal Contractor’s CEMP unless measures which have a greater level of environmental protection are proposed.

Table 1 Summary of Anticipated Key Roles and Responsibilities relating to the Implementation of the CEMP

Role	Key Responsibilities
The Aberfeldy New Village LLP. (Client)	Responsibility for appointment / allocation of the Principal Contractor, Project Manager and Environmental Manager,
TBA (Principal Contractor)	<p>Responsibility for the enabling and construction activities and holds overall responsibility for the activities on site and implementation of the Final CEMP. Responsibilities include:</p> <ul style="list-style-type: none"> Ensuring that the works are carried out in accordance with the Final CEMP and contract documentation, including the implementation of mitigation and management measures, environmental monitoring, environmental auditing, and other matters covered in this Outline CEMP; Ensuring the appointed contractors / subcontractors are appropriately qualified and competent; Ensure environmental awareness training for all workers, including an induction for all site workers / contractors which includes environmental elements pertaining to the implementation of the Final CEMP; Monitor the performance of contractors / sub-contractors and provide direction as necessary; Liaise regularly with the Environmental Manager; Complete a monthly audit of the Final CEMP and report findings, with follow up on identified actions as required; and Undertaking corrective actions in the event of breaches of the CEMP or applicable environmental legislation. Ensuring that resources are appropriately allocated to allow for the inclusion of the actions included in the Final CEMP for the duration of the project. Responsible for the actions of management of contractors / sub-contractors associated with the construction works and ensuring that they appropriately comply with the requirements of the Final CEMP and applicable environmental legislation.
Environmental Manager	<p>Co-ordinate monitoring and reporting of the Final CEMP implementation, through liaison with the Principal Contractor and other parties as appropriate, to ensure that the works are implemented in accord with the commitments in the Final CEMP. Responsibilities include:</p> <ul style="list-style-type: none"> Undertake environmental monitoring and reporting as specified in the Final CEMP; Undertaking environmental audits in conjunction with the Principal Contractor as specified in the Final CEMP. Reporting of audit findings is to occur on a monthly basis. Regularly review the Final CEMP to ensure it accurately reflects the construction works occurring on site, at a frequency of no less than six months (unless significant changes to the enabling and construction methodology occurs); Ensure that all relevant environmental consents, licences, permits etc. are in place prior to the commencement of the relevant works. Ensure the requirements of these permits are included in the Final CEMP and are adhered to; Act as the first point of contact for environmental issues associated with the Proposed Development; Undertake environmental training (including toolbox talks) as required, to ensure that enabling and construction staff are aware of the environmental requirements; Ensure that the objectives of the Final CEMP are being achieved and that

	<p>are not contrary to any relevant legal requirements;</p> <ul style="list-style-type: none"> Engage with the Principal Contractor on environmental issues identified during the construction works, and issue Corrective Notices where required. Follow-up on such notices is to be undertaken in conjunction with the Principal Contractor to ensure non-compliances have been appropriately rectified.
Environmental Consultant	Advise Client on environmental related matters as requested.
Contractor(s) / Sub-Contractor(s)	<ul style="list-style-type: none"> Work to agreed plans, methods and procedures to minimise environmental impacts; Commit to undertaking works associated with the Project in accordance with the Final CEMP; Undertake the site induction training (which is to include an environmental management element); Report all environmental incidents immediately to their line manager; and Monitor the workplace for potential environmental risks and alert their line manager if any are observed.

Key Contacts

The following Table outlines the Key Contacts for Aberfeldy Village Development.

Table 2 Key Project Contacts

Role	Name	Contact Details
The Aberfeldy New Village LLP (Client)	TBC	TBC
(Principal Contractor)	TBC	TBC
Structural Engineer	TBC	TBC
Environmental Consultant	TBC	TBC
Project Manager	TBC	TBC
Site Manager	TBC	TBC
Environmental Manager	TBC	TBC
Health and Safety Officer	TBC	TBC
Community Liaison Manager	TBC	TBC

3.0

GENERAL FRAMEWORK AND ADMINISTRATION

Public Liaison

The Contractor should provide LBTH Environmental Health Department with a full programme of key activities for the development before it starts.

The specific measures to be implemented by the Contractor will include:

- The Contractor will liaise with LBTH Environmental Health Department on a regular basis, agreeing routine arrangements for each site's activities and ensuring compliance with the Final CEMP.
- The Contractor will be responsible for establishing and maintaining contact with LBTH and local residents; keeping them informed of construction matters likely to affect them.
- This liaison will include the regular and frequent distribution of Newsletters and attendance at meetings at the request of LBTH with representatives of local businesses and residents' groups. (See under community relations below).
- The Contractor will provide an information and reporting telephone 'Hot Line' staffed throughout working hours. Information on this facility shall be prominently displayed on site hoardings. The Contractors' nominated persons will attend monthly reviews with LBTH Environmental Health Department, or otherwise as requested.
- The Contractor will facilitate LBTH Environmental Inspectors to undertake regular planned inspections of the site to check compliance and associated records.
- The Contractor will provide LBTH with a full programme, providing detail on the nature and timing of the main site activities. The contents of this programme are specified in the following section.

Community Liaison

Contact with neighbours and the public throughout the construction programme will be pro-actively maintained, with regular update meetings on no less than a quarterly basis and the issuing of a brief news sheet on progress. Update sheets will be displayed on site hoardings.

The Contractors will nominate community relations personnel, who will be focussed on engaging with the local community. The Contractor will ensure that occupiers of nearby properties and residents are informed in advance of works taking place,

including the estimated duration. The Contractor will inform local businesses and residents likely to be affected by such activities at least 14 days prior to undertaking the works, as well as applying for the appropriate permits and licences, (e.g. hoardings and crossovers).

Neighbour and Public Relations Strategy

To successfully develop and implement a ‘Neighbour and Public Relations Strategy’, the following actions will be undertaken:

- Initial Contact: Once full planning permission has been obtained and contractors have been appointed, formal contact will be established with the nearest neighbours and those who could potentially be affected by the construction works; and
- Contact during Works Period: A single point of contact for neighbour and public relations will be established, with a senior member of the project staff nominated for the role. Contact details for this single point of contact will be displayed on the site hoarding. Outside normal working hours, site security will act as the main point of contact via a dedicated phone number. Security will alert the staff contact if necessary (available 24 hours). Should there be any complaints, these will be logged, fully investigated and reported to the relevant department within LBTH as soon as possible. The complainant will be informed as to what action has been taken.

Emergency Incident Communication

In the case of work required in response to an emergency, LBTH and all neighbours will be advised as soon as reasonably practicable that emergency work is taking place. Potentially affected occupiers will also be notified of the ‘hotline’ number, which will operate during working hours.

Construction Staff and Training

All site construction staff to be made aware of the requirements of the CEMP and will be made responsible for its implementation. Regular training is to be implemented where deemed appropriate, and in response to non-compliance incidents.

Health and Safety

The Principal Contractor will prepare and implement a project specific Construction Phase Plan, in accordance with The Construction (Design and Management) Regulations (CDM Regulations). This Plan is to be provided to, and agreed with, LBTH (and other relevant parties as required).

4.0

PROJECT OUTLINE

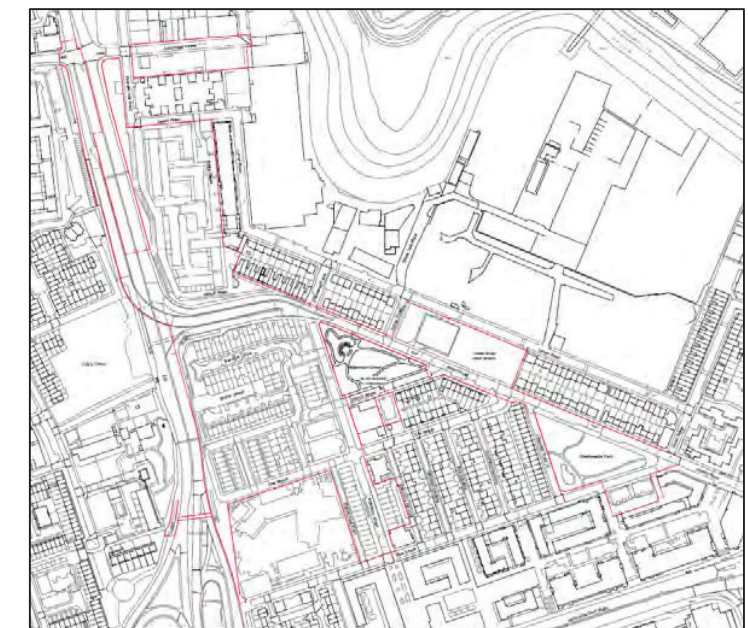
The Site

The Proposed Development is located on Land to the north of East India Dock Road (A13), east of the Blackwall Tunnel Northern Approach Road (A12) and to the southwest of Abbot Road.

The Site is located in Poplar, within the administrative boundary of the London Borough of Tower Hamlets. The Site is 8.14 hectares (approx. 20 acres) in total and comprises:

- Abbott Road;
- Aberfeldy Street;
- Balmore Close;
- Blairgowrie Court;
- Heather House;
- Jura House;
- Tartan House;
- Thistle House;
- Kilbrennan House;
- Nos. 33-35 Findhorn Street;
- 2a Etrick Street;
- 384 Abbott Road;
- Lochnagar Street;
- Aberfeldy Neighbourhood Centre;
- Nairn Street Estate; and
- Leven Road Open Space and Braithwaite Park are included for their enhancement.

Location Plan



Overview of the Proposed Development

The Aberfeldy Village Masterplan aims to deliver, up to 1628 new homes, new workspace, a new high street, new and improved open space and the pedestrianisation of the A12 Abbott Road vehicular underpass.

The anticipated works comprise residential development and associated demolition and public realm improvements to be delivered in four phases. The works are summarised as:

- Phase A – Buildings H1 to H3, I and J (the Detailed Proposals);
- Phase B – Buildings A1 to A3, B1 to B5, and extensive highways and public realm alterations;
- Phase C – Buildings C1 to C4 and E1 to E3;
- Phase D – Buildings D1 to D4; and

Public realm works to be delivered in each phase.

Construction Sequence

The Proposed Development is expected to be completed in four construction phases, sequenced to suit a phased completion and occupation. The proposed development is currently planned to be completed and occupied in the sequence: Phase A-B-C-D.

Public realm and highways works will be completed within each phase to suit the occupation sequence with the larger elements of highways alterations planned with Phase B.

Project Programme

The current expectation is that the demolition and construction works would take approximately 128 months (10 years 8 months). Phases may be constructed in an overlapping sequence. The Contractor is to provide the Environmental Health Department with a full programme. This will include:

- detailed method statement for works and activities affecting the highway
- detailed method statements for specific/special activities in line with the principles identified in this report
- details of site traffic movements showing the projected number of vehicles; what is being delivered, when peaks in activities occur, traffic marshalling arrangements.
- routes to site for deliveries.
- The Contractor will agree detailed schedules of work with the Inspectors acting on behalf of LBTH prior to commencement of development to assess the potential for nuisance.

Indicative Construction Timetable

Construction Task / Activity	Duration	Start Date (Quarter and Year)	Completion Date (Quarter and Year)
Phase A Site Establishment & Demolition	5 months	Year 1 Q3	Year 2 Q1
Phase A Construction.	28 months	Year 1 Q3	Year 3 Q4
Phase B Demolition	5 months	Year 3 Q3	Year 3 Q4
Phase B Construction	36 months	Year 4 Q1	Year 6 Q4
Highways: A12/ B125 Junction	15 months	Year 3 Q4	Year 4 Q4
Highways: B125 realignment	12 months	Year 5 Q1	Year 5 Q4
Public Realm: Underpass Pedestrianisation and landscape	12 months	Year 6 Q1	Year 6 Q4
Phase C/ D Demolition	7 months	Year 6 Q3	Year 6 Q4
Phase C Construction	36 months	Year 7 Q1	Year 9 Q4
Phase D Construction	22 months	Year 10 Q3	Year 12 Q2

5.0

CONSTRUCTION OVERVIEW

This section of the document will identify the expected construction methodology of the project. Much of the design is at an early stage and more detailed construction planning will be carried out as the individual building designs become more advanced

The construction of the Proposed Development will comprise the following key stages, overlapping across the phased construction sequence.:

1. Site establishment;
2. Demolition and site Preparation;
3. Substructures/ Foundations;
4. Superstructures;
5. Building Envelope;
6. Fitting Out; and
7. Landscaping (sequenced to suit the completion of each phase).

Pre-construction Planning

Prior to commencement of works on site a period of pre-construction planning and activities are required to ensure works can commence.

- Production of a detailed CEMP including:
- Neighbour liaison before the commencement on site to explain the nature of works.
- Liaison with the project teams of potentially ongoing local developments to agree shared and combined logistics issues.
- Condition survey of boundary walls and fences.
- Condition survey of highways.
- Existing statutory services surveys.
- Ecological surveys to facilitate site clearance.
- Unexploded ordnance checks.
- Formulation of project Construction Phase Plan and risk assessments.
- Formulation of detailed Site Waste Management Plans and environmental plans as per the current DEFRA guidelines.
- Development of project specific method statements.
- Production of detailed works programmes and sequencing.
- Hoarding and scaffold licences for works on the perimeter boundary.
- Section 80 demolition notices.
- Construction notices.
- Notices for works on the highway in accordance with the Highways Act 1980 and Road Traffic Act 1998.

- Connections to existing statutory services and main sewers.
- Licence for discharge of water from the site into the public sewer
- baseline movement & environmental monitoring establishment
- Submission of section 61 Prior Consent application
- Register the project under the Considerate Constructors Scheme.
- Mobilisation of selected plant and operators

Site Establishment

One of the first site activities as each phase starts will be to establish the area as a construction site. The working areas will be secure, and the general public will be separated from the works. The construction site areas will be secured prior to works commencing with solid and well maintained, 2.4m high hoarding. Secure access points with wheel cleaning facilities will be established at the access and egress locations. Pedestrian access points for operatives and staff will generally be located close to the main vehicular access gates with separate pedestrian gates and footpaths provided.

The project offices are proposed to be established in Jura House (subject to planning permission), a residential building within the phase D site. Welfare and individual site offices will be located in temporary modular buildings on each phase. Temporary accommodation and welfare facilities will be adapted as required as demolition and construction processes.

Specific Site Establishment activities will include:

- Hoardings will be 2.4m high, decorated, with clear pedestrian warning signs and the required notices of Contractors Contact details. Bulkhead lighting to be provided in accordance with LBTH licence.
- Vehicle and pedestrian access to the works will be via separate entrances controlled by fully trained gatemen and traffic marshals.
- Installation of site temporary electrics, lighting, water and fire alarms. The site will operate from connections to the permanent utility supplies rather than generators.
- Establishment of site security provisions to ensure that the site is protected against unauthorised or unlawful entry and potential theft from site.
- Wheel cleaning facilities will be established at all site access and egress locations.
- Establish project offices in temporary cabins located inside the construction boundary hoardings.

Site Establishment

Construction site areas will be made safe and secure prior to works commencing and the general public will be separated from the works, with the use of solid and well maintained, 2.4m high hoardings. Secure access points with wheel cleaning facilities will be established at all site access and egress locations. Pedestrian access points for operatives will generally be located close to the main vehicular access gates with separate pedestrian gates and footpaths provided. Public access to neighbouring buildings will be safeguarded and will be entirely separate from construction areas.

In addition to the proposed use of Jura House subject to planning permission as the main Project Office, site offices and associated welfare facilities for the workforce will be provided for each site. Temporary accommodation and welfare facilities will be established in temporary cabins as works progress. The locations will be identified in advance and agreed with the LBTH as part of the detailed construction and demolition logistics programming and approval of the DMS, CMS and CEMP. It is anticipated that further information and details on this will be submitted, pursuant to planning conditions in relation to construction and demolition management.

Perimeter scaffolding with Monarflex sheeting will be designed to ensure that safe access for both pedestrians and vehicles accessing the retained neighbouring buildings and surrounding streets.

Demolition

Two methods of demolition will be adopted and will be refined following further risk assessment of the individual sites and surrounding areas. Taller buildings that lie alongside congested areas and public highways will be demolished using a "Top Down" method. 'Top-Down' demolition offers more control and accuracy over standard mechanical demolition methods. The Blair Street site where Building I is proposed in Phase one is an example where "Top Down" would be appropriate. The majority of buildings, where a safe buffer zone exists within the site boundary, will be demolished by "High Reach" machines. This dual approach to demolition will ensure that high reach plant operated at a considerable distance from the public and is contained within the central areas of the site. Further details of the methods to be applied follow below.

The first demolition areas will focus on both the Phase A construction areas. The site for the terrace "J" has been previously demolished and once secured will be investigated and cleared of vegetation and below ground obstructions. Sites of buildings F, H and I will be secured, hoarded and prepared for demolition by top down or high reach methods.

A "Soft Strip" will entail the removal of all internal furnishings, windows and roof plant, and will include the safe removal of asbestos within the existing buildings by a specialist contractor. Advanced building surveys will be carried out as part of the pre-demolition process following vacant possession of each building, including a full Refurbishment & Demolition (R&D) survey of materials containing asbestos. Waste arising from the soft strip will be separated on site into recyclable waste streams for processing off site.

Top-Down demolition is undertaken by encapsulating the building with scaffolding and Monarflex, back propping the floors where required (subject to engineer's report) and lifting smaller machines into the building by crane. The building is then reduced a floor at a time. The arisings from the demolition shall either be loaded down stripped out lift shafts or lifted down in bins using a crane.

For High Reach demolition of the central areas of the site, buildings are demolished in a step like manner working through the structural bays on each floor using excavators fitted with long reach arms. Arisings on the floors will be scraped off periodically to keep the weight on the slabs to a minimum. Independent scaffolding and Monarflex will be used on key elevations and water hoses fed up through the machine arm assists dust suppression. Arisings on the ground will be processed for crushing using standard height machines.

The buildings will primarily be dismantled using a combination of machine mounted pulverisers, crushers and shears. Water dousing will be carried out using recycled water where possible, to control dust. Noise levels will be controlled using best practice controls and management including the provision of screening where required. It is anticipated that the concrete materials recovered from the demolition process will be crushed, graded and stockpiled on site, and then ultimately reused on site. In the event of contaminated material being identified, the contaminated material will be segregated and removed from site to a suitable landfill.

Various utilities and services exist on the site. To eliminate the risks associated with live services, existing services will be identified and terminated prior to demolition commencing. Temporary services will be installed in advance of these terminations as necessary. All new cables and services will be clearly marked, located and identified.

Substructure/ Foundations

All of the proposed buildings are founded at ground level with the exception of Building B3 in Phase B which has a single level basement.

New piled foundations will be required to support the new construction. Design is at an early stage and remains subject to further site investigations, but current expectation is that piles for Phase A Buildings will be Continuous Flight Auger (CFA), 600mm diameter and up to 20m deep.

When demolition is complete to each site a piling platform will be constructed using compacted crushed demolition arisings that will have been stockpiled for this purpose. Pile probing for below ground obstructions will be undertaken prior to forming the piling platform.

Piling will be undertaken from a piling platform at the existing ground level. Excavation for below ground drainage, ground beams and pile caps will follow piling operations. Basement (B3 only) and ground level slabs will then be cast.

A single piling rig is likely to be on site for each of the buildings in Phase A, although multiple rigs may operate on the larger phases in the future. Piling will be serviced by small crawler cranes and 360° excavators. Concrete will be delivered by ready mix trucks and placed directly from the vehicle's placement chute where possible.

Fixed tower cranes, needed for building each superstructure, will be erected during the piling works and will be used to service the remaining substructure construction. Cranes will generally be positioned within the footprint of each of the taller buildings. Low rise structure will be constructed using smaller mobile cranes.

Superstructure

The proposed superstructures to the residential buildings will be reinforced concrete framed with ribbon columns and flat slab floors. The concrete cores may be constructed ahead of the main frame by slip-forming or jump-forming. Consideration will be given in the detailed construction planning to utilising prefabricated elements, such as columns and staircases. Balconies will need to be carefully considered as the final detailing can dictate method and sequencing of the superstructure frames. It is envisaged that the final balconies design will allow a 'clip-on' approach, fixed to the external cladding.

Fixed tower cranes will be used to assist with construction of the superstructures in a conventional manner on a floor-by-floor basis. Concrete will be placed by concrete pumps and placing booms.

Access and edge protection will be incorporated in the design of the falsework system which could include climbing screens to contain construction operations for the taller buildings.

The lifting equipment (e.g. mobile cranes, tower cranes, other lifting equipment such as elevated working platforms or forklifts etc) that will be required throughout the construction works is yet to be determined in detail. However, as part of the DMS and CMS, a lifting strategy will be developed and prepared in accordance with the detailed design and statutory obligations. The LBTH will be consulted throughout preparation of the lifting strategy to ensure an appropriate proposal is put forward for consent. All necessary permits and licenses (e.g. permits and over sailing licenses (where applicable) for tower cranes) will be secured, and risk assessments and safe working instructions prepared and approved, ready for implementation by the contractor prior to the use of this type of equipment on site.

Building Envelope

The new cladding will be a mixture of components for which specific methodologies will be developed once the design has been further developed. For the purposes of construction planning for we have assumed that the inner skin of the perimeter walls to residential blocks would ideally be a Metsec, or similar SFS (steel framing system) which will allow earliest creation of a watertight environment for fit out works to commence.

For the low-rise buildings traditional scaffolding would be erected as concrete frames near completion for the construction of SFS, windows and membranes; followed by hand laid brickwork, or rendered rainscreen panels. For the taller buildings mast climber platforms may be used for access rather than scaffolding.

Materials will be transported vertically by platform hoists. Mortar would be delivered as dry ready mix and stored on site in silos for daily preparation and use.

The final operations for tower cranes will be to deliver roof materials, plant and equipment, after which they will be dismantled and removed. External hoists will remain in position throughout the envelope construction and to move fit out materials. Hoists will remain in position until permanent lifts are operational.

Fitting Out

Finishes and services fit out will commence once a level of temporary or permanent water tightness has been achieved, working from the lower floors upwards. The fit-out works will comprise the complete installation of finishes and services to the residential units, common areas and cores.

Plant will be installed when plant rooms become available, and services distribution will then proceed. Prefabrication of

components will be adopted wherever practical in order to reduce site time and numbers of deliveries.

As each building nears completion the construction site area will be reduced, and the local hard and soft landscaping areas released. Finally, the temporary site facilities and hoardings will be cleared, and the final landscaping completed for the public realm.

Highways

The proposed project includes the realignment of the junction of the B125 (Abbott Road) and A12 including the pedestrianisation and landscaping of the current northbound underpass. The Highways alterations will mostly be undertaken in Phase B. The junction and underpass will remain open throughout the demolition and construction to help mitigate the additional traffic flows. Early construction of the new junction (in year 4) will provide a direct construction access to Phase B from the A12.

The new alignment of Abbott Road will be constructed through the Phase B site in parallel to construction of the buildings in year 5 and the underpass would be closed around the end of that year. The pedestrianisation and landscaping of the underpass would then be concluded in year 6, the final year of Phase B works.

6.0

THE CONSTRUCTION SITE

This section outlines the requirements relating to site management practices, ranging from the location of accommodation and equipment to the operation of equipment on site. It outlines procedures that should be implemented during site operations. These relate to working hours, site layout & appearance, and good housekeeping.

Representatives from the Contractors and LBTH should regularly inspect the construction site to ensure that these procedures are followed. The Contractors must follow a 'good housekeeping' policy at all times.

The specific measures to be implemented by the Contractors will include:

Working hours

Working Hours will be in accordance with LBTH's CoCP:

08.00 to 18.00 Monday to Friday

08.00 to 13.00 Saturday

No working on Sundays, Bank or Public Holidays

To ensure that the impact of the enabling and construction is kept to a minimum we propose that the contractors should submit a Section 61 Prior notice application to LBTH.

Good housekeeping

The Contractors will:

- ensure considerate site behaviour of the Contractors' staff;
- ensure the noise from lorry reversing alarms and the like are kept to minimum levels;
- prohibit open fires;
- ensure that appropriate provisions for dust control and road cleanliness are implemented;
- remove rubbish at frequent intervals, leaving the site clean and tidy;
- frequently inspect, repair and re-paint as necessary all site hoardings to comply with the conditions of LBTH Licence – all flyposting and graffiti is to be removed as soon as reasonably practicable and within 24 hours of notice from authorities;
- maintain toilet facilities and other welfare facilities for its staff;
- remove food waste;

- prevent vermin and other infestations; and
- undertake all loading and unloading of vehicles inside the site boundary.

Public information

The site hoarding will display all necessary health & safety material.

Security

The Contractors will ensure that the site is secure and will prevent unauthorised entry to or exit from the site. Site gates will be closed and locked when there is no site presence. Alarms will incorporate an appropriate cut-out period. Access and egress will be via controlled security gates.

Hoardings, site layout and facilities

The site will be completely secure to deter public access. The proposed hoarding line and gates, all of which will be in accordance with LBTH licencing requirements, are shown on the logistics plans in section 7. It is intended to provide protection from noise and dust at all times through the erection of encapsulating scaffolds, climbing screens and physical barriers as appropriate to the task.

Site welfare arrangements will be maintained in temporary accommodation in modular cabins.

Emergency planning and response

The Contractors will develop a plan for emergencies to incorporate:

- Emergency procedures including emergency pollution control to enable a quick response.
- Emergency phone numbers and the method of notifying LBTH and statutory authorities. Contact numbers for the key staff of the Contractors will also be included. The Contractors will display a 'contact board' on the hoarding identifying key personnel with contact addresses and telephone numbers, so that members of the public know who to contact in the event of a report or query.
- London Fire Commissioner requirements for the provision of site access points.
- Site Fire plan and management controls to prevent fires.
- A plan to reduce fire risk and potential fire load during construction, operation and subsequently during maintenance or repair. The project will comply with any third-party requirements as may be appropriate.

Access and Egress Gates

The main site access gates will be located as indicated on the logistics plans in section 7.

Materials Handling & Cranes

Materials handling is a major logistics exercise for large projects. Prefabrication will be adopted extensively with components being brought to site in large sections where possible. Large volumes of materials will be required at times calling for the highest levels of delivery and handling management. Delivery vehicles will enter the sites as shown on the site logistics drawing and leave in forward gear.

LBTH approvals will be sought for tower crane locations. Luffing jib cranes will be used such that oversailing of neighbouring property can be ruled out by computer limiter. Cranes will be positioned ensuring that out of service radii do not extend beyond the site boundary.

Considerate Constructors Scheme

The site will be registered with the 'Considerate Constructors Scheme'. This scheme ensures that contractors carry out their operations in a safe and considerate manner with due regard to neighbours, passing pedestrians and road users.



7.0

SITE LOGISTICS

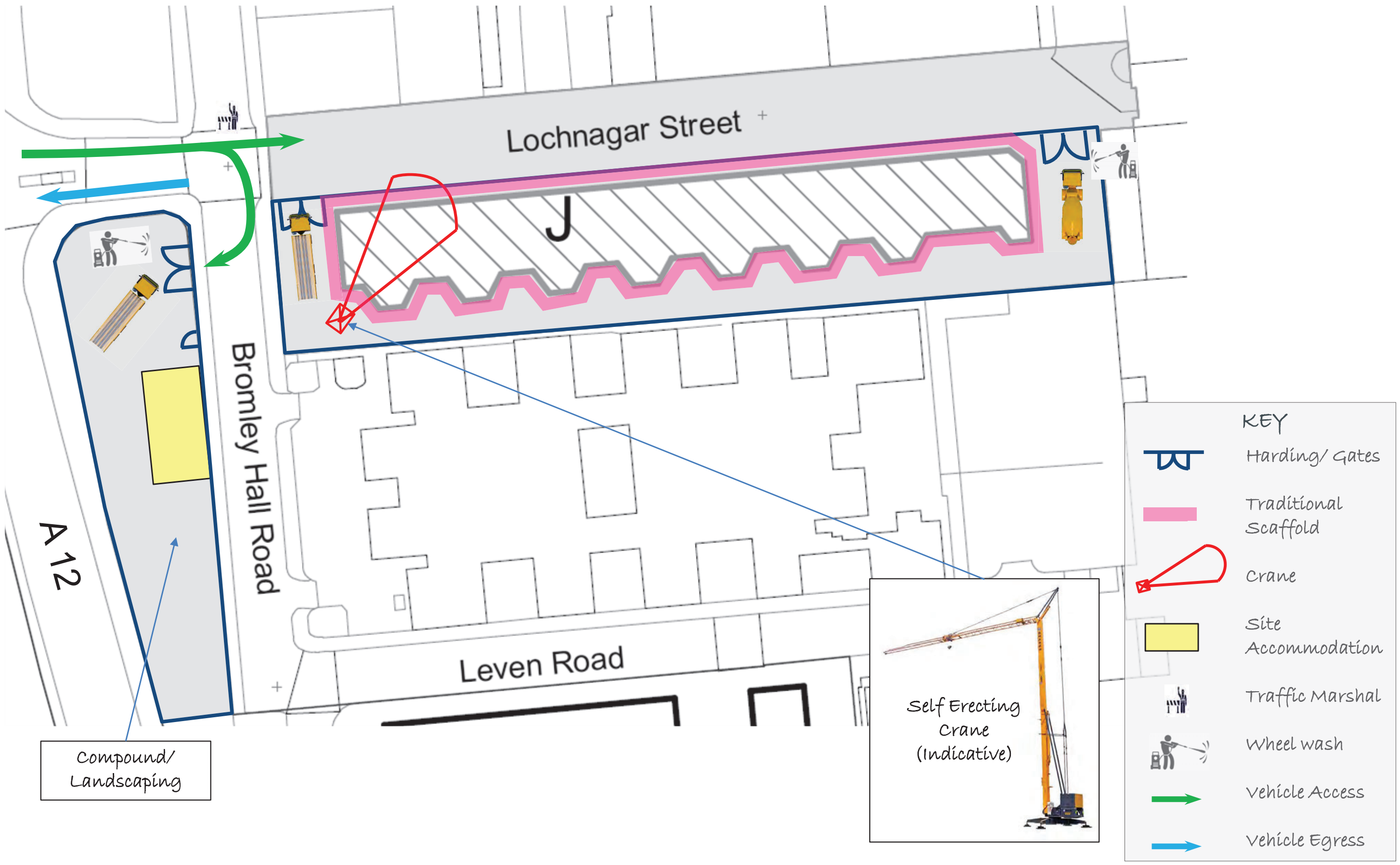
The efficient management of the site logistics will be vital to the success of the project. A key strategy of logistics for a construction project is to ensure that the products and materials arrive on site at the time and in the quantities that are required.

The Contractor will ensure that the necessary pre-planning is undertaken and that the quality of the communication between those planning the project and those supplying the products and materials is maintained throughout the duration of the project.

The drawings overleaf illustrate the proposed overall logistics plan for the sites that incorporates the following key features:

- Sites are fully hoarded throughout the construction periods;
- Safe segregated access to adjacent properties maintained;
- All vehicle access via gates as indicated;
- All loading and unloading to be within the site boundary;
- Access and egress to be controlled by fully manned security gates;
- Tower cranes to be selected and located to ensure no oversailing outside the site boundaries.

**Please refer to Phasing and Logistics drawings
BSB-AV-001-010 overleaf**



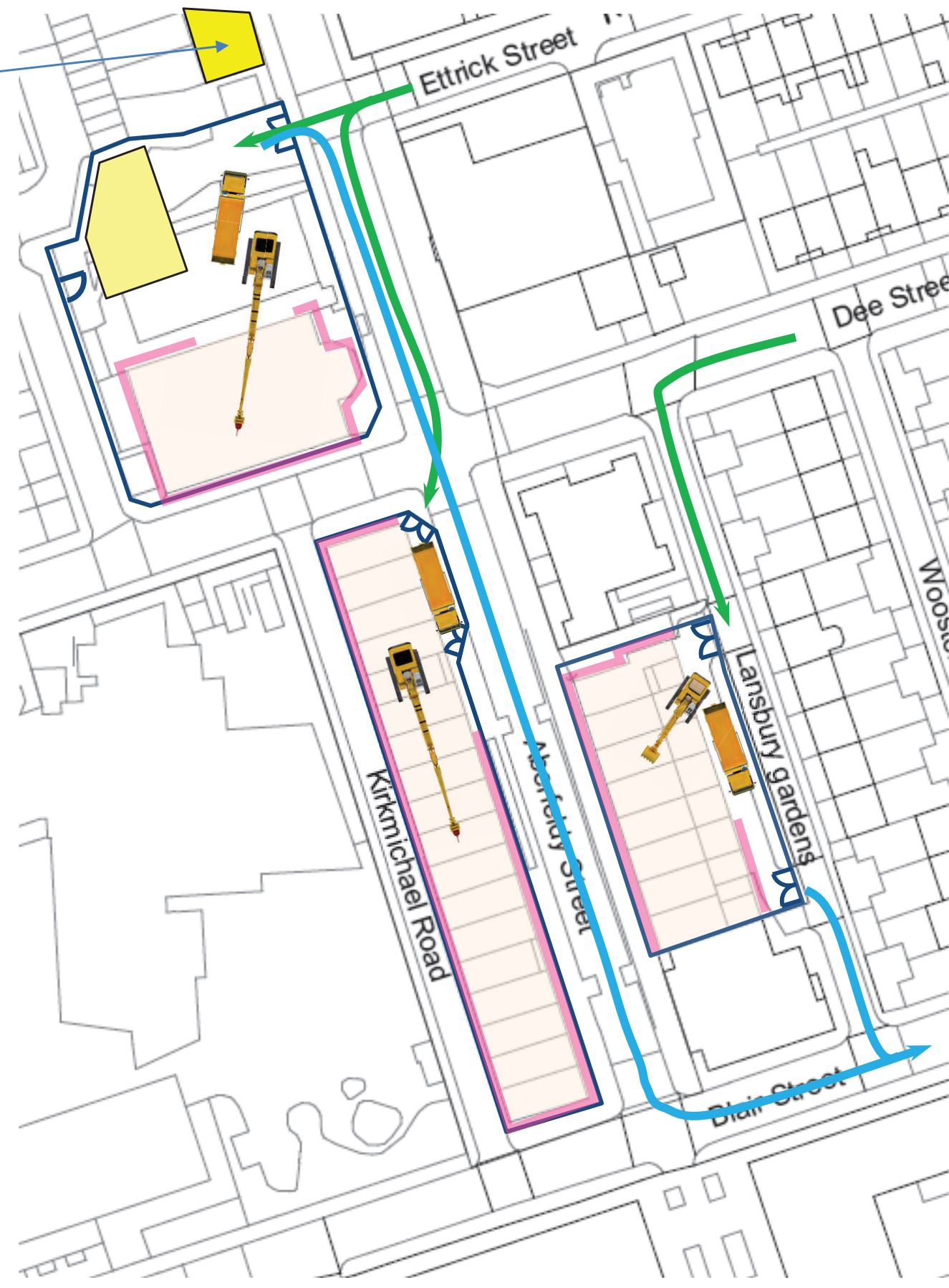
Compound/
Landscaping



PROJECT: Aberfeldy Village
CLIENT: EcoWorld
TITLE: Phase A. J1. Construction Logistics

DRAWING NO.: BSB-AV-001
REVISION NO. & DATE: Rev 0 – 24/09/2021

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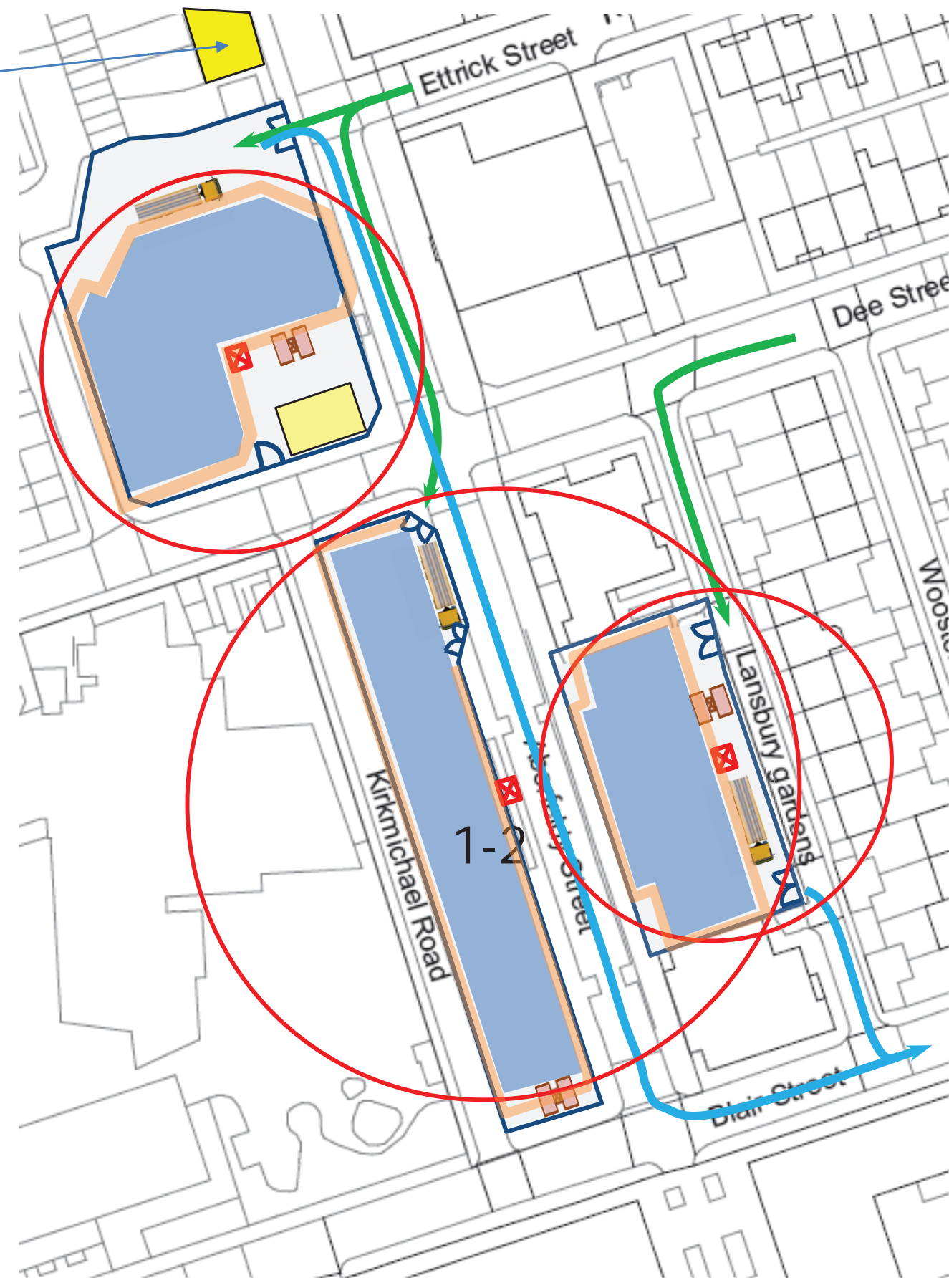
KEY	
	Harding/ Gates
	Traditional Scaffold
	Long Reach Excavator
	Site Accommodation
	Traffic Marshal
	Vehicle Access
	Vehicle Egress



PROJECT: Aberfeldy Village
 CLIENT: EcoWorld
 TITLE: Phase A. F1 & H1-3. Demolition Logistics

DRAWING NO.: BSB-AV-002
 REVISION NO. & DATE: Rev 0 – 24/09/2021

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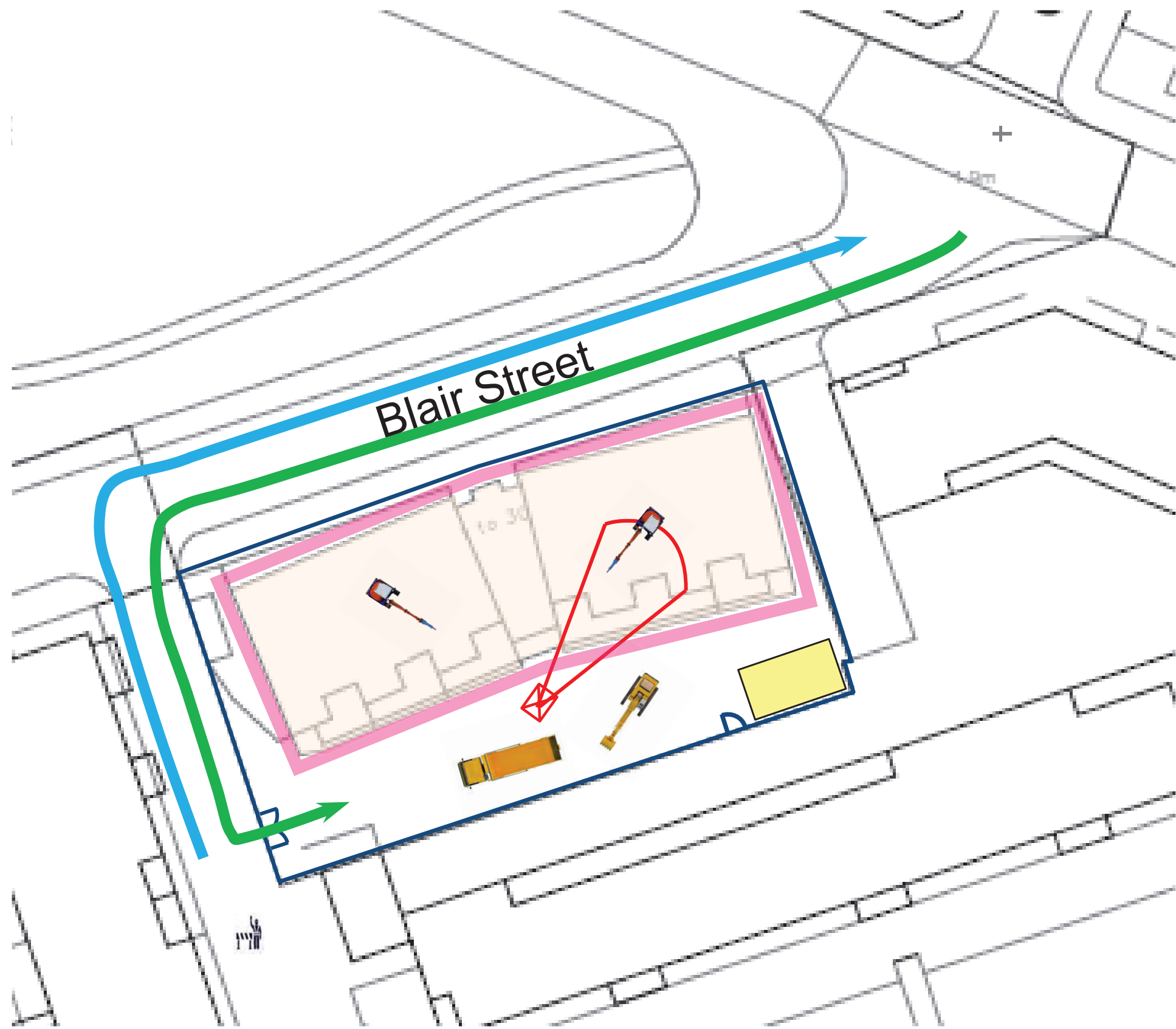


KEY	
	Harding/ Gates
	Mast Climbers
	Luffing Jib Tower Crane
	Site Accommodation
	Platform Hoists
	Vehicle Access
	Vehicle Egress



PROJECT: Aberfeldy Village
 CLIENT: EcoWorld
 TITLE: Phase A. F1 & H1-3. Construction Logistics

DRAWING NO.: BSB-AV-00
 REVISION NO. & DATE: Rev 0 – 24/09/2021



KEY	
	Harding/ Gates
	Traditional Scaffold
	Mini Excavator/ Breaker
	Site Accommodation
	Traffic Marshal
	Vehicle Access
	Vehicle Egress



PROJECT: Aberfeldy Village
 CLIENT: EcoWorld
 TITLE: Phase A. I1. De olition Logistics

DRAWING NO.: BSB-AV-004

REVISION NO. & DATE: Rev 0 – 24/09/2021

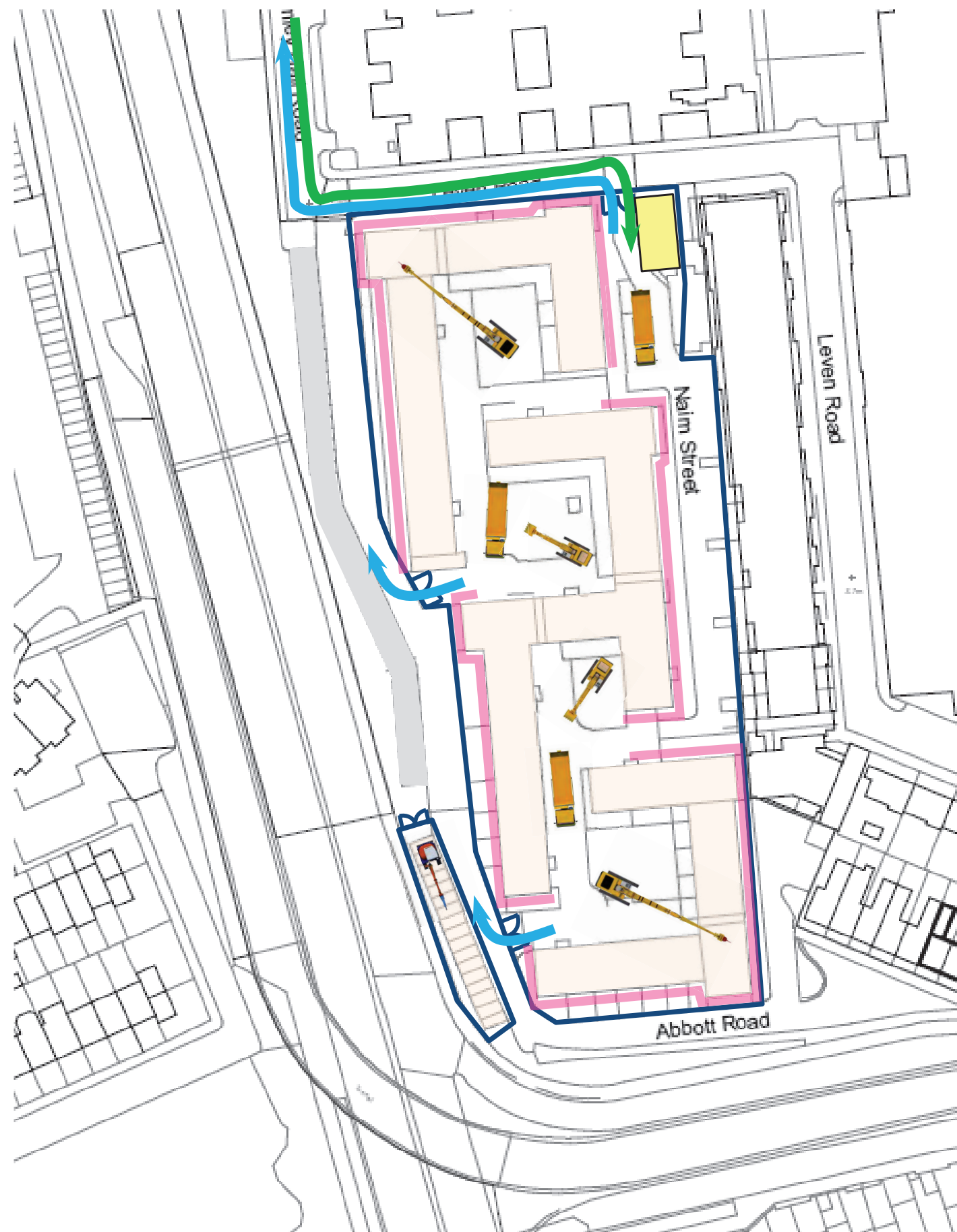


KEY	
	Harding/ Gates
	Heras Fence
	Mast Climbers
	Luffing Jib Tower Crane
	Platform Hoists
	Site Accommodation
	Traffic Marshal
	Vehicle Access
	Vehicle Egress



PROJECT: Aberfeldy Village
 CLIENT: EcoWorld
 TITLE: Phase A. I1. Construction Logistics

DRAWING NO.: BSB-AV-00
 REVISION NO. & DATE: Rev 0 – 24/09/2021



KEY	
	Harding/ Gates
	Traditional Scaffold
	Long Reach Excavator
	Loader Excavator
	Mini Excavator
	Site Accommodation
	Vehicle Access
	Vehicle Egress

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PROJECT: Aberfeldy Village
 CLIENT: EcoWorld
 TITLE: Phase B. A1-3 B1- . Demolition Logistics

DRAWING NO.: BSB-AV-00
 REVISION NO. & DATE: Rev 0 – 24/09/2021



New junction to be constructed and used for construction vehicles until through road available

Existing road layout maintained until new route fully available

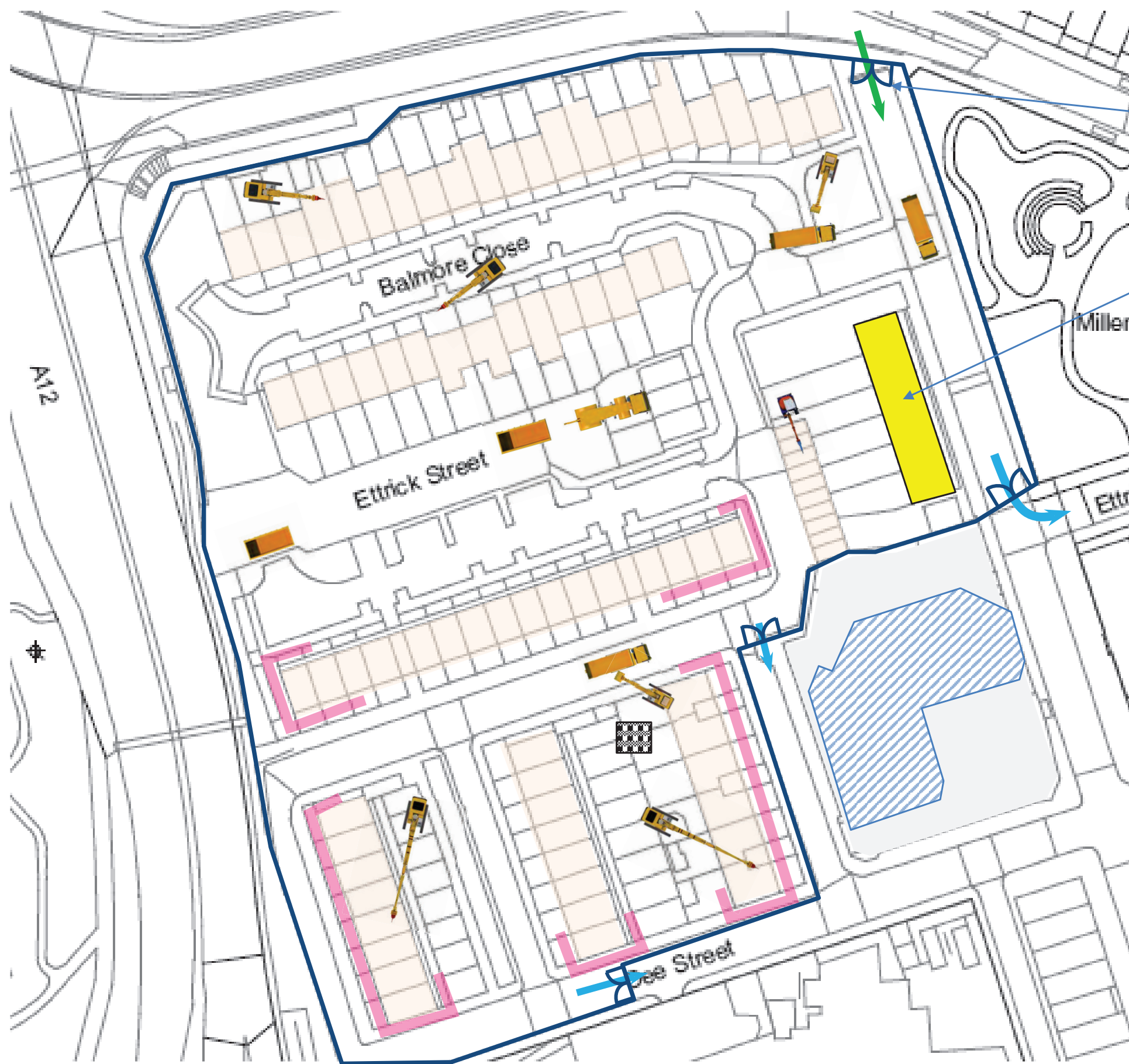
Jura House - Project Office

KEY	
	Harding/ Gates
	Mast Climbers
	Traditional Scaffold
	Luffing Jib Tower Crane
	Mobile Crane
	Site Accommodation
	Platform Hoists
	Vehicle Access
	Vehicle Egress



PROJECT: Aberfeldy Village
 CLIENT: EcoWorld
 TITLE: Phase B. A1-3 B1- Construction Logistics

DRAWING NO.: BSB-AV-00
 REVISION NO. & DATE: Rev 0 – 24/09/2021



Construction access from new Abbott Road alignment

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KEY	
	Harding/ Gates
	Traditional Scaffold
	Long Reach Excavator
	Loader Excavator
	Mini Excavator
	Roll on/off skip
	Concrete Crusher
	Site Accommodation
	Vehicle Access
	Vehicle Egress



PROJECT: Aberfeldy Village
CLIENT: EcoWorld
TITLE: Phase C D. Demolition Logistics

DRAWING NO.: BSB-AV-00
REVISION NO. & DATE: Rev 0 – 24/09/2021

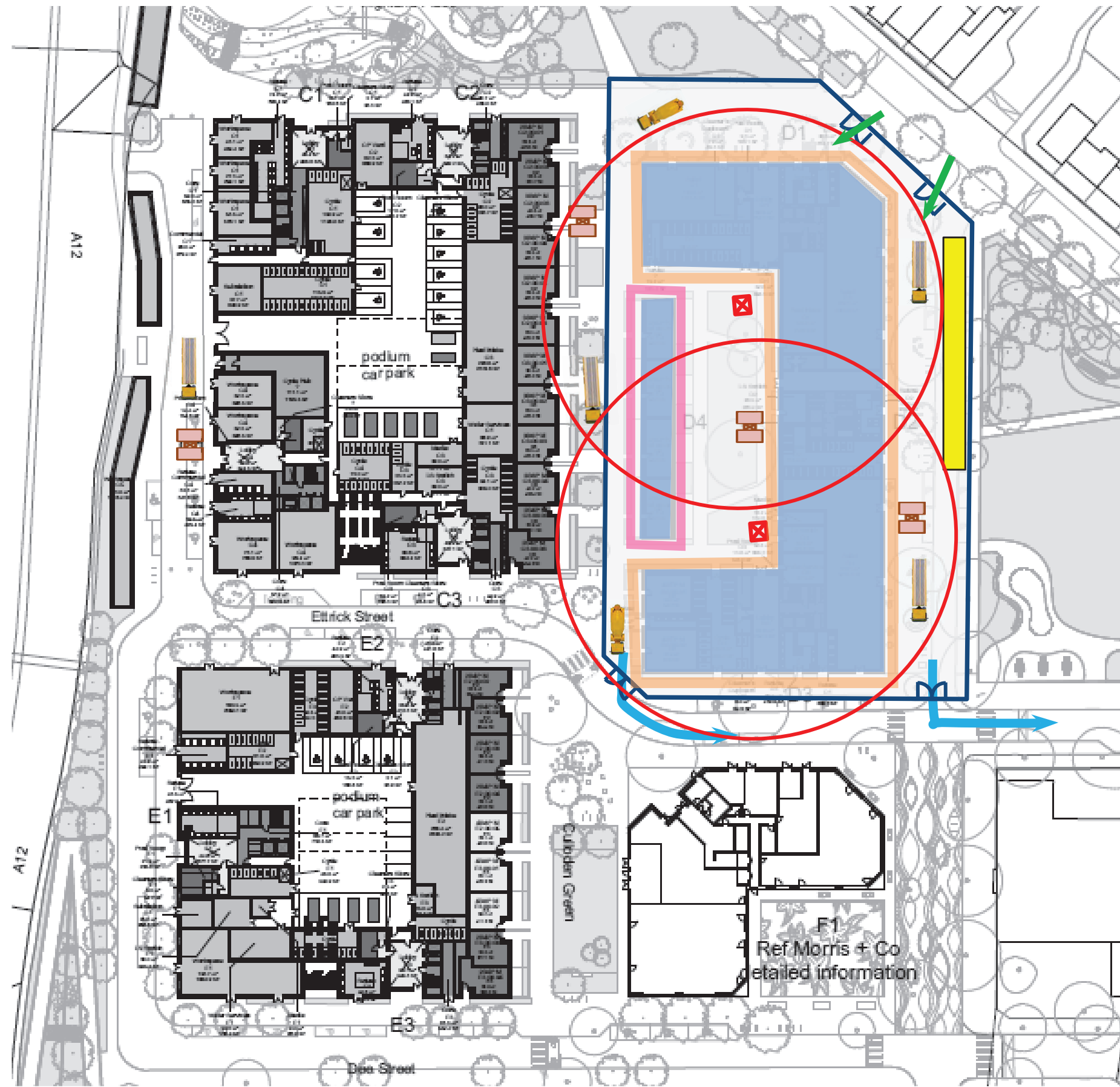


KEY	
	Harding/ Gates
	Mast Climbers
	Traditional Scaffold
	Luffing Jib Tower Crane
	Mobile Crane
	Site Accommodation
	Platform Hoists
	Vehicle Access
	Vehicle Egress



PROJECT: Aberfeldy Village
 CLIENT: EcoWorld
 TITLE: Phase C. C 1- E1-3 Construction Logistics

DRAWING NO.: BSB-AV-009
 REVISION NO. & DATE: Rev 0 – 24/09/2021



KEY	
	Harding/ Gates
	Mast Climbers
	Traditional Scaffold
	Luffing Jib Tower Crane
	Mobile Crane
	Site Accommodation
	Platform Hoists
	Vehicle Access
	Vehicle Egress



PROJECT: Aberfeldy Village
 CLIENT: EcoWorld
 TITLE: Phase D. D 1- Construction Logistics

DRAWING NO.: BSB-AV-010
 REVISION NO. & DATE: Rev 0 – 24/09/2021

8.0

TRAFFIC MANAGEMENT

This section highlights the measures by which the Contractor will avoid nuisance to the public that may arise from increases in traffic flows and temporary rearrangements of the road network associated with the construction works. Measures have been considered in relation to access routes, site access, timing of movements, environmental standards, vehicle registration and parking.

The Contractor will maintain existing public access routes and rights-of-way during construction. Any operations requiring vehicle manoeuvring or interruptions to the footway will be planned, notified and controlled. Condition surveys of highways and footpaths will be undertaken and agreed with LBTH before demolition and construction works are undertaken.

From summer 2015 the SLS (TfL & London Councils Safe Lorry Scheme) required almost all HGVs, irrespective of current exemptions, over 3.5 tonnes that drive in Greater London to be fitted or retrofitted with:

- Side guards (also known as “lateral protection devices”) irrespective of vehicle type; and
- Both Class V and VI mirrors, irrespective of vehicle age or registration date.

The contractor will ensure that all sub-contractors and suppliers delivery vehicles comply with the scheme and any non-complying vehicles are turned away from site.

CLOCS Compliance

The project will adopt Construction Logistics and Community Safety (CLOCS) standards for all delivery vehicles. (CLOCS Standard for construction logistics, V1.2 2014) Fleet Operator Recognition Scheme (FORS) Silver accreditation as a minimum will be a contractual requirement, FORS Gold operators will be appointed where possible. Where FORS Silver operators are appointed, written assurance will be sought from contractors that all vehicles over 3.5t are equipped with additional safety equipment (as per CLOCS Standard P13), and that all drivers servicing the site will have undertaken approved additional training (e.g. Safe Urban Driving + 1 x e-learning module or Work Related Road Risk Vulnerable Road User training + on-cycle hazard awareness course + 1 x e-learning module etc.). CLOCS Compliance will be included as a contractual requirement.

Desktop checks will be made against the FORS database of trained drivers and accredited companies as outlined in the CLOCS Standard Managing Supplier Compliance guide. These will be carried out as per a risk scale based on that outlined in the CLOCS Managing Supplier Compliance guide.

Checks of FORS ID numbers will form part of the periodic checks and will be carried out as per an appropriate risk scale. Random spot checks will be carried out by site staff on vehicles and drivers servicing the site at a frequency based on the aforementioned risk scale. These will include evidence of further training, license checks, evidence of routing information, and checks of vehicle safety equipment. Results from these checks will be logged and retained and enforced upon accordingly.

Collision reporting data will be requested from operators and acted upon when necessary.

Access routes

The Contractor will use designated construction traffic routes for deliveries to the site and removal of waste etc.

Access routes to and from the site to be used by heavy goods vehicles (HGVs) will be agreed with TfL and LBTH prior to initiation of the construction programme, to minimise disruption to the road and pedestrian network. The Transport for London Road Network (TLRN) will be used as far as possible to reach the site, with construction traffic making final approaches to site using the B125.

At this stage we do not know which direction specific traffic will approach from but that will become clearer once the materials are better known, and ultimately when contractors can place supply orders. However, the site is well placed for vehicle access, and we would expect that most construction traffic will approach from the A12 and A13 to reach site.

Detailed logistics plans will be developed as part of the contractor’s Final CEMP, when procurement will be further advanced, and more knowledge of vehicle origination and routes can be planned.

Pedestrian access for operatives and staff will be located close to the main vehicular access gates with separate pedestrian gates and footpaths provided.

To minimise the likelihood of congestion during the construction period, strict monitoring and control of vehicles entering and egressing the sites will be implemented. Construction deliveries will be carefully planned with delivery times agreed with each sub-contractor and supplier using a booking system. Delivery schedules will be produced in order to look at the profiles of up

and coming deliveries, and to regulate deliveries and eliminate bottle necks.

Specific time slots will be allocated to the sub-contractors and suppliers for the use of cranes and hoists, to ensure that the main plant will be utilised efficiently, and that deliveries are not queued.

Construction Traffic Forecast

The number of lorry movements, hours of operation and any lorry holding areas will be agreed in advance with LBTH. The Contractor will maintain an up-to-date log of all drivers that will include a written undertaking from them to adhere to approved routes for construction traffic.

There will be no daytime or overnight parking of lorries within the vicinity of the construction site.

Estimated numbers of construction related vehicle journeys for the construction period will be calculated based on volumes of excavated waste material, imported concrete, brickwork, cladding and fit out materials when designs are further advanced.

Operatives Journeys to Work

Operatives should be encouraged to come to work by public transport or cycle. No parking would be permitted on site.

Bike parking and showers should be provided on site.

The site is served by Hammersmith & City, District and DLR stations, and D8 and 309 bus routes.

9.0

SITE WASTE MANAGEMENT

The Contractor will use working methods that minimise waste. Any waste arising from the site will be properly categorised and dealt with in accordance with appropriate legislation. Opportunities for re-using or recycling construction or demolition waste should be explored and implemented.

The Contractor will carry out the works in such a way that, as far as is reasonably practicable, the amount of spoil and waste (including groundwater, production water and run-off) to be disposed of is minimised.

The disposal of all waste or other materials removed from the Site will be in accordance with the requirements of the Environment Agency, Control of Pollution Act (COPA), 1974, Environment Act 1995, Special Waste Regulations 1996, Duty of Care Regulations 1991 and the Waste Management Regulations 2011.

In general, and in accordance with the principles of the UK Government's 'Waste Strategy 2010', a principal aim during enabling works and construction will be to reduce the amount of waste generated and exported from the Development site.

This approach complies with the waste hierarchy whereby the intention is first to minimise, then to treat at source or compact and, finally, to dispose of off-site as necessary. All relevant Contractors will be required to investigate opportunities to minimise and reduce waste generation, such as:

- Agreements with material suppliers to reduce the amount of packaging or to participate in a packaging take-back scheme.
- Implementation of a 'just-in-time' material delivery system to avoid materials being stockpiled, which increases the risk of their damage and disposal as waste.
- Attention to material quantity requirements to avoid over-ordering and generation of waste materials.
- Re-use of materials wherever feasible (e.g. re-use of crushed concrete from demolition for the piling platform; re-use of excavated soil for landscaping).
- The Government has set broad targets for the use of reclaimed aggregate, and in keeping with best practice, Contractors will be required to maximise the proportion of materials recycled.
- Segregation of waste at source.

- Re-use and recycling of materials off-site where re-use on-site is not practical (e.g. through use of an off-site waste segregation facility and re-sale for direct re-use or re-processing). Our expectations in this regard are shown in the following table.

The Final CEMP is to include the full environmental management requirements specified in a Site Waste Management Plan (SWMP). Should the SWMP be reviewed and updated, the waste management measures detailed here should be updated to reflect any changes.

Material	Target	Probable Location
Architectural salvage	100% re-used	Several architectural salvage companies in London.
Structural steel for re-use	100% re-used	Steel used in temporary works is likely to be previously used and will be retained for subsequent re-use. Whole steel members removed in the demolition may be similarly re-use on subsequent projects
Metals	100% recycled	Every effort will be made to recycle these materials. Waste and off-cut metals will be segregated on site and taken for recycling to a waste transfer station.
Hard-core (crushed concrete, masonry etc.)	100% recycled	Crushed on site and reused.
Excavated material/ clay etc.	100% recycled	Clay – 100% processed for re-use (subject to analysis).
Timber	Up to 80% re-used The amount re-used will depend on the material	We will attempt to salvage any re-useable timber for hoardings, battening, shuttering etc. for possible use on site with the balance being retained by the Contractors.
Glass (non-tempered, non-laminated and non-bomb proofing film etc.)	100% recycled	Processing facility in Greenwich.
Plasterboard	100% recycled	Processing plants via British Gypsum
Mixed waste	The amount recycled will depend on the material	An absolute minimum will remain for transport to landfill.
Asbestos	100% landfill	Taken to a licensed site.

10.0

NOISE AND VIBRATION

The Contractor will discuss and agree with LBTH whether to seek their formal consent in accordance with Section 61 of Control of Pollution Act 1974 to his proposed methods of work and to the steps he proposes in order to minimise noise. Notwithstanding this, the Contractor will discuss in detail and agree the proposed noise and vibration control measures with the Local Authority.

Best Practicable Means

Best Practicable Means (BPM) of noise control will be applied during construction works to minimise noise (including vibration) at neighbouring residential properties and other sensitive receptors arising from construction activities.

Designated site-based staff shall have the authority to take the steps necessary on behalf of the contractor to ensure noise and vibration is adequately controlled and managed, according to the circumstances associated with each worksite. At the commencement of their appointment on the project (or prior to start of works on site), all site staff are to be briefed on their responsibilities to the application of BPM to minimise construction noise and vibration and the content of any planning consents, codes of construction or other legal agreements. The performance of the training should then be regularly reviewed and repeated throughout the construction programme as appropriate.

The general principles of noise management are given below:

Control at source:

- Equipment – noise emissions limits for equipment brought to site.
- Equipment – method of directly controlling noise e.g. by retrofitting controls to plant and machinery.
- Equipment - indirect method of controlling noise e.g. acoustic screens.
- Fit all plant and equipment with appropriate mufflers or silencers of the type recommended by the manufacturer.
- Follow manufacturer’s guidance and measures to operate plant and equipment and use it in a manner which minimises noise.
- Equipment - indirect method of controlling noise e.g. benefits and practicality of using alternative construction methodology to achieve the objective as opposed to more conventional but noisier techniques; selection of quieter tools/machines; application of quieter processes.

- Reduce loading / unloading heights for muck away and material movement to mitigate impact noise.
- Handle all material in a manner that minimises noise
- Use all plant and equipment only for tasks for which it has been designed for.
- Maximise screening from existing features / structures or employ the use of full or partial enclosures for fixed plant. The enclosures should be well maintained. Fixed plant can include generators, compressors, pumps, batching plant and ventilation plant.

Control across site by:

- Administrative and legislative control,
- Control of working hours,
- Control of delivery areas and times,
- Careful choice of compound location,
- Locate the site access away from noise sensitive receptors. Keep internal haul routes well maintained.
- Limit material and plant loading and unloading to normal working hours.
- Physically screening site,
- Control of noise via Contract specification of limits,
- Noise Monitoring, to check compliance with noise level limits, cessation of works until alternative method is found.
- Many of the activities which generate noise can be mitigated to some degree by careful operation of machinery and use of tools. This may best be addressed by toolbox talks and site inductions.

Noise control

The Contractor's environmental team will undertake a noise assessment as part of the Construction Noise and Vibration Report, to predict noise levels at adjoining properties. This noise assessment will be carried out in accordance with BS5228-1: 2009+A1: 2014 'Code of Practice for noise and vibration on construction and open sites'.

This assessment allows the Contractor to select the most appropriate tools, methodology and controls to minimise disruptions of buildings at close proximity of the adjacent structures (sensitive receptors) and in particular live and occupied premises during the enabling, piling and excavation periods.

Noise levels will be monitored by the Contractor during the works. LBTH shall be given access to all noise readings if required as soon as they become available.

Although the noise levels to be included in a formal agreement between the Contractor and LBTH are the maximum to be allowed, at sensitive locations the Contractor will be requested to achieve, where practicable, noise levels lower than the specified limits.

Noise Control Measures

The Contractor shall comply with the recommendations set out in BS5228:2009 and in particular with the following requirements:

- Vehicles and mechanical plant will be maintained in a good and effective working order and operated in a manner to minimise noise emissions. The contractor will ensure that all plant complies with the relevant statutory requirements;
- HGV and site vehicles will be equipped with broadband, non-tonal reversing alarms;
- Compressor, generator and engine compartment doors will be kept closed and plant turned off when not in use;
- All pneumatic tools will be fitted with silencers/mufflers;
- Care would be taken when unloading vehicles to avoid unnecessary noise;
- The use of particularly noisy plant will be limited, i.e. avoiding use of particularly noisy plant early in the morning;
- Restrict the number of plant items in use at any one time;
- Plant maintenance operations will be undertaken at distance from noise-sensitive receptors;
- Reduce the speed of vehicle movements;
- Ensure that operations are designed to be undertaken with any directional noise emissions pointing away from noise-sensitive receptors;
- When replacing older plant, ensure that the quietest plant available is considered;
- Drop heights will be minimised when loading vehicles with rubble;
- Vehicles should be prohibited from waiting within the site with their engines running or alternatively, located in waiting areas away from sensitive receptors;
- Local hoarding, screens or barriers should be erected to shield particularly noisy activities;
- Temporary noise screens will be used to reduce noise from particularly noisy activities and the height of perimeter hoarding will be extended where this would assist in reducing noise disturbance at sensitive receptors; and
- Hours of operation should be strictly enforced and any deviations other than those previously identified will be with the consent of the local authority;
- Limiting of high impact activities (including breaking out or piling works) to specific times of the day. For example, this may include 2 hours on – 2 hours off, or the restriction of such activities to between 09:00-12:00 and 14:00-17:00;
- Piling will be carried out with the method that minimises both noise and the transmission of vibration to sensitive receptors;
- Vehicles, plant and equipment will undergo regular servicing and maintenance to prevent irregular noise levels;

- The location of stationary plant in areas which will have a minimized impact on occupied residential and commercial properties, where feasible;
- Static plant, when in operation, is to be sound attenuated using methods based on the guidance and advice in the BS 5228, where practical;
- Implementation of Best Practice Means (as defined in Section 72 of the COPA) by trade contractors at all times, and are to carry out all work in such a manner as to reduce disturbances from noise and vibration;
- Preference for electrically powered plant, to mechanically powered alternatives, where practical;

Construction Traffic

The Contractor will incorporate the following measures into the scheme to avoid noise related impacts from construction traffic:

- Vehicles will not wait or queue up with engines running on the site or the public highway;
- Vehicles will be properly maintained to comply with noise emissions standards;
- Deliveries will be restricted to be within working hours of the site; and
- Design and routing of access routes will minimise vehicle noise and the need to perform reversing manoeuvres.

Vibration control

Vibration is a particular risk during the demolition, piling and excavation stages. The measures taken to reduce the acoustics of these two operations will also assist in mitigating the effects of vibration on neighbours and their property.

A digital seismograph measuring device will be used to measure the amount of vibration produced during the works. Where elevated levels are recorded the source will be investigated and, where possible, alternative techniques employed to reduce the levels.

The Contractor will comply with the vibration levels established by agreement with LBTH, which will consider BS 5228-2.

11.0

AIR QUALITY

The Contractors will, as far as reasonably practical, seek to control and limit emissions to the atmosphere in terms of gaseous and particulate pollutants from tools and equipment used on site and dust from construction activities.

We recommend that the site activities should be assessed in accordance with the Mayor of London's SPG "The Control of Dust & emissions during Construction & Demolition". The contractors must submit a statement to Camden for approval identifying proposed dust control measures before work starts. Special precautions must be taken when materials containing asbestos are encountered.

Throughout the project, the Contractors will ensure the following:

- Develop and implement a stakeholder communications plan that includes community engagement before work commences on site
- Display the name and contact details of person(s) accountable for air quality and dust issues on the Site boundary. This may be the environment manager/engineer or the site manager
- Display the head or regional office contact information
- Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the LBTH.
- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken
- Make the complaints log available to the LBTH when asked
- Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the logbook.
- Hold regular liaison meetings with other high-risk construction sites within 500m of the Site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised
- Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the LBTH when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and windowsills within 100m of site boundary, with cleaning to be provided if necessary

- Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked
- Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions
- Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.
- Erect solid screens or barriers around dusty activities or the Site boundary that are at least as high as any stockpiles on site
- Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period
- Avoid site runoff of water or mud
- Keep site hoarding, barriers and scaffolding clean using wet methods
- Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site
- Cover, seed or fence stockpiles to prevent wind whipping
- Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London NRMM standards
- Ensure all vehicles switch off engines when stationary - no idling vehicles
- Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable
- Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas
- Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials
- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems
- Ensure an adequate water supply on the Site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate
- Use enclosed chutes and conveyors and covered skips
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment
- Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods
- Avoid bonfires and burning of waste materials
- Ensure effective water suppression is used during breaking out operations. Handheld sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition, high volume water

- suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground
- Avoid explosive blasting, using appropriate manual or mechanical alternatives
- Bag and remove any biological debris or damp down such material before breaking out
- Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable
- Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable
- Only remove the cover in small areas during work and not all at once
- Avoid scabbling (roughening of concrete surfaces) if possible
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
- Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery
- For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust
- Use water-assisted dust sweeper(s) on the access and local roads, if required
- Avoid dry sweeping of large areas
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport
- Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.
- Record all inspections of haul routes and any subsequent action in a site logbook
- Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.
- Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable)
- Access gates to be located at least 10m from receptors where possible

12.0

GROUND CONDITIONS

This section is to be updated by the Principal Contractor in the Final CEMP.

The preparation of a Remedial Statement will direct any environmental management, monitoring and other requirements.

The contractor is also to include the management of groundwater, and potential impacts associated with the construction works.

Some of the proposed management measures are outlined below.

The management of infiltration and promotion of leaching to groundwater is to occur with regards to the following:

- Completion of a Foundation Works Risk Assessment, informed by a site investigation;
- Implement measures to minimize infiltration to groundwater (Principal and Secondary Aquifer);
- Avoid stockpiling of contaminated soil;
- Any stockpiled material is to be covered and placed on an impermeable surface.
- Remove / treat any gross contamination if identified.
- Waste characterisation (as part of the pre-commencement investigations)
- Groundwater is to be managed during excavation works.

13.0

SURFACE WATER MANAGEMENT

This section sets out the requirements on the Contractors for managing the environmental impacts of constructing the development, associated with surface water management.

The contractor will prepare a detailed Surface Water Management Plan and site-specific Erosion and Sediment Control Plan, which will minimise discharge of potentially polluted site water to nearby drains and overland flow routes;

- No polluted water is to be discharged from the site;
- Sediment and erosion controls are to be regularly inspected to ensure sufficient capacity;
- Wheel washes are to be implemented on site;
- Drainage of surface runoff and de-watering effluents to settling tanks to remove suspended solids prior to discharge to sewer or removal by a suitably licenced waste operator;
- Storage of chemicals and hazardous materials within bunded areas, with adequate capacity (of 110%);
- Bunded areas are to be regularly inspected to ensure that sufficient capacity is available;
- Prevention of spills and leaks.

Key Site Activities Using Water		
Activity	Water Use	Source: Potable or Non-Potable
Site Cabins	Drinking, Kitchen, Canteen	Potable
	Toilets and urinals, showers and hand washing	Non-potable
Drainage	Flushing	Both
General Cleaning	Tool rinsing, boot washing, plant & equipment washing	Non-Potable
Site Dust Suppression	Dampening (browsers) and misting	Non-Potable
Concrete Production	Mixing	Non-Potable
Masonry	Mortar mixing	Both
Screeds	Laying	Both
Concrete wash out	Plant wash out	Non-Potable
Commissioning	M&E pipe and plant testing	Both (as appropriate to system)

Key Options for Water Sustainability	
Activity	Options to Reduce Potable Water Demand
Site Cabins	Efficient showers, taps, toilets and urinal controls. Trigger controls on catering taps and use of vessels for washing rather than under running taps. Rainwater capture for toilet flushing. Waterless urinals
Drainage	Reuse water collected from dewatering, e.g. dewatering Use water from attenuation tanks or rainwater harvest tanks
General cleaning	Fill containers rather than use running taps or open hoses Trigger operated spray guns Use of a closed water recycling system for wheel washing.
Site Dust Suppression	Use of control systems to allow damping activities to be altered for different applications. Use of water efficient road sweepers. Use water collected from elsewhere for dust suppression (e.g. from attenuation tanks).
Masonry	Use water butts as opposed to long hose runs when mixing mortar in remote areas of the site
Screed	Apply in early morning/ late afternoon for natural cooling (reduced need for damping) Use ready mix
Concrete Production	Consider water storage where water for cleaning could be blended with potable for production.
Concrete Wash out	Consider collecting wastewater filtering and reusing

14.0

ECOLOGY

This section is to be updated upon the completion of further ground conditions investigations. The Ecology section of the construction-phase CEMP for the Proposed Development will outline the procedures that will be put into place to control and limit disturbance to areas of nature conservation interest and protected species in accordance with relevant legislative requirements and accepted industry practice, as appropriate. The following measures are to be implemented:

- Enabling works are to be undertaken outside of the bird breeding season, which runs from March to September (inclusive).
- Where this is not possible, bird nest checks will be undertaken no more than 48 hours in advance of clearing by an appropriately qualified ecologist.
- Should any active bird nests be identified within the construction works area, all works on site are to cease immediately and the area around the nest is to be protected from disturbance. A suitably qualified ecologist is to be contacted immediately.
- In accordance with the requirements of the Wildlife and Countryside Act 1981, active nests are not to be disturbed and cannot be relocated.
- A cordon of an appropriate size is to be established to avoid disturbance to the nest, for the duration it is active.
- No injury, harm or death to fauna during the construction works is to occur.

All works are to be carried out in accordance with 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites' (2009).

15.0

CONCLUSION

In addition to this outline CEMP, other supporting management plans have been drafted and submitted in support of the Planning Application, specifically a Construction Logistics Plan (CLP).

It is anticipated that the implementation of the CEMP and CLP as well as required management plans (e.g. Dust Management Plan) will be secured through appropriately worded planning conditions. The CEMP is based on the LBTH Code of Construction Practice and established good management principles. It is intended that the CEMP (and other plans, as relevant) will be 'live working' documents, and that the Principal Contractor's appointed representative will update the documents accordingly with any amended construction environmental management measures as the phased construction of the proposed development progresses.

REFERENCES

The contractor shall comply with all relevant legislation, standards, codes of practice, and guidance for the works being carried out including (but not exclusive to) those listed in this section.

Legislation

- The Explosives Regulations 2014
- Clean Air Act 1993
- Public Health Act 1961
- Health and Safety at Work, etc. Act 1974
- Control of Pollution Act 1974
- Control of Pollution (Amendment) Act 1989
- Environmental Protection Act 1990
- New Roads and Street Works Act 1991
- Lifting Operations and Lifting Equipment Regulations 1998
- Special Waste Regulations 1996
- Control of Lead at Work Regulations 2002
- Control of Asbestos Regulations 2012
- Ionising Radiations Regulations 2017
- Electricity at Work Regulations 1989
- Control of Noise at Work Regulations 2005
- Controlled Waste (Registration of Carriers & Seizure of Vehicles) Regulations 1991
- Environmental Protection (Duty of Care) Regulations 1991
- Management of Health & Safety at Work Regulations 1999
- Provision & Use of Work Equipment Regulations 1998
- Personal Protective Equipment at Work Regulations 1992
- Construction (Design & Management) Regulations 2015
- Control of Substances Hazardous to Health Regulations 2002
- Work at Height Regulations 2005
- Dangerous Substances and Explosive Atmosphere Regulations 2002
- Manufacture and Storage of Explosives Regulations 2005

British Standards

- BS 5228 Code of Practice for noise control on construction and open sites
- BS 5607 Code of Practice for safe use of explosives in the construction industry
- BS 6187 Code of Practice for demolition
- BS 7121 Safe use of cranes

Guidance

- HSE Guidance booklets:
- HSG 47 Avoiding danger from underground services
- L21 Management of health and safety at work
- L101 Safe work in confined spaces

HSE Guidance Notes

- GS 6 Avoidance of danger from overhead electric lines
- CS 15 The cleaning and gas freeing of tanks containing flammable residues
- EH 40 Occupational exposure limits (revised annually)

HSE Construction Information Sheet

- No.45 Establishing exclusion zones when using explosives in demolition.

Asbestos Removal

Legislation

- The Health and Safety at Work etc. Act 1974
- The Control of Pollution Act 1974
- The Special Waste Regulations 1996
- The Personal Protective Equipment at Work Regulations 1992 (as amended)
- The Control of Asbestos Regulations 2012
- Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009
- The Construction (Design and Management) Regulations 2015

Approved Codes of Practice

- L21 Management of health and safety at work: Management of Health and Safety at Work Regulations 1999 (second edition)
- L24 Workplace health, safety and welfare. Workplace (Health, Safety and Welfare) Regulations 1992
- L25 Personal protective equipment at work (Second edition). Personal Protective Equipment at Work Regulations 1992 (as amended). Guidance on Regulations
- L64 Safety signs and signals. The Health and Safety (Safety Signs and Signals) Regulations 1996
- L87 Safety representatives and safety committees (third edition)
- L95 A guide to the Health and Safety (Consultation with Employees) Regulations 1996
- L127 The management of asbestos in non-domestic premises (second edition)
- L143 Work with materials containing asbestos. Control of Asbestos Regulations 2012
- L144 Managing health and safety in construction: Construction (Design and Management) Regulations 2015

British Standards

- BS 8520-1:2009 Equipment used in the controlled removal of asbestos-containing materials. Controlled wetting equipment. Specification
- BS 8520-2:2009 Equipment used in the controlled removal of asbestos-containing materials. Negative Pressure Units
- BS 8520-3:2009 Equipment used in the controlled removal of asbestos-containing materials. Operation, cleaning and maintenance of class H vacuum cleaners
- BS EN ISO 13982-1:2004+A1:2010 Protective clothing for use against solid particulates. Performance requirements for chemical protective clothing providing protection to the full body against airborne solid particulates (type 5 clothing)
- BS EN ISO/IEC 17020:2012 General criteria for the operation of various types of bodies performing inspection

- BS EN ISO/IEC 17024:2012 Conformity assessment. General requirements for bodies operating certification of persons
- BS EN ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories

HSE Guidance Booklets & Leaflets

- HSG189/2 Working with asbestos cement
- HSG210 Asbestos essentials task manual. Task guidance sheets for the building, maintenance and allied trades
- HSG213 Introduction to asbestos essentials. Comprehensive guidance on working with asbestos for the building, maintenance and allied trades
- HSG227 A comprehensive guide to Managing Asbestos in Premises
- HSG247 Asbestos: The licensed contractor's guide
- HSG248 Asbestos: The analyst's guide for sampling, analysis and clearance procedures
- HSG264 Asbestos: The survey guide
- INDG188 Asbestos alert (pocket card) for building maintenance, repair and refurbishment workers
- INDG223 A short guide to managing asbestos in premises. (Rev 3)
- INDG255 Asbestos dust kills – keep your mask on (Rev 1)
- INDG289 Working with Asbestos in Buildings
- OC 282/28 Fit testing of respiratory protective equipment face pieces.

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Blue Sky Building is an innovative construction management company which delivers unique solutions. Our founding directors boast a combined experience of over eight decades, uniting their background in the delivery of bespoke construction with the expertise and skills needed to manage complex engineering and construction projects, particularly in the midst of the kind of city centre environment prevalent in London and the South East.

We act as a trusted collaborator, setting the kind of standards other constructors aspire to, by offering our clients quality, professionalism and innovation. We've built our reputation upon offering a bespoke service each time, tailored to meet the individual needs of each client.

We know our industry and understand how the construction process works. We study our clients' business and we understand the wider business climate, bringing all three together in a pursuit of excellence which is as relentless as it is refreshing.

At Blue Sky Building, no resource is more valuable than the people charged with delivering our vision. The principles we work around are excellence, quality and safety and the values underpinning our work are intelligence, honesty, integrity and trust.

Our Promise:

- A focus on the client;
- Clarity of leadership and direction;
- Accessible and practical advice;
- Input and ownership up to Director level;
- Appropriate and timely communication;
- Simple solutions to complex issues;
- Advice which is independent and maintains the integrity of the clients' procurement process;
- In depth knowledge of the market and links to key trade contractors; and
- Value added throughout - from design, through procurement and on to construction.

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