BLUE SKY BUILDING
founded on excellence

AG Hondo Pope's Road BV

CONSTRUCTION MANAGEMENT PLAN

FOR

Pope's Road Brixton

March 2020

CONTENTS

BLUE SKY BUILDING
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REGISTRATION NO. 07816133

1.0 INTRODUCTION

Blue Sky Building has been appointed by AG Hondo Pope's Road BV to identify best practice procedures for managing the demolition and construction of Pope's Road. These procedures will ensure that the interests of local residents, businesses and the public are given special attention by the Contractor during the works duration.

20-24a Pope's Road, Brixton, SW9 7PR comprises a funnel shaped parcel of land situated between two large railway viaducts. The site is bound by Popes Road to the West, at its widest point, and Valentia Place to the East, at its narrowest point. The Site comprises a single storey building currently in use as a retail store.

Demolition of the existing building and erection of a part G + 19, part G + 8 storey building comprising flexible A1/A3/B1/D1/D2 uses at basement, ground and first floor, with restaurant (A3) use on floor 8 and B1 accommodation on floors 2 to 19, with plant enclosures at roof level, and associated cycle parking, servicing and all necessary enabling works.

The baseline for our analysis includes the Lambeth Local Plan, Adopted September 2015 (the Plan). We have viewed those requirements as the minimum standards to be achieved and have identified improvements in most areas under consideration.

This CMP details the specific obligations on the Contractor when undertaking the works; the specific measures to be used during the demolition and construction works; and the specific details of the control measures for each environmental issue.

Key outputs from this report are:

- **Noise during Demolition & Construction.**

The objective is to control noise limits within recognised limits. The on-going quiet enjoyment of the neighbours is of paramount importance. This Construction Management Plan identifies the specific measures to be taken in protecting these parties from the adverse effects as a result of the construction activities in the most efficient and economical way.

- **Working hours.**

Working Hours will be:

08.00 to 18.00 Monday to Friday
08.00 to 13.00 Saturday

There are likely to be special events in connection with working alongside the railway where works will be required outside these hours. In all such cases the contractor will obtain the necessary permissions from Lambeth Council and Network Rail (NR) in advance of undertaking the works.

- **Logistics.**

A key aspect of the potential logistics and methodology of the project is the limited access and the proximity of NR tracks. The contractor will ensure compliance with NR Standards in all respects.

- **Cranage.**

We have proposed two fixed tower cranes, erected and dismantled from the east gate of the site and operated within NR rules. Crane erection could require weekend road closures subject to liaison and agreement with Lambeth, NR and TfL.

- **Deliveries.**

The site is constrained to vehicle deliveries from the east gate which is shared with local businesses housed in the railway arches. We are proposing an additional loading arrangement from Brixton Station Road, via a railway arch in the site demise for small vehicles and concrete pumping to reduce the impact on the east gate and Valentia Place.

- **Programme.**

A Strategic Programme is included in Section 3.

Key Reference Documents

Lambeth Local Application Requirements July 2016

The Lambeth Local Application Requirements July 2016 requires Planning Applications for major projects to demonstrate compliance with Lambeth Local Plan (2015) Policies T8, Q2 and Q10 and Policy 5.18 of the London Plan (2015) via a Construction Management Plan (CMP) or Construction Logistics Plan (CLP).

This CMP covers all aspects of demolition and construction work that could reasonably be anticipated to impact on the local community and the environment throughout the construction of the proposed works including:

- the general principles to be applied during demolition and construction, and the context within which mitigation measures will operate and be developed;
- the specific provisions for site operations; and
- the specific environmental issues that need to be considered throughout the period of demolition and construction works.

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) and statutory guidance and Codes of Practice.

The Contractor will be responsible for identifying new legislation and regulation and for complying with all prevailing legislation at the time of construction including any requirements under Health and Safety.

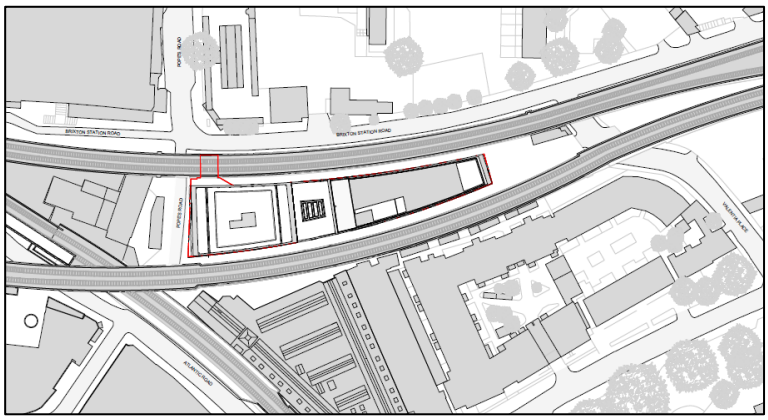
Licences

In addition to the environmental requirements described, the Contractor will be responsible for obtaining licences from Lambeth Council before erecting any scaffolding, hoardings, gantries, road closures, parking bay suspensions, temporary crossings or fences or depositing a skip on the highway.

2.0 NATURE OF THE PROJECT/ SCOPE OF WORKS

Location Plan

Pope's Road site comprises a funnel shaped parcel of land situated between two large railway viaducts. The site is bound by Popes Road to the West, at its widest point, and Valentia Place to the East, at its narrowest point.



Scope of Work

Demolition of existing building and erection of a part G + 19, part G + 8 storey building comprising flexible A1/A3/B1/ D1/D2 uses at ground and first floor with B1 accommodation on floors 2 to 19, with plant enclosure at roof level, and associated cycle parking, servicing and all necessary enabling works.

The new building includes piled foundations, excavation of a new basement, RC frame, brick elevations and CAT A fitting out of office space.

3.0 METHODOLOGY, SEQUENCE AND PROGRAMME

This section of the document will identify the specific methodology that we have identified for the project:

1. Enabling and lead-in works
2. Site Establishment & Logistics
3. Stripping out and Investigation
4. Demolition
5. Foundations and Substructure
6. Superstructure
7. Building Envelope
8. Fitting Out & Completion

3.1 Enabling/lead-in works

Prior to commencement of works, a period of pre-planning and activities will take place to ensure works can be undertaken efficiently. Certain elements of these works will require third party approvals.

- Production of a Site Environmental Management Plan
- Mobilisation of selected plant and operators.
- Formulation of project Health and Safety Plan and risk assessments.
- Formulation of Site waste management plan and environmental plans as per the current DEFRA guidelines.
- Development of project specific construction phase method statements.
- Production of detailed works programmes and sequencing.
- Surveys of existing services and structures to confirm methodology and load capabilities.
- Highways & adjoining property condition surveys to be carried out prior to commencement on site.
- Services investigations/surveys for decommissioning purposes.
- CCTV surveys of existing drainage.

- Hazmat and asbestos refurbishment & demolition (R&D) surveys, testing and ASB5 notifications to the HSE.
- Lambeth licence applications and approvals for hoardings, scaffolding, & parking bay suspensions.
- NR applications and approvals for all logistics and temporary works operations in proximity to the railway and NR property.
- Baseline movement monitoring.
- Baseline environmental monitoring.
- Neighbour liaison before the commencement on site to explain the nature of works.
- Temporary works design.

3.2 Site establishment and logistics

Site establishment is the preparation of the site to carry out the enabling and construction process. The activity is generated from full vacant possession of the building by the existing users and full possession of site areas. The following activities will comprise the site establishment programme:

- Securing the external project boundary with the erection of full height close boarded hoardings and gates where appropriate,
- Ensuring the security and fire integrity of the existing building,
- Erection of sheeted scaffolds for demolition
- Vehicle and pedestrian access to the works will be controlled by fully trained gatemen and traffic marshals.
- Installation of site temporary electrics, lighting, water and fire alarms.
- Establishment of a 24/7 site security provision with CCTV perimeter support to ensure that the site is protected against unauthorised or unlawful entry and potential theft from site.
- Isolation of existing services and systems within the building. Diversions of existing utilities if required will be carried out at an appropriate point in liaison with the statutory service providers.

- Site welfare arrangements will initially be established inside the existing building while soft stripping is undertaken and moved to small cabins during demolition.
- Larger site offices and welfare accommodation for construction activities may include rental of local space
- Emergency routes on site specified and clearly signposted
- Instigation of a full R&D Asbestos Survey
- Structural investigation surveys and trial holes
- Initial inspection and site investigation for tower crane location

3.3 Stripping out and Investigations

Once the R&D Asbestos Survey is undertaken to identify if any asbestos is present within the existing building a method of working shall be submitted to the HSE (ASB5 notification) in order to complete removal works.

Advanced soft strip/service Isolations

The first operation will be to isolate any live services. An advance desk top study of all existing services will have been carried out in the pre-construction phase to highlight termination points.

Running concurrently with the service isolation will be a safety review of the existing structure to highlight any dangerous areas e.g. exposed edges, exposed asbestos, roof loadings etc. These areas will be isolated with the relevant warning signs positioned and any exposed edges or voids to be hand railed off.

Soft strip works

Following on from the initial soft strip, asbestos removal work, and isolation of services, the main soft strip of any redundant fixtures and fittings within the existing structure will be carried out, in the areas needed for structural interventions. Caution regarding the structural integrity of the building will always be maintained by operatives and site staff during the soft stripping works, as parts of the building will be exposed for the first time.

Stripping out will be carried out using hand-held tools and accessed from the existing floor level or from aluminium towers. Competent, trained persons will be used to erect the aluminium mobile towers.

All the works will be carried out by trained operatives using hand tools/hand-held plant to assist in the stripping process, as the materials are stripped, they will be removed to the east yard

as bagged material or in wheelie bins. The material will then be deposited into large capacity skips for removal from site.

Ceiling hangers, trunking, conduit, pipework and other non-structural metalwork will be cut out using oxygen/propane burning equipment, angle grinders or mechanical dismantling.

A 'Hot-Works' permit to work system will be enforced when any works of this nature are undertaken, and fire extinguishers will be prominent. Hot works will cease two hours before the end of a working shift and the area thoroughly checked prior to breaks or to leaving site.

It will be impressed on the workforce that the site has a 'No Smoking' policy except for a designated external area. Windows will be opened for the purpose of ventilation. Oxygen and propane bottles will be stored upright in a lockable cage.

By regularly removing the accumulated debris, the potential fire risk that loose combustible material imposes, is minimised or removed.

Soft strip debris arising from the structures will be processed at ground level for disposal from site.

3.4 Demolition

Demolition of the existing building at the Site will be a carefully managed process that can be considered deconstruction. The existing building is constructed of various materials and remains subject to intrusive survey to establish details. Most of the single storey building comprises concrete framing and load bearing masonry, with a roof constructed as a car park level.

The demolition sequence will be dictated by accessibility. After the soft strip is completed 360º excavators fitted with jaws and breaker points will demolish the single storey building working from the east of the site. Machines will operate on the ground slab. The immediate area around the de-construction area will be barriered off and warning signs erected. Drop zones within the de-construction area will be established and further demarcation established. Below ground services will be traced and checked for safety and stability as works proceed.

Resultant de-construction debris will be cleared using a skid steer Bobcat or similar and deposited to stockpiles for selection and crushing on site, for future use in formation of a piling platform. Unsuitable material will be loaded away to skips or waiting tipper wagons for removal from site.

The roof structure will be stripped of asphalt and the debris broken down and separated for recycling. Careful consideration must be given to the stability of the building at all times. Any load bearing elements will be identified prior to de-construction

commencing to ensure that they are maintained until structurally redundant to prevent collapse.

Dust emissions will be controlled at the working face and loading away area by a fine water spray. The quantity of water emitted by the sprays will be regulated and controlled to prevent any flooding at ground floor level. The perimeter scaffold will be erected as an independent scaffold to remain in place without fear of being brought down with the building. The scaffold screen will be maintained one lift above demolition as it proceeds.

With the bulk of the superstructure demolished the ground slab will be saw cut to separate it from the retained roads and hardstandings and broken up by 360^{o} machine. An on-site crusher will be used to crush suitable concrete debris to be retained on site for the future construction of a piling mat.

The on-site storage of potentially polluting plant and materials will be limited. However, storage of diesel fuel in approved, double-bunded tanks will be necessary. There are currently no plans for using contaminating or hazardous materials or

3.5 Basement & Substructure

These works consist of the provision of a basement structure which will provide plant rooms and functional space. The methodology and logistics for piling and excavation is at a preliminary stage and currently is seen as follows.

The demolition will be complete including removal of ground slab and grubbing out of foundations, at which point the encapsulating scaffold will have been reduced in height and then removed. A piling mat will be formed at ground level using site won demolition materials crushed on site for the purpose.

New secant piling to the full perimeter of the new basement will then proceed from ground level, followed by its capping beam. Load bearing piles within the basement footprint area will also be formed from ground level, blind bored and backfilled pending bulk excavation.

Excavation of the new basement levels will commence as the capping beam and load bearing piling completes. Muck away vehicles will access the east gate directly from Valentia Place. A temporary ramp will initially allow vehicles to enter the new excavation. As the excavation proceeds temporary propping will be introduced.

At this stage tower cranes will be erected for the new construction, mounted on plunge columns.

Under slab drainage, and slab preparation would proceed once excavation reaches formation. As the construction of the new

raft progresses in sections across the site, so the new concrete structures of perimeter and loadbearing walls and columns will be constructed. Cores will be constructed in traditional formwork up to ground floor and will then progress as slip-form or jump-form structures.

The contractor will be required to manage excavation vehicle flows using a traffic management system with no queuing or waiting in local streets; vehicle numbers to be submitted and agreed in advance of the works.

3.6 Superstructure

The proposed superstructures to the new buildings will be predominantly reinforced concrete framed. The concrete cores will be constructed ahead of the main frame by slip-forming or jump-forming. Consideration will be given in the detailed construction planning to the use of prefabricated elements, such as columns and staircases.

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 would include climbing screens to contain construction operations for the tower building.

The lifting equipment (e.g., tower cranes, elevated working platforms or hoists etc.) that will be required throughout the construction works is yet to be determined in detail. However, as part of a detailed CMP, a lifting strategy will be developed and prepared in accordance with the detailed design and statutory obligations. Lambeth and NR will be consulted throughout preparation of the lifting strategy to ensure an appropriate proposal is put forward for consent. All necessary permits and licenses 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.

3.7 Building Envelope

The new building envelope is predominantly brick with some precast concrete elements and glass curtain walling. We have assumed that the external wall will include an inner, SFS skin of Metsec, or similar, to allow the earliest partial watertight condition for commencement of fit out.

As the frame completes and formwork is struck and removed from site the inner skin of perimeter wall can be constructed. Metsec (or similar) panels would be delivered and placed by crane or hoist to achieve early watertight conditions. Roofing

materials would be placed by tower crane in a parallel operation. Windows will ideally be installed as part of the inner skin construction where the design permits. Scaffolding adaptions would then take place to prepare the site for the construction of the external skin of cladding.

Precast units will be delivered by articulated lorry and erected using tower cranes. Glazed elements will be a subsequent operation, erected using floor mounted manipulators and small lifting equipment as far as possible. External columns and fins to the highest levels are likely to be prefabricated elements, erected as the final cladding operation using the tower cranes.

The roof plant levels include elements of structural steel and plant installations which will need to be erected in a carefully planned sequence. On completion of the façade, plant screening works and roof plant placement, the tower cranes will be dismantled and removed.

Scaffolds will be struck and removed from site when cladding is complete to both sections of the building, leaving platform hoists in place to serve fit-out activities. New hard and soft landscaping will be progressed once scaffolds are removed.

3.8 Fitting Out & Completion

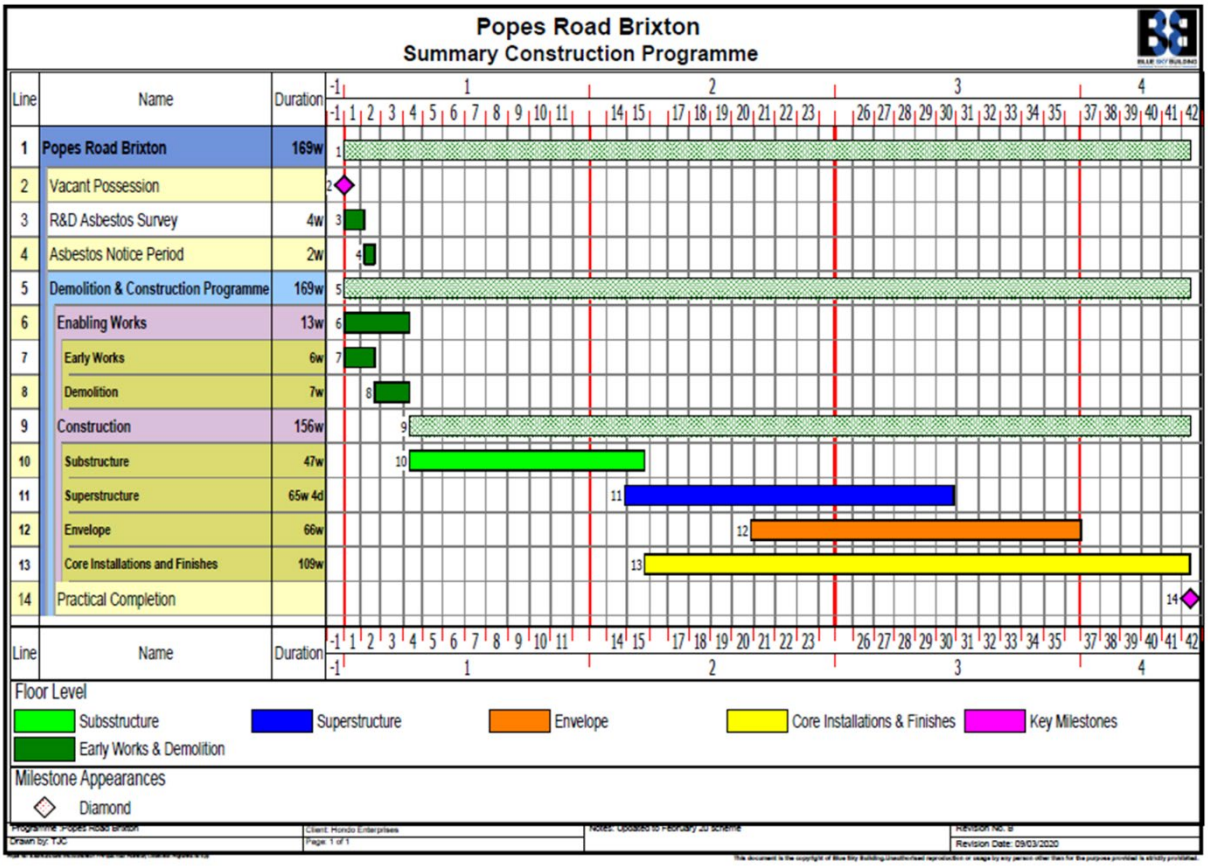
Fitting out of internal spaces will be undertaken as soon as floors and envelope are complete and watertight.

Plantrooms, vertical risers and lift shafts will take early priority, followed by distribution of services across floors.

Deliveries will be made predominantly to the east gate from Valentia Place for distribution vertically via an external platform hoist, until permanent lifts become available. Smaller vehicles will deliver to the railway arch to the north west corner of the site, accessed from Brixton Station Road

As the internal works approach completion and deliveries reduce the site logistics set up will be cleared. Final deliveries of decoration materials will be made at ground level through the front doors.

Summary Construction Programme:



4.0 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 a number of procedures that should be implemented during site operations.

These relate to working hours, site layout & appearance, and good housekeeping.

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

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

Working hours

Working Hours will be as directed and are expected to be:

08.00 to 18.00 Monday to Friday
08.00 to 13.00 Saturday

There are likely to be special events in connection with working alongside the railway where works will be required outside these hours. In all such cases the contractor will obtain the necessary permissions from Lambeth Council and Network Rail (NR) in advance of undertaking the works.

To ensure that the impact of the construction is kept to a minimum we propose that the contractor should submit a Section 61 Prior notice to Lambeth for approval.

Good housekeeping

The Contractor will follow a 'good housekeeping' policy at all times. This will include, but not necessarily be limited to the following. The Contractor will:

- ensure considerate site behaviour of the Contractor's 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 the Lambeth Council's Licence – all flyposting and graffiti is to be removed as soon as reasonably practicable and within 24 hours of notice from the Lambeth Council.
- 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 as identified on the logistics drawings.

Public information

The site entrance hoarding will only display any necessary health & safety material and Client publicity material relating to the demolition and construction.

Security

The Contractor 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 doors.

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 Lambeth Council's licence, are shown on the logistics plans in section 5 of this document. It is intended to provide protection from noise and dust at all times through the erection of hoardings, barriers and sheeted scaffolds.

Site welfare arrangements will be established inside the existing building for demolition, together with a site office space. As works progress off site space will be rented for some accommodation.

The Contractor 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 Lambeth Council and statutory authorities. Contact numbers for the key staff of the Contractor will also be included. The Contractor 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 and Emergency Planning Authority (LFEPA) 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.

Materials Handling

Vertical movement of materials will be by tower crane, and external platform hoists.

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.

5.0 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.

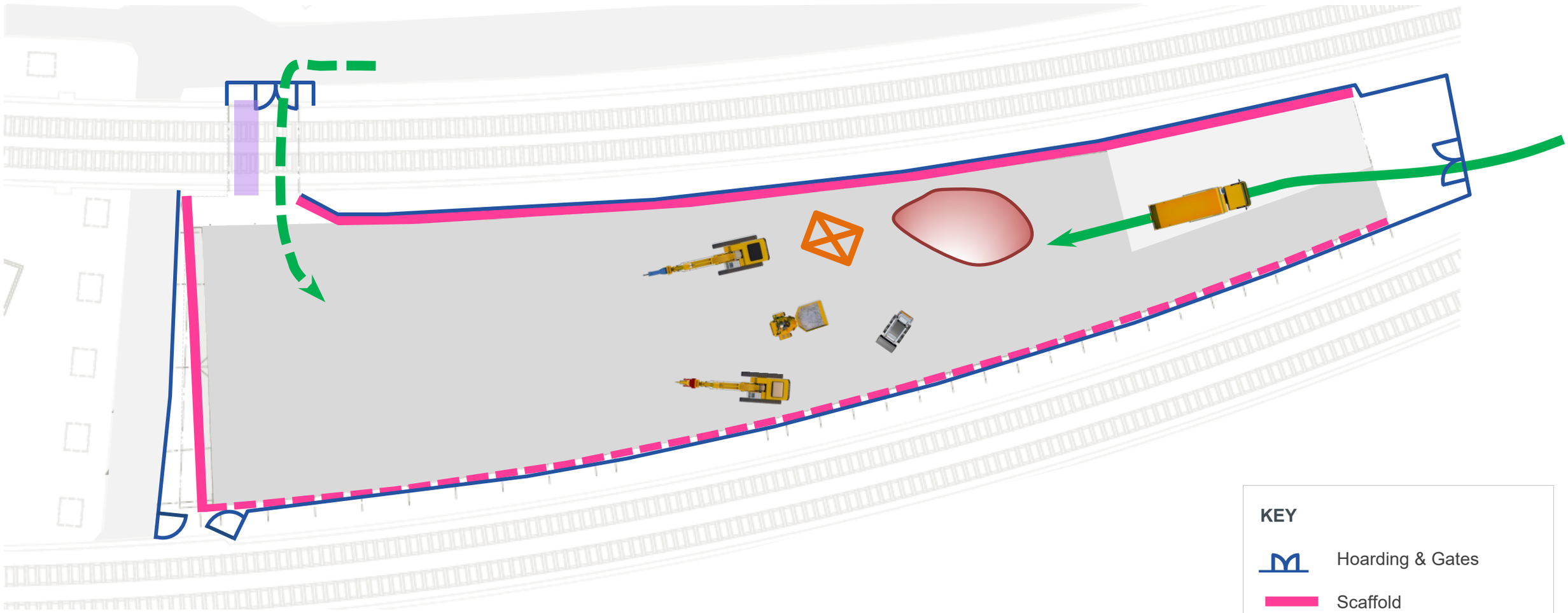
The drawings overleaf illustrate the proposed overall logistics plan for the site that incorporates the following key features:

- The site is accessed by a vehicle gate from Valentia Place at its east end. Popes Road toe the west is pedestrianised and restricted by low headroom bridges. Most deliveries must be made to the east gate, which is shared with businesses occupying some of the railway arches.
- A secondary access is possible via a railway arch to the north west corner of the site which connects to Brixton Station Road. Concrete pumping and small vehicle deliveries to the arch will help to limit the vehicle access from Valentia Place.
- The east gate from Valentia Place can be negotiated by artic as shown on Canepro Associates drawing TR003. The manoeuvre requires reversing, which will be controlled by traffic marshals, but the preferred strategy will be to deliver materials on smaller, rigid vehicles where possible, that can turn inside the site.
- Two tower cranes are proposed for the construction of the superstructures and to assist with the building envelope. Cranes have not been fully sized pending further development of design information but will be designed in accordance with NR standards including de-rating of lifting capacity. Cranes will be erected and dismantled from the east gate as described on drawing BSB-PR-004.
- Construction waste will be removed to skips and removed daily from the east gate.

- All vehicle movements will be strictly controlled by traffic marshals and short-term temporary barriers erected to safeguard pedestrians where required (in Brixton Station Road.
- Access and egress to be controlled by manned security gates.
- A static concrete pump may be positioned in the railway arch from Brixton Station Road, feeding a placement boom on the structure for concrete pours.

Please refer overleaf to the following drawings:

BSB-PR-001	Logistics - Demolition
BSB-PR-002	Logistics Substructure
BSB-PR-003A	Logistics Superstructure
BSB-PR-004A	Crane Strategy
Canepro TR003	Swept Path Analysis



KEY

- Hoarding & Gates
- Scaffold
- Demountable Screen
- Site Accommodation
- Crusher
- Stockpiled material for piling mat
- Construction Deliveries

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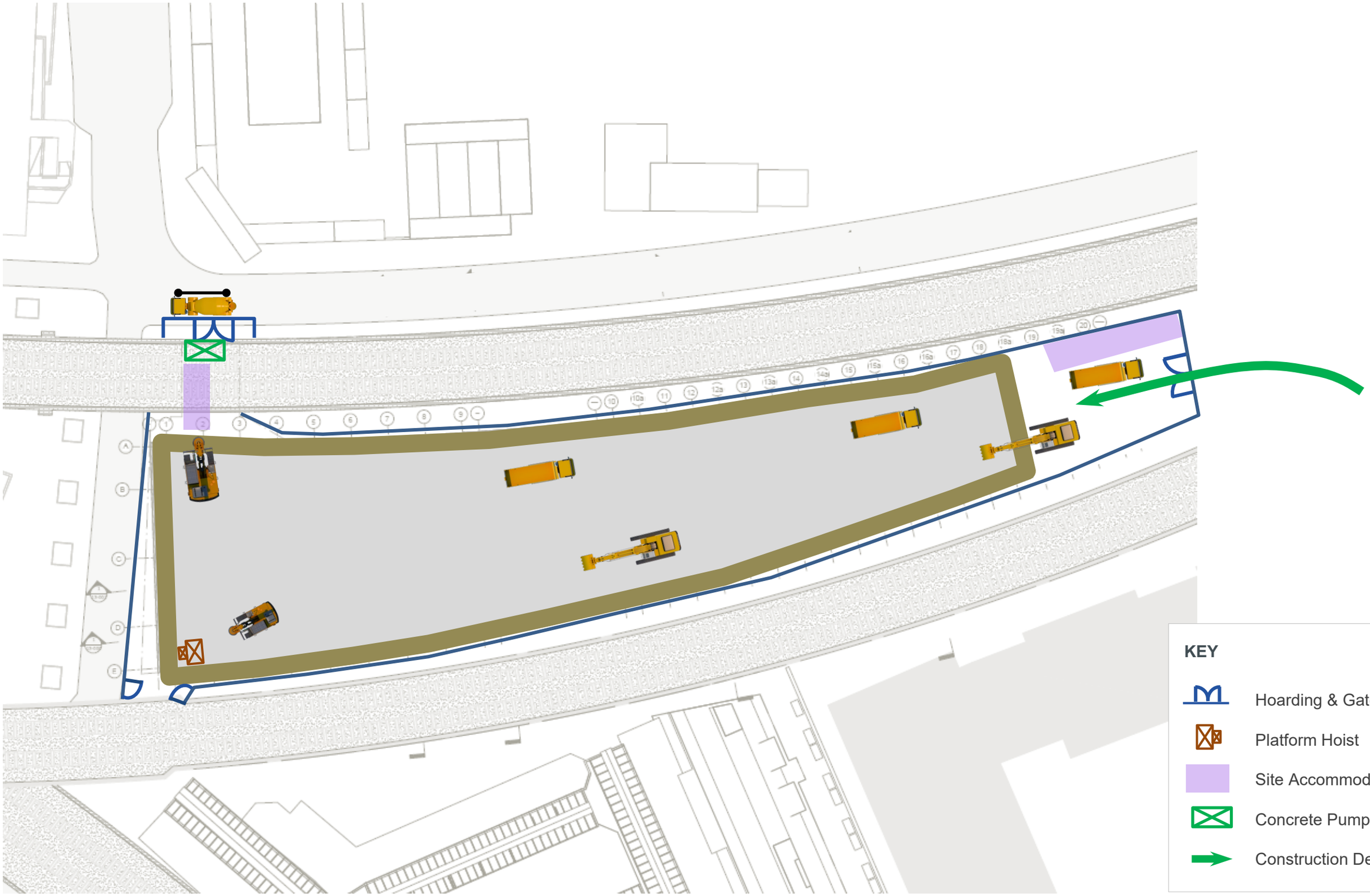
PROJECT: Pope's Road, Brixton
CLIENT: Hondo Enterprises

TITLE: **Logistics – Demolition**

DRAWING NO.: BSB-PR-001

REVISION NO. & DATE: Rev 0 – 14/11/2019



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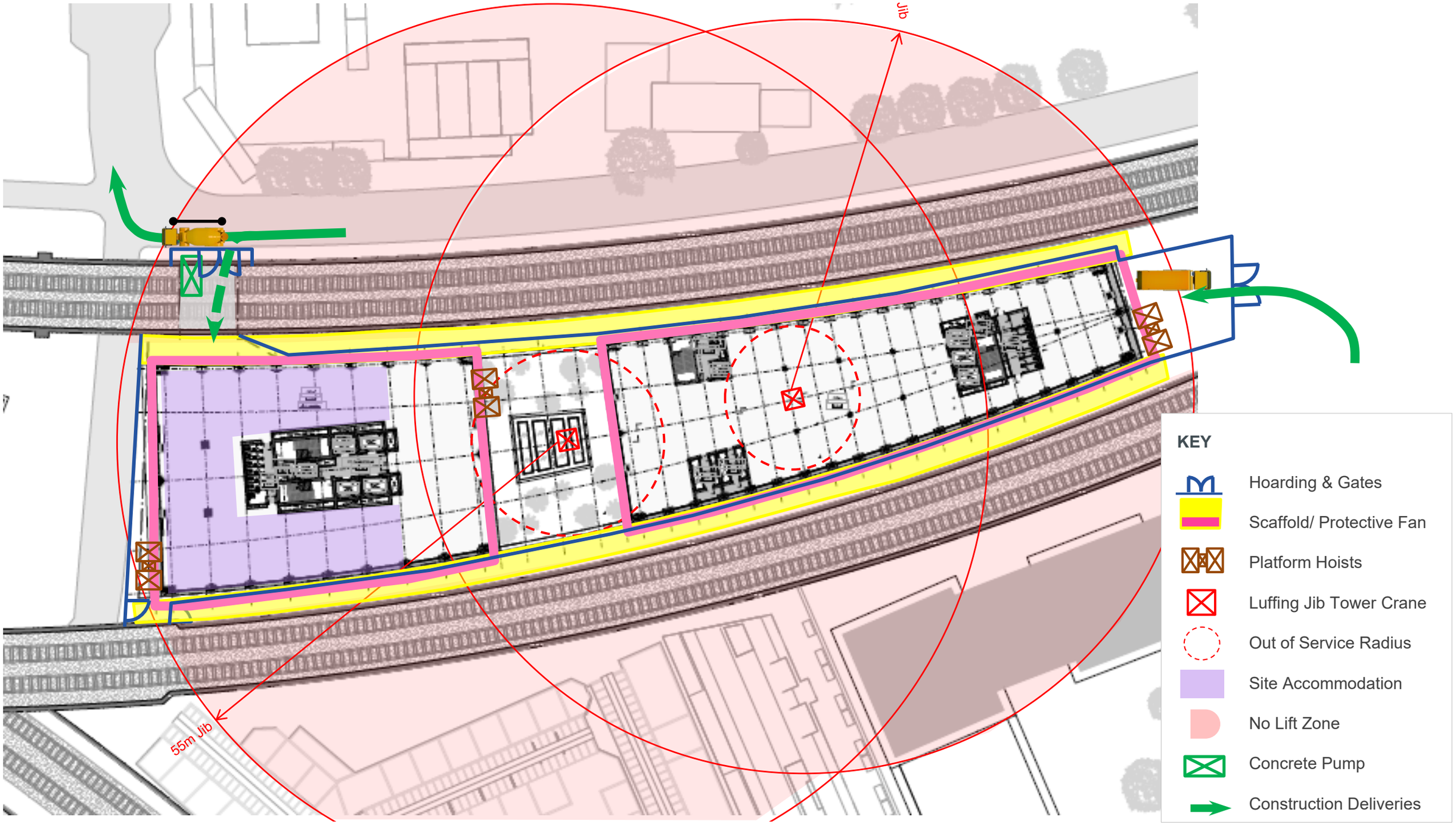
PROJECT: Pope's Road, Brixton
CLIENT: Hondo Enterprises

TITLE: **Logistics – Substructure**

DRAWING NO.: BSB-PR-002

REVISION NO. & DATE: Rev 0 – 14/11/2019



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PROJECT: Pope's Road, Brixton
CLIENT: Hondo Enterprises

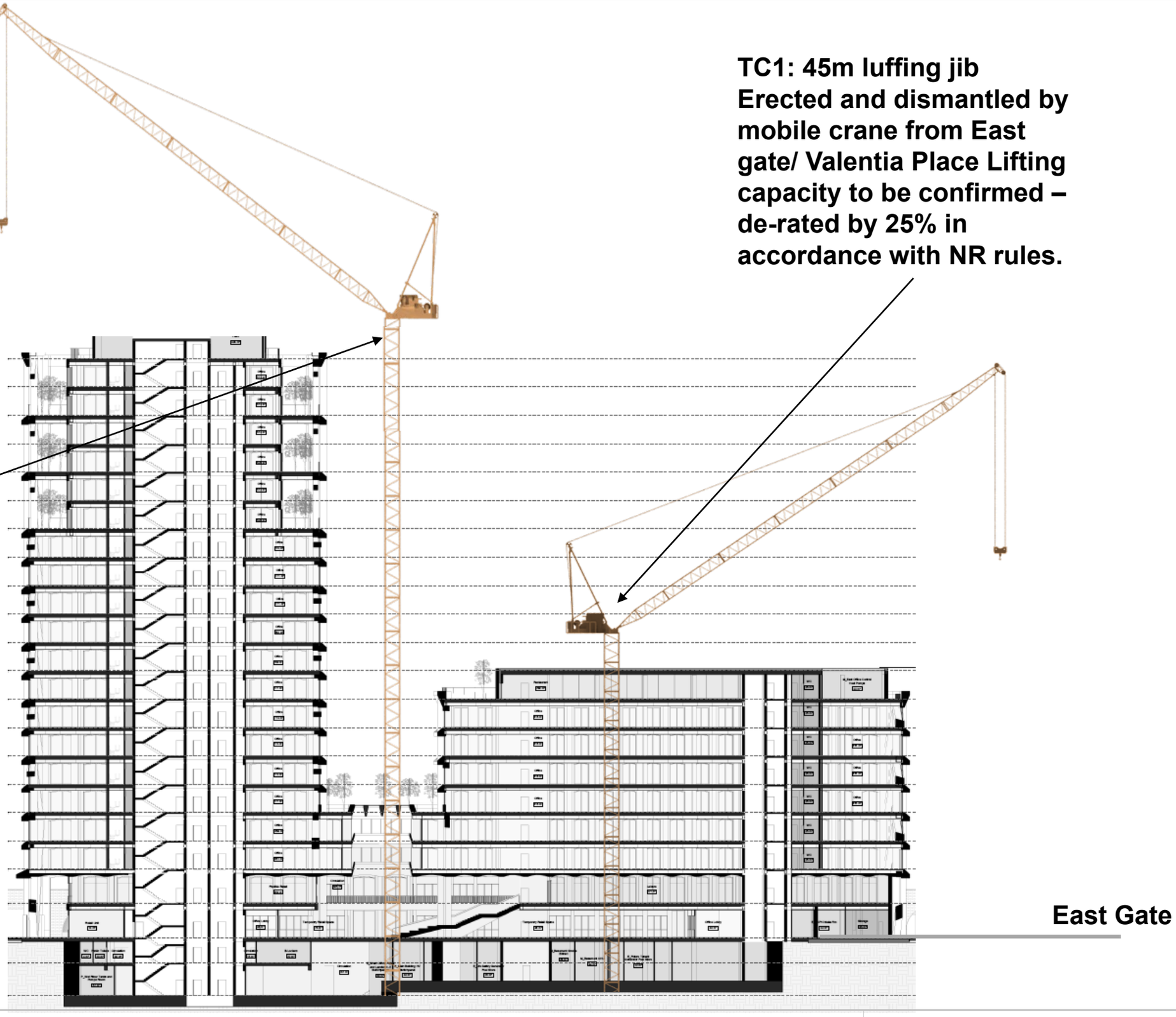
TITLE: **Logistics – Superstructure**

DRAWING NO.: BSB-PR-003

REVISION NO. & DATE: Rev A – 09/03/2020

TC1: 45m luffing jib
Erected and dismantled by mobile crane from East gate/ Valentia Place Lifting capacity to be confirmed – de-rated by 25% in accordance with NR rules.

TC2: 55m luffing jib
Erected and dismantled by TC1. Crane will be climbed to full height and down for removal.
Lifting capacity to be confirmed – de-rated by 25% in accordance with NR rules.
Crane to stand clear of tower to allow for climbing down facing East.



East Gate

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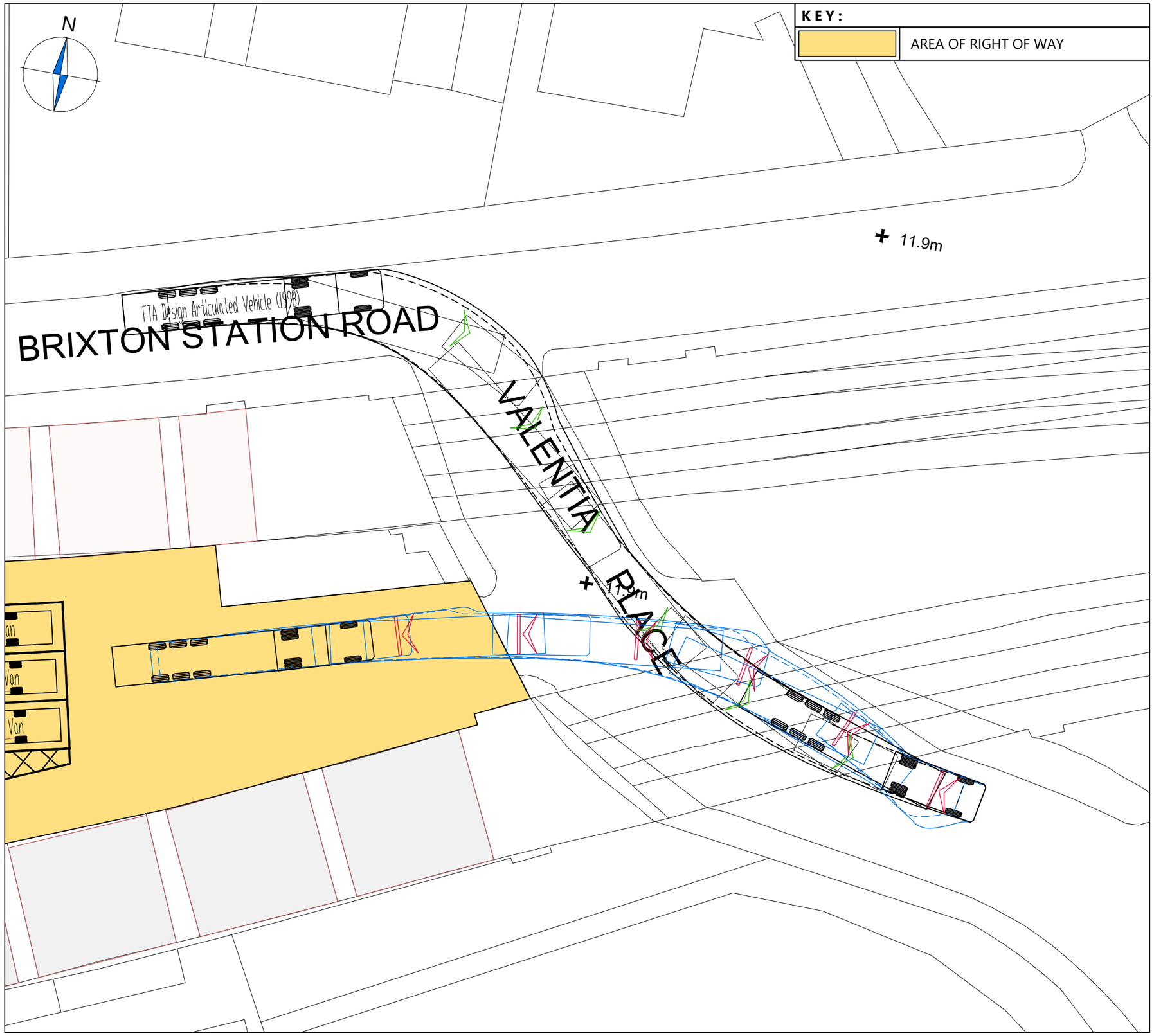
PROJECT: Pope's Road, Brixton
CLIENT: Hondo Enterprises

TITLE: **Crane Strategy**

DRAWING NO.: BSB-PR-004

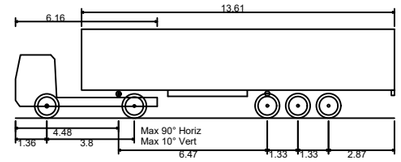
REVISION NO. & DATE: Rev A – 09/03/2020



NOTES

1. Do not scale from this drawing.
2. This drawing to be read & printed in colour.
3. This drawing is for illustrative purposes only.

FTA DESIGN ARTICULATED VEHICLE (1998)



Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to Lock Time	3.00s
Kerb to Kerb Turning Radius	6.550m

FORWARD MOVEMENTS ARE SHOWN IN BLACK *(design speed - 5kph)*

REVERSE MOVEMENTS ARE SHOWN IN BLUE *(design speed - 2.5kph)*

Rev	Details	Drawn	Checked	Date
.	...	...	...	.. ..

REVISION HISTORY

Status: ☐ Preliminary ☐ For Approval ☐ For Construction ☑ For Information ☐ For Tender ☐ As Built

Client:

Hondo Enterprises

Project:

Popes Road
Brixton

Drawing Title:

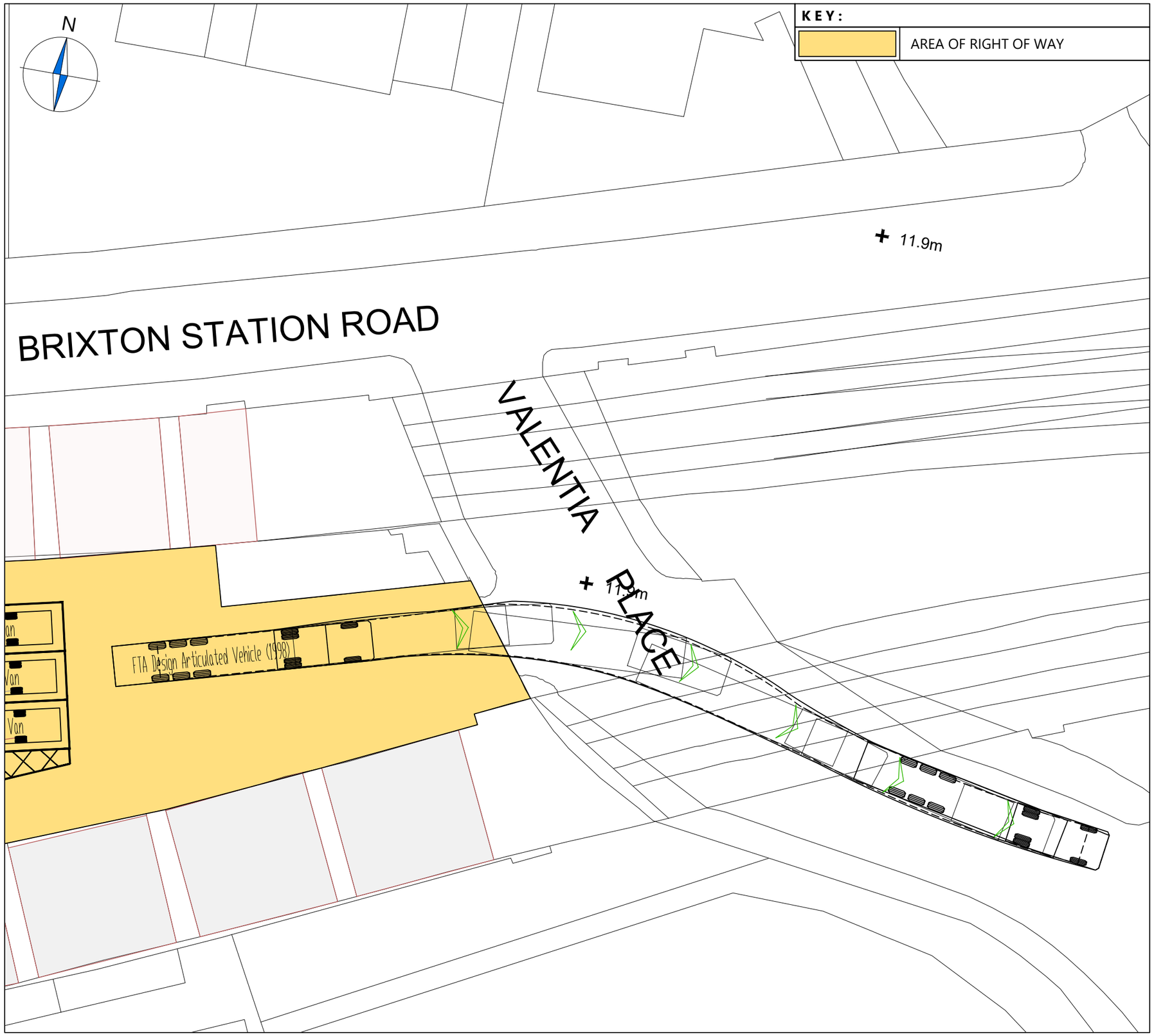
Vehicle Swept Path Analysis of an FTA Design Articulated Vehicle

Scale:	Size:	Drawn by:	Checked by:	Date:
1:250	A3	AFG	GS	14.11.2019

CANEPARO ASSOCIATES
Transport Planning & Highway Design
21 Little Portland Street • London • W1W 8BT • Tel. 020 3617 8200

Scheme Ref:	Drawing No:	Sheet :	Rev:
CA3981	TR003	1 of 2	...

CA3981_TR003 - SWEPT PATH ANALYSIS.DWG



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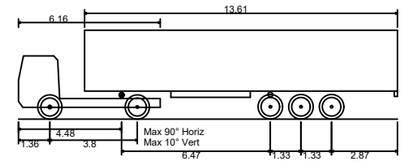

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Kerb to Kerb Turning Radius	6.550m

FORWARD MOVEMENTS ARE SHOWN IN BLACK *(design speed - 5kph)*

REVERSE MOVEMENTS ARE SHOWN IN BLUE *(design speed - 2.5kph)*

Rev	Details	Drawn	Checked	Date
.	...	...	...	.. ..

REVISION HISTORY

Status:
☐ Preliminary ☐ For Approval ☐ For Construction
☑ For Information ☐ For Tender ☐ As Built

Client:

Hondo Enterprises

Project:

Popes Road
Brixton

Drawing Title:

Vehicle Swept Path Analysis of an FTA Design Articulated Vehicle

Scale:	Size:	Drawn by:	Checked by:	Date:
1:250	A3	AFG	GS	14.11.2019

CANEPARO ASSOCIATES
Transport Planning & Highway Design
21 Little Portland Street • London • W1W 8BT • Tel. 020 3617 8200

Scheme Ref:	Drawing No:	Sheet :	Rev:
CA3981	TR003	2 of 3	...

CA3981_TR003 - SWEPT PATH ANALYSIS.DWG

6.0 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.

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.

Measures to reduce danger to cyclists.

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) Bronze accreditation as a minimum will be a contractual requirement, FORS Silver or Gold operators will be appointed where possible.

Operatives Journeys to Work

Given the central location of the site, operatives are expected to arrive by public transport. No operatives parking will be permitted or encouraged.

Access routes

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

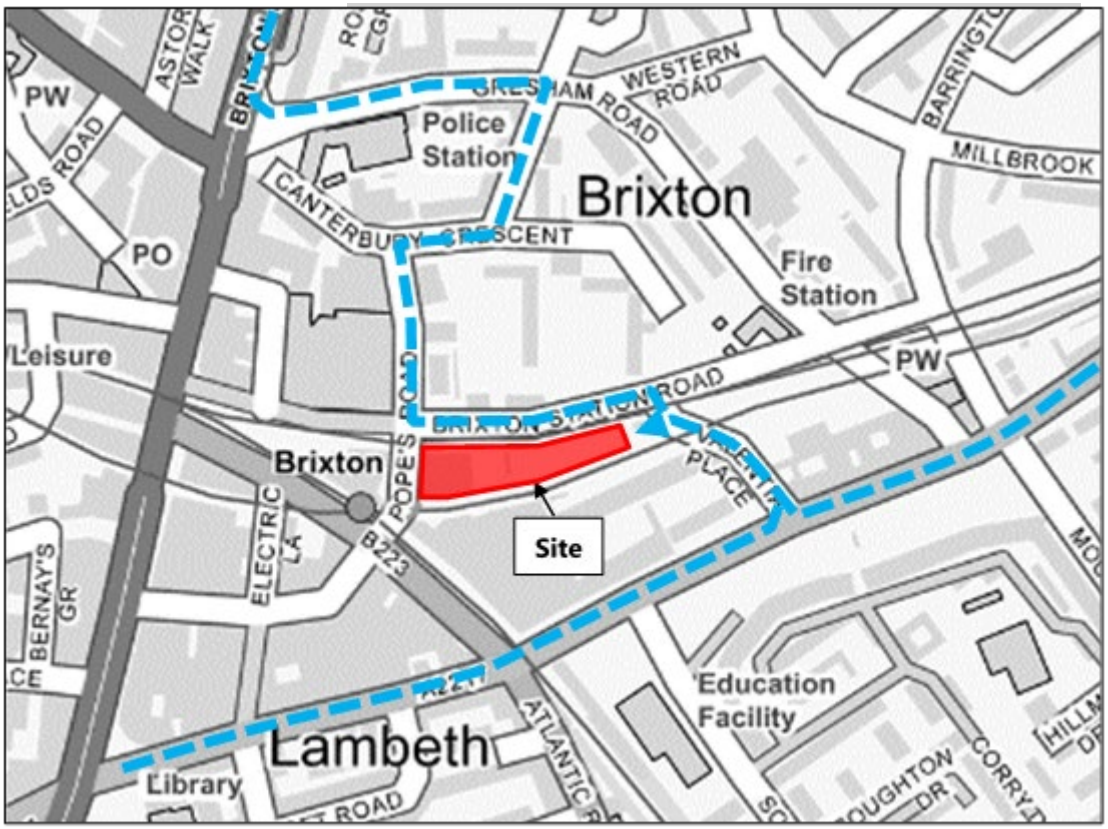
Access routes to and from the site to be used by heavy goods vehicles (HGVs) will be agreed with Lambeth Council prior to initiation of the construction programme, to minimise disruption to the road and pedestrian network. The strategic road network will be used as far as possible to reach the site, with the majority of construction traffic assumed to be approaching the site from the north and west of London.

Vehicles arriving to the site from the north will make use of the A23 Brixton Road before heading eastbound along Gresham Road, then south onto Wiltshire Road and Canterbury Crescent, providing access to Pope's Road to the north of the site, leading down to Brixton Station Road and access to the secondary loading area and Valentia Place to the east, providing access to the primary loading area.

Vehicles arriving from the east, south and west are anticipated to make use of the A2217 and/or the A23 Brixton Hill, traveling along Coldharbour Lane and then northbound along Valentia Place until the primary loading area is reached.

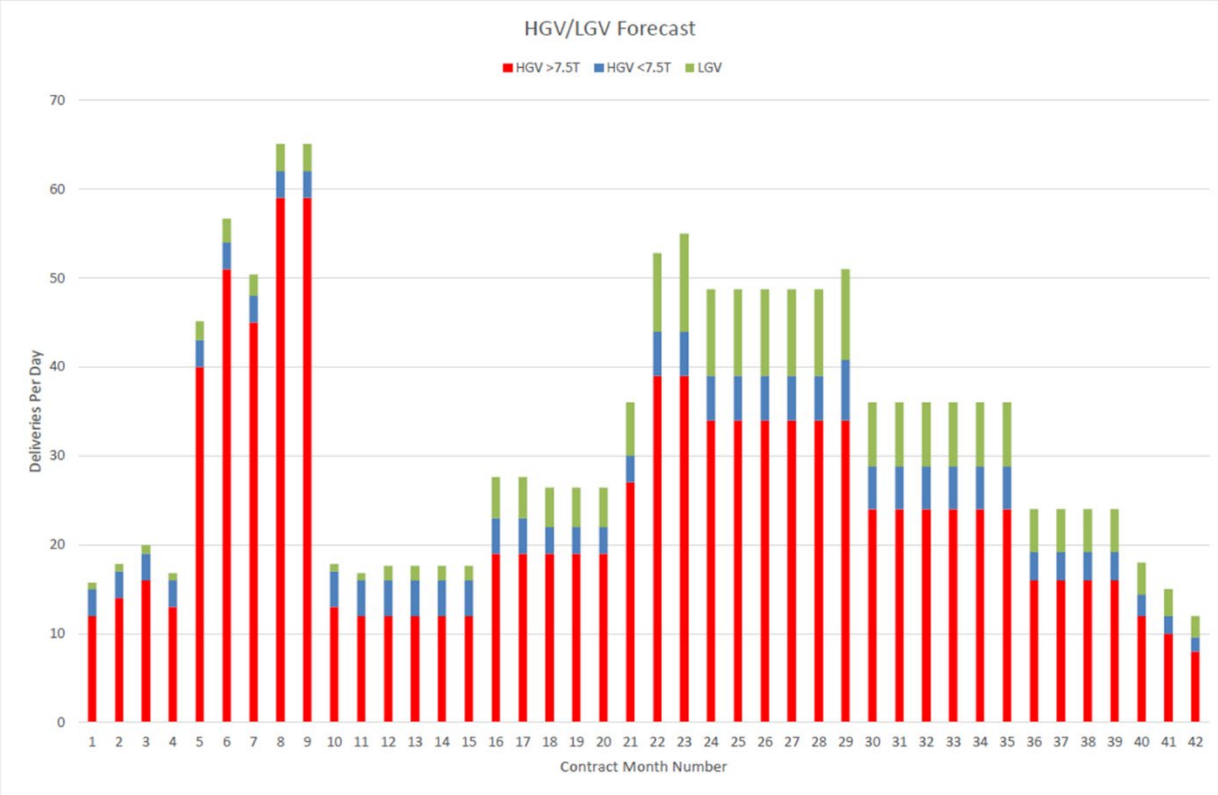
The proposed vehicle routes are considered to be the most appropriate and suitable for larger vehicles and seeks to minimise disruption to local road users. All vehicle arrivals and departures will be managed by Banksmen and Road Marshalls to ensure appropriate safety and traffic management measures are adhered to.

This routing will be subject to further development as construction logistics planning is further progressed and will be discussed and agreed with Lambeth Council when the contractor is appointed.



Construction Traffic Forecast

- The number of lorry movements, hours of operation and any lorry holding areas will be agreed in advance with Lambeth Council. The Contractor will maintain an up-to-date log of all drivers that will include a written undertaking from them to adhere to Lambeth Council's 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 demolition and construction period have been calculated based on volumes of demolition waste material, together with imported concrete and first fixing. An assessment has also been made for the envelope and fit outfit-out period



7.0 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, and that any waste arising from the site is properly categorised and dealt with in accordance with the appropriate legislation and guidance.

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 2006.

In general, and in accordance with the principles of the UK Government's 'Waste Strategy 2010', a principal aim during demolition 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 demolition waste in the piling mat, re-use of excavated soil for landscaping elsewhere).
- The Government has set broad targets of 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 where practical.
- 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.

Material	Target	Probable Location
Architectural salvage	100% re-used	Several architectural salvage companies in London.
Metals	100% recycled	Every effort will be made to recycle these materials on site with any surplus being taken to waste transfer station.
Hardcore (brick/block/ concrete etc.)	100% recycled	To be crushed on site and reused as piling platform.
Excavated material/ clay etc.	100% recycled	Clay – 100% processed for re-use as fill (subject to analysis).
Glass	100% recycled	Taken for processing at specialist plants
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 Contractor.
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.

8.0 NOISE AND VIBRATION

The Contractor will monitor and control levels of noise and vibration from the site.

Measures for reducing such levels are set out of this section. The site will require prior approval via Section 61 of the Control of Pollution Act 1974.

Noise control

The Contractor's environmental team will undertake a noise assessment using noise-predicting software that projects noise levels at adjoining properties based on the emissions made by specific equipment. This noise assessment will be carried out in accordance with BS5228-1 2009 'Plan of Practice for noise and vibration on construction and open sites and is above the requirements of the Local Plan.

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 piling and structural works.

Noise levels will be monitored by the Contractor during the course of the works. Lambeth Council 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 Lambeth Council 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 provisions – screens and scaffolds

Throughout the critical demolition, piling, and excavation stages, works will be enclosed in scaffold screens and hoardings. The encapsulation provides the following benefits during those stages of works:

- It acts as a visual screen hiding the on-going works.
- Dust arising will be contained within the scaffold enclosures, safeguarding neighbouring properties and trees.
- With the use of the sheeting, noise is contained.
- The scaffold is easily adapted to suit the progress of the works.

Vibration control

Vibration is a particular risk during below demolition, piling and excavation works. The measures taken to reduce the acoustics of these 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 these 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 Lambeth Council.

9.0 AIR QUALITY

The Contractor 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.

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

Throughout the more critical demolition activities, all works will be enclosed behind hoarding and dust screens. This encapsulation together with the nature of the existing construction, results in a low risk of emissions to the air; the project will be a site with a low risk of Emissions (Tier 1).

Throughout the project, the Contractor will ensure the following:

- Where potential dust producing activities are taking place, screens remain in position. This will include all demolition, excavation and structural works.
- There is no burning of waste materials on site.
- There is an adequate water supply on the site.
- Disposal of run-off water from dust suppression activities and cleaning is in accordance with the appropriate legal requirements.
- All dust control equipment is maintained in good condition and record maintenance activities.
- Strip inside of the existing building before any demolition is undertaken.
- Site hoarding, barriers and scaffolding are kept clean.
- Loading of material into lorries within the site boundary.

- If necessary, clean public road and pavement using wet sweeping methods.
- All vehicles carrying loose or potentially dusty material to or from the site are fully sheeted.
- Minimise the amount of waste or excavated material held on site.
- Sheet, seal or damp down unavoidable stockpiles and skips of material held at site, where required.
- Avoid double handling of material wherever reasonably practicable.
- Ensure water suppression is used during demolition operations.
- Use enclosed rubble chutes and conveyors where reasonably practicable or use water to suppress dust emissions from such equipment.
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
- Use prefabrication of goods and materials to reduce the need for grinding, sawing and cutting on site wherever reasonably practicable.
- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction.
- The engines of all vehicles delivering to site are not left running unnecessarily to prevent exhaust.
- Carry out site inspections regularly to monitor compliance with dust control procedures set out above and record the results of the inspections, including nil returns, in the logbook detailed.
- Increase the frequency of site inspections when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- Record any exceptional incidents causing dust episodes on or off the site and the action taken to resolve the situation in an incident logbook.
- Ensure that dust monitoring is carried out during potential dust producing activities.

10.0 MANAGING THE ENVIRONMENTAL IMPACT OF CONSTRUCTION

This section sets out the requirements on the Contractor for managing the environmental impacts of constructing the development. The Contractor must demonstrate in detail how the requirements of the Local Plan will be met.

The Contractor will need to demonstrate the management, monitoring, auditing and training procedures that are in place to ensure compliance with the Local Plan. The contractor will set out the specific roles and responsibilities of their personnel in managing, monitoring all of the works, including any sub-contractors.

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

- The Contractor will liaise with Lambeth Council's Environmental Inspectorate on a regular basis, agreeing routine arrangements for each site activities and ensuring compliance with the Local Plan.
- The Contractor will be responsible for establishing and maintaining contact with Lambeth Council 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 Lambeth Council with representatives of local residents' groups. (See "Community Relations" in the final section).
- The Contractor will advise the local authority within 24 hours of any incidents of non-compliance with the Local Plan and health and safety issues. The Contractor will respond to any reports referred by Lambeth Council, Police or other agencies within 24 hours, or as soon as reasonably practicable.

- The Contractor will maintain on site, a system for recording any incidents and any corrective action taken for inspection by the City Council's representatives. This will be forwarded to the City Council on a regular basis. The Contractor will ensure as far as is reasonably practical, that necessary action has been taken and steps to avoid recurrence have been implemented.

- The Contractor will provide an information and reporting telephone 'Hot Line' staffed at all times during working hours. Information on this facility shall be prominently displayed on site hoardings. The Contractor's nominated person will attend monthly reviews with Lambeth Council's Environmental Inspectorate, or otherwise as requested.

- The Contractor will facilitate Lambeth Council's Environmental Inspectors to undertake regular planned inspections of the site to check compliance with the Local Plan and associated records.

11.0 AUTHORITIES AND PUBLIC LIAISON

This section sets out the processes involved in liaising with local authorities and the public prior to the commencement of development activities.

Contractors should provide Lambeth Council's Environmental Inspectors with a full programme of activity for the development before it starts. Specific information and details for the site have been outlined within this section.

Protection of local amenity is a key section within the Local Plan and will be crucial to the success of the Project.

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

- Inform on the nature and timing of all main site activities relating to the impact on local amenity.
- All site construction staff to be made aware of the requirements of this CMP and will be made responsible for its implementation.
- Sufficiently in advance of works, the Contractor will provide the Environmental Inspectors with a full programme. This will include:
    - an outline 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.
    - a health and safety plan.
- The Contractor will agree detailed schedules of work with the Inspectors acting on behalf of Lambeth Council prior to commencement of development to assess the potential for nuisance.

Community relations

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

The Contractor will inform local 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. parking bay suspension and large vehicle movements. The most suitable method of informing residents is through newsletters.

Whilst the Contractor will provide monthly newsletters, we propose that an additional liaison group will be set up with representatives of the businesses using adjacent properties.

The Contractor's project director together with the nominated person (if different) will agree with these neighbours a schedule of regular review meetings. Sufficient time prior to activities will be allowed for the neighbours' reasonable concerns to be addressed. Where required and reasonable, requested ad-hoc meetings with these neighbours will be attended by the Contractor's project director and the nominated person.

In the case of work required in response to an emergency, Lambeth Council, 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.

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.

OUR SERVICES

CONSTRUCTION DELIVERY
PRECONSTRUCTION
PROJECT MANAGEMENT
CONSULTANCY

OUR VALUES

INTELLIGENCE
HONESTY
INTEGRITY
TRUST

BLUE SKY BUILDING