Appendix C2

Draft Construction Environmental Management Plan (including outline CLP and outline Site Waste Management Plan)

St William
Designed for life

Marian Place Gasholder Site

Draft Construction Environmental Method Statement

Version	Date	Author	Reviewed By
1	25/11/2019	H. Barakzai	M. Daly
2	27/11/2019	JLDavies	MD

Executive Summary

The draft Construction Environmental Method Statement (draft CEMS) outlines initial proposals that as far as reasonably practicable, will be adopted by St William Homes LLP (the Applicant) to ensure that the re-development of the Marian Place Gasholder Site (the Site) will have minimum impact on the surrounding environment, local residents and businesses.

The draft CEMS supports the planning application for the proposed development and will be amended as and when more detailed information becomes available. The draft CEMS is an iterative process and as such is dependent upon ongoing dialogue between stakeholders and consultees to ensure that the CEMS addresses the necessary legislative, regulatory and environmental requirements. It is therefore not a definitive final document and will be finalised prior to commencement of the construction activities.

The draft CEMS outlines environmental controls that through best practicable means, will be implemented to minimise the emissions of dust, noise and vibrations. The draft CEMS also details possible monitoring methods and techniques that could be utilised to assist in mitigating impacts arising from the construction of the proposed development.

Throughout the development, the CEMS will remain a live document and will be reviewed periodically by the Applicant.

Contents

1 Project Description

1.1 General

St William Homes LLP (St William) is a joint venture between the Berkeley Group and National Grid with the objective of bringing forward former gasholder sites for residential led development. St William ('the Applicant'), intends to submit a full planning application for a residential led mixed-use development ("the Proposed Development") on the Marian Place Gasholder Site ("the Site") in the administrative area of the London Borough of Tower Hamlets ("LBTH").

The Site is 1.83 hectares (ha) located within the St Peter's Ward in Bethnal Green, east London. It sits adjacent to the Regent's Canal which acts as the boundary between LBTH and the London Borough of Hackney to the north.

The draft Construction Environmental Method Statement (draft CEMS) is submitted in support of the planning application.

1.2 Description of the scheme

The application will comprise of full planning permission for 555 mixed tenure homes as well as mixed use commercial spaces. The development will be accommodated in five buildings. Two of the buildings will be located within the existing gasholder guide-frames which will be retained and restored. The scheme is also to include car and cycle parking, as well as areas of public space.

1.3 Proposed Programme/Phasing

The current aim is for construction to commence with the southern buildings initially, consisting of buildings D, C and B. It will finish with the remaining two buildings to the north, which are buildings A and E. Figure 1 below shows the location of these.

<u>Proposed Phasing</u> – anti-clockwise starting from Building D

Phase 1a: Building D & partial basement
Phase 1b: Building C & remainder of basement
Phase 1c: Building B
Phase 2a: Building A1 & partial basement
Phase 2b: Building A2 & remaining basement
Phase 3: Building E

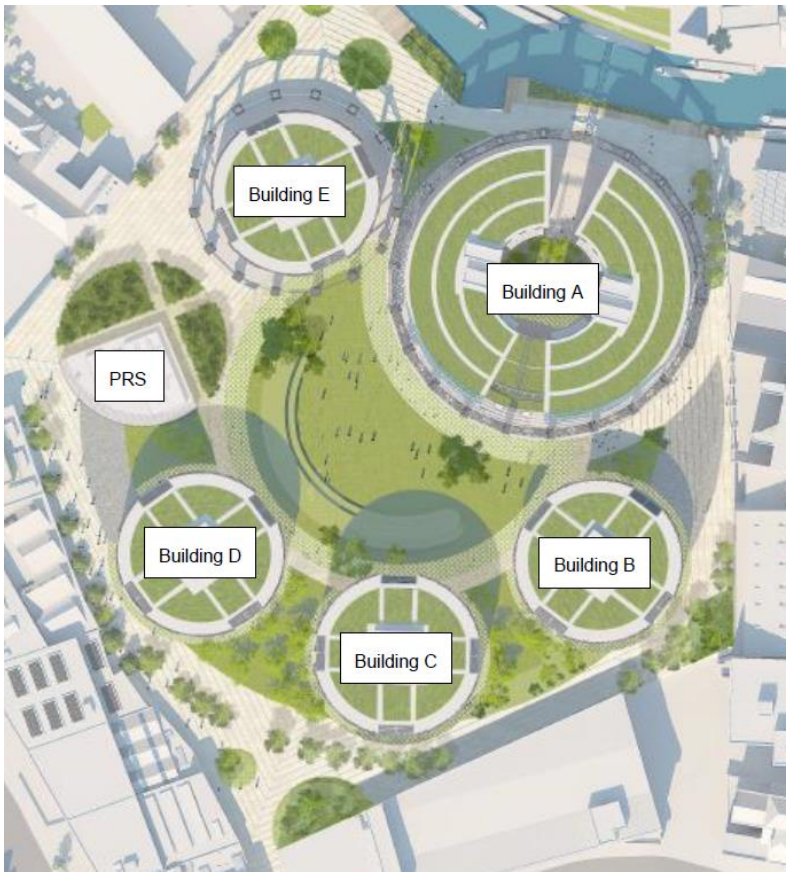


Figure 1 - Conceptual Scheme for the Marian Place Gasholder Site

2 Construction Information

2.1 Health Safety Quality and Environmental Standards & Management

In line with the Construction (Design and Management) Regulations 2015, a detailed strategy for the Construction Phase Plan and Health Safety, Environment and Quality (HSEQ) will be developed. The Plan will set out the controls for managing environmental, health and safety matters arising during the project. The details of the Construction Phase Plan and HSEQ controls are not intended to duplicate the draft CEMS but will cover the following:

- Project Health, Safety & Environmental goals
- Arrangements for identifying and managing high risk activities
- Arrangements for Environmental/Sustainability Management
- Arrangements for communication & consultation (including H&S committees)
- Arrangements and standards for training and competency
- Monitoring and auditing procedures
- Accident and incident reporting and emergency controls

The Plan will also set out the management structure, identifying key personnel and their responsibilities for managing HSEQ on the project, key items will include but not limited to are:

- Site safety rules
- Occupational Health procedures
- Project Fire Plan

- Project Quality Management Plan
- Project Accident Plan & Hospital information
- Construction Logistics Plan
- Traffic Management Plan
- Health and Safety file information and requirements

The maintenance and management of the construction phase plan will be the responsibility of St William.

2.2 General Principles and Health & Safety

Site working hours are expected to be between 08:00 and 18:00 Monday to Friday and 08:00 to 13:00 on Saturdays. No work is anticipated during Sunday and Bank Holidays. If there is a particular requirement to work outside of these hours, LBTH will be notified.

The objective of St William will be to protect project personnel and the general public from any significant adverse effect during the construction works. Therefore all site work will be carried out under the provision of the Health and Safety at Work Act 1974 and the CDM 2015 Regulations.

It will be the responsibility of St William, or its nominated representative, to ensure adherence to all standard safety procedures laid down in the appropriate statutory guidelines, as well to produce, manage and implement a bespoke Project Construction Phase Health and Safety Plan (a requirement under the CDM 2015 Regulations). This document will cover key elements such as (but not limited to):

- Appointing the right people and organisations at the right time.
- Making sure everyone has the right information, instructions, training and supervision etc.
- Consulting workers and engaging with them to promote and develop effective measures to work safely and healthily.

2.3 Construction Site Layout and Good Housekeeping

The Site will be screened by a 3m high hoarding/barrier around the external boundary, as recommended within the noise and vibration assessment within the Environmental Impact Assessment (EIA). The barrier will be maintained to a high standard throughout the construction phases. As works progress above the barrier, measures will be introduced to control work at heights by task specific method statements and procedures. St William will follow a “good housekeeping” policy at all times.

This will include, but not necessarily be limited to, the following requirements:

- General maintenance and cleanliness of site boundary, welfare facilities and storage areas;
- Provision of adequate welfare facilities for site personnel;
- Appropriately located designated smoking areas with waste container;
- Appropriate waste management provision and regular collections;
- Open fires will be prohibited at all times;
- Effective infestation prevention of pests or vermin including arrangements for regular disposal of food or other material attractive to pests. If infestation occurs St William will take appropriate action to eliminate and prevent further occurrence;
- When required, wheel wash facilities will be provided;
- No discharge of site runoff or water discharge without agreement of the appropriate

authority;
- Appropriate security and lighting;
- Provision of site layout map showing key areas such as material storage, spill kits, material and waste storage;
- Maintain cleanliness of adjacent public highway, where practicable;
- Lorries will enter and exit the site in a forward direction and Trained Banksmen will be provided to oversee vehicle manoeuvres;
- Trained Traffic Marshals will be on hand at site entrances to manage vehicle access and egress; and
- All loading and unloading of vehicles will take place off the public highway wherever this is practicable.

2.4 Storage of plant and equipment

Materials will be stored on-site in designated, signed areas. They will be protected to prevent the likelihood of damage which would otherwise become waste. All materials will be stored close to the area where they will be used.

Plant and equipment will be ordered and delivered to site to suit the programmed task in hand. Secure tool vaults will be used for storage of smaller plant.

2.5 Welfare Accommodation

The welfare accommodation has the potential to evolve as the project progresses, but currently the welfare is being proposed within one position on the site. A welfare facility will be present for all site personnel. As construction progresses, the strategy for the location and size of the welfare office will be reviewed.

The welfare facilities will likely comprise, a canteen area, drying room with lockers, male and female toilets, induction room, first aid room, St William and office welfare facilities, and meeting rooms. Where practicable, energy and water efficient fixtures and fittings will be incorporated.

2.6 CCTV

CCTV will be installed on the site in suitable locations.

2.7 Considerate Constructors Scheme (CCS)

The site will be registered with the CCS (Considerate Constructors Scheme), posters with contact details, will be clearly displayed on the site hoardings in prominent locations.

The most up to date CCS ‘Code of Considerate Practice’ will be explained to operatives and staff during the site induction and reinforced with periodic briefings.

2.8 Publicity and Communications

St William proposes to engage with the various local landowners, residents and businesses throughout the construction process through periodic consultation to explain the anticipated programme of works, hours of work, site progress, etc. This includes prior to the commencement of noisy construction activities. This also offers an opportunity for residents in the area to raise specific concerns. Newsletters detailing project progress, specific works and contact details will be circulated to residents in the area.

Statutory signage and site notification information will be visible on site hoardings, this will also

include contact information for raising comments or concerns.

The project team will establish a website which will provide site information, a progress update and contact information to handle all enquires. All enquires will be recorded and a log will be maintained that will include details of the response and action taken. All enquires will be dealt with in a timely manner

3 Construction Works

3.1 Demolition Works

There are four existing gasholders, two with above ground frames and two exclusively below ground. Initially, along with the remediation of the site, each gasholder will be demolished, with the frames for gasholders 2 and 5 refurbished and retained.

The demolition of the gasholders will initially start with the dewatering of the below ground tank, followed by the removal of the crown and below ground tanks from within the structure. Following demolition, the gasholder will be filled to the required levels.

During the demolition phase, all demolition material generated will be recycled or re-used during construction, wherever practicable. Any material identified as being 'untreatable contaminated' will be disposed of, off-site at an appropriately licensed facility by a specialist Contractor. Any other material that cannot be reused on-site will be removed by licensed waste carriers and sent for reuse at another development site or sent for disposal at appropriately licensed facilities.).

3.2 Substructure works

Following site clearance and the demolition and filling of each respective gas holder, piling will commence. Basements are proposed within the existing gasholder structures.

On completion of the piling for each respective building, bulk excavation and foundations will commence. Any excess water within excavations will be dealt with through the use of pumps, if necessary.

Movements of piling rigs and the relevant plant for the substructure activities will be monitored during the duration of the works and sequencing may be subject to change if it were deemed to be at the benefit of the project.

3.3 Superstructure works

The superstructure for all of the phases will be serviced by various tower cranes which will be located in positions deemed the most appropriate by the Site team to serve the building in the most effective manner. The current scheme is for a traditional reinforced concrete frame method of construction with the walls and columns carrying the loads through the building. The external cladding shall follow the frame once a sufficient height has been reached.

3.4 External envelope

The external envelope will consist of rainscreen cladding on a suitable frame.

The construction strategy is currently to provide external scaffolding around the facade to provide access to install the necessary cladding and distribution of heavier materials will be via hoist and crane.

3.5 Internal fit out

The internal fit out will be sequenced to suit the programme, where a quality management plan will be in place for relevant points of the process and in line with the project execution plan, the quality standards and frequency of delivery will be confirmed.

A phased occupation strategy will be adopted as units are completed within each of the buildings. Consideration of new residents will be incorporated into logistics plans in order to ensure their health and safety.

3.6 Works Adjacent to Regents' Canal

Refurbishment or replacement of the canal wall will require liaison with the Canal & River Trust (CRT). The CRT Asset Protection team have been consulted prior to submission. All works adjacent to the canal will be in accordance with the Canal & River Trust Code of Practice.

3.7 Temporary Drainage

Prior to works commencing a Temporary Drainage Strategy will submitted and approved by LBTH, as part of the Construction Environmental Management Plan (CEMP).

The Temporary Drainage Strategy will include local flood prevention measures, in line with best practice and policy to mitigate both flood risk and sediment loading and will ensure any increase in surface water runoff above pre-development rates are managed and attenuated on-site.

It will ensure that surface water runoff is captured on site and treated to remove physical contaminants in accordance with the EA's pollution prevention guidance and CIRIA guidance 'C532 - Control of Pollution from Construction Sites'.

It will also ensure that no surface water runoff enters the canal and will include measures to reduce groundwater flooding if this occurs during excavation works. For example temporary de-watering strategies and provision for pumping of excavations as discussed above.

4 Environmental Management

4.1 Introduction

St William is committed to setting and working to high environmental standards and to achieve these standards, a detailed Project Sustainability Tracker (PST) will be developed. The PST is a live document that will track compliance with environmental and sustainability requirements for the duration of the project. Targets for the following aspects will be monitored and will include:

- Waste and plastics;
- Timber sourcing;
- Non-road mobile machinery (NRMM) emissions;
- Electrical usage; and
- Water usage.

4.2 Waste Strategy

4.2.1 Pollution Prevention

St William will prepare and implement appropriate measures to control the risk of pollution due to construction activities and materials in an incident control plan.

An Incident Response Plan will be prepared that includes the procedure to be adopted by site personnel in the event of any pollution incident, for example a spillage. The plan will be briefed to all site operatives as part of their induction and training given throughout the construction phase to ensure the plan is suitably implemented. The Plan will also contain the following:

- List of key external and internal contacts;
- Procedures for spill containment and remediation;
- Site plan including drainage and location of storage/ refueling areas;
- List of stored materials;
- Location of spill equipment;
- List of appropriate spill kit material for different types of spill; and
- Reporting procedures.

St William will prepare and maintain an "emergency contacts" set of procedures for each work site with contact details displayed prominently at each site. St William will be required to follow the procedures in any site incident. The procedures will contain phone numbers and the method of notifying the relevant authorities and all other relevant services, for action, where required. Contact numbers of key personnel will also be included.

St William will ensure that the requirements of the emergency services will be followed for the provision of site access points. St William will work in partnership with the emergency services as appropriate.

4.2.2 Waste Management Plan

Prior to any works commencing, a Site Waste Management Plan will be prepared. The Plan will include details on waste minimisation strategies incorporated into the design and procurement stages. It will also include information on the management of waste. The waste hierarchy strategy is employed on St William sites which seek to minimise the volume of waste produced and divert waste from landfill by maximising re-use, recycling and recovery as far as possible and practical.

The approximate amount of material that will be removed from the Site following excavation are:

Excavation Works / Materials	**Volume (m^3)**
Soils (Uncontaminated)	2700
Soils (Contaminated)	300

The approximate volumes of construction materials that will be required for the construction and the subsequent waste amounts for each respective material for the Proposed Development are:

Construction Materials	**Volume Required**	**Volume of Waste**
Concrete	48,200 m^3	241 m^3
Glass	300 m^3	minimal
Steel (reinforcing bar)	6,850 tonnes	Minimal (recycled)
Blockwork	1,600 m^3	160 m^3
Plasterboard	4005 m^3	400 m^3 (recycled)

While the above volumes are shown indicatively, Berkeley Group Policy mandates that methods for reducing waste are considered and implemented. The below section of this document seeks to illustrate these methods through promotion of the Circular Economy and ambitions to promote zero-waste construction methodologies.

4.2.1 Circular Economy Statement

The development has been designed in such a way as to promote the ethos of the Circular Economy. The site itself is a restoration, recycling and remediation exercise.

The remediation and cut & fill strategy has been developed in order to re-use the majority of on-site arisings to fill the gasholder voids to useable basement levels where practicable. The basement levels have been set in order to achieve the best possible equilibrium.

The demolition of the below ground gasholder tanks will provide a large volume of recyclable steel while the above ground frames will be restored. Further information on the reuse of site-won material is covered in section 4.2.2.

Furthermore, Modern Methods of Construction (MMC) have been considered at this early stage in order to maximise efficiency of material use, minimise waste and limit the potential for on-site waste. This has been executed through the designing of prefabricated bathrooms, utility cupboards, risers and primary plant within the planning scheme. Through off-site manufacture in factory conditions, these elements will achieve greater efficiency than will be possible through traditional methods.

Further reduction in waste is achieved a modularisation through repetition of a limited number of elements. Cladding panels and window sizes have been rationalised to a limited number of variations.

The design also seeks to promote flexibility through its design. Through use of an efficient concrete frame, internal partitions can be demolished and replaced to allow alternative arrangements and uses during the building's lifespan. Ground floor retail and commercial uses have been designed as open plan spaces as standard.

Finally, recycling facilities for residents within the development seek to promote responsible refuse.

4.2.2 Refuse and recycling

The Berkeley Group Waste Data Tool (WDT) will be used to monitor the volume and type of waste produced on site and this will be analyzed periodically.

During remediation and site enabling works, materials will be crushed, stockpiled and processed for reuse on the site. Where this is not possible, materials will be sent for beneficial reuse off site in accordance with the WRAP Good Practice Guidance. Consideration and implementation of good practice will be engaged with where appropriate.

4.2.3 Segregation and Storage

The storage and segregation of waste will prevent harm to human health, amenity and the environment through nuisances such as dust, odour or pests. Waste segregation strategies will be developed and implemented in line with the overall logistics plan for the Site.

Construction waste on the project will be stored utilising suitable methods and appropriately managed.

The proposed development will comply with the Control of Substances Hazardous to Health

(COSHH) Regulations. All COSHH items will be stored in accordance with the relevant Environment Agency (EA) pollution prevention guidance and St William's internal pollution prevention policies. COSHH materials will be stored in a designated safe and secure locations on the Site. The management of COSHH materials will also be explained in site induction briefings.

St William will carry out periodic toolbox talks/briefings on spill prevention. COSHH material will be stored in securely locked containers when not in use to prevent unauthorised access. The Plan also includes a COSHH and key contacts to be notified in the event of a significant pollution incident.

4.2.4 Duty of Care

All controlled waste transferred will be accompanied with a compliant Waste Transfer Note (WTN) or Consignment Note for Hazardous waste. A Waste Transfer Note needs to be held for 2 years and a Hazardous Waste Consignment Note is to be held for 3 years.
St William will ensure that an environmental permit or registered exemption is in place prior to any off-site transfer, treatment or disposal of waste being undertaken.

4.2.5 Pest control measures and monitoring

St William will ensure the site is kept tidy and well maintained at all times, including arrangements for regular disposal of food and other materials attractive to pests. The tidiness of the site will be monitored through daily inspections.

If infestation occurs St William will take appropriate action to eliminate and prevent further occurrence St William will ensure pest monitoring is planned and documented and include the use of appropriate site plans.

4.3 Noise and Vibration

St William will apply Best Practicable Means (BPM) (as defined by section 72 of the Control of Pollution Act 1974) to minimise noise and vibration on neighboring sensitive receptors. Noise arising from the construction will also be managed in accordance with GLA best practice guidance and London Borough of Tower Hamlets – Code of Construction Practice (LBTH COCP).

The CEMP will set out the noise and vibration management objectives and measures for the sites so that affected sensitive receptors are protected from the adverse effects arising during the construction process.

In terms of demolition plant and equipment, the control and mitigation of noise pollution will be adhered to where practicable, these measures could include:

- plant and equipment liable to create noise and vibration whilst in operation will, as far as reasonably practicable, be located away from sensitive receptors.
- all plant/equipment and noise control measures applied to plant and equipment will be maintained in good and efficient working order, such that noise emissions are minimized as far as reasonably practical.
- provide static noise emitting equipment operating continuously with suitable acoustic enclosures.
- all pneumatic tools should be fitted with silencers or mufflers where practicable.
- traffic marshals will be used to avoid, as far as reasonably practicable, the use of reversing alarms.
- unnecessary revving of engines will be avoided and equipment switched off when not in use, wherever practicable;
- internal haul routes will be kept well maintained;

- drop heights of materials should be minimised;
- plant should always be used in accordance with manufacturers' instructions;
- care should be taken to site equipment away from noise-sensitive areas;
- where possible and practical, loading and unloading should also be carried out away from sensitive areas; and
- regular and effective maintenance by trained personnel should be undertaken to keep plant and equipment working to manufacturers specifications.

4.4 Air Quality

The provisions of the Air Quality Standards Regulations 2010, the Environment Act 1995, Environmental Protection Act 1990 and all other pertinent legislation will be complied with. The "Control of Dust and Emissions during construction and demolition", Mayor of London, July 2014 document should be adhered to. During construction primarily during earthworks and from construction traffic leaving the worksite, temporary and limited effect will be experienced. Once the frame is constructed, the majority of the works will be contained within the building and by virtue of their activities, are unlikely to generate significant levels of dust emissions. A dust management plan will be compiled before construction works commence. Following completion of the building, works associated with the landscaping will commence. These works are unlikely to generate a significant amount of dust emissions.

Best practice measures, would be implemented to minimise these impacts, including but not limited to:

- damping down roads and working areas in dry conditions;
- fully sheeting vehicles carrying loose or potentially dusty material to or from the worksite;
- organising the site so that physical barriers or screens are installed to limit the dispersal of dust emissions and loose materials are covered as soon as possible;
- minimum drop heights from conveyers and loading equipment;
- no materials to be burnt on-site;
- dust suppression when cutting, grinding or sawing materials (e.g. water sprays or local extraction).

Emissions from construction machinery will be controlled to acceptable levels by measures including:

- no vehicle or equipment to be left idling, wherever practicable;
- plant and machinery to be well-maintained; and
- all vehicles to switch off engines when not in use.

In addition to the above, the following measures will be implemented where practical:

- plan site layouts - fixed machinery and dust causing activities will be located away from sensitive receptors;
- effective vehicle cleaning and wheel washing on leaving the sites and at appropriate locations, when required;
- use enclosed well hole within the buildings to transfer debris arising from working level to grounds.
- all vehicles, including off-road vehicles will comply with exhaust emission regulations for their class.

4.5 Traffic and Transport

4.5.1 Existing and Proposed Access

The Site is well serviced from main arterial routes to London. The A11 is approximately 10 minutes' drive south along the A107 and links the Site to both Stratford and the City of London. At Stratford, traffic can use the A12 to get to the M11 or M25. The A10 is approximately 5 minutes' drive to the East of the Site along the A1208 and links the site to North London and the M25.

4.5.2 Travelling Access Egress

It is estimated that at peak production for the sub and superstructure will total up to 300 personnel on site. It is therefore important that the travel requirements are communicated to all operatives during pre-commencement meetings and the site induction process.

Access and egress to the Site will mainly be gained via the existing access, Marian Place. This is illustrated in the Figure below. It is envisaged that this entrance point will be maintained for as long as practicable. During the earlier stages of construction, The Emma Street entrance will also be used as an access point for construction traffic.

A Construction Logistics Plan (CLP) will be developed and in consultation with key stakeholders to detail vehicle routing strategy and highlight arterial routes to site.

- All deliveries are to be booked with logistics management team.
- Deliveries will be coordinated by the logistics management team.
- Plant traffic routes and pedestrian routes will be segregated.

All personnel will enter via the main entrance and will report to security/reception for induction at the site offices.

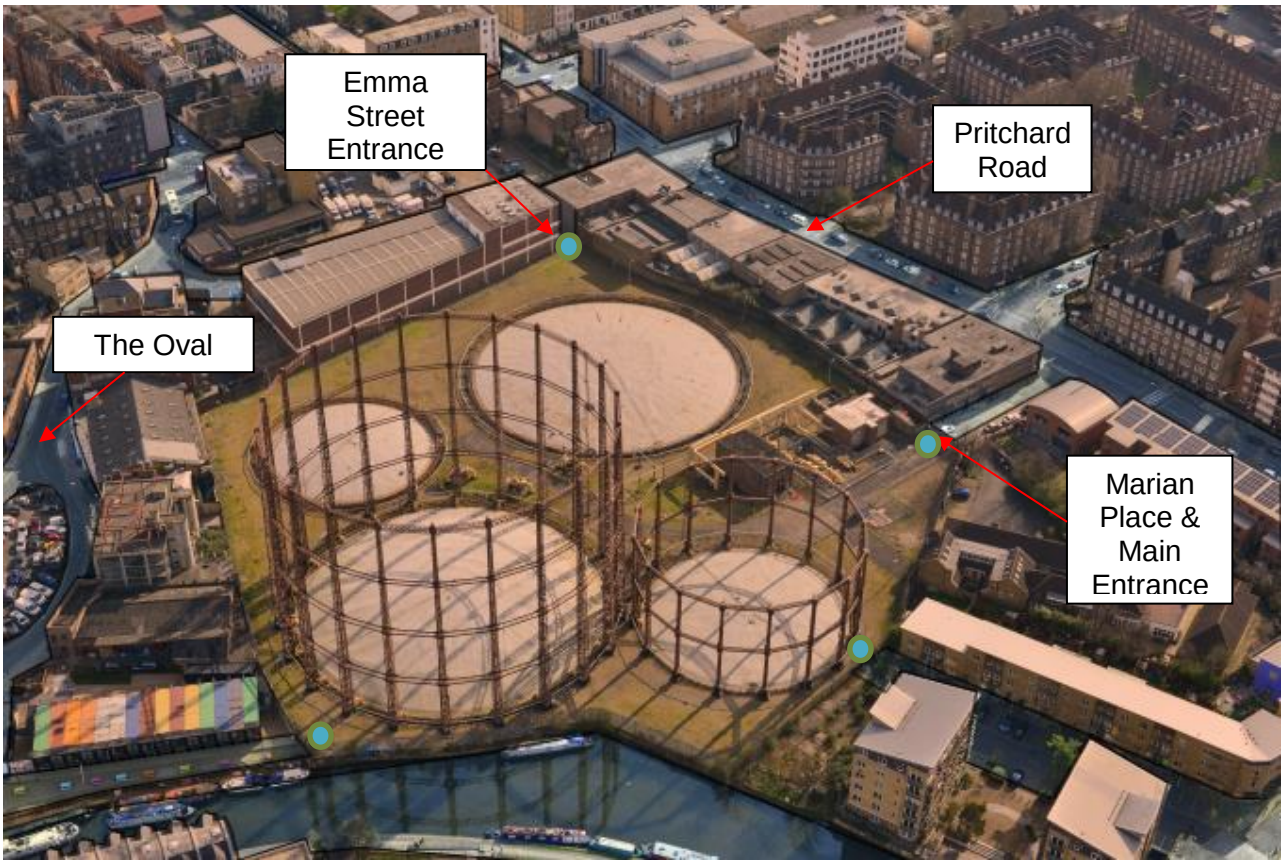


Figure 2 - Marian Place Gasholder Site Access Locations

4.5.3 Public Transport and Vehicles

The Site is well served with good access with a PTAL rating ranging from 4-6a. Cambridge Heath Station is 0.4km to the south-east of the Site, serviced by direct London Overground trains. Bethnal Green Ungerground Station is 0.8km south-east of the Site, which is serviced by the Central line. Bus stops are located on Pritchard's Road, Hackney Road and Cambridge Heath Road, with the nearest stop being 0.1km from the Site.

Public transport will be promoted with details of the local bus, rail and cycle networks posted on office notice boards and raised in the induction briefings. Generally, there will not be parking on site, except for specialist vehicles, where required.

4.5.4 Freight Operator Recognition Scheme (FORS)

All suppliers and haulage companies must be registered with the Freight Operator's Recognition Scheme administered by Transport for London (TfL). The aim is to ensure fleet operators work to best practice by meeting the FORS standard. All deliveries will be required to be FORS silver compliant and this will be stipulated in the pre-qualification procurement process. Deliveries shall not be accepted without contractors or haulage FORS membership numbers.

4.5.5 Mitigation

Best practice measures, would be implemented to minimise or remove these impacts where possible, these could include:

- all entrances will be managed by traffic marshals and will be inaccessible to the public;
- on site, physical barriers will be used to ensure vehicle movements are separated from

site operatives to ensure safe working environment;
- all HGVs will be required to be registered with FORS;
- strict adherence to site rules;
- a maximum speed limit on site will be maintained, which will be 15mph on surfaced roads and 10mph on unsurfaced haul roads and works areas.
- no smoking across the site (only in designated smoking areas);
- no children or animals allowed on site;
- turn off all engines when in unloading/ loading position where possible to prevent excessive exhaust fumes;
- check site access prior to planned delivery dates;
- a segregation area for the safe loading and unloading of road vehicles and goods, no unloading will take place on Pritchard Road, Marian Place (road) or any other surrounding roads, unless this is a necessity;
- traffic marshals will direct vehicles onto and off the site in a safe and secure manner;
- all HGV vehicles servicing this project must comply with the Euro III LEZ standard;
- all deliveries to the Site shall be booked in using a Delivery Management System;
- where necessary vehicles leaving the site will be suitably cleaned to prevent any materials being dispersed onto the highway. When required, a wheel wash will be set up to ensure the surrounding roads are kept clean and free from construction materials;
- no unloading of materials onto the public highway or footpath without the prior consent of the local authority.

4.6 Ecology and Landscaping

St William will ensure that works are undertaken in accordance with the relevant ecological requirements, which are provided as part of the planning submission.

Appropriate measures such as the use of interceptor fencing and bunds will be adopted to protect the ecology and water quality of the area of the Proposed Development and the worksites. These are highlighted within Chapter M – Ecology of the Environmental Statement. All works adjacent to the canal will be in line with the Canal & River Trust Code of Practice document.

4.7 Contaminated Land and Remediation

There is currently National Grid infrastructure that is to be demolished, which includes 4 gasholder tanks and certain redundant buildings There is also a substation housing that is to be removed. These can be seen in Figure 3 below.

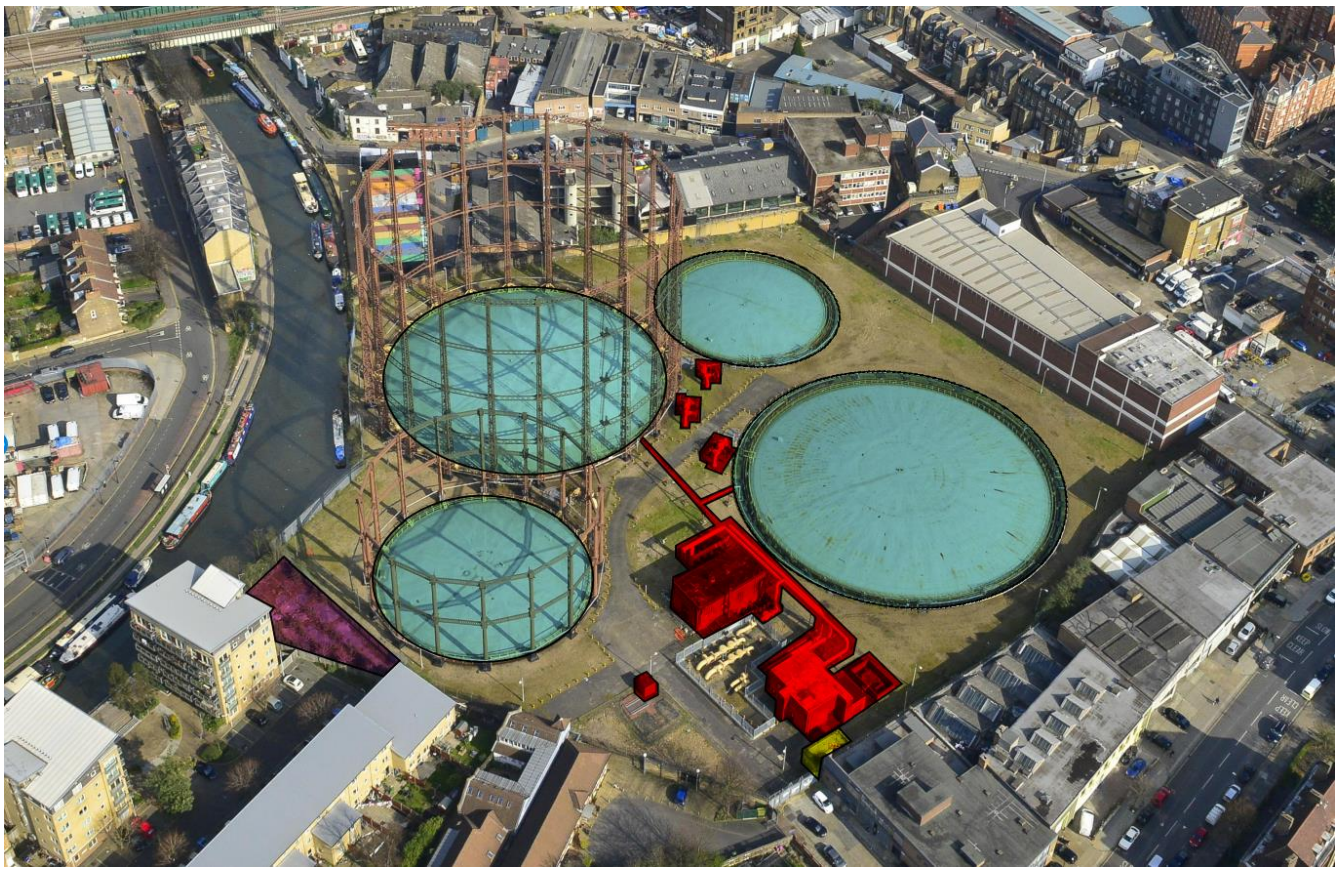


Figure 3 - Coloured items to be removed - Redundant Gas Infrastructure (Red), Gasholder Metal Tanks (Turquoise), Substation Housing (Yellow), Concrete Hardstanding (Purple)

All remediation works will comply with the legislative and regulation requirements. The outline methods proposed for remediation works aim to:

- Ensure Health and Safety of the public and workforce
- Reduce the impact on the Environment in terms of noise, dust, odour, surface runoff, protection of soil and groundwater from the actions of soil treatment
- Statutory engagement and agreement on principles relating to remediation proposals

Other pre-start arrangements will include:

- As suggested in Chapter F: Ground Conditions of the Environmental Statement, a piling risk assessment will be completed and submitted to the LPA prior to piling works.
- Any site assessment and remediation works required will be based upon Defra/EA's Model Procedures for the Management of Land Contamination (CLR11).
- Details of remediation strategy and proposed techniques
- Preparation of emergency procedures for clearing or encountering unexploded ordnance during construction
- Enabling works prior to remediation commencement

5 Targets and monitoring

5.1 Targets

The following targets are to be set for this scheme:

- All suppliers and hauliers registered to FORS (or equivalent COCS)

- Ensuring all vehicles meet the Greater London Authority's NRMM standards.
- Monitor and recording of all electricity and water consumption on Site
- 85% excavation and construction waste reduced or recycled
- Zero pollutions incidents
- Achieve a score of at least 38/50 in each CCS report

5.2 Monitoring

The Berkeley Group waste data tool will be used to record waste arising from the demolition and construction phase of the project. The following:

- Date of waste management
- Container type
- Total number of container (skips etc.)
- Destination Site name and type
- Waste carrier
- Waste streams by %

Carbon emissions arising from deliveries to Site will be monitored and the following data provided:

- Date of vehicle movement
- Vehicle and fuel type
- Distance of journey (miles)

The St William timber tracker will be used to monitor timber being delivered to Site to ensure that it is FSC or PEFC approved.

St William will be responsible for ensuring the above data is recorded and the resulting graphs and charts displayed on Site. The accuracy of such data will be reviewed during the monthly Site sustainability review.

Monitoring and review of the procedures proposed in this plan will be carried out once a month by St William. The inspection reports will identify any failures to comply with this plan and in consultation with the project manager, detail actions and responsibilities to ensure good compliance.

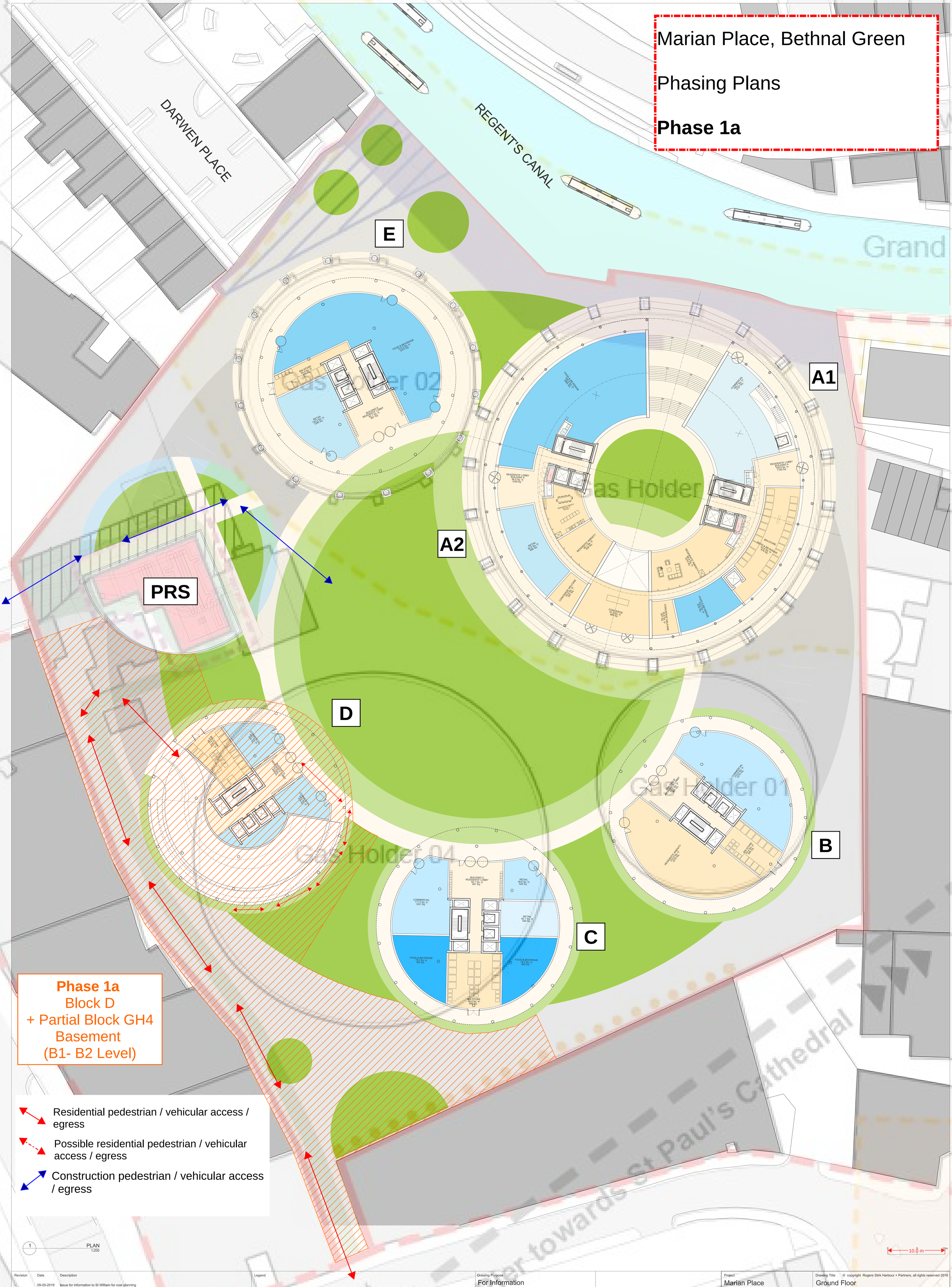
6 Phasing Plans

The following pages outline the initial proposed phasing for the development illustrating the construction sequencing and segregated access for construction and the public.

Marian Place, Bethnal Green

Phasing Plans

Phase 1a



Phase 1a
Block D
+ Partial Block GH4
Basement
(B1- B2 Level)

Residential pedestrian / vehicular access / egress

Possible residential pedestrian / vehicular access / egress

Construction pedestrian / vehicular access / egress

1 PLAN 1:200

10.0 m

Revision	Date	Description
-	09-05-2019	Issue for information to St William for cost planning

Legend

Drawing Purpose: For Information

Drawn by	Checked by	Authorised by
JN	-	JN

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Drawing Title: Ground Floor General Arrangement Plan

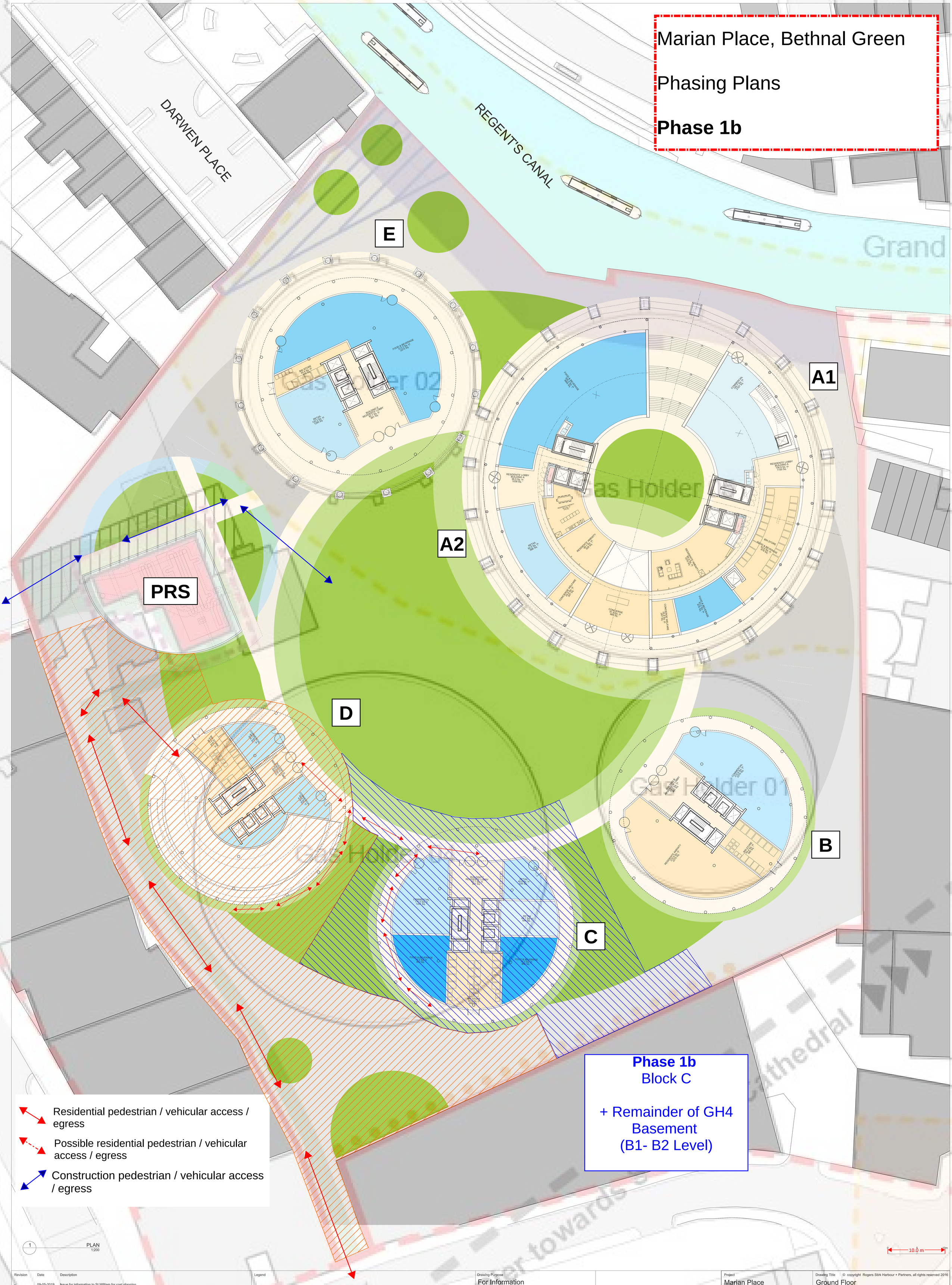
Drawing Number	Revision
RSHP-J11690-SK-0099	--

Scale @ A0	Drawing Date	Revision Date
1:200	09-05-2019	-

Marian Place, Bethnal Green

Phasing Plans

Phase 1b



Revision	Date	Description
-	09-05-2019	Issue for information to St William for cost planning

Legend

Drawing Purpose: For Information

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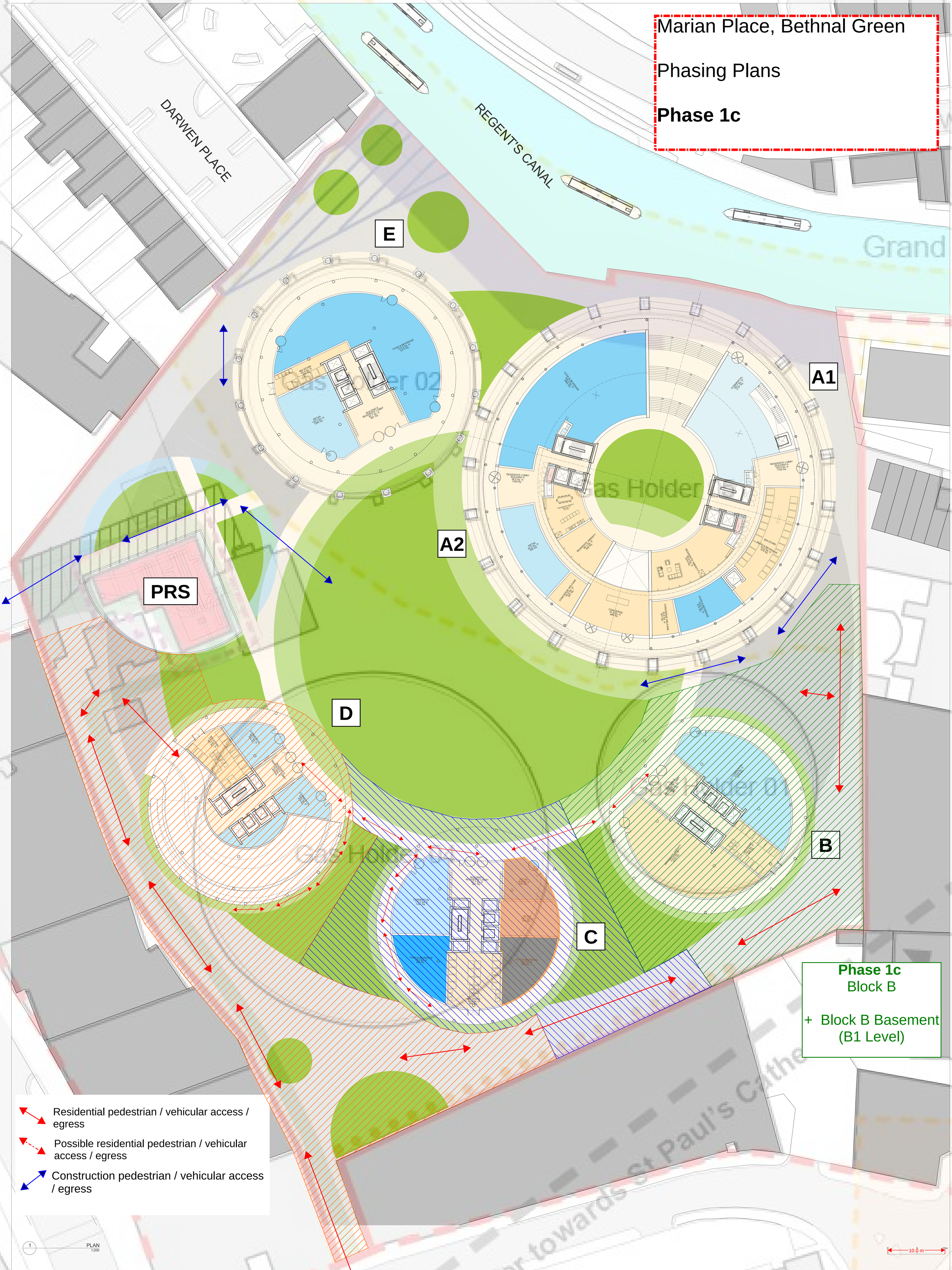
Marian Place, Bethnal Green

Phasing Plans

Phase 1c



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Marian Place, Bethnal Green

D13B Phasing Plans - Rev 1

Phase 2

Phase 2
Block A1 & A2
+ Remaining GH5
Basement
(B1 Level)

DARWEN PLACE

E

A1

A2

PRS

D

B

C

Residential pedestrian / vehicular access / egress

Possible residential pedestrian / vehicular access / egress

Construction pedestrian / vehicular access / egress

1 PLAN 1:200

10.0 m

Revision	Date	Description
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Legend

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Revision: --

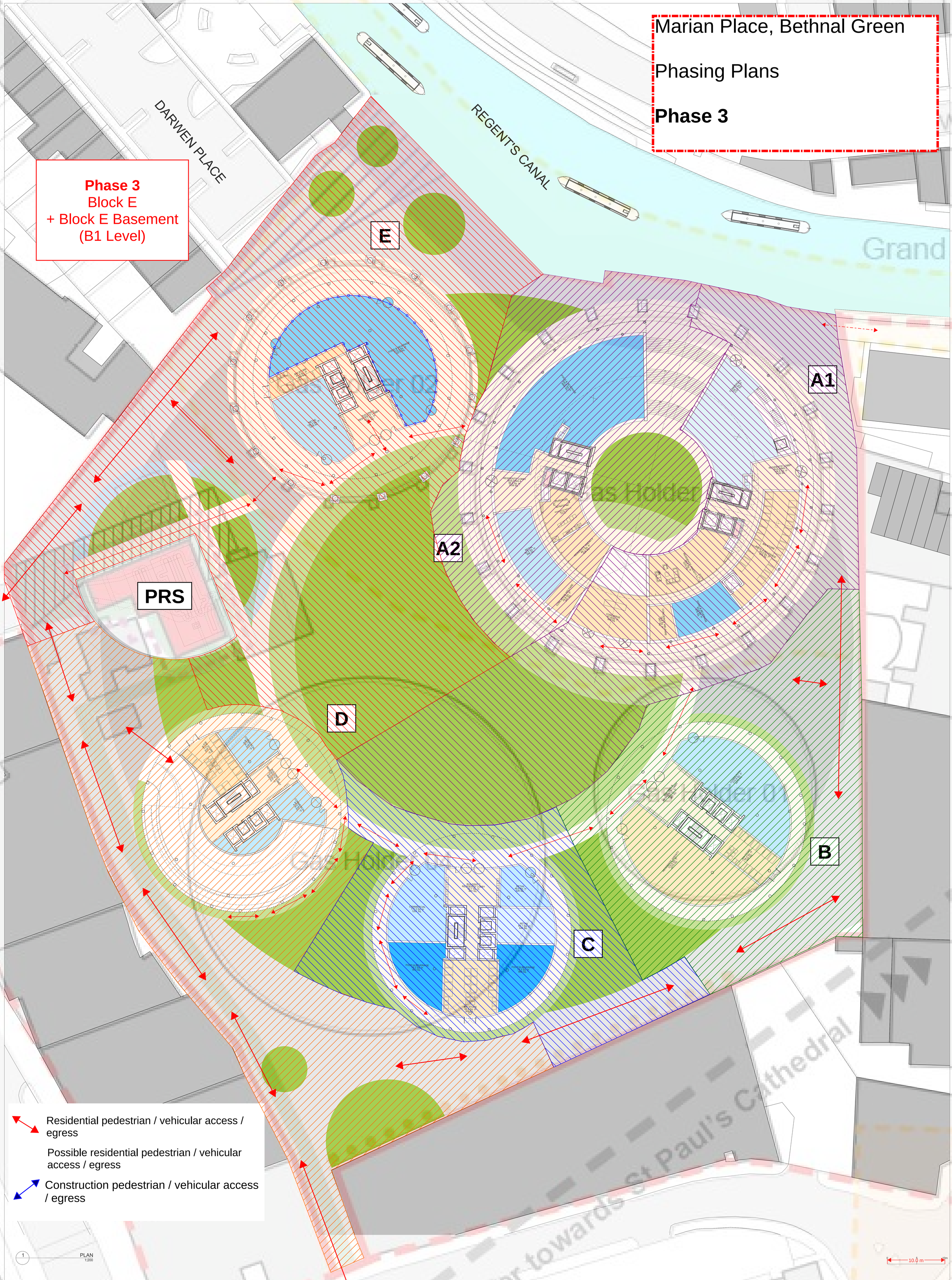
Scale @ A0	Drawing Date	Revision Date
1:200	09-05-2019	-

Marian Place, Bethnal Green

Phasing Plans

Phase 3

Phase 3
Block E
+ Block E Basement
(B1 Level)



Residential pedestrian / vehicular access / egress

Possible residential pedestrian / vehicular access / egress

Construction pedestrian / vehicular access / egress

1 PLAN
1:200

10.0 m

Revision	Date	Description
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Legend

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