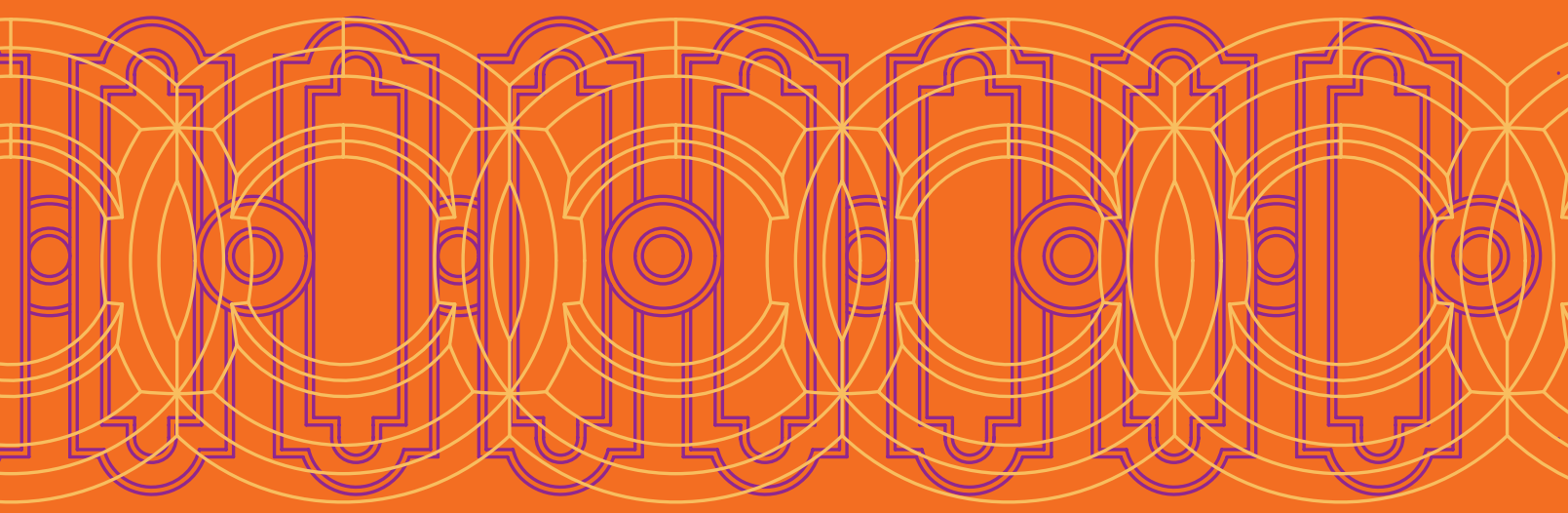
MARIAN PLACE



BETHNAL GREEN

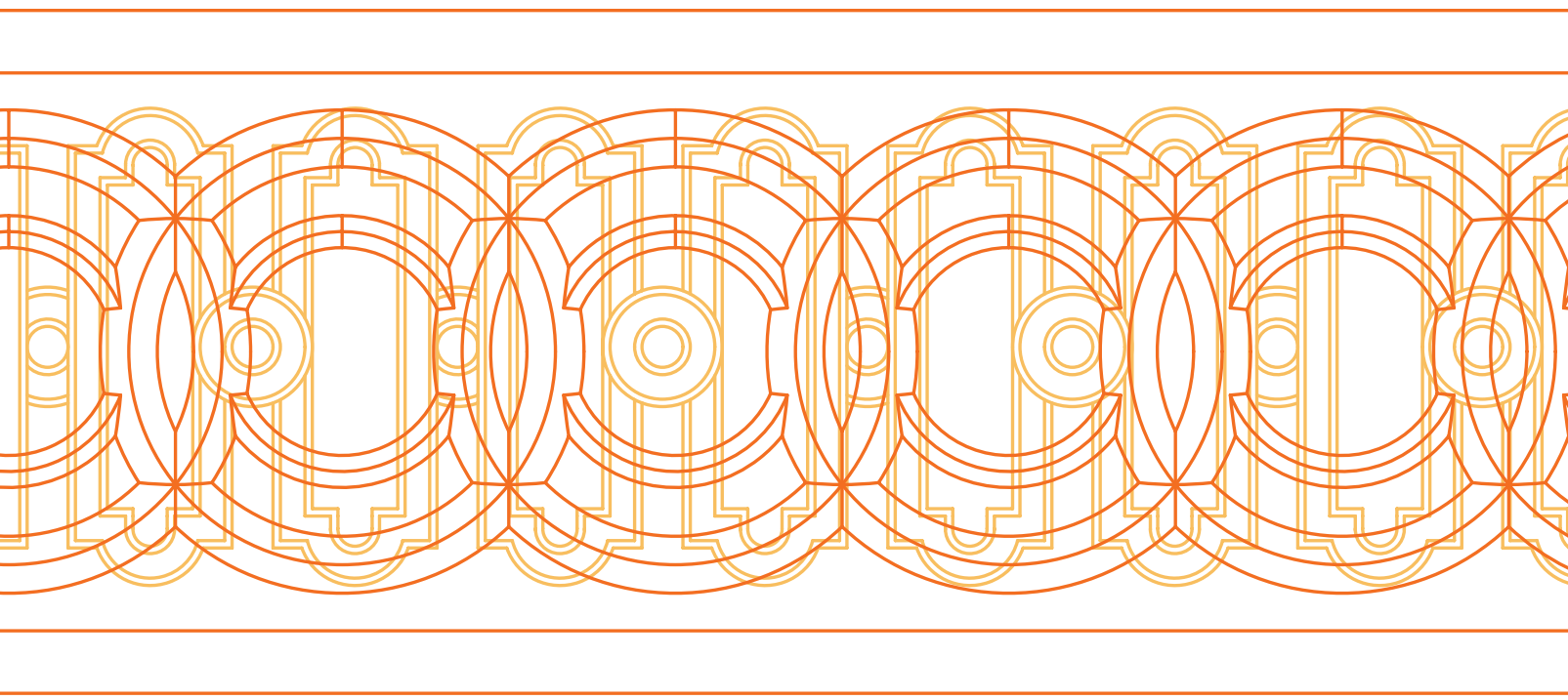
Environmental Statement (February 2020)

Volume III – Non-Technical Summary

St William
Designed for life

Our vision

Rogers Stirk Harbour + Partners



Marian Place Gasholders Environmental Statement

Volume III - Non-Technical Summary

February 2020

LICHFIELDS

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Contents

1.0 Introduction & Methodology

1.1 This document is a summary in non-technical language of an Environmental Statement ('ES') prepared on behalf of St William Homes LLP ('St William') ('the Applicant'). It sets out the findings of an Environmental Impact Assessment ('EIA') of proposals for a residential led mixed-use development of the Gasholders site at Marian Place, Bethnal Green, located on the south side of the Regents Canal and to the west of A107 Cambridge Heath Road (the 'Marian Place Gasholders Site' or 'the Site').

1.2 The proposed development falls within Part 10(b) (Infrastructure projects) of Schedule 2 of the updated 2017 EIA Regulations. Part 10(b) relates to urban development projects that include more than 150 dwellings. For such developments, EIA is required where significant environmental effects are likely. The findings from the EIA are set out in an Environmental Statement ('ES').

1.3 The document includes the following information: -

- Section 1.0 – background to the assessment process and the scheme;
- Sections 2.0 to 3.0 – a description of the site and the current proposals;
- Sections 4.0 to 16.0 – a topic by topic review of the findings of the EIA;
- Section 17.0 – a review of whether other direct or indirect effects may arise when the scheme is considered with other schemes in the area;
- Section 18.0 – details of how to obtain a full copy of the ES;
- Section 19.0 – key scheme plans and cross-sections.

The EIA Process

1.4 The EIA process aims to ensure that any significant effects arising from a development are systematically identified, assessed and presented to help a local planning authority, statutory consultees and other stakeholders in their understanding of impacts arising from development. If measures are required to minimise or reduce effects, then these are clearly identified.

1.5 For this development, EIA has been carried out to consider the likely significant effects that may arise during its construction and operation and due to its potential relationship to future developments in the area. It has been completed with regard to best practice and relevant legislation and has addressed the following matters agreed with London Borough of Tower Hamlets ('LBTH') as being required to assess the impacts of the development: -

- Townscape and Visual Impact
- Built Heritage
- Ground Conditions
- Socio-Economics
- Transport
- Wind Environment
- Air Quality
- Noise and Vibration
- Daylight, Sunlight and Overshadowing
- Ecology and Nature Conservation
- Climate Change
- Water Environment
- Archaeology

1.6 Likely effects are identified based on current knowledge of the site and surroundings, desktop assessment, survey and fieldwork and information available to the EIA team. All those matters that could be reasonably required to assess the effects of the proposals are set out in the ES; this includes effects arising from the scheme itself as well as those temporary effects arising during the construction of the proposed development.

1.7 The EIA team has worked with the design team to ensure that the scheme for which planning permission is sought incorporates those revisions or modifications that are necessary or appropriate to avoid or reduce significant adverse effects on the environment.

1.8 Consultation has also informed the EIA process in relation to the methods by which the EIA has been carried out, as a means to seek environmental data, to review the effectiveness of any identified mitigation measures and as a means to keep interested bodies informed on the process of EIA undertaken.

The Applicant

1.9 St William Homes LLP ('St William') is a joint venture between National Grid and the Berkeley Group, with the aim of regenerating industrial sites, including underutilised gasworks and gasholder sites across London and the South East. Their goal is to reconnect these sites with the local community and transform them into places where people want to live, work and spend time. The Berkeley Group has built a reputation as London's leading residential-led mixed-use developer; delivering more than 10% of London's new private and affordable homes each year.

Background to the Scheme

1.10 Since being built in the 1860s, the Marian Place Gasholder site in Bethnal Green has stored and distributed gas to thousands of homes across east London. However, technological advances in gas infrastructure have resulted in the gasholders being made redundant. The gasholders were therefore decommissioned in May 2012 and the only gas infrastructure on site that remains in operational use is a Pressure Reduction Station ('PRS'), which is to be retained.

1.11 Today the underused site sits in the middle of a vibrant neighbourhood which is also home to a mix of residents, businesses and community spaces. St William is now looking to bring forward the Marian Place site to provide new homes, jobs and public open space.

1.12 The development site also forms part of a wider emerging Site Allocation (ref. 1.3) in the London Borough of Tower Hamlets draft Local Plan 2031 ('Marian Place Gasworks and The Oval'). The allocation is for new homes, employment space and a 1ha area of consolidated open space. The draft site allocation expects development proposals to retain, reuse and enhance gasholders no.2 and no.5, respond positively to the character of the Regent's Canal Conservation Area and deliver a series of design principles and considerations such as improving biodiversity and ecology, providing an active frontage to the canal and maximise the provision of family homes.

2.0 Site Location and Surroundings

2.1 The development site is located in St Peter's Ward in the north of the LBTH, in an area known as Cambridge Heath.

2.2 The site comprises a pentagonal piece of land covering an area of approximately 1.83 hectares and accommodates the four decommissioned gasholders of Bethnal Green Gas Holder Station. A cluster of buildings including an Electrical Integration ('EI') substation, booster house and the PRS are located at the west of the site. Access can be taken from Marian Place or Emma Street.

2.3 The main local shops and services associated with Cambridge Heath centre are situated approximately 200m to the south-east. The areas to the west comprise residential, while the areas to the north beyond Regents Canal and east comprise light industrial and business use.

2.4 The primary vehicular routes in the vicinity of the site are Cambridge Heath Road – a major road linking the areas of Whitechapel and London Fields – and Shoreditch High Street / Kingsland Road (A10) which runs north, via the M25 Junction 25, towards Cambridge.

Figure 2.1 Aerial Photograph showing General Extent of Site and Surrounding Features

Source: Google Earth, Lichfields notes

2.5 The site is partially within the Regents Canal Conservation Area, which includes the two gasholders within the northern part of the site (Gasholders No.2 and No.5). None of the gasholders on site are Statutorily Listed, however, gasholders no.2 and no.5 are considered to be non-designated heritage assets due to their location within the Conservation Area.

Figure C2.2 Aerial Photograph showing General Extent of Site and Surrounding Features

Source: Google Earth; Lichfields notes

2.6 There are no listed buildings within the site, however there are a large number of listed buildings within the vicinity of the site, where the nearest to the site is 2 Pritchard's Close (Grade II listed) which is located approximately 25m south of the site.

2.7 The nearest statutory ecological designation is Tower Hamlets Cemetery Park Local Nature Reserve – located approximately 800 m to the southeast of the site. The site falls within Flood Zone 1 (i.e. within an area least likely to flood) and is located within the Tower Hamlets Air Quality Management Area ('AQMA'). The Tower Hamlets AQMA covers the entire borough and was declared in 2000 due to levels of pollutants nitrogen dioxide (NO_2) and small particulates (PM_{10}). There are no Tree Preservation Orders located within the site.

3.0 Description of Development

3.1 The description of development is as follows: -

"Demolition of existing buildings, decontamination/remediation of the site and retention (including dismantling, refurbishment and reinstatement) of the two existing gasholder frames to facilitate redevelopment for a mixed use development comprising 5 buildings ranging between 6-13 storeys (up to 63m AOD) to contain 555 residential dwellings and 4,182sqm (GIA) non-residential floorspace in flexible A1-A4, B1 and D Use Classes (maximum provision of up to 180 sqm A1/A2, up to 1,300 sqm A3/A4, up to 2,485 sqm of B1(a) and up to 635 sqm of D1/D2 use class floorspace), together with access, car and cycle parking, associated landscaping and public realm, public open space and works to the existing canal wall, Pressure Reduction Station and existing gasholders."

3.2 The development comprises 555 homes of a range of dwelling sizes including Manhattan (studios), one, two, three or four bedrooms.

3.3 The development includes provision for 35% of the habitable rooms to be affordable housing. This equate to 147 homes of 516 habitable rooms. The affordable housing provision is split 71:29 (by habitable room) between affordable rent and intermediate housing. At least 10% of all dwellings have been designed to be wheelchair user dwellings and all other units are accessible or adaptable (where possible).

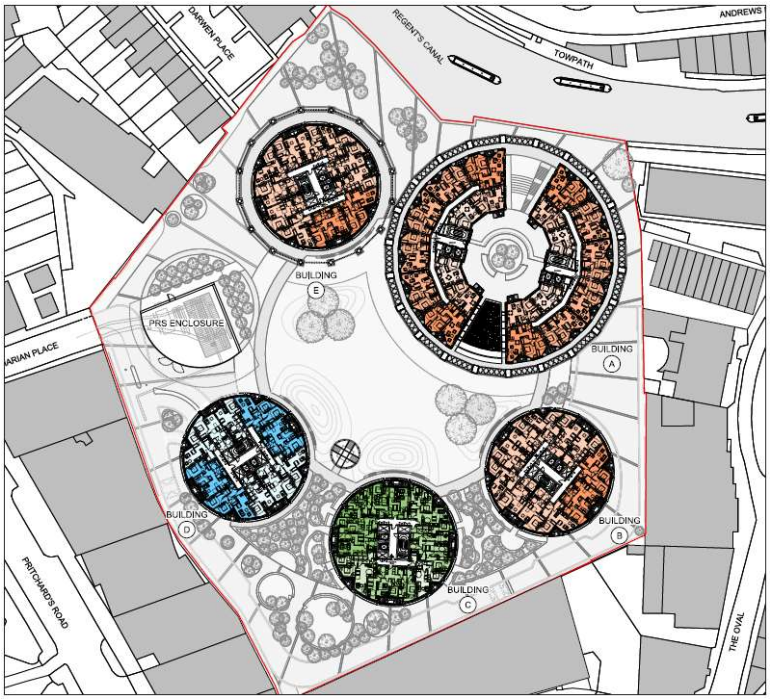
3.4 The different elements of the Proposed Development are described below.

Layout, Scale and Massing

3.5 The five buildings are in a circular form and arranged in a radial pattern within the site with two of the buildings integrated within the frames of two of the gasholders (Gasholders 2 and 5). The buildings are set within areas of public open space with further open space located alongside the Regent's Canal.

3.6 The buildings will range between 6 storeys (ground + 5m) and 13 storeys (ground +12m), with heights ranging from 38.425 metres to 60.225 metres (AOD). Basements are provided to all buildings with buildings B and C including a combined basement of two levels. Car parking will be provided within the combined basement area.

Figure 3.1 Illustration of Overall Site Layout (for reference only)



Source: Marian Place Gasholders Design and Access Statement (November 2019)

3.7 A comprehensive landscaping scheme has been developed for the site. The layout of the proposed development is structured around a clear and connected public realm network and provides amenity space around the buildings at ground level. The landscape design divides the 1.32 hectares of open space into 7 character areas:

Figure 3.2 Landscape Character Areas

Source: Marian Place Design and Access Statement (November 2019); Lichfields' annotations

3.8 Biodiverse roofs will be provided on all roofs with the exception of the western half of building A. In addition to the wider landscape proposals, each dwelling has a balcony (except for the courtyard studios within Building A which have been oversized and provided with a juliet balcony).

Non-Residential Uses

3.9 The development includes 4,182 sqm (GIA) of non-residential floorspace (including commercial) to be provided across all five buildings at basement, lower ground and ground level. The floorspace would be suitable for a range of uses within Classes A1 to A4 (retail/food and drink); B1 (offices); D1 (community uses); and D2 (leisure). 226 sqm of the Office (B1) floorspace will be provided as affordable workspace (10% of the total), rent will be reduced by 10% of open market value

3.10 Commercial uses are provided within the ground and sub-levels of Buildings A and E.

Access, Servicing and Parking

3.11 Vehicular access to the site will be maintained from Marian Place where access will also be provided for pedestrians and cyclists. Emma Street will be available for pedestrians and cyclists only. A third new access point will be provided from Corbridge Crescent, which bounds the site to the east, and will be for use by pedestrians and cyclists only.

3.12 The development includes 57 car parking spaces which represents the full 10% accessible car parking space requirement. Of these spaces 17 (3%) will be accessible spaces with the remaining 40 spaces (7%) to be large spaces available for the use of non-disabled residents until such time that demand arises for use of the full 10% of spaces by accessible users. A vehicular access control point on the perimeter road will feature retractable bollards, this will be controlled via a key fob which will be provided to blue badge holder residents with allocated parking spaces.

3.13 976 secure cycle spaces will be provided for residents with 14 visitor spaces (Sheffield stands) located within the public realm. All the resident cycle spaces will be secure and covered and located within the shared basements of buildings C and D. Cyclists from buildings C and D will be able to access their bikes via lifts/stairs located within each building, and others will use access via external lifts/stairs.

3.14 Refuse vehicles will access the site from Marian Place and will utilise the on-site perimeter road to perform waste collection. Delivery vehicles will access the onsite perimeter road from Marian Place and will be directed to the correct building at the intercom by a concierge desk and through wayfinding/signage. The majority of deliveries to the residential development will be delivered to the concierge desk in building A.

Design

3.15 The scheme includes a palette of high-quality durable materials with aluminium cladding being the main material across the site. The development's character has been influenced by the industrial character of the site and surrounding areas. The colour palette has been prepared to use existing materials and colours found in the area and are consistent with the post-industrial nature of the site. In particular, the reflect the changing natural colours of the existing gasholder forms.

Sustainability

3.16 The development maximises carbon savings which can be achieved through the provision of a highly efficient building fabric; efficient building services plant (including the provision of high efficiency air handling plant with heat recovery and low specific fan power); 100% low energy lighting and maximised use of LED and low energy fixtures; heat network provided by Air Source Heat Pumps, Water Source Heat Pumps and high efficiency back-up boilers; and roof mounted PV panels.

Construction Methodology

3.17 For the purpose of assessment within this EIA, it has been assumed that construction will start in Quarter 1 – Quarter 2 of 2021 and the construction period will last six years, with the construction period ending in Quarter 1 – Quarter 2 of 2027. The Proposed Development will be completed in phases starting with Building D and moving anti-clockwise around the site. The peak of the construction period is likely to be during the site wide basement construction and earthworks stages.

3.18 During the earthworks stage, the gasholder 2 ('GH2') frame will be dismantled and taken away from site to be refurbished. Following refurbishment, it is currently proposed that the frame would be kept in storage until the end of the construction period when the frame elements would be transported back to site and re-erected.

3.19 All normal best practice construction methods and health and safety requirements will be put in place by the contractor(s). The contractor will be required to produce and agree a Construction Environmental Management Plan ('CEMP') and Construction Traffic Management Plan ('CTMP').

3.20 Works are planned to be undertaken during the hours 8am to 6pm Monday to Friday, and 8am to 1pm on Saturdays. No work will be undertaken on Sundays and Bank Holidays.

Alternatives Considered

3.21 The 2017 EIA Regulations require that consideration is given to any alternatives to the scheme that may have been studied by the applicant; along with a consideration of what may happen at the site should the development not go ahead.

3.22 If no development was to come forward at the subject site, it is possible that the site would remain in its current use, which is an unused Gas Holder site, comprising four decommissioned gas holders. However, due to the LBTH emerging site allocation, if the Applicant did not bring this site forward, due to the emerging allocation, it is possible that the site would be brought forward by another developer during the plan period.

3.23 A range of alternatives were considered during the evolution of the scheme both with and without the retention of the gasholder frames. The current form of development, which retains Gasholder frames 2 and 5 and otherwise incorporates a series of circular building forms has emerged form the process of testing different alternatives and reviewing environmental effects.

4.0 Townscape and Visual Impact

4.1 An assessment has been carried out of the likely environmental effects of the Proposed Development with respect to townscape, heritage and visual impacts. It is likely that there will be temporary effects from the demolition and construction works on townscape character and visual amenity. These are likely to be from the visual intrusion of large demolition and construction plant and machinery, and the fact the development will be a work in progress.

4.2 The design of the Proposed Development has been modified throughout the design process to reduce impacts and increase opportunities. As such, adverse effects have been avoided for the completed Proposed Development.

4.3 The visual assessment considers the significant effects of the Proposed Development on 23 representative views around the site. The townscape assessment considers the significant effects of the Proposed Development on four townscape character areas within 500m of the site.

Figure 4.1 Representative Views Assessed

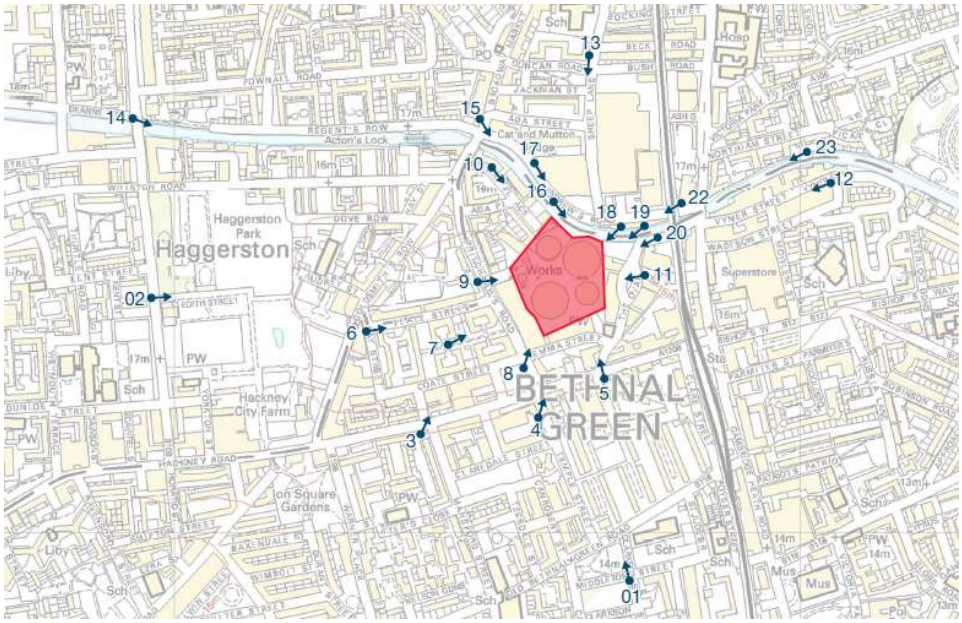
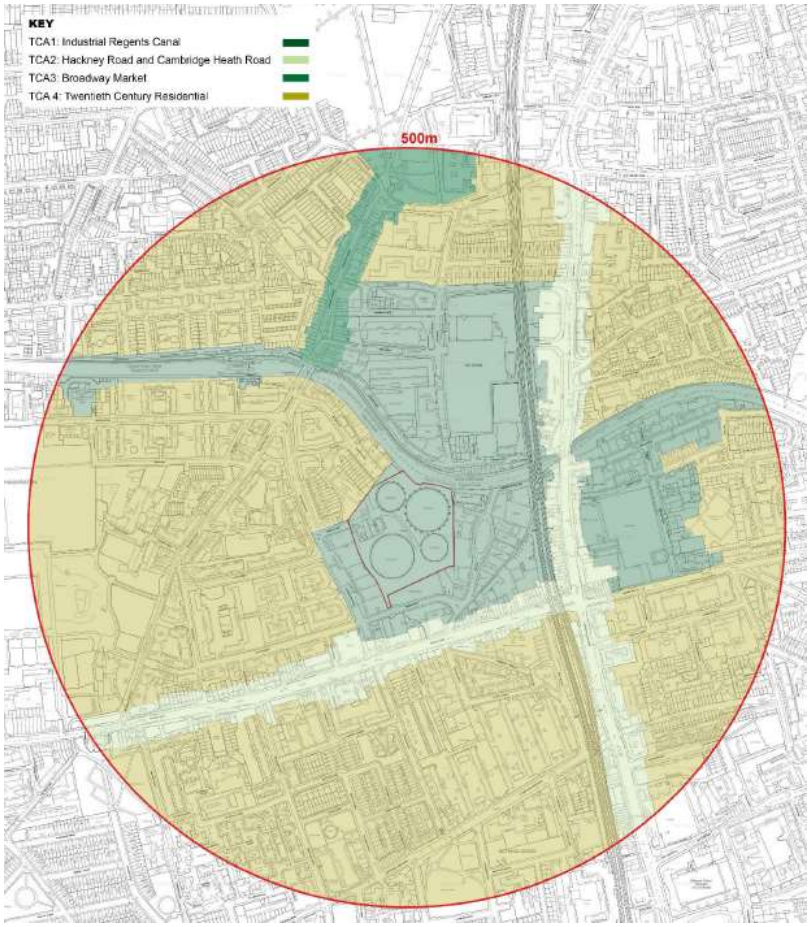


Figure 4.2 Townscape Character Areas



4.4 The effects of all demolition and construction works on townscape and close views within the local area varies. In more distant views and townscape areas, cranes and part-construction of the taller buildings on the application site are likely to be visible. All demolition and construction effects are temporary and have no residual effects once the scheme is complete, so they are not considered to be significant.

4.5 There would likely be beneficial effects on townscape character areas during operation, ranging from Negligible to Substantial.

4.6 The layout and structure of the site takes its cue from its historic use as a former gasholder site. Circular buildings would sit within the two surviving gas holder frames Nos. 2 and 5, with three further circular buildings to their south. The heights of the proposed buildings have been tested and carefully calibrated to create a stepped skyline and, as the verified views demonstrate, they would form an attractive composition of circular forms.

4.7 The scale of the tallest building within the Proposed Development (Building A within Gasholder No. 5) would allow the lattice work beam at the top the frame to remain visible against the open sky helping to preserve the landmark quality of the gasholder. The scale and footprint of Building A and Building E (within Gasholder No. 2) would remain lower than the retained frame and set back from the frame to allow the retained frame to remain legible where visible.

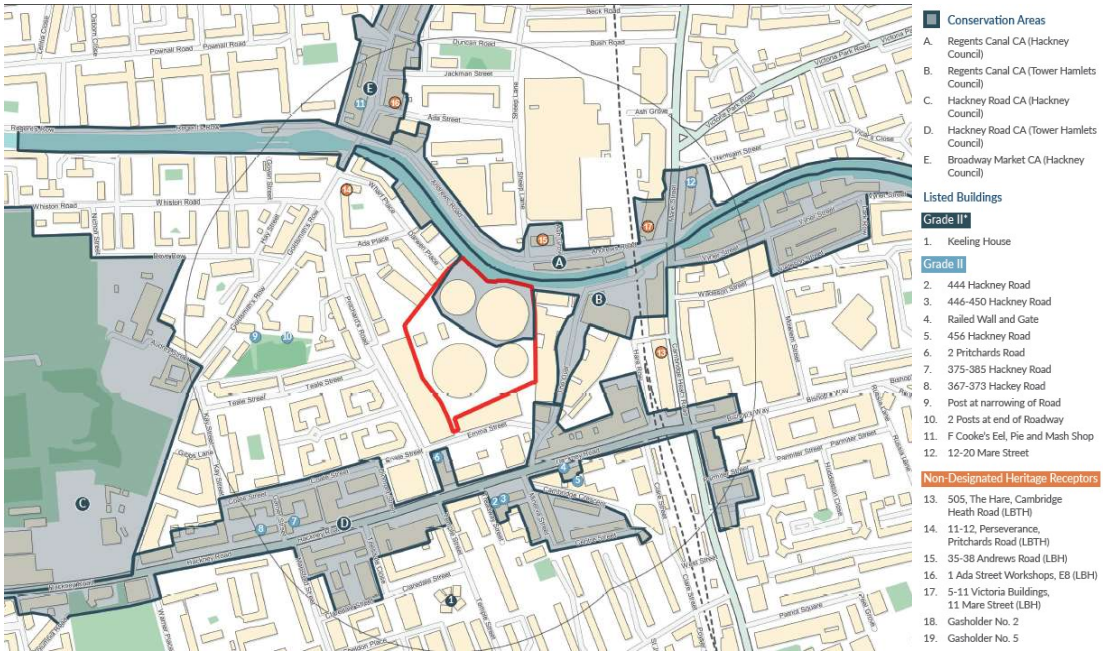
4.8 The Proposed Development would have no effect on designated medium range views. It would have localised significant effects on the character and quality of the townscape around the site and on the composition and character of local views very close to the site. Longer local views

where streets and open spaces align with the site may also be affected albeit none of these effects would be adverse.

5.0 Built Heritage

5.1 An assessment has been carried out of the likely direct and indirect effects of the development on built heritage receptors. The site does not form part of the setting of any World Heritage Sites or Scheduled Monuments but there are a number of heritage receptors in the area.

Figure 5.1 Heritage Assets



5.2 At construction stage, mitigation measures include the implementation of a Construction Environmental Management Plan (CEMP), giving construction plant schedules, working hours, proposals to minimise noise emissions and a programme of sample monitoring.

5.3 Gasholders No. 2 and 5 will be retained and refurbished, with new buildings set within and set back from the circumference of the frames. This will provide the opportunity to appreciate the engineering interest of the gasholders.

5.4 Buildings A and E have been designed to fall short of the height of the retained and refurbished gasholders. This will allow viewers to appreciate the heritage value of the gasholders.

5.5 Buildings B, C and D have been designed to gradually rise towards the canal in order to emphasise Gasholder No. 5, which makes a positive contribution to the character and appearance of the Regent's Canal Conservation Area (LBTH), and the setting of the equivalent in the London Borough of Hackney.

5.6 A programme of Historic Building Recording will be undertaken to record the gasholders during the redevelopment of the application site.

5.7 The only residual significant effect is an identified moderate beneficial effect to the Regent's Canal Conservation Area (LBTH). No residual adverse effects are identified.

6.0 Ground Conditions

6.1 An assessment has been carried out of the potential effects of the development with respect to ground conditions.

6.2 During the construction phase, there are limited potential risks to people and the environment associated with the development and the ground conditions on site. Site investigation will inform mitigation measures, which will be defined in the remediation strategy and Contractor's method statements, amongst other documents, will ensure appropriate design and construction. During operation, it is assessed that there would be no effects, and so no supplementary mitigation measures are necessary.

6.3 Upon completion and occupation of the Proposed Development, the Site will be covered by a combination of buildings, hardstanding, landscaped areas and gardens. The buildings and hardstanding will both form an effective barrier to any residual contamination at the Site. The implementation of the remediation strategy would reduce any residual contamination. This will include excavation of contaminated made ground and the importation and placement of clean soil material within the green areas which create an effective barrier to any residual contamination; and the remediation of any identified hotspots. Therefore, there is little potential for the Proposed Development's end users (i.e. residents, maintenance workers, neighbours, and users of public open spaces) to be exposed to contamination once the Proposed Development is completed and occupied.

6.4 Following the implementation of an appropriate Remediation Strategy, it is anticipated there will be no significant geo-environmental effects associated with the Proposed Development during enabling and construction, and once complete and operational.

7.0 Socio-Economics

7.1 An assessment has been carried out as to how the development at Marian Place is likely to affect socio-economic aspects of the local area during its construction and operation. It primarily considers the impacts of the development on housing, employment and the local labour market.

7.2 The resident population in LBTH equated to 317,700 in 2018, with 73.4% of the population of working age (16-64). This compares to the resident population of Greater London being 8,908,100, with 67.5% of the population being of working age.

7.3 The job density levels in LBTH in 2017 (the ratio of total jobs to the population aged 16-64) was 1.4. This is higher than the averages across London (1.02) and Great Britain (0.86) and indicates higher availability of employment opportunities within the Borough when compared with Greater London as a whole.

7.4 The sector providing the most employee jobs in LBTH in 2018 were in Financial and insurance activities (22.1%), higher than the Greater London (7.0%) and Great Britain (3.5%) averages. The sector providing the second-most employee jobs in LBTH in 2018 were in Professional, scientific and technical activities (15.8%), again higher than the Greater London (13.7%) and Great Britain (8.7%) averages.

7.5 Out of the 326 local authorities within England, LBTH ranks 27th and therefore falls within the top 10% most deprived areas within England, despite improving from having been ranked 6th in 2015. Overall, these economic and labour market indicators suggest the LBTH economy performs typically when compared to other central London borough economies.

7.6 The development will have a beneficial effect on the local economy by creating new construction jobs during the development phase and new operational jobs at a range of skill levels once the scheme is operational. Increases in resident expenditure will also support additional employment.

7.7 Alongside these economic effects, the proposed development will contribute to meeting local housing needs in this inner London location.

7.8 Overall, from a socio-economic perspective, the proposed development is assessed as having a moderate beneficial effect.

8.0 Transport

8.1 An assessment has been carried out of the likely environmental effects of the Proposed Development with respect to transport and access.

8.2 The proposals will comprise the provision of 57 car parking spaces which represents 10% of the total number of units. The proposed cycle parking provision is in line with the minimum standards provided in the Draft New London Plan. The low car parking provision and the provision of on-site cycle parking is in line with the policies of the Mayor's Transport Strategy which encourage sustainable transport throughout London.

8.3 Enabling works, demolition and construction would generate short-term increases in vehicle movements on the highway in the vicinity of the site. These increases would, however, not be constant throughout the demolition and construction period.

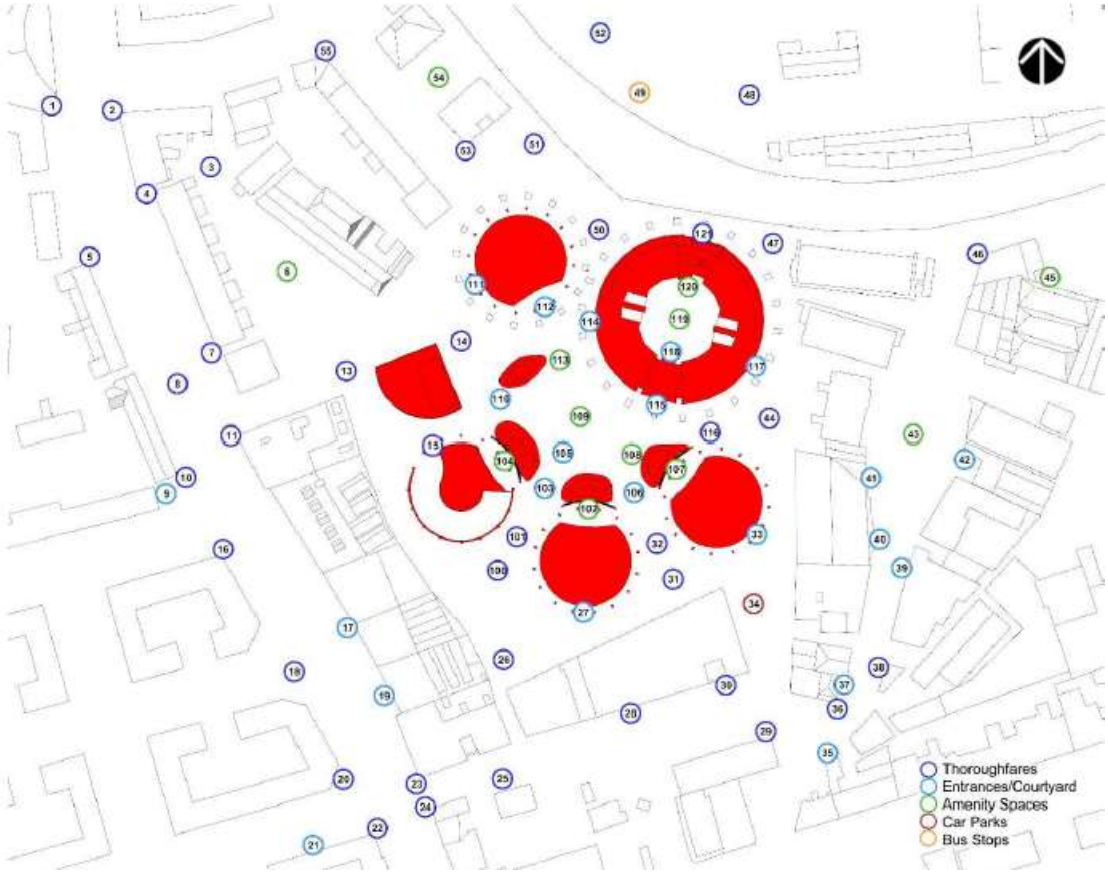
8.4 Potential traffic and transportation related effects could arise causing temporary disruption to road users and pedestrians from vehicles (particularly HGVs) entering and leaving the site. These could include temporary footway closures and diversion of pedestrian and cyclist movements. The effects would only be experienced immediately surrounding/adjacent the site.

8.5 Following implementation of the mitigation measures proposed, no other significant effects are predicted during construction or operation.

9.0 Wind Environment

9.1 An assessment has been carried out of the likely significant effects arising from the Proposed Development upon the wind microclimate on a number of receptor locations.

Figure 9.1 Sensitive Receptors Assessed in relation to the Wind Environment



9.2 In terms of pedestrian safety, wind conditions at both street and upper levels are rated as suitable for the general public.

9.3 In summer and in the context of the existing surrounding area, wind conditions on the rooftop terraces accessible to the residents are considered suitable for long periods of sitting and therefore suitable for the intended use.

9.4 In terms of pedestrian comfort, most areas of the site are rated as suitable for the intended uses, except some of the amenity spaces within the proposed development. In some parts of the central area of the development, the wind comfort level was identified to be 'standing', which is one category below the desired one. However, based on professional experience, the currently planned landscaping would successfully promote the wind comfort level in these areas to be suitable for the intended use and thus no additional mitigation would be required.

9.5 In conclusion, the assessment found all areas of the site and surrounding area to be safe for the general public and suitable for their intended uses.

10.0 Air Quality

10.1 An assessment has been carried out of the likely environmental effects of the Proposed Development with respect to local air quality.

10.2 A qualitative assessment of the potential impacts on local air quality from construction activities has been carried out for the construction phase using a methodology defined by the Institute of Air Quality Management. This identified that there is a 'high' risk of dust soiling impacts, a

'medium' risk of impacts on human health due to construction activities and a 'medium' risk of ecological impacts.

10.3 A quantitative assessment of the potential impacts during the operational phase has been carried out to predict the changes in NO_2, PM_{10} and $PM_{2.5}$ concentrations that would occur due to emissions from traffic generated by the Proposed Development and the proposed Energy Centre. The assessment shows that the impacts on air quality are negligible. Concentrations at proposed receptors are below the objective levels set and fall within APEC A, indicating that no mitigation should be required.

10.4 The results of the Air Quality Neutral Assessment show that the Proposed Development in compliant with the building and transport emissions benchmarks for NO_x and PM_{10}. Therefore, the Proposed Development is air quality neutral.

10.5 It is considered that the Proposed Development will comply with national and local policy for air quality.

11.0 Noise and Vibration

11.1 An assessment has been carried out of the likely environmental effects of the Proposed Development with respect to the surrounding noise and vibration climate. The suitability of the site for the proposed residential and commercial use and the need to provide a suitable noise environment for future occupants is also considered.

11.2 A baseline noise survey has been conducted in the area of the Proposed Development to establish the existing noise levels on the application site. The results of the noise survey have been used in the assessment of ambient noise affecting the Proposed Development once built and occupied.

11.3 Construction noise has been predicted at representative noise sensitive receptors in the vicinity of the Site. Notwithstanding the adoption of the best practicable means for minimising noise, it is likely that there will be some periods when existing sensitive receptors surrounding the site will experience significant major adverse effects.

11.4 The effects of construction vibration are predicted to be significant during the foundation works, but this is very dependent upon the piling technique that is adopted. The predicted levels of vibration will generally be below those at which cosmetic damage would be expected.

11.5 Plant noise emission limits have been proposed following consultation with LBTH.

11.6 Appropriate specifications for glazing and ventilation have been identified in the application site suitability assessment. It is understood that mechanical ventilation with heat recovery will be adopted for all residential homes with mechanical cooling in some units.

11.7 It is considered that subject to the glazed elements of the building façade achieving the specifications set out within this report and the proposed ventilation strategy, an adequate internal noise environment will be provided to future occupants and on this basis it is concluded that the application site is suitable for residential development.

12.0 Daylight, Sunlight and Overshadowing

12.1 An assessment has been carried out of the likely significant effects of the development on the environment in terms of:

- Daylight and sunlight amenity to existing and future residential properties surrounding the Site;
- Overshadowing to amenity areas, open spaces and waterways around the Site;
- Daylight amenity within the residential elements of the Proposed Development.

12.2 There are unlikely to be any significant effects of solar glare, because the design of the Development does not include high levels of reflective material on the façades. Because of this, a solar glare assessment has not been undertaken.

12.3 There are unlikely to be any significant effects of light pollution, because of the location of surrounding residential properties and residential units within the scheme in relation to any commercial element of the Development, which is located at ground floor and basement level. Because of this, a light pollution assessment has not been undertaken.

12.4 The assessment has concluded there are no significant effects on daylight and sunlight amenity caused by the Proposed Development.

12.5 The assessment has concluded there are no significant effects on overshadowing caused by the Proposed Development.

12.6 No significant effects are predicted to be caused by the Proposed Development.

13.0 Ecology and Nature Conservation

13.1 An assessment has been carried out of the likely significant effects of the Proposed Development in terms of biodiversity and nature conservation. To evaluate the current ecological baseline, the site was subject to various ecological surveys in 2019.

13.2 The site and the surrounding area does not contain any statutory designated sites of nature interest. The Proposed Development will not have any impacts on the closest statutory designated sites (3.7km away) during the construction or operational phases, either considered alone or in combination with other plans and projects.

13.3 During construction, the Construction Environmental Management Plan (CEMP) will use standard construction protocols and best practice to avoid potential effects on the Regent's Canal from contaminated run-off, dust, noise, vibration and lighting. During operation, a sensitive lighting strategy will minimise potential effects on nocturnal species on Regent's Canal. This combined will fully eliminate any adverse effects on the Regent's Canal.

13.4 Currently, most of the site is limited in its ecological value. The Proposed Development will improve this significantly by providing wildlife habitats, particularly native woodland and grassland. This will contribute towards habitats in the Tower Hamlets Biodiversity Action Plan and represent a net gain in biodiversity terms compared to the existing situation.

13.5 Protected, rare or notable fauna identified within the application site include bats and birds, although opportunities for both groups are at present very much restricted.

13.6 Bat activity will be protected by providing a sensitive lighting strategy throughout construction and operation, and once completed habitats will promote invertebrate populations for foraging bats. Bat boxes will be installed on suitable trees in the northern part of the site to provide additional roosting opportunities.

13.7 Birds will be protected by providing species-rich habitats to provide improved opportunities for nesting and foraging, with bird nesting boxes on suitable trees within the site for key species London and Tower Hamlets Biodiversity Action Plans.

13.8 Invertebrate-friendly habitats will be also be provided within the new development, through the provision of features such as green/brown roofs with varied topography and structures.

13.9 Following implementation of the mitigation measures proposed, there are predicted to be net benefits for ecology and nature conservation as a result of the Proposed Development. On this basis, the Proposed Development complies with all legislation and planning policy relevant to ecology and nature conservation.

14.0 Climate Change

14.1 An assessment has been carried out of the likely significant environmental effects arising from the Proposed Development upon Greenhouse Gas (GHG) emissions. The focus is on GHG emissions arising from both the construction and operational stages.

14.2 GHG emissions are assessed in EIAs to identify potential sources of emissions, to enable an early and informed understanding of a project's impacts, and ensure that the complexity and detail of assessment is proportionate to the project's size and nature.

14.3 The GHG emissions reported within this assessment have been split into four sources, and after mitigation all of these have been found to have minor adverse effects:

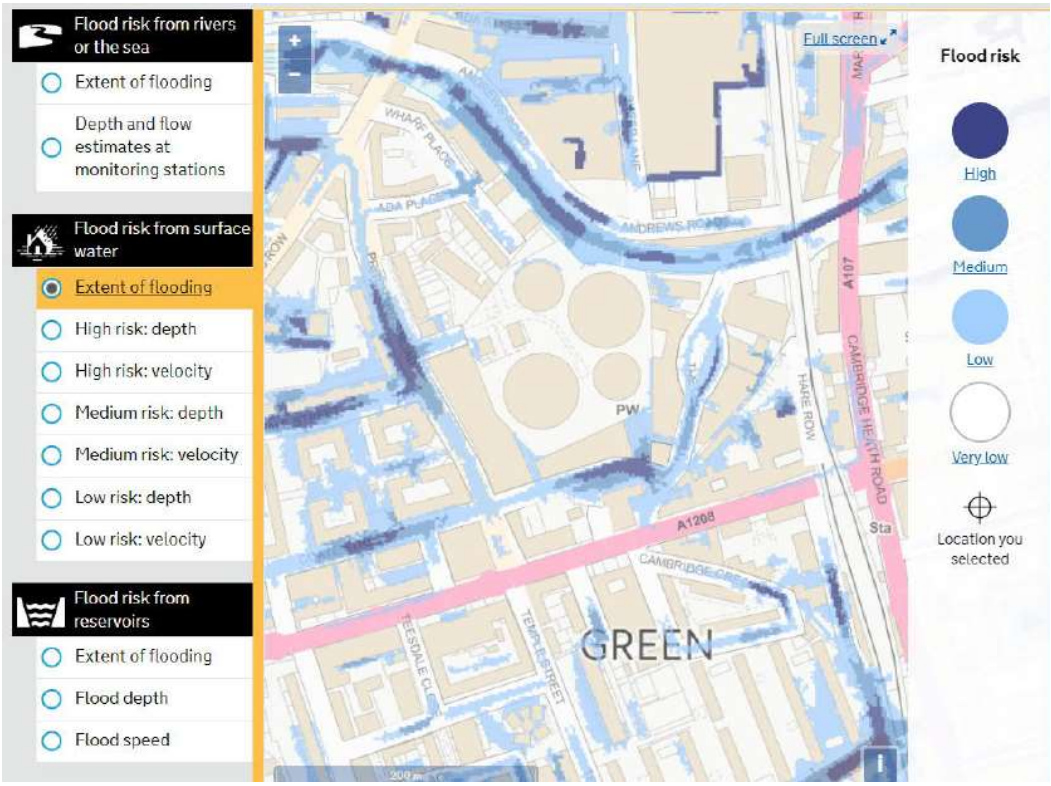
- Embodied carbon;
- Construction transport;
- Operational building; and
- Operational transport.

15.0 Water Environment

15.1 An assessment has been carried out of the outcome of the assessment of likely significant effects arising from the Proposed Development upon water resources, flood risk and drainage.

15.2 The current Environment Agency Flood Map shows that the entirety of the Site is classed as Flood Zone 1, less than 1 in 1000 (0.1%) chance of flooding from rivers in any given year.

Figure 15.1 Long Term Flood Risk Map for Surface Water Flooding Extract



Source: www.gov.uk

15.3 The only existing sources of flood risk that are likely to have a significant effect are from surface water, groundwater and from the Regents Canal, all other sources of flood risk have been deemed to be not significant.

15.4 At the Construction Stage a temporary drainage strategy will be implemented as part of the Construction Environmental Management Plan (CEMP).

15.5 At the Operational Stage the Outline Drainage Strategy (ODS) will be put in place as part of the inherent design and ensure that there are no detrimental effects the application site in relation to water resources, flood risk or receiving drainage systems. This will control surface water runoff through the use of suitable Sustainable Drainage Systems (SuDS) in accordance with relevant policy and guidance.

15.6 Off-site reinforcement and upgrade works to the Thames Water Potable network in the location of the application site is likely to be required. The extent of the required works should be re-assessed post-planning at the detailed design stage.

15.7 Following the assessment carried out, no significant adverse residual effects have been identified on the water resources, flood risk or drainage of the Proposed Development.

16.0 Archaeology

16.1 An assessment has been carried out of the impact on potential archaeological (below ground) assets in respect of the Proposed Development.

16.2 Very few archaeological finds or features of prehistoric date are recorded on the Greater London Historic Environment Records within the 750m study area search radius. No archaeological finds or features of Roman date have been identified within the 750m study area search radius.

16.3 During the Anglo-Saxon and Medieval periods the study site probably lay in open land. The potential for remains from these periods at the study site can therefore be identified as low. Evidence of agricultural activity and land division could conceivably be present. In the event that remains are identified at the study site, the available information indicates that their significance is likely to be low/local.

16.4 Maps of early nineteenth century date show the southern and western parts of the study site occupied as a fish pond, with a layby from the adjacent canal projecting into the development site from the 1840s onwards. The Imperial Gas Light and Coke Company created the Bethnal Green gasholder station within the site with the first coming into operation in the 1850s.

16.5 As such, the site is most likely to have an archaeological potential for the Post Medieval and Modern periods, primarily associated with the extant gasholder station present from the middle of the nineteenth century onwards. The significance of the archaeological potential of the gasholder station is understood to be low/local.

16.6 Construction groundworks associated with the Proposed Development could have the potential to damage archaeological remains where they occur. Any potential archaeological assets within the Development Site are anticipated to be of local importance, so they can be preserved by record, comprising a programme of archaeological fieldwork which could be secured by condition attached to the granting of planning consent.

16.7 Following implementation of the mitigation measures proposed, no other significant effects are predicted during construction or operation.

17.0 Cumulative Assessment

17.1 An assessment has been carried out to identify if additional environmental effects would be likely to arise if the Proposed Development is considered in relation to:

1 the combined effect of different type of impacts attributable to the Proposed Development ('direct impacts') in respect of a particular receptor when considering those effects identified within each technical aspect chapter; and

2 potential cumulative effects from the Proposed Development interacting with other developments in order to ascertain whether there are any inter-project cumulative effects.

17.2 It has been identified that non-significant synergistic effects exist for some receptors in close proximity to the Proposed Development, which do not give rise to a need for additional mitigation measures.

17.3 14 schemes located in the area surrounding the Proposed Development were identified in relation to potential for inter-project effects. These were then considered in relation to each technical aspect chapters. The assessment has shown that there could be potential for cumulative effects in relation to Air Quality and Noise and Vibration if any nearby developments are constructed at the same time as the Proposed Development. Mitigation measures are identified within Chapter R that would ensure that such effects are minimised and are non-significant. Furthermore, it is expected that similar mitigation measures as those construction phase measures identified within this ES will be in place at any such developments, in accordance with best practice.

18.0 Availability of the Environmental Statement

18.1 A paper or electronic (CD Rom) copy of the full ES can be obtained from: -

- Lichfields, The Minster Building, 21 Mincing Lane, London, EC3R 7AG (Tel: +44(0)20 7837 4477)

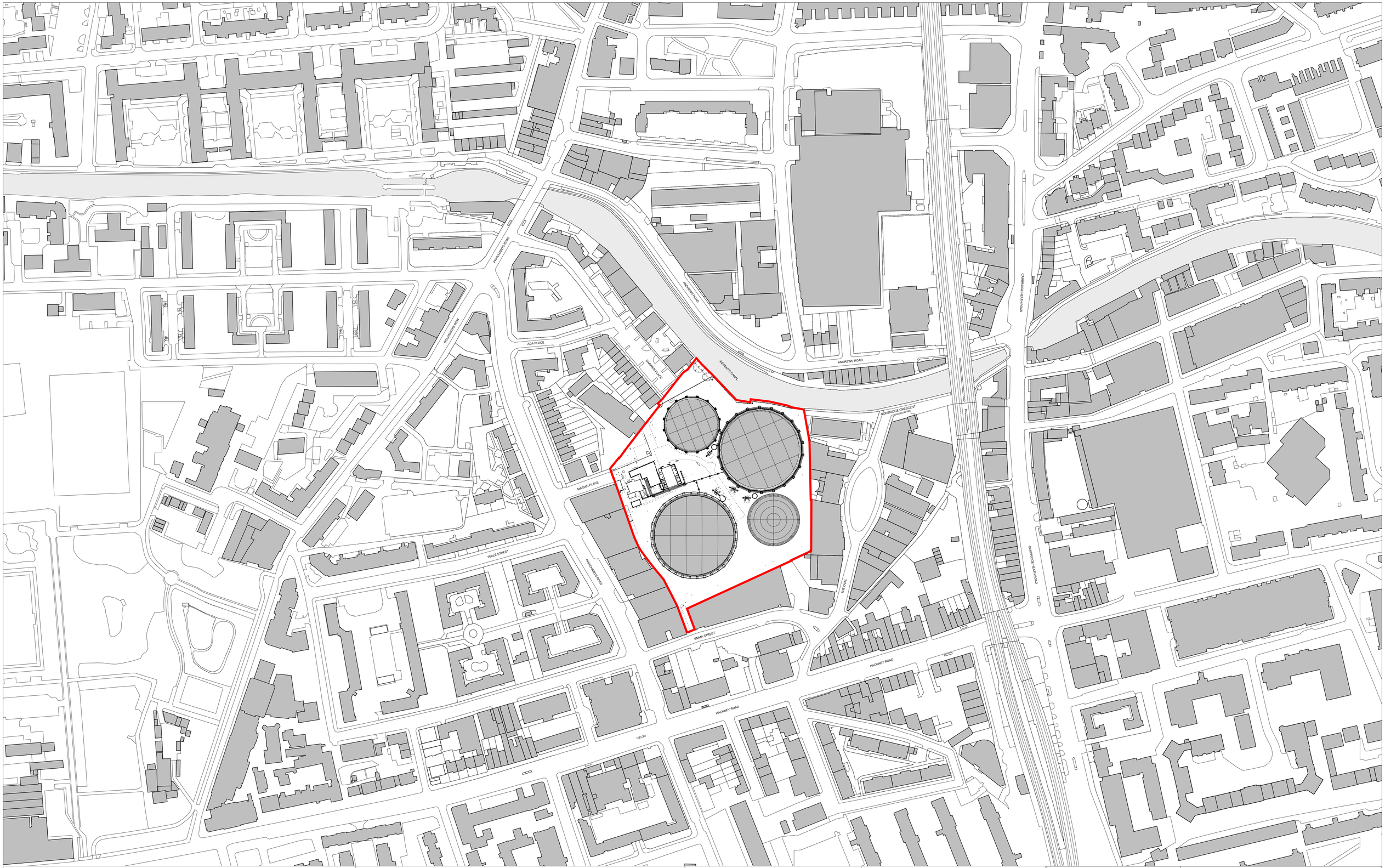
18.2 Information on the planning application and the ES can also be viewed on the website of LBTH at:-

- www.towerhamlets.gov.uk/

18.3 All comments on the ES (and planning application) should be issued to LBTH directly.

19.0 Key Scheme Plans

[Provided Overleaf]



Revision	Date	Description
P1	29-11-2019	Planning Issue

Legend

Site boundary

Drawing Purpose

Planning Issue

Drawn by	Checked by	Authorised by
RSHP	RSHP	RSHP

St William
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Project

Marian Place Gasholder Site
Bethnal Green
London Borough of Tower Hamlets

Drawing Title

General Arrangement
Site Location Plan As Existing
Ground Level

Contact
Rogers Stirk Harbour + Partners
On behalf of St William Homes LLP
The Leadenhall Building
122 Leadenhall Street
London
EC3V 4AB
tel: 020 7385 1235
fax: 020 7385 9409
email J11690@rsh-p.com
www.rsh-p.com

Drawing Number	Revision
RSHP-P-0001-P-00	P1

Scale @ A1	Drawing Date	Revision Date
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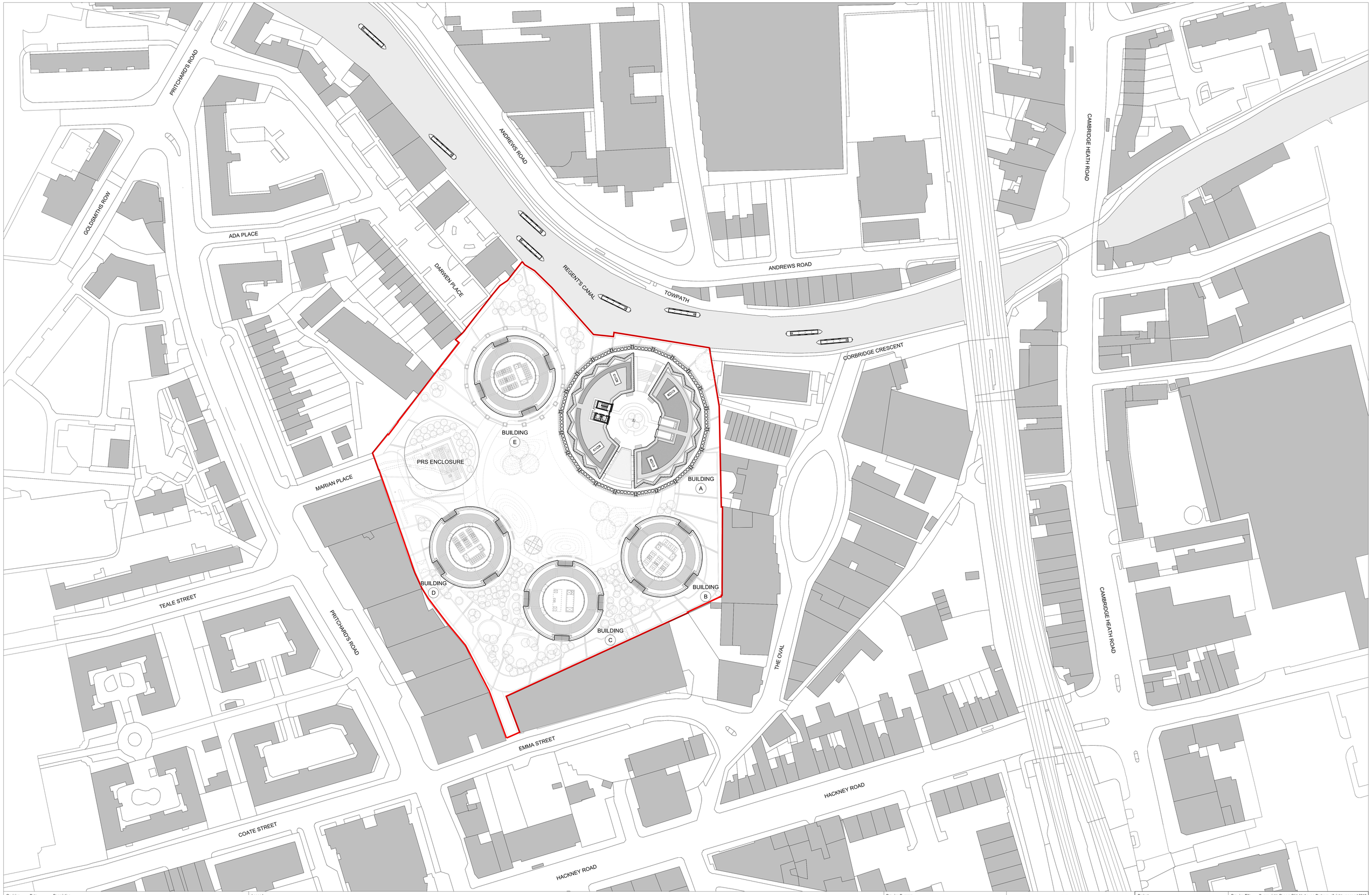

Revision	Date	Description
P1	29-11-2019	Planning Issue

Legend

Site boundary

N

0 50m 100m

Drawing Purpose

Planning Issue

Drawn by	Checked by	Authorised by
RSHP	RSHP	RSHP

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Project
Marian Place Gasholder Site
Bethnal Green
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Contact
Rogers Stirk Harbour + Partners
On behalf of St William Homes LLP
The Leadenhall Building
122 Leadenhall Street
London
EC3V 4AB
tel: 020 7385 1235
fax: 020 7385 8409
email.j11690@rsh-p.com
www.rsh-p.com

Drawing Title

General Arrangement
Site Plan As Proposed
Ground Level

Drawing Number	Revision
RSHP-P-0004-P-00	P1

Scale @ A0	Drawing Date	Revision Date
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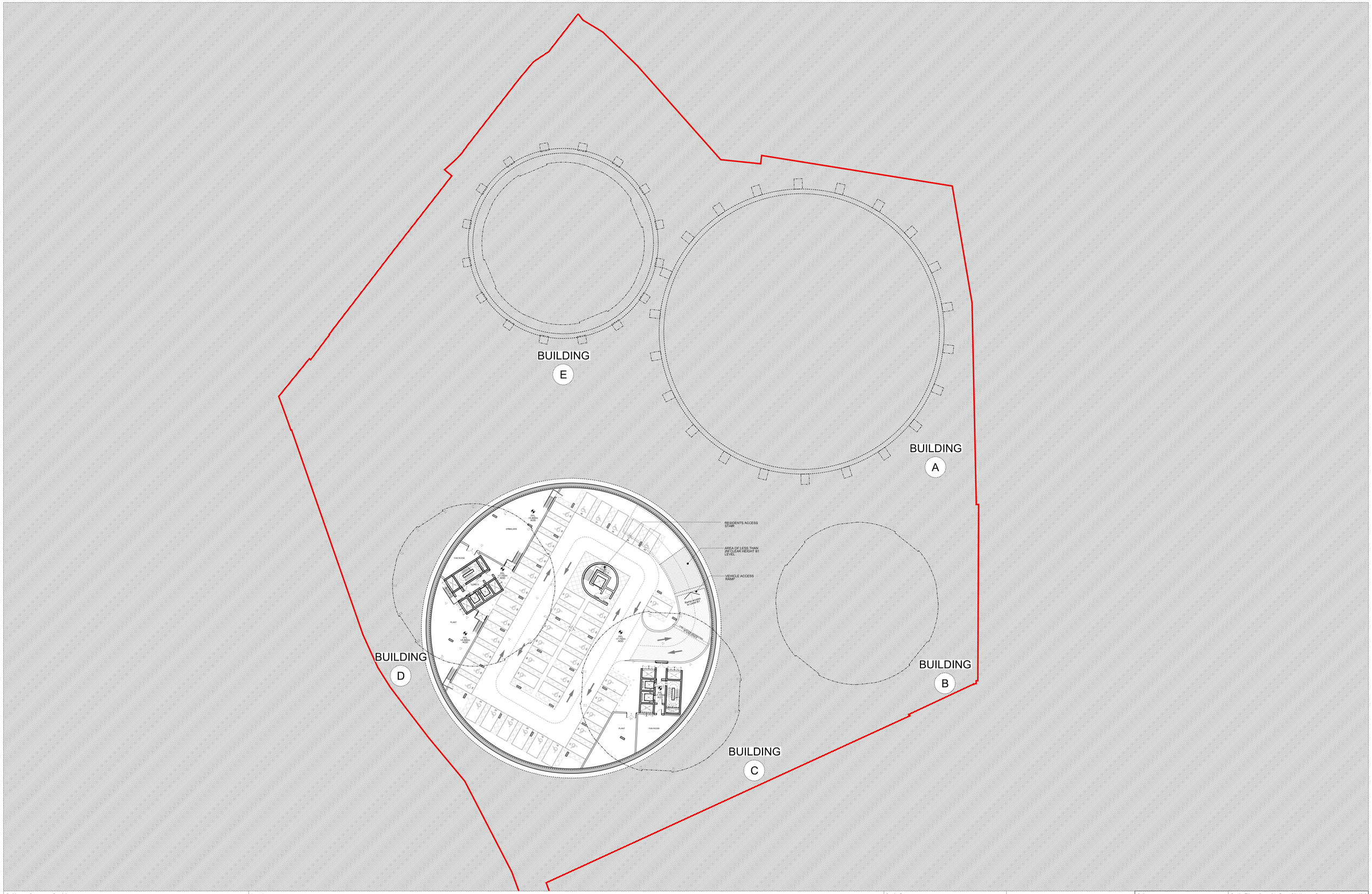

Revision	Date	Description
P1	29-11-2019	Planning Issue

Legend

Site boundary

N

0 5m 10m 50m

Drawing Purpose
Planning Issue

Drawn by	Checked by	Authorised by
RSHP	RSHP	RSHP

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The sizing of all structural and service elements must always be checked against the relevant engineer's drawings. No reliance should be placed upon sizing information shown on this drawing.

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Project
Marian Place Gasholder Site
Bethnal Green
London Borough of Tower Hamlets

Contact
Rogers Stirk Harbour + Partners
On behalf of St William Homes LLP
The Leadenhall Building
122 Leadenhall Street
London
EC3V 4AB
tel: 020 7385 1235
fax: 020 7385 8409
email j11690@rsh-p.com
www.rsh-p.com

Drawing Title
General Arrangement
Site Plan As Proposed
Basement Level B2

Drawing Number	Revision
RSHP-P-0098-P-B2	P1

Scale @ A0	Drawing Date	Revision Date
1:250	29-11-2019	

Revision	Date	Description
P1	29-11-2019	Planning Issue

Legend

Site boundary

N

Drawing Purpose
Planning Issue

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Contact
Rogers Stirk Harbour + Partners
On behalf of St William Homes LLP
The Leadenhall Building
122 Leadenhall Street
London
EC3V 4AB
tel: 020 7385 1235
fax: 020 7385 9409
email J11690@rsh-p.com
www.rshp.com

General Arrangement
Site Plan As Proposed
Basement Level B1

Drawing Number	Revision
RSHP-P-0099-P-B1	P1

Scale @ A0	Drawing Date	Revision Date
1:250	29-11-2019	