

GROSVENOR GARAGES FITZGERALD AVENUE BARNES SW14 8SZ

DESIGN & ACCESS STATEMENT

MARCH 2024



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1. INTRODUCTION:

- 1.1 This statement has been prepared by Halo Architects Ltd to accompany a full planning application for the proposed redevelopment of Grosvenor Garages, Fitzgerald Avenue, London SW14 8SZ.
- 1.2 The proposal is for the construction of 2-storey block with roof accommodation comprising of 5no. residential apartments and a ground floor commercial unit and 3no. dwelling houses with associated parking and landscaping following demolition of the existing garage buildings.
- 1.3 This statement covers the following:
 - An analysis of the site as existing, the immediate surrounding area and the wider context.
 - A description of the design process that has been followed to reach the proposed design solution
 - An assessment of the site opportunities and considerations.
 - Review of accessibility within the site, transport links within the surrounding area and the location of pedestrian and vehicular access points to the site.
- 1.4 This statement should be read in conjunction with submitted plans as prepared by Halo Architects Ltd together with supporting documentation produced by other consultants.



2. THE SITE AND SURROUNDINGS:

Location and Community Facilities:

- 2.1 The site is located in East Sheen on the corner of Buxton Road and Fitzgerald Avenue, in close proximity to Barnes Hospital. The application site of some 0.23 acres comprises of a mixture of garage and workshop units, an office and a flat.
- 2.2 The site is located within the Mortlake & Barnes electoral ward within the London Borough of Richmond upon Thames. The site is not located within a Conservation Area nor has any statutory listed buildings.
- 2.3 There are two points of access into the site. The main access is via Fitzgerald Avenue located on the eastern boundary of the site. The secondary access is located on the western boundary of the site off Grosvenor Avenue.
- 2.4 Within the area, there is a good provision of educational facilities with East Sheen Primary School at 400m distance & St. Mary of Magdalen's Catholic Primary School within 800m distance.
- 2.5 Secondary schools are also in close proximity with Richmond Academy and Shene School approximately 700m walking distance whilst Thomson House Upper and Lower schools approximately 800m distance. Barnes Hospital is some 300m distance part of which is being redeveloped into a residential development.
- 2.6 The site is well placed to access local amenities with Barnes, East Sheen and Mortlake village centres all within 1km walking distance which has a range of shops pubs, restaurants and recreational facilities.

Transport Links:

2.7 The site is in close proximity to the South Circular (A205). This provides access to the Upper Richmond Road West (A305), a main distributor road across South London. From here it is easy to access the A4 and M4. Barnes railway station is a 12 minute walk to the east at 1.1km distance while Barnes Bridge Railway Station is 2.8km distance to the northeast of the site.



Area Map - courtesy of Streetmaps



Aerial Map - Google Maps



Site Location (map not to scale)







RAILWAY STATIONS

...... RAILWAY LINE

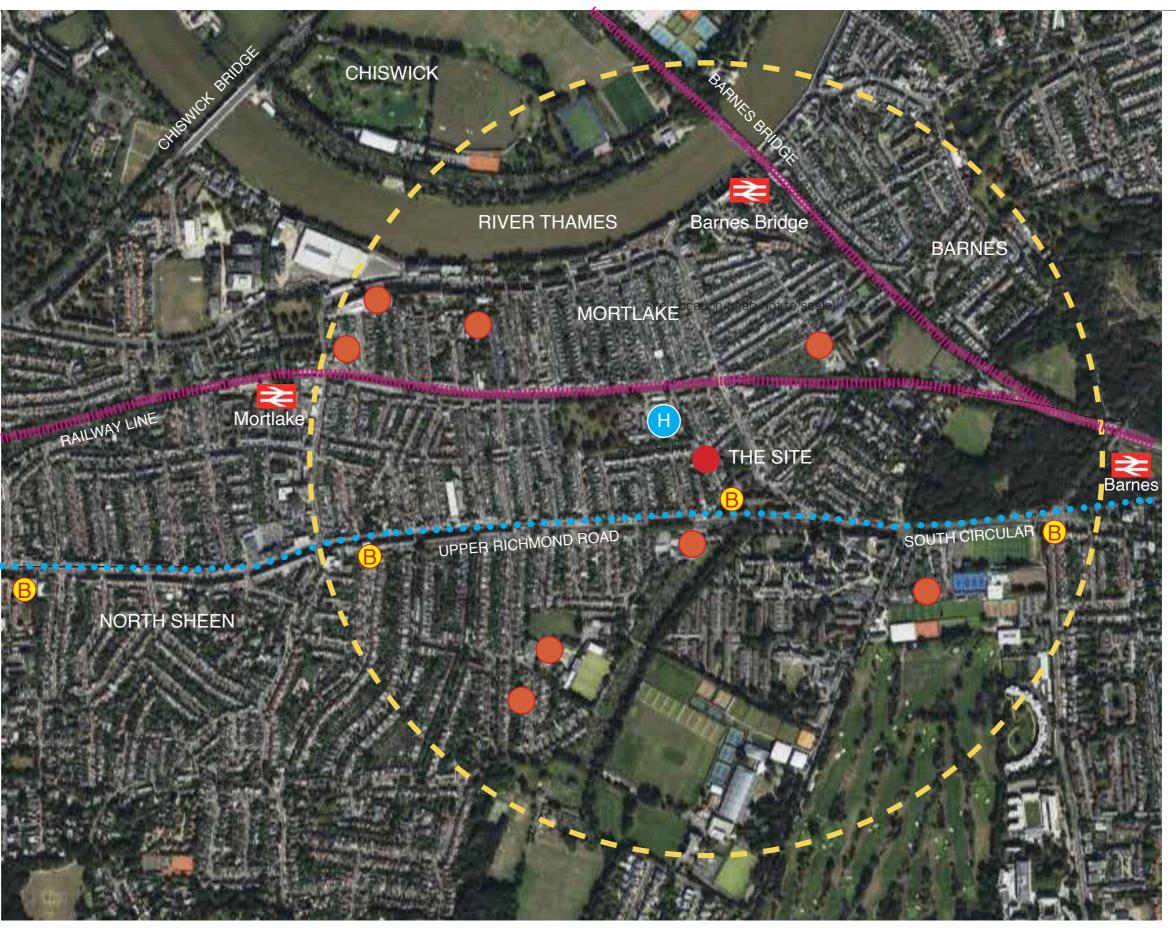
B BUS STOPS

SCHOOLS

THE SITE

H HOSPITAL

1KM DISTANCE





-Fitzgerald Avenue

-Grosvenor Avenue



Buxton Road

Aerial View of the Grosvenor Garages

- —South Worple Avenue
- 2.8 The site is well located for access to public transport. Bus stops are located a short distance to south on the Upper Richmond Road while local facilities are located within walking distance.
- 2.9 The site falls within level 2 of the Public Transport Accessibility Levels (PTAL)

Character of The Land:

2.10 The application site has an area of 0.23 hectares and is located within an established residential area. It is irregular in shape and comprises of predominantly single storey workshops and garages. One section of the garages on the southern boundary has a first floor extension that forms a residential apartment accessed via an external staircase.

- 2.11 The site is bounded to the north by a pedestrianised road (South Worple Avenue); to the west by the residential dwellings in Grosvenor Avenue, to the east by Fitzgerald Avenue and to the south by residential dwellings located in Fitzgerald Avenue.
- 2.12 The site is predominately covered by buildings and hard surface tarmac and concrete driveway. There is a single tree located in the north east corner of the site and small scale hedging by the site entrance.
- 2.13 In terms of topography the site is fairly level with a minimal level changes. The site slopes down from north to south by 0.3 metres and west to east by approximately 0.25 metres.
- 2.14 The site falls within Flood Zone 1 and there will therefore be no potential risk of flooding from rivers within the proposed development. In terms of risk of flooding from surface water, the site is considered low risk. Any new proposal will follow local authority guidance in terms of finished floor levels to avoid any flooding form surface water.
- 2.15 The site consists of predominantly lock-ups and old garages. A small MoT facility and workshop occupies only a small percentage of the site.
- 2.16 It is intended to maintain a commercial element on the site (107sqm) to avoid any loss of employment. The size of the proposed new commercial unit will exceed what is in existing use (circa 100.5sqm).



Surface Water Flood Risk Map (courtesy of www.gov.uk)



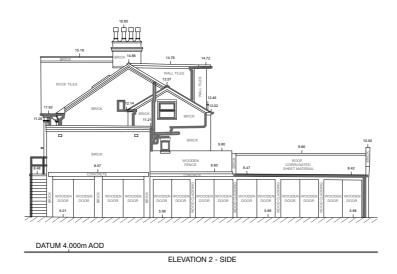


Existing Floor Plans (not to scale)



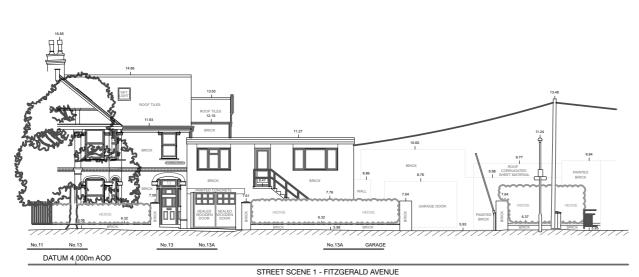


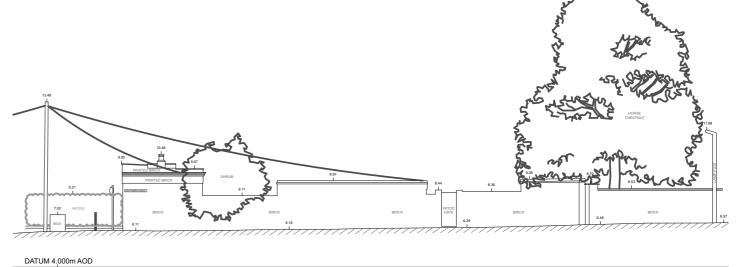
DATUM 4,000m AOD





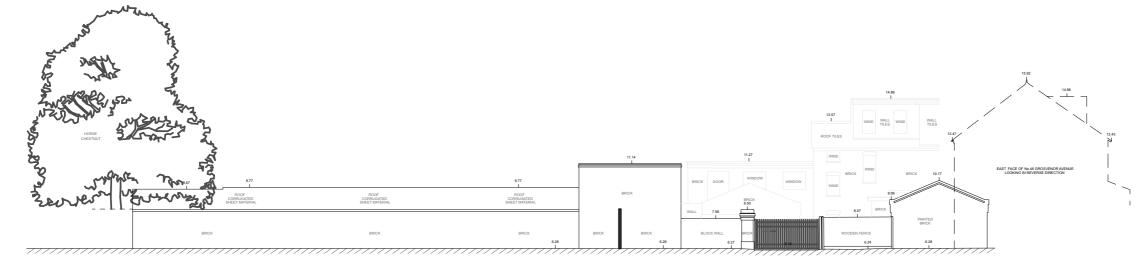
Existing Elevations and Site Sections





STREET SCENE 2 - SOUTH WORPLE AVENUE

Existing Elevations and Site Sections



STREET SCENE 3 - WEST SIDE

Existing Elevations (not to scale)



























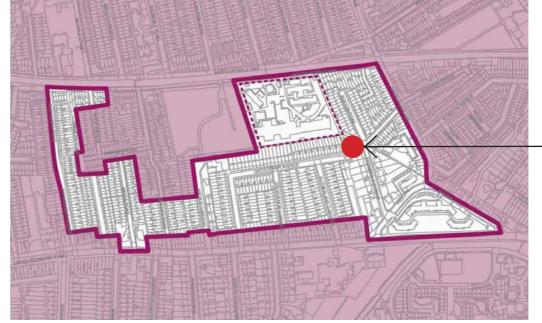






3. AREA CHARACTER

- 3.1 In terms of character, the immediate area falls under Grosvenor Avenue /Alexandra Road Character Area within the supplementary planning document, East Sheen Village Planning Guidance 2015.
- 3.2 This area primarily comprises parallel residential streets around the older cemetery and Queens Road development. It lies between the railway to the north and Upper Richmond Road West to the south with little through traffic on the quiet, leafy streets.
- 3.3 Most of the area was developed in the early twentieth century, although there are also pockets of late nineteenth-century buildings. These are found most notably on Fitzgerald Avenue where there are semi-detached houses with coloured brickwork along with roughcast render and applied timbering in some cases. The houses in this location are considered to be Buildings of Townscape Merit.
- 3.4 The terraced houses of Buxton Road are of a smaller scale and date circa 1900 built originally with yellow brick often coloured and are characterised by bay windows.
- 3.5 Grosvenor Avenue follows a similar pattern of development as Buxton road with 2 storey linked terraced houses believed to have been constructed of a later date with red brick and are broadly the same scale and design to the latter, but with the addition of Arts and Crafts detailing such as gables, applied timbering and roughcast render. Some properties have been painted in different colours. Many of the properties have had a loft conversion with dormers predominantly located on the rear.
- 3.6 Within this area lies the former Barnes Isolation Hospital which opened in 1889. The original buildings which date from the late nineteenth and early twentieth century are all Buildings of Townscape Merit albeit part of the site has been sold off for residential redevelopment.
- 3.7 The key architectural features of this area are:
 - · Red and yellow brick, render, applied timbering.
 - Bay windows, clay-tiled roofs, clay chimneys.
 - Brick gate piers with dwarf walls incorporating railings.
 - Planted front gardens and street trees.
 - Many dwellings have been extended at the rear and within the roofspace. aerial views show an abundance of box dormers (Grosvenor Avenue and Fitzgerald Avenue)



East Sheen Character Area 8 - Richmond Council Supplementary Planning Guidance



Fitzgerald Avenue



Grosvenor Avenue



The Site

Buxton Road

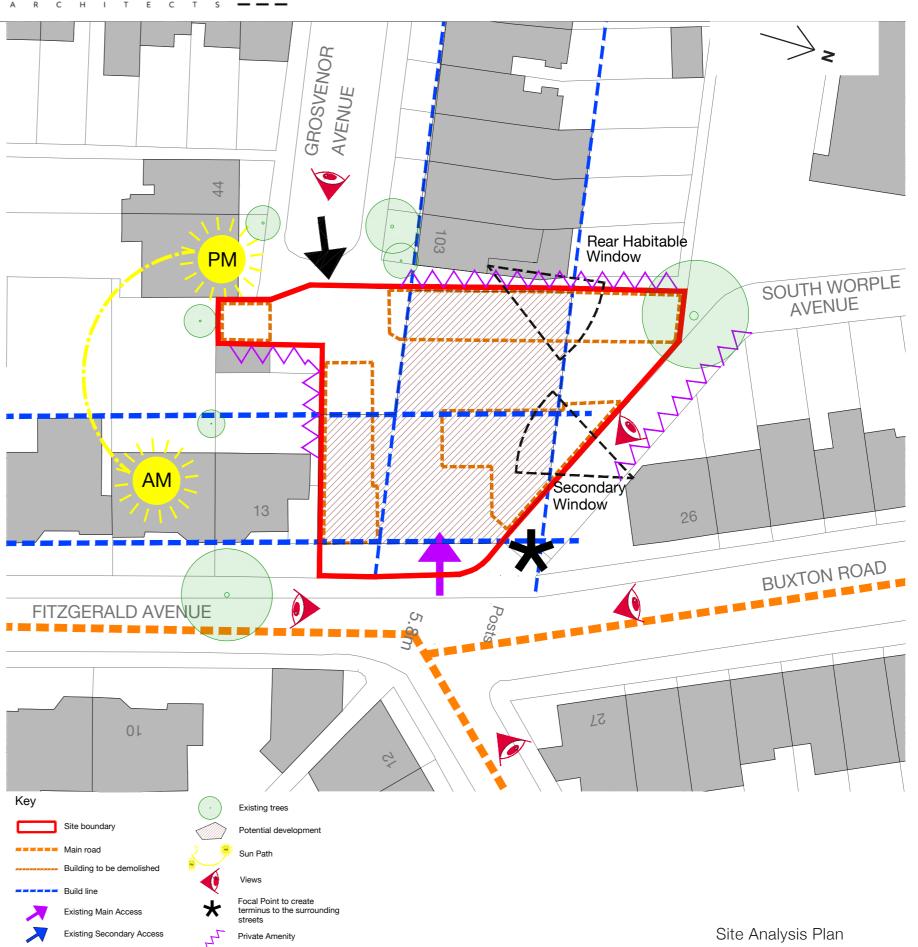


Barnes Hospital



4. SITE CONSIDERATIONS & OPPORTUNITIES

- 4.1 The site falls within the Grosvenor Avenue/Alexandra Road Character designation. Accordingly proposals should reflect the character of the area in terms of mass, bulk and scale.
- 4.2 The proposed development should be built within the established build lines formed by dwellings located in Fitzgerald Avenue and Grosvenor Avenue respectively.
- 4.3 The East Sheen Supplementary Planning Guidance advises that the site should create a terminus for the surrounding streets. The corner position of the site should create a focal point through an increase in height, with a design that compliments the vernacular of the immediate area.
- 4.4 To encourage the retention of employment on this site, the proposal includes a commercial element, the size of which exceeds the area that is currently provided the by the existing workshops (to be demolished).
- 4.5 The proposed development should respect the private amenity of neighbouring properties.
- 4.6 The two access points into the site off Fitzgerald Avenue and Grosvenor Avenue are to be utilised and provide separate entry points to the development with Grosvenor Avenue serving the proposed houses and Fitzgerald Avenue serving the proposed commercial and apartment element.
- 4.7 The proposed development demonstrates a complient score of 0.4 in Urban Greenig Factor according to Scarp's UGF calculation and accompanying report.





5. PLANNING HISTORY

5.1 There is no recent or relevant planning history associated with this site. For further details regarding the planning policies relevant to the proposal, please refer to the Planning Statement produced by Andrew Black Consulting that accompanies this application submission.

6. DESIGN PROCESS & EVOLUTION

- 6.1 The final design for the development of the site has evolved from careful research and examination of the site, topography, site constraints, character of the area and consultation with specialist consultants involved with this project. As part of this planning proposal the following policy documents have been extracted as relevant to this application.
 - Richmond Local Plan 2018
 - London Plan 2021
 - National Planning Policy Framework (NPPF)
 - Design Quality SPD (2006)
 - Residential Development Standards SPD (2010)
 - Affordable Housing SPD (2014)
 - Strategic Flood Risk Assessment (2020)
 - Small & Medium Housing Sites SPD (2006)
- 6.2 The design has developed from analysis of the location, topography, movement and character of the area together with the constraints and opportunities identified in Section 4. The layout proposed follows the built form defined by Fitzgerald Avenue, Grosvenor Avenue and South Worple Avenue. The proposed buildings should address the frontage of both Fitzgerald Avenue and Grosvenor Avenue respectively to continue the well defined street scenes and maintain the character of the immediate area.
- 6.3 Car parking will be limited to surface parking serving the commercial unit and the proposed dwelling houses only. Secure cycling will be provided for all residential elements.
- 6.4 The site enjoys an abundance of existing mature tree and hedgerow planting which will be maintained to all boundaries. Where required, additional tree and hedgerow screen planting will provide screening of the proposed building from neighbouring properties.

6.5 The positioning of the proposed dwellings provides a natural surveillance over the site as a whole creating a sense of privacy and security to future homeowners. The overall design will continue the form of infill development that characterises the immediate area and responds sensitively to the locality, ecological demands and affirms its identity and character of the surrounding area.



Concept Sketch Plan

(not to scale)



7. PROPOSAL

- 7.1 The proposal is for the construction of 3no. houses, 5no. apartments and a commercial unit with associated car parking, amenity, bin and cycle storage and landscaping following the demolition of the existing workshop, garages and outbuildings.
- 7.2 The proposed development is split into two elements. The houses (Plots 1 to 3) will be accessed from Grosvenor Avenue whilst the commercial unit and the residential apartments (Apartments 1-5) to be accessed off Fitzgerald Avenue.

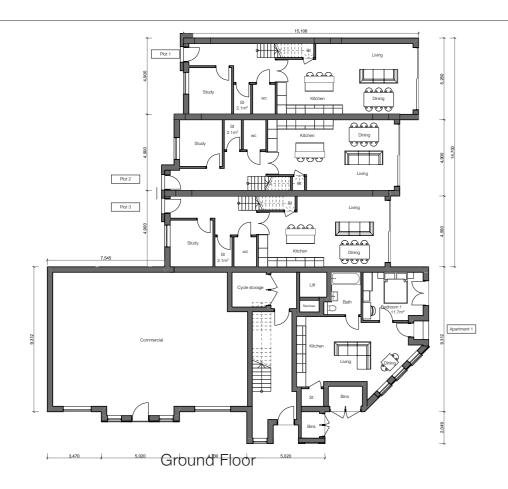
Plots 1 to 3 - Houses

- 7.3 Plots 1 to 3 are comprised of 1no. 3-bedroom and 2no. 4-bedroom terraced houses orientated to respect the build line of properties located on Grosvenor Avenue.
 - The proposed houses respect the build line and pattern of development of properties located on Grosvenor Avenue. Their orientation is south to north with rear garden amenity facing northwards towards South Worple Avenue and their frontages southwards. An informal courtyard fronts the proposed dwellings with surface parking.
 - The proposed houses are two storey with roof accommodation, served by dormer windows both front and rear. Each of the proposed dwellings is dual aspect, providing the inhabitants with well lit interior spaces.
 - The overall ridge and eaves heights are comparable with 2 storey dwellings found in the near vicinity. The proposed dwellings have a minimum floor to ceiling height of 2.5m to comply with Mayor of London's Housing SPG.
 - The layout of the proposed houses within the site is such that the rear garden amenity space will
 not be affected by overshadowing, whilst at the same time ensuring that the existing amenity
 spaces of the neighbouring dwellings are not overshadowed or overlooked by the proposed
 dwellings.
 - The proposed gardens would have appropriate garden amenity space in accordance with local policy standards.
 - The proposed houses are sited to provide appropriate separation distances to the neighbouring houses and to each other, maintaining the density and character of the immediate area.
 - The proposed houses will have parking in accordance with local authority requirements. Each house has been provided with one parking space within the courtyard that complies with parking standards as well as the Building Regulations.
 - Each plot is provided with adequate space for on plot bicycle storage within the front gardens.



Proposed Site Plan (not to scale)







First Floor

Roof Plan



Proposed Floor Plans

Apartments 1-5

- 7.4 The proposed apartments face eastwards and northeastwards onto Fitzgerald `Avenue and South Worple Avenue respectively. The apartments are comprised of 3no. 1-bedroom and 2no. 2-bedroom units.
 - The proposed apartments have a private access point separate from the commercial unit. The ground floor apartment has its own entrance accessed from South Worple Avenue.
 - The apartments have been designed to meet minimum space standards and are dual aspect to provide future inhabitants with well lit interiors.
 - In terms of amenity, each apartment on the first and second floor level has a balcony of a size that meets minimum standards. The ground floor apartment has its own private garden area fronting South Worple Road.

Commercial Unit

- 7.5 The commercial unit is located on the ground floor with an internal floor area of 107sq.m which exceeds the area of commercial space it replaces. The unit has its own private entrance and is provided with 3no. parking spaces located in front of the unit and accessed from Fitzgerald Avenue.
- 7.6 Both the commercial unit and the apartments have separate secure bin and recycling storage. In addition, the apartments also have secure cycle storage contained within the building.
- 7.7 The proposal provides extensive green roofs to all the properties with the addition of living green walls to amenity areas serving Plots 1, 2 and 3 and the ground floor apartment as well as the courtyard area to Plots 1 to 3. As a result the scheme achieves a score of 0.4 in Urban Greening Factor.







Elevation 3 (South-West)

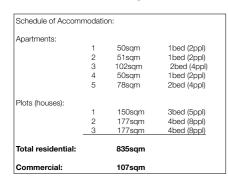


Proposed Elevations



8. DENSITY /MIX

- 8.1 The scheme results in 8no. dwellings, giving a net increase of 7no. dwellings. This results in a proposed density on site of 84.8 dph. This increase in density would be higher than the immediate area but would make best use of a brownfield site and consistent with other recent developments in this sustainable urban location.
- 8.2 The proposal provides family housing consistent with the immediate area and current market needs with a range of dwelling types by providing a mix as shown in the table below.



8.3 The proposed dwellings have been designed to conform to the nationally prescribed space standards (NDSS) as set out by the Ministry of Housing, communities and Local Government (MHCLG).

Nationally Described Space Standards																							
HA24-267 - Grosvenor Garages, Fitzgerald Avenue, SW14 8SZ																							
Unit	Beds	Person	NDSS	Unit G.I.A.		Bed 1			Bed 2			Bed 3				Bed 4				Intl St. Sq.m			
Offic				Sq.m	sq.ft	NDSS area	sq.m	NDSS Wid	lth m	NDSS area	sq.m	NDSS Wid	lth m	NDSS area	sq.m	NDSS Wid	lth m	NDSS area	sq.m	NDSS Wid	th m	n NDSS	
Apartment 1	1	2	50	50	538.2	11.5	✓	2.75	✓	/		/		/		/		/		/		1.5	✓
Apartment 2	1	2	50	51.9	558.652	11.5	✓	2.75	✓	/		/		/		/		/		/		1.5	✓
Apartment 3	2	4	70	110	1184.04	11.5	✓	2.75	✓	/		/		/		/		/		/		2	✓
Apartment 4	1	2	50	51.9	558.652	11.5	✓	2.75	✓	/		/		/		/		/		/		1.5	✓
Apartment 5	2	4	70	80	861.12	11.5	✓	2.75	✓	/		/		/		/		/		/		2	✓
Plot 1	3	5	99	148.5	1,598	11.5	✓	2.75	✓	11.5	✓	2.55	✓	7.5	✓	2.15	✓	/		/		2.5	✓
Plot 2	4	8	130	177.3	1,908	11.5	✓	2.75	✓	11.5	✓	2.55	✓	11.5	✓	2.55	✓	11.5	✓	2.55	✓	3	✓
Plot 3	4	8	130	176.4	1,899	11.5	✓	2.75	✓	11.5	✓	2.55	✓	11.5	√	2.55	✓	11.5	✓	2.55	✓	3	✓

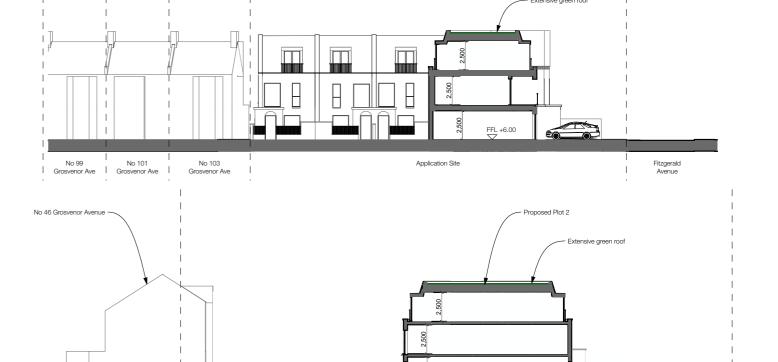
9. SCALE

- 9.1 The proposed dwellings have been designed to have a mass, bulk and scale similar to the existing dwellings found in the immediate locality, having commensurate eaves and ridge heights to properties found on Fitzgerald Avenue and Grosvenor Avenue
- 9.2 All the proposed houses and apartments are two storey with roof accommodation situated within a mansard roof served by dormer windows or feature brick gables. As previously mentioned, the flat roofed areas are constructed as extensive green roofs.
- 9.3 The proposed development in terms of mass and scale and architectural features provide a terminus and focal point to the surrounding streets.





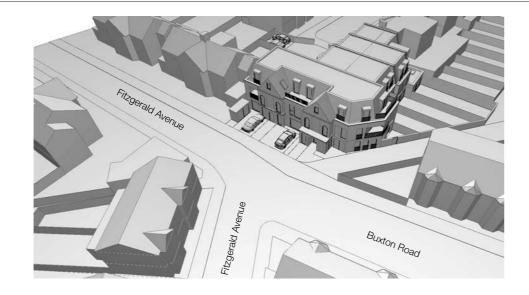
Proposed Street Scenes

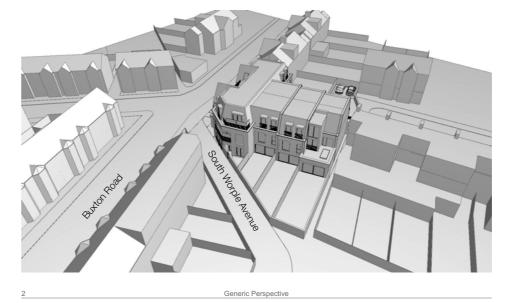


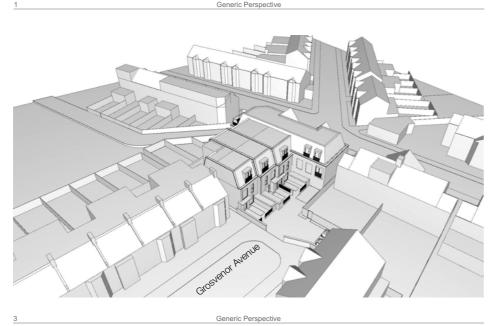
Proposed Site Sections

Application Site















Proposed 3D Perspectives



10. MATERIALS & DETAILS

- 10.1 The design of the proposed development has been carefully considered following a study of the local area and the East Sheen Character Assessment Supplementary Design Guidance and the principles of the local Authority Design Guide. The vernacular is one of a traditional appearance which relates to, and compliments the traditional vernacular that is found in the locality.
- 10.2 The proposed development is to be of a contemporary appearance and detailing, however its form, rhythm and key design features are drawn from original architecture found in the local area.
- 10.3 The scale of the proposed houses suggests an affinity to the nearby housing stock, which is reinforced by the use of contemporary architectural forms developed from the nearby traditional architecture. The proposal features gabled and mansard roofs to provide interest and variety.
- 10.4 The use of different facing materials between levels, reflects on the materials uses within the locality and breakes up the mass of the proposed building giving a scale that compliments the adjoining properties.

Materials Palette





Artificial slate tiles





Reconstituted stone



Black steel balustrade



Standing Seam Zinc



Cast clay detail

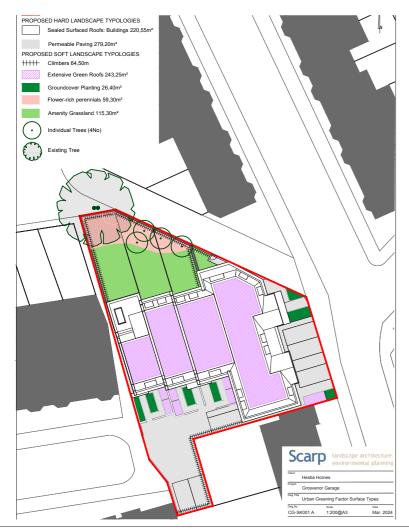


Black aluminium windows



11. LANDSCAPE STRATEGY

- 11.1 The landscaping for the development has been carefully considered and the application is accompanied by a landscape masterplan prepared by landscape architects Scarp Landscape Architecture Environmental Planning (see below).
- 11.2 Careful consideration has been given with regards to the proposed landscaping of the site to ensure that the proposal offers an aesthetic improvement of the site and meets the Urban Greening Factor requirements (a score of 0.4).
- 11.3 Beside the amenity gardens, groundcover planting and flower-rich perennials the scheme will also provide approx 243sqm of extensive green roof and approx 120sqm of green wall.
- 11.4 Green roofs are also are proposed to be incorporated into bin and cycle storage (example below)
- 11.5 Hard landscaping such as the access drive, footpaths or low level walls with railings will be specified from materials that ensure a high quality design and respond to the local vernacular and character of the area.







12. HIGHWAYS AND ACCESS

- 12.1 The scheme has been designed in accordance with the planning polices related to transport in the London Borough of Richmond's Local Plan and the London Plan; National Planning Policy Framework (NPPF) 2023 and national transport policies and best practice guidance for car parking for the proposed development of 8no. dwellings and 1no. commercial unit.
- 12.2 A Transport Statement produced by Motion Ltd provides full details of the highway strategy for this application submission. A summary of the statement is given below
- 12.3 It is proposed to use the existing access points into the site from Grosvenor Avenue to the west and Fitzgerald Avenue to the east of the site respectively. Car parking (including electric vehicle charging) and cycle parking would be provided to adopted local standards. Suitable arrangements would also be provided for access by delivery, refuse and other service vehicles.
- 12.4 The Transport Statement has stated that the levels of traffic associated with the proposals will not lead to any harm to the existing operation and free-flow of traffic on the adjoining highway network.
- 12.5 The site is located in a highly sustainable location with bus services located on Upper Richmond road West within a short walking distance. The site also benefits from local facilities and close proximity to local schools. This indicates that the site is currently accessible by a variety of sustainable transport modes that have the potential to reduce dependency upon the private car.
- 12.6 The 3no. houses would be provided with 3no. surface parking spaces utilising the existing crossover from Grosvenor Avenue. Each parking space will have an electrical vehicle charging point.
- 12.7 The commercial unit will be provided with 3no. surface parking spaces taking access from Fitzgerald Avenue. An electrical vehicle charging point will be available for one of the car parking spaces.
- 12.8 Cycle parking on site in the form of a secure cycle storage for the apartments and dwelling houses respectively and accord with the London Plan Cycling Standards 2011.
- 12.9 Secure refuse and recycling enclosures will also be provided to each of the houses, the apartment block and the commercial unit. Collection for refuse and recycling will be as per existing arrangements.
- 12.10 In comparison with the site's former use as a motor vehicle workshop and MOT test centre, the proposal will have a significant reduction in the amount of vehicular movements and the amount of traffic generated.
- 12.11 90% of the proposed development have been designed to satisfy the latest M4(2) Building Regulation requirements and 10% (Apartment 3) to M4(3) Standard.



13. FLOODING & DRAINAGE

- 13.1 A Flood Risk Assessment and Drainage Strategy has been produced by MJA Consulting and forms part of the application documentation. A summary of the report is as follows:-
- 13.2 As previously mentioned in Section 2, the site falls with Flood Zone 1 for Rivers and Streams and accordingly can be deemed at low risk.
- 13.3 In terms of surface water flooding, the site is also considered low risk, however, the site levels are higher than that found on Fitzgerald Avenue which has the potential to generate surface water runoff. As such the site is at risk from flooding up to depth of circa 300mm.
- 13.4 To combat any chance of surface water flooding, a Surface Water Drainage Strategy (SuDS) has been produced be utilised for this development by way of considering the use of :-
 - Porous block paving to the courtyard and parking spaces and driveways.
 - Green Roofs and Rainwater Harvesting, Water Butts could be attached to rainwater downpipes to encourage reuse of rainwater for garden irrigation together with Attenuation measures.
 - Soakaways to be placed within parking areas or in the private garden where appropriate.
- 13.5 In terms of Attenuation, the proposed SuDS will be sized to manage the run off from a 1 in 100 rainfall event plus a further 40% allowance for predicted future events due to climate change. The current site has an impermeable area of over 900sq.m. The proposal with its introduction of permeable block paving, footpaths and rear garden amenity reduces the impermeable area to 770sq.m. which would require an attenuation of 32sq.m overall.
- 13.6 The proposed SuDS would provide a sustainable and robust system giving flood risk protection to future occupiers of the proposed development and existing properties adjacent to and within the vicinity of the site. The development of this site will offer a minimum 50% reduction in peak runoff for the frequent rainfall events and up to a reduction of over 80% for the extreme rainfall events, reducing the burden of the downstream public sewer network.
- 13.7 In terms of Foul Water Drainage, it is proposed for the foul water to discharge into a new gravity fed pipe system and connect to the existing public foul sewer located within Fitzgerald Avenue and Grosvenor Avenue respectively.





14. ECOLOGY

- 14.1 Temple Consultants conducted a Preliminary Ecological Appraisal and Bat Roost Assessment on the existing buildings and habitats of the application site. The assessment encompassed a desktop study, a habitat walkover survey, internal and external building inspection. The Appraisal forms part of the application submission. A summary of the findings is given below.
- 14.2 The Site is not subject to any nature conservation designations. It contains mostly urban habitat types and is situated in an urban area surrounded by residential property and roads and is distant from sites of habitats of nature conservation importance.
- 14.3 The Site is within the Impact Risk Zone of one SSSI, however, the development, does not fall within any of the categories (wind and solar energy; minerals, oil and gas; combustion; or waste) that would trigger a consultation between the local planning authority and Natural England. The Site does not support rare species, or diverse assemblages or large populations of any noteworthy species.
- 14.4 In terms of protected species survey, the following observations were made:-
 - Bats There is limited suitable habitat for foraging and roosting bats on the Site, and there is limited connected semi-natural habitat. Therefore, the Site is likely to be used infrequently by low number of foraging and roosting bats. All garages and buildings were deemed to have negligible suitability for roosting bats and as such, require no further surveys. The single horsechestnut tree located off site in north east corner was inaccessible to survey. As such, the tree should be protected during construction works and to avoid any illumination of the tree during and post construction.
 - Birds Impact to birds are not considered significant. Removal of shrubs or trees with potential to support breeding birds, must be carried out between September and February inclusive to avoid any potential offences relating to birds during the main breeding season
 - Other Species- in the unlikely event that any protected species are found during site clearance or construction works must stop immediately and advice sought from a suitably qualified ecologist on how to proceed.
- 14.5 The mitigation plan recommended by the Ecologist for the proposed development includes:
 - A recommendation for a Construction Environmental Management Plan (CEMP) is produced prior to any construction to ensure pollution prevention methods and best working practices.
 - Habitat no further habitat surveys are required; existing trees to be protected with barriers. Planting within the proposed scheme should use native species of trees and hedgerow to enhance the biodiversity.

- Bats no further survey is required Any lighting scheme for the site should be low level to minimise light spillage. Additional bat roosting habitats should be incorporated into the scheme if possible.
- Other Species no further surveys or mitigation is required.
- Birds impacts to birds are not considered to be significant, removal of shrubs or trees with potential to support breeding birds, must be carried out between September and February existing hedgerows, trees, shrubs have the potential to support nesting birds and it is recommended the removal of suitable nesting Swift brick box habitat occurs outside the nesting season.
- 14.6 Opportunities for Ecological Enhancement The proposal should seek to provide a net gain by new native shrub and hedgerow planting on the boundaries; planned areas of amenity grass should be replaced with species rich turf;
- Refuges should be provided to increase opportunities for various species and the installation of bird, swift bricks or house sparrow boxes as well as bee-bricks should be incorporated into the scheme.





Native Planting



15. SUSTAINABILITY & ENERGY

- 15.1 A Sustainability and Energy Statement has been produced by Blue Sky Unlimited and accompanies this application submission. The report details an energy strategy showing how energy efficiency, low carbon and renewable energy measures have been considered and those chosen for this proposal. A summary of which is given below.
- 15.2 SAP calculations have been provided within the report based upon the planning drawings and construction specification provided by the applicant.
- 15.3 The fabric standards of the building will exceed the requirements of the Building Regulations. Various technologies have been considered in the report, the conclusion of which considered wind turbines, combined heat and power and ground source heat pumps as not appropriate.
- 15.4 It is proposed to install air source heat pumps into each of the houses and the commercial unit and heat pump, hot water cylinders into each apartment.
- 15.5 In addition, to install a total of 42no. photovoltaic (PV) panels in combination with the intensive green roof without detrimentally impacting on the aesthetics of the development (the output of the panels is assumed to be 400W. 6no. PV panels will be placed on the 3-bedroom house; 9no. panels on each of the 4-bedroom houses and a total of 24no. PV panels on the roof of the apartments.
- 15.6 Water efficiency target is set for the houses to achieve an enhanced standards required by Building Regulations to less than 105 litres per person per day
- 15.7 The energy statement recommended the following Passive Design Measures:-
 - Passive solar gain natural ventilation and exposed thermal mass with high levels of insulation , air tightness and the control of solar gain. All apartments have been designed to be dual aspect and will benefit from access to direct sunlight.
 - Natural day lighting the orientation and size of the windows has been maximised to reduce the demand of artificial lighting.
 - Efficient Building Fabric U values to meet Building regulations Part L1A standards
 - Air Leakage a minimum standard of permeability of 8m³ of air per hour per m² of envelope area, at 50pa is proposed to target 38% improvement over Building Regulations for the dwellings and achieve a permeability of 5.0m³/hr/m²
 - Thermal Bridging utilising accredited construction details will achieve higher efficiency requirements of the building regulations.
 - Ventilation mechanical extract ventilation to be provided to cloakrooms, bathrooms and en-suites

- 15.8 The energy statement recommended the following Active Design Measures:-
 - Efficient lighting controls
 - Space Heating & Hot Water the proposal is for the installation of air source heat pumps to all houses and apartments and the SAP calculations have been based on the use of this technology.
 - · The use of air source heat pumps.
 - · The use of photovoltaic panels.
- 15.9 Water efficiency measures will ensure water use target of 110 litres per person per day is achieved to all dwellings. The following devices will be incorporated within the apartments:
 - · water efficient taps and toilets
 - low output showers
 - flow restrictors to manage water pressure to achieve optimum levels.
- 15.10 The report concludes that there is a 12.07% (% of TER) reduction in carbon dioxide emission from the proposed energy efficiency, low carbon and renewable technologies and an overall reduction of 68.41% when air source heat pumps and PV panels are included.
- 15.11 The non-residential element is 107.0 m2 in floor area and is proposed as of not sufficient scale to warrant a BREEAM assessment. The cost of the assessment for a development of this scale would outweigh any benefits.



Photovoltaic Panels on Green Roofs

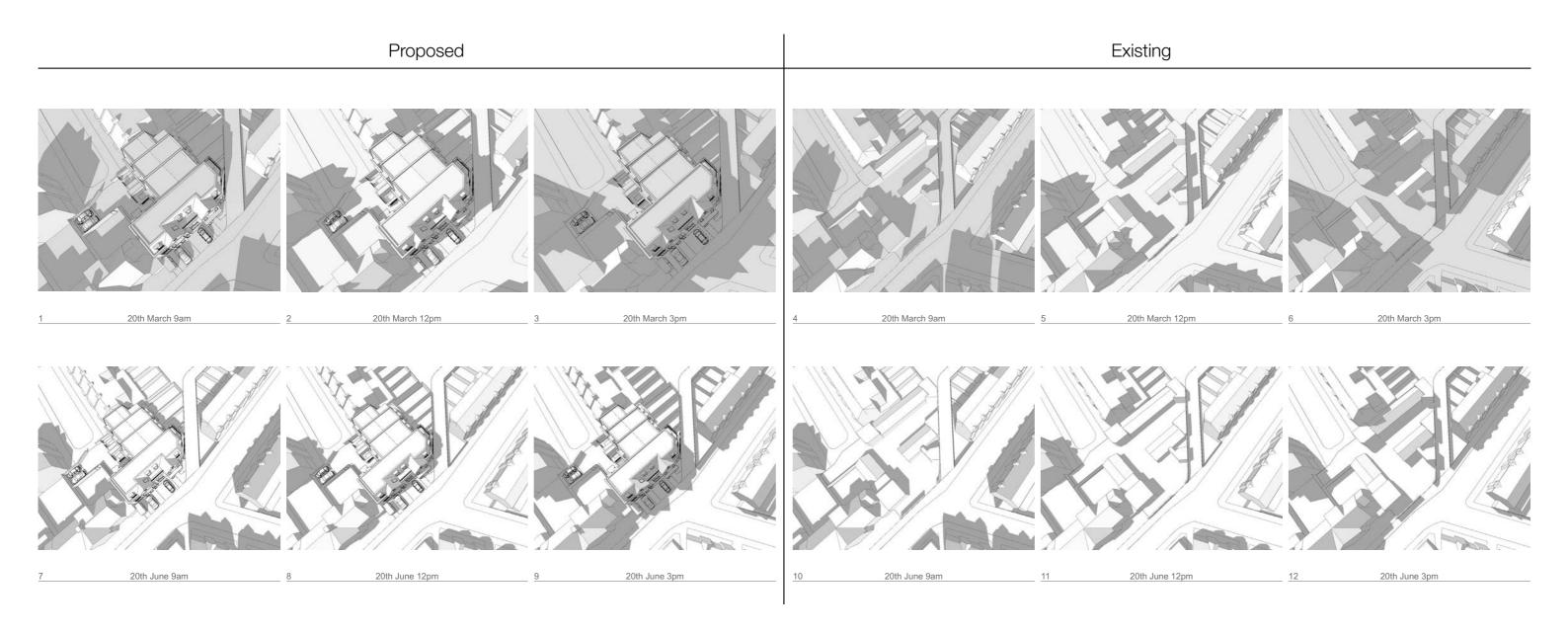


Air Source Heat Pump

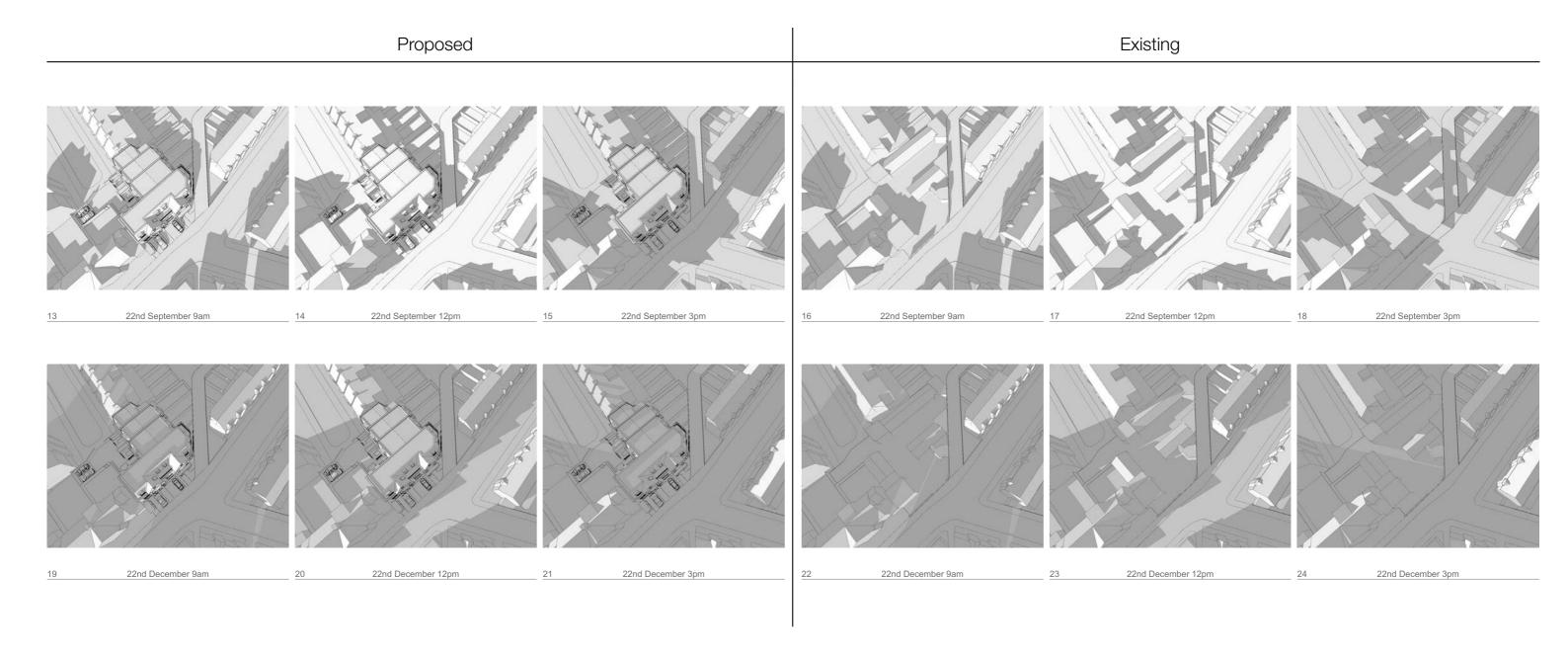


16. SUN PATH STUDY

16.1 The Sun Path Study demonstrates that the proposed development would not cause undue overshadowing of the neighbouring properties.









17. SUMMARY

- 17.1 Planning Permission is sought for the construction of 3no. houses, 5no. apartments and a commercial unit with associated parking car parking, amenity, bin and cycle storage and landscaping following the demolition of the existing workshops, garages and outbuildings.
- 17.2 The application proposes a mix of high-quality 1 and 2-bedroom apartments as well as 3 and 4-bedroom dwellings providing a net gain of 7no. dwellings to the housing stock in a highly sustainable location.
- 17.3 Following the extensive analysis and design development described in this statement a well-designed scheme has emerged which provides the following key points:-
 - Has been designed to ensure that a very high-quality living environment is created for future occupants and that the amenity of neighbouring residents is adequately maintained and protected.
 - A use of materials, details and design features which will successfully integrate within the existing character of the immediate area.
 - A development that will relate sympathetically to its surrounding character and context and reflects the established pattern of the development that does not impact on neighbouring properties.
 - Retention of the vast majority of existing tree and hedgerow planting will protect the amenity of neighbouring properties and maintain the verdant character of the immediate area.
- 17.4 In conclusion this proposal would make the best and most efficient use of the site whilst balancing its impact with the local environment and has been designed to be consistent with the character and appearance of the surrounding residential area. As such, it would be compliant with local plan policies and NPPF.

18. DRAWINGS LIST

HA24-267-P001	Location Plan
HA24-267-P002	Existing Site Plan
HA24-267-P003	Existing Site Use
HA24-267-P004	Existing Floor Plans
HA24-267-P005	Existing Elevations and Site Sections
HA24-267-P006	Proposed Site Information Plan
HA24-267-P007	Proposed Ground and First Floor Plan
HA24-267-P008	Proposed Second Floor and Roof Plan
HA24-267-P009	Proposed Elevations
HA24-267-P010	Proposed Street Scenes
HA24-267-P011	Proposed Site Sections
HA24-267-P012	Proposed 3D Images