

New City Court Townscape, Visual Impact and Built Heritage Assessment - Night Views Supplement

BACKGROUND

- 1.1 In December 2018, GPE (St Thomas Street) Limited, submitted a detailed planning application (reference: 18/AP/4039) to the London Borough of Southwark (LBS) for the demolition of the existing 1980s office buildings, part restoration and refurbishment of listed terrace, and redevelopment of Keats House with retention of existing façade, and construction of an office-led, mixed-use scheme (hereafter referred to as the 'Development'). The Development is proposed on a parcel of land along Thomas Street in the London Bridge area (hereafter referred to as the 'Site').
- The Development (planning reference: 18/AP/4039) was described on the planning application form as follows:
- 'Comprehensive redevelopment of the site to include demolition of existing 1980s office buildings and erection of a 37-storey building (including ground and mezzanine) of a maximum height of 144m (AOD), restoration and refurbishment of existing listed terrace, and redevelopment of Keats House with retention of existing façade to provide a total of 46,374 sqm of Class B1 office floorspace, 765 sqm of Class A1 retail floorspace, 1,139 sqm of Class A3 retail floorspace, 615 sqm of leisure floorspace (Class D2), 719 sqm hub space (Class B1/D2) and a 825 sqm elevated public garden, associated public realm and highways improvements, new station entrance, cycling parking, car parking, servicing, refuse and plant areas, and all ancillary or associated works.'*
- 1.2 An Environmental Impact Assessment (EIA) was undertaken to identify the likely significant environmental effects of the Development, in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations, 2017 (as amended). The findings of the EIA were presented in an Environmental Statement (ES) (the 'December 2018 ES'), submitted with the detailed planning application (the 'December 2018 Planning Application'). Volume 3 of the ES comprised the Townscape, Visual Impact and Built Heritage Assessment (TVIBHA), carried out by Peter Stewart Consultancy (PSC).
- 1.3 On receipt of the planning application, LBS requested that additional schemes be included within the Chapter 14: Cumulative Effects of the December 2018 ES, which are as follows:
- Capital House (ref: 18/AP/0900);
 - Becket House / 60 St Thomas Street (ref: 18/AP/4136);
 - Vinegar Yard (ref: 18/AP/4171);
 - Bermondsey Street/Snowfields (ref: 19/AP/0404); and
 - 2-4 Melior Place (ref: 18/AP/3229).

- 1.4 There have been no changes to the Development since planning submission that affect this assessment

PURPOSE OF THIS SUPPLEMENT

- 1.5 This document provides an assessment of the effect of the Development on a selection of night-time views, provided as accurate visual representations (AVRs). These have been prepared to assist the Council in its consideration of the planning application.
- 1.6 The views subset, produced by Millerhare, uses new baseline photography taken at dusk in February 2019. It is titled 'Environmental Statement Part 3: TVIBHA –Night Views Supplement, June 2020', and is contained in Appendix A to this document. The assessment should be read alongside the views in Appendix A, together with the submitted December 2018 ES TVIBHA, the TVIBHA Cumulative Assessment Addendum (June 2020), the TVIBHA Addendum (June 2020), and the Environmental Statement Addendum by Waterman Infrastructure & Environment Ltd. (June 2020).
- 1.7 Night time views are presented from the following viewpoints:
- **London Bridge: upstream - at the City of London bank** (Viewpoint 24 in the December 2018 ES TVIBHA);
 - **London Bridge, outside Glazier's Hall** (Viewpoint 57 in the December 2018 ES TVIBHA); and
 - **Millennium Bridge** (new viewpoint).
- 1.8 For each view, there are images of the view 'as existing', 'as proposed' and 'as proposed and cumulative'. Baseline photography dates to February 2019. Shard Place (site formerly occupied by Fielden House) was considered to form part of the baseline condition for the purposes of the December 2018 TVIBHA. It is represented by a white wireline in the baseline photography where visible (based on an accurate digital model of the permitted scheme).
- 1.9 The 'as proposed' AVRs are provided as rendered (photorealistic) images. As noted, in the introduction to the Millerhare views document, the lightness of the Development and the treatment of the materials was the best judgment of the visualiser as to the likely appearance of the scheme given the intended lighting strategy and the ambient lighting conditions in the background photograph.
- 1.10 Cumulative schemes are represented as orange 'wirelines' (diagrammatic representations showing the outline of these schemes in blue) in the 'as proposed and cumulative' AVRs.
- 1.11 The cumulative schemes considered in this addendum comprise those cumulative schemes assessed in the TVIBHA Cumulative Assessment Addendum, June 2020

(see Appendix B to the Environmental Statement Addendum by Waterman Infrastructure & Environment Ltd, June 2020) . The additional schemes considered in that addendum, at the request of Southwark Council, are as follows:

Scheme	Description	Status
Capital House, 42-46 Weston Street (18/AP/0900).	Demolition of Capital House and the erection of a 39-storey building	Approved
2-4 Melior Place (18/AP/3229)	Development of 6 storeys	Approved
40 Bermondsey Street, 42-44 Bermondsey Street and 1-7 Snowfields (19/AP/0404)	Development of up to 18 storeys	Submitted
Vinegar Yard (18/AP/4171)	Development of up to 21 storeys	Submitted
Becket House, 60 St Thomas Street (18/AP/4136)	Scoping submitted for a 24-storey building	Pre-planning

LEGISLATION, PLANNING POLICY AND GUIDANCE

1.12 Since submission of the December 2018 TVIBHA, there have been updates to legislation, policy and guidance of relevance to townscape, visual, and built heritage. These are set out below. This assessment takes these updates into account.

Statutory duties

Town and Country Planning and Infrastructure Planning (EIA) (Amendment) Regulations 2018

1.13 The 2018 Regulations are an amendment to the 2017 Regulations which make minor changes to correct drafting errors in the 2017 Regulations that were referenced in the December 2018 TVIBHA. These amending regulations have no bearing on this assessment.

National Planning Policy and Guidance

The National Planning Policy Framework (2019) (“NPPF”)

1.14 The Government issued the latest version of the NPPF in February 2019. The NPPF sets out planning policies for England and how these are expected to be applied by all users of the planning system.

1.15 The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development, which has three dimensions; economic, social and environmental. The NPPF states, at paragraph 10, that *‘at the heart of the National Planning Policy Framework is a presumption in favour of sustainable development.’*

NPPF Section 12: Achieving well-designed places

1.16 Section 12 of the NPPF deals with design. At paragraph 124, the NPPF states that *‘Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities.’*

1.17 Paragraph 127 notes that *‘Planning policies and decisions should ensure that developments:*

- a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;*
- b are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;*
- c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);*
- d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;*
- e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and*
- f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.’*

1.18 Paragraph 130 states that *‘Permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions,’* and goes on to say *‘Conversely, where the design of a development accords with clear expectations in plan policies, design should not be used by the decision-maker as a valid reason to object to development.’*

1.19 Paragraph 131 states that *‘In determining applications, great weight should be given to outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in the area, so long as they fit in with the overall form and layout of their surroundings.’*

NPPF Section 16: Conserving and enhancing the historic environment

- 1.20 Section 16 of the NPPF deals with conserving and enhancing the historic environment. It applies to plan-making, decision-taking and the heritage-related consent regimes under the 1990 Act.
- 1.21 Heritage assets are defined in Annex 2 of the NPPF as a *'building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authority (including local listing).'*
- 1.22 The NPPF notes, at paragraph 184, that heritage assets *'should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations.'*
- 1.23 The NPPF requires an applicant to describe the heritage significance of any heritage assets affected by a proposal, including any contribution made by their setting (para 189). It goes on to say that *'the level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.'*
- 1.24 The NPPF identifies three key factors local authorities should take into account in determining applications (para.192):
- a) *'The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;*
 - b) *The positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and*
 - c) *The desirability of new development making a positive contribution to local character and distinctiveness.'*
- 1.25 Paragraph 193 states that in assessing impact, the more important the asset, the greater the weight should be given to its conservation. It notes that *'this is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.'*
- 1.26 The setting of a heritage asset is defined in Annex 2 as *'the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.'*
- 1.27 The NPPF states, at paragraph 195, that where a proposed development would lead to *'substantial harm'* or total loss of heritage significance of a designated heritage

asset, consent should be refused, *'...unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss'*, or all of a number of specified criteria apply, including that the nature of the heritage asset prevents all reasonable uses of the site.

- 1.28 Where a development proposal will lead to *'less than substantial'* harm to the heritage significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use (paragraph 196).
- 1.29 Paragraph 197 states the effect of an application on the significance of a non-designated heritage asset requires a balanced judgement having regard to the scale of any harm or loss and the heritage significance of the heritage asset.
- 1.30 The NPPF requires local planning authorities to look for opportunities for new development within conservation areas and World Heritage Sites (WHSs) and within the setting of heritage assets to enhance or better reveal their heritage significance. Paragraph 200 goes on to say *'Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.'*
- 1.31 Paragraph 201 states *'Not all elements of a Conservation Area or World Heritage Site will necessarily contribute to its significance.'*

Planning Practice Guidance

- 1.32 The national Planning Practice Guidance (PPG) was launched by the Government on the 6 March 2014 and provides a frequently updated web-based resource in support of the NPPF.
- 1.33 The PPG includes a section called 'Design: process and tools' which 'provides advice on the key points to take into account on design'. This was issued on 1 October 2019; it replaces a previous section called 'Design'.
- 1.34 The PPG deals with the processes of the planning system with respect to design, and notes that guidance on good design is set out in the National Design Guide (see below).
- 1.35 The PPG includes a section called 'Historic environment' which was updated on 23 July 2019. It explains which bodies are responsible for the designation of Heritage Assets ("HAs") and provides information on heritage consent processes.
- 1.36 The PPG considers the factors that should inform decision taking about developments that would affect HAs. It notes that *'HAs may be affected by direct physical change or by change in their setting. Being able to properly assess the nature, extent and importance of the significance of a HA, and the contribution of its*

setting, is very important to understanding the potential impact and acceptability of development proposals... (18a-007-20190723). It goes on to say *'understanding the significance of a heritage asset and its setting from an early stage in the design process can help to inform the development of proposals which avoid or minimise harm'* (18a-008-20190723). It states that in assessing proposals, where harm is found, the extent of harm should be *'clearly articulated'* as either *'substantial'* or *'less than substantial'* (18a-018-20190723).

- 1.37 The PPG notes that setting is defined in the NPPF and that *'all heritage assets have a setting, irrespective of the form in which they survive and whether they are designated or not. The setting of a heritage asset and the asset's curtilage may not have the same extent'* (18a-013-20190723). It goes on to say, *'the extent and importance of setting is often expressed by reference to the visual relationship between the asset and the proposed development and associated visual/physical considerations. Although views of or from an asset will play an important part in the assessment of impacts on setting, the way in which we experience an asset in its setting is also influenced by other environmental factors such as noise, dust, smell and vibration from other land uses in the vicinity, and by our understanding of the historic relationship between places. For example, buildings that are in close proximity but are not visible from each other may have a historic or aesthetic connection that amplifies the experience of the significance of each'* (18a-013-20190723).
- 1.38 The PPG contains guidance on WHSs, including particular guidance on setting which notes that buffer zones may be identified around a WHS in some cases, and that it may be appropriate to protect the setting of a WHS in other ways *'... for example by the protection of specific views and viewpoints.'* (18a-033-20190723). The PPG goes on to state that developments potentially affecting a WHS *'...need to submit sufficient information with their applications to enable assessment of impact on Outstanding Universal Value'* (18a-035-20190723).
- 1.39 With regard to non-designated HAs, the PPG notes that *'there are a number of processes through which non-designated heritage assets may be identified, including the local and neighbourhood plan-making processes and conservation area appraisals and reviews. Irrespective of how they are identified, it is important that the decisions to identify them as non-designated heritage assets are based on sound evidence.'* It states *'it is important that all non-designated heritage assets are clearly identified as such'* noting it is *'helpful if local planning authorities keep a local list of non-designated heritage assets, incorporating any such assets which are identified by neighbourhood planning bodies'* (18a-040-20190723).

The National Design Guide (2019)

- 1.40 The National Design Guide (September 2019) ('NDG') states (paragraph 3) that it *'forms part of the Government's collection of planning practice guidance'*.

- 1.41 At paragraph 21 the NDG states that well-designed places are achieved by making the right choices at all levels, including:

*'The layout (or masterplan)
The form and scale of buildings
Their appearance
Landscape
Materials; and
Their detailing'*

- 1.42 At paragraph 35 the NDG sets out ten characteristics which contribute to the character of places, nurture and sustain a sense of community, and address issues affecting climate. These are described as follows:

*'Context – enhances the surroundings.
Identity – attractive and distinctive.
Built form – a coherent pattern of development.
Movement – accessible and easy to move around.
Nature – enhanced and optimised.
Public spaces – safe, social and inclusive.
Uses – mixed and integrated.
Homes and buildings – functional, healthy and sustainable.
Resources – efficient and resilient.
Lifespan – made to last.'*

Historic England Advice Note 12 - Statements of Heritage Significance: Analysing Significance in Heritage Assets (2019)

- 1.43 Historic England issued Advice Note 12, Statements of Heritage Significance: Analysing Significance in Heritage Assets in October 2019. The note covers the NPPF requirement that heritage significance is described in order to help local authorities make decisions on the impact of proposals for change to heritage assets. It states, in paragraph 2 of the introduction, that *'the level of detail in support of applications for planning permission and listed building consent should be no more than is necessary to reach an informed decision, and that activities to conserve the asset(s) need to be proportionate to the significance of the heritage asset(s) affected and the impact on that significance'*. It describes a statement of heritage significance as *'an objective analysis of significance, an opportunity to describe what matters and why'*.
- 1.44 The advice note states that a staged approach to decision making, where the significance is assessed before the design of the proposal commences, is the best approach. It states in paragraph 29, under 'proportionality', that while *'analysis should be as full as necessary to understand significance, the description provided to the LPA need be no more than sufficient to understand the potential impact of the proposal on significance'*.

Historic England Advice Note 4 – Tall Buildings – Second edition consultation draft (2020)

- 1.45 This draft updated version of the advice note issued in 2015 had been issued for public consultation at the time of writing, with comments invited until 28 May 2020. The guidance within the draft Advice Note is not significantly different to that in the existing document, and the updates are primarily designed to reflect changes to the policy and guidance, including the NPPF and the National Design Guide, to take account of changing technology for visualising proposed tall buildings, and to give greater focus to plan-led approaches to tall buildings.

Regional Planning Policy and Guidance

The Draft New London Plan – Intend to publish (December 2019)

- 1.46 In December 2019, the Mayor of London issued a draft ‘Intend to Publish’ version of the new London Plan, which shows all of the Mayor’s suggested changes to earlier drafts, following the Examination in Public (EiP) and publication of the Panel of Inspectors report, including panel recommendations. While it is not yet adopted, the draft London Plan carries a good deal of weight as a material consideration, having been through examination. Its aim is to *‘provide a vision for how London should sustainably grow and develop in the future’*. When adopted, it will replace the current London Plan.
- 1.47 Whilst it was anticipated that the draft plan would be finally published in the period post Mayoral election, in early summer 2020, the Mayor of London received a letter from the Secretary of State on 13 March 2020 directing him to make specified changes to the plan prior to adoption. The timescales for adoption are now less clear. The Mayor of London indicated, in a letter of 24 April, that he is seeking to enter into discussions with the Secretary of State regarding the changes that he has been directed to make. The Secretary of State’s letter does not make reference to the draft policies noted below.
- 1.48 Chapter 2 ‘Spatial Development Patterns’ includes policies on Opportunity Areas. Policy SD1 on ‘Opportunity Areas’ states that boroughs should, inter alia, *‘support development which creates employment opportunities and housing choice for Londoners’*.
- 1.49 The policies most relevant to townscape, visual impact and the historic environment are contained in Chapter 3, ‘Design’, and Chapter 7, ‘Heritage and Culture’. These chapters contain draft policies that are broadly similar to those in Chapter 7, ‘London’s Living Places and Spaces’, in the current London Plan. These draft policies are as follows:

- 1.50 Policy D1 on *‘London’s form, character and capacity for growth’* states that the form and layout of a place should enhance local context by delivering buildings and spaces that positively respond to local distinctiveness, which have clearly defined public and private environments. They should *‘provide active frontages and positive reciprocal relationships between what happens inside the buildings and outside in the public realm to generate liveliness and interest.’* Policy D1 also states that development proposals should *‘enhance local context by delivering buildings and spaces that positively respond to local distinctiveness through their layout, orientation, scale, appearance and shape, with due regard to existing and emerging street hierarchy, building types, forms and proportions.’* Development proposals should *‘be of high quality, with architecture that pays attention to detail,’* and uses *‘attractive, robust materials which weather and mature well’*.
- 1.51 Policy D2 on *‘delivering good design’* highlights the necessity to allow master plans and design codes to help bring forward development to ensure it delivers high quality design, optimising site capacity. It also notes that at least one design review should be carried out if the development proposes *‘a building defined as a tall building by the borough (see Policy D9 Tall Buildings), or that is more than 30m in height where there is no local definition of a tall building’*.
- 1.52 Policy D8 on *‘public realm’* states that opportunities to create a new public realm should be encouraged and that development plans and proposals should consider a number of things, including that the public realm is well-designed, incorporates materials that are *‘of good quality, fit-for-purpose, durable and sustainable,’* and that it relates to the local and historic context. It states that buildings should be *‘of a design that activates and defines the public realm,’* and that there should be *‘a mutually supportive relationship between the space, surrounding buildings and their uses’*.
- 1.53 Policy D9 on *‘tall buildings’* highlights that *‘tall buildings should only be developed in locations that are identified in Development Plans.’* Development Plans should provide a definition of a tall building (*‘the height of which will vary between and within different parts of London’*) and should identify in maps where tall buildings may be appropriate.
- 1.54 Policy D9 also notes that the views of buildings from different distances should be considered. This includes long-range views (buildings must make a *‘positive contribution to the existing and emerging skyline and not adversely affect local or strategic views’*), mid-range views (buildings must make a positive contribution to the local townscape and particular attention should be paid to its form, proportions and materiality), and immediate views (buildings should *‘have a direct relationship with the street, maintaining the pedestrian scale, character and vitality of the street’*). Proposals should *‘take account of, and avoid harm to, the significance of London’s heritage assets and their settings’*. It notes that the architectural quality and materials should be of an exemplary standard and buildings should *‘positively contribute to the character of the area.’* Buildings that are situated in a World Heritage Site must preserve, and not harm, the Outstanding Universal Value of the World Heritage Site.

- 1.55 Policy HC1 on 'Heritage Conservation and Growth' aims to highlight the importance of London's historic environment when proposing new development. This policy emphasises that *'development proposals affecting heritage assets, and their settings, should conserve their significance, by being sympathetic to the assets' significance and appreciation within their surroundings'*.
- 1.56 Policy HC2 on 'World Heritage Sites' states that development proposals in World Heritage Sites and their settings, including any buffer zones, should *'conserve, promote and enhance their Outstanding Universal Value.'*
- 1.57 Policy HC3 on 'Strategic and local views' states that *'development proposals must be assessed for their impact on a designated view if they fall within the foreground, middle ground or background of that view.'* The Mayor will seek to *'identify and protect aspects of views that contribute to a viewer's ability to recognise and appreciate a World Heritage Site's authenticity, integrity, and attributes of Outstanding Universal Value. This includes the identification of Protected Silhouettes of key features in a World Heritage Site'*. Boroughs should clearly identify local views in their Local Plans and strategies.
- 1.58 Policy HC4 on the 'London View Management Framework' highlights that *'development proposals should not harm, and should seek to make a positive contribution to, the characteristics and composition of Strategic Views and their landmark elements.'* They should also *'preserve and where possible enhance viewers' ability to recognise and to appreciate Strategically-Important Landmarks in these views and, where appropriate, protect the silhouette of landmark elements of World Heritage Sites as seen from designated viewing places.'* Development in the foreground, middle ground and background of a designated view *'should not be intrusive, unsightly or prominent to the detriment of the view'*.
- 1.59 Development in the background of a Protected Vista that is inside or outside of the Wider Setting Consultation area *'should not harm the composition of the Protected Vistas'*. It should make a positive contribution and *'where possible enhance the viewer's ability to recognise Strategically-Important Landmarks'*. Where existing buildings currently detract from or block the view, *'this should not be used as justification for new development to likewise exceed the threshold height of the Landmark Viewing Corridor'*. It also notes that opportunities to reinstate Landmark Viewing Corridors arising as a result of redevelopment and demolition of existing buildings that exceed Landmark Viewing Corridor threshold height *'should be taken whenever possible'*.
- 1.60 The composition of the view as a whole should not be harmed and instead, development proposals should give context to landmarks. In particular, *'townscape and linear views should be managed so that the ability to see specific buildings, or groups of buildings, in conjunction with the surrounding environment, including distant buildings within views, is preserved.'* Similarly, London panoramas and River Prospects views must be managed and the composition of the view as a whole must be not be harmed.

Local Planning Policy and Guidance

LBS New Southwark Plan 2019 to 2034 - Submission version (2020)

- 1.61 The submission version of the New Southwark Plan document was submitted for Examination in January 2020, following two rounds of Regulation 19 (pre-submission) consultation. It reflects responses made between December 2017 and February 2018 on the Proposed Submission version issued in December 2017. As the Plan is yet to undergo Examination Hearings, it currently carries only a moderate weight as a material consideration in the decision making process, which will increase on an ongoing basis as policy are tested throughout Examination. The following draft policies are of relevance to this assessment.
- 1.62 Draft Policy P12 relates to the design of places. It notes that development must:
- '1. Ensure height, scale, massing and arrangement respond positively to the existing townscape, character and context; and*
 - 2. Better reveal local distinctiveness and architectural character; and conserve and enhance the significance of the local historic environment; and*
 - 3. Ensure the urban grain and site layout take account of and improve existing patterns of development and movement, permeability and street widths; and*
 - 4. Ensure buildings, public spaces and routes are positioned according to their function, importance and use; and*
 - 5. Ensure a high quality public realm that encourages walking and cycling and is safe, legible, and attractive, and eases the movement of pedestrians, cyclists, pushchairs, wheelchairs and mobility scooters and vehicular traffic. Street clutter should be avoided; and*
 - 6. Provide landscaping which is appropriate to the context, including the provision and retention of street trees; and*
 - 7. Provide the use of green infrastructure through the principles of water sensitive urban design, including quiet green spaces, tree pit rain gardens in addition to green grid spaces for people and surface runoff; and*
 - 8. Provide accessible and inclusive design for all ages and people with disabilities; and*
 - 9. Provide opportunities for formal and informal play; and*
 - 10. Provide adequate outdoor seating for residents and visitors'.*
- 1.63 Draft Policy P13 relates to the design quality. It notes that development must provide:
- '1. High standards of design with fabric, function and composition; and*
 - 2. Innovative design solutions that are specific to the site's historic context, topography and constraints; and*
 - 3. Adequate daylight, sunlight, outlook, and a comfortable microclimate including good acoustic design for new and existing neighbouring occupiers residents; and*
 - 4. Respond positively to the context using durable, quality materials; and*

5. Buildings and spaces which are constructed and designed sustainably; and
6. Buildings and spaces that utilise active design principles that are fitting to the location, context, scale and type of development; and
7. Active frontages and entrances that promote activity and successfully engage with the public realm in appropriate locations; and
8. Adequate servicing within the footprint of the building and site for each land use; and
9. Accessible and inclusive design for all; and
10. A positive pedestrian experience; and
11. Basements that do not have adverse archaeological, amenity or environmental impacts’.

1.64 Draft Policy P16, Tall buildings, provides a map of areas where tall buildings are expected to be set out and they are typically within Southwark’s Major Town Centres, Opportunity Area Cores, Action Area Cores and the Central Activities Zone. Tall buildings are defined as being ‘being significantly higher than surrounding buildings or their emerging context.’ New tall buildings must:

- ‘1. Be located at a point of landmark significance; and
2. Have a height that is proportionate to the significance of the proposed location and the size of the site; and
3. Make a positive contribution to the London skyline and landscape, taking into account the cumulative effect of existing tall buildings and emerging proposals for tall buildings; and
4. Not cause a harmful impact on strategic views, as set out in the London View Management Framework, or to our Borough views; and
5. Respond positively to local character and townscape; and
6. Provide a functional public space that is appropriate to the height and size of the proposed building; and
7. Provide a new publically accessible space at or near to the top of the building and communal facilities for users and residents where appropriate.

1.65 The draft policy goes on to state that the design of tall buildings will be required to:

- ‘1. Be of exemplary architectural design and residential quality; and
2. Conserve and enhance the significance of designated heritage assets and make a positive contribution to wider townscape character. Where proposals will affect the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting) clear and convincing justification in the form of public benefits will be required; and
3. Avoid harmful and uncomfortable environmental impacts including wind shear, overshadowing, and solar glare; and
4. Maximise energy efficiency and prioritise the use of sustainable materials; and
5. Have a positive relationship with the public realm, provide opportunities for new street trees, and design lower floors to successfully relate to and create a positive pedestrian experience; and provide widened footways and routes to accommodate increased footfall’.

1.66 It is noted in the ‘Fact Box’ that follows the text above that

*‘Tall buildings are above 30m except where they are 25m in the Thames Special Policy Area, and also where they are significantly higher than surrounding buildings or their emerging context.
A point of landmark significance is where a number of important routes converge, where there is a concentration of activity and which is or will be the focus of views from several directions’.*

1.67 Draft Policy P18, on ‘Listed buildings and structures’, states that development relating to Listed Buildings and structures will only be permitted where it conserves and enhances the special significance of listed buildings and structures and their settings by conserving and enhancing:

- ‘1. The historic fabric, architectural style and features, curtilage, site layout, plan form and readability, and land use; and*
- 2. The contribution of the building to its setting or its place within a group; and*
- 3. Views that contribute positively to the significance of the building or structure or their setting; and*
- 4. The viable use of listed buildings and structures that is consistent with their on-going and long term conservation’.*

1.68 It also states that any harm to the significance of the Listed Building or structure that results from a proposed development ‘must be robustly justified’.

1.69 Draft Policy P19, on ‘Conservation areas’, states that development relating to conservation areas will only be granted where:

- ‘1. The development conserves and enhances the significance of conservation areas, taking into account their local character, appearance and positive characteristics published in Conservation Area Appraisals and Conservation Area Management Plans; and*
- 2. The development conserves and enhances the significance of a conservation area’s setting, including views to and from the conservation area’.*

1.70 It continues, ‘2. The demolition of buildings or structures that make a positive contribution to the historic character and appearance of a conservation area will not be generally permitted. Any replacement buildings or structures must conserve and enhance the conservation area’s historic character and distinctiveness’.

1.71 Draft Policy P20, is titled ‘Conservation of the historic environment and natural heritage’. It identifies several types of heritage asset, both designated and non-designated, not all of which are of relevance to this assessment. It states that development must ‘conserve and enhance the significance’ of the following heritage assets and their settings:

- ‘i. Scheduled monuments; and*
- ii. Sites of archaeological interest; and*

- iii. Protected London squares; and
iv. Registered parks and gardens; and
v. Trees within the curtilage of a listed building; and
vi. Trees that contribute to the historic character or appearance of conservation areas; and
vii. Trees that are subject to a Tree Preservation Order (TPO); and
viii. Ancient hedgerows; and
ix. Buildings and land with Article 4 (1) directions inside and outside conservation areas; and
x. Unlisted buildings of townscape merit; and
xi. Undesignated heritage assets including Second World War Stretcher Fences; and
xii. Foreshore and river structures’
- 1.72 The policy states that new development must also do the following:
- ‘2 Enable the viable use of the heritage asset that is consistent with its on-going and long-term conservation; and*
- ‘3 Provide robust justification for any harm to the significance of the heritage asset that result from the development.’*
- 1.73 Draft Policy P21 on Borough Views, states that development must:
- 1. Preserve and where possible enhance the borough views of significant landmarks and townscape; and*
2. Ensure the viewing locations for each view are is accessible and well managed; and
3. Enhance the composition of the panorama across the borough and central London as a whole.
- 1.74 Policy P21 goes on to identify Borough Views and sets outs requirements for developments in a given view. Those noted below are of relevance to this assessment:
- ‘View 1: The London panorama of St Paul’s Cathedral from One Tree Hill*
- 1. Maintain the view of St Paul’s Cathedral from the viewing place on One Tree Hill and not exceed the threshold height of the view’s Landmark Viewing Corridor; and*
2. Not compromise the sensitive Wider Assessment Area that is located either side of the Landmark Viewing Corridor to ensure the viewer’s ability to recognise and appreciate St Paul’s Cathedral and its setting is maintained. A canyon effect of the view of St Paul’s Cathedral must be avoided;
- View 2: The linear view of St Paul’s Cathedral from Nunhead Cemetery*

- 1. Maintain the view of St Paul’s Cathedral from the viewing place within Nunhead Cemetery and not exceed the threshold height of the view’s Landmark Viewing Corridor; and*
2. Not compromise the sensitive Wider Assessment Area that is located either side of the Landmark Viewing Corridor to ensure the viewer’s ability to recognise and appreciate St Paul’s Cathedral and its setting is maintained. A canyon effect of the view of St Paul’s Cathedral must be avoided;

- 1.75 Annex 1 sets out the viewing locations and view geometry that relates to the Borough Views.
- 1.76 Draft Policy P23, on ‘World heritage sites’, states that development *‘will only be permitted when the significance of the Outstanding Universal Value of World Heritage Sites and their settings are sustained and enhanced. This should include views in, out and across sites’.*
- 1.77 The section of the draft plan on Site Allocations (page 94 onwards) notes under Allocation NSP50, which includes the site, that:
- ‘Site is directly adjacent to Grade II listed London Bridge Station and Grade II listed Railway Arches. Proposals for the site should sustain and enhance the setting of these assets and integrate St Thomas Street Boulevard.*
 - Proposals for the site should be sensitive to the surrounding context, and sustain and enhance the setting of the Bermondsey Street conservation area to the east.’*
- 1.78 Draft Policy P25: ‘Local List’ states that *‘Development must take into account locally listed buildings and structures that positively contribute to local character and amenity’.*
- 1.79 Chapter 4 of the draft plan presents the local planning authority’s area visions. Vision AV.11 covers the London Bridge area, which includes the site. It notes that development in London Bridge should, inter alia:
- ‘Attract global commerce with headquarter and local offices and build on its reputation for arts and crafts, food and trade while serving local needs through its town centre role;*
 - Support the creation of a distinctive and inspiring world class environment through a mix of inspiring new architecture, restored and reactivated warehouses and other heritage revealed with ‘placemarks’, public art and quality public realm that provides openness, connectivity and a ‘green grid’. Greenery and innovations in environmental resilience should be incorporated into buildings;*
 - Build on the fabric of local alleyways and yards to create quiet, green routes with clean air;*
 - Strengthen the cultural offer of the area and diversify activities and shops;*
 - Make sure the new standard of London Bridge Station is upheld and the Shard remains significantly taller and more visible than surrounding buildings as the station’s landmark;*

- *Improve local accessibility and interchange at the station with enhanced walking, cycling, tube, bus and boat routes;*
- *Contribute towards the development of the Low Line, a new public realm corridor adjacent to historic railway arches, with lively accessible spaces for creativity, new jobs and retail;*
- *Support the development of vibrant new high streets on St Thomas Street, Crucifix Lane and Tooley Street, complementing the distinct character of nearby Bermondsey Street’.*

- 1.80 Vision AV.11 presents the London Bridge Area Vision Map on page 40. This indicates the site allocations lying within this area. St Thomas Street is the focus of three allocated sites – NSP49 (the focus of which is Guy’s Hospital) just to the east of the Site; NSP50 (which includes Capital House and Becket House); and NSP50 (which includes Vinegar Yard).
- 1.81 The section of the draft plan on Site Allocations (page 94 onwards) notes that ‘*Site Allocations are planning policies which apply to key potential development sites of strategic importance’.*

Liberty of The Mint Conservation Area Appraisal (2018)

- 1.82 The Liberty of The Mint Conservation Area Appraisal was published by Southwark Council in November 2018. After detailing the historic background of the area and its development, the document considers the character of the conservation area and its setting. It notes that the conservation area ‘*contains a varied section of Southwark townscape broadly dating from the later 19th century. This consists of a mix of industrial, residential, educational, transport and historic, mixed-use buildings fronting onto Borough High Street’.*

VIEWS ASSESSMENT

View 24.1 - London Bridge: upstream - at the City of London bank, night

Existing

- 1.83 This viewpoint is located on London Bridge, beside the north bank of the Thames. It looks south towards Southwark. Views towards Southwark from London Bridge are mentioned in the Borough High Street Conservation Area Appraisal. The foreground is occupied by the bridge and the Thames. The Shard is the dominant feature in this view, marking the location of London Bridge Station. The externally illuminated top 20 storeys of the 95 storey Shard form a clear beacon, drawing the eye. The apartment and hotel levels below are clearly not fully occupied, but the office levels nearer the base are seen to be more or less fully in use, evidenced by the internal lighting of those floors.
- 1.84 Those buildings that form the ‘foothills’ to The Shard - including The Place and no.1 London Bridge seen to its right – are identifiable features of the view at this hour, by virtue of the level of occupancy apparent from their internal illumination. The top levels of Shard Place (outlined here in white) and Guy’s Hospital tower rise behind this, the roof level of the latter seen to be floodlit.
- 1.85 The silhouette of Southwark Cathedral (grade I) can be made out on the right side of the image, rising above the office buildings fronting the river. While the Cathedral itself is mostly in shadow, its pinnacles are floodlit. The Strata Tower at Elephant and Castle is seen partially behind the Cathedral (right side).
- 1.86 It is likely that people in this location would include a mix of local residents, workers and people in their leisure time.
- 1.87 This is a view of **medium** sensitivity.

Proposed

- 1.88 The Development is seen to terminate the view at the end of the bridge. It will be read as part of the expanding group of large scale and tall buildings clustered around London Bridge Station. The dominance of The Shard in this view would remain unchallenged; the Development would be seen to step down towards the Cathedral, drawing the eye towards this landmark. The level of illumination of the Development would be consistent with that of the other modern glass buildings in this view.
- 1.89 This is a change of **moderate to major** magnitude to a view of **medium** sensitivity, as would be the case during the daytime.
- 1.90 The significance would be **moderate to major**. The effect would be **beneficial**.
- 1.91 The effect is at regional level and long term.

Cumulative

- 1.92 Cumulative development on St Thomas Street is seen to step down to the east of The Shard, consolidating the grouping of tall buildings at London Bridge. Taking this into account, this would be a change of **moderate to major** magnitude to a view of **medium** sensitivity, as would be the case during the daytime.
- 1.93 The significance would be **moderate to major**. The effect would be **beneficial**.
- 1.94 The effect is at regional level and long term.

View 57 - London Bridge, outside Glazier's Hall

Existing

- 1.95 This viewpoint is located outside Glazier's Hall, Borough High Street, the main route into Borough as one has crossed the bridge from the north. It lies within the Borough High Street Conservation Area. It looks towards London Bridge Station, marked by The Shard and The Place, the dominant features of the view at this time of day. The externally illuminated top 20 storeys of the 95 storey Shard form a clear beacon, drawing the eye. The degree of internal illumination to The Place also lends it considerable presence.
- 1.96 The left side of the image is framed by a late 20th century office building (no.1 London Bridge), and the right side by Bridge House (grade II), which dates to the first half of the 19th century.
- 1.97 It is likely that people in this location would include a mix of local residents, workers and visitors.
- 1.98 This is a view of **medium** sensitivity.

Proposed

- 1.99 The Development would be a bold addition to this view, as seen on the right side of the image. It would appear to form part of the grouping of modern large scale and tall buildings around London Bridge. The Shard would remain the tallest of the group by some way. There would be a strong visual affinity between the Development and these buildings, by virtue of the common use of glass and steel in their façades. The connection between the Development and The Place will be further reinforced by the curvature to the northern façades of both buildings, and the way the rectilinear eastern ends of both buildings are seen to project towards Borough High Street. The level of internal illumination of the Development would be consistent with the existing condition.

- 1.100 This would be a change of **major** magnitude to a view of **medium** sensitivity, as would be the case during the daytime.
- 1.101 The significance would be **moderate to major**. The effect would be **beneficial**.
- 1.102 The effect is at local level and long term.

Cumulative

- 1.103 Cumulative development on St Thomas Street is visible to the left of The Shard. Taking this into account, this would be a change of **major** magnitude to a view of **medium** sensitivity, as would be the case during the daytime.
- 1.104 The significance would be **moderate to major**. The effect would be **beneficial**.
- 1.105 The effect is at local level and long term.

View 63 - Millennium Bridge (new viewpoint)

- 1.106 This viewpoint is located on Millennium Bridge. The view looks south-east towards the Site. The open expanse of the River Thames dominates the foreground of the view. The right side of the image takes in buildings lying on the south bank of the Thames. These include the Globe Theatre, with its distinctive thatched roof. One can see Tower Bridge in the distance on the left side of the image. Both of the above buildings are floodlit.
- 1.107 The Shard commands attention in this view, visible in the centre in the image. Shard Place (outlined in white) is seen in front of it, and The Place is seen immediately to the left of this. Guys Hospital Tower is seen to the right of The Shard. This grouping of tall buildings indicates the location of London Bridge Station. Southwark Cathedral is visible in front of The Place. While its pinnacles are floodlit, the rest of the Cathedral is not lit and is not especially noticeable in this view.
- 1.108 It is likely that people in this location would include a mix of workers and people in their leisure time, at least some with the specific expectation of enjoying the view.
- 1.109 This is a view of **medium** sensitivity.

Proposed

- 1.110 The Development is illustrated in the centre of the image. It would be visible directly in front of Guy's Hospital Tower, rising to a similar apparent height. It would appear as one of several tall and large scale modern buildings seen to form the foothills of The Shard, consolidating the grouping. The Shard would continue to command

attention in this view. The degree of illumination to the Development would be consistent with that of other modern developments located around London Bridge Station.

- 1.111 This is a change of **minor to moderate** magnitude to a view of **medium** sensitivity.
- 1.112 The significance would be **minor to moderate**. The effect would be **beneficial**.
- 1.113 The effect is at district level and long term.

Cumulative

- 1.114 Cumulative development on St Thomas Street is illustrated between the Development and The Shard/Shard Place. Taking this into account, this would be a change of **minor to moderate** magnitude to a view of **medium** sensitivity.
- 1.115 The significance would be **minor to moderate**. The effect would be **beneficial**.
- 1.116 The effect is at district level and long term.

CONCLUSION

- 1.117 It is considered that the appearance of the Development at night would be consistent with that of other existing developments in the local area, and would not give rise to additional likely significant effects on heritage assets beyond those apparent during the daytime.
- 1.118 The overall assessment of the effect of the Development, in terms of architecture, urban design, views, townscape and built heritage (as provided within the December 2018 TVIBHA) remains valid.

Appendix A – Views

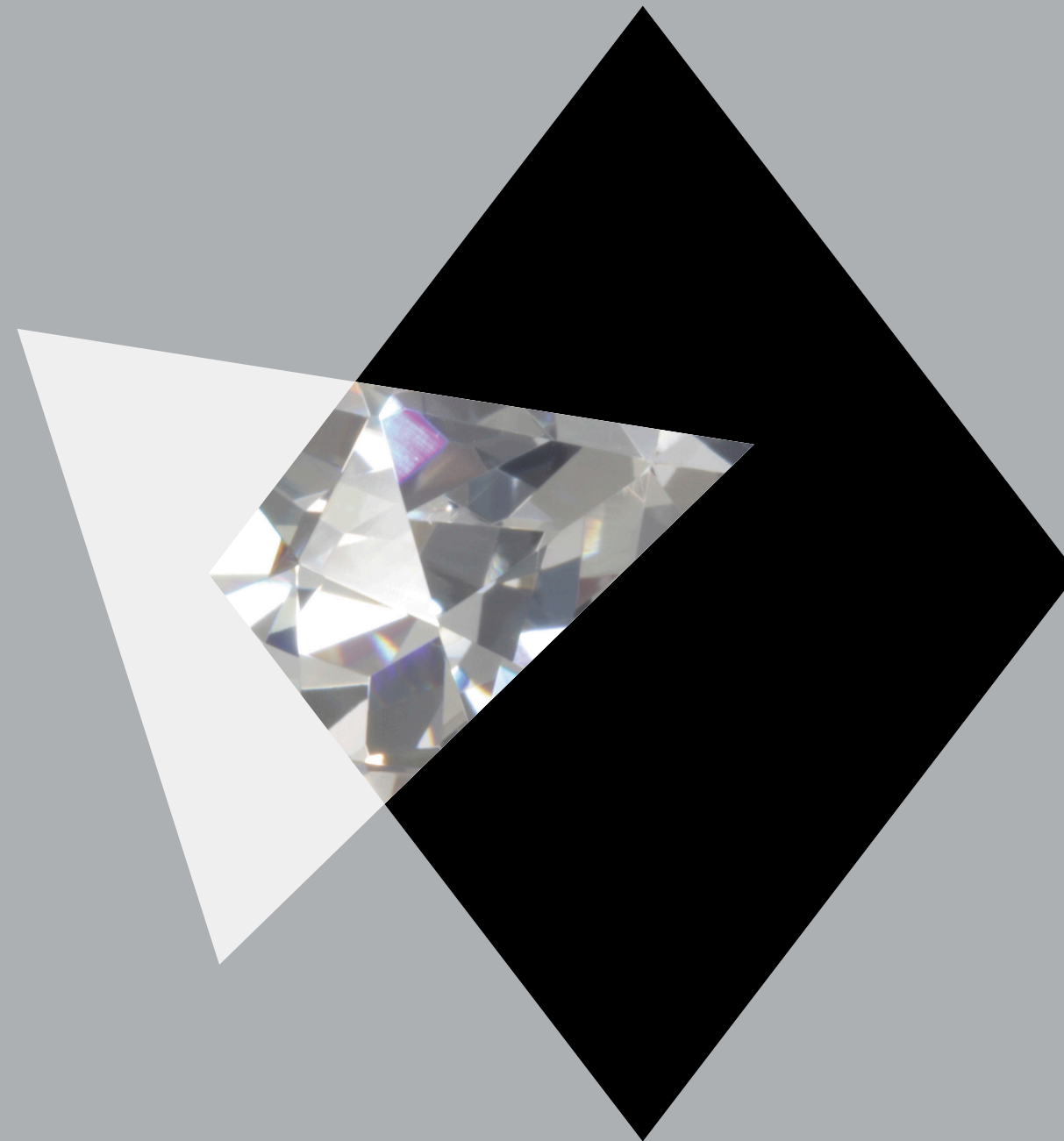
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Somerset House
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June 2020

New City Court, St Thomas Street

Environmental Statement Part 3: TVIBHA - Night Views Supplement

June 2020



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Environmental Statement Part 3: TVIBHA - Night Views Supplement

June 2020

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Client GPE (St Thomas Street) Limited
Architect Allford Hall Monaghan and Morris LLP
Planning Consultant DP9
Townscape Consultant Peter Stewart Consultancy
Visualisation Millerhare

1 Introduction

Scope	
1.1	This study tests the visual impact of the Proposed Development by GPE (St Thomas Street) Limited at New City Court, 20 St Thomas Street, London. It consists of a series of accurately prepared photomontage images or Accurate Visual Representations (AVR) which are designed to show the visibility and appearance of the Proposed Development from a range of publicly accessible locations around the site. The views have been prepared by Miller Hare Limited.
1.2	The views included in the study were selected by the project team and they include, where relevant, standard assessment points defined by the Mayor of London and the London Borough of Southwark Planning Authority. Where requested, view locations have been refined and additional views added. The full list of views is shown in thumbnail form on the following pages, together with a map showing their location. Detailed co-ordinates for the views, together with information about the source photography are shown in the Views section on page 6.
1.3	In preparing each AVR a consistent methodology and approach to rendering has been followed. General notes on the AVRs are given in Appendix A3 “Accurate Visual Representations”, and the detailed methodology used is described in Appendix A4 “Methodology for the production of Accurate Visual Representations”.
1.4	From each viewpoint a large format photograph has been taken as the basis of the study image. The composition of this photograph has been selected to allow the Proposed Development to be assessed in a meaningful way in relation to relevant elements of the surrounding context. Typically, photographs have been composed with a horizontal axis of view in order to allow vertical elements of the proposals to be shown vertically in the resulting image. If required in order to show the full extent of the proposals in an natural way the horizon line of the image has been allowed to fall above or below the centre of the image. This has been achieved by applying vertical rise at source using a large format camera or by subsequent cropping of the image. In a limited number of cases the source photograph has been extended vertically to ensure that the full height of the proposals are shown in the images of the future condition. In all cases the horizon line and location of the optical axis are clearly shown by red arrow markers at the edges of the image.
1.5	The lenses chosen for the source photography have been selected to provide a useful Field of View given the distance of the viewpoint from the site location. The lenses used for each view are listed in the Views section on page 6.
1.6	For each AVR image, the precise Field of View, after any cropping or extension has been applied is shown clearly using indexed markings running around the edges of the image. These indicate increments of 1, 5 and 10 degrees marked away from Optical Axis. Using this peripheral annotation it is possible to detect optical distortions in parts of the image away from the Optical Axis . It is also possible to simulate a different field of view by masking off an appropriate area of the image. More detailed information on the border annotation is contained in Appendix A3 “Accurate Visual Representations”.
Conditions	
1.7	From each selected viewpoint a set of accurate images have been created comparing the future view with the current conditions represented by a carefully taken large format photograph. In this study the following conditions are compared: <ul style="list-style-type: none">• Existing – the appearance today as recorded on the specified date and time• Proposed – the future appearance were the Proposed Development to be constructed• Cumulative – the Proposed Development is shown in the context of other significant schemes, agreed in consultation with Southwark Council.
Presentation	
1.8	For each view the AVRs have been presented using a double page layouts, which facilitates desktop study.
Styles	
1.9	For each viewpoint, the Proposed Development is shown in a defined graphical style. These styles comply with the definitions of AVR style defined by the London View Management Framework. The styles used in this study are: <ul style="list-style-type: none">• AVR 3 – a fully rendered representation of the building showing the likely appearance of the proposed materials under the lighting conditions obtaining in the selected photograph.
1.10	The Proposed Development is shown at night-time. The light-ness of the scheme and the treatment of the materials was the best judgment of the visualiser as to the likely appearance of the scheme given the intended lighting strategy and the ambient lighting conditions in the background photograph.
1.11	The Proposed Development shown in the study has been defined by drawings and specifications prepared by the client’s design team issued to Millerhare in August 2018. Computer models reflecting the Proposed Development have been assembled and refined by Millerhare and images from these models have been supplied to the project team to be checked for accuracy against the design intent. An overview of the study model annotated with key heights is illustrated in Appendix A1 “Details of schemes”.

The Views



24.1 | London Bridge: upstream - at the City of London bank | Night

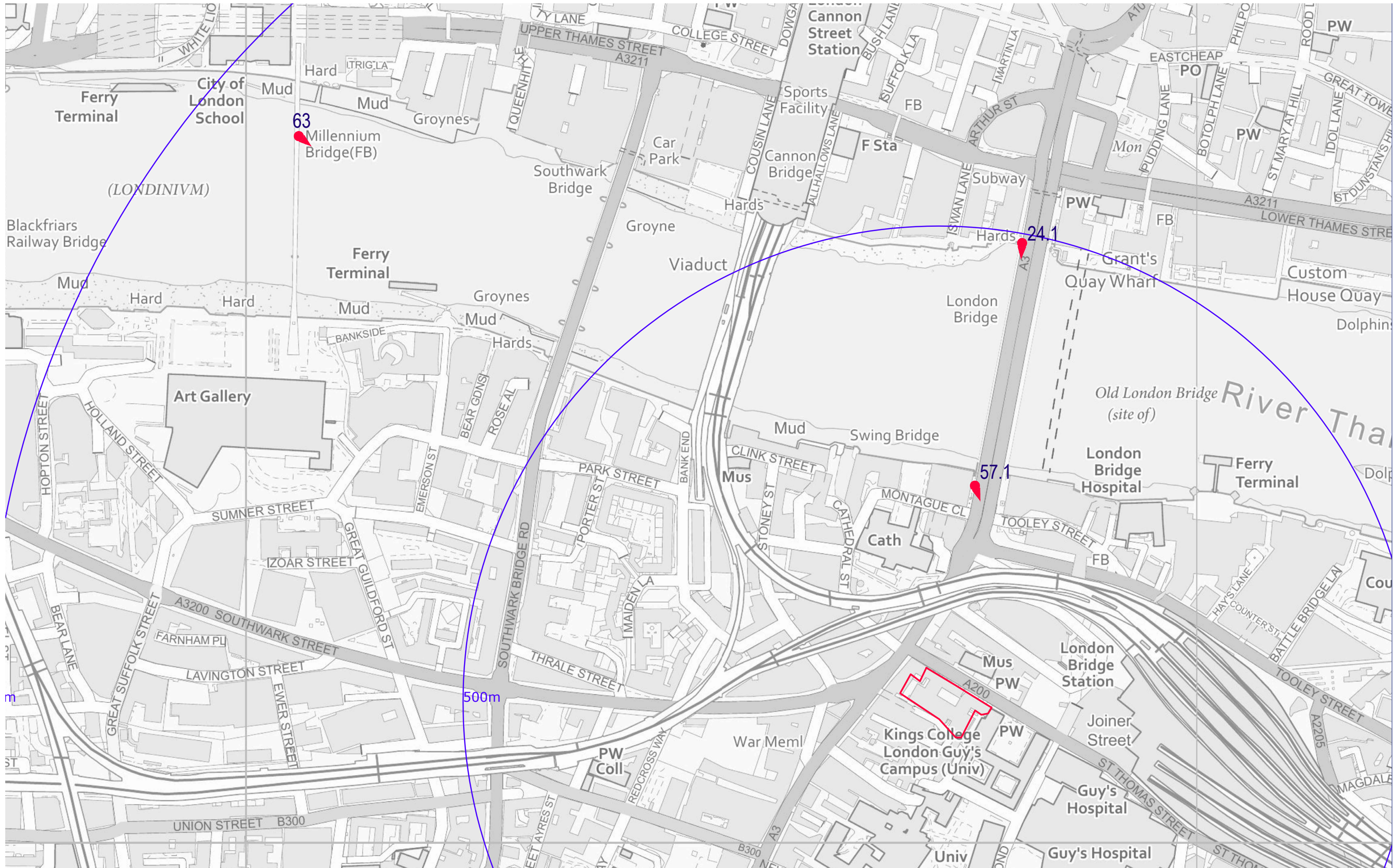


57.1 | London Bridge, outside Glazier's Hall | Night



63 | Millennium Bridge Dusk View

View	Description	MH Reference	Type	Method	Camera Location			Camera	Lens	HFOV		Photo date/time	Bearing	distance (km)
					Easting	Northing	Height			Photo	Image			
24.1	London Bridge: upstream - at the City of London bank Night	2610	Verified	Verified	532815.5	180630.9	15.40	Canon EOS 5D Mark II DSLR	24mm	73.5	73.2	13/02/2019 17:47	190.8	0.5
57.1	London Bridge, outside Glazier's Hall Night	2710	Verified	Verified	532765.9	180375.9	14.03	Canon EOS 5D Mark II DSLR	24mm	73.3	73.0	12/02/2019 17:35	190.6	0.2
63	Millennium Bridge Dusk View	5400	Verified	Verified	532055.1	180743.2	15.75	Canon EOS 5D Mark II DSLR	24mm	73.3	73.1	11/02/2019 17:29	131.8	0.9



[View location map](#)

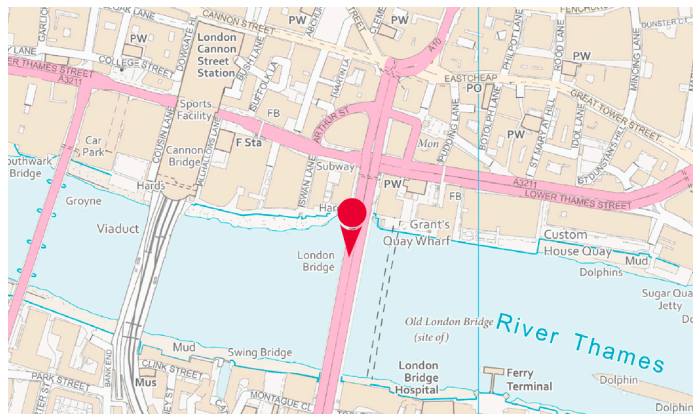


3462_2611



3462_2615

Existing



Proposed

*Camera Location*

National Grid Reference 532815.5E 180630.9N
 Camera height 15.40m AOD
 Looking at Centre of Site
 Bearing 183.8°, distance 0.5km

Photography Details

Height of camera 1.60m above ground
 Date of photograph 13/02/2019
 Time of photograph 17:47
 Canon EOS 5D Mark II DSLR
 Lens 24mm



Cumulative

Warning: Key 'cumulative' is not present in schema 'final2'.

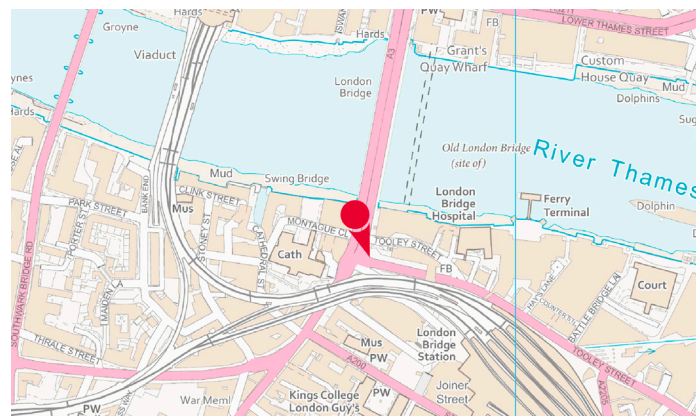


3462_2711



3462_2715

Existing



Proposed

*Camera Location*

National Grid Reference 532765.9E 180375.9N

Camera height 14.03m AOD

Looking at Centre of Site

Bearing 160.8°, distance 0.2km

Photography Details

Height of camera 1.60m above ground

Date of photograph 12/02/2019

Time of photograph 17:35

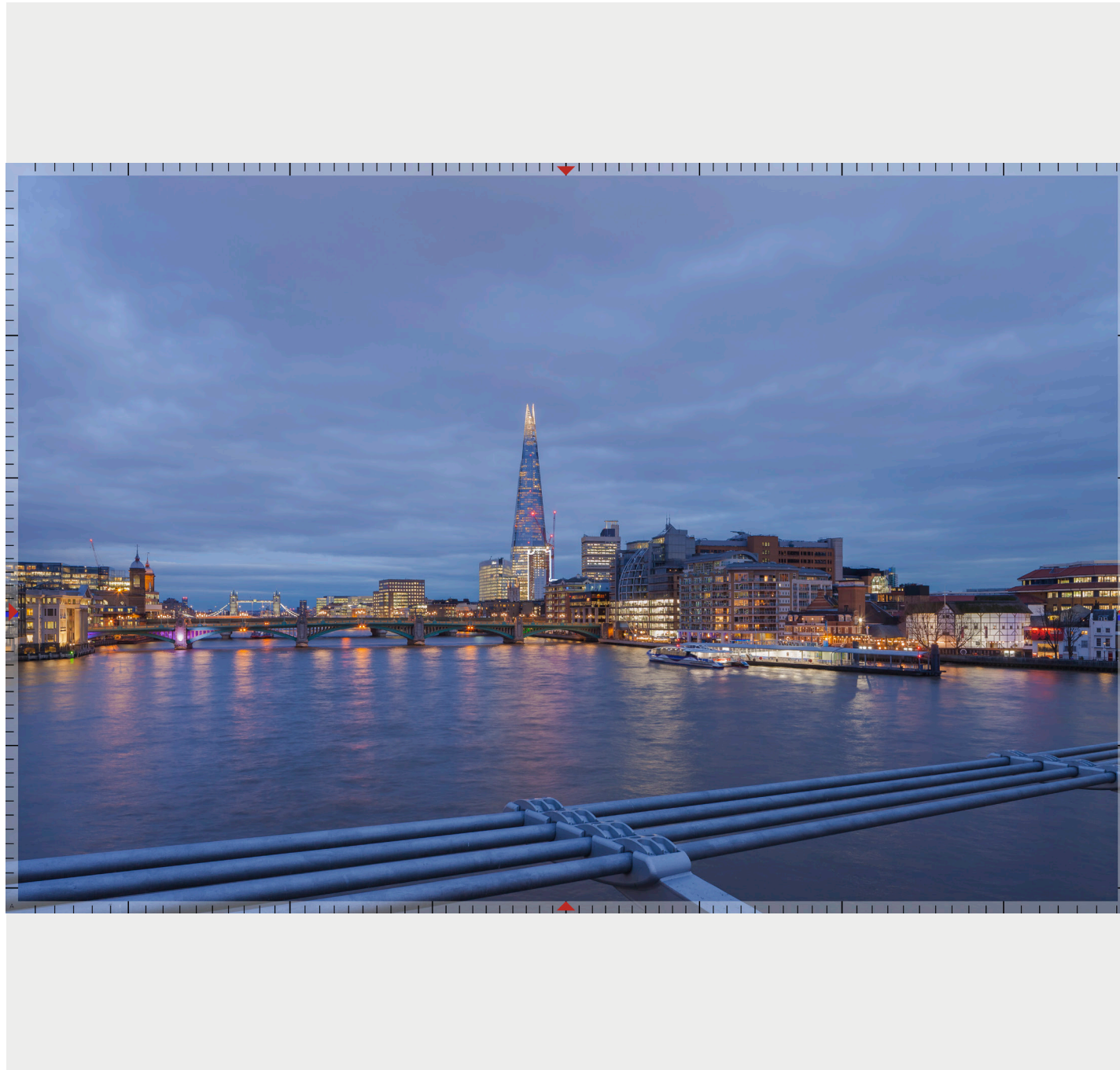
Canon EOS 5D Mark II DSLR

Lens 24mm

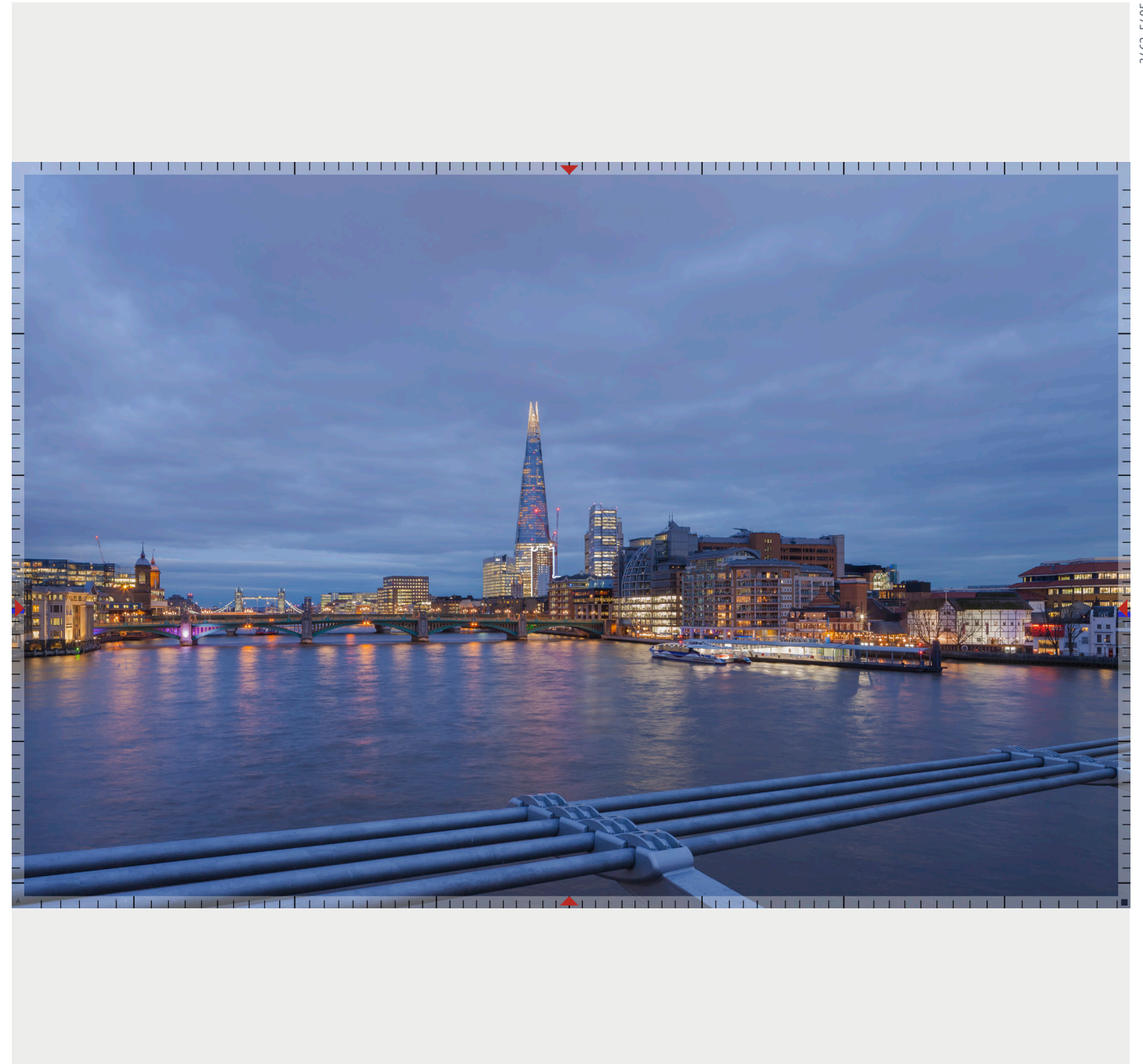


Cumulative

Warning: Key 'cumulative' is not present in schema 'final2'.

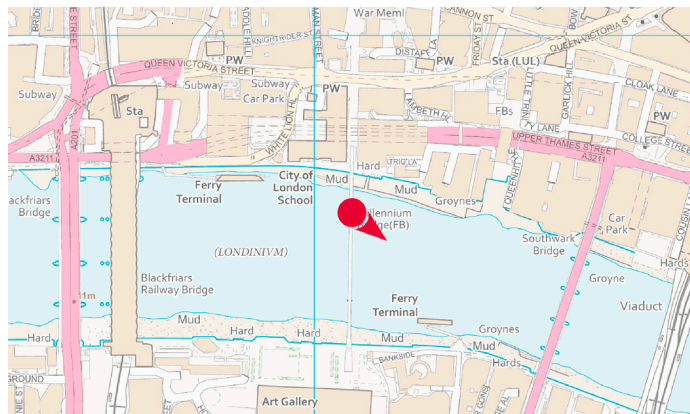


3462_5401

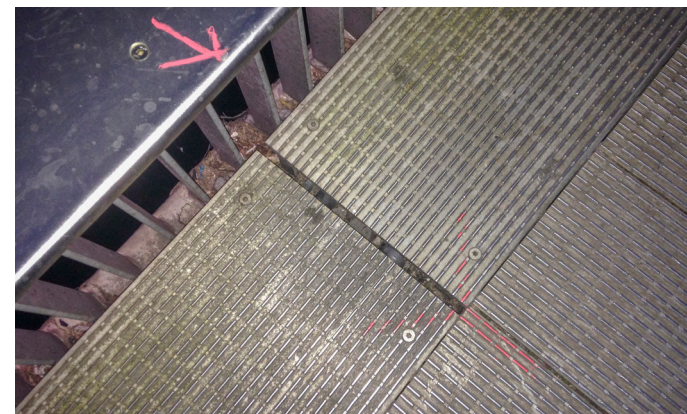


3462_5405

Existing



Proposed

*Camera Location*

National Grid Reference 532055.1E 180743.2N
 Camera height 15.75m AOD
 Looking at Centre of Site
 Bearing 128.8°, distance 0.9km

Photography Details

Height of camera 1.60m above ground
 Date of photograph 11/02/2019
 Time of photograph 17:29
 Canon EOS 5D Mark II DSLR
 Lens 24mm

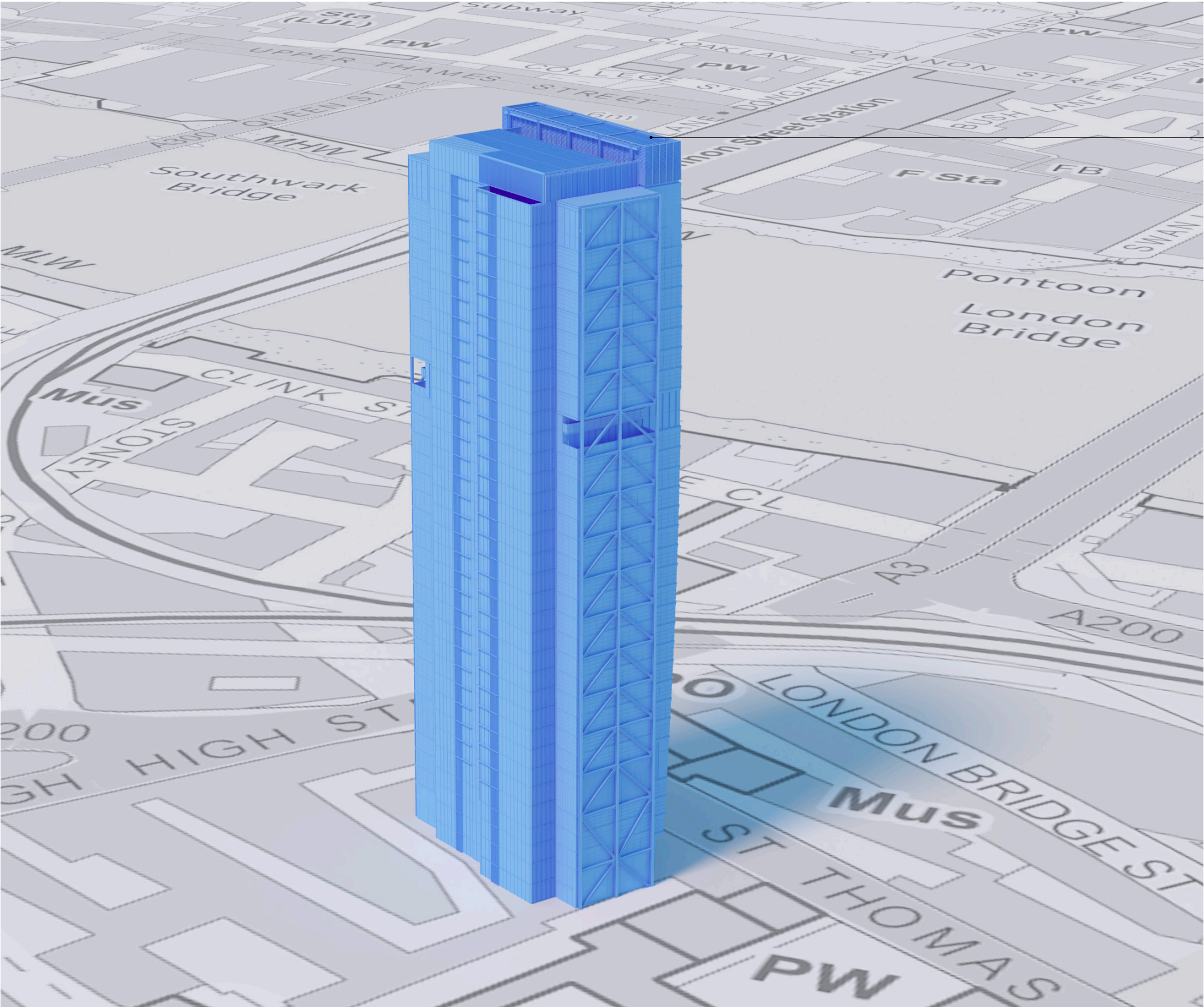


Cumulative

Warning: Key 'cumulative' is not present in schema 'final2'.

Appendices

A1 Model Overview



Aerial view of Proposed Development

Appendices (continued)

A2 Accurate Visual Representations

A2.1 Each of the views in this study has been prepared as an Accurate Visual Representation (AVR) following a consistent methodology and approach to rendering. Appendix C of the London View Management Framework: Supplementary Planning Guidance (March 2012) defines an AVR as:

“An AVR is a static or moving image which shows the location of a proposed development as accurately as possible; it may also illustrate the degree to which the development will be visible, its detailed form or the proposed use of materials. An AVR must be prepared following a well-defined and verifiable procedure and can therefore be relied upon by assessors to represent fairly the selected visual properties of a proposed development. AVRs are produced by accurately combining images of the proposed building (typically created from a three-dimensional computer model) with a representation of its context; this usually being a photograph, a video sequence, or an image created from a second computer model built from survey data. AVRs can be presented in a number of different ways, as either still or moving images, in a variety of digital or printed formats.”

A2.2 In this study the baseline condition is provided by carefully taken large format photography. The proposed condition is represented as an accurate photomontage, which combines a computer generated image with the photographic context. In preparing AVRs of this type certain several key attributes need to be determined, including:

- the Field of View
- the representation of the Proposed Development
- documentation accompanying the AVR

Selection of Field of View

A2.3 The choice of telephoto, standard or wide-angle lens, and consequently the Field of View, is made on the basis of the requirements for assessment which will vary from view to view.

A2.4 In the simple case the lens selection will be that which provides a comfortable Viewing Distance. This would normally entail the use of what most photographers would refer to as a “standard” or “normal” lens, which in practice means the use of a lens with a 35mm equivalent focal length of between about 40 and 58 mm.

A2.5 However in a visual assessment there are three scenarios where constraining the study to this single fixed lens combination would not provide the assessor with the relevant information to properly assess the Proposed Development in its context.

Field Of View

The term ‘Field Of View’ (FOV) or more specifically Horizontal Field of View (HFOV), refers to the horizontal angle of view visible in a photograph or printed image and is expressed in degrees. It is often generally referred to as ‘angle of view’, ‘included angle’ or ‘view cone angle’.

Using this measure it becomes practical to make a comparison between photographs taken using lens of various focal lengths captured on to photographic film or digital camera sensors of various size and proportions. It is also possible to compare computer renderings with photographic images.

Studies of this type use a range of camera equipment; in recent times digital cameras have largely superseded the traditional film formats of 35mm, medium format (6cm x 6cm) and large format (5in x 4in). Comparing digital and film formats may be achieved using either the HFOV or the 35mm equivalent lens calculation, however quoting the lens focal length (in mm) is not as consistently applicable as using the HFOV when comparing AVRs.

35mm Lens	HFOV degrees	Lens focal length (mm)
Wide angle lens	74.0	24
Medium wide lens	54.4	35
Telephoto lens	28.8	70
Telephoto lens	20.4	100
Telephoto lens	10.3	200
Telephoto lens	6.9	300

The FOV of digital cameras is dependent on the physical dimensions of the CCD used in the camera. These depend on the make and model of the camera. The comparison table uses the specifications for a Canon EOS-5D Mark II which has CCD dimensions of 36.0mm x 22.0mm.

A2.6 Firstly, where the relationship being assessed is distant, the observer would tend naturally to focus closely on it. At this point the observer might be studying as little as 5 to 10 degrees in plan. The printing technology and image resolution of a print limit the amount of detail that can be resolved on paper when compared to the real world, hence in this situation it is appropriate to make use of a telephoto lens.

A2.7 Secondly, where the wider context of the view must be considered and in making the assessment a viewer would naturally make use of peripheral vision in order to understand the whole. A print has a fixed extent which constrains the angle of view available to the viewer and hence it is logical to use a wide angle lens in these situations in order to include additional context in the print.

A2.8 Thirdly where the viewing point is studied at rest and the eye is free to roam over a very wide field of view and the whole setting of the view can be examined by turning the head. In these situations it is appropriate to provide a panorama comprising of a number of photographs placed side by side.

A2.9 For some views two of these scenarios might be appropriate, and hence the study will include two versions of the same view with different fields of view.

Representation of the Proposed Development and cumulative schemes

Classification of AVRs

A2.10 AVRs are classified according to their purpose using Levels 0 to 3. These are defined in detail in Appendix C of the London View Management Framework: Supplementary Planning Guidance (July 2007). The following table is a summary.

AVR level	showing	purpose
AVR 0	Location and size of proposal	Showing Location and size
AVR 1	Location, size and degree of visibility of proposal	Confirming degree of visibility
AVR 2	As level 1 + description of architectural form	Explaining form
AVR 3	As level 2 + use of materials	Confirming the use of materials

A2.11 In practice the majority of photography based AVRs are either AVR 3 (commonly referred to as “fully rendered” or “photoreal”) or AVR 1 (commonly referred to as “wire-line”). Model based AVRs are generally AVR 1.

AVR 3 – Photoreal



Example of AVR 3 – confirming the use of materials (in this case using a ‘photo-realistic’ rendering technique)

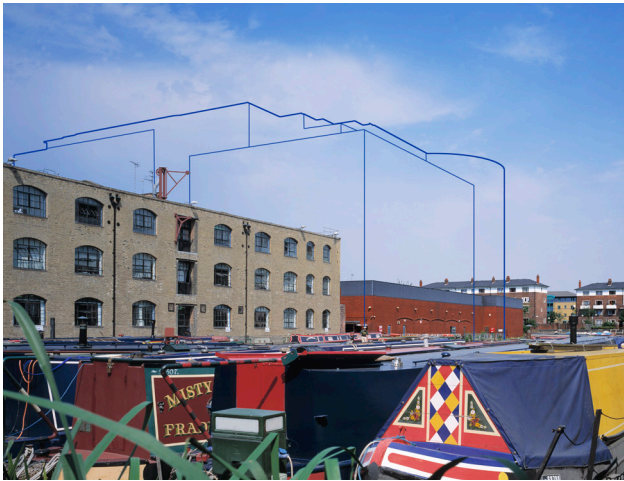
A2.12 The purpose of a Level 3 AVR is to represent the likely appearance of the Proposed Development under the lighting conditions found in the photograph. All aspects of the images that are able to be objectively defined have been created directly from a single detailed description of the building. These include the geometry of the building and the size and shape of shadows cast by the sun.

A2.13 Beyond this it is necessary to move into a somewhat more subjective arena where the judgement of the delineator must be used in order to define the final appearance of the building under the specific conditions captured by the photographic and subsequent printing processes. In this area the delineator is primarily guided by the appearance of similar types of buildings at similar distances in the selected photograph. In large scope studies photography is necessarily executed over a long period of time and sometimes at short notice. This will produce a range of lighting conditions and photographic exposures. The treatment of lighting and materials within these images will respond according to those in the photograph.

A2.14 Where the Proposed Development is shown at night-time, the lightness of the scheme and the treatment of the materials was the best judgment of the visualiser as to the likely appearance of the scheme given the intended lighting strategy and the ambient lighting conditions in the background photograph. In particular the exact lighting levels are not based on photometric calculations and therefore the resulting image is assessed by the Architect and Lighting Designer as being a reasonable interpretation of the concept lighting strategy.

Appendices (continued)

AVR 1 – Outline



Example of AVR 1 confirming degree of visibility (in this case as an occluded 'wire-line' image)

- A2.15

The purpose of a wire-line view is to accurately indicate the location and degree of visibility of the Proposed Development in the context of the existing condition and potentially in the context of other proposed schemes.
- A2.16

In AVR1 representation each scheme is represented by a single line profile, sometimes with key edges lines to help understand the massing. The width of the profile line is selected to ensure that the diagram is clear, and is always drawn inside the true profile. The colour of the line is selected to contrast with the background. Different coloured lines may be used in order to distinguish between proposed and consented status, or between different schemes.
- A2.17

Where more than one scheme is represented in outline form the outlines will obscure each other as if the schemes were opaque. Trees or other foliage will not obscure the outline of schemes behind them. This is because the transparency of trees varies with the seasons, and the practical difficulties of representing a solid line behind a filigree of branches. Elements of a temporary nature (e.g. cars, tower cranes, people) will similarly not obscure the outlines.
- Framing the view

A2.18

Typically AVRs are composed with the camera looking horizontally i.e. with a horizontal Optical Axis. This is in order to avoid converging verticals which, although perspectively correct, appear to many viewers as unnatural in print form. The camera is levelled using mechanical levelling devices to ensure the verticality of the Picture Plane, being the plane on to which the image is projected; the film in the case of large format photography or the CCD in the case of digital photography.
- A2.19

For a typical townscape view, a Landscape camera format is usually the most appropriate, giving the maximum horizontal angle of view. Vertical rise may be used in order to reduce

the proportion of immediate foreground visible in the photograph. Horizontal shift will not be used. Where the prospect is framed by existing buildings, portrait format photographs may be used if this will result in the proposal being wholly visible in the AVR, and will not entirely exclude any relevant existing buildings.

- A2.20

Where the Proposed Development would extend off the top of the photograph, the image may be extended vertically to ensure that the full height of the Proposed Development is show. Typically images will be extended only where this can be achieved by the addition of sky and no built structures are amended. Where it is necessary to extend built elements of the view, the method used to check the accuracy of this will be noted in the text.

Documenting the AVR

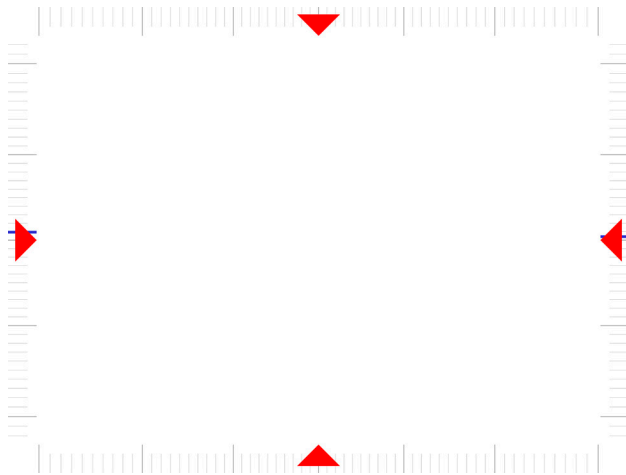
Border annotation

- A2.21

A Millerhare AVR image has an annotated border or 'graticule' which indicates the field of view, the optical axis and the horizon line. This annotation helps the user to understand the characteristics of the lens used for the source photograph, whether the photographer applied tilt, vertical rise or horizontal shift during the taking of the shot and if the final image has been cropped on one or more sides.
- A2.22

The four red arrows mark the horizontal and vertical location of the 'optical axis'. The optical axis is a line passing through the eye point normal to the projection plane. In photography this line passes through the centre of the lens, assuming that the film plane has not been tilted relative to the lens mount. In computer rendering it is the viewing vector, i.e the line from the eye point to the target point.
- A2.23

If the point indicated by these marks lies above or below the centre of the image, this indicates either that vertical rise was used when taking the photograph or that the image has subsequently been cropped from the top or bottom edge. If it lies to the left or right of the centre of the image then cropping has been applied to one side or the other, or more unusually that horizontal shift was applied to the photograph.

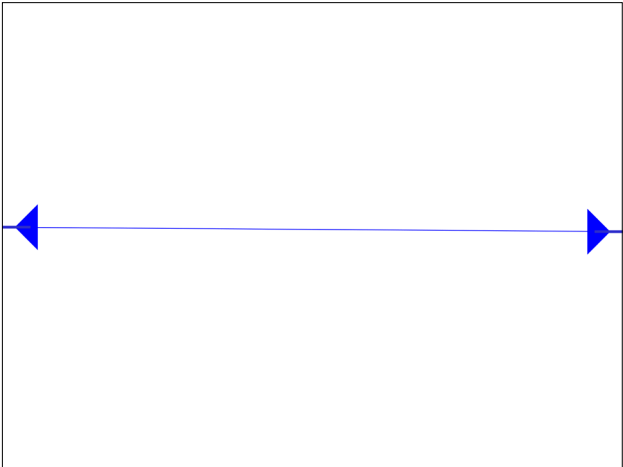


Sample graticule showing optical axis markers

- A2.24

The vertical and horizontal field of view of the final image is declared using a graticule consisting of thick lines at ten degree increments and intermediate lines every degree, measured away from the optical axis. Using this graticule it is possible to read off the resultant horizontal and vertical field of view, and thereby to compare the image with others taken using specific lens and camera combinations. Alternatively it can be used to apply precise crops during subsequent analysis.
- A2.25

The blue marks on the left and right indicate the calculated location of the horizon line i.e. a plane running horizontally from the location of the camera. Where this line is above or below the optical axis, this indicates that the camera has been tilted; where it is not parallel with the horizontal marking of the optical axis, this indicates that the camera was not exactly horizontal, i.e. that "roll" is present. Note that a small amount of tilt and roll is nearly always present in a photograph, due to the practical limitations of the levelling devices used to align the camera in the field.



Sample graticule showing horizon line markers

Comparing AVRs with different FOVs

- A2.26

A key benefit of the index markings is that it becomes practical to crop out a rectangle in order to simulate the effect of an image with a narrower field of view. In order to understand the effect of using a longer lens it is simply necessary to cover up portions of the images using the graticule as a guide.

Appendices (continued)

A3 Methodology for the production of Accurate Visual Representations

Overview of Methodology	
A3.1	The study was carried out by Millerhare (the Visualiser) by combining computer generated images of the Proposed Development with large format photographs at key strategic locations around the site as agreed with the project team. Surveying was executed by Absolute Survey (the Surveyor).
A3.2	The methodology employed by Millerhare is compliant with Appendix C of the London View Management Framework: Supplementary Planning Guidance (March 2012) and Landscape Institute Advice Note 01/11.
A3.3	The project team defined a series of locations in London where the proposed buildings might have a significant visual effect. At each of these locations Millerhare carried out a preliminary study to identify specific Assessment Points from which a representative and informative view could be taken. Once the exact location had been agreed by the project team, a photograph was taken which formed the basis of the study. The precise location of the camera was established by the Surveyor using a combination of differential GPS techniques and conventional observations.
A3.4	For views where a photographic context was to be used additional surveying was carried out. A number of features on existing structures visible from the camera location were surveyed. Using these points, Millerhare has determined the appropriate parameters to permit a view of the computer model to be generated which exactly overlays the appropriate photograph. Each photograph has then been divided into foreground and background elements to determine which parts of the current context should be shown in front of the Proposed Development and which behind. When combined with the computer-generated image these give an accurate impression of the impact of the Proposed Development on the selected view in terms of scale, location and use of materials (AVR Level 3).
Spatial framework and reference database	
A3.5	All data was assembled into a consistent spatial framework, expressed in a grid coordinate system with a local plan origin. The vertical datum of this framework is equivalent to Ordnance Survey (OS) Newlyn Datum.
A3.6	By using a transformation between this framework and the OSGB36 (National Grid) reference framework, Millerhare have been able to use other data sets (such as OS land line maps and ortho-corrected aerial photography) to test and document the resulting photomontages.
A3.7	In addition, surveyed observation points and line work from Millerhare's London Model database are used in conjunction with new data in order to ensure consistency and reliability.
A3.8	The models used to represent consented schemes have been assembled from a variety of sources. Some have been supplied by the original project team, the remainder have been built by Millerhare from available drawings, generally paper copies of the submitted planning application. While these models have not been checked for detailed accuracy by the relevant architects, Millerhare has used its best endeavours to ensure that the models are positioned accurately both in plan and in overall height.
Process – photographic context	
Reconnaissance	
A3.9	At each Study Location the Visualiser conducted a photographic reconnaissance to identify potential Assessment Points. From each candidate position, a digital photograph was taken looking in the direction of the Proposed Development using a wide angle lens. Its position was noted with field observations onto an OS map and recorded by a second digital photograph looking at a marker placed at the Assessment Point.
A3.10	In the situation where, in order to allow the appreciation of the wider setting of the proposal, the assessor requires more context than is practical to capture using a wide angle lens, multiple photographs may be combined to create a panorama, typically as a diptych or triptych. This will be prepared by treating each panel as a separate AVR and then combining in to a single panorama as a final process.
A3.11	The Visualiser assigned a unique reference to each Assessment Point and Photograph.
Final Photography	
A3.12	From each selected Assessment Point a series of large format photographs were taken with a camera height of approximately 1.6m. The camera, lens, format and direction of view are determined in accordance with the policies set out above
A3.13	Where a panoramic view is specified the camera/tripod head is rotated through increments of 40 degrees to add additional panels to the left and/or right of the main view.
A3.14	The centre point of the tripod was marked and a digital photograph showing the camera and tripod in situ was taken to allow the Surveyor to return to its location. Measurements and field notes were also taken to record the camera location, lens used, target point and time of day.
Surveying the Assessment Points	
A3.15	For each selected Assessment Point a survey brief was prepared, consisting of the Assessment Point study sheet and a marked up photograph indicating alignment points to be surveyed. Care was taken to ensure that a good spread of alignment points was selected, including points close to the camera and close to the target.
A3.16	Using differential GPS techniques the Surveyor established the location of at least two intervisible stations in the vicinity of the camera location. A photograph of the GPS antenna in situ was taken as confirmation of the position.
A3.17	From these the local survey stations, the requested alignment points were surveyed using conventional observation.
A3.18	The resulting survey points were amalgamated into a single data set by the Surveyor. This data set was supplied as a spreadsheet with a set of coordinates transformed and re-projected into OSGB36 (National Grid) coordinates, and with additional interpreted lines to improve the clarity of the surveyed data.
A3.19	From the point set, the Visualiser created a three dimensional alignment model in the visualisation system by placing inverted cones at each surveyed point.
Photo preparation	
A3.20	From the set of photographs taken from each Assessment Point, one single photograph was selected for use in the study. This choice was made on the combination of sharpness, exposure and appropriate lighting.
A3.21	The selected photograph was copied into a template image file of predetermined dimensions. The resulting image was then examined and any artefacts related to the digital image capture process were rectified.
A3.22	Where vertical rise has been used the image is analysed and compensation is applied to ensure that the centre of the image corresponds to the location of the camera's optical axis.
Calculating the photographic alignment	
A3.23	A preliminary view definition was created within the visualisation system using the surveyed camera location, recorded target point and FOV based on the camera and lens combination selected for the shot
A3.24	A lower resolution version of the annotated photograph was attached as a background to this view, to assist the operator to interpret on-screen displays of the alignment model and other relevant datasets.
A3.25	Using this preliminary view definition, a rendering was created of the alignment model at a resolution to match the scanned photograph. This was overlaid onto the background image to compare the image created by the actual camera and its computer equivalent. Based on the results of this process adjustments were made to the camera definition. When using a wide angle lens observations outside the circle of distortion are given less weighting.
A3.26	This process was iterated until a match had been achieved between the photograph and alignment model. At this stage, a second member of staff verified the judgements made. An A3 print was made of the resulting photograph overlaid with the

alignment model as a record of the match. This was annotated to show the extents of the final views to be used in the study.



Example of alignment model overlaid on the photograph

Preparing models of the Proposed Development

A3.27 A CAD model of the Proposed Development was created from 3D CAD models and 2D drawings supplied by the Architect. The level of detail applied to the model is appropriate to the AVR type of the final images.

A3.28 Models of the Proposed Development and other schemes are located within the spatial framework using reference information supplied by the Architect or, when not available, by best fit to other data from the spatial framework reference database . Study renders of the model are supplied back to the Architect for confirmation of the form and the overall height of the Proposed Development. The method used to locate each model is recorded. Each distinct model is assigned a unique reference code by the Visualiser.

Determining occlusion and creating simple renderings

A3.29 A further rendering was created using the aligned camera, which combined the Proposed Development with a computer-generated context. This was used to assist the operator to determine which parts of the source image should appear in front of the Proposed Development and which behind it. Using this image and additional site photography for information, the source file is divided into layers representing foreground and background elements.

A3.30 In cases where the Proposed Development is to be represented in silhouette or massing form (AVR1 or AVR2), final renderings of an accurate massing model were generated and inserted into the background image file between the foreground and background layers.

A3.31 Final graphical treatments were applied to the resulting image as agreed with the Architect and environmental and planning consultants. These included the application of coloured outlines to clarify the reading of the images or the addition of tones to indicate occluded areas.

Appendices (continued)

Creating more sophisticated renderings

A3.32 Where more sophisticated representations of the Proposed Developments were required (AVR3) the initial model is developed to show the building envelope in greater detail. In addition, definitions were applied to the model to illustrate transparency, indicative material properties and inter-reflection with the surrounding buildings.

A3.33 For each final view, lighting was set in the visualisation system to match the theoretical sunlight conditions at the time the source photograph was taken, and additional model lighting placed as required to best approximate the recorded lighting conditions and the representation of its proposed materials.

A3.34 By creating high resolution renderings of the detailed model, using the calculated camera specification and approximated lighting scenario, the operator prepared an image of the building that was indicative of its likely appearance when viewed under the conditions of the study photograph. This rendering was combined with the background and foreground components of the source image to create the final study images.

A3.35 A single CAD model of the Proposed Development has been used for all distant and local views, in which the architectural detail is therefore consistently shown. Similarly a single palette of materials has been applied. In each case the sun angles used for each view are transferred directly from the photography records.

A3.36 Material definitions have been applied to the models assembled as described. The definitions of these materials have been informed by technical notes on the planning drawings and other available visual material, primarily renderings created by others. These resulting models have then been rendered using the lighting conditions of the photographs.

A3.37 Where the Proposed Development is shown at night-time, the lightness of the scheme and the treatment of the materials was the best judgment of the visualiser as to the likely appearance of the scheme given the intended lighting strategy and the ambient lighting conditions in the background photograph.

A3.38 Where a panoramic view is specified each panel is prepared by treating each photograph as an individual AVR following the process described in the previous paragraphs. The panels are then arranged side by side to construct the panorama. Vertical dividers are added to mark the edge of each panel in order to make clear that the final image has been constructed from more than one photograph.

Documenting the study

A3.39 For each Assessment Point a CAD location plan was prepared, onto which a symbol was placed using the coordinates of the camera supplied by the Surveyor. Two images of this symbol

were created cross-referencing background mapping supplied by Ordnance Survey.

A3.40 The final report on the Study Location was created which shows side by side, the existing and proposed prospect. These were supplemented by images of the location map, a record of the camera location and descriptive text. The AVR level is described.

A3.41 Peripheral annotation was added to the image to clearly indicate the final FOV used in the image, any tilt or rise, and whether any cropping has been applied.

A3.42 Any exceptions to the applied policies or deviations from the methodology were clearly described.

A3.43 Where appropriate, additional images were included in the study report, showing the Proposed Development in the context of other consented schemes.

