



330 Grays Inn Road,
London, WC1

TVIBHA
Addendum

February 2023

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1.0 Introduction

- 1.1 This addendum to the November 2020 Townscape, Visual Impact, and Built Heritage Assessment (TVIBHA) considers the Section 73 Minor Material Amendments to the consented scheme (Camden Council planning ref 202/553/P) for the site at The Royal National Throat, Nose and Ear Hospital, 330 Gray's Inn Road, London WC1X 8DA ('the Site'). The TVIBHA was produced by Peter Stewart Consultancy (PSC). This addendum is produced by the successor company to PSC, The Townscape Consultancy (TTC). It is submitted on behalf of 330 Gray's Inn Road Ltd ('the Applicant').
- 1.2 Principally, the necessary changes to the consented proposals are in response to the temporary decant and occupation of the UCL Ear Institute within the basement of the development while the consented hotel is constructed. The extent of the amendments are concentrated at the basement and ground floor levels, with no change to the scheme above the first floor, with the exception of minor adjustment to plant requirements at roof level.
- 1.3 This TVIBHA addendum considers those amendments that have the potential to affect the assessment and conclusions of the TVIBHA by virtue of their potential visibility from the surrounding townscape. It focuses on the likely effects outlined in the TVIBHA, considering whether any new effects are likely as a result of the amendments, taking into account any material changes to the baseline context, and planning policy. The TVIBHA addendum should be read together with the TVIBHA, the Design & Access Statement (DAS) submitted as part of the original application, and the S73 Amendment Application document and drawings by the architects, AHMM.
- 1.4 There are no material changes to the baseline conditions set out in the TVIBHA.
- 1.5 Unless otherwise indicated, the conclusions of the TVIBHA remain unchanged as a result of the amendments.

2.0 Updates to Planning Policy and Guidance

National planning policy and guidance

The National Planning Policy Framework (2021)

- 2.1 The Government issued the latest version of the National Planning Policy Framework (NPPF) in July 2021. The NPPF sets out planning policies for England and how these should be applied.
- 2.2 The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development, which has three overarching objectives; economic, social and environmental. The NPPF states, at paragraph 10, that *'at the heart of the Framework is a presumption in favour of sustainable development.'*

NPPF Section 12: Achieving well-designed places

- 2.3 Section 12 of the NPPF deals with design. At paragraph 126, 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.'*
- 2.4 Paragraph 130 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.'

- 2.5 Paragraph 134 states that *'Development that is not well designed should be refused, especially where it fails to reflect local design policies and government guidance on design, taking into account any local design guidance and supplementary planning documents such as design guides and codes'*. It goes on to say that *'Conversely, significant weight should be given to:*

a) development which reflects local design policies and government guidance on design, taking into account any local design guidance and supplementary planning documents such as design guides and codes; and/or

b) outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings.'

- 2.6 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.

- 2.7 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).'*

- 2.8 The NPPF notes, at paragraph 189, 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.'*

- 2.9 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 194). 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.'*

- 2.10 The NPPF identifies three key factors that local authorities should take into account in determining applications (para 197):
- 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.'*
- 2.11 Paragraph 199 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.'*
- 2.12 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.'*
- 2.13 The NPPF states, at paragraph 201, 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.
- 2.14 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 202).
- 2.15 Paragraph 203 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.

- 2.16 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 206 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'*.
- 2.17 Paragraph 207 states *'Not all elements of a Conservation Area ...will necessarily contribute to its significance'* and that *'Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area ... should be treated either as substantial harm under paragraph 201 or less than substantial harm under paragraph 202, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area ... as a whole'*.

The National Design Guide (2021)

- 2.18 The National Design Guide (January 2021) ('NDG') states (paragraph 3) that it *'forms part of the Government's collection of planning practice guidance'*.
- 2.19 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'*
- 2.20 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 4 – Tall Buildings (2022)

- 2.21 This document sets out advice on planning for tall buildings within the historic environment. It supersedes Advice Note 4 issued by HE in 2015. It notes that *'alternative approaches may be equally acceptable, providing they are demonstrably compliant with legislation and national policy objectives.'*
- 2.22 Paragraph 1.3 states that when planning for tall buildings it is important to avoid or minimise impacts on the significance of heritage assets, and principles to consider that help to do this include:
- A plan-led approach to tall buildings to determine their location;
 - Evidence base exploring alternative options for location and heights;
 - Decision making informed by understanding of place, character and historic significance;
 - Tall building proposals which take account local context and historic character; and
 - Early and effective engagement at plan-making and decision-taking stages including the use of design review panels.
- 2.23 Paragraph 3.1 states that *'In the right locations tall buildings can support major change or regeneration while positively influencing place-shaping and conserving the historic environment'* and that *'in the right place well-designed tall buildings can make a positive contribution.'* It notes that several tall buildings are listed.
- 2.24 Paragraph 3.2 states that if a tall building is not in the right place, by virtue of its size and visibility, it can harm the qualities of place that people value. It continues that there are places which are so distinctive, where the level of heritage significance is so great, that tall buildings will be too harmful, regardless of the perceived quality.
- 2.25 Paragraph 3.3 notes that the following factors - quality of place, heritage, visual, functional, environmental and cumulative - need to be considered when determining the impacts of a tall building could have on the historic environment.

- 2.26 Paragraph 3.4 and 3.5 notes that tall buildings vary in their impact depending on their height, mass and locations, and what is considered tall depends on the nature of the local area. Definitions of tall buildings vary, but in general they should be informed by local character.
- 2.27 Section 4, 'Development plans', covers the production of development plans and tall building policies, summarising the main considerations for a plan led approach for tall buildings within the historic environment.
- 2.28 Section 5, 'Developing proposals for tall buildings', stresses the need to have a good understanding of significance of any heritage assets that may be affected by the proposal, as well as the character of the place. It states that supporting information required describing the impacts on the historic environment should be proportionate, precise and accurate.
- 2.29 Section 6, 'Assessing proposals', notes that many of the heritage implications that arise with proposals for tall buildings are the same for other applications, and advice set out in HE's GPA Managing Significance in Decision Taking note 2 is relevant. However, issues which frequently arise include location and height parameters; context and local character; high quality design; significance and risk of harm to the significance of heritage assets; and cumulative impacts.
- 2.30 Paragraphs 6.3 states that the key considerations for local authorities is the ability to secure public benefits from tall building developments. Paragraph 6.4 continues that the extent, nature and justification of public benefits will be carried out by decision makers in light of potential harm and long-term impacts on the significance of heritage assets and the integrity of historic townscapes. It states that the *'conservation of the historic environment is itself a public benefit and secures its existence for future generations.'*

Regional Planning Policy and Guidance

The London Plan (2021)

- 2.31 The London Plan 2021 was adopted in March 2021. It is the *'overall strategic plan for London'* and sets out a *'framework for the development of London over the next 20-25 years'*.
- 2.32 The policies most relevant to townscape, visual impact and heritage are found in section 3, *'Design'*, and section 7, *'Heritage and Culture.'*
- 2.33 Policy D1 on *'London's form, character and capacity for growth'* highlights the necessity for Boroughs to identify an area's capacity for growth by undertaking an assessment of the *'characteristics, qualities and values of different places'*.



This should include the consideration of urban form and structure, historical evolution and heritage assets, and views and landmarks.

- 2.34 Policy D3 on 'Optimising site capacity through the design-led approach' states that *'All development must make the best use of land by following a design-led approach that optimises the capacity of sites, including site allocations.'* The policy 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 should *'respond to the existing character of a place'*, and *'provide active frontages and positive reciprocal relationships between what happens inside the buildings and outside in the public realm to generate liveliness and interest.'* The policy further states that development design should *'be of high quality, with architecture that pays attention to detail, and use attractive, robust materials which weather and mature well.'*
- 2.35 Policy D8 on 'Public realm' states that development plans and proposals should ensure that the public realm is *'...well-connected, related to the local and historic context...'*. It states that there should be *'a mutually supportive relationship between the space, surrounding buildings and their uses'* and that development should *'ensure that buildings are of a design that activated and defines the public realm, and provides natural surveillance.'*
- 2.36 Policy D9 on 'Tall buildings' notes that the height of what is considered a tall building should be defined in development plans and identified on maps, and that although this will vary in different parts of London, *'should not be less than 6 storeys or 18 metres'*. The policy also notes that *'tall buildings should only be developed in locations that are identified as suitable in Development Plans.'*
- 2.37 Policy D9 also notes that the views of buildings from different distances should be considered. This includes long-range views (developments should make a *'positive contribution to the existing and emerging skyline and not adversely affect local or strategic views'*), mid-range views (developments should make a *'positive contribution to the local townscape in terms of legibility, proportions and materiality'*), and immediate views (developments 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'* and should *'positively contribute to the character of the area.'* It goes on to note that the architectural quality and materials should be of an exemplary standard. Buildings that are situated in the setting of a World Heritage Site *'must preserve, and not harm, the Outstanding Universal Value of the World Heritage Site, and the ability to appreciate it.'* Buildings near the River Thames should protect the open quality of the river, including views.

- 2.38 Policy HC1 on 'Heritage conservation and growth' notes that development proposals that affect heritage assets and their settings should *'conserve their significance, by being sympathetic to the assets' significance and appreciation within their surroundings'*.
- 2.39 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 identify Strategically-Important landmarks within designated views and will *'seek to protect vistas towards Strategically-Important Landmarks by designating landmark viewing corridors and wider setting consultation areas. These elements together form a Protected Vista'*. The Mayor will *'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.'*
- 2.40 Policy HC4 on the 'London View Management Framework' states 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.'* It notes that development should not be *'intrusive, unsightly or prominent to the detriment of the view'*, when it falls within the foreground, middle, or background of a designated view. With regard to protected vistas, development should protect and enhance, not harm, the viewer's ability to recognise and appreciate the strategically important landmark, and it should not harm the composition of the protected vista, whether it falls within the wider setting consultation area or not.

Local Planning Policy and Guidance

Camden Planning Guidance - Design (2021)

- 2.41 The Camden Planning Guidance – Design was updated in 2021. The content relevant to this assessment is unchanged from the previous version of this guidance (dated 2019) which is summarised in the TVIBHA.

3.0 Addendum Methodology

- 3.1 The method of assessment of effects on views, townscape and built heritage remains as set out in the TVIBHA.
- 3.2 The TVIBHA presented a set of 25 verified views of the consented scheme. These have been updated for the current assessment and can be found in Appendix 1 of this addendum.

4.0 The Amended Proposed Development

4.1 Principally, the necessary changes to the consented proposals are in response to the temporary decant and occupation of the UCL Ear Institute within the basement of the development while the consented hotel is constructed. The extent of the amendments are concentrated at the basement and ground floor levels, with no change to the scheme above the first floor, with the exception of minor adjustment to plant requirements at roof level of the Wicklow Street residential building.

4.2 The Section 73 application description is as follows:

'Variation of Condition 2, 18, 31, 41 and 54 of planning permission ref 202/553/P for the 'Redevelopment of the former Royal National Throat, Nose and Ear Hospital site, comprising: Retention of 330 Gray's Inn Road and a two storey extension above for use as hotel (5 above ground storeys in total), demolition of all other buildings, the erection of a part 13 part 9 storey building plus upper and lower ground floors (maximum height of 15 storeys) for use as a hotel (including a cafe and restaurant); covered courtyard; external terraces; erection of a 7 storey building plus upper and lower ground floors (maximum height of 9 storeys) for use as office together with terraces; erection of a 10 storey building plus upper and lower ground floors (maximum height of 12 storeys) for use as residential on Wicklow Street and office space at lower ground and basement floors; erection of a 5 storey building plus upper and lower ground floors (maximum height of 7 storeys) for use as residential on Swinton Street and associated residential amenity space; together with a gymnasium; new basement; rooftop and basement plant; servicing; cycle storage and facilities; refuse storage; landscaping and other ancillary and associated works.' NAMELY to enable amendments to the approved drawings list to enable an uplift in office/labs floorspace, a reduction in affordable workspace, amendments to the landscape design of the residential garden, a revised entrances on Wicklow Street, a revised arrangement to the loading bay on Wicklow Street, reconfiguration at basement level of the office/labs building, and increased cycle parking provision, and additional basement level, reconfiguration of the roof level plant and enclosures, the addition of flues in addition to other associated works'.

4.3 In summary, the proposed amendments are as follows:

Changes to accommodate UCL Ear Institute decant requirements

1. Increased basement beneath residential to house UCL Ear Institute;
2. Amendment to landscape design of the residential garden;
3. Ventilation through garden;
4. Raised lift overrun enclosure and new extract flues through residential building;
5. Omission of Basements below Wicklow Courtyard;
6. Relocated plant to additional basement level due to omission above;

Resulting changes to the masterplan

7. Replanning of basement spaces as result of additional lab floorspace and footprint of basement;
8. Increase roof plant demand to accommodate additional lab floorspace;
9. Adjust office floor to floor to increase flexibility for lab-enabled floors;
10. Relocating Affordable Workspace to Gray's Inn Road Building; and
11. Swinton Street entrance becomes fire egress and plant replacement use.

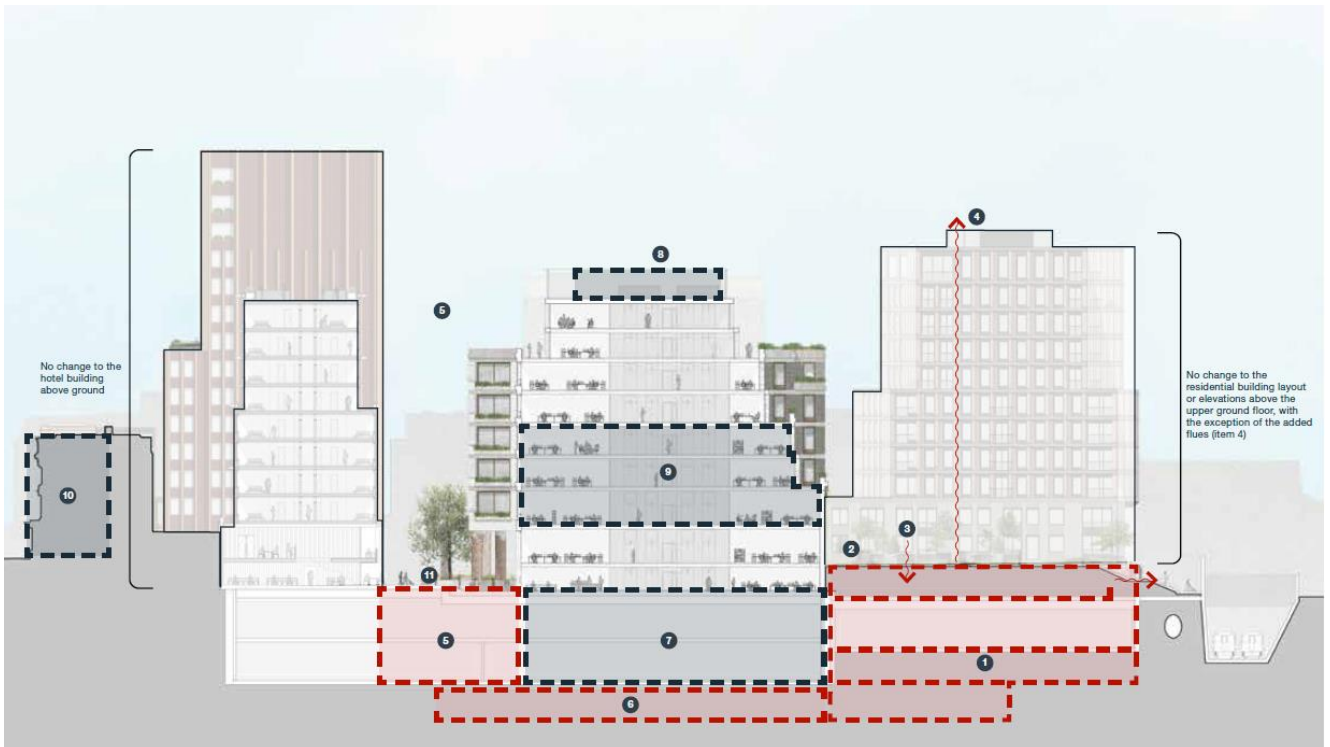


Figure 4.1: Section through development highlighting changes to Consented Scheme (Source: AHMM)

4.4 Of the amendments noted above, those of most relevance to this assessment are [4]. They involve raising the residential building lift overrun by 1m, with 1.5m

tall flues extending above that. The flues would be located centrally in plan to reduce visual impact. Figure 4.2 below illustrates the proposed height of the lift overrun and flues.



Figure 4.2: Section through residential building indicating increased lift overrun and new flues (above the red line)
(Source: AHMM)

- 4.5 Further detail on the proposed amendments, can be found in the S73 Amendment Application document by AHMM.

5.0 Updated Assessment of Architecture and Urban Design

- 5.1 The design of the consented scheme was considered in Chapter 4 of the TVIBHA. The TVIBHA stated (at paragraph 4.10) that:

'The architectural expression of the buildings will be of a high quality. Each building has its own personality, expressing its particular use. They also have strength as a group in adhering to a set of common design principles: responsiveness to the industrial and domestic context; use of strong bases and framed upper floors; a focus on long-life / loose-fit; and use of a shared palette of robust materials, with an emphasis on masonry and reclaimed elements to instill a sense of familiarity, helping to embed the scheme in its context and ensuring its buildings stand the test of time'.

- 5.2 This would continue to be the case in the amended scheme. In terms of urban design, the TVIBHA stated (at paragraph 4.11) that:

'The Proposed Development adheres to well established urban design principles. Active, engaging frontages to its boundaries and new public routes and spaces within the Site will help to ensure that it contributes to street life and appears much more integrated with the CA than today. The location of the proposed north-south pedestrian route through the Site, connecting Swinton Street to Wicklow street, where a new public courtyard is proposed, is well judged. It also skillfully negotiates the change in levels between the two streets, adding drama to the experience of moving through the Site. Access arrangements for new residents, workers, visitors and servicing are well conceived to reduce potential conflict between users'.

- 5.3 The above statement applies equally to the amended scheme. It would represent a substantial improvement on the existing situation on the Site.

6.0 Updated Assessment of Views and Townscape

- 6.1 The TVIBHA presented a set of 25 verified views of the consented scheme. These have been updated for the current assessment and can be found in Appendix 1 of this addendum.
- 6.2 The updated verified views reveal that the proposed amendments would either not be seen or would be not especially noticeable in views 1,2,3,5,6,7,8,9,10,11,12,13,14,15,18,20,21 and 24. In views 4, 16, 17, 19, 22, 23 and 25 the viewer would be able to discern the raised lift overrun and new flues to the Wicklow Street residential building. Notwithstanding, the assessment of effect on those views set out in TVIBHA chapter 5 would remain valid in the context of the proposed amendments.
- 6.3 The assessment of effect on townscape character set out in TVIBHA chapter 6 would remain valid in the context of the proposed amendments. The amended Proposed Development, where visible, will appear as an appropriate and beneficial element in the townscape.

7.0 Updated Assessment of Built Heritage

- 7.1 The assessment of the updated verified views has informed this assessment of the amended scheme's effects on built heritage.
- 7.2 Effects on built heritage were summarised in paragraphs 10.26-28 of the TVIBHA as follows:

'It is our assessment that there is no harm to the significance of any heritage asset. The question at issue is principally one of the scale of the Proposed Development rather than its design. Our assessments of the effects of the Proposed Development on each of the heritage assets in question have been set out above.

As far as the King's Cross/St. Pancras CA is concerned, we consider that buildings of the scale proposed are consistent with the established character of the CA and that the quality of the design is such that it enhances the CA (with regard to paragraph 196 of the NPPF, the relevant consideration for whether there is harm to the CA is to consider the effect of the completed development, and not whether the proposed demolition on its own causes harm to the CA). The Site's most significant positive contributor, the frontage to the original hospital at no.330 Gray's Inn Road, will be sensitively refurbished and extended (including the removal of the insensitive post-war extension at ground level) to better reveal its contribution to the CA as part of a group of positive contributors, alongside the Water Rats public house and Swinton House. In terms of the positive contributors, as identified by the LBC, that would be replaced on Site, it is our view that any positive contribution to the CA will be made as well or better by the replacement buildings.

As far as the Bloomsbury CA is concerned, we consider that the scale of the Proposed Development is appropriate, as assessed above, and will enhance the setting of this CA as a result of the improvements to the Site's street frontages on Swinton Street and the Gray's Inn Road. The effect on other CAs in the Site's vicinity will be low to negligible'.

- 7.3 The above assessment would remain valid in the context of the proposed amendments. The amended Proposed Development would cause no harm to the heritage significance of any heritage asset.

8.0 Conclusion

- 8.1 The effects of the Proposed Development would be the same as those set out in the TVIBHA. The conclusions of the TVIBHA remain valid for the amended Proposed Development.
- 8.2 In terms of views and townscape, the TVIBHA noted (at paragraph 6.30) that *'Overall, the proposed development would form a high quality and characterful scheme, with appropriately scaled buildings that would either enhance or have a neutral effect on the local and wider views and townscape in which they would be visible. It would have no effect on the LVMF views assessed in this report. It would create a welcoming environment that strengthens sense of place and encourages social interaction'*. This would also be the case for the amended scheme.
- 8.3 The design of the amended scheme has had regard to the statutory duties of the Planning (Listed Buildings and Conservation Areas) Act (1990). As was the case for the consented scheme, the amended scheme would enhance the character and appearance of the King's Cross/St. Pancras Conservation Area. It would not harm the setting of any heritage asset. In respect of design and built heritage considerations, it is in line with the policies and guidance set out in the NPPF and PPG; London Plan policies; and the LBC local policies and guidance.

Appendix 1 : Verified views and visualiser methodology





SCHEME
GRAYS INN ROAD
REF.
AVR METHODOLOGY STATEMENT

DATE
20 JANUARY 2023
ARCHITECT
AHMM
JOB NO.
2415
AVR IMAGES & METHODOLOGY PRODUCED BY
INK



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INTRODUCTION



Accurate Visual Representation (AVR) is the accurate integration of a virtual scene within a piece of visual media.

The candidate scheme is accurately added to the photographic or video scene using sets of numerical data collected from the real environment.

The set of viewpoints from which the candidate scheme is to be assessed is first selected by the client team.

The practices employed within the verification process are consistent to those outlined in London View Management Framework document.

This document gives a brief introduction to the workflow used.

PHOTOGRAPHY

Capturing The Scene



01. TRIPOD POSITIONED AT 1.6M



02. TRIPOD POSITION RECORDED

A photograph is taken at each of the viewpoints chosen by the client team.

Typically, this is undertaken by a professional photographer, ensuring the results are of the highest standard.

The photographer uses a high resolution digital format camera, mounted on a levelled tripod, positioned 1.6m vertically above the identified location.

The position is recorded for the surveying process completed at a later stage.



03. FINAL IMAGE SHOT ON LOCATION

The photographer uses a ‘standard’ set of lenses in accordance with the London View Management Framework. These may vary depending on the proximity to the site.

For each viewpoint, the time and date of the photograph is recorded, so that the lighting conditions can be recreated.

SURVEY

Measuring The Scene



01. SURVEY FEATURES REQUESTS MARKED UP ON PHOTOGRAPHY

Using the reference material provided by the photographer, and annotation outlined by INK, the survey team provide sets of 3-dimensional data about the photographed environment.

Data is collected according to topographical markers on buildings, objects or landmarks.

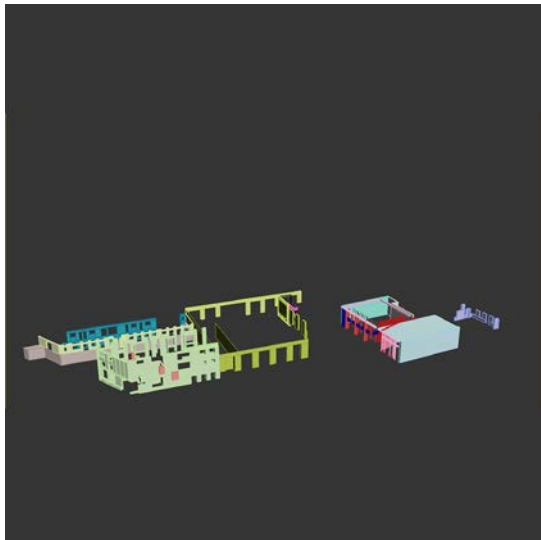
This is typically orientated around the OS coordinate system, but bespoke coordinate systems may also be used. This coordinate system forms the basis of the production of the views.

In the case of the former, Easting, Northing and heights above datum are returned to INK for translation into the virtual 3D environment. The survey team also provide the coordinates

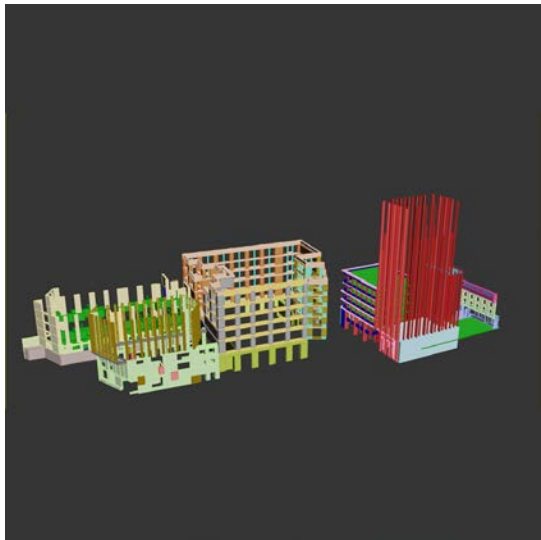
for the camera position and horizon levels for each viewpoint.

MODELLING

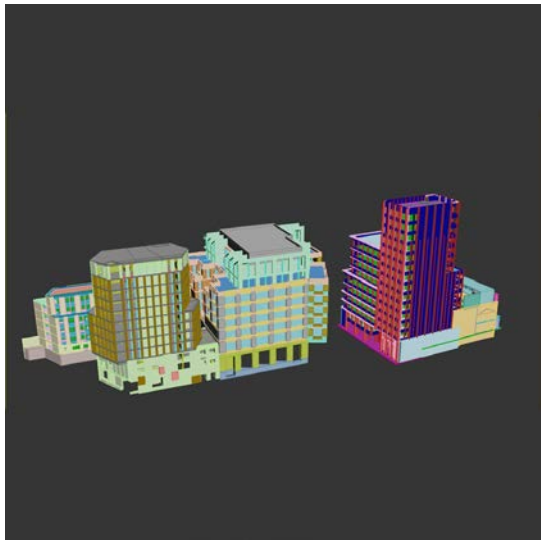
Modelling The Scene



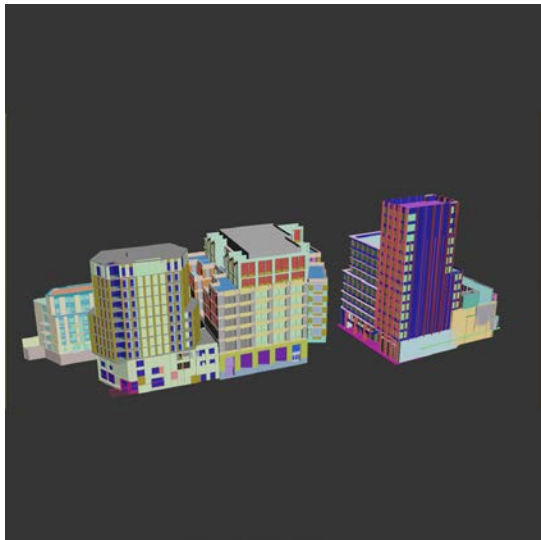
01. FACADE LOCATED IN COORDINATE SPACE



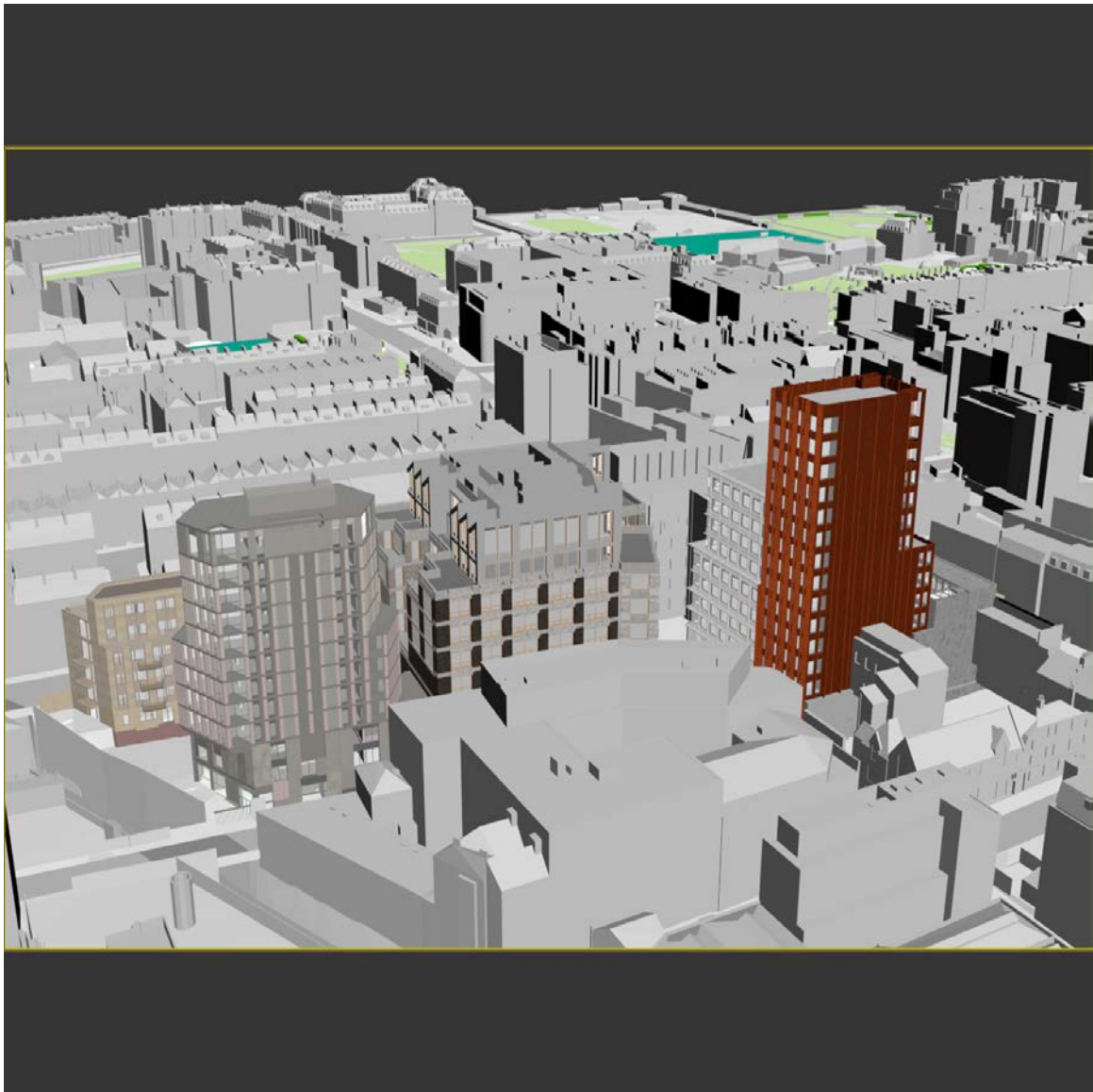
02. MODELLING IN PROGRESS



03. MODELLING IN PROGRESS



04. MODELLING IN PROGRESS



05. COMPLETED DETAIL MODEL

The proposed scheme is created in 3-dimensional form within the virtual environment. This is completed using previously established coordinate system provided by the survey data, ensuring accuracy throughout the entire process.

The client team provide all the necessary design information for the candidate scheme.

The model is typically worked up to two different levels, depending on the desired AVR type.

AVRs Type 1 and 2 utilise a less detailed model of the proposed scheme where the mass / envelope is being assessed.

AVRs Type 3 and 4 utilise a more resolved model where the proposed scheme is created to a very high level of detail. This is completed with the intention of producing 'photorealistic' representations of the proposed scheme.

ALIGNMENT

Aligning The Scene



01. ILLUSTRATION OF VIRTUAL CAMERA



02. SURVEY AS SEEN THROUGH ALIGNED CAMERA



03. MODEL SHOWN IN ALIGNED POSITION

The photography, survey and model are now brought together and aligned.

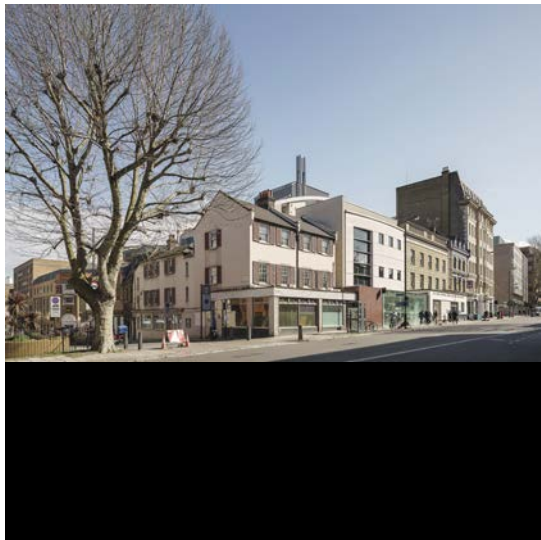
The photography is analysed and corrected for any inconsistencies arising from the shoot. This is then brought into the 3D software to form a ‘background’ to which a virtual camera is aligned.

The model (already in the survey coordinate space) and the survey data are amalgamated to create the alignment ‘scene’.

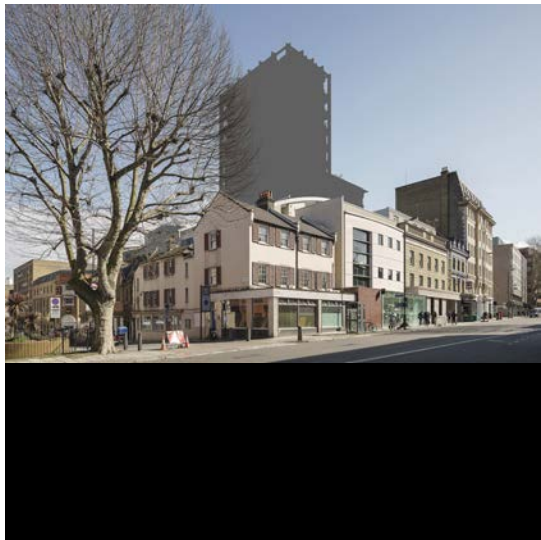
The virtual camera is then created and placed at the surveyed coordinates of the viewpoint position. The orientation of the camera is altered to ensure a match between the virtual scene and the background; this is achieved using the 3-dimensional surveyed data positions identified in the photographic background.

COMPOSITE

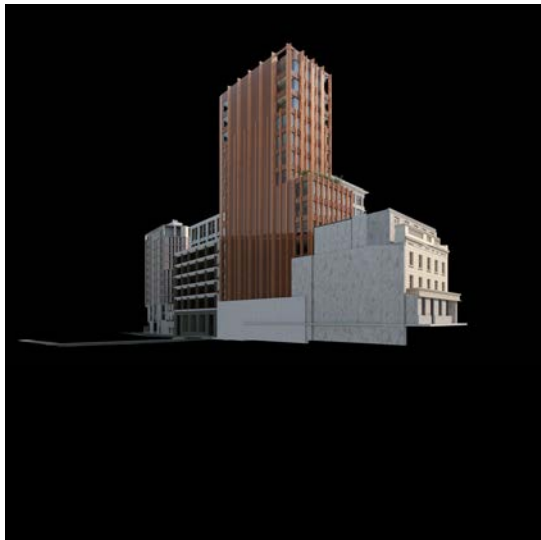
Compositing The Scene



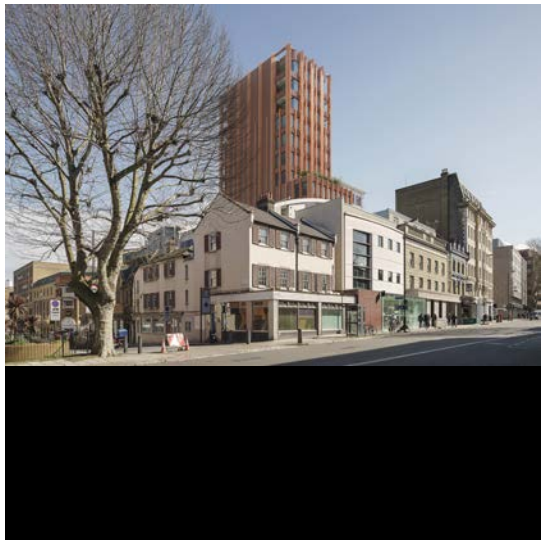
01. BACKGROUND PHOTOGRAPHY - BASIS FOR COMPOSITE



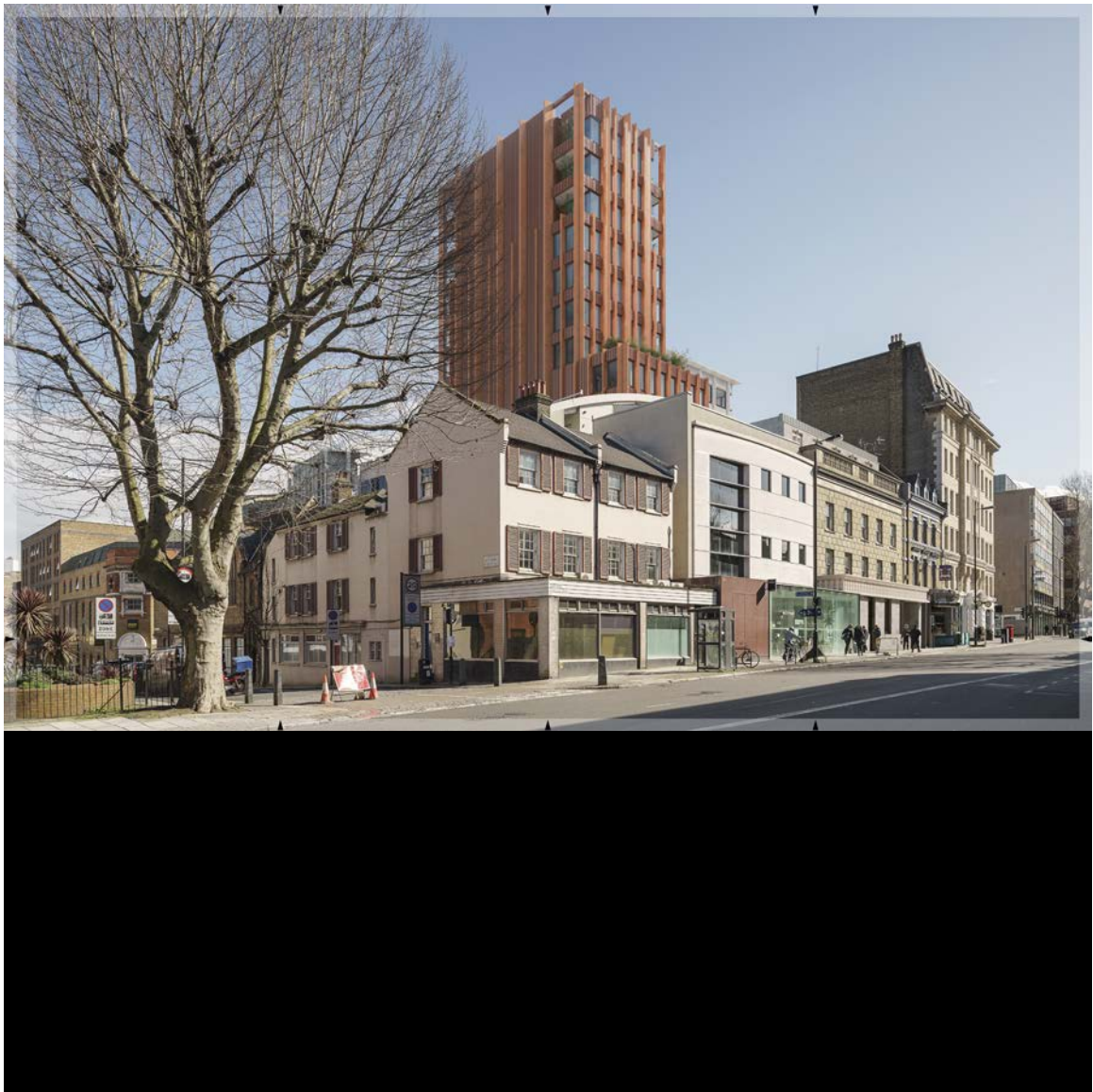
02. OCCLUDING OBJECTS ISOLATED



03. BASE RENDER OF CANDIDATE SCHEME



04. BASE RENDER OF CANDIDATE SCHEME INTEGRATED



05. COMPLETED IMAGE

The final stage of the verified image process is the composite.

This is where the scheme is integrated into the photography to the desired level of detail.

With AVR Types 1 and 2, the identification of any object/building occluding the mass and then indication of the mass itself.

For AVR Types 3 and 4, where the scheme needs to be considered in detail, more complex rendering techniques are employed.

In the case of the photorealistic AVR, textures are applied to represent the finished materials and the lighting is carefully matched to create a 'photoreal' finish. The photographer's notes from the shoot day are used to support this.

Further detail may be added to a photorealistic AVR such as the addition of people and trees.

VIEWS

View 1



01. PHOTOGRAPHY



02. PROPOSED

View 1
LVMF 2A.1 Parliament Hill
Looking towards St Paul’s Catedral

Camera data:

East	531819.55
North	180560.00
Ground	5.69
Height	1.6m
Date	06/03/2020
Time	17:15
FOV	72mm
Vertical shift	1mm

VIEWS

View 2



01. PHOTOGRAPHY



02. PROPOSED

View 2
LVMF 3A.1 Kenwood
In front of the orientation board (off map)

Camera data:

East 532051.50
North 180619.30
Ground 12.8
Height 1.6m

Date 06/03/2020
Time 16:34

FOV 72mm
Vertical shift 1mm

VIEWS

View 3



01. PHOTOGRAPHY



02. PROPOSED

View 3
King's Cross Square, Central, Looking South-East

Camera data:

East	532402.5
North	180675.7
Ground	14.5
Height	1.6m
Date	26/08/2020
Time	19:10
FOV	24mm
Vertical shift	7mm

VIEWS

View 4



01. PHOTOGRAPHY



02. PROPOSED

View 4
King's Cross Square / York Way, Looking South-East

Camera data:

East	530312.9
North	182976.4
Ground	16.35
Height	1.6m
Date	26/08/2020
Time	18:32
FOV	24mm
Vertical shift	8mm

VIEWS

View 5



01. PHOTOGRAPHY



02. PROPOSED

View 5
Gray's Inn Road / St Chad's Street, Looking South-East

Camera data:

East	530448.06
North	182914.64
Ground	16.84
Height	1.6m
Date	11/03/2020
Time	13:29
FOV	24mm
Vertical shift	7mm

VIEWS

View 6



01. PHOTOGRAPHY



02. PROPOSED

View 6
Gray's Inn Road / Britannia Street, Looking East

Camera data:

East	530486.10
North	182848.17
Ground	18.02
Height	1.6m
Date	12/03/2020
Time	12:44
FOV	24mm
Vertical shift	10mm

VIEWS

View 7



01. PHOTOGRAPHY



02. PROPOSED

View 7
Gray's Inn Road / Argyle Street, Looking East

Camera data:

East	530536.25
North	182751.75
Ground	19.92
Height	1.6m
Date	11/03/2020
Time	13:14
FOV	24mm
Vertical shift	7mm

VIEWS

View 8



01. PHOTOGRAPHY



02. PROPOSED

View 8
Argyle Street, outside no. 64, Looking East

Camera data:

East	530334.64
North	182740.73
Ground	20.38
Height	1.6m
Date	26/08/2020
Time	18:19
FOV	24mm
Vertical shift	5mm

VIEWS

View 9



01. PHOTOGRAPHY



02. PROPOSED

View 9
Argyle Square / St. Chad's Street, Looking East

Camera data:

East	530291.32
North	182822.53
Ground	18.52
Height	1.6m
Date	11/03/2020
Time	11:52
FOV	24mm
Vertical shift	7mm

VIEWS

View 10



01. PHOTOGRAPHY



02. PROPOSED

View 10
Euston Road / Cromer Street, Looking North

Camera data:

East	530551.85
North	182730.26
Ground	20.13
Height	1.6m
Date	02/09/2020
Time	13:25
FOV	24mm
Vertical shift	8mm

VIEWS

View 11



01. PHOTOGRAPHY



02. PROPOSED

View 11
Mecklenburgh Square / Doughty Street, Looking North

Camera data:

East	530664.50
North	182370.24
Ground	21.43
Height	1.6m
Date	26/08/2020
Time	09:44
FOV	24mm
Vertical shift	13mm

VIEWS

View 12



01. PHOTOGRAPHY



02. PROPOSED

View 12
Farrington Road / Exmouth Market, Looking North-West

Camera data:

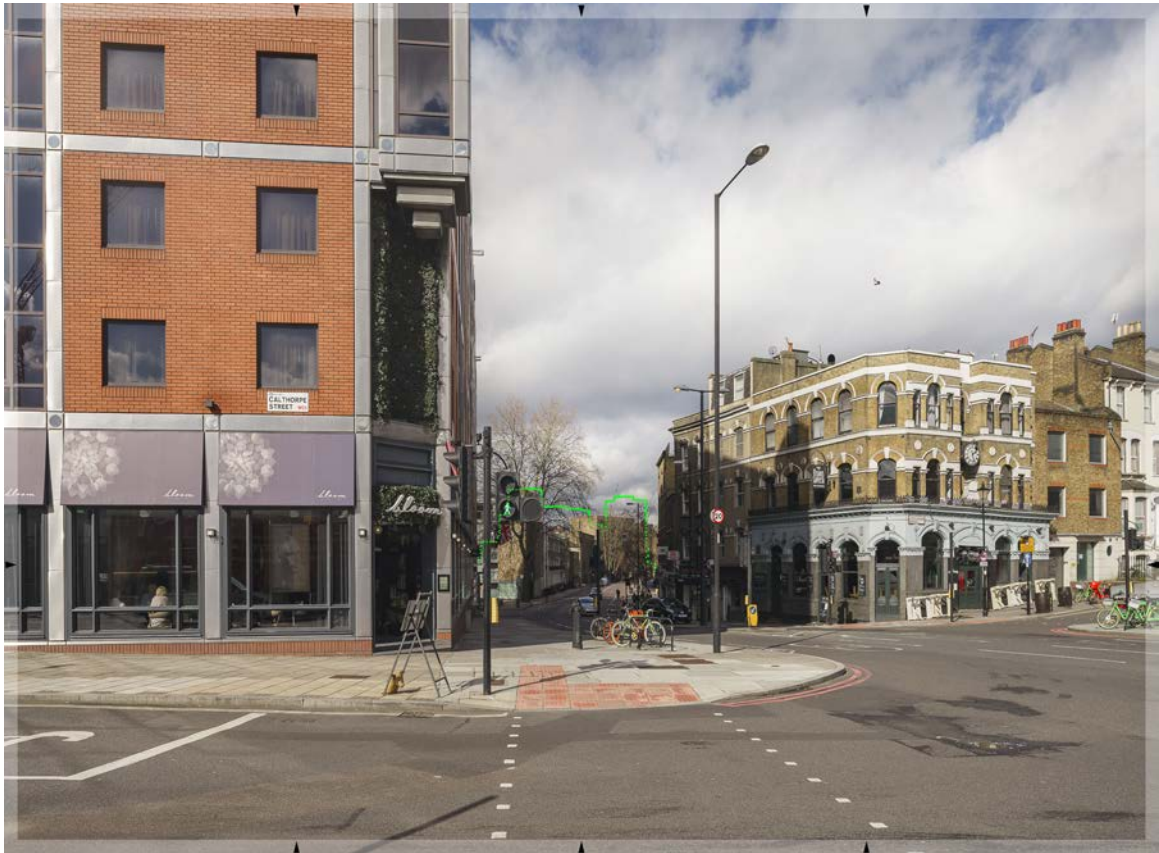
East	531144.25
North	182405.90
Ground	21.26
Height	1.6m
Date	26/08/2020
Time	12:38
FOV	24mm
Vertical shift	5mm

VIEWS

View 13



01. PHOTOGRAPHY



02. PROPOSED

View 13
Farringdon Road / Calthorpe Street, Looking North-West

Camera data:

East	530998.04
North	182502.30
Ground	17.89
Height	1.6m
Date	11/03/2020
Time	11:07
FOV	24mm
Vertical shift	6mm

VIEWS

View 14



01. PHOTOGRAPHY



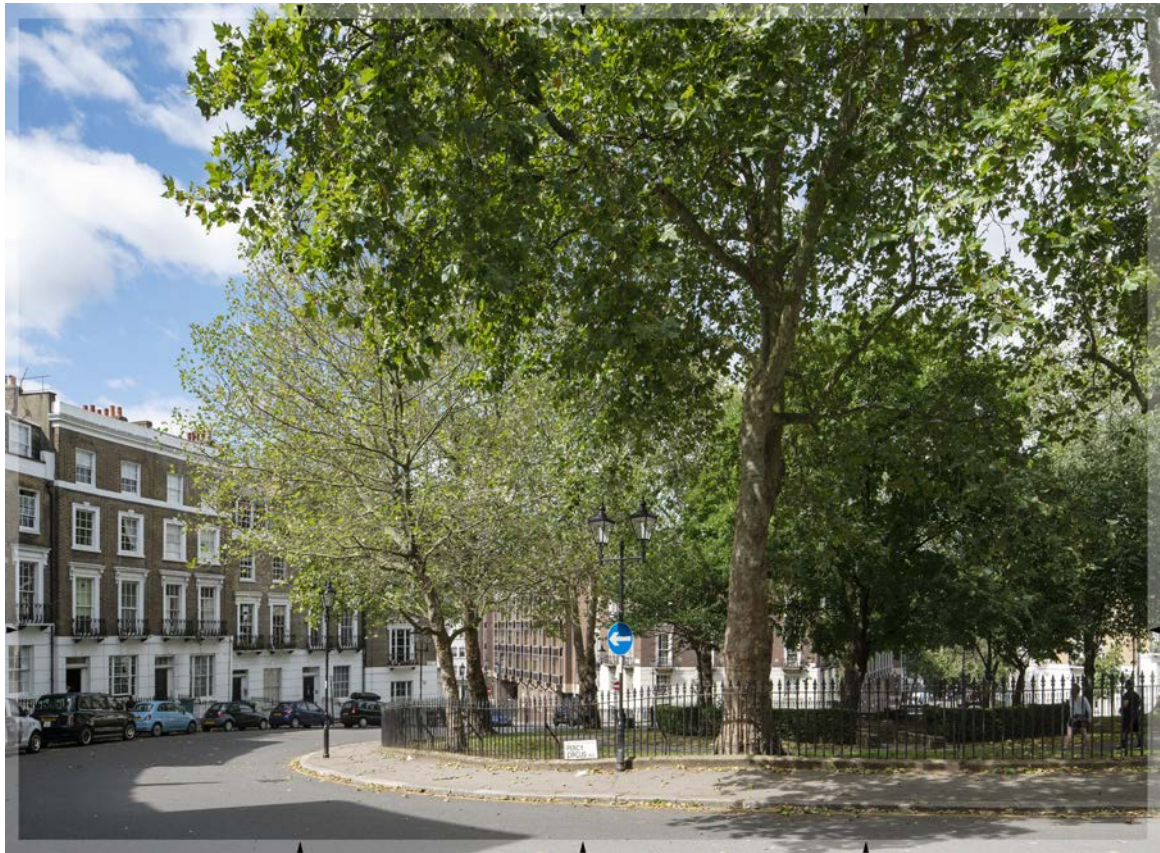
02. PROPOSED

View 14
Great Percy Street / Cumberland Gardens, Looking West

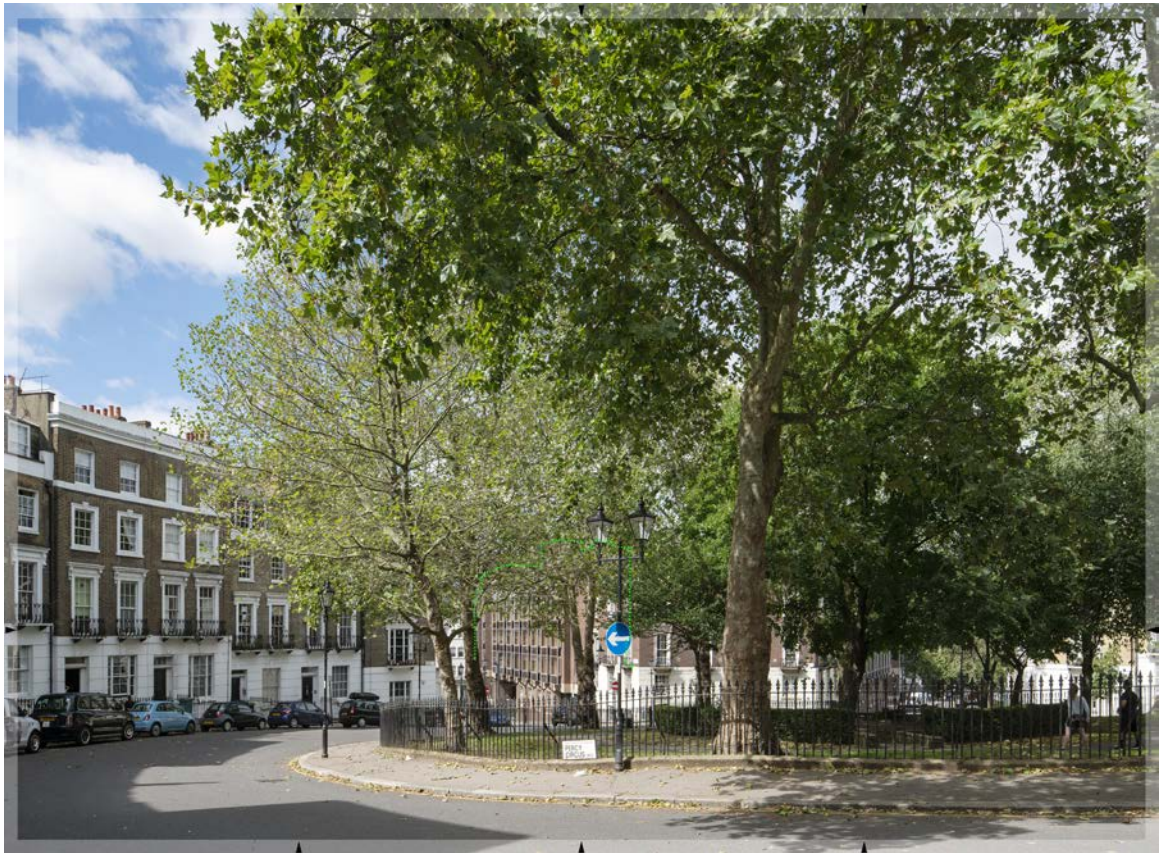
Camera data:

East	530993.98
North	182855.35
Ground	31.30
Height	1.6m
Date	26/08/2020
Time	11:57
FOV	24mm
Vertical shift	5mm

VIEWSVIEW 15



01. PHOTOGRAPHY



02. PROPOSED

View 15
Percy Circus / Prideaux Place, Looking West

Camera data:

East	530936.99
North	182818.82
Ground	26.49
Height	1.6m
Date	26/08/2020
Time	11:43
FOV	24mm
Vertical shift	5mm

VIEWS

View 16



01. PHOTOGRAPHY



02. PROPOSED

View 16
Ampton Street / Ampton Place, Looking North

Camera data:

East	530700.35
North	182627.26
Ground	18.97
Height	1.6m
Date	26/08/2020
Time	11:19
FOV	24mm
Vertical shift	10mm

VIEWS

View 17



01. PHOTOGRAPHY



02. PROPOSED

View 17
Acton Street / Swinton Place, Looking North

Camera data:

East	530693.28
North	182745.55
Ground	17.87
Height	1.6m
Date	26/07/2020
Time	09:55
FOV	24mm
Vertical shift	6mm

VIEWS

View 18



01. PHOTOGRAPHY



02. PROPOSED

View 18
King's Cross Road / Swinton Street, Looking West

Camera data:

East	530802.82
North	182846.63
Ground	15.21
Height	1.6m
Date	11/03/2020
Time	11:27
FOV	24mm
Vertical shift	8mm

VIEWS

View 19



01. PHOTOGRAPHY



02. PROPOSED

View 19
Penton Rise / Penton Square, Looking West

Camera data:

East	530824.09
North	182928.20
Ground	17:32
Height	1.6m
Date	12/03/2020
Time	08:47
FOV	24mm
Vertical shift	6mm

VIEWSS

View 20



01. PHOTOGRAPHY



02. PROPOSED

View 20
Wicklow Street / King's Cross Road, Looking West

Camera data:

East	530772.54
North	182898.20
Ground	14.64
Height	1.6m
Date	26/08/2020
Time	11:06
FOV	24mm
Vertical shift	6mm

VIEWS

View 21



01. PHOTOGRAPHY



02. PROPOSED

View 21
Leeke Street Bridge, Looking South

Camera data:

East	530619.32
North	182901.59
Ground	14.95
Height	1.6m
Date	12/03/2020
Time	08:23
FOV	24mm
Vertical shift	13mm

VIEWSVIEW 22



01. PHOTOGRAPHY



02. PROPOSED

View 22
Wicklow Street / St Chad's Place, Looking South

Camera data:

East	530512.95
North	182958.42
Ground	14.80
Height	1.6m
Date	12/03/2020
Time	19:29
FOV	24mm
Vertical shift	7mm

VIEWS

View 23



01. PHOTOGRAPHY



02. PROPOSED

View 23
Northdown Street / Pentonville Road, Looking South

Camera data:

East	530540.71
North	183026.16
Ground	16.18
Height	1.6m
Date	26/08/2020
Time	08:06
FOV	24mm
Vertical shift	8mm

VIEWS

View 24



01. PHOTOGRAPHY



02. PROPOSED

View 24
Caledonian Road / Killick Street, Looking South

Camera data:

East	530594.62
North	183288.68
Ground	19.41
Height	1.6m
Date	26/08/2020
Time	07:51
FOV	24mm
Vertical shift	7mm

VIEWS

View 25



01. PHOTOGRAPHY



02. PROPOSED

View 25
Acton Street Bridge, Looking North-West

Camera data:

East	530756.58
North	182768.22
Ground	16.23
Height	1.6m
Date	26/08/2020
Time	10:14
FOV	24mm
Vertical shift	10mm

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