

Former University College London (UCL) Student Union and Royal Ear Hospital, Huntley Street, Bloomsbury University College London Hospitals - Phase 5 Development

The Security Strategy has been developed in consultation on with The Trust Security Officer.

Secured by Design is the official Police flagship initiative supporting principles of 'designing out crime'. It focuses on crime prevention of homes and commercial premises and promotes the use of security standards for a wide range of applications and products. The aim being to achieve a good overall standard of security for buildings and the immediate environment and attempts to deter criminal and anti-social behaviour.

General design considerations, include but not limited to:

Liaise with Architectural Liaison Officer (ALO) and Crime Prevention Design Advisor (CPDA).

Create a sense of ownership and responsibility for every part of the • development.

Safe and secure working environment for patients, medical profes-٠ sionals and visitors.

- Secure vehicle parking (not applicable for this hospital).
- Adequate lighting should be provided.

Controlled access to individual and common areas; between wards and between wards and public areas etc

A landscaping and lighting scheme, which when combined, enhances natural surveillance and safety. Future growth and maintenance also taken into account.

Site and building layout - kept simple to reduce hidden and isolated areas. Natural surveillance and CCTV monitored.

Perimeter security - enclosed hospital perimeter with consideration given to building shell security to prevent scaling or climbing. Robust materials such as masonry or stone to be used to avoid forced entry through vulnerable material choice. Where boundaries are required, these should be appropriate (not 'fortress-like') to restrict access and unauthorised entry with a minimum height of 2m. No climbing aids in close proximity.

Public entrances - the number of entrances to the hospital has been reduced to a minimum with pedestrians and vehicles directed through one or two entrances. Secure and controlled fire escapes

Vehicular access - restricted to a minimum with restrictions enforced by signage, bollards, double curbs and landscaping

• Signage - from the hospital entrance through to the designation wards, signage should be clear and multi-lingual if applicable. Colour coded to aid simplicity.

Cycle store - safe, secure and undercover with natural surveillance.

CCTV and alarm systems - well designed and properly managed.

Internal layout - clear signage and building logic, such as grouping • functions together with straight corridors to aid CCTV surveillance. Reception and main entrance to be in close proximity to each other and the route forward logically sign posted. Reception desks should be located in order that surveillance of all parts of the wards / entrances can be achieved. Highrisk areas of the building (ie. pharmacies) requiring internal wall reinforcement.

Secure plant and bin store, loading bay and oil tanks with natural surveillance within a safe area secured by fence / gate.

All grilles and visible / accessible services to use security screws or bolts, constructed so to avoid climbing

Roof materials and construction to provide a robust and secure • construction with roof glazing, service openings and plant rooms protected.

Security office and management strategy (see above for the Trust Security Officer's recommendations)

All installations will be in line with the security requirements of the Secure by Design Police document, HTM & HBN's. They will also comply with all British Standards for CCTV, Access Control, Alarms and manned guarding, and the UCLH's security specification document.

24 hour security, 7 days a week - manned security will be deployed in the building to officer a physical presence in the building and response, with support from a mobile team and the main team in UCH. It is currently planned to include at least three officers in the building all linked to the

main control room via radio. •

area.

• /checks over the course of a 24 hour period.

- can be deployed.
- ٠ public areas.
- ٠

- quired.

Staff checks - all staff will require standard and in some cases en-٠ hanced background checks to ensure that the personnel are qualified and authorised to work in the UK and any criminal convictions have been taken into account.

• Police - the police will be an integral part of the response in emergency cases and as part of the intruder alarm response.

Visible security presence - it is anticipated the building will follow suit from Phase 3 and have a visible security presence in the main reception

Patrols - the building and site will be part of routine security patrols

Access control - the building will be protected with a mixture of electronic locks on the doors (both CCure and local electronic lock such as Salto) and physical locks for FM and non clinical spaces. All doors will be linked with door contacts to report to security when a door is false or breached doors with camera cover and where required, a security or police response

Restricted access to certain areas of the building and site, for example the loading bay / services area and a separate on between staff only and

CCTV - will cover the outer envelope and internal public spaces and high risk-risk areas such as non-clinical risk spaces and FM risk spaces.

Intruder alarms - the inner risk areas will have intruder alarms attached, linking to red care and the main security control room.

Panic alarms - all nursing stations, receptions and interview rooms will be linked to security via panic alarms for security intervention if re-



Typical floor plan with patient and staff toilets

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Various studies had been provided and design of sanitary spaces was developed to comply with Part M requirements, BS Standards 6465 Sanitary Instalations and the Schedule of accommodation requirements.

A number of issues had been considered in connection with all forms of sanitary accommodation. These relate the needs of people with various disabilities and special needs. WC cubicles are designed to be operated by people with limited strength and ability.

Doors to assisted / wheelchair users accessible unisex toilets open out and the space is designed not to encroach into the wheelchair user turning space and minimum activity space.

On each floor there are 2 clusters of three toilets - female, male and unisex accessible toilet. One of these clusters is located to the main core and escape staircase. The other is located within the clinical department to be accessed by people who are within the consultation / examination area. Each floor accommodate at least 1 to 2 dedicated staff toilets.

To serve the 2 education group therapy rooms and the entrance area at ground floor, a significant number of toilets are provided. The two clusters of three toilets are completed by 2 assisted unisex toilets together with devoted changing rooms for people with complex disability.

floor and Level 5.

	CON	SULT/EXAM &	HEA	RING BALANCE		
ZONE	NUMBER			Within Clinical Area		
Adult 1	169,5 people		FEMALE	MALE	ASSISTED	
	WC in area		6	2	2	2
ZONE	NUMBER			Within Clinical Area		
Adult 2	Adult 2 169,5 people			FEMALE	MALE	ASSISTED
	WC in area		6	2	2	2
ZONE			Within Clinical Area			
Paediatrics	144	people		FEMALE	MALE	ASSISTED
	WC in area		3	1	1	1

DENTAL TREATMENT AREA						
ZONE	NUMBER			Within Clinical Area		
Adult 1	100,5 people			FEMALE	MALE	ASSISTED
	WC in area		4	1	1	2
ZONE	NUMBER			Within Clinical Area		
Adult 2	100,5 people			FEMALE	MALE	ASSISTED
	WC in area		4	1	1	2
ZONE	NUMBER		Within Clinical Area			
Paediatrics	91 people		FEMALE	MALE	ASSISTED	
	WC in area 2		1		1	

INTERVENTION						
ZONE		Within Clinical Area				
Procedures	56 people		FEMALE	MALE	ASSISTED	
	WC in area	3	1		2	

IMAGING							
ZONE		Within Clinical Area					
Procedures	59,5 people		FEMALE	MALE	ASSISTED		
	WC in area	3	1	1	1		

EDUCATION							
ZONE	NUMBER Withir			Vithin Clinical Ar	hin Clinical Area		
Meeting rooms	35 pec	35 people		MALE	ASSISTED		
	WC in area	3	1	1	1		
TOTAL WC 34			11	9	14		

Schedule of toilet provision within the clinical departments

On key levels, the sanitary provision is supplemented with baby feed / baby change facilities. These are located to entrance level, Level 2 - paediatrics



View along Huntley Street

Methodology for the production of Accurate Visual Representations The Accurate Visual Representations (AVRs) in this document were prepared by Wadsworth 3d Ltd who can be contacted by phone on 01480 385185 or by email at info@wadsworth3d.com. Wadsworth 3d Ltd is based at Middle Paddock, 18 King Street, Over, Cambs CB24 5PS ENGLAND.

Overview

Wadsworth 3d Ltd applied the following methodology to the AVRs requested by the project team. Guidance was taken from the 'Guidelines for Landscape and Visual Impact Assessment Third Edition' and the 'Supplementary Planning Guidance: London View Management Framework March 2012', specifically appendix C.

In this methodology reference is made to the optical axis and field of view (FOV). The optical axis is the original centre of the viewpoint of the photograph. The field of view is the horizontal angle of the view and is measured in degrees.

View selection

Initial camera positions were proposed by JLL and Camden Planning Department having regard to relevant planning policy and guidance. The camera locations were marked up on an OS map. Wide angle photographs were taken from each proposed location looking in the direction of the project site. The final viewpoints were then presented to Camden Planning Department. Each final camera position was then given a unique identification number.

The SPG: London View Management Framework March 2012 states the following levels for producing AVRs;

- AVR Level 0 Location and size of proposal
- AVR Level 1 Location, size and degree of visibility of proposal
- AVR Level 2 As level 1 + description of architectural form
- AVR Level 3 As level 2 + use of materials

A decision was made by the project team to produce all views to AVR level 3 to fully represent the design intent.

The final set of AVRs would include the following options

- Existing : the existing view photograph
- Proposed: the existing view photography + the Proposed development +

the Phase 4 development Digital photography

highest quality background image. The Survey

carried out to the OS datum. camera match.

The surveyor visited each camera position and took precise readings of the camera location (as marked by the photographer) and the selected reference points.

All surveyed camera positions and photo control points were fully controlled and related to a network of survey stations throughout the survey area. All survey data was therefore on a common co-ordinate and level system which enabled a precise relationship of all information. A network of survey control stations were established throughout the survey areas; these formed the primary control. These control stations were surveyed by Network RTK methodology (as described in the TSA Best

The photographer used a Nikon D800 to produce high resolution background images. For this project the views would use a 24mm shift lens to show the required amount of context. Each view was shifted between 5mm and 13mm where required. The shift reduced the amount of foreground at the bottom of the photograph and increased the amount of the proposed building visible at the top of the photograph.

Photographs were taken from a tripod with the camera containing an inbuilt spirit level to ensure the camera setup was exactly level with the horizon. The camera was set to a height of 1.6m from the ground to closely match eye level. A nail or other marker was used to set a reference point directly below the camera position. Photographs were taken to show the position of the tripod. The majority of the views were photographed in landscape format where this best described the relationship of the proposal to its larger context. Views 1 and 3 required the photography be taken in portrait. Photographs were processed and then provided in TIF format to ensure the

All survey work was produced under the General Specification for Topographical Surveys and generally in accordance with the R.I.C.S. guidance notes for large scale land and building surveys. The survey was

Each photograph was marked up with a selection of reference points taken on key objects within the view. The selection of points chosen were in a variety of foreground, middle and distant locations to ensure an accurate

5.0 The Proposal 5.11 Verified Views Methodology

Practice Guidance Notes) to provide precise OSTN02 National Grid coordinates & MSL heights. Where appropriate, the control stations may also have been levelled to an existing OSBM (Ordnance Survey Bench Mark) using a tripod mounted auto-level & staff.

A further network of tertiary or secondary survey stations were also installed; these derived their National Grid co-ordinates & levels from the primary control traverse.

The survey stations were occupied in turn by a tripod mounted REDM (Remote Electronic Distance Measuring - Total Station Survey instrument - Leica TPS 800 series) and reference observations may have been taken to adjacent survey stations. At each survey station the adjacent camera locations and photo control points were precisely surveyed using the REDM. The survey data was then post-processed and supplied to Wadsworth 3d Ltd in a vector based format compatible with Autodesk 3ds Max software and as numerical data in the form of an excel spreadsheet. Indexed photographs of each view were also produced indicating the photo control points and levels and supplied to Wadsworth 3d Ltd.

The Visualisation Process for AVR3 views

1. The model of the proposed building was provided in the OS co-ordinate location by the architect and then cross checked against plans and elevations to confirm position and height. The model was then forwarded to the architect for final confirmation of detail and location.

2. Survey data was imported into Autodesk 3ds Max software and cross checked against the supplied excel numerical data. A marker was then placed at each co-ordinate.

3. Each final photograph was opened in Adobe Photoshop and adjusted to ensure accurate colour and light balance. If necessary, the image was slightly rotated to ensure an exact horizon level and where available confirm that the edges of buildings were vertical. The image was extended at the top or bottom to compensate any vertical rise applied by the photographer using the shift lens and to ensure the optical axis was positioned in the centre of the image. The required crop was then masked off and a background image saved in PSD Photoshop format.

4. Within 3ds Max software a camera was manually setup for each view using the surveyed camera position, the metadata from the digital photograph and notes supplied by the photographer. Further camera

specific information such as the size of the sensor (or film gate) was acquired from the camera manufacturer and entered to ensure the field of view of the camera in 3ds Max accurately matched the photograph. 5. The camera was then aligned to the background image using the surveyed reference points. Due to camera lenses being curved even on the highest quality equipment there will be some distortion towards the edges of the photograph. This is compensated for in the camera alignment process by giving less weighting to surveyed reference points which appear furthest from the optical axis.

6. For each view a base render of the proposal with the survey markers was created and overlaid onto the background image to confirm the accuracy of the alignment. Where required, adjustments were made to the camera setup and the process repeated until the view was accurately aligned. 7. The position of the sun and time of day were taken from the metadata in each photograph and entered into the software's daylight system to produce an accurate lighting solution to match each background image. 8. Using details of the building materials supplied by the architect photorealistic textures were created in 3ds Max and applied to the faces of the 3d model. These textures match as closely as possible the real life gualities of the materials intended by the architect.

9. Rendering is the software process used to create a photorealistic image from a 3d computer model. For each view an image was rendered in 3ds Max to match the size of the background image using the Vray render plugin.

10. Each photograph was divided into foreground and background elements to determine where the proposed building sat in relation to its context. The final rendered proposal was then overlaid onto the background image and the foreground elements of the photograph placed on top.

11. In the case of existing site objects or distracting construction objects being visible in the proposed image once the render had been correctly positioned into the image, it was necessary to use other reference photography to 'photoshop' them out of the final image. Where possible, the photographer returned to the exact location on site once the objects had been moved and reshot a photograph. This was then overlaid in Photoshop and masked off to hide the erroneous items. Where this was not possible, similar reference material was used and matched in, taking guidance from a 3d model of the surroundings.

naturally match into the photograph. verified views.

Postproduction

A transparent frame was added to each AVR proposal indicating the field of view in degrees. This helps when comparing views taken from the same camera position but using different camera lenses. Red arrows were positioned to explain the position of the optical axis. This aids in understanding any lens shift used for each photograph and the amount of crop applied to the final image. If the optical axis is below the centre of the final image then, most likely, the original photograph was shifted up to be able to see more of the top of the proposal. If the optical axis is to the left or right of the centre of the final image, then the image has most likely been cropped from the side or an additional photograph has been stitched on to the original (in this case the view would be annotated as such for clarity).



12. Each final image was edited in Photoshop and the render blended to

13. A review process took place with the architect prior to finalising the

5.0 The Proposal5.11 Verified Views1 - From Torrington



Existing

The view looking west from Torrington Place with the handsome Gordon Mansion apartment blocks in the foreground framing the view down Huntley Street. The mansion blocks effectively act as book ends to Huntley Street and are rich in the form and character. The organisation of subtle projecting bays above ground level creates a strong rhythm to the street. This is however interrupted by buildings on the application site which present an evident differential in building height, scale and line. The buildings on the site by virtue of their design and appearance offer a poor townscape response to Huntley Street.

Proposed

In this view it is evident that the replacement building is delicate and restrained and establishes a complementary relationship to its context and setting. The prominent mansion blocks would remain the principal townscape features. A positive townscape effect.

1 - From Torrington Place looking towards North West



5.0 The Proposal5.11 Verified Views2 - From Huntley Str



Existing

In this view the buildings on the site are closer in view along Huntley Street looking towards Grafton Way. On the western side of the street Gordon Mansions is in the foreground and on the eastern side the Grade II listed Georgian terrace. This three storey terrace (with mansard) forms a strong edge to the street continuing the line of the Gordon Mansion apartment block.

The view shows the roof line interrupted by the former Medical Student's Union building (part two, part four including basement). The scale and height of built form then rises again where the building abuts the former Royal Ear Hospital building (four storeys over basement). The blank side flank side elevation is dominant in the view. The red brick character terminates with the UCH Macmillan Cancer Centre (Phase 3) which projects the building line forward.

The view demonstrates the strong traditional palette of material evident in the street, with brick and renders the principal materials in use. The view confirms that the overall composition of buildings on site do not respond to the prominence offered by this corner site.

Proposed

The relationship and setting of Gordon Street Mansions is substantially enhanced by the replacement building, which completes the street block. The architectural approach re aligns the site in line with the street edge and draws strong reference from the adjacent Edwardian style. The building complements the setting of the Georgian listed terrace opposite and is careful not to be overbearing. The design and treatment of the facing elevation has addressed residential amenity considerations and the use of brick splays to the project bays will diffuse the potential for overlooking and light pill. The outlook from these residential properties will be greatly enhanced. A positive townscape effect.

2 - From Huntley Street looking towards North West



5.0 The Proposal5.11 Verified Views3 - From Huntley Str



Existing

A closer view of the site focusing on the former Royal Ear Hospital east elevation and showing it in the context of the adjacent contemporary UCH Macmillan Cancer Centre. The building's prominent light well is in view which effectively weakens the building edge, setting it back from the strong building line established by both Gordon Mansions and the UCH Macmillan Cancer Centre. The poor condition of the building's façade is evident, along with its less than impressive architectural quality reflecting the range of alterations that have taken place over the years.

Proposed

In this view the replacement building is read in the context of the adjacent contemporary UCH Macmillan Cancer Cente. The view demonstrates a strong ground floor frontage which provides clear pavement space and integrates the crest of the Former Royal Ear Hospital into the façade proudly alongside the main entrance. In this view the quality of detailing on the subtle projecting bays is evident. The horizontality of the building is expressed through the use of linear bands of render, common to the local context. A positive townscape effect.

3 - From Huntley Street looking towards West



5.0 The Proposal5.11 Verified Views4 - From Huntley Str



Existing

This view looks south east past the site towards Torrington Place and the wider Bloomsbury Conservation Area. In this view the distinctive roofscape of the Gordon Mansions apartment block is clearly visible. The corner of the east elevation of the Former Ear Hospital is visible. The view shows clearly the variation in scale, height and building line on the western side of Huntley Street opposed to the eastern side which reads as orderly and highly legible benefitting from its continuous street block.

Proposed

The replacement building in this view will positively transform this prominent corner of Huntley Street and Capper Street. A legible central public entrance will be visible and the architectural form of this elevation has been developed to both animate the street whilst drawing down elements of the structural façade to the street referencing the established residential character of the surrounding mansion blocks. The view demonstrates that the replacement building will enhance the appearance of the street, the buildings scale, form and height is in keeping with surrounding buildings and that the proposed palette of material is complementary to the established and characterful streetscape character. A positive townscape effect.

4 - From Huntley Street looking towards South East



5.0 The Proposal5.11 Verified Views5 - From University S





The contemporary UCH Macmillan Cancer Centre building is dominant in this view, on the western side of Huntley Street. It demonstrates the introduction of modern architecture and building materials to the street. The building benefits from a central legible main entrance with canopy over for weather protection. The view again looks south and the distinctive Gordon Mansion block roofscape remains evident in this distant view.

Proposed

In this view the replacement building blends successfully into the established local townscape, re-establishing a strong building line on the western side of Huntley Street. The tripartite design (base, body and attic) re-establishes the traditional hierarchy evident around the areas historic buildings and the use of subtle projecting bays above ground level maintains a calm residential character to street. The roof profile is restrained yet carefully animated by architectural detailing reflective of local townscape features. A positive townscape effect.

5 - From University Street looking towards South East



5.0 The Proposal5.11 Verified Views6 - From Capper street



Existing

This view looks east from Tottenham Court Road along Capper Street. This view demonstrates the mixed townscape and material palette. The Art-deco inspired Shropshire House six storey building dominates the view which is terminated by the Grade II Listed terrace building (No.70 Huntley Street) and the contemporary UCL Cancer Institute Paul O'Gorman building. The northern elevation of the former Ear Hospital appears to fall in to the backdrop of the view rather than dominating the important street corner. The townscape character here is largely influenced by a broad palette of materials and variety of architectural style and detailing.

Proposed

In this view the curved elevation is finely and richly detailed and its form and detailing relates carefully to references the linear art deco rhythm established by Shropshire House. The building is appropriate in its scale and height to the townscape and roofline in this part of the conservation area. The introduction of curved elements to the façade also responds to the contemporary style of the UCH Macmillan CancerCentre opposite. A positive townscape effect.

6 - From Capper street looking towards East



5.0 The Proposal5.11 Verified Views7 - From Shropshire



Existing



Existing

This view looks along Shropshire Place and is abruptly terminated by the tall blank brick elevation of Gordon Mansions. Whilst Shropshire House provides a characterful response on the western side, the rear elevation of both buildings on the site creates an unattractive, dead and utilitarian frontage to Shropshire Place. The pedestrian environment is poor and unwelcoming and Shropshire Place feels strongly to be a back service yard.

Proposed

The replacement building will transform the character and experience of Shropshire Place. The new pedestrian entrance and organised arrangements for servicing and waste storage will enhance the public realm. The replacement building and its sweeping north elevation carefully turns the corner of Capper Street drawing pedestrians into Shropshire Place and into Queen's Yard. The replacement building restores the street edge of Shropshire Place, effectively disguising the ugly blank elevation which currently exists. The curved elevation is finely and richly detailed in its form and detailing. The view of the building demonstrates that the proposed scale and height is appropriate to the established townscape and roofline in this part of the Conservation Area. A positive townscape effect.

Proposed

7 - From Shropshire Place looking towards South

5.0 The Proposal5.11 Verified Views8 - From Queen's P



Existing



Proposed

Existing

This view of the site is glimpsed from Queen's Yard accessed from Tottenham Court Road. Although a pedestrian route its character and appearance is one of a rear service area rather than attractive and safe connection, although overlooked by windows. The relatively low scale of the rear elevation of the site appears unbalanced adjacent to its taller counterparts and its appearance is unsightly, and cluttered by metal fire escapes, grills and plant.

Proposed

The replacement building serves to frame the view through Queen's Yard adding subtle architectural interest and in scale to the adjacent buildings which enclose the view. The replacement building has been designed to incorporate a new pedestrian public entrance onto Queen's Yard, which serves to animate the street. The introduction of ribbons of glazed fenestration on the upper floors will further to animate the street. The pedestrian experience will be dramatically enhanced, and the introduction of new built form of high architectural quality will enhance local townscape character. A positive townscape effect.

8 - From Queen's Place looking towards East