CONTENTS

1.0 INTRODUCTION

This Statement is prepared to accompany the application for the regeneration of Grenfell Tower, which includes the complete overcladding of the exterior, changes to the arrangements of the lowest four levels, the creation of new floor area and some changes and enhancements to the area immediately adjacent to the tower.

The regeneration of Grenfell Tower is an extension of, and intergral to the Kensington Academy and Leisure Centre project (KALC), Planning Application Reference PP/12/01833 which is for a new Secondary Academy and rebuilt Leisure Centre and upgraded public realm. to the north, east and west; These public realm works include new play areas, a share surface connecting Grenfell Road and Silchseter Road, new pedestrain routes and new planting. The three projects represent a significant investment and make-over for the area.

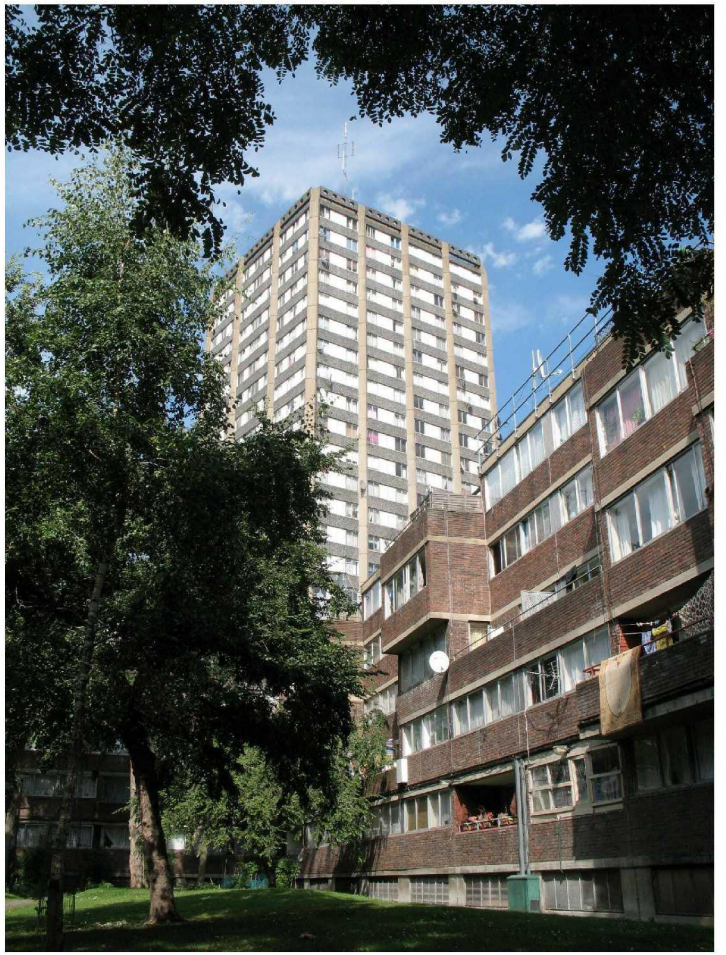
OBJECTIVES

This Application is being made by the K&C Tenant Management Organisation (TMO), following Cabinet Approval for the funding on 2 May 2012. This statement will demonstrate how the TMO's key objectives have been realized with these proposals:

- Respond to the Supplementary Planning Guidance for the site.
- Find a long term solution which is both efficient and economically viable for the Communal heating to the tower.
- Extend the life of the building and bring the standard of the external envelope in line with current standards.
- Optimise the use of space in the tower.
- Exploit any "hidden homes" opportunities to deliver additional affordably housing for the Borough.
- Improve the entrance and appearance of the block and the Lancaster West Estate generally.

This statement comprises an appraisal of the site and the local context, a description of the proposed changes internally and what key points have come up in resident and community consultation, a discussion of layout and the appearance of the Proposals, together with the Sustainability and Accessibility sections.

This needs to be read in conjunction with the Planning Statement prepared by Taylor Young, Sustainability Statement, Housing Needs and Noise Assessment. Extensive consultation has been undertaken with local residents and this is documented the Consultation Statement.

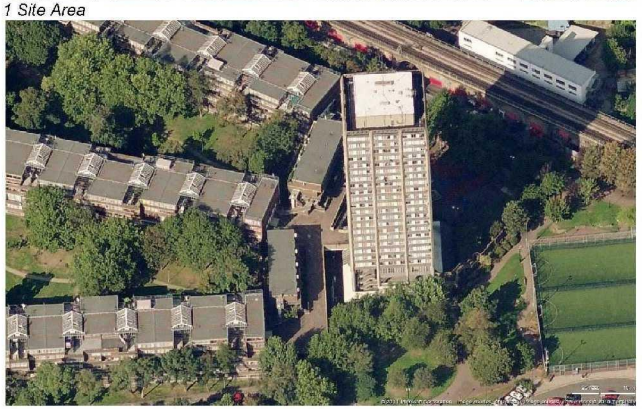


2.0 SITE

Grenfell Tower sits at the Northern end of the Lancaster West 1 Estate, in the Notting Barns Ward of North Kensington. The Estate consists of the tower and three "finger blocks" – Testerton, Hurstway and Barandon Walks – 3 and 4 storey linear residential blocks which extend 150m south from the Tower enclosing two large green spaces.

The area to the immediate east of the tower is Lancaster Green and there are children's play areas to the immediate west. While these are retained and remodelled as part of the KALC project the open space to the north which is currently all-weather football pitches is the site of the proposed Kensington Academy. The London Underground viaduct is 70m to the west and Latimer Road Tube station is 200m walk from the entrance to the tower. The new Leisure Centre is situated beyond Lancaster Green.

1 Site Area



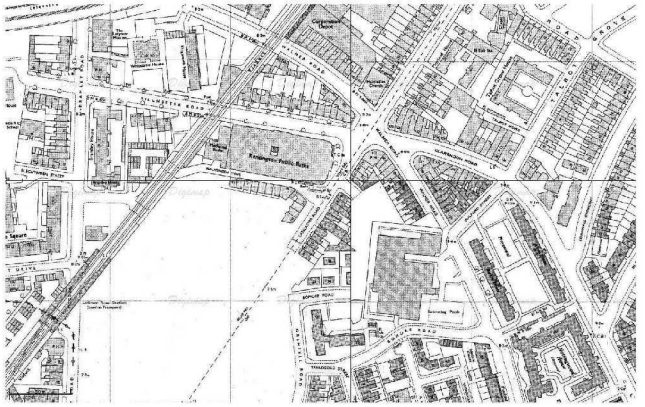
2 Grenfell tower

HISTORY

Lancaster West was built in the early 1970's, completely erasing the previous street pattern and replacing properties without internal plumbing which had become to be regarded as slum housing. The estate was designed around a network of elevated pedestrian streets. Parking and service access are at a lower ground level and all pedestrian access is at first floor deck level. This was originally freely accessible: raised streets extended north to south down the centre of each finger block, with ramped access at either end. The deck originally extended right through the base of the tower. The streets – referred to as Walkways – are linked together into a single network at the northern end and the connection to Grenfell Tower is via a bridge at its south-west corner.

In the early 1990's various improvements and changes were made across the estate, the most significant being access control. New glazed screens and doors with key-fob access now secure the blocks individually, restricting the use of the streets as thoroughfares. Whereas Grenfell Tower once had more than one point of access, including at Walkway level, it is now only accessible via a small reception at ground level on the south side of the tower.

One of the changes made at the time was the closing off of the single public lift to Grenfell tower which serves Ground, Walkway and Walkway +1 levels. The latter originally served as a Doctor's Surgery and most recently it was occupied by RBKC Social Services. There is now no lift access between the ground floor parking level and the Walkway anywhere across the estate. The original concept of the elevated street is unchanged for the residents of the finger blocks and it is still the level at which they gain access to their front doors. The service yard and lower ground parking was intended to be out of site and to achieve this the lower ground level was artificially dropped by approximately 2m from the surrounding grade level. All traffic accessing this undercroft – refuse trucks, maintenance vehicles, residents – is directed to the lowest point in this "site bowl" – directly opposite the Grenfell tower entrance. For the residents of Grenfell tower the yard is very much in view, not tidily concealed. It is a hostile environment for pedestrians and a dark unpleasant space to be in. While it is not possible to fundamentally alter the system of refuse collection or vehicle movement the TMO intend reducing the amount of traffic in this area and this application proposes transforming it into a pedestrian priority zone.



3 OS map of the site 1970

4 Lancaster Green

5 Service Access to east side of tower

SPD

The Special Planning Guidance (SPD) for this site deals primarily with the siting of the proposed Academy and Leisure Centre and the Public Realm. It is this last aspect which is most important because of the fractured nature of the KALC site, a consequence of its historic piecemeal development. The SPD seeks to improve the pedestrian (and visual) links across the site, beginning with a new north-south shared surface, starting at Grenfell Road at its southern end and connecting with Silchester Road on the north. The new north-south route is part of the KALC Planning Application and will be controlled by retractable bollards at both ends.

An improved east/west link is also indicated on the SPD on the south side of the tower because this is currently not a level direct pedestrian route. It is the shortest route from Station Walk and the tower entrance, and a natural desire line for anyone crossing the site by foot.

The area to the west of Grenfell Tower was originally a walled garden and for residents' use only (figure 8). A youth club and Tenant's Association meeting areas at the base of the tower both (figure 9) opened directly onto the garden and there were several means of access from Walkway level. It was not a public thoroughfare. One route down from Walkway is a stepped and curved ramp on the west side of the tower. This does not extend down to grade, perhaps because of the limited space available for the ramp. This intermediate ground level and the position of the ramp blocks the direct east-west connection highlighted in the SPD. One has to walk up, change direction and walk down another stair to pass.

Over the years the garden has been opened up. The Youth Club is no more and the current tenants at the base of the tower – a nursery and amateur boxing club – need public access. The SPD sees the removal of the stepped ramp and the area levelled and opened up.

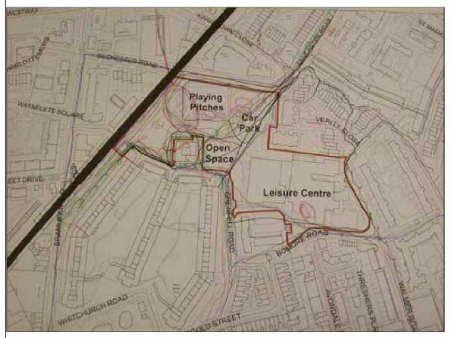
East-West Connection

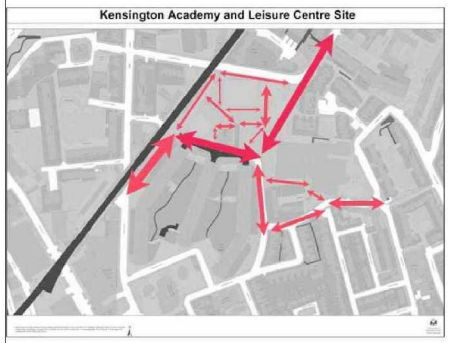
5.4.5 The map in Appendix 2 shows there is a popular east-west connection at ground level to the South of Grenfell Tower under Grenfell Walk. At present this route is poorly defined, dominated by the servicing yard for Lancaster West and Grenfell Tower and includes steps, limiting disabled access. Whilst not included as part of the site, an improved pedestrian environment should be provided as an integral part of the project.

6 SPD - Extract

Appendix 2: Walking Routes

The first image shown below is a photograph showing residents preferred walking routes. This information was obtained from the consultation event held by the Council on 20th November 2010. The second image is a graphical reproduction of this.





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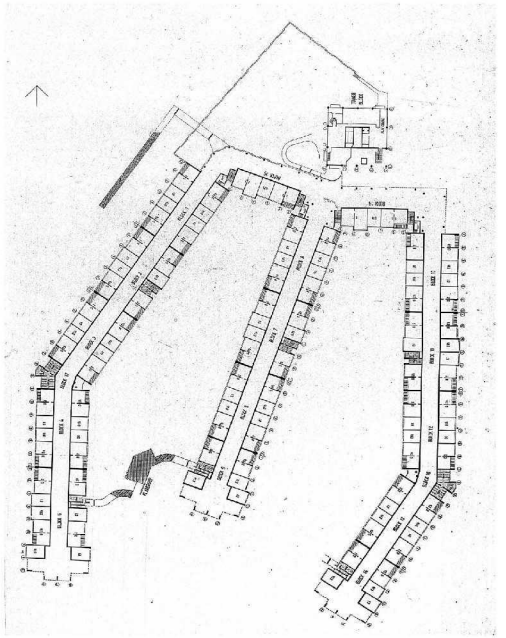
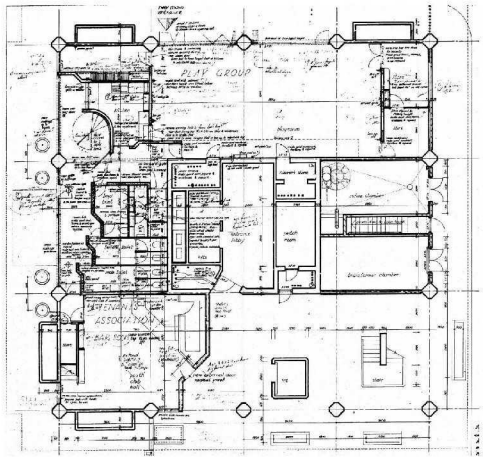
7 SPD - Appendix 2



8 Original drawing - Lower Ground Floor of Lancaster West



9 Original drawing - Ground Floor

KENSINGTON ACADEMY AND LEISURE CENTRE

The proposed site plan of the reconfigured KALC public realm is shown below.

The organizing north-south route required in the SPD has been overlaid with a new east-west pedestrian route that runs between the new Academy and Grenfell Tower and kinks south-eastwards to link to the cafe and main entrance to the Leisure Centre and Bomore Road. The open space of Lancaster Green has been extended eastwards with the new green space opened up to the south west of the Leisure Centre. The children's play area on the west has been reconfigured to provide the same area currently does. The stepped ramp and external stair to Walkway level are shown removed.

The loss in means of access between Walkway and ground level is addressed in the design and discussed under section 4.0, Layout.

The Academy hugs the northern boundary to keep as much distance as possible between it and Grenfell Tower, rising from a two-storey block on the Sports Centre end (west) to a four-storey mass at the main entrance on the north east.

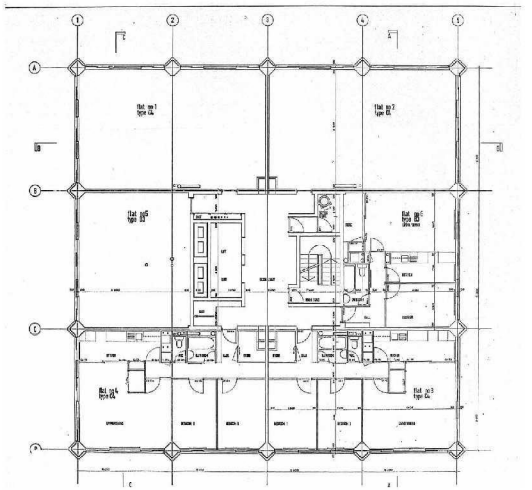
GRENFELL TOWER

Grenfell Tower comprises 20 storeys of residential flats and four storeys of community/office spaces at podium level. It is roughly square in plan and the residential floors are identical: 4no. 2-bed flats – one on each corner –and 2no. 1-bed flats – one facing east and the other west. The north and south elevations are almost identical, as are the east and west.

The structural frame: columns, core, stairs and floor plates are in-situ poured concrete. Pre-cast concrete panels form the cladding to the residential floors: one panel type serves as a horizontal structural spandrel, spanning column to column and the other is a facing to the columns, each panel a full storey height.

10 KALC. Reprovided play area to west of the tower, re-landscaped green to the east

11 View of base to east side of tower



12 Standard residential floor plan - 2 bed units at thecorners.

3.0 USE

RESIDENTIAL

This proposal sees no change to the 20 floors of existing flats. New residential properties are proposed at the Walkway +1 and Mezzanine levels. Large family homes have been identified as a priority need and four are proposed at Walkway +1 and three at Mezzanine – seven in total.

NURSERY

The Grenfell Under 3's nursery currently occupies the Mezzanine level. This space is unfortunate for a nursery because:

- It is above ground level, has no lift and the small stair makes access and egress difficult. Young children especially need easy access to the outside.
- The space is divided into two disconnected areas which makes managing the nursery and moving between the two spaces awkward.
- The high windows block views out, especially for children and the low canopy which extends on all four sides of the tower make the spaces very dark. As part of these proposals the nursery is moved to ground floor with the entrance on the west elevation, close to the reprovided and fenced play area. Our solution to this is described under "Layout"

BOXING CLUB

The Dale Boxing club is currently occupying the ground floor; it is a very small facility for a vibrant and successful club that has produced several champions and a gold medallist at the 2008 Beijing Olympics. The proposal is to relocate the club to a new space at Walkway level, in part created from enclosing the unused and ex-Walkway area on the north half of the tower. The club will enjoy more space, better facilities and high ceilings across the gym – something their existing space does not afford – so all of it can be used for sparring and training.

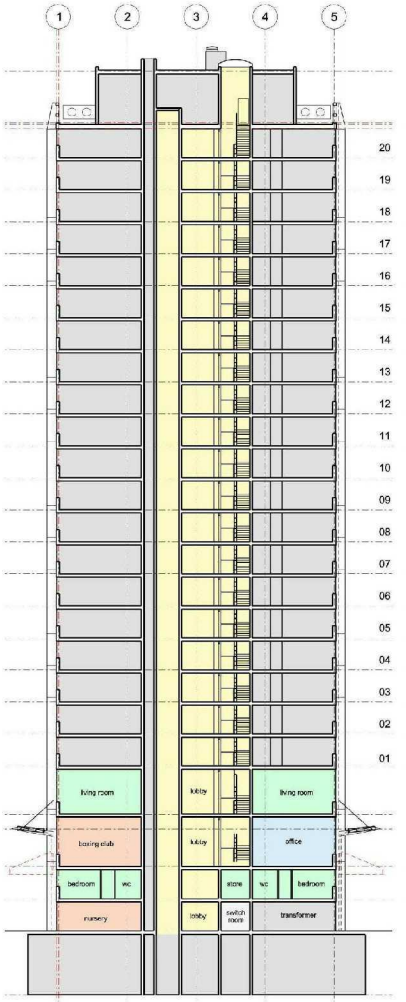
OFFICE

The existing TMO Estate Management office on Walkway level will be re-provided in a slightly smaller area on the south east corner. This location is ideal for them to monitor deliveries and traffic in the service area.

New flexible office space is created from five garages opposite the Grenfell Tower entrance. This office could be used by TMO staff, EMB staff, Estate contractors or potentially private tenants.

13 Dale Youth Boxing Club, ground floor.

14 Nursery at mezzanine



15 Cross section showing reconfigured areas at podium level coloured

4.0 AMOUNT

The proposed and existing internal areas covered under this application are summarized in the table opposite.

	Grenfell Tower	
	Existing m²	Proposed m²
Basement		
Gross Internal Area (approximate)	650	650
Ground		
Boxing Club	190.6	0
Nursery	0	218.5
Gross Internal Area	437.5	491.8
Mezzanine		
Nursery	244.5	0
3b5p residential unit 1	0	126.9
3b5p residential unit 2	0	102.3
3b5p residential unit 3	0	101.9
Gross Internal Area	290.6	440.3
Walkway Level		
Office	118.2	102
Boxing Club	0	249.1
Gross Internal Area	204.1	472.6
Walkway +1 Level		
Vacant office	378.4	0
4b6p residential unit 4		101.5
4b6p residential unit 5		101.5
4b6p residential unit 6		101.5
4b6p residential unit 7		101.5
Gross Internal Area	394.3	472.6
Typical Residential Level		
Gross Internal Area	472.6	472.6
Roof Plant Level		
Gross Internal Area (approximate)	250	250

	Garages	
	Existing	Proposed
Ground Floor Office	0	135.7

5.0 LAYOUT

The key changes proposed to the internal organization of the tower are:

- Removal of the external concrete stair on the south east corner to make way for new floor space at ground, mezzanine, walkway and Walkway+1.
- Creation of a new stair and lift on the south west corner of the tower, connecting the lower three levels.
- Infill of voids and extension to the mezzanine floor slab to create extra space to become residential properties.
- A remodelled reception to be larger, more welcoming and provide surveillance to the doors, new lift and stairs.

The proposal is that the new stair would be generally accessible to residents, therefore replacing the external stepped ramp as a means of getting between ground and Walkway level. A new connection on the bridge is created to achieve this. This stair also provides the last two flights of stairs down to ground for residents in the floors above. The original fire escape strategy involves leaving the building at Walkway level and escaping via the bridge or one of the two external stairs.

Given the location of the Electrical switch room at Ground and the greater floor-to-floor heights it is not possible to extend the original escape stair directly down to ground level so the new stair has to become the necessary protected route out in the event of an emergency.

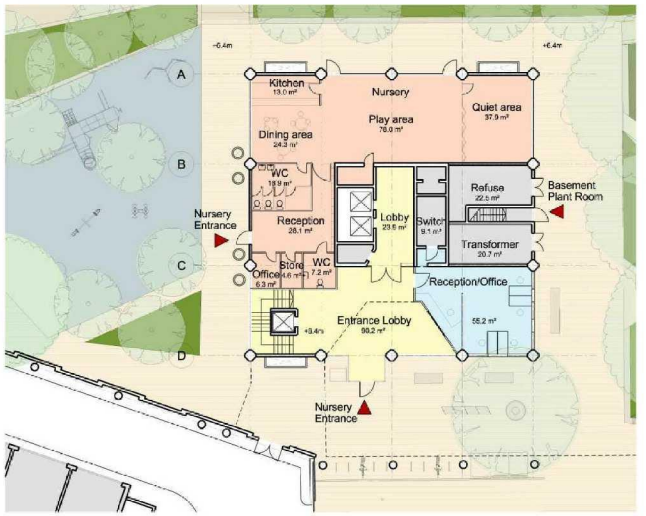
The location of the transformer Room, lifts and refuse chute are fixed and relocating them is beyond the scope of this project. Within the given footprint (roughly 22x22m square) and the concrete structure we are proposing the following at each level:

GRENFELL TOWER - GROUND FLOOR

- Enlarged entrance foyer, new stair and Part M compliant lift
- Concierge / reception desk with view of main entrance, new lift and stair and the entrance to the main lift core.
- New office for the EMB (Estates Management Board) inspectors. This office is transferred from its existing location on the north-east corner of Barandon Walk.
- Relocated nursery in an L-shaped configuration. The proposed entance is on the west elevation to give direct connection to the play area, and to use the west leg of the "L" as a foyer and office spaces and keep the main space a simple rectangular shape for easier supervision and greater flexibility. The strip of paving to the immediate north of the tower is not part of the east-west route across the KALC site. By virtue of being at grade and not being a thoroughfare, and having a canopy lends itself to becoming a dedicated outdoor area for the nursery.

MEZZANINE

This level is not served by the two central lifts and it is proposed that only the new lift stops at mezzanine level. A new slab in what is a lift lobby on the floor above an below is nevertheless necessary to give access to the three new residential units: 3bed, 5 person dwellings laid out in accordance with the London Housing Guide



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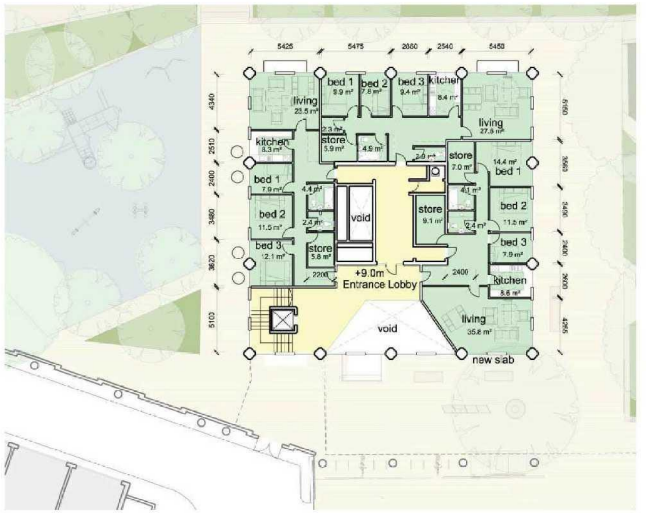

17

WALKWAY LEVEL

The boxing club occupies over half the available floorplate and the relocated Estate's Management office the rest. Access to both is via the new stair and lift.

WALKWAY +1 LEVEL

A new "shell and core" arrangement similar to the 20 floors above is proposed with some structural changes: new floor slab, new lift door openings, new connection to the refuse chute and a new connection to the escape stair.

Four 4-bed units are arranged in each quadrant with the structural module having a strong influence on the layout: the bedrooms are situated on the north and south elevations and the living spaces face east and west where the structural module is wider. The kitchens are directly below the kitchens to the two-bed units above, which is important to maintain a vertical continuity of services such as gas and water.

GARAGES

The five garages opposite Grenfell Tower are proposed as new office space. The current situation of recycling bins being parked directly outside Grenfell tower is improved with a dedicated space in the converted garage for recycling.

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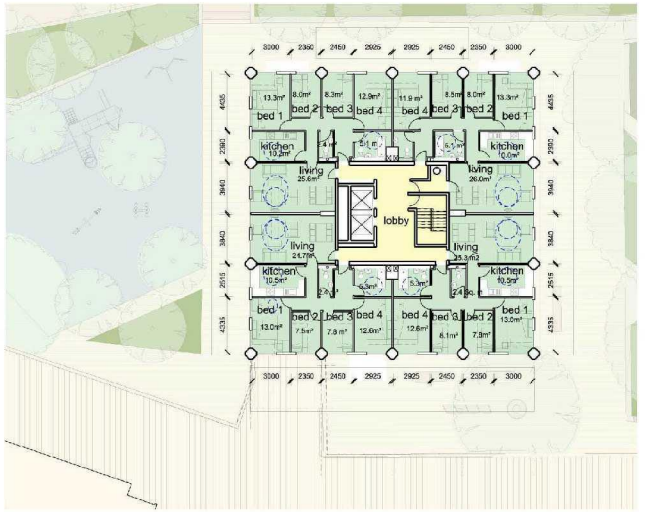

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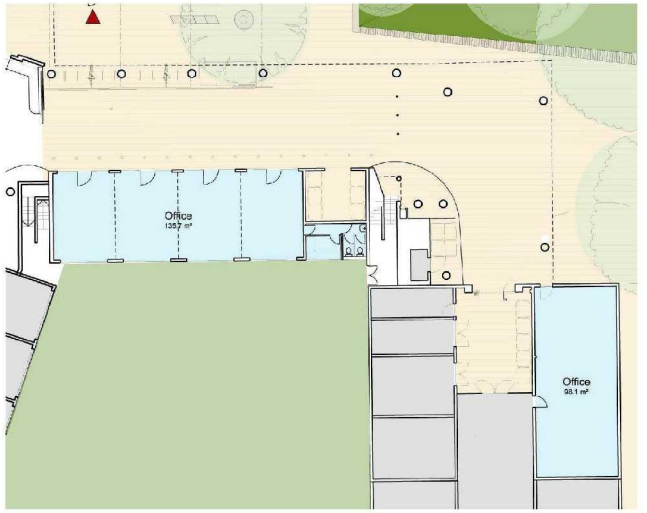

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6.0 LANDSCAPING

Grenfell Tower sits at the southern edge of the 2 hectare site which is the subject of development proposals associated with the Kensington and Chelsea Academy and Leisure Centre. The following text needs to be considered alongside the current proposals for the Kalc project which are currently the subject of a planning approval.

EXISTING CONDITION

The external areas to the four sides of the tower lack any real sense of place or arrival. The building sits within a skirt of low quality pavings which allow pedestrians to move around its base on all sides.

The south side of the building provides the principal means of access to the tower for pedestrians. However this is also the primary access route for vehicles approaching from the south and Grenfell Road. This is an area with a utilitarian quality dominated by tarmac and paving slabs. The south side of the building gives access onto a narrow paved forecourt accommodating bicycle and motorbike stands. A low wall separates the space immediately adjacent to the tower from a service road which provides access to the baseline offices and the parking areas under the Testerton and Hurstway blocks. This area is dark and overshadowed sitting in part under the first floor access deck to the adjacent residential blocks.

21 Service yard

To the west is the existing children's playground which wraps around the north west corner of the building. In the south west corner is a brick stepped ramp which provides the means of access onto the raised deck. The ramp lands on a low raised platform which means that all pedestrians passing around this corner of the building have to go up and then down a small flight of steps, making access around the south side of the tower more difficult than it need be.

It is understood that the existing playground is very successful with children of all ages, including those attending the crèche, regularly using the facility, particularly during the summer months. The playground is currently divorced from the wider public realm by a high brick walls. The playground is sub divided into the main play space and a more secluded private garden space. It is understood that this second enclosure has only recently seen the addition of play equipment, previously this was a quieter more contemplative space. The playground is secured by 1.8 metre high railings. The area contains a number of existing trees, those along the southern edge being of slightly higher quality with 2 mature London Plane providing visual screening from the elevated Metropolitan Line. A high graffiti clad wall defines the southern edge of the space.

22 Stepped Ramp, playground on right

23 Ramp blocks route to main entrance

To the north of the tower is a narrow service road set behind a dense belt of shrubs and trees. The existing fire escape stairs on this side of the tower jut out into the space.

On the east side the tower overlooks a wide access road which then becomes a slabbed path containing 4 large London Plane the roots of which have lifted the paving. Lancaster Green is then to the immediate east providing a green outlook on this side of the building. The present mounded form of Grenfell Tower establishes a degree of visual separation between the base of the tower and the wider public realm.

Despite the presence of the playground which is clearly a valuable asset for the residents it would appear that the spaces immediately adjacent to the tower provide little significant benefit for the residents in terms of areas for active use, the majority of green space accommodates only informal relaxation and dog exercising. Given the space available, this is a missed opportunity.

24 Grafitti wall

25 Children's playground

PROPOSALS

The proposals for the base of the tower need to be read in association with the plans for the Kensington Academy and Leisure Centre. While it is essential that the spaces are integrated with the wider KALC project, it would be beneficial if the spaces immediately adjacent to the tower were seen belonging to the residents of the block.

The removal of the existing stepped ramp will go a considerable way to delivering a more meaningful sense of space on the west side of the tower, providing level access from Station Walk around the south side of the playground and then along the south side of the tower onto Grenfell Road. While the east – west link remains the primary route for those crossing the site or accessing the Academy or the Leisure Centre, the removal of these steps will encourage short cutting by some local users which will encourage heavier use of the route and, in so doing, enhance passive surveillance.

The playground is re-provided slightly further to the south, the quantity and quality of the play equipment maintaining or improving what is currently provided. Its northern edge is now defined by the east – west route and the secondary public entrance to the academy. The levels are used to create a slight sense of division between the heavily used pathway and the spaces adjacent to the tower base. By elevating the east – west path by circa 500mm it is possible to achieve a sense of division without creating a narrow corridor like space along this side of the tower. A ramp leads down to the north east corner of the tower from Lancaster Green achieving fully inclusive access. It is envisaged that the space alongside the tower will be separated by a low fence with access via pairs of gates at both corners of the building.

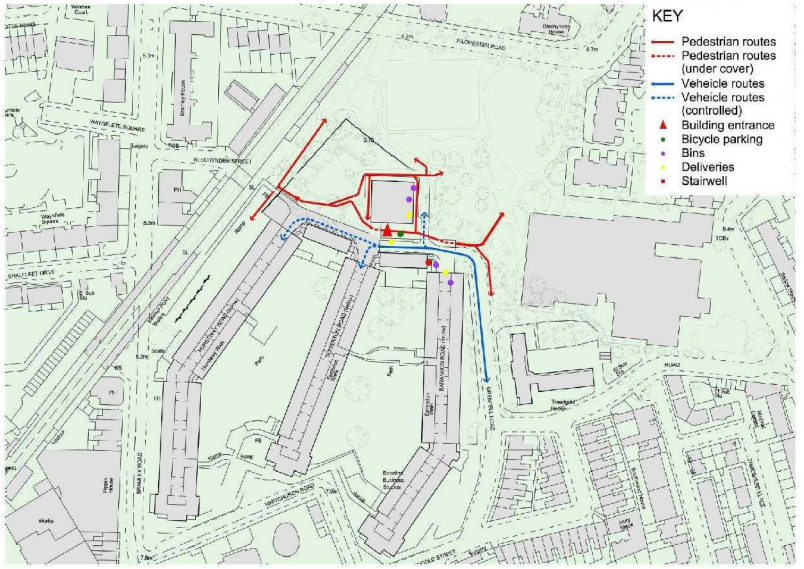
On the east side Lancaster Green is drawn much closer to the tower absorbing the existing strip of broken paving slabs under the London Plane and part of the adjacent road. The shallow embankment which rises onto the green will be populated with small seating areas set amongst low shrubs providing quieter spaces for reading and for other passive recreation.

The southern side of the tower will experience the greatest level of transformation. The existing low brick wall will be removed and the bike stands reprovided under the elevated walkway. An expanse of open paving will then extend down to the existing garage doors providing a simple uncluttered hard landscape space as a more appropriate threshold to Grenfell Tower.

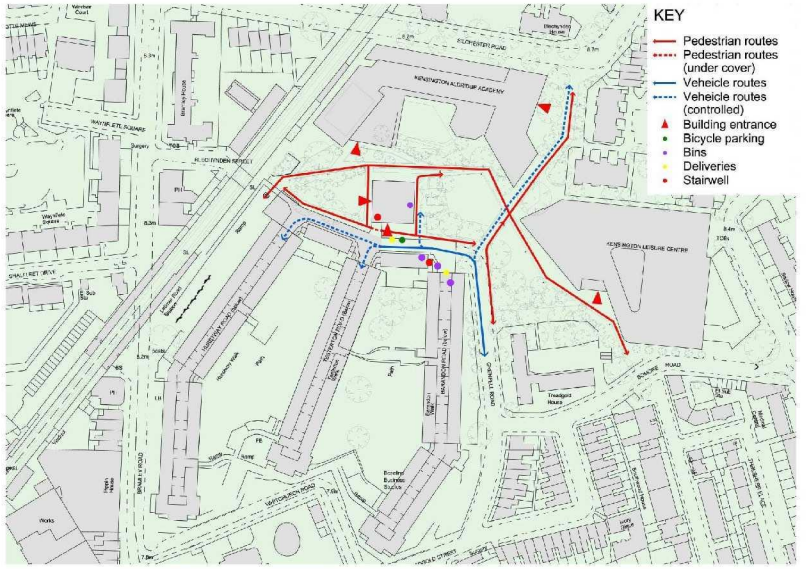
The diagrams overleaf illustrate the current and proposed access arrangements to the site.

26 Landscape Proposals

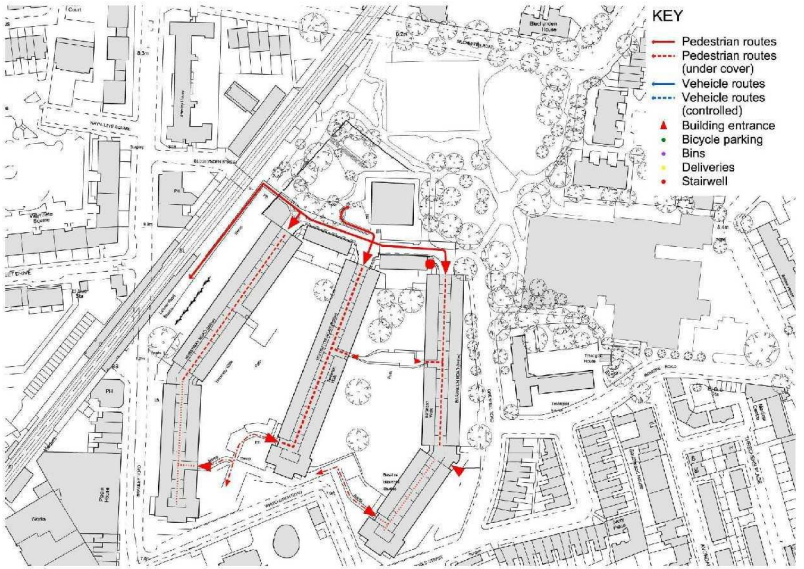
ACCESS DIAGRAMS



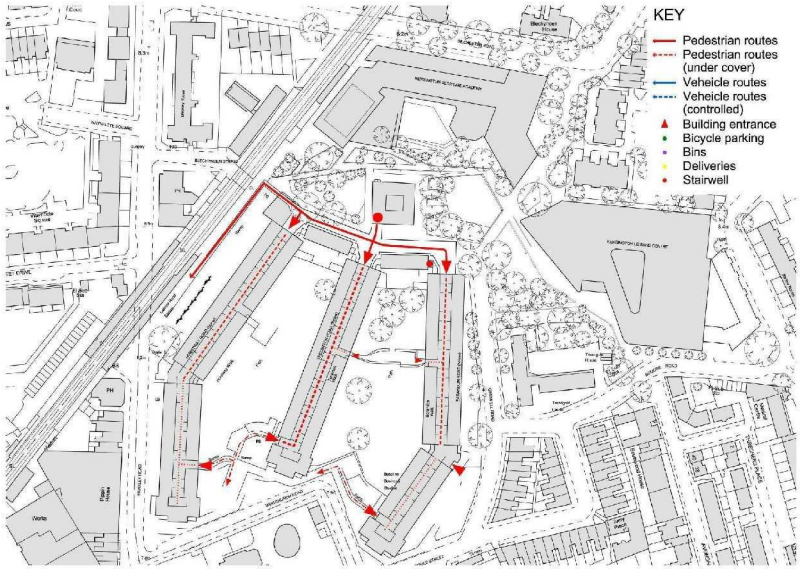
27 Existing - Circulation and Access at Ground



28 Proposed opening up of pedestrian routes



29 Existing - Deck Level Access

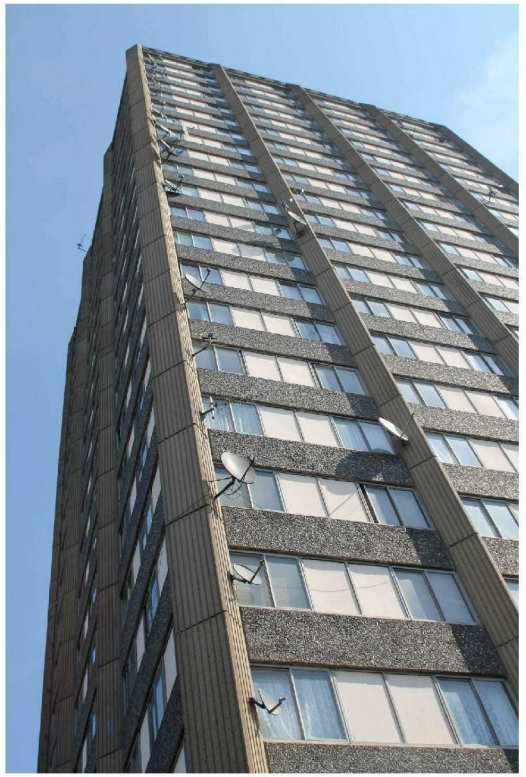


30 Proposed replacement of stepped ramp with new internal stair

7.0 APPEARANCE

EXISTING BUILDING

Grenfell Tower is a concrete structure with mill finished (unfinished) aluminium windows. The external walls to the finger blocks are brick but there is relatively little used on Grenfell tower and only at the ground level. For the upper 20 storeys precast concrete cladding has been used: one panel type serves as a structural spandrel under the windows (horizontal) and the other is a decorative facing to the triangular pilasters, each a full storey height of 2.6m (vertical). This system sets up a simple visual language of modular elements: horizontal rough, washed aggregate for the spandrels, lighter and sharper detail on the vertical columns with cast-in vertical grooves, and aluminium framed "strip glazing" between. The infill panels between each window are a smooth white panel so that the assembly reads as a light weight infill in a concrete frame.



31 Existing cladding

The original tower was divided compositionally into a base – the podium up to Walkway +1 level, a middle – the 20 residential floors, and a top – the plant room and pre-cast "crown" of tapered pilasters and ring of perforated freestanding beams. The perimeter columns have been rotated by 45° to read as diamonds in plan, and this generates the distinctive triangular pilasters running the full height of the building and grid across each elevation.

The existing windows are single glazed and sliding opening, each half sliding across the other so that it is in theory possible to clean the outside of outer half with the inner open and the outside of the inner half by moving it left and right of the outer window positioned mid-way in the opening. The low (980mm) internal cill height and need to reach up and out of an open window makes cleaning the windows potentially very dangerous. Retrofit restrictor devices have been fitted to all the windows which limit the opening to approximately 150mm. These can be disengaged but they do provide a measure of safety for residents, and in particular young children.

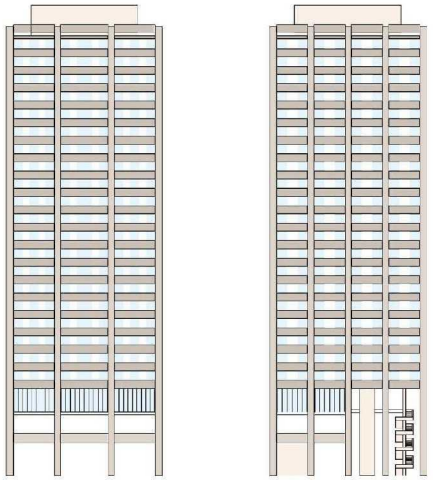
An Integrated Receiver System has recently been installed to Grenfell tower meaning all wall-mounted satellite dishes will be permanently removed as part of these proposals.

CONCEPT

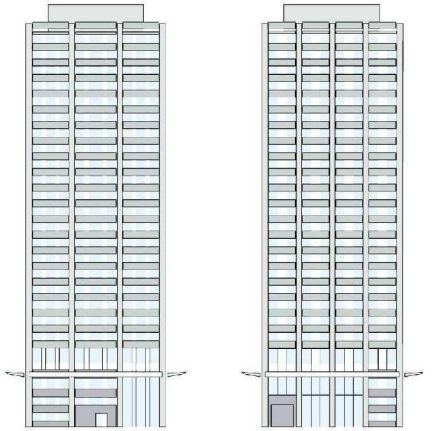
Grenfell Tower was designed as a large rectilinear mass lifted high off the ground on stilt-like columns and nestled in an urban garden. We interpret the original intent behind this concept was to mitigate the density of the development by handing over of the lowest levels to outdoor and community use. The latter part of this vision has been completely lost. The lowest levels are now entirely defensive in character and the building is separated by a tarmac road from what little garden there is. The under-utilized outdoor deck and stairs to Grenfell Tower are prime locations for mischief rather than community use, and plagued by pigeons.

The original pre-cast concept is a simple and direct solution for the elevations, albeit very uniform and even monotonous. The tower offers only limited interest in the modelling and silhouette at roof level and the constraints of existing structure and plant mean there is no opportunity to add new habitable space at roof level.

Our response to the detail design of the over-cladding to the residential floors has been to respect the visual language of the original: light verticals, darker horizontals and "window strips" as used throughout Lancaster West, including the finger blocks. We have also sought to maintain the podium or lowest four levels as a distinct "base" zone with a more glassy appearance and different cladding material. The glazed screen is full height across the four levels on the two centre bays of the north and south elevations, and on the south-west corner where the new stair is situated. These proportions work for the size of the tower and the glassy openness responds to a desire to address the outdoor spaces: and expanded entrance forecourt on the south, and the scoop of the Academy to the north.



32 Schematic - Elevations as designed circa 1970



33 Schematic - Proposed West(L) and South(R) elevations

CLADDING DESIGN BRIEF

The over-cladding works are an integral part of the upgrade to the heating of the building, while also being a complete overhaul to its appearance. New windows will deliver improved thermal performance and better functionality. The existing windows are 40 years old and at the end of their design life. More detail on the proposed energy efficiency of the complete building envelope and the parameters use in identifying the preferred window option can be found in the Sustainability Statement.

In consultation with the Design Team, the TMO and through several open workshops with residents we arrived at the following objectives for over-cladding:

- A dramatic improvement in heat loss with new insulation and air sealing which will generate significant energy savings.
- Windows which can be opened sufficiently to naturally vent the building throughout the year, without contributing to a risk of falling.
- Windows that can be safely cleaned from the inside.
- Windows that maintain the existing good levels of natural daylight internally.
- Improved acoustic performance which will bring the noise levels inside the flats to within Planning policy targets.
- To re-compose the tower with the reconfigured spaces at the lower floors into a coherent single entity and improve the overall appearance of the tower which is such a dominant presence in the public realm that will be upgraded as part of the KALC project.

WINDOWS

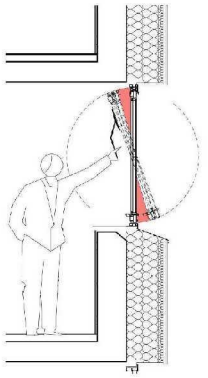
Powdercoated aluminium windows are proposed as replacements for the existing. The proposed configuration is not dissimilar to that illustrated below (34): A narrow "purge panel" opens inward to allow rapid ventilation. It is screened by horizontal louvers to ensure large objects cannot fall out. The larger panel is a pivot window which is the default means of ventilation and it will be restricted to a narrow opening in normal use. Both window halves can be cleaned safely from inside: the pivot window can be disengaged from the safe position and rotated by 180 degrees. The casement is narrow enough not to disturb internal furniture arrangements when open 90 degrees inwards.

We feel the narrow module of the grille to the purge panel introduces a new and interesting rhythm to the otherwise very rigorous geometry of the original. The calculations prepared by Max Fordham demonstrate the need to for this amount of openable area to safeguard the thermal comfort of the occupants. The windows are slightly larger than existing to compensate for the heavier frames and to therefore to maintain the good levels of natural daylight.

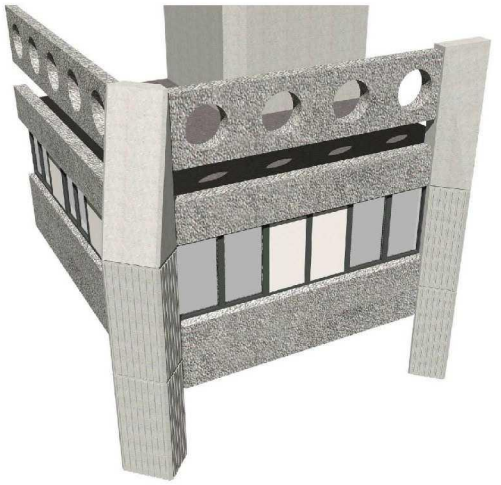
MATERIALS

A zinc composite rainscreen cladding is proposed to the upper levels. Zinc has the advantage of being a self-finished natural material that will not corrode or weather as a coated finish eventually would. It offers a clean appearance, crisp detailing at joints and an attractive dull lustre. It is not sufficiently robust to use at low level so a combination of dark brick and new high quality concrete facings for the columns is proposed for the podium level. The colour of the brick is selected to match the pallet of the tower rather than the red multi brick used on the rest of the estate. Our view is that the tower always had a different treatment; the precast panels complemented the raw and rough brick used on the finger blocks and the neutral grey zinc will do the same in the overclad condition, albeit a lightweight and more refined material. Colour is proposed in a controlled way to the solid infil panels to the new areas of curtain wall and windows. This is proposed as coloured glass.

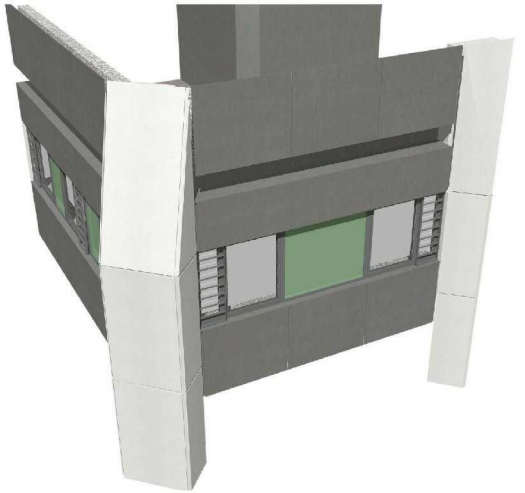
34 Grille to purge vent



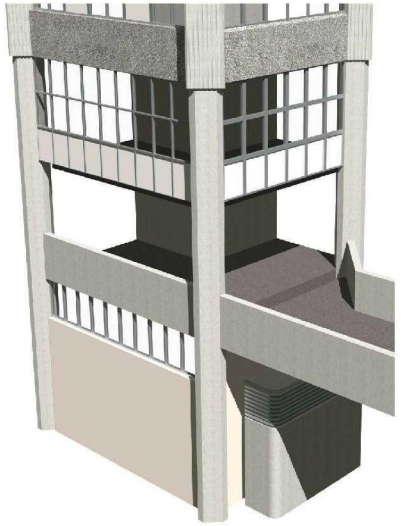
35 Pivot window



36 Corner Study - existing top corner



37 Corner Study – proposed zinc cladding



38 Corner Study - Bottom corner

39 Corner study - Proposed cladding at low level

CANOPY

As part of the improvements to the entrances in the early 1990's a 2.5m wide steel and polycarbonate canopy was added to the perimeter of Grenfell Tower. Prior to that access at ground and walkway level were set well back from the edge of the building and therefore effectively sheltered from the rain. The 1990 canopy provides a protected route around the base of the tower but at the cost of the poor daylight to the mezzanine floor. This canopy has also suffered from frequent impact by objects being dropped from above.

Several options for replacing this canopy were explored and it was felt a continuous ribbon or "skirt" would conflict with the vertical articulation of the tower so it is proposed to to design the canopy as four independent lengths rather than a continuous strip. A small gap between the canopy and the building is introduced to allow the pilasters to run visually uninterrupted down to the ground – not that differently to the existing canopy.

To improve the daylighting to the new residential units at mezzanine level and to provide cover to the new entrance at Walkway level, the canopy is raised up a full storey height. Instead of pitching down it is pitched upward with a gutter and rainwater pipes against the building. This canopy is proposed to be a solid metal finish on the top side, on topo of a plywood deck to withstand the impact of falling objects. The underside will be a flush ceiling board, detailed so as to limit opportunities for pigeons to roost, a problem with the current canopy. Access to the gutters and hoppers will be critical and this is proposed via hydraulic "cherry picker" platforms.

GARAGES

The public realm areas of the undercroft and service yard will be transformed as part of these proposals. A new ceiling will brighten the space and conceal the numerous pipes and cables mounted to the soffit. New lighting will be provided throughout. The garage doors will be replaced with glazed shopfronts for the new offices. The existing louvers in the opposite south facing wall (Figure 41) will be replaced with windows to match those to the Baseline Studios.

The Bins area will be screened and new paving to the shared surface will extend up to the entrance of Baseline, the new offices and the retractable gate to the rest of the garages.

40 Proposed canopy

41 Louvred vents to existing garages. Baseline windows can be seen to the right.

8.0 SUSTAINABILITY

This project targets the main environmental deficiency of Grenfell Tower at its root: it is hugely wasteful of energy, even to the point of the heating system contributing to regular complaints of overheating in the flats during the summer.

The improved envelope and heating system are part of an integrated solution to tackling the inefficiency and the refurbished building will be virtually compliant with current energy standards for new residential buildings.

The underlying concrete frame to the tower is in good condition and there are no concerns as to its lifespan. The selection of materials for the cladding have also been made with a view to achieving maximum life out of the investment. The Zinc and aluminium systems have lifespans of 30-50 years and can be easily recycled when the time comes to replace them. Both require little or no maintenance.

The policy context for the environmental and sustainable issues are covered in the accompanying statements. RBKC Policy CE1 requires the development to achieve a score of "Very Good" under the new BREEAM for Domestic Refurbishment assessment, and a draft is included with this application.

42 The 40-yearl-old boilers under Grenfell tower serving all of Lancaster West 1.

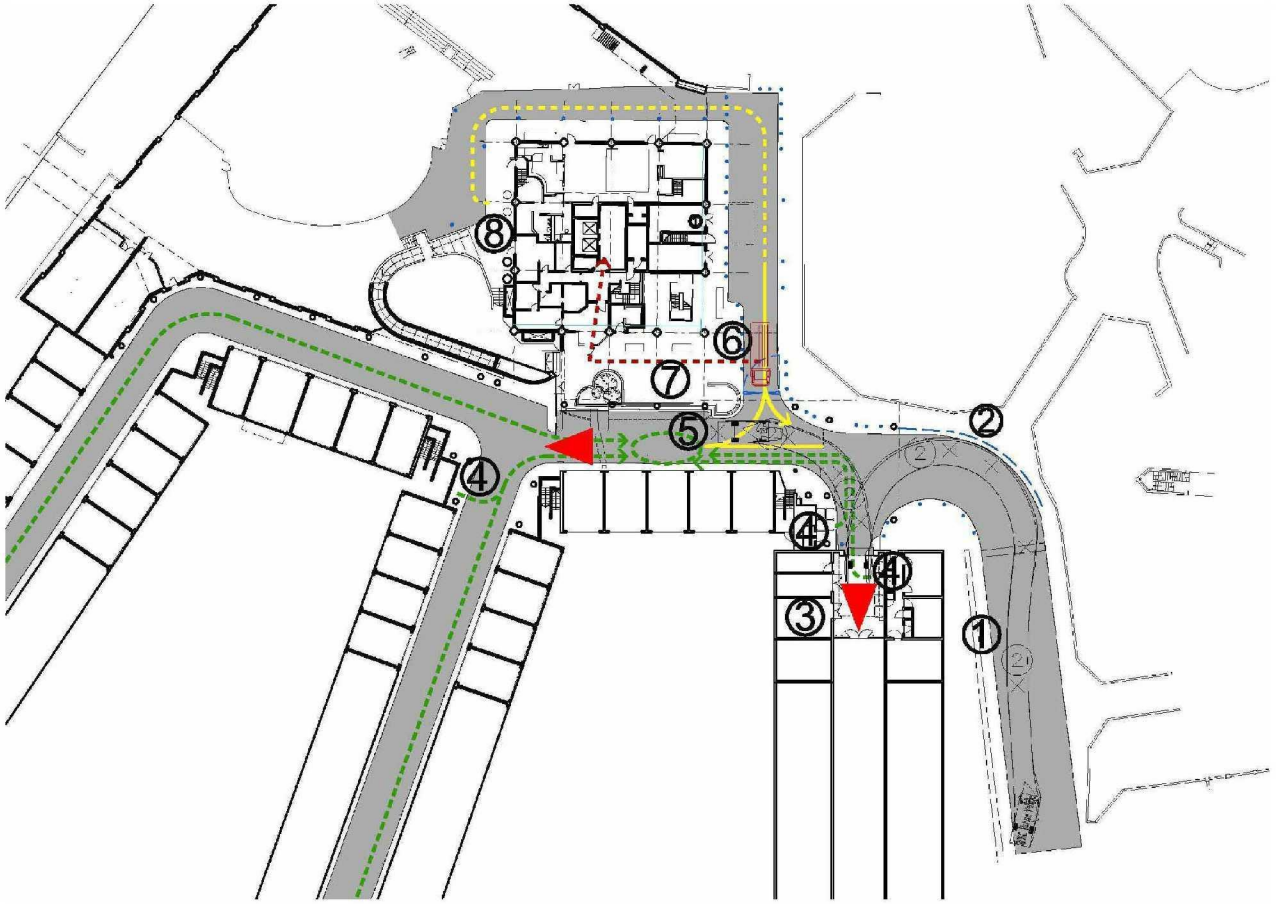
9.0 ACCESS

The diagram opposite illustrates the existing vehicle access arrangements to the area opposite Grenfell Tower. Grenfell Road is the only approach for refuse trucks serving the whole estate, the resident's parking garages, deliveries to Grenfell tower and the Baseline, the small business units created from the garages under Barandon Walk, and the large basement plant under Grenfell Tower itself. The fire strategy for Grenfell Tower requires that the Fire Tender be parked close to the entrance to be able to connect to the dry riser in the lobby and pressurize the hydrants at each floor. This can be a busy and congested area and it is managed by the EMB Estate Inspectors. Their new office on the SE corner of Grenfell Tower will give them excellent views and access to this service area.

Vehicle access will not fundamentally change as a consequence of these proposals but parking, particularly by contractors has been a major detractor from the quality and the use of this space. There is a desire to make those areas around the tower more usable by pedestrians and by residents transforming them from the current highway-like character, the objective being to establish an environment which looks like a plaza rather than a road. However, there are still traffic related issues which do need to be carefully considered and adequately addressed.

CHANGES TO ACCESS AND PARKING

Free access by vehicles must be prevented, vehicle movements into this area need to be controlled and managed. Changes of the floorscape will reinforce the message that the vehicle user has only permissive rights of access, pedestrian use being the primary focus. It is likely that motorists entering this area will do so at low speed, 10-15 mph is likely to be the norm given the restricted nature of the space. However, it will also be necessary to prevent free access by the installation of retractable bollards to the south east corner of the tower so that there is a discernible boundary between this area and Grenfell Road and between this area and the north –south link. It will also be necessary to establish a line across the southern edge of the space beyond which vehicles should clearly not progress. In an ideal world this line would be established through the use of furniture, trees, bike stands.



43 Existing Service access diagram

1. *Permit holder parking along Grenfell Road*
2. *Railings and bollards preventing illegal parking*
3. *Bulk Storage – Estates Management Board*
4. *Bins*
5. *Euro bins collection point. Bins are walked from each finger block and Grenfell tower for emptying here.*
6. *Fire Tender. Gate in place to protect access.*
7. *Bike parking*
8. *Basement Plant replacement access.*

Red Arrows indicate controlled access to garages (L) and delivery access to Baseline Studios (R).

It may also be necessary to place a retractable bollard at the south west corner of the tower following removal of the existing stepped ramp. This will prevent vehicles trying to circumnavigate the base of the tower. (Refer figure 26)

INCLUSIVE DESIGN

The design has been formulated using best practice guidance:

- Approved Documents Part M and B of the Building Regulations
- BS9999:2008 Code of Practice for means of escape for disabled people
- BS 8300:2009 Design of buildings and their approaches to meet the needs of disabled people - Code of Practice
- Department of Transport – Inclusive Mobility
- Dulux – Colour and Contrast: A design guide for the use of colour and contrast to improve the built environment for visually impaired people
- Accessible London: achieving an inclusive environment, Lifetime Homes
- LDF Access Design Guide: Supplementary Planning Document – Adopted December 2010
- Lifetime Homes 21st Century Living - Habinteg
- These documents will continue to be used through the design process as more information and detail comes to light.
- External Environment

The proposed scheme has removed these steps providing level entry to the whole of the ground floor and walkway level, ensuring ease of access for all to the facilities. The surrounding landscape provides gentle slopes to access the site and other buildings within it.

There is currently no car parking within the curtiledge of Grenfell Tower and this situation will remain. Permit-holder car parking is available on-street on Grenfell Road (22 bays, two of which are disabled.) there are additional bays nearby in Verity close (18, of which 2 are disabled). Beneath Hurstway and Testerton are a total of 109 garages available for tenants. The status of these garages is under constant review but as of July a significant proportion were not let.

Entrance/ Exit Doors

Entry to the main lobby, nursery and walkway foyer will be fully visible within the facade. All public entry doors will be 1000mm clear width; automation will be provided where required. Manifestation will be provided to meet the requirements of BS8300 and any door entry system will be positioned to suit all users.

Wayfinding

The development has two level entry points. Clear routes are provided between buildings and wayfinding tools will include the use of signage which meets the Sign Design Guide.

Internal Residential Arrangements

There is only one new floor of residential accommodation being provided, which contains four apartments. Whilst the internal walls are being gutted, there is a core of vertical circulation and services remaining; these impact on the final solution.

The following points identify the standards achieved for various elements and any deviations from them.

Corridors

The corridors within the residential zone exceed the 1050mm minimum width required, other than, one short section of corridor which is purely for means of escape.

Doors

All new doors will meet the clear opening width of 750mm applicable to the corridor widths and have the required clear leading edge to facilitate independent access.

Toilets and Bathrooms

The existing services are located within the central core of the building and the location of the sanitary facilities has been dictated by this. A bathroom and separate WC are being provided.

Due to the construction and overall plan layout the bathrooms cannot be located adjacent to a bedroom. However, the WC could be accessed off one of the bedrooms and the existing construction is being investigated to establish whether a floor drain can be installed to allow maximum flexibility in future use.

Sliding doors are being installed to the bathrooms to provide maximum manoeuvrability and a layout is provided to show a shower only alternative, should one be required.

All walls to the bathrooms will be of sufficient strength to allow the installation of grab rails.

Windows

The fenestration of the block remains and whilst windows are being replaced, there will not be any alteration to their size and shape. The windows will be chosen to allow ease of opening with the relevant safety features.

Finishes

Throughout the building materials and finishes will be chosen to ensure tonal contrast. This will include fixed furniture, decorations, carpets, all electrical and mechanical fittings, etc.

Switches and Sockets

All new sockets and switches will be located within the 450 – 1200mm off FFL range as recommended by Lifetime Homes.

DRAWINGS

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