Robin Partington & Partners

built around people

Non-material Amendment April 2016

Parker House

Contents

Appendix

Parker House Addendum Statement

This report sets out a number of technical issues identified within the consented Parker House scheme, and the proposed responses and design solutions that together form this NMA application. This follows a Pre-Application meeting with Camden Council which was held on 23rd March 2016, and attended by planning and design officers. It was agreed that the revisions were non-material in principle, subject to adequate technical and design justification.

The report demonstrates how the consented scheme does not meet minimum requirements in terms of structural and MEP design, leading to unworkable and/or heavily compromised spaces in several instances. The proposal therefore seeks to:

- address these points, to make the scheme workable and deliverable; and

- mitigate any potential visual implications on Parker Street and the immediate Conservation Area

1.0 Minor Basement Enlargement

Parker House

Plant Allocation in Basement

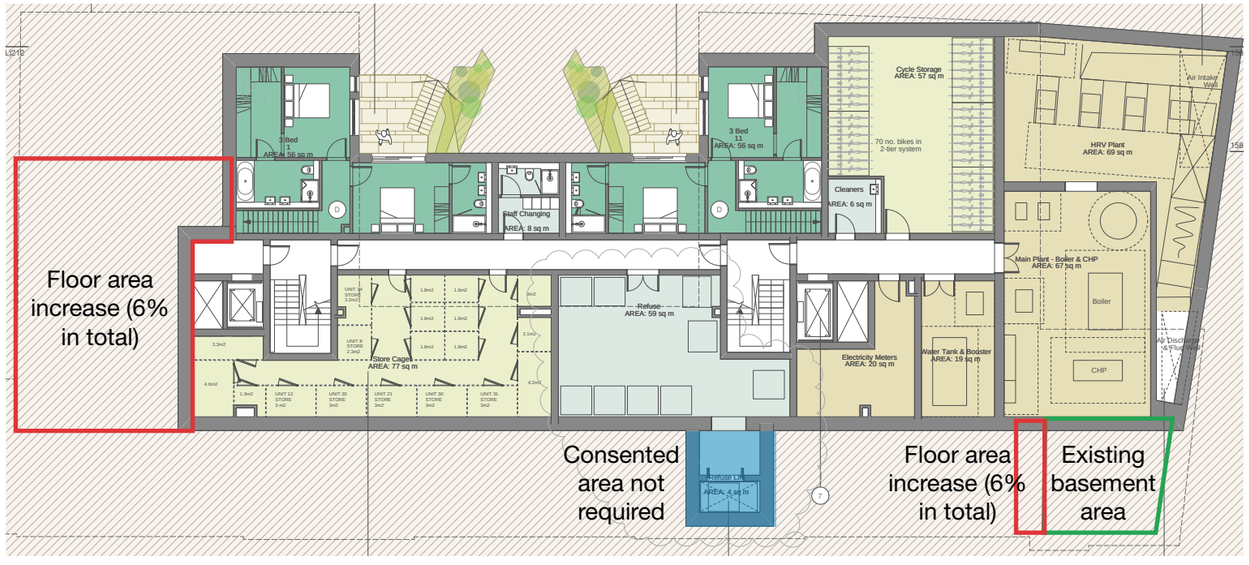
- Following an in depth analysis of the MEP strategy of the consented scheme, it was concluded by the client's MEP Engineer, Scotch Partners, that the plant area allowance had been underestimated.

- In order to maintain the consented ceiling height of the basement, and avoid any further excavation, a strategy has been devised to accommodate the required plant and assocated ductwork within a revised layout.

- The proposal incorporates an existing basement area which had not been included in the consented scheme.

- As a result, an increase in floor area of 38sqm is required, which represents a 6% increase of the consented floor area.

- The revised basemrnt layout has been reviewed and agreed by the client's structural engineer, AKT II.

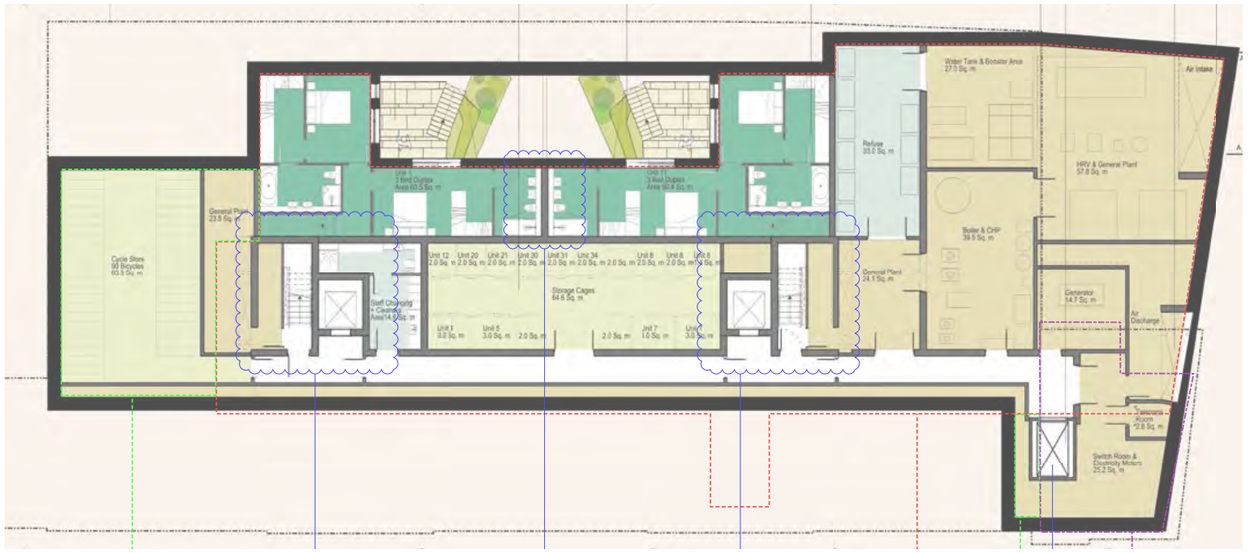


CONSENTED GROUND FLOOR PLAN

Basement GIA Schedule:

- Consented basement 635.5 sqm (not including existing basement)
- 6% increase 38.1 sqm
- Reutilised existing basement 32.4 sqm

- Proposed basement = consented + 6% increase + existing = 706 sqm



PROPOSED GROUND FLOOR PLAN

2.0 Service Distribution

Parker House

Insuficient Riser Allocation in Consented Scheme

Useable Riser Areas (insufficient)

Additional Required Riser Areas*

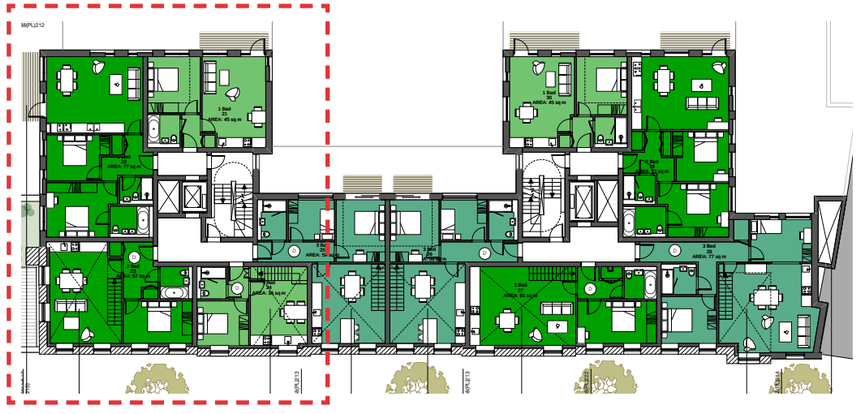
Impact of Required Riser Areas

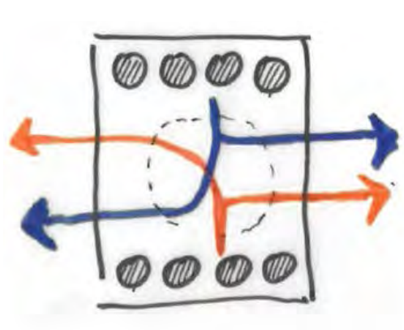
* based on consulation with Scotch Partners, MEP engineers.

CONSENTED SCHEME - TYPICAL LAYOUT, WEST CORE

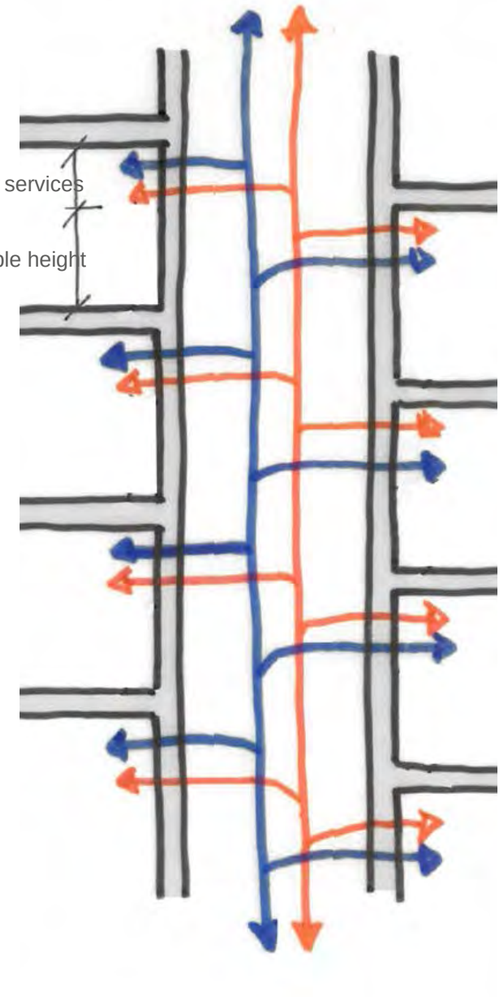
- Due to the shape of the risers throughout the building, much of the riser area is ‘unusable’ as it cannot be accessed from the landings.

- The additional riser area required must therefore be located elsewhere. As demonstrated in the diagram above, wherever this area is located, it has a major impact upon the layouts of the apartments, in many cases to the extent that they are no longer viable.





PLAN THROUGH SHAFT DIAGRAM

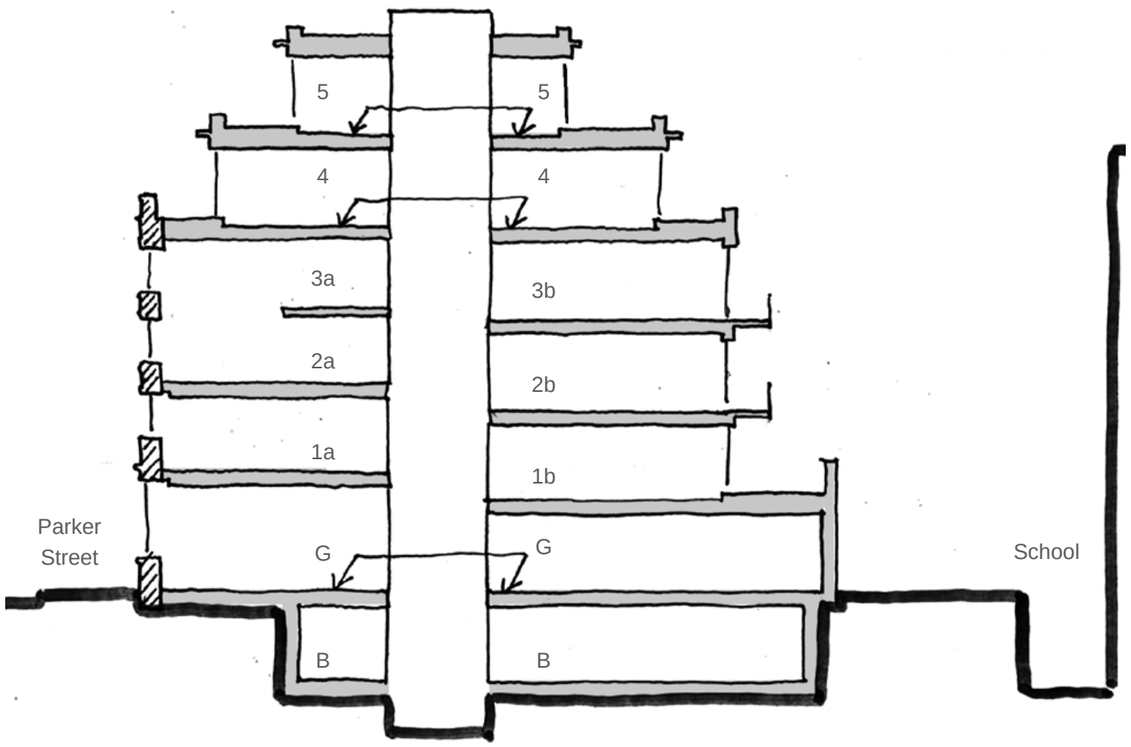


SECTION THROUGH SHAFT DIAGRAM

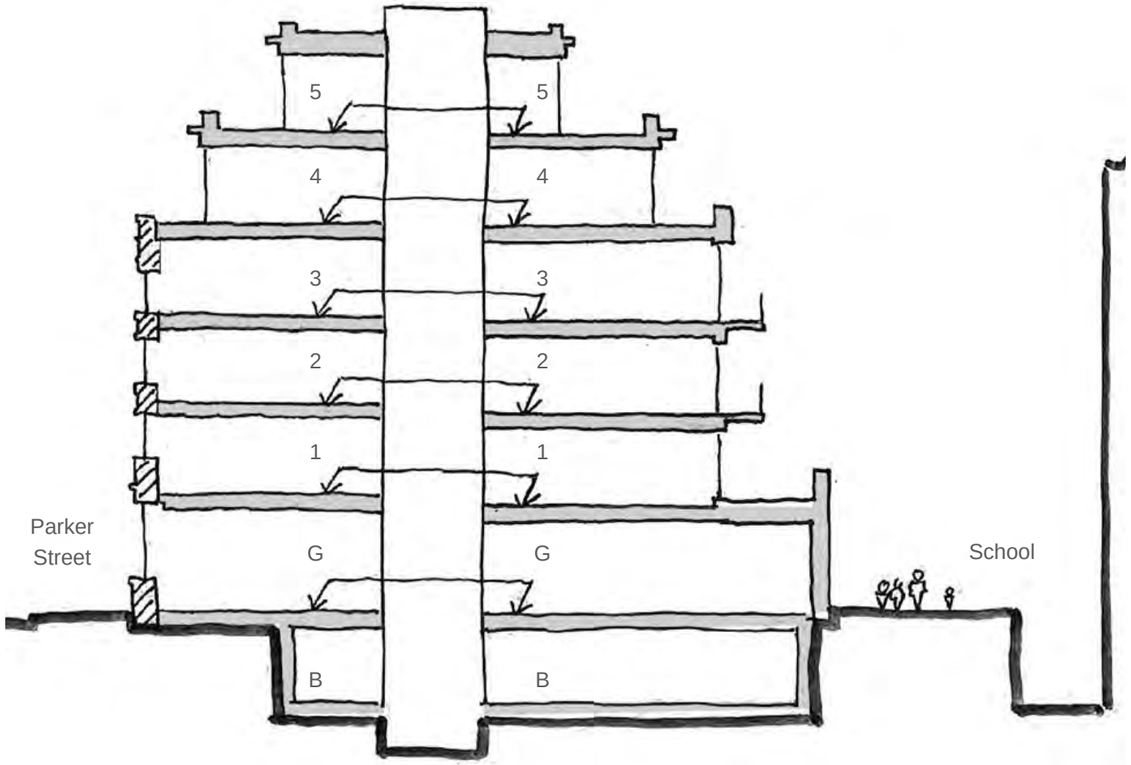
- A key feature of the consented scheme is that there is a difference in the levels between the front of the builing and the rear of the building. This means that there is a significant ‘doubling up’ of services, to serve both corridors either side of the core.

- As the services are located in the ceiling of the corridor, the more services there are, the less height is available for general circulation.

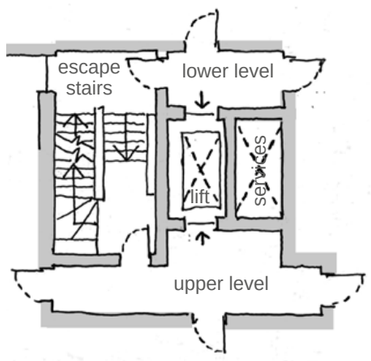
Response to Insufficient Riser Allowance



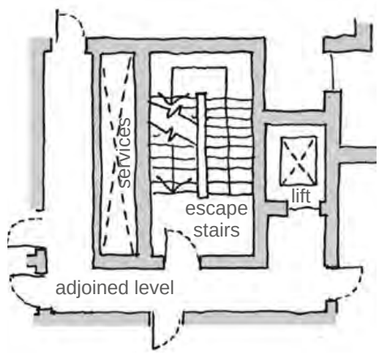
CROSS SECTION - CONSENTED SCHEME



CROSS SECTION - PROPOSED SCHEME



CORE LAYOUT - CONSENTED SCHEME



CORE LAYOUT - PROPOSED SCHEME

- Adjoining the split levels allows the following:

- A more efficient shape to the riser, accommodating all of the services, and therefore not impacting on the layouts of the apartments.

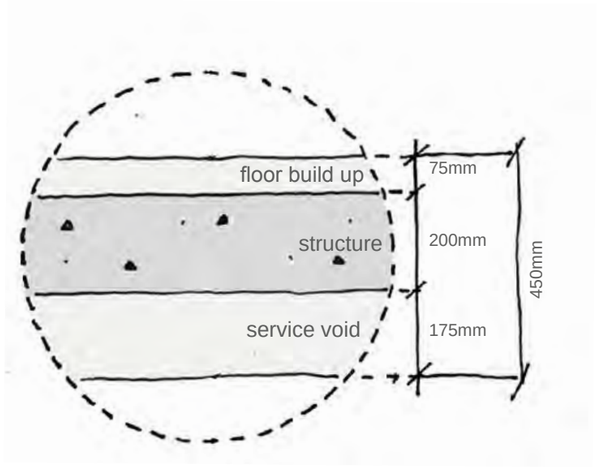
- A lesser amount of services required in the ceiling of the corridor, therfore not compromising the circulation.

3.0 Minor Height Increase

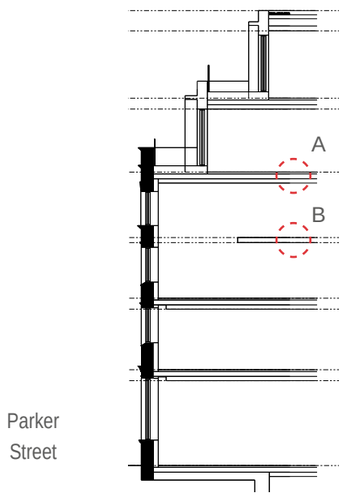
Parker House

Floor Build Up - Consented Scheme

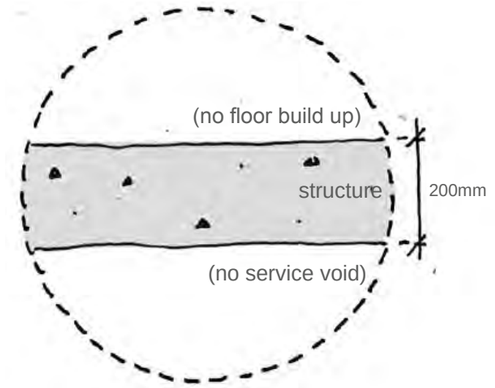
- Within the consented scheme, the typical floor build up is within a 450mm zone, and the duplex floor build up is within a 200mm zone.
- There is a consistent 200mm thick stuctural slab, with no allowance for deflections.
- Typically, there is a service void of 175mm, to accommodate all services and the dropped ceiling fixing system.
- There has been no allowance for a service void within the duplex apartments.



DETAIL A - TYPICAL FLOOR BUILD UP



CONSENTED SCHEME -
CROSS SECTION



DETAIL B - DUPLEX FLOOR BUILD UP

Floor Build Up - Proposed Scheme:
Minimum Requirements
Following Structural Engineer Input

- Details C and D demonstrate the two conditions for proposed ceiling voids, following detailed consultation with MEP consultants.

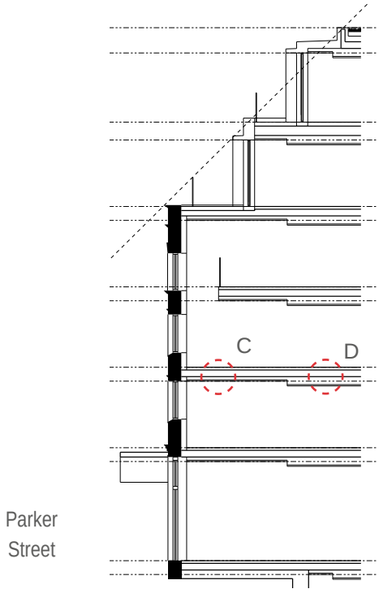
- Detail C - Ceiling void reduced to minimum in Living Room and Bedrooms:

Below the 250mm slab, a minimum 120mm zone is required for ductwork. In this condition, there can not be any crossing over of services. A suspended ceiling system, plus a plasterboard finish requires a zone of 50mm.

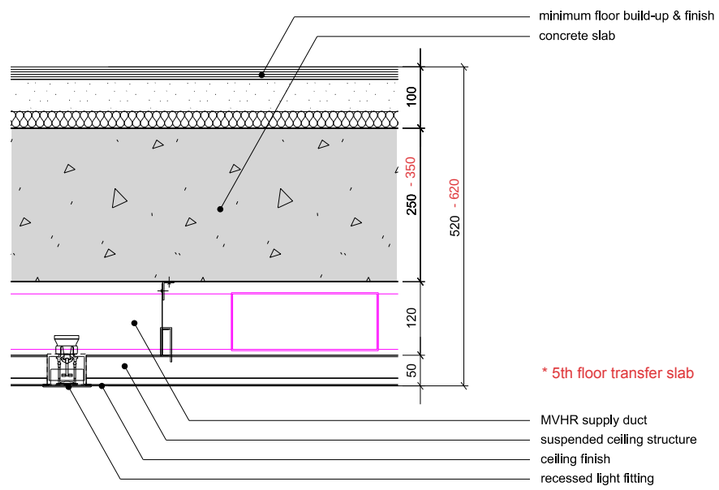
- Detail D - Ceiling void reduced to the minimum for cross overs in Bathrooms, Kitchens and Lobbies:

Below the 250mm slab, a minimum 300mm zone is required for services. This conditions is applied when the crossing over of ductwork is unavoidable. A suspended ceiling system, plus a plasterboard finish requires a zone of 50mm.

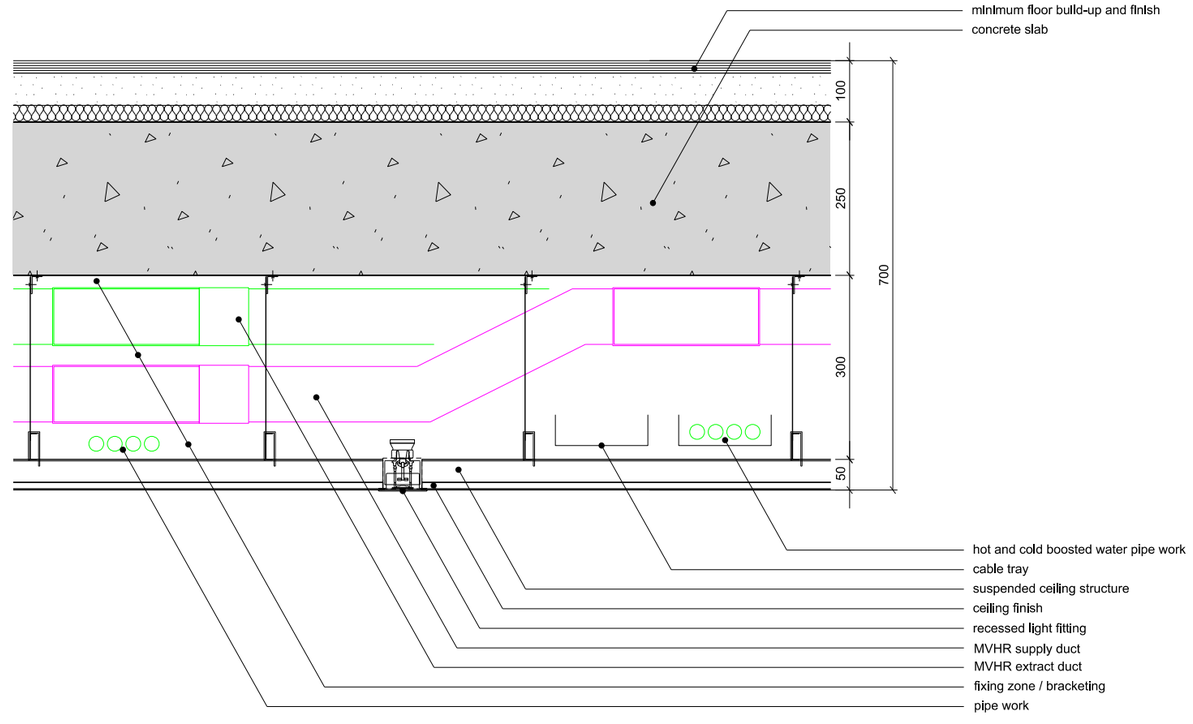
- A transfer slab of 350mm is required at fifth floor.



PROPOSED SCHEME -
CROSS SECTION



DETAIL C - Minimum Ceiling Void

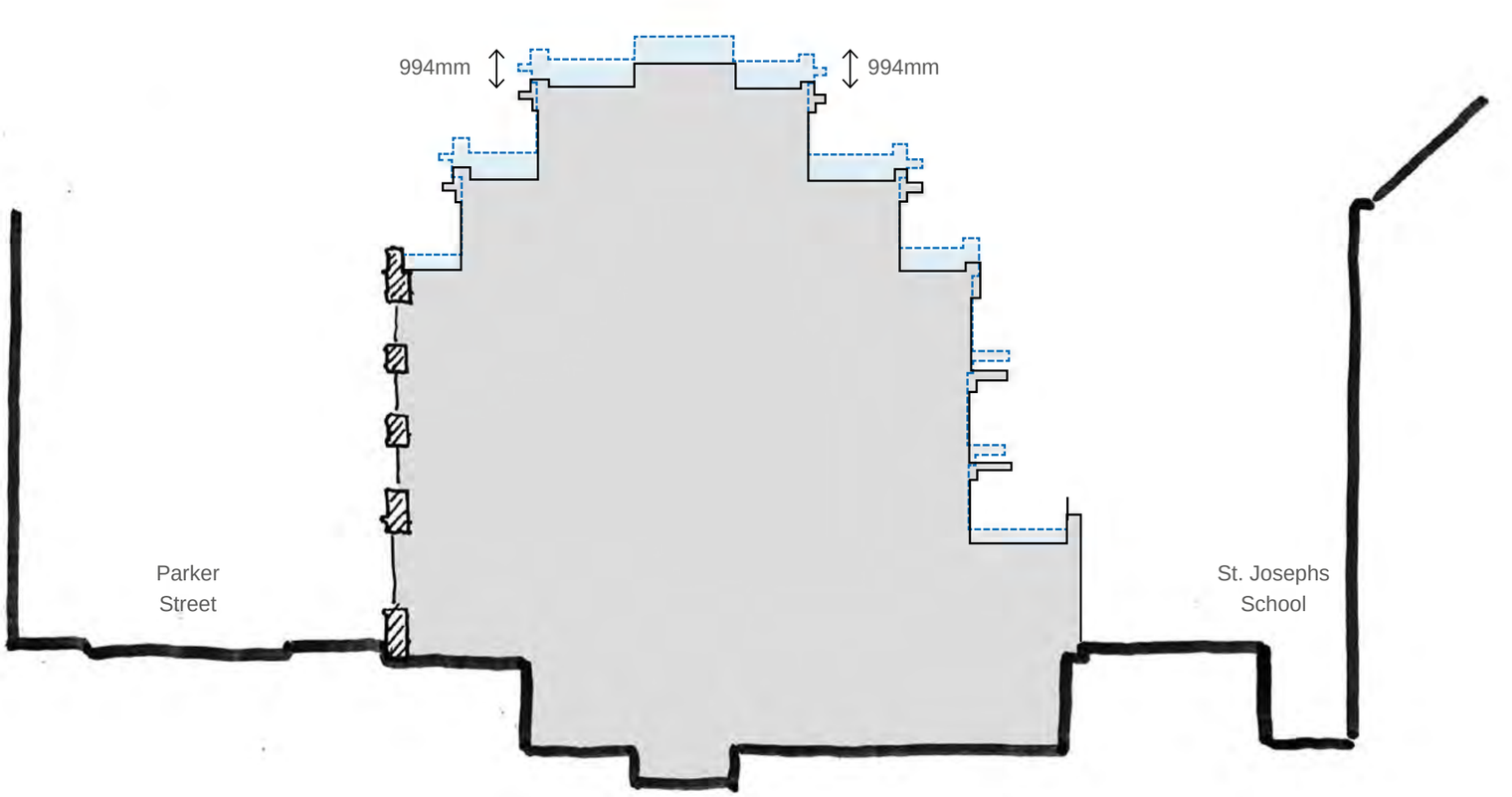


DETAIL D - Maximum Ceiling Void

Consequence of Implementing Minimum Floor Build Ups

- As a result of introducing the revised floor build up, based on minimum requirements for Structural and MEP design, whilst respecting the ceiling heights within the consented scheme, the overall height of the building raises by 994mm.

- Pages 12 and 13 demonstrate the level differences between the consented and proposed schemes in more detail.



CONSENTED / PROPOSED LEVELS OVERLAY

Section Facing Parker Street

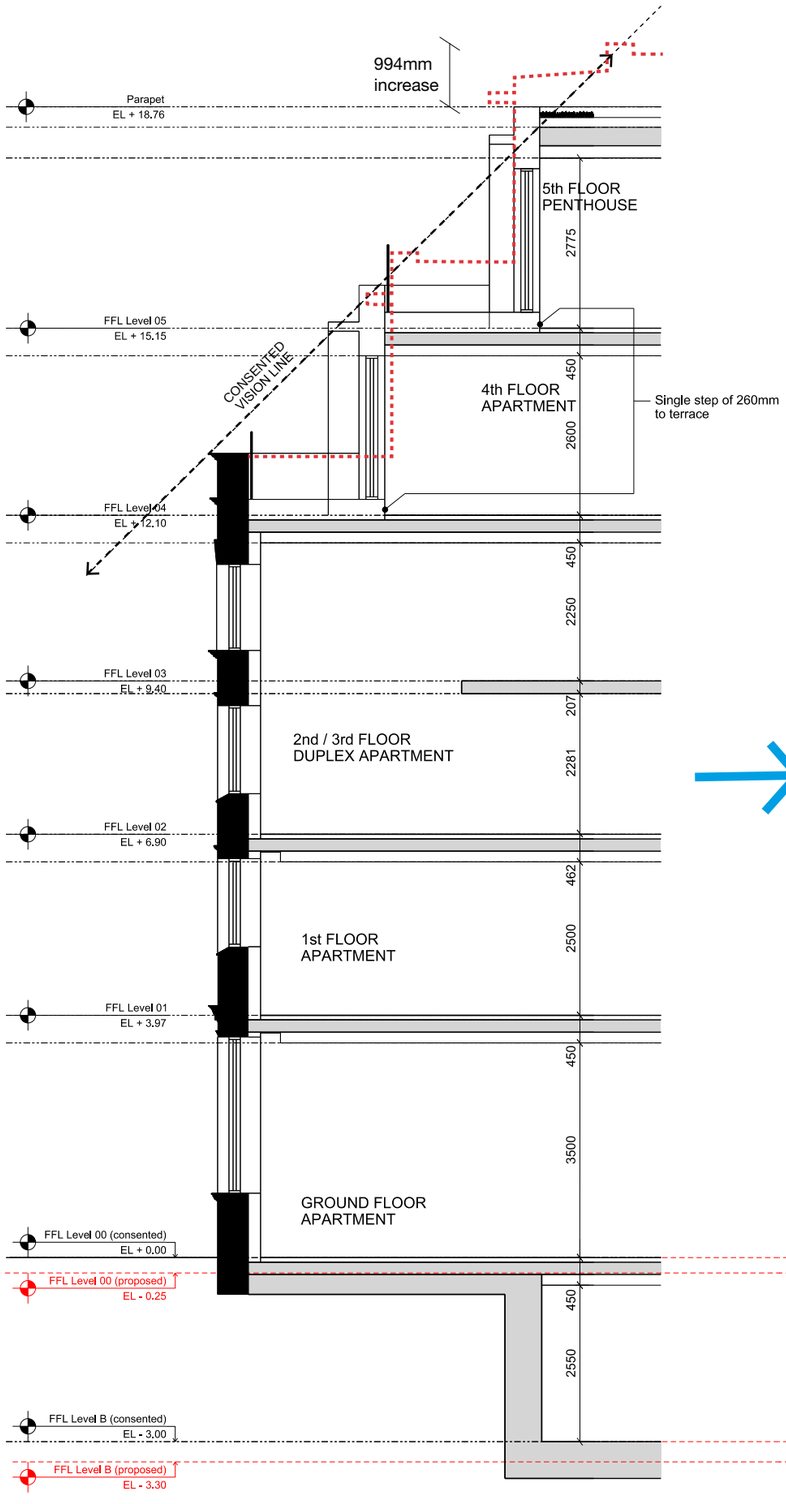
- Consented section on left hand side demonstrates the floor build ups and ceiling heights within the approved scheme.

- As demonstrated on page 10, floor build ups have been undersized and do not meet minimum requirements. Once mimimum floor build ups are considered, ceiling heights are further compromised.

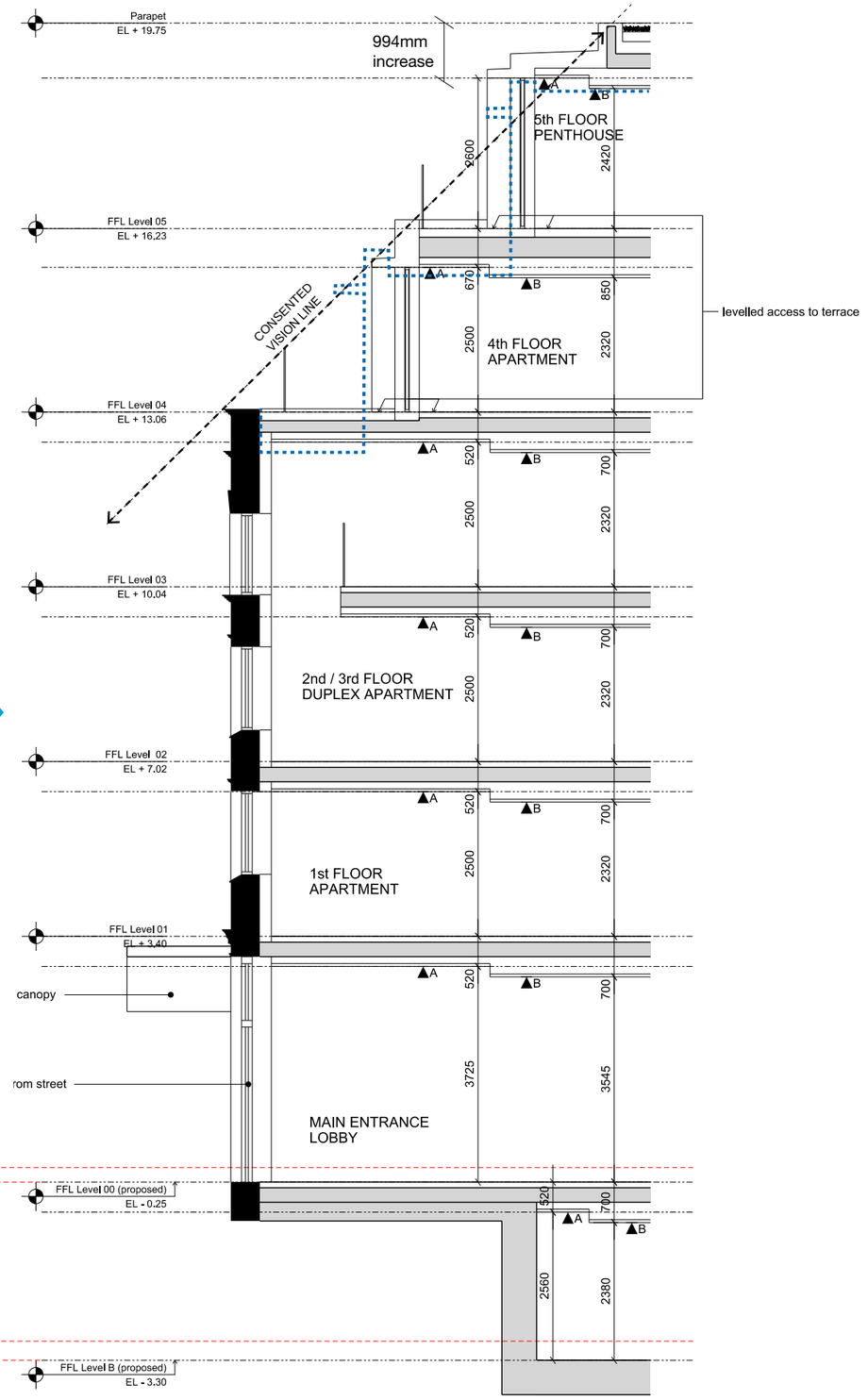
- Proposed section on right hand side demonstrates result of considering minimum floor build ups, and consistent ceiling heights of 2320mm-2500mm (depending on ceiling void condition) across floors 1-4, and 2420mm-2600mm in Penthouse.

- Proposed ceiling heights do not exceed consented ceiling heights (other than those that were described as ‘compromised’), and remain acceptable and compliant with relevant design guidance.

- Profile of roof parapet has been revised so as not to impact on Parker Street. This includes stepping back the roof parapet, and reducing the depth of the canopy.



CONSENTED SECTION



PROPOSED SECTION

consented building envelope

proposed building envelope

Section Facing Rear

- Consented section on left hand side demonstrates the floor build ups and ceiling heights within the approved scheme.

- As demonstrated on page 10, floor build ups have been undersized and do not meet minimum requirements. Once mimimum floor build ups are considered, ceiling heights are further compromised.

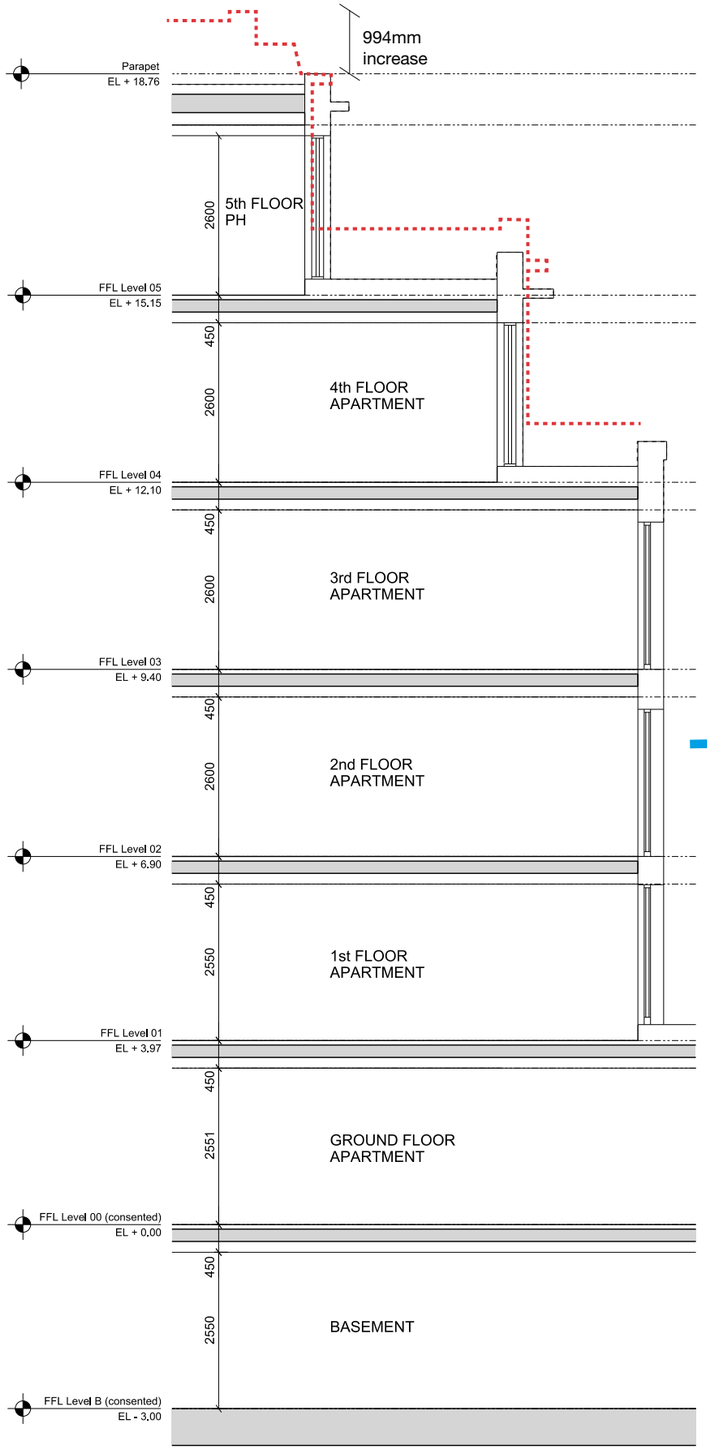
- Proposed section on right hand side demonstrates result of considering minimum floor build ups, and consistent ceiling heights of 2320mm-2500mm (depending on ceiling void condition) across floors 1-4, and 2420mm-2600mm in Penthouse.

- Proposed ceiling heights do not exceed consented ceiling heights (other than those that were described as ‘compromised’), and remain acceptable and compliant with relevant design guidance.

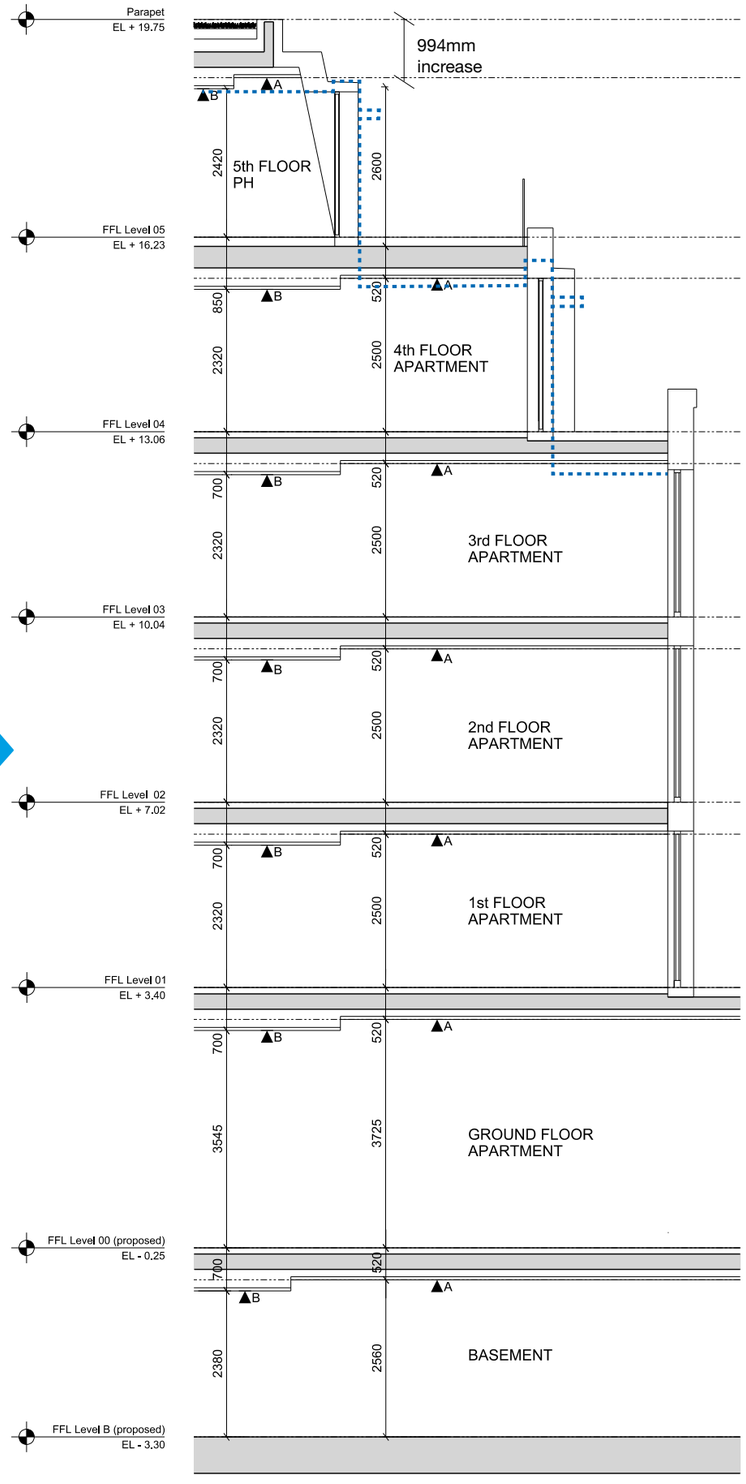
- Profile of roof parapet has been revised so as not to impact on Parker Street. This includes stepping back the roof parapet, and reducing the depth of the canopy.

consented building envelope

proposed building envelope



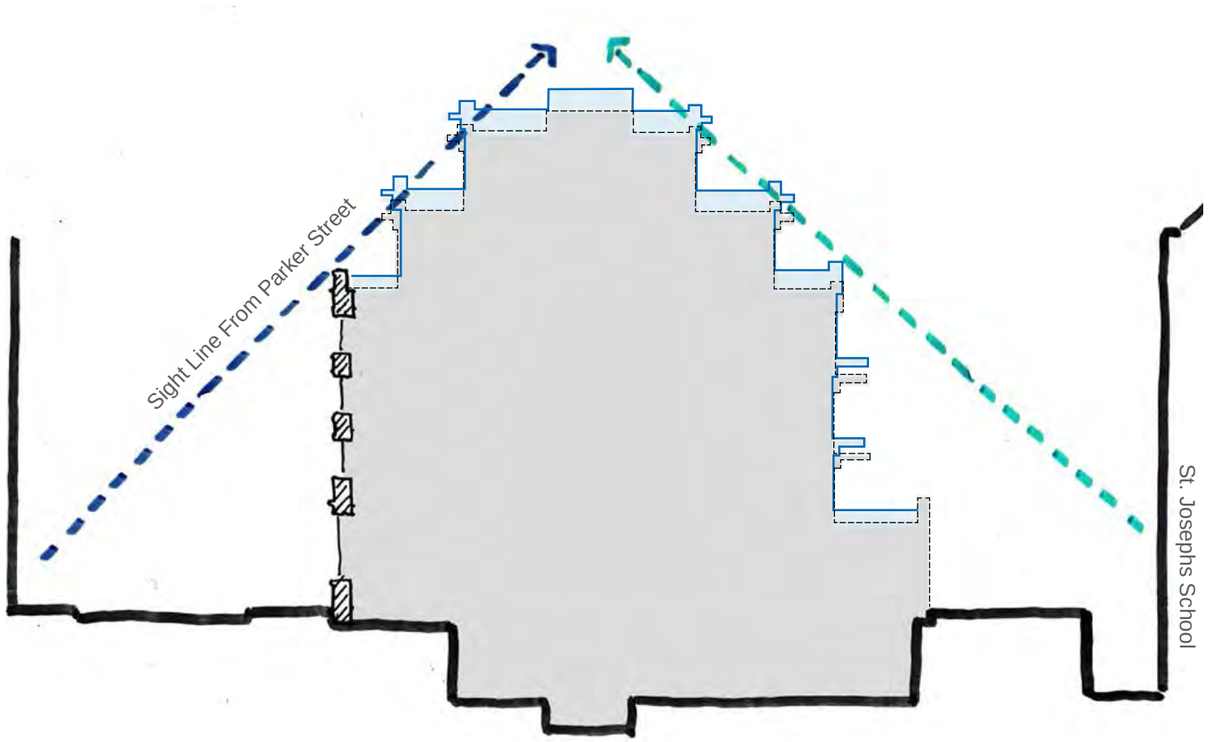
CONSENTED SECTION



PROPOSED SECTION

4.0 Mitigating Minor Height Increase

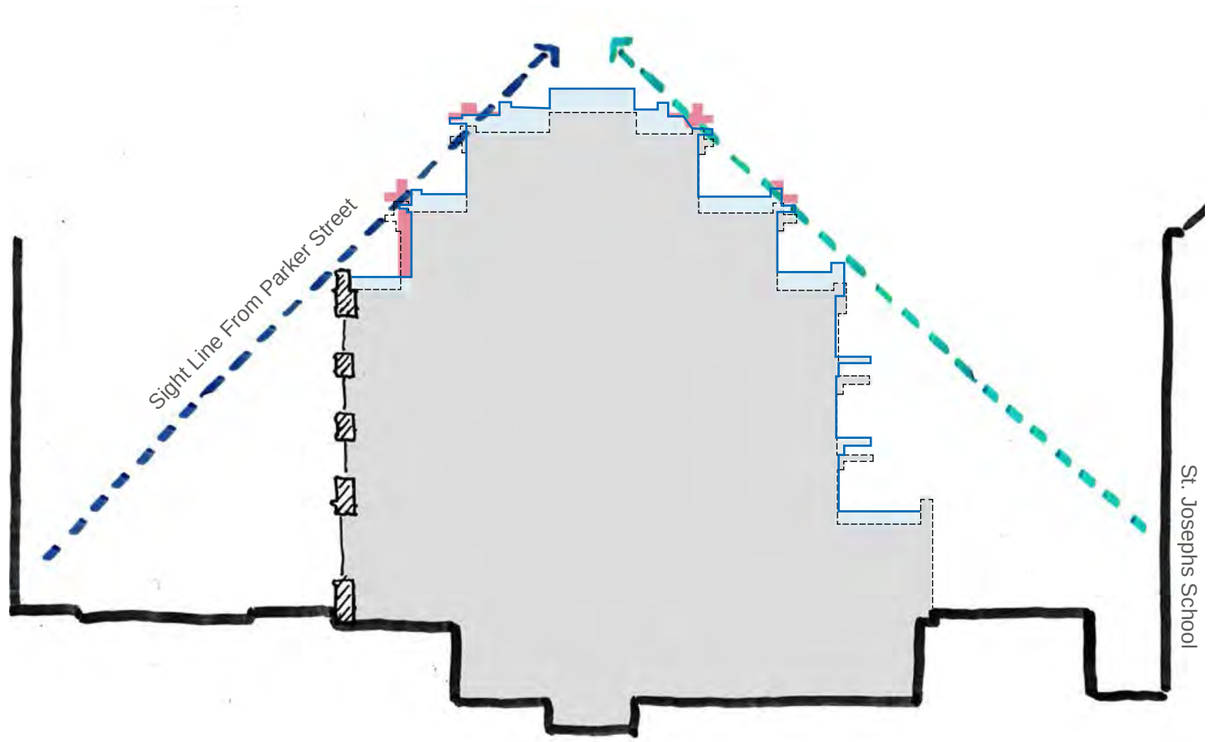
Revising Building Envelope to Mitigate Raising Levels



CONSENTED / PROPOSED LEVELS OVERLAY

Consented scheme

Proposed scheme difference



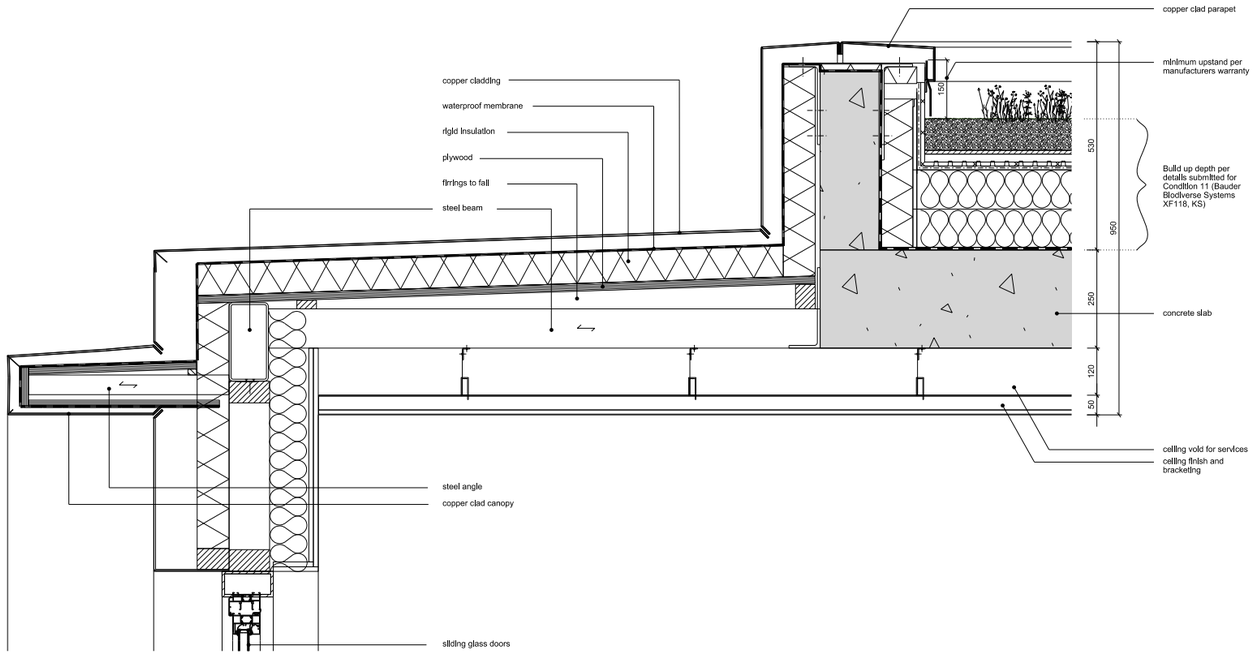
CONSENTED / PROPOSED SECTION OVERLAY

Consented scheme

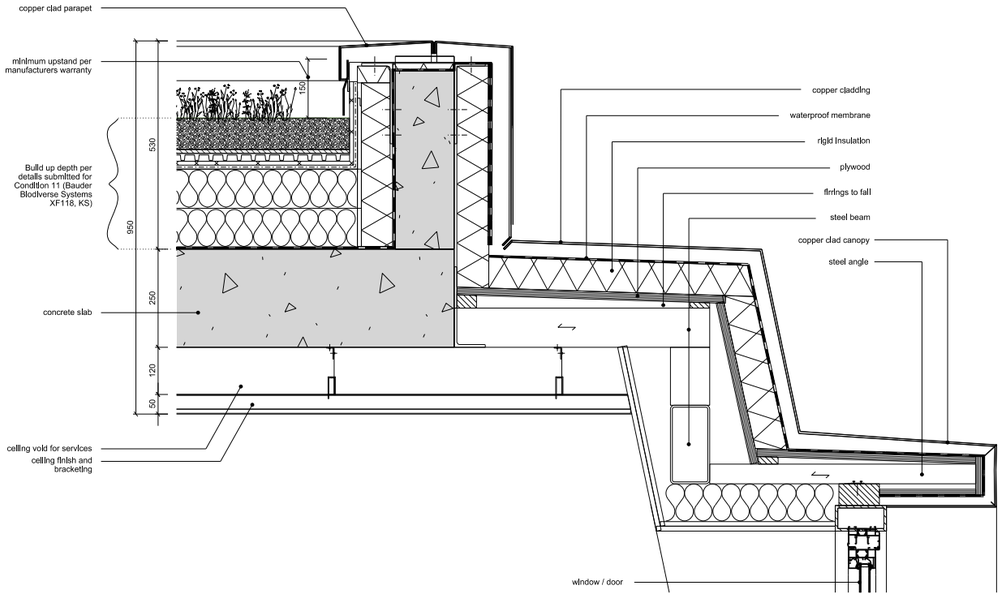
Proposed scheme difference

Area of stepped back building profile to mitigate raising building height

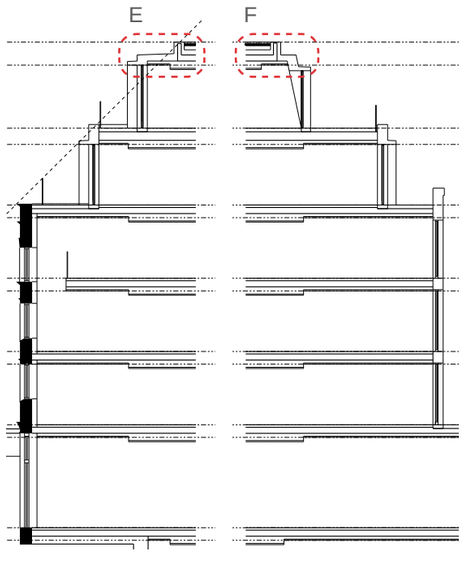
Parapet Details Of Proposed Scheme



DETAIL E - Top Level Parapet With Green Roof
- Facing Parker Street



DETAIL F - Top Level Parapet With Green Roof
- Facing Rear



PROPOSED SCHEME -
CROSS SECTION

- Details E and F demonstrate minimum build up within profile of parapet.
- A minimum of 150mm upstand above the green roof is required to ensure warranty from the manufacturors of the waterproofing membrane.
- Build up of extensive green roof is as per details (submitted) for Condition 11 requirements.
- Parapet, external walls and canopy to be clad in copper, as consented.

No Impact On Layouts Following Revised Building Envelope

PROPOSED FOURTH FLOOR PLAN

line of consented envelope

line of consented ballustrade

GIA reduction by stepping back wall

- Fourth floor plan of proposed scheme demonstrates that recessing the front wall of the fourth floor by 531mm does not compromise the layout of the apartments.

Revised Building Envelope Elevation Study

CONSENTED PARKER STREET ELEVATION

PROPOSED PARKER STREET ELEVATION

- The proposal to raise the overall building height by 994mm does not affect the retained facade, and therefore is only reflected in the foruth and fifth floor copper clad extensions.

- For the consented scheme, a number of different forms had been considered for the profile of the extended fourth and fifth levels. The result is a profile that is complementary to the existing facade, reflecting as contemporary intervention that respects the retained brick facade.

- Whilst the proposal includes raising the overall height of the building by 994mm, the articulation across the two levels maintains the relationship between the new and retained elements, in terms of proportion, rhythm and heirarchy. The key principles include;

  - alignment between the contemporary windows at the fourth level and the fenestration within the retained facade,
  - a break in the mass of the fifth floor, with ‘glazed links’ above the retained gables, to aid hierarchy,
  - introduction of external shading devices to more sympathetically reflect a traditional dormer form, and to give the retained gables more dominance,
  - shaddow gap details at the junction with copper to give the gables more dominance in elevation.

- The consented brick flank wall and extension to the chimney at the fifth floor level has been raised proportionally to reduce the visibility of the modern extension from the end of Parker Street at the intersection with Drury Lane.

Parker Street Study

- View from Intersection of Parker Street and Drury Lane

CONSENTED SCHEME

PROPOSED SCHEME

- As demonstrated, the result from the study to revise the profile of the building envelope means that raising the levels of the building does not have any additional material impact upon Parker Street, when compared to the consented scheme.

- The consented brick flank wall and extension to the chimney at the fifth floor level has been raised proportionally to reduce the visibility of the modern extension from the end of Parker Street at the intersection with Drury Lane.

Parker Street Study

- View from Intersection of Parker Street and Kingsway

CONSENTED SCHEME

PROPOSED SCHEME

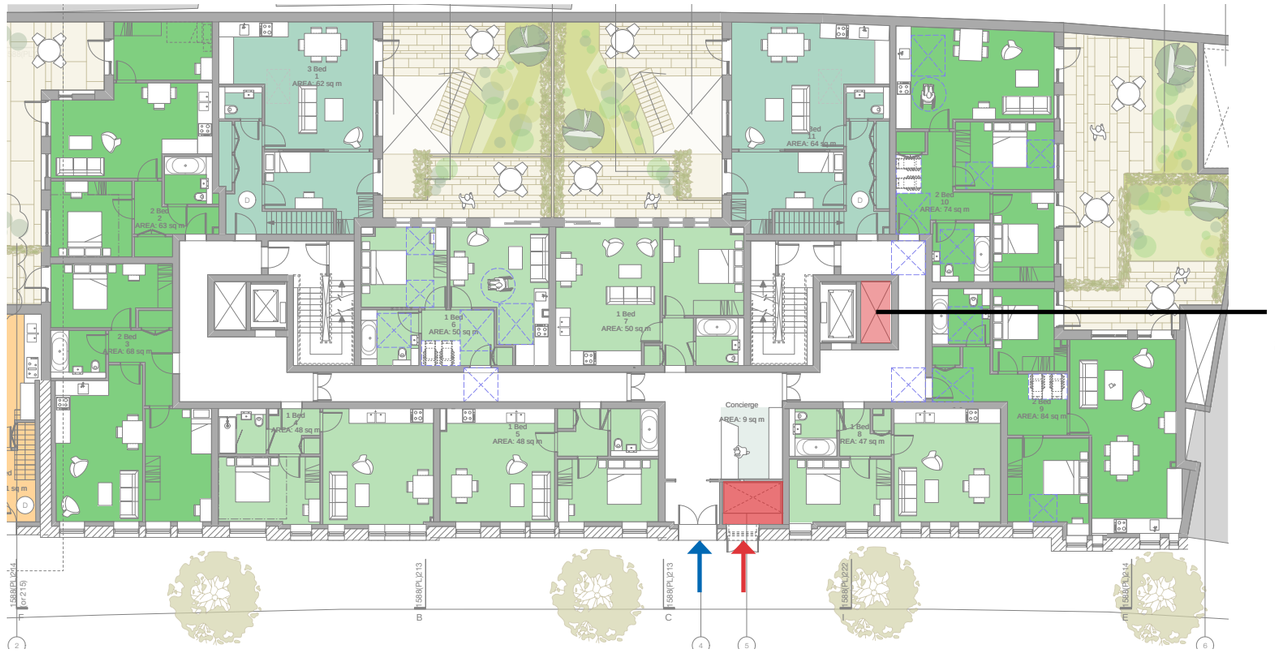
- As demonstrated, the result from the study to revise the profile of the building envelope means that raising the levels of the building does not have any additional material impact upon Parker Street, when compared to the consented scheme.

5.0 Relocation of Service Entrance

Service Entrance and Access to Cycle / Waste Store

- In the consented scheme access to the basement for cycles, waste and plant replacement is through the front door, and using one of the two passenger lifts that has been oversized.

- The bins are moved upstairs and downstairs through a service lift that is located immediately adjacent to the front door. A concern has been raised over this proximity which may compromise residential quality.



CONSENTED GROUND FLOOR PLAN

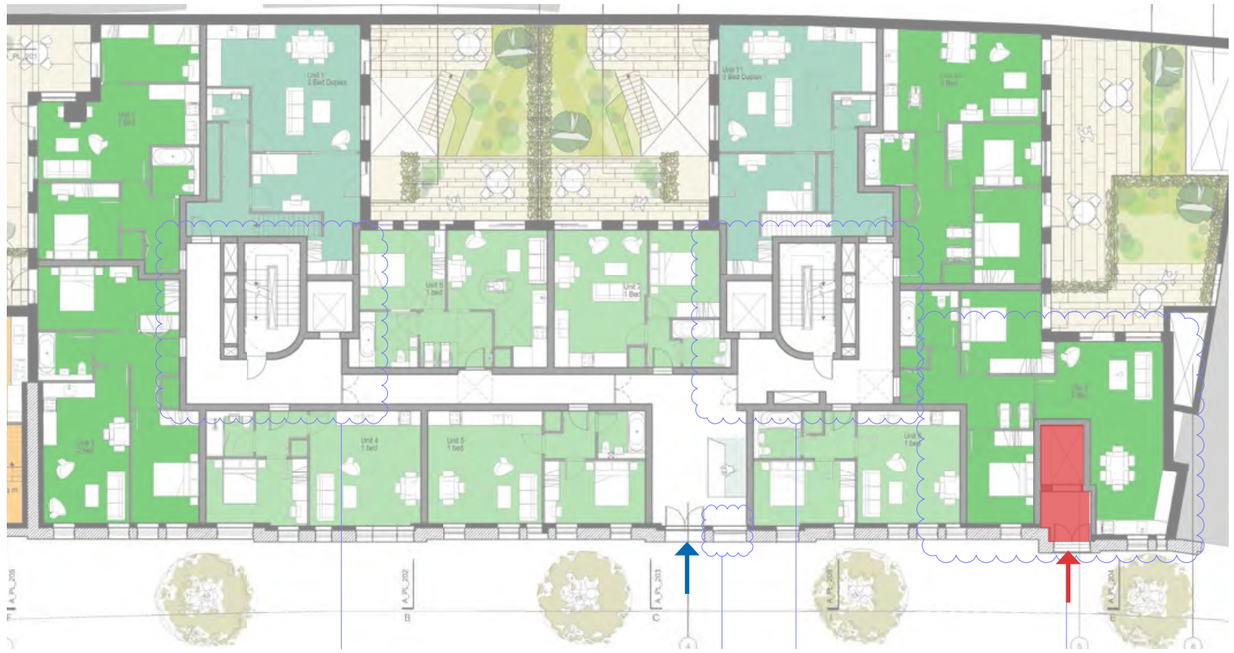
- The proposal is to have a remote service lift dedicated to cycles, bins and plant located away from the front door. This will be in place of an existing door and window at the base of the water tower. (please refer to the front elevation on page 16)

- By enlarging the existing door the following points can be achieved:

  - Mechanical equipment in the basement plant areas can be replaced via the service lift and door on the front facade. If the door is not enlarged, this equipment can only be replaced by removing part of the terrace slab in one of the private gardens, and craning the equipment over the building. This was identified as a health and safety concern by the Principal Designer.

  - Use of standard sized Eurobins. With the smaller opening, a larger number of samller bins would be required.

  - Having a seperate access to the cycle store directly from the street, and without pushing the bikes through the reception/concierge area.



PROPOSED GROUND FLOOR PLAN

main entry from Parker Street

entry from Parker Street to basement for refuse / bikes / plant

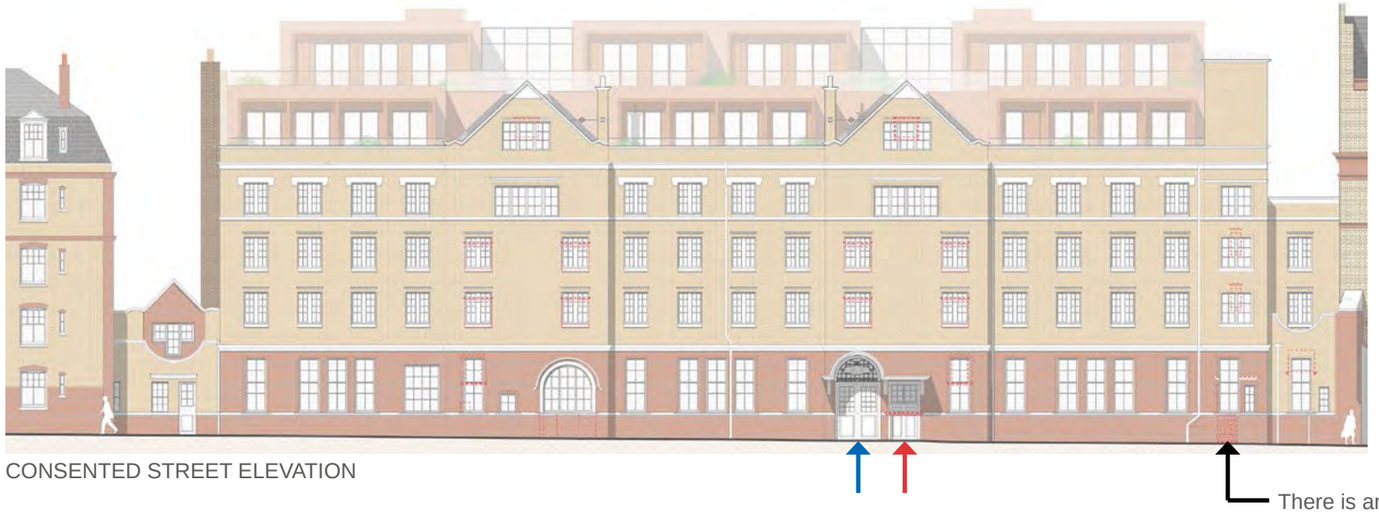
zone for entry to basement for refuse / bikes / plant

Service Entrance and Access to Cycle / Waste Store

- A comparison between the consented and the proposed Parker Streer elevations demonstrates the proposal to relocate the service entry away from the main entry and to the side of the building.

- The proposed door will be in keeping with the Arts and Craft heritage style of the building, and will match the consented front door. Furthermore it maintains the rhythm of the fenestration on the levels above within the water tower.

- This is a much preferred arrangement from a technical perspective, and will enhance the residential quality and experience.



CONSENTED STREET ELEVATION

There is an existing door at the base of the water tower

PROPOSED STREET ELEVATION

Conclusions

Issue	Solution
• Insufficient plant allocation in basement.	• Reuse existing basment area + increase of consented floor area by 38sqm (6% of consented basement GIA).
• Insufficient riser allocation for service distribution.	• Adjoinig split levels + revising the layout of the core.
• Insufficient zone for floor build up to accommodate structural and service requirements.	• Raising the overall height of the building by 994mm.
• Perceived visual impact upon Parker Street as a consequence of raising the building height by 994mm.	• Revised building envelope, including stepping back the external wall of the fouth level that faced Parker Street, stepping back the roof parapets away from the perimeter of the building, and reducing the depth of the canopies on the fourth and fifth levels.
• Proximety between main entrance to building, and entrance to cycle and waste store, which compromises the residential quality.	• Relocating the cycle and waste store entrance away from the main entrance, to the north end of the retained facade, at the base of the water tower.

• Overall the propsed scheme changes are considered non-material and will realise a workable and deliverable design.

Appendix A

PARKER HOUSE: REVISED DRAWING NUMBER SCHEDULE

Consented	NMA
Plans	
1588(PL)200 rev.P2	A_PL_099
1588(PL)201 rev.P2	A_PL_100
1588(PL)202 rev.P1	A_PL_101
1588(PL)203 rev.P2	A_PL_102
1588(PL)204 rev.P2	A_PL_103
1588(PL)205 rev.P3	A_PL_104
1588(PL)206 rev.P2	A_PL_105
1588(PL)207 rev.P1	A_PL_106
Sections / Elevations	
1588(PL)212 rev.P1	A_PL_201
1588(PL)213 rev.P1	A_PL_202
1588(PL)213 rev.P1	A_PL_203
1588(PL)214 rev.P3	A_PL_204
1588(PL)215 rev.P3	A_PL_205
1588(PL)216 rev.P2	A_PL_206
1588(PL)221 rev.P1	A_PL_207
1588(PL)222 rev.P2	A_PL_208
1588(PL)211 rev.P2	A_PL_301

Appendix B

PARKER HOUSE
NMA COMMENTARY
BUILDING SERVICES

SCOTCH Partners

Introduction

Scotch Partners has reviewed the consented scheme in terms of building services design and corresponding space and height allocations.

Our overall view is that the plant room sizes, horizontal and vertical distribution routes, storey heights and floor build-ups are generally less than we would seek for a project of this type and scale. The consented Energy Strategy requires the use of a CHP installation in addition to boiler plant. Some cooling plant is located within the basement and this is not an efficient use of internal space as the amount of external air that needs to pass through such plant is large and requires bulky air ducting to transfer the air from intake shafts and to exhaust shafts.

Plant access for maintenance and means of plant replacement have also been considered as part of our review.

Basement Plant Space

We have undertaken initial calculations to estimate likely building services loads within the development. On the basis of these loads we have made an assessment of plant space and height that we would ask for if the scheme was a new-build and spatial constraints were not an issue.
Our plantroom schedule (at the end of this document) lists the ideal plantroom sizes, heights and interconnectivity requirements as we would request them.

In summary the plant areas on our schedule are much larger than those in the consented scheme. The heights that we would ask for within plantrooms are also greater that currently available. The route of cooling air into and out of the basement are challenging and require large amounts of space that usually cannot be used for other things. Having said that, we are proposing that the cooling inlet air would be drawn through a plant room and this does allow us to place equipment in the same location – this represents an efficient use of the space by doubling-up on the function of part of the basement.

We have agreed to compromise on the plantroom space and heights that we would regard as 'good practice' and our revised, smaller plant areas and reduced heights will mean that space for access and maintenance will be more limited than the ideal. Parts of the systems may need to be removed to allow plant items to be replaced for example and headroom will be compromised in some locations, step overs may now be needed etc.

Basement Distribution

Space for the distribution of the building services would normally be in the form of headroom above corridor or plantrooms to vertical distribution riser positions.
In this case the limited heights available preclude this as a solution and we have agreed an alternative which is to route the services distribution along a wall instead of above the corridor. Whilst this is an appropriate, if unorthodox solution, it inevitably takes up more floor area than an overhead solution would do.

Vertical Distribution

We have incorporated space for boiler and CHP flues which did not appear to form part of the spatial considerations of the consented scheme.
The riser areas were probably adequate in themselves but the arrangement of staggering the floor plates on either side of each riser created a difficulty in allowing proper access to the rising services. The arrangement within the riser to allow the services to exit into the ceiling void at each floor level was also problematic when we assessed how this may work.
The alternative arrangement of a single linear riser is much more spatially efficient as personnel can stand in the corridor to access the services within the riser. In this way riser footprint is used effectively and does not incorporate floor area that will only be used occasionally by maintenance staff only.
The arrangement of exiting the riser into what will inevitably be shallow ceiling voids is much improved with the proposed linear riser as the crossing of services within the riser is minimised.

Ceiling Void Requirements for Building Services

We have reviewed the amount of ceiling void space that would be required to service apartments based on actual space used in other residential schemes that we have done. This information has been pared back to what we consider to be a minimum and typical depths and justification for this shown on sketch drawings to inform the architectural design assessments.

Floor Build-Ups

We have discussed possible floor build ups with the design team and identified the amount of space required for pipework and thermal insulation. In addition, in our capacity of acoustic consultant we have considered the requirements for mitigation of general and impact noise transmission between floors / dwellings within the building. The needs of this analysis are generally more than were used within the consented scheme.

Appendix B (continued)

Parker House
27.1.16

Preliminary Plantroom Schedule

SCOTCH Partners

	Plantroom	Location	Size	Area	Notes
			(L) x (W) x (H)	(Approx)	
Mechanical Services					
	Boiler room	Basement	10m x 5m x 3m	50m^2	Three flues will rise to above roof level and need access at every storey
	Chiller plantroom	Basement	7m x 5m x 3m	35m^2	Links to chiller condenser
	Chiller condenser room	Roof (external) or basement	14m x 5m x 3m	70m^2	Links to chiller Needs 5m x 2m shaft to fresh air at each end
	VRV Condenser room	Roof (external) or basement	16m x 5m x 3m	80m^2	Needs 5m x 2m shaft to fresh air at each end
	Smoke extract fans	Roof	5m x 1m x 1m	5m2	2No systems required (tbc by fire strategy)
Electrical Services					
	LV Substation	Ground floor	4m x 4m x 3.5m	16 m^2	Accessible directly from street
	LV Switchroom	Ground floor or basement	4.5m x 5m x 3.5m	22.5 m^2	Ground floor or basement local to substation
	Comms Room	Basement	3m x 1.5m x 3.5m	4.5 m^2	
	Lifesafety Generator Room	Basement or roof	7.5m x 4m x 3.5m	30 m^2	Flue to roof needed plus ventilation air
	Lifts (motor roomless)	-	2.1m x 1.1m 2.1 x 1.1m	- -	2No 13 person lifts 1No goods lift for bikes and plant components to basement
Public Health Services					
	Water tankroom inc sprinklers	Basement	8m x 8m x 4m	64m^2	Taller tank rooms minimise room footprint
	Greywater tank room	Basement	8m x 4m x 3m	32m^2	Required to allow high water flow bathroom fittings