BNP PARIBAS
REAL ESTATE

SECTION 73 • DESIGN STATEMENT

December 2015

PARKER TOWER • PARKER STREET • COVENT GARDEN

A&Q
PARTNERSHIP

INTRODUCTION

This Section 73 Application seeks to amend the details of existing proposals to incorporate design development and structural appraisal of the scheme.

Planning Permission to convert this former office building into residential use, was first granted on 18th December 2014 (LPA Ref: 2014/0176/P). The concept of that scheme remains as the main basis of the proposal.

A recommendation to grant Section 73 approval, subject to a Section 106 Legal Agreement was passed on 3rd September 2015 (LPA Ref: 2015/2988/P) to vary the number of units and minor amendments to the proposals, particularly at lower floor levels.

Following this amendment a thorough analysis of the existing structure has been undertaken, including intrusive surveys of the reinforced concrete frame. This together with detailed design of individual apartments and integration of services throughout the building has been developed with the aspects of buildability and delivery of the scheme, minimising the disruption to the buildings neighbours in this mixed use dense urban location wherever possible.

A large number of the revisions have arisen from the need to limit the structural load on the existing foundations and the large transfer beam that sits at second floor level, supported on only six existing columns.

The amended drawings now put forward, incorporate a series of revisions that deal with the implications of actual construction details and techniques, together with four areas of particular note:

- Tower Balconies
- Affordable Housing Block
- Tower Apartments
- Roof Plant

The amended accommodation floor areas is also illustrated to demonstrate the maximised residential floor area as part of the detailed design

It is proposed to substitute approved drawings as follows:

	PLANS TO BE REMOVED	REPLACED BY (A&Q PARTNERSHIP)
	PLANS	
Basement -2	P_B2_C645_001	Withdrawn. See 01P0009A
Basement -1	15125A - 01P0009 A	15125A - 01P0009 B
Ground	15125A x 00P1000	15125A x 00P1000 A
First	15125A x 01P1001	15125A x 01P1001 A
Second	15125A x 02P1002	15125A x 02P1002 A
Third	P_03_C645_001 C	15125A x 03P1003 A
Fourth	15125A x 04P1004	15125A x 04P1004 A
Fifth	15125A x 05P1005	15125A x 05P1005 A
Sixth	P_06_C645_001 C	15125A x 06P1006 A
Seventh	P_07_C645_001 B	15125A x 07P1007 A
Eighth	P_08_C645_001 A	15125A x 08P1008 A
Ninth	15125A x 09P1009	15125A x 09P1009 A
Tenth	15125A x 10P1010	15125A x 10P1010 A
Eleventh	15125A x 11P1011	15125A x 11P1011 A
Twelfth	15125A x 12P1012	15125A x 12P1012 A
Thirteenth	15125A x 13P1013	15125A x 13P1013 A
Fourteenth	15125A x 14P1014	15125A x 14P1014 A
Fifteenth	15125A x 15P1015	15125A x 15P1015 A
Roof	15125A x 16P1016	15125A x 16P1016 A
	ELEVATIONS / SECTIONS	
North	15125A xxx E1201	15125A xxx E1201 A
South	15125A xxx E1203	15125A xxx E1203 A
West	15125A xxx E1204	15125A xxx E1204 A
Section AA	S_AA_C645_001 C	15125A xxx S1019
Section BB	15125A xxx S1020	15125A xxx S1020 A
Section CC	15125A xxx E1202	15125A xxx E1202 A
Section DD	S_DD_C645_001 B	15125A xxx S1021
Section EE	S_EE_C645_001 B	15125A xxx S1022
	SITE PLANS	
Public Amenity	P_00_C645_002 D	15125Ax00P1030
LTH Access	P_00_C645_003 C	15125Ax00P1031
	LIFETIME HOME PLANS	
Studio	P_F1_C645_001	Withdrawn
1 Bed	P_F2_C645_001	
2 Bed	P_F3_C645_001	{ 15125Ax00P1043
3 Bed	P_F4_C645_001	
P.Wheelchair	P_F5_C645_001	15125Ax00P1046
3 Bed Afford	P_F6_C645_001 A	15125Ax00P1041
A.Wheelchair	P_F7_C645_001 A	15125Ax00P1040
	DETAILS	
Tower Bay	E_01_C645_001 B	15125A xxx E1037
Podium Bay	E_02_C645_001 C	Withdrawn see S1021
Tower Retail	E_04_C645_001 A	15125A xxx E1035
Tower Entrance	E_04_C645_001 A	15125A xxx E1036
	COMPARATIVES	
South Elev	E_S_C645_002 A	Withdrawn
North Elev	E_N_C645_002 B	Withdrawn
West Elev	E_W_C645_002 A	Withdrawn
Section CC	S_CC_C645_002 C	Withdrawn

BALCONIES

The approved proposals (LPA Ref: 2014/0176/P) incorporate new balconies for the proposed accommodation on floors 2 to 14. These provide 2 square metres of external space, typically 2.2 x 0.92m, located in four corners of the development except at the northeast corner, where floors to 2 to 7 contain no balconies due to issues of privacy with the neighbouring housing block.

The approved design relies on the adaptation of the existing concrete structural frame, behind the external cladding, removing every other column and the upstand concrete beams around the perimeter of the building, at every floor level, down to level three.

The external concrete frame extends from second floor level to the top of the tower, supported by a large concrete transfer ring beam at second floor level. This ring beam is itself supported on six large columns, allowing lightweight or glazed infill below. The transfer ring beam is a key part of the structure and cannot be cut out to provide space for any form of balcony, being 900mm above second floor level.

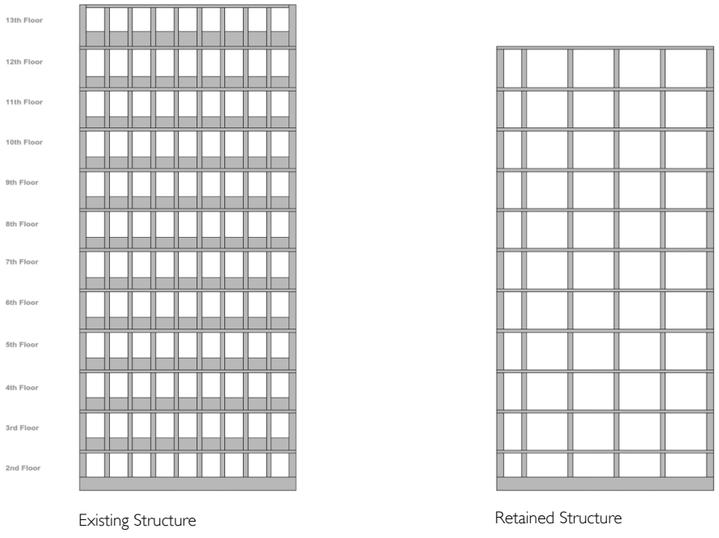


Illustration showing the extent of structure to be removed behind the facade.

The stability of the building is considerably reduced by removing these concrete elements and needs to be replaced with a continuous steel channel around the perimeter of each floor, to reinforce the slab edge, together with the remaining columns bolstered by enlargement with additional concrete additions.

The approved balconies are located at the four extreme corners of the block, inset into the floor plate. Cutting into the floor plate to form recesses for the approved balconies destroys the integrity of the structural approach described above (known as a Virendeel action), necessitating far greater structural intervention than was envisaged within the approved proposals.

With the cut out of the floor plate to create the proposed balcony, the Virendeel structure requires additional compensation particularly in the impact on the transfer ring beam, which supports all the upper floors. Additional columns to support the ring beam would be required together with significant strengthening of the transfer beam itself. This would severely stunt the appearance of the building, removing the elegance of the six supporting columns, the cantilever effect and a light glazed infill below.

The cut into the existing floor slabs adds considerable extra demolition works, together with temporary support to maintain stability of the tower and a prolongation of the disturbance from noise and dust to local offices and residents.

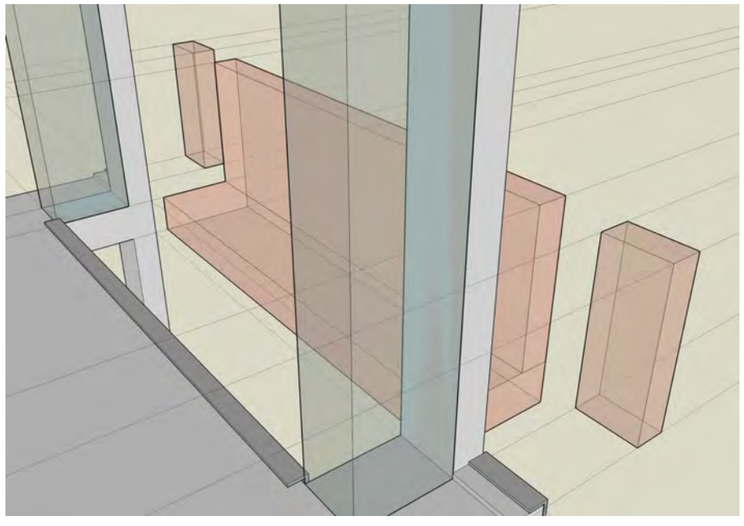


Illustration showing the extent of cut into the floor slab for the approved balconies.

As an alternative, therefore, the design team have looked at adding a slightly reduced depth balcony and incorporating it into the layout of the individual apartments to beneficial effect. By maintaining the existing floor slab line with edge reinforcement by a steel channel, any additional columns and excessive strengthening of the ring beam are avoided.

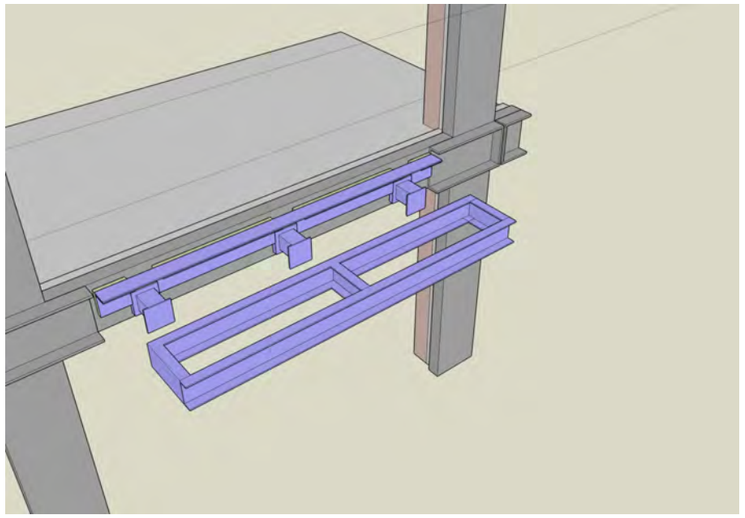


Illustration showing the alternative balcony maintaining structural integrity.

The revised balcony is the same width as before, but has a reduced the depth from 920 to 570mm, providing an external space of 1.25 square metres. This obviously has an impact on the external amenity area, but by utilizing sliding folding doors, that allow the full width of the balcony to be open, the balcony becomes an extension to the living space, providing a more practical use of the external amenity by not restricting furniture to fit on the separated 900mm deep balcony, that cuts into the room and reduces available internal space.

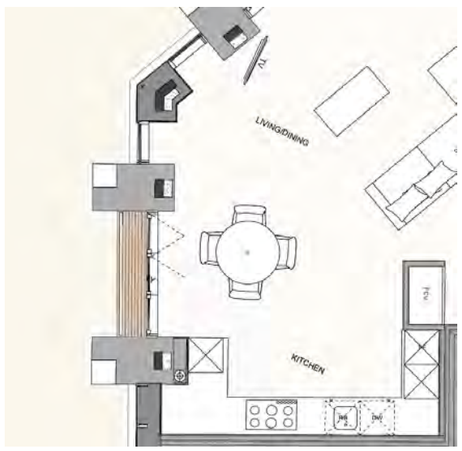
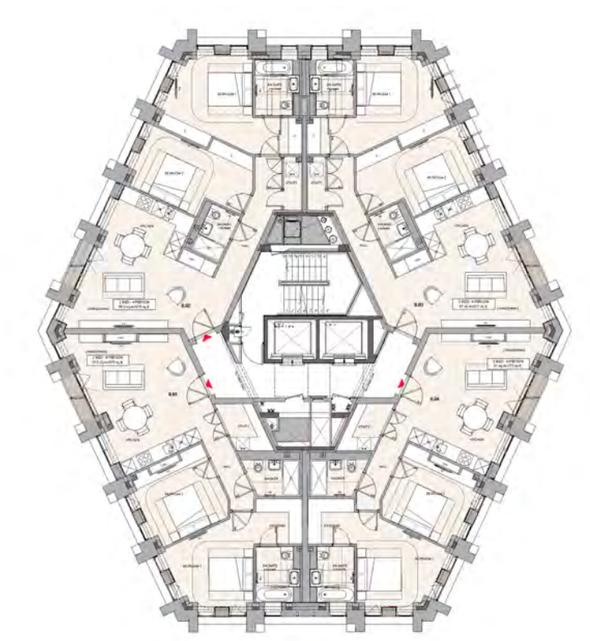


Illustration showing the alternative balcony as part of the living space.

As part of this process, the location of the balconies has also been reviewed to ensure the maximum use and orientation. Two of the approved balconies face entirely north and many of them are located off bedrooms (9), which are unlikely to fulfil their intended function. Six floors currently have no balcony in the northeast corner, due to the proximity of the neighbouring residential block and issues of privacy.

Apartments are designed to maximise the useable floor space, reducing common circulation areas where practical, whilst living spaces have been orientated towards the better views and to maximise sunlight and daylight.

With the reduced balcony footprint, privacy is less of an issue as the occupants are encouraged to use their living space as part of the balcony facility, thus space as a sitting area. The relocated balcony positions keep away from the adjacent residential development, further aiding privacy.



Typical upper floor plate with proposed balconies

As previously stated it is not possible to cut into the second floor ring beam for a balcony due to the structural transfer effected by this beam. The façade is designed as paired floors, separated every second floor with a horizontal masonry feature. The second and third floors are paired in this fashion, so as a consequence of the inability to introduce balconies to the second floor, the third floor show follow the same approach. The third floor also has a close relationship with the adjacent affordable block which would be good reason on its own to not have a balcony at this level for privacy reasons.

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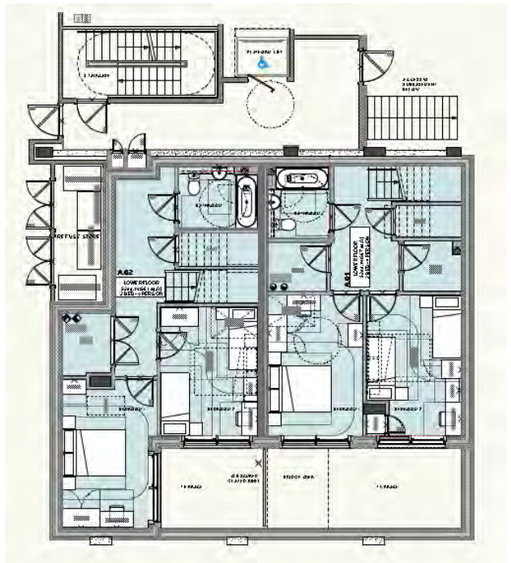
AFFORDABLE HOUSING BLOCK

The original Squire & Partners proposals assumed the construction of a separate four storey Affordable Housing block at the Eastern end of the former office podium area, abutting neighbours buildings to the east and north.

The existing structure and foundations do not lend themselves to this proposal without considerable change in levels, which would elevate the ground floor and extensive new foundations and basement retaining structures, which would have a significant impact on the neighbours.

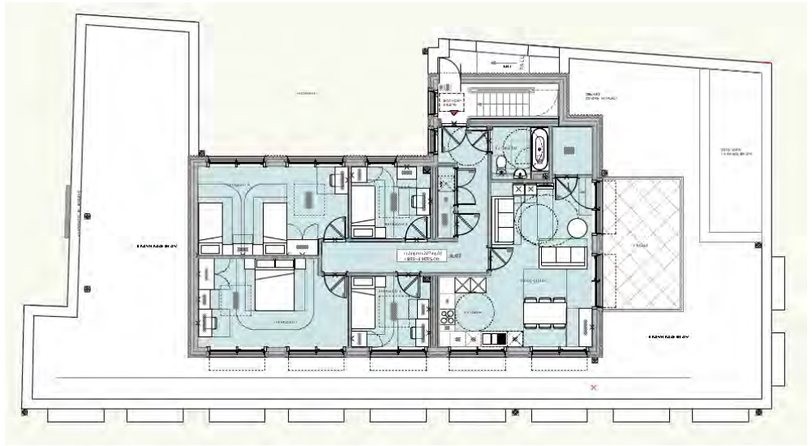


Basement Affordable Block

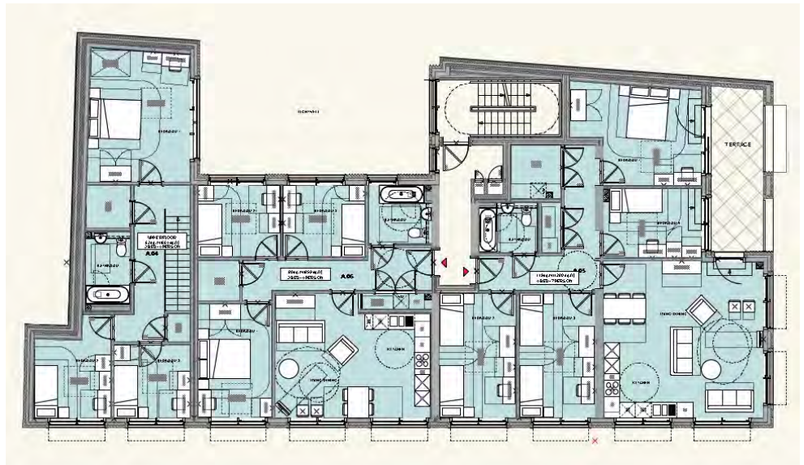
It is therefore proposed to utilise the existing foundations as much as possible, retaining all the existing boundary retaining walls and use lightweight construction above the ground floor. This necessitates a reworking of the lower floor of the duplex units, retaining existing column positions, with a new transfer structure at ground floor level. Thereafter the upper floors are constructed using a timber frame technique, retaining the original proposal of a brick façade outer facing.

The basement level has been reworked appropriately to accommodate existing column positions, with more detailed layouts developed for the upper units.

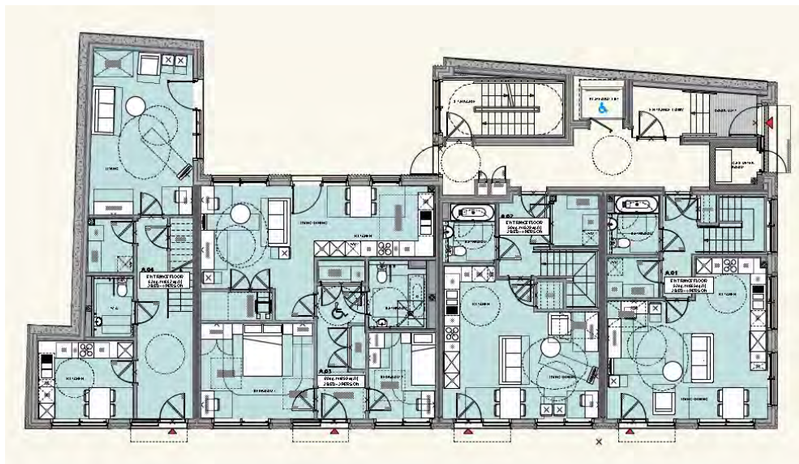
Working with One Housing Group, who has been selected as the appropriate Registered Provider, has allowed the design to be optimised



Second Floor Affordable Block



First Floor Affordable Block



Ground Floor Affordable Block

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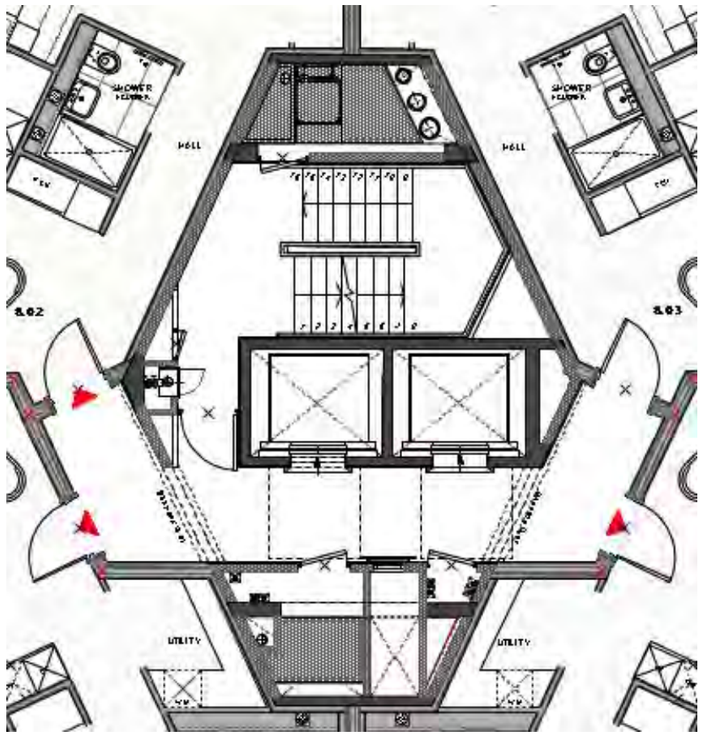
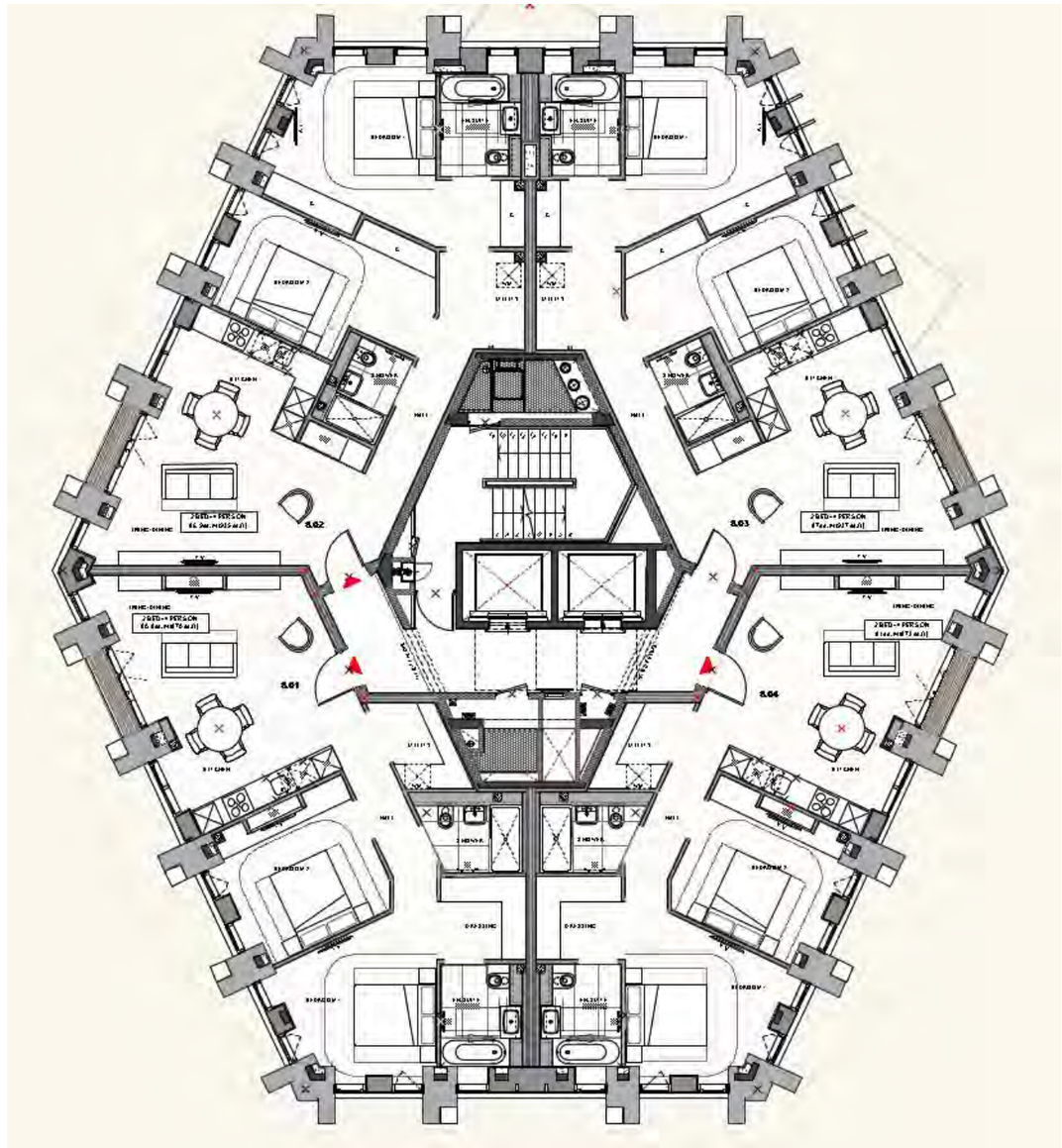
TOWER APARTMENTS

The mix and number of residential units within the tower was varied under 2015/2988/P. The design of those units together with the integration of services has since been developed in considerable detail.

The existing service cores in the tower have been adapted to house the necessary distribution of services, including boiler and generator flues to discharge at roof level, and communal supply routes for heating, hot water, electricity and communications, from the plant in the basement, as well as cooling pipework distribution from roof level.





These efficiencies in the Core design allow the maximum of space to be provided to residential floorspace. The layouts themselves have been reworked to achieve the most potential, whilst also complying with all statutory and servicing requirements.