CENTRE POINT TOWER MIXED-TENURE SUPPLEMENTARY STUDIES: SMOKE EXTRACT RISERS & STRUCTURAL LIMITATIONS ON RISERS

The following pages have been prepared in response to comments raised by London Borough of Camden during the first strategic planning meeting with respect to smoke extract risers and structural limitations imposed by the existing building.

01 Smoke extract risers. For corridors longer than 15.0m with a single direction of travel (as layout type W) a vertical smoke extract riser needs to be included. The impact of this is demonstrated on the following pages.

02 Structural limitations. A diagram has been prepared to illustrate the key points that mean the main risers need to be moved in to the lettable floor area for both affordable and private residential scenarios.

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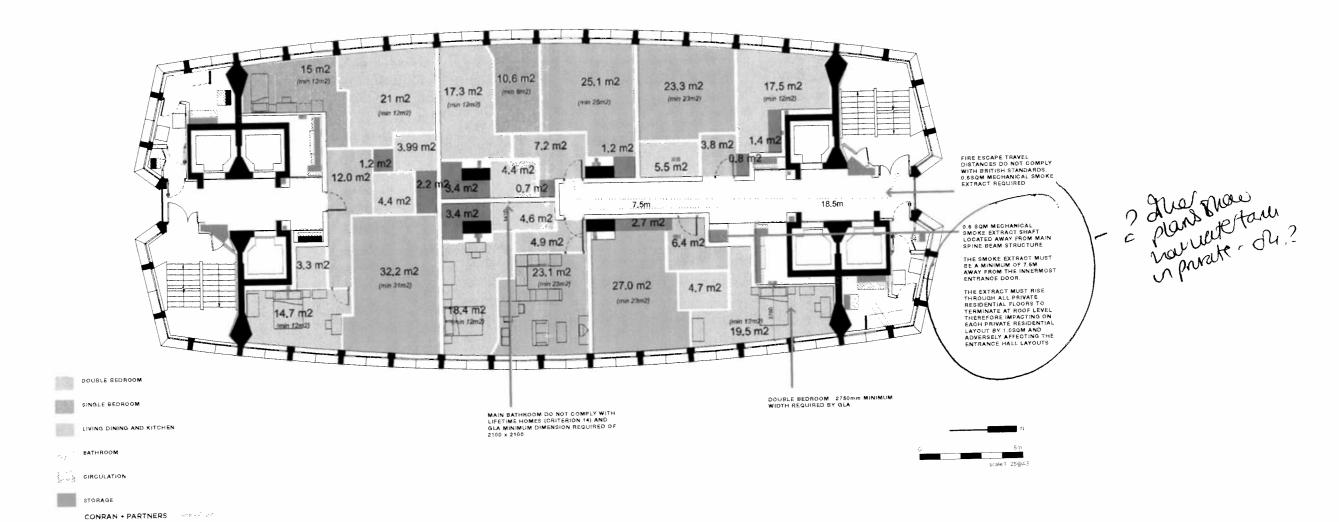
01 MIXED TENURE TYPE W: IMPACT OF SMOKE EXTRACT RISER

SMALL UNITS = 1BED & 2BED 1 X 115M2 : 3B5P 1 X 14M2 : 2B3P (DO NOT COMPLY WITH GLA HOUSING MINIMUM REQUIREMENTS)

1 X 54M2 : 182P
1 X 57M2 : 182P (DO NOT COMPLY WITH GLA HOUSING AND LIFETIME HOMES MINIMUM REQUIREMENTS)
1 X 62M2 : 182P (DO NOT COMPLY WITH GLA HOUSING MINIMUM REQUIREMENTS)

NO UNITS HAVE EXTERNAL AMENITY SPACE

Achieves 5 x 1-bedroom apartments and 1 x 2-bedroom apartments. Aside from the various GLA and Lifetime Homes standards that are not met, this type of arrangement does not fall within the maximum fire escape distance requirements for a single means of escape. For this reason it is necessary to incorporate a longer corridor with a single means of escape. For a single means of escape beyond 15 0m it would be necessary to consider a mechanical smoke and heat exhaust ventilation system in lieu of natural ventilation. This would typically involve incorporating a 0 6m2 shaft, with an aspect ratio of 2.1 Replacement air would be drawn from the AOV on the façade. The layout below shows the impact of introducing this riser



02 STRUCTURAL IMPACT ON RISER POSITIONS

- 1 The primary space to use for services would be the former WC's to north and south cores, but the structure of the building limits how services from these spaces can transfer to the apartments.
- 2 The structural concrete shear walls can only be penetrated in small areas, therefore service transfers throught the wall must be kept to a minimum.
- 3 The lift lobby soffit is too low to transfer services from the former WC space to the apartment entrances.
- 4 Limitations imposed by points 1 3 above mean that the main service risers are to be newly formed within what would otherwise be net lettable area.
- 5. Existing riser locations are used where possible.

