

MEETING TO DISCUSS THE CONCRETE REPAIRS ON THE BARBICAN ESTATE

30 APRIL 2013 – 11 AM – BARBICAN ESTATE OFFICE

PRESENT:

GARETH MOORE – Deputy Chairman of the Barbican Residential Committee (BRC)
TIM MACER – Chairman of the Barbican Residents' Consultation Committee (RCC)
JANE SMITH – Chairman of the Barbican Association (BA)
ROBERT BARKER – Secretary to the Barbican Association
EDDIE STEVENS - Housing and Technical Services Director - Community and Children's Services
KAREN TARBOX - Head of Technical - Community and Children's Services
DR RON CASSON – Concrete Consultant, Bickerdike Allen
DR JOHN BROOMFIELD – Concrete Corrosion Specialist
JULIE MAYER – Town Clerks (Clerk to the BRC and RCC)

This meeting had been called at the request of the RCC and the BRC, who had set today's agenda.

The BA and RCC considered it essential that the City should apportion the costs equitably and given the history, the research they had undertaken and the opinions they had sought, they did not believe that the City's stance; i.e. that this was a 100% service charge matter, was justifiable.

Mr Barker felt that the fundamental issue was the definition of 'structural defects' and 'defects affecting the structure'. The group were asked to note an extract from the BRC minutes from 1986, which referred to minor defects on the Estate. Mr Barker felt that they should have been mentioned in subsequent leases; that the original workmanship had been inadequate and the City was therefore liable and not the long leaseholders. Mr Barker also urged the City to revisit Counsel's opinion in this matter, which had been sought by the Comptroller and City Solicitor in 1999 and 2000. Mr Stevens later confirmed that this had been done.

The group then studied pictures from a balcony at Willoughby House, where some steel had been exposed. The property was owned by Mr Macer, who confirmed that the balcony had been in this condition for at least 10 years but that there had not been any further deterioration in that time. In concluding, the RCC and BA accepted that some of the defects were due to fair wear and tear but they would like to see a fair apportionment.

Eddie Stevens then invited Dr Casson, a leading UK concrete expert, to explain the structure of concrete and its deterioration.

Dr Casson advised that all concrete structures built in the same era (i.e. 1960's and 70's) were similarly affected and the defects on the Barbican Estate were very typical. Dr Casson referred to the tabled photographs and, whilst unsightly, explained that the concrete's function was not impaired and there was no evidence of creeping corrosion on the exposed steel. In fact, Dr Casson was surprised at the very low level of deterioration on the Barbican Estate, given that many 1960's/70's concrete buildings had now been demolished. The number of affected concrete elements was very low compared with the total number in the estate, and this again reflected the high standards of construction.

In concluding, Dr Casson recommended stabilisation and cosmetic repair but emphasised that the deterioration was neither a 'structural defect' nor a 'defect affecting the structure'. Dr Broomfield concurred with Dr Casson's view and agreed that the Barbican Estate was generally a well-made structure, given that build and design standards of the 1960's and 1970's were greatly inferior to those of today.

Dr Broomfield then explained that there was currently no guidance as to how often concrete buildings should be inspected, although bridges and car parks were covered by legislation. Furthermore, prior to the introduction of robust European standards in 2000, materials and guidance had been unreliable and, therefore, any repairs could reasonably have had to have been undertaken 2 or 3 times in the time up to now, if carried out in accordance with earlier standards.

Mr Barker challenged whether proper maintenance had been carried out. Mr Stevens explained that maintenance works are regular and planned, generally before any fault arises but concrete cannot be maintained in this way. Dr Broomfield suggested that the rate of regression and timing of future repairs could be estimated from the current rate of carbonation and cover depths but this would be a complex task.

Dr Casson confirmed that the concrete on the Barbican Estate was in excellent condition, given its age. Dr Broomfield advised that low compaction occurred in all concrete buildings but new builds use special additives which prevent it. Such additives were not available in the 60's and 70's. Dr Broomfield also advised that structures such as the Barbican reach their 'design life' after about 50 years and therefore concurred with Dr Casson's view as to the Estate's excellent condition. In response to a question about carbonation, Dr Casson advised that this would only be deemed a structural defect if it coincided with low cover, which was generally not found in the surveys that had been carried out.

In concluding, Mr Stevens advised that, having carefully considered the views of leading experts in the field, he would be recommending this as a chargeable repair to long leaseholders.

The BA and RCC accepted the conclusion but, given the evidence presented, asked if there was any merit in making the repairs. Dr Casson and Dr Broomfield advised that whilst there was no pressing need from an engineering perspective, cosmetic repairs should be phased over the next few years. The BA and RCC asked to see the full concrete reports and details of any works carried out between 1991 and the present day. Mr Stevens offered to facilitate at future resident meetings on this matter.

Dr Casson and Dr Broomfield finally explained the rationale behind the amount of scaffolding used. The group noted that, as some of the testing had necessitated 'hammer tapping', there had been a risk of falling concrete. Furthermore, given the height of the tower blocks, simply cordoning off the blocks would not have provided sufficient protection. The scaffolding had remained in place whilst the concrete test results were being analysed, as this was more cost effective than dismantling and re-erecting it.