

Application Reference 129740/FO/2021: Hexagon Tower, Blackley
Response to Urban Design Comments
May 2021

Introduction

1. The planning application for the proposed over-cladding and replacement windows at Hexagon Tower is supported by a Planning Statement and Design & Access Statement which sets out the extent of deterioration and considers the proposal's compliance with the development plan.
2. This supplementary note addresses the comments raised by Manchester City Councils Urban Design & Conservation Manager and follows discussions with officers of the Council on 17 May, requesting further clarity on the rationale for the proposed design solution. Specifically, we consider:
 - a. Materiality and whether alternative products and finishes have been explored;
 - b. Window replacement and proportions; and
 - c. Scheme amendments that retain larger areas of the original mosaic tiling.
3. The note concludes by reasserting the balanced judgement required under paragraph 197 of the National Planning Policy Framework (NPPF).
4. This note should be read in conjunction with the originally submitted information and Corstorphine + Wright's accompanying presentation document which provides further context and technical commentary to the recent issues raised.

Existing Issues

5. The existing façade of Hexagon Tower is progressively deteriorating, leading to expanses of the mini-mosaic tiling that cover the entirety of the solid portions of the building to delaminate and sheer off, presenting a health and safety issue. There are several other defects across the building which have contributed to the rate of deterioration such as cracks through the cladding, areas of missing tiles and degraded sealant and flashing. It has not been possible to secure and safeguard the existing tiles in areas where they are debonding.
6. Where large panels of tiles are missing, or have been obviously 'patch repaired', the visual uniformity of the building is clearly disrupted. Where panel joints have been replaced it has often been with white silicone, rather than grey, as original. Again, these white movement joints can be read very clearly and disrupt the design intent for a uniformity of finish to the precast panels.
7. The submitted engineers (Mott MacDonald) report concludes that areas of de-bonded cladding represent a health and safety risk.
8. Longer term remedial strategies have been explored, but each have significant disadvantages. Over-cladding would prevent water ingress whilst also providing a less variable range of temperature exposure by limiting direct sunlight. Mott MacDonald confirm that both of these factors would contribute to a reduction in the rate of additional debonding of the existing cladding.

9. Over-cladding provides the greatest opportunity to improve the appearance of the building whilst also providing a long-term warranty for the works which will reduce the ongoing maintenance liabilities of the applicant.

Materiality

10. An anodised aluminium cladding is proposed, selected to provide enhanced definition and a 'crispness' across the building. The visible joint lines of the building will be reflected in the proposed cladding panels, significantly improving the existing situation by replacing the unsympathetic white silicone jointing.
11. Alternative products and finishes have been considered during design development though discounted on the basis that the fire integrity of the building cannot be ensured. The overriding factor is the A1 rated fire safety credentials of the cladding that must not be compromised.
12. Special attention has been paid to the original colour scheme and texture of the mosaics. Aside from the obvious failings in the mosaic system, decades of pollution and weathering has naturally dulled the sharpness of the building. It is apparent from studying more sheltered parts of the tower, that a subtle shine and shimmer would have played an important part in people's experience of the building.
13. As a result, the inspiration for using a natural anodised aluminium has been derived from the existing silver / grey tones found within the mini mosaic tiles. The previously submitted illustrative views provide a representation of the authentic metallic sheen / lustre of the aluminium panels and how the new cladding system will assist in reasserting the design intent of Seifert & Partners. The panels will provide the variance that the mosaics do already but on a larger scale.
14. The pre-coated anodised aluminium embodies other important benefits that when considered in the context of the scheme represent compelling reasons for selecting this product. These include:
 - a. Euroclass A1 fire rated;
 - b. UV colour resistant with no risk of surface finish fading;
 - c. Corrosion and abrasion resistant;
 - d. Uniform surface finish; and
 - e. Long term product guarantee.
15. Finally, the proposed over cladding treatment will significantly improve the current poor sustainability and energy performance of the building. The submitted Energy Statement advises that the existing fabric is in a poor condition and as a result has a high rate of 'air leakage'. The environmental benefit of the cladding will be to improve air permeability, something that is particularly important within a lab environment, where environmental conditions need to be closely controlled and monitored.
16. In selecting the proposed over cladding system, the development will make the building adaptable to the long-term effects of climate change. It is expected that the new aluminium cladding will result in a carbon emission reduction of 24% per year.

17. The development demonstrates the applicant's commitment to minimise energy consumption and reducing embodied carbon over the future life of the building.

Windows

18. The original glazing is single pane, poorly performing and has therefore reached the end of its natural life. There are recurring issues with water ingress and over recent years several windows have failed and become damaged. Isolated replacement on an ad-hoc basis is not a sustainable solution from a cost perspective. Where replacements have occurred, attempts to try and replicate the original tinted glazing with an applied film has presented issues in achieving consistency.
19. The design team have considered alternative window systems, including refurbishment and the use of secondary glazing. The only option available is to replace the windows with new double-glazed units with as close to the original proportions as possible.
20. From a practicality and health and safety perspective, it is necessary to install the windows internally. The dimensions and weight allowance of the internal goods lift dictate the maximum pane size as being 2.4m in height. As a result, it is necessary to slightly raise the transom bar in height to approximately 900mm from finished floor level. This will allow for the two glazing panels to be transported within the building and installed internally.
21. The raised height of the transom bar is the lowest possible, accounting for the practicality and constraints of window installation. The design team have carefully considered the effect of increasing the transom height by approximately 600mm. From ground level the window proportions would not be visible.
22. In summary, the small change in window proportions is in response to the constraints of having to install internally rather than externally. An additional constraint is that the proposed window transom must be able to take the weight of the double-glazed unit. Moreover, the double-glazing units will reduce the thermal heat loss from the building and significantly improve its U-Value rating.

Scheme Amendments

23. In response to comments that we explore opportunities to retain larger elements of the existing mini mosaic tiling, the applicant is willing to omit proposals to over-clad the two-storey machine hall annexe's either side of the main tower. This is in addition to the areas of tiling that would remain exposed in the protected spaces of the southern entrance.
24. In consultation with the building manager and structural engineers, it is apparent that the rate of delamination is not as acute on the machine halls. The results of the latest hammer tap test survey indicate more isolated instances of failure that can be periodically managed and maintained more easily and with less risk of falling debris from height.
25. Clearly a long-term solution is required, however in the interests of stopping the progressive decline of the existing tiles across the main tower the applicant is prepared to continue with its maintenance regime on the lower portions of the building for some time longer.

26. As a result, updated plans have been prepared that remove proposals to overclad the two-storey annexe's either side of the main tower.

Summary

27. Paragraph 197 of the NPPF requires a proportionate 'balanced judgement', having regard to the significance of the heritage asset and scale of any harm caused. Importantly, national policy does not stipulate that any identified harm needs to be weighed against the public benefits as it does for listed assets. In considering the proposals the applicant is not required to demonstrate clear and convincing justification.
28. The NPPF does not differ between 'substantial' and 'less than substantial harm' in respect to locally listed buildings. There is not a range of potential impacts, or a scale of heritage harm that we are required to meet in this instance.
29. To achieve the balance that is directed at paragraph 197, the benefits of the proposal are invited to be considered as part of the planning judgement. In the context of the above comments these are reiterated below:
- a. The de-bonded cladding represents a serious health and safety risk due to the increased likelihood of a significant piece of material falling from the height. The proposed over-cladding will remove the risk of unsecure cladding;
 - b. A holistic approach to remediating the progressive delamination of the building's façade and poor performing single glazed windows, rather than expensive reactionary 'patch repair';
 - c. Improving the visual appearance of the building whilst preserving key features. The colour and tone of the over-cladding has been selected to minimise the degree of change and to maintain the uniform appearance of the building in longer range views;
 - d. Significantly increasing the building's energy efficient performance;
 - e. The installation of an A1 rated fire cladding system; and
 - f. Safeguarding the long-term viability of a non-designated heritage asset.
30. This supplementary note has outlined the unique constraints faced by the applicant in attempting to repair Hexagon Tower. The design team have explored alternative cladding options and retaining the existing window proportions, however in both cases these are not viable solutions. The applicant is however comfortable to remove the proposal to clad the smaller two storey annexes so that larger areas of the existing tiling can be left exposed.
31. As previously described within the planning application, the proposed development will bring forward a comprehensive solution to the challenges presented by the existing mosaics and single pane glazing. Approving this application will enable the heritage asset to benefit from a thorough programme of repair and maintenance.
32. The proposed design solution will make an appreciable positive contribution to Hexagon Tower and should be viewed as part of the building's evolution as a unique, attractive, and distinctive structure befitting of the important work that is carried out internally.

33. Over-cladding in anodised aluminium represents the greatest opportunity to provide an attractive and low maintenance building façade which retains the existing architectural form, eliminates the risk of falling debris and ongoing maintenance liability, allowing future investment in the building to be better planned and delivered.
34. Moving forwards, and as discussed during our meeting, the applicant would be happy to accept a pre-commencement condition requiring submission of a full-size sample panel so that details of the proposed aluminium cladding can be considered in detail. This will ensure that the Council retains overall control over the quality of the proposed product.