ATELIER.MB

SUPPEMENTARY PLANNING REPORT

PROJECT	MIDLAND HOTEL ENTRANCE	**DATE**	MARCH 2025
PROJECT REF.	2045	**REVISION**	B

Planning Approval ref: 140016/LO/2024

This report is written in support of a Discharge of Conditions application.

4 Notwithstanding the details submitted with the application, prior to the commencement of any the following works, samples and specifications including detailed drawings of:

iii) The extent and type of treatment of the Terracotta surrounding the area of obvious damage.

As per the original application package, several areas of the terracotta balcony were identified as having soiling following the fire. High pressure steam cleaning (DOFF) was carried out in accordance with the approved sample and methodology.
A subsequent inspection revealed that whilst the terracotta had responded well to the cleaning, and the surfaces had not been damaged, some of the 'terracotta' pieces were actually a GRP (glass reinforced plastic) recreation. These are thought to be dated. This difference in material was not discernible from ground level, and was only identified due to the unusual reaction of the material to the heat from the fire.
We have now identified which areas are made from fibreglass that have been damaged. These need to be fully removed and replaced. See drawing C(220).



GRP revealed following DOFF cleaning. The previous glazed effect is lost, and there is some surface blistering.

5 Notwithstanding the details submitted with the application, prior to the removal of any stone form the building the extent and type of repair of the terracotta and the amount of replacement, including a structural engineers report, the final extent and detail of works to the terracotta and a method statement includes hold and review points that requires further inspection when works are on site shall be submitted to and agreed by the City Council as local planning authority.

We carried out localised removal of the GRP, and core drilled into the supporting concrete structure. This revealed significance levels of steel reinforcement, and the full depth of the concrete (at least 700mm), which continues beneath the balcony itself.



Localised removal of GRP to reveal concrete behind. Core drilling confirmed the depth of the concrete.

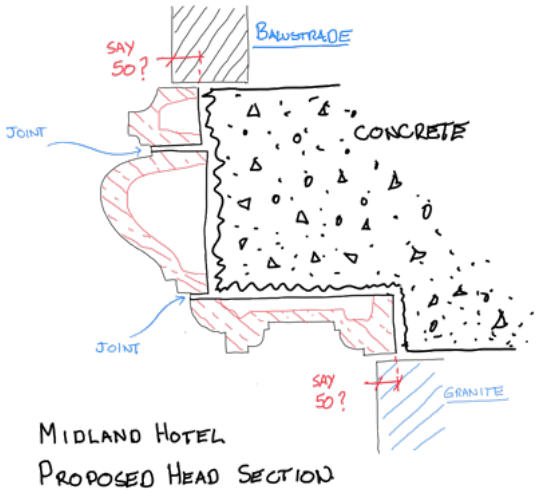


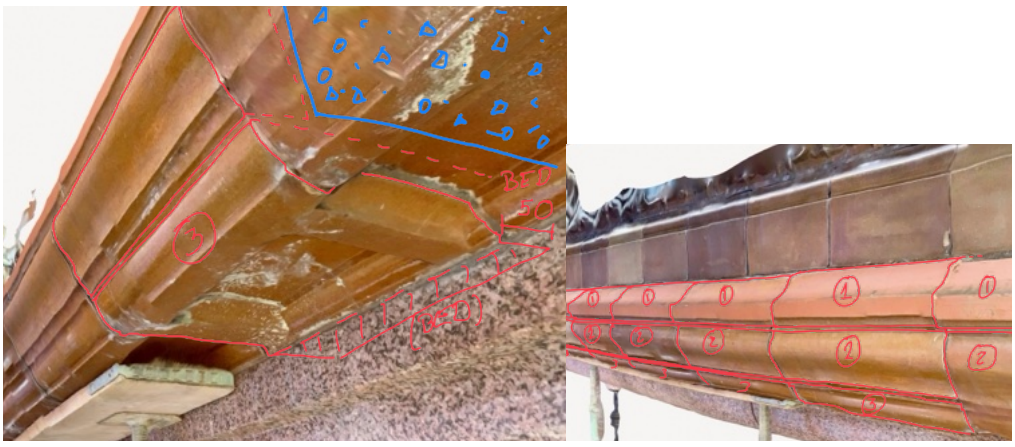
Substantial reinforcement bars revealed at the outer edge of the concrete, with minimal cover.

We have explored 3 no. option in terms of how we can 'reinstate' the damaged terracotta balcony. These are summarised below:

1) Remove all concrete and reinstate full faience blocks.
   a. Our structural engineer, Renaissance Ltd have inspected the structure on site and have advised that this would be a very risky option as it would require the existing terracotta structure to be undermined. There is a substantial risk that the wider balcony would be damaged – the terracotta blocks are expected to have been reinforced and infilled as a continuous line and therefore any movement would cause cracking at least.

2) Cut out concrete to just behind balcony face, and install new faience tiles with hairline joint. REN confirmed that this still posed risks due to vibration of cutting out – and the unknowns of the existing concrete and its reinforcement. BC to meet with Darwen Terracotta on site to determine further details of this option, and the confirm time and cost implications.
   a. Recognised experts Darwen Terracotta were approached and attended site to advise on this solution.
   b. As this is reinstatement work rather than full blocks, they suggested that new terracotta pieces could be prepared. But these would each need to be made into 3 no. pieces each to facilitate installation.





Mark ups from Darwen Terracotta noting the number of pieces required.

   c. This option was discussed with REN, who advised the risks as follows:

1) Possible disturbance to the adjacent terracotta and other items due to vibration during removal of concrete and reinforcement.

2) Possible damage to terracotta and adjacent stonework during breaking out (especially as the connection between balustrade and cantilever is unknown and may vary along its length).

3) Loss of anchorage to the reinforcement- while we don't know exactly how hard the reinforcement is working, removing the bend on the outer edge could potentially compromise the effectiveness of the bars.

4) Possible rotation / local failure of the balustrade due to being supported on only the remining corner of concrete. Any such movement would also likely damage the new terracotta units.

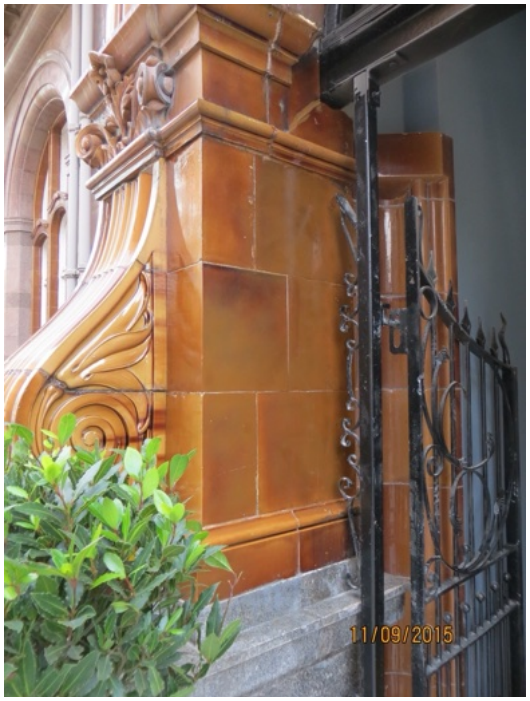
3) Repair concrete and apply a new mortar based finish with on-site glazing.
This glaze cannot be baked at the high temperatures of a terracotta faience unit, and therefore its surface longevity will be less. However, they have carried out similar repairs elsewhere on the building and these are currently lasting very well.



Sample insitu repair of 'faience' progressing on site.



Finish sample prepared. The colour is still being developed, but note the shine on the left hand side of the image.



Previous repairs using a similar methodology prepared by Bullen Conservation in other areas of the building.

Taking due consideration of all the issues raised above, we have determined that the most appropriate solution is no. 3 above. Repair of concrete and preparation of in-situ surface to match surrounding terracotta. We give the following reasons for these proposals to be acceptable:

- Minimal risk to disturbance of surrounding fragile fabric which would cause additional damage and could lead to the whole stretch of terracotta being replaced and all the original material with it.
- A high quality matching finish can be achieved. This repair is above pedestrian height, and will not be a readily visible from the pavement, within the building, or from any surrounding building.
- Previous repairs using an inferior GRP solution, and we suspect dating from circa 1980s, were not readily discernible until inspected from the scaffold.

In terms of heritage impact, these proposals and the justification given above have been reviewed. Giving due consideration to the potential of any other solution to cause significant damage to the surrounding historic fabric, it is considered an acceptable proposal. This proposal will simply reinstate the condition of the fabric before the fire, albeit using higher quality modern materials to produce a more robust finish. The proposal will therefore not result in harm to the significance of the listed building.

Mortar
Please see accompanying sample sheets detailing the mortar mix, and trials. We also provide the Womersley's sample analysis.

Stone Indents
These will be carried out in accordance with NBS Cl41. See below example done elsewhere by Bullen Conservation.

