

Listed Building Consent Condition 8 Methodology

Dragonfly Contracts Ltd

Job Reference: DF2279

Client: Bruntwood

Project: Pall Mall Court – Redevelopment

Location: Pall Mall, 61-67 King Street, Manchester M2
4PD



1.0)	Contents	
2.0)	Introduction	4
3.0)	Historical Information	4
4.0)	General Repair Methodology	4
5.0)	General Protection Methodology	4
6.0)	Condition 8A – Repairs to original stair cores	5
6.1)	Peelaway Paint Stripper.....	6
6.2)	Dry Ice Blasting.....	6
6.3)	Conclusion.....	8
7.0)	Condition 8B – Repairs to original timber and metal balustrade in stair cores.	8
8.0)	Condition 8C – Repair and restore lift lobbies.....	10
9.0)	Condition 8D – Making good to fabric following removal & formation of new openings.	10
9.1)	Structural Alterations LGF.....	10
9.2)	Floor Slab Removal to Form Atrium	11
9.3)	New Staircase GF to Basement, Platform Lift.....	12
9.4)	New service core holes	12
9.5)	Strip out works to toilet walls.....	13
9.6)	Shear Wall Removal	13
9.7)	Riser works.....	13
10.0)	Condition 8E – Schedule of external signage, fixtures and fittings to be removed and making good methodology.....	13
11.0)	Condition 8F – Details of propose damp proofing (if required) & methodology.	14

Change Tracking

Revision	Date	Author	Signature	Approved by	Signature
4	15/03/24	Chris Myers			
Amended document type to provide clear line in information submitted to date.					

2.0) Introduction

Dragonfly Contracts Limited have been appointed by Bruntwood SciTec to complete the redevelopment works to Pall Mall Court. This document details the individual methodologies associated with the retention, alteration and repair of the historic fabric of the building.

In general, all significant interventions have been previously investigated prior to Dragonfly instruction and all necessary research and investigation works have been completed to allow the design to be developed.

All works are to be carried out on the principle of minimum disturbance of the existing fabric of the Pall Mall building and where necessary shall be undertaken in line with the below methodologies. Any works not covered by this methodology must cease until a review can be undertaken and amendments made and agreed with City Council as the local planning authority.

All works are to be undertaken in accordance with the design drawings and specifications issued to Dragonfly Contracts by the Bruntwood and Sheppard Robson as client and designer.

3.0) Historical Information

Prior to the involvement of Dragonfly Contracts certain documentation has been provided by the client team for consideration of the city council. In relation to the conditions within this document the relevant documentation is listed below:

Soft Strip Amendment_Lift Lobby Mosaics Rooftop ME Equipment – *Appendix 1*

Pall mall Court – Lift Lobby Mosaic Proposals – *Appendix 2*

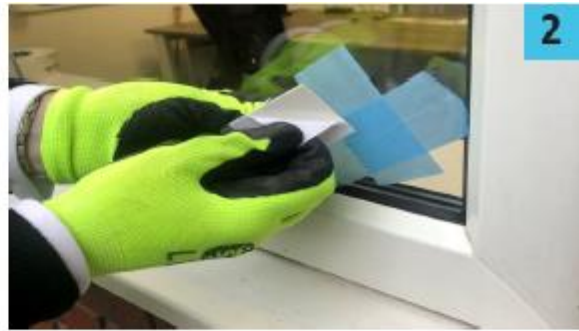
4.0) General Repair Methodology

The basic repair methodology for all mosaic tiles has been described within '*Soft Strip Amendment_Lift Lobby Mosaics Rooftop ME Equipment*' which details the supplier and methodology for installation of any replacement tiles. It should be noted that the extent of the repairs was then amended in the later issued '*Pall Mall Court – Lift Lobby Mosaic Proposals*'. The generic approach will be to recover as many existing mosaics as possible from areas of removal and to re-use these for the repairs throughout. The removal process is to be undertaken in line with this agreed methodology.

5.0) General Protection Methodology

In principle the primary aim will be to isolate all heritage finishes prior to commencement of works throughout the project. Isolation will utilise various methods with the primary 2nr being use of mobile screen made from timber or temporary protection with corex or similar. Where there are areas of high risk to existing finishes these will be protected with more heavy duty temporary protective materials which achieve LPCB's LPS 1207.

Temporary protection will be used using self-adhesive pins. Low tack tape is to be installed onto the heritage finishes, with pins adhered to this and temporary protection placed over these to be held in place. The tape will aid removal of the protection and minimise disruption to the existing finish, images below:



A single floor is to be completed initially for internal quality review. All internal spaces will then be protected.

Protection will be monitored throughout the project during weekly site managers inspections and repairs will be undertaken as required to re-instatement the required levels.

6.0) Condition 8A – Repairs to original stair cores

Within Pall Mall Court, two of the four original staircases are coated in Two Pack Epoxy Paint (Stair 2 & 3). In said locations, this has been applied over the original Staffordshire blue floor tiles.

The current heritage proposal is to remove the coatings and restore the two staircases to their original condition.

Following advice taken from Stephen Levrant Heritage Architects, the following methods for cleaning the tiles were adopted:

- Peelaway Paint removal system
- Dry Ice Blasting

Samples of the proposed systems were completed.

6.1) Peelaway Paint Stripper

To provide a sample of paint removal and to expose the original finishes beneath the paint, we used Peelaway paint stripper and left this to work for 72 hours: the maximum recommended amount of time. Please refer to **Image A** for the result of this.

This method proved to be unsuccessful.

Image A



6.2) Dry Ice Blasting

Following our unsuccessful attempt with the Peelaway Paint Removal System, it was recommended by Stephen Levrant - Heritage Architecture, that Dry Ice Blasting may be effective in removing the existing paint.

Ice Blasting was completed on one half landing and three stairs of Stair 3, please refer to the **Image B** below.

Image B

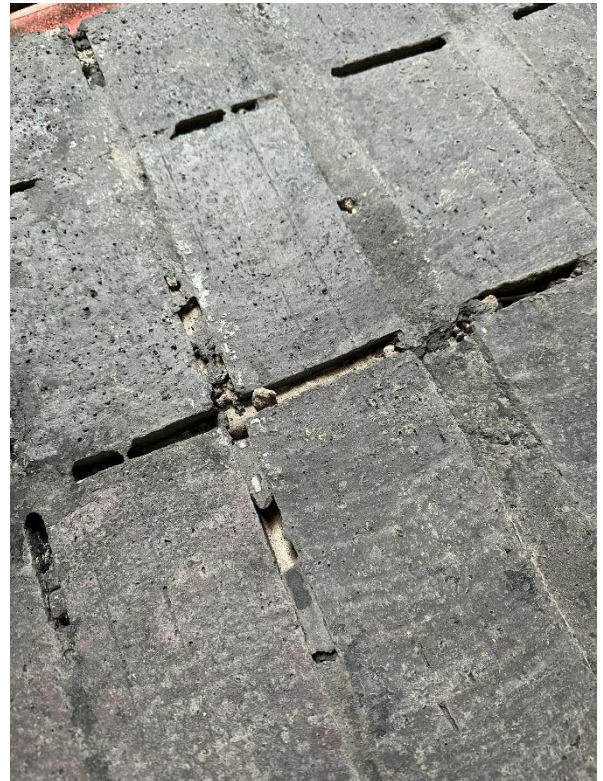


Whilst this method was successful in removing paint from this surface, it caused significant damage to the grout between tiles. It is important to note that the historic grout appears to be defective due to its original application, as a void beneath the grout was exposed following the Ice Blasting procedure. Please see the **Images C** and **D** below for an example of this.

Image C



Image D



6.3) Conclusion

The sample areas of Peelaway Paint Removal System and Ice Blasting were reviewed on site by Paul Mason, the Heritage Architecture consultants, Stephen Levrant, and Deloitte planning advisors. In general, it was agreed that the removal of the existing paint finishes to staircases would be detrimental to the historic feature. We propose that a more suitable strategy to restore these areas is to recoat over the existing paint with proprietary paint finish to match the existing.

There are two staircases that retain their original tile finish, please see **Image E** and **F** below (Stair 1 & 4). It is undeniable that our efforts to revert the sample area back to the original finish, have been unsuccessful.

Image E



Image F



Proposed final finishes

Stairs 1 & 4 to be cleaned back to Staffordshire blue tiles, with new nosings painted onto the stairs.

Stairs 2 & 3 are to be prepared, lightly sanded, vacuumed, degreased and painted. Final paint product to be confirmed with sample produced on site for agreement.

7.0) Condition 8B – Repairs to original timber and metal balustrade in stair cores.

Protection has been installed to all existing timber handrail within the 4nr staircases. Monitoring of this is form part of the weekly site managers checklist. Upon removal, the

handrails are to be sanded and refinished as existing. This protection has been witnessed on site by MCC, images below:

Image G



Image H

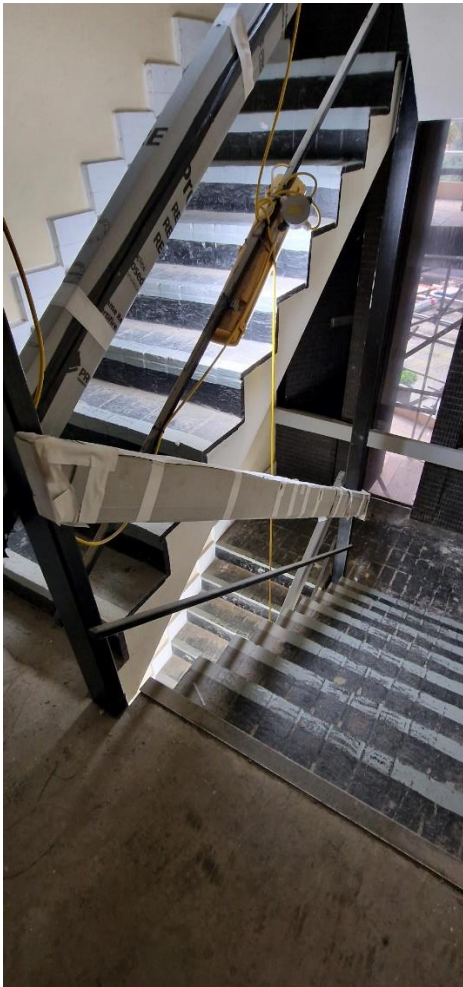
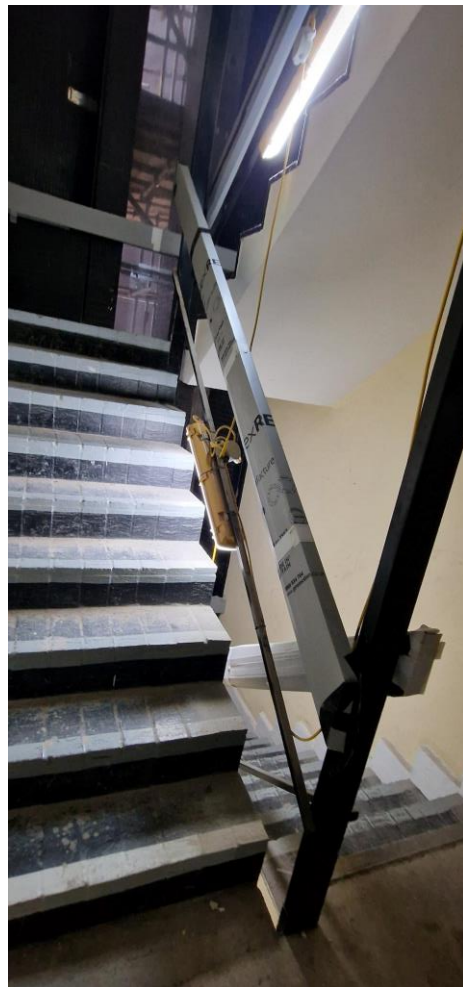


Image I



8.0) Condition 8C – Repair and restore lift lobbies.

Historic fabrics within lift lobbies are limited to mosaic tiles. To protect these valuable historic elements, the processes and materials outlined in Section **5.0: General Protection Methodology** will be carefully implemented to prevent any potential damage.

For methodology of repair to mosaic tiles, please refer to **LBC C5 – Internal & External Mosaic Repairs**. This is inclusive of materials and tools used in instances of repair.

8.1) Alterations to Historic Fabrics

Planned alterations to historic fabrics within lift lobbies are limited to the replacement of existing lift call buttons and extension of mosaic tiles to meet new ceiling datum lines. To minimise the risk of unnecessary damage to the mosaic tiles, all fixings will be carefully positioned in the grout lines between tiles, avoiding direct penetration into the tiles themselves.

9.0) Condition 8D – Making good to fabric following removal & formation of new openings.

9.1) Structural Alterations LGF

These works have been previously agreed under the enabling phase.

All structural alterations will be reviewed for structural integrity before works commence and a robust design solution for temporary works will be implemented if required. The Temporary works will be designed and installed in accordance with our project culture regarding the Grade 1 listed status of the building and the preservation of Heritage finishes.

All trade contractors associated with the works will have proven competency, hold the relevant CSCS competency card, and will attend a Site Induction including task Specific induction, regarding preservation of heritage items/Mosaic Tiles. Additional Task Specific and heritage preservation Toolbox Talks will be completed at regular intervals if required for prolonged works.

Heavy duty crash deck Scaffolding will be erected, below areas requiring demolition in accordance with previously approved tie details if required, only as a last resort. Alternative tie details that mitigate the requirement to tie through Mosaic tiles will be considered and employed if possible.

Mosaic tiles and external finishes will be protected against impact and water damage using robust materials such as, plywood, corex . Mechanical fixing will not be permitted. Adhesive tape must be easily removed on completion of works leaving no adhesive residue. Upon removal cleaning will be undertaken with hot soapy water to loosen any adhesive residue. Any difficult patches will be cleaned with sealant removal and a microfibre cloth.

Works cannot progress until protection has been inspected as fit for purpose by the Dragonfly supervisor.

Existing windows will be removed sympathetically to skips.

Mosaic tiles that require removal to facilitate the demolition works will be carefully removed using metal hand scrapers if possible. If required, and as a last resort lightweight percussion tools may be used.,

The removed tiles will be collected and stored for cleaning by specialist contractors for reuse in other areas, in accordance with approved methodology.

The existing floor slab will be saw cut to provide a clean edge, Water suppression will be kept to a minimum by restricting the flow rate with the on-tool connection to mitigate water damage to historic features.

RC slab will be removed using mechanical breakers, BROKK or similar.

Concrete arisings will be removed to skips in Marsden Street via wheelbarrows.

Rough edges of exposed concrete will be cut clean using cut off saws and diamond blades. Where possible dust extraction will be implemented as a preference to water suppression.

The effects of adverse weather will be mitigated using suitable temporary screens. These will be freestanding and robust enough to withstand high winds and severe rain.

On completion of structural alterations, the protection will be removed and the area will be inspected by Dragonfly supervisor. Any damage to historic features will be sympathetically repaired using reclaimed materials.

9.2) Floor Slab Removal to Form Atrium

Works completed under the enabling submission.

Structural Steel will be installed in line with LBC to support exposed edges before removal of sections RC Floor Slab. Steelwork will be delivered to site in manageable sizes and lifted into position using mechanical means Genie Lift or similar.

Site operatives working from MEWPs will install the steelwork using bolted connections.

A Heavy-Duty Scaffold crash deck will be installed directly under the area of slab to be removed.

The slab edge will be cut neatly using diamond tipped blades with minimum water suppression to mitigate damage to other areas. Mechanical breakers will be used to remove the floor slab working in a controlled manner, clearing arisings at regular intervals. Care will be always taken to prevent damage to other areas affected by the works.

Exposed slab edges will be sympathetically repaired using Reinforced Concrete. The fixing detail of shutters will be completed with minimum intervention of surrounding undisturbed areas.

The finishes and handrail will be installed in accordance with agreed and approved materials as the works progress to prevent damage. A robust system for protecting the finishes will be implemented on completion of the installation.

9.3) New Staircase GF to Basement, Platform Lift
Works completed under the enabling submission.

Following completion of Basement piling works and Steel installation the section of Floor slab will be re moved to accommodate the new stair. Mechanical fixings will not be permitted at any times.

The opening will be formed following installation of a robust heavy duty crash deck.

Mechanical breakers will be used to remove the floor slab., Exposed edges will be cut using diamond edged tools. Arisings will be removed progressively as works progress.

Exposed slab edges will be sympathetically repaired using Reinforced Concrete. The fixing detail of shutters will be completed with minimum intervention of surrounding undisturbed areas.

The new steel staircase will be delivered to site in manageable piece small sections and erected in accordance with our site culture of maintaining and preserving the historic fabric of the building. Temporary edge protection will be provided in lieu of the permanent solution being installed at a later date. At landing level these will be formed with scaffold tubes bolted to concrete slabs or clamped to new steel beams. These do not interact with the mosaic tile. Throughout the stair flights the handrail will be formed of temporary steel sections clipped to the new steel stringers.

The finishes and handrail will be installed in accordance with agreed and approved materials as the works progress to prevent damage. Once installed the new finishes will be protected with a combination of corner trims and corex to prevent damage to newly installed finishes.

The builders work for the platform lift will be completed with minimal disturbance to existing finishes in conjunction with new stair. The platform lift will be installed at a later date as finishes progress.

Our site team will closely monitor the work to ensure interventions are managed and preserved.

Feature Stair – refer to drawings (all drawings are available from the viewpoint system managed by Bruntwood).

6911-SRA-ZZ-XX-DR-A-24101 – *Appendix 3*

6911-SRA-ZZ-XX-DR-A-24102 – *Appendix 4*

Platform Lift Pit –

6911-SRA-ZZ-B1-DR-A-66320 – *Appendix 5*

9.4) New service core holes

Various core holes are required for the routing of new services throughout the building. Where possible services have been routed to avoid heritage aspects including the mosaic tiles but may be needed within the vicinity of these existing finishes. Prior to works commencing all heritage finishes will be protected utilising repeat methodologies from above and avoiding any mechanical fixings. All protection will be inspected by a Dragonfly Site manager prior to commencement of works.

All core holes will be completed utilising a standard rig mounted core drill. Rigs will be fixed next to the drilling location. Diamond tipped core bits will be used to allow for drilling without percussion impact.

Core hole requirements are marked on the MEP builders works drawing for across the building and will be marked and checked on site by the MEP and Dragonfly managers prior to commencement. M&E drawings have been previously submitted to MCC.

Lose cores will be captured from below utilising mobile scaffolds to prevent unwanted damages to finishes below and any slurry will be cleared on the day to prevent staining of finishes.

All waste will be removed to skips located on site.

9.5) Strip out works to toilet walls

All lift lobby walls will be previously protected and will be inspected prior to commencement of the works. The existing block work wall will have mosaics removed and bagged for re-use prior to removal. Removal will be via previously agreed methodology. Removal of all block work will be completed with medium duty handheld breakers to limit vibration exposure to the surrounding areas. All block work will be periodically removed to site skips to prevent a build-up of debris. Where the walls interact with tiles to be maintained clean lines will be cut with diamond tipped saws to provide a clear break. Protection will then be re-instated to these corners.

9.6) Shear Wall Removal

All new structural steel will be installed using resin anchors with grout applied and fully cured prior to removal of concrete. Each corner will be stitch drilled with a diamond core to allow full cutting of the concrete. Shear walls will be cut using a track mounted saw, into manageable sized chunks and removed to the on-site skip. All cuts will be undertaken not to overcut into the remaining concrete. Generally, works for cutting are 600-800mm away from retained heritage finishes.

9.7) Riser works

Several existing risers are to be enlarged to accommodate new services. Where possible these will utilise existing slab openings, where not new cores or removed slabs will be undertaken to enable the MEP installation. All slabs will be removed between structural ribs to avoid major structural supports being installed. All new core holes will utilise the methodology above.

Any works within the vicinity of heritage finishes will be completed with the same care and attention across the entire project. All protection will be maintained and checked throughout the works to ensure protection of the heritage finishes.

10.0) Condition 8E – Schedule of external signage, fixtures and fittings to be removed and making good methodology.

Schedule of fixtures to be removed from the external façade:

- Main Pall Mall signage to King Street elevation of the tower

- Pall Mall sign at low level to right hand side of existing entrance
- Pall Mall Court signage above existing main entrance on King Street
- Pall Mall Court signage to Brown Street elevation
- Low level redundant alarm and CCTV ancillaries in various locations.

For all removal works a reverse installation technique will be followed. Fixings will be undone instead of removed with crow bars or the similar. Care will be taken at all times to limit the impact to surrounding finishes.

Not all high level signage is accessible from scaffold, where not access rope access systems will be used for roof level to allow removal. During this access accurate images will be taken of the existing mosaics below the signage.

11.0) Condition 8F – Details of propose damp proofing (if required) & methodology.

All trade contractors associated with the works will have proven competency holding the relevant CSCS competency card, and will attend a site Induction including task specific induction, regarding preservation of heritage items. The heritage items concerned with their package of works are identified as:

Mosaic Tiles

RC Finishes

The interface with new replacement glazing.

The roofing sub-contractor will develop a safe system of works incorporating the general protection principle from this document into their works. Where the sub-contractor is responsible for local protection works will not commence until a Dragonfly Supervisor has signed off the protection.

The site team will maintain a sympathetic approach towards the work and the listed status of the building, this approach will be relayed to the subcontractors via induction. Toolbox Talks and site notice boards.

Additional Task Specific and heritage preservation Toolbox Talks will be completed at regular intervals if required for prolonged works.

A detailed inspection of the area affected by the works will be completed and a photographic record will be maintained before during and following the works.

Material will be transported to the roof areas using external hoists and cranes positioned within the Marsden Street and King Street., The appropriate permits will be in place before lifting operations are implemented.

The existing Asphalt surface has been surveyed and cleared of ACM.

Davit Arm Sockets will be secured to the roof slab with a minimum embedment and will be subject to through testing in compliance with required standards, before insulation and roof finishes are completed.

Wherever possible the existing asphalt will be maintained and overlaid with tapered Insulation. Liquid plastic finishes will be applied to the roof surface in accordance with the relevant specification and manufacturers recommendations.

The weather will be closely monitored, works will not be permitted during periods of adverse weather, rain and cold.

In areas where insulation is not required the Liquid Plastic finish will be applied direct to

existing asphalt surfaces.

Interventions with Davit Arm sockets and Plant support steel will be carefully managed with attention to detail.

Where possible with abutments wall chasing will be avoided to mitigate any effect on the existing structure and mosaic tiles (level 11). However, if chasing is required to meet the specification requirements, mosaics will be carefully removed and replaced in accordance with previously agreed and approved methodology.

The liquid plastic finishes will be returned up the parapets and under the new copings.

On completion of the works, the area will be inspected for damage and any repairs will be completed sympathetically in accordance with previously agreed methodology.

The roof balustrade will be fixed to the roof structure using a proprietary channel and fixings. The roof membrane will then be dressed into the channel creating a water tight seal before glazing is fitted. The Glazing will be installed on completion of roof works and sealed into the channel using a proprietary glazing system, as below.

MATERIAL/SYSTEM SCHEDULE

DECK: Original deck and Mastic Asphalt.

PRIMER: SA Contact Primer

VAPOUR CONTROL LAYER: SA Flex Vapour Barrier

THERMAL INSULATION: Foil faced PIR Insulation (tapered on the concrete deck and flat board on the timber deck)

ADHESIVE: Garland Insu-Lock Insulation Adhesive

UNDERLAY: SA Flex Carrier Layer

REINFORCEMENT LAYER: Garland GarMat Premium

BASE LAYER(S): White-Knight Base Coat @1.25Lpm² (Note: 1.5Lpm² Where the coating is simply going straight onto the Mastic Asphalt – see attached roof layouts)

FINISHING LAYER: White-Knight Top Coat @1Lpm²



Soft Strip Amendment

Lift Lobby Mosaics & Rooftop M&E Equipment

This document requests approval for additional strip out works at Pall Mall, 61 King Street, Manchester, M2 4PD. The main package of strip out works has already been approved by Manchester City Council as per approval letter ref JA/DMCC. At the time approval was sought, the full scope of strip out works was being finalised and the scope for additional works has now been agreed between Bruntwood and the Principal Contractor.

The additional works are relatively minor in comparison to the already approved works and consist of removal of all rooftop M&E equipment, as well as removal of covering finishes to the mosaic tiles in the ground floor reception and to the lift lobbies to floors 9,4,3 and 1. Please see the appended document titled "Annotated Plans and Photos".

The lift lobby and ground floor reception mosaic tiles have been overboarded with plasterboard. It is not yet apparent how this plasterboard has been fixed but it appears to be either adhered with some form of adhesive with other areas being affixed by way of a metal framing system. The proposed works will see these finishes removed to expose the mosaic tiles behind, which are being retained and showcased as part of the redevelopment proposals.

The plasterboard finishes will be removed using hand tools and with care to reduce the risk of any damage being caused. If mosaic tiles are damaged as a result of these works, the following reinstatement methodology is to be adopted:

- If mosaic tiles cannot be repaired in-situ, damaged tiles are to be carefully removed using hand tools. No power tools to be used under any circumstances.
- Replacement tiles are to be supplied by Craven Dunnill Jackfield Ltd and affixed using heritage putty and colour matched heritage lime grout to finish.
- The below image shows an original mosaic tile sat centrally in the photograph, surrounded by 4 sample tiles provided by Craven Dunnill Jackfield Ltd. Orders have not been placed for reinstatement materials at this stage as damage is not anticipated to be caused, however, the likeness in terms of material, colour, form, texture and size will be matched as closely as possible if required as shown below. No repair/replacement/reinstatement works will be undertaken without prior review, consent and approval from the appointed conservation officer:



Pall Mall Court - Lift Lobby Mosaic Proposals

A "blue grit" type of bonding agent has been applied to the original mosaic tiles to the lift lobbies to floors Ground, 1, 3, 4 and 9 at Pall Mall Court. The blue grit has been used as a key for plasterboard adhesive to be applied to, before the plasterboard has then been "dot and dabbed", skimmed and painted. The plasterboard is therefore very well stuck to the tiles and is almost impossible to remove without causing damage.

Everbuild, the product manufacturer, were contacted for their advice and to understand if there is any way that the blue grit can be removed. Everbuild advised to apply hot soapy water and an abrasive brush / sponge. This was trialled on 25th August 2022 to the 9th floor lift lobby. At the same time, attempts were also made to remove the plasterboard adhesive. The blue grit, for the most part, came off the tiles however residues remained, particularly to the grout lines due to their porosity. The small area highlighted in the photos below took c.30 minutes to clean. The plasterboard adhesive to the trial area came away without significantly damaging the tiles, however, the residue left behind would now require further abrasive cleaning to remove i.e. wire brushing / blasting of some kind which would ultimately damage beyond repair the mosaic tiles behind.

Taking the above into account, it is not deemed to be practical from an aesthetic, time or cost perspective to remove the plasterboard coverings, particularly considering there would still be a significant amount of making good and replacement tiles required. It should also be noted that patching in with new tiles to such large areas would risk somewhat of a patchwork finish being achieved.

The cost for removing the plasterboard, plasterboard adhesive and blue grit, followed by making good and replacing the damaged mosaic tiles is calculated to be in the region of £74,456 per lift lobby. This is c.4.5 times more expensive than preferred alternative options presented to MCC during the site visit on Tuesday 20th September 2022. Summary photos below.

Blue grit removed. Sample area circled in red. 30 minutes to remove to this standard:

