



OUR TOWN HALL
MANCHESTER CITY COUNCIL
EXTERNAL FINISHES CONDITION SUMMARY
MAY 2018

Issue Details

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External Finishes Condition Summary	OTH-PUR-ZZ-ZZ-SCH-A-9242	
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1.00 ROOF COVERINGS

The roof coverings of OTH comprise:

- Westmoreland slate tiles generally, with polychromatic patterning on the outward Albert Square and return slopes to Princess Street and Lloyd Street turrets and plain slating to courtyard slopes. Roof slopes have generally been repaired on a piecemeal basis with some inappropriate (suspected) Welsh slates.
- Lead coverings to flat roofs, gutters, gullies and so on.
- Lead coverings with welted joints to link bridges between OTH and Town Hall extension building

Condition summary

- Erosion, loss, damage and displacement of roof slates
- Where inspected there are many split tiling battens
- Splits, tears and wear to lead roof coverings, with oversized bay widths non-compliant with current Lead Sheet Association (LSA) standards
- Absence of torching (mortar pointing) and/or breathable felting to underside of coverings which would offer a secondary means of defence against water ingress (the intricate roof arrangements hinder access to all areas)
- Visible water ingress through coverings (some areas have been temporarily made good), leading to damage of interior fabric
- Suspected lack of roof insulation throughout
- Inadequate falls and dispersal of rainwater across roofscape (also tested in detail by Arup)
- Wear and tear failures to decorative ironwork to ridges etc
- Poor and unsafe access arrangements to undertake maintenance
- Possible surface wear and underside corrosion to lead coverings on link bridges with potential insufficient capacity to drainage

2.00 EXTERNAL FABRIC ELEMENTS: MASONRY (INCLUDING MONUMENTS)

The masonry elevations of OTH comprise:

- Carboniferous sandstone
- Marbles, limestones and granites (monuments)
- Brickwork (high level elevations with the courtyards, Great Hall gable
- Decorative Minton-style mosaic panels (courtyards)
- Bronze (monuments)

Condition summary

- Erosion, loss, and damage to functional weathering elements (cills, hoodmoulds, string courses); stonework was generally constructed with a horizontal bed (how it came out of the ground), where horizontal weatherings should be vertically bedded to deter delamination
- Structural defects and weathering to high-level chimney stacks; uncertainty over the stability of cantilevered stonework ie. gargoyles with some having been removed or have received temporary support
- Localised failing/missing/inappropriate pointing
- High number of redundant fixtures, fittings and fixings detracting from the overall appearance of the building and its aesthetic values; those which are ferrous have/will result in damage to the stonework
- High level loss and failure to projecting gargoyle elements (e.g. to Albert Square Tower)
- Surface salt damage, powdering and staining
- Scaling, blistering and peeling of surfaces
- Transfer of previous window paint to masonry surfaces
- Localised structural deflection and separation (assessed by Ramboll)
- Loss of decorative stone detail (OTH and monuments)
- Biological and atmospheric soiling, especially to projecting elements
- Staining and streaking from ineffective rainwater dispersal from failing weathering, rainwater goods etc.
- Black pollution crust formation
- Damaged/missing mosaic panels
- Expansion damage from metal inserts
- Deep-seated geological and atmospheric staining (especially to courtyard elevations)
- Staining and patination to bronze monuments
- Staining and soiling to granite sections of monuments
- Calcification and staining of elements to fountain

3.00 EXTERNAL FABRIC ELEMENTS: METALWORK

The historic metalwork elements of OTH comprise:

- Portcullis gates to Cooper Street, Lloyd Street and Albert Square
- Security gates into and within the courtyards
- Decorative railings to balconies
- Decorative original edge protections to roofs and turrets
- Fretwork panels to ventilation apertures
- Decorative ridges to roofs (as noted/included above)
- Link bridges with bronze cladding between OTH and Town Hall extension building, with ?zinc/stainless steel/aluminium undercarriages

Condition summary

- Erosion, loss, and damage to details
- Structural defects where barrier loading requirements are necessary
- Localised failing/missing details
- Some decorative panels have been replaced with inappropriate, modern alternatives detracting from the original building arrangements
- In locations ironwork is corroding where built into masonry walls which is resulting in failure/loss of masonry
- Inability to closely inspect condition of framework within upper levels/open belfry to Albert Square tower
- Inability to closely inspect bronze link bridges; but appear poorly patinated and in need of cleaning. Possible localised damage and distortion. Potential ingress issues to undercarriages

4.00 EXTERNAL FABRIC ELEMENTS: ALBERT SQUARE TOWER BELLS

Existing arrangements

A total of 23 bells cast originally by John Taylor & Company Bell Foundry (including a ringing peel of 12 although 13 are present), consisting of the Great Abel hour bell (recast in 1937) weighing more than 8 tonnes, being installed at the time of original construction.

Condition summary

We have obtained a copy of John Taylor’s 22 December 2016 report where they found the bells to be in good order apart from the following points:

- The steel bell frame at the top of the tower housing Great Abel is now starting to suffer from corrosion. This should be cleaned down, de-greased and treated before being painted with good quality undercoat and top coat of paint. This would prevent corrosion becoming a problem in the future.
- All 23 bells in the main chamber are covered in a thick coat of grime which resonates as the clapper strikes the bell.
- The bell chamber is very dirty and would benefit from a clean down. This would decrease the amount of grit entering the moving parts of the bells and carillon.
- The ropes on bells 1, 2# and 6 are showing signs of wear around the garter hole and pulleys. This should be monitored and repaired or replaced when necessary.
- The 5th clapper has been re-flighted to swing in line with the bell.
- The 9th and 11th clappers have 2-3mm of vertical play in the bush. These will need replacing within 1-2 years. The cost for re-bushing a round top clapper is £135.00 plus VAT per clapper. This is the “at works” cost and would therefore involve local volunteers removing the clappers, transporting them to and from our works in Loughborough and then refitting them back into the bells.
- The tenor has a wooden shafted clapper which was fitted in 2013 and there is already an excessive amount of play in the bush. To rectify this, we would like to remove the clapper and crown staple from the bell, transport back to the foundry to re-bush them, then re-fit into the bell. This would be done under the 2013 warranty of the clapper with a reduced rate offered to complete the works to the 9th and 11th clappers if undertaken at the same time.

5.00 EXTERNAL FABRIC ELEMENTS: CLOCK

Existing arrangements

4no. clock faces all original made by William Gillett (now known as Gillett and Johnston) each 15 ft 9” in diameter with 6 ft hour hands and 10 ft minute hands. The clock face consists of metal ferramenta/ framework with opaque glazed panes

Condition summary

- Decorations to metalwork failing (including gilding)
- There are several cracked panes (likely from bird impact) which require conservation repair, or potential replacement but remains intact.
- With reference to John Taylor’s report above (reference item 8), the clock was not chiming correctly, quote ‘It was noted that the clock was not chiming correctly. On the hour and quarter past the hour the full Westminster chimes sound and on the half hour and quarter to the hour the half hour chimes sound. It is suggested that you contact your clock contractor to rectify the situation’.
- It has not been made known when the last major inspection of the clock and mechanism was undertaken by a specialist; externally a drone survey has been completed to the northern face.
- Stage 2 remedial recommendations
- Specialist inspection of the clock mechanism and face both internally and externally to ascertain its condition and inform proposals for its repair
- Undertake localised repair of the glass panes and metalwork and to internally and externally prepare and redecorate all metalwork
- Correct the chiming (as noted above).
- Specialist to undertake a comprehensive service to include cleaning down, lubrication, greasing, inspection and adjustment (as necessary) of all parts of the clock and mechanism to ensure proper working of all mechanical, electrical and electronic parts, as relevant to include:
 - a) Entire clock mechanism
 - b) All motion work and gearing
 - c) All associated automatic windings, mechanical or electrical
 - d) Striking and chiming mechanisms
 - e) Re-setting of switching mechanisms as necessary
 - f) Hammers and connecting rods
 - g) Leaving the clock to time and in proper working condition

6.00 EXTERNAL FABRIC ELEMENTS: MAINTENANCE ACCESS PROVISIONS

Existing arrangements

The existing high-level maintenance access arrangements comprise:
Access walkways across lead coverings
Timber access gantry to Great Hall roofspace
Localised step and ladder access between levels and elements

Condition summary

- Deterioration and instability of gantry to Great Hall (condemned)
- A need to bring access to full compliance standards