

BUXTON CRESCENT AND SPA
SCHEDULE OF CONDITION AND REPAIRS
TO THE
MARBLE TO THE COLUMNS AND PILASTERS
WITHIN
THE PUMP ROOM

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December 2012
Updated June 2014

Generally

The contractor will be required to inspect and confirm the extent of the works prior to pricing the work.

There are three forms of defect that have occurred to the brechia pavonazzo sheet marble cladding of the rectangular columns and wall plasters of the Pump Room interior.

1. The green marble capitals to the columns are tied back to the brickwork behind by bronze clips and plaster dabs. The load bearing support is directly onto the sheet marble below which is also clipped bronze clips and plaster dabs, leaving the total load bearing on the green marble base. The long term effect has been for the sheet marble to deflect outwards under the pressure of the load above.
2. Where the deflection has been excessive the sheet marble has broken along the veining lines where the marble is weaker.
3. The effect of the damp atmosphere within the Pump Room has caused the marble to decay and become friable which has increased the fracturing due to loading. Where the marble is not fractured the proposal is to anchor the sheets back in situ. Prior to fixing back the sheets all loose debris should be removed from between sheet marble and brick backing. This will enable the sheet marble to be returned towards its original position. This work of anchoring back should be undertaken by drilling counter sunk holes in the marble, drilling the brick backing and inserting plastic rawl plugs (with collar removed) and fixing with stainless steel screws (gently tighten so as to draw in the stone where possible). Allow 6 fixings to each face. After completion of this the counter sunk holes will be filled with specialist resin mixed with stone dust from the salvaged marble. Where larger pieces of marble are missing salvage stone should be cut in and resin fixed in place. Where small pieces are missing (e.g. arris damage) the repair should be undertaken with resin and stone dust.

Where the stone is too decayed to be reinstated the marble should be removed from the top downwards, and the brickwork behind cleaned and made good. When dismantling the capital and base stone care must be taken in proper recording of the pieces to enable them to be assembled correctly. Each of the green base skirting sections have been drilled at close centres for the installation of an injected Damp Proof Course. This has severely defaced the stone. This requires suitably cut discs of colour and grain matched vert tinos marble to be tightly fitted into the holes and grouted into place. Where required, re-fix base vert tinos green marble with bronze anchors and plaster dabs. Clean out any plaster / mortar debris from behind base whenever possible. Re-fix column capital vert tinos green marble with bronze anchors, plaster dabs, lime chalk mortar beds and new stainless steel support angles under lower stone sections. Engineer or contractor to calculate size and locations of supports. The face of the support angles should not be visible on completion of the column face below.

Specialist contractor to paint plastic repairs, edges of disc insertions and screw fixings with marble effect to blend repairs in with surrounding marble. Any repairs, whether in resin or other material such as plaster of paris, should be suitable for the high moisture content of the stone.

At an appropriate stage in the repairs the marble is to be cleaned, polished with talcum and wax.

Column No.1

Current condition

This is a quarter pilaster which has a base and capital of green marble, however, the sheet marble is in a very poor condition having fragmented into a number of pieces. This pilaster has already been dismantled.

Proposed repairs

Prior to reconstruction, clean, polish and wax the pieces of stone being reinstated. Reinstall the green marble at the base and capital and to replace the damaged sheet marble of the column with new sheet marble finish. Ensure that the corner re-entrant arris detail is replicated at the corner joints. Make up green marble as necessary with new matching profiled pieces.

Column No.2

Current condition

This half pilaster is in reasonable condition, however, on all three sides the central flat sheets of brechia pavonazzo are bowing outwards, particularly the wide central section. The bowing marble sheet should be stabilised and slightly drawn in.

Proposed repairs

The green capital should be dismantled and rebuilt upon new mountings. Anchor back the brechia pavonazzo marble as described above by the use of 6No countersunk holes, stainless steel screws, rawlplugs to each face sheet of marble. Fill countersunk holes in stone after fixing. Make resin / stone dust repairs to 3No sections of broken edge to the slabs (approx. 150x25mm, 50x12mm, 75x12mm). Joints between slabs to be filled with approved grout. Repair holes in base.

Following re-anchoring the marble sheet, the 11No.old rawlplugs and screws previously put into the marble sheets should be removed along with any other metalwork etc and the holes resin filled in the same way as the deep counter-sunk holes.

Clean, polish and wax finished repairs.

A specialist contractor is to undertake painted marble finish to areas of resin repair.

Column No.3

Current condition

This half pilaster is in reasonable condition, however, on all three sides the central flat sheets of Brechia pavonazzo are bowing outwards, particularly the wide central section. The bowing marble sheet should be stabilised and slightly drawn in.

Proposed repairs

The green capital should be dismantled and rebuilt upon new mountings. Anchor back the brechia pavonazzo marble as described above by the use of 6No countersunk holes, stainless steel screws, rawlplugs to each face sheet of marble. Fill countersunk holes in stone after fixing. Make resin / stone dust repairs to 2No sections of broken edge to the

slabs (75x12mm, 100x12mm). Joints between slabs to be filled with approved grout. Refix broken corner section using resin. Repair holes in base.

Following re-anchoring the marble sheet, the 12No. old screw holes are to be resin filled in the same way as the deep counter-sunk holes.

Clean, polish and wax finished repairs.

A specialist contractor is to undertake painted marble finish to areas of resin repair.

Column No.4

Current condition

This quarter pilaster is in reasonable condition, however, on all three sides the central flat sheets of Brechia pavonazzo require further securing. The bowing marble sheet should be stabilised and slightly drawn in.

Proposed repairs

The green capital should be dismantled and rebuilt upon new mountings. Anchor back the brechia pavonazzo marble as described above by the use of 6No countersunk holes, stainless steel screws, rawlplugs to each face sheet of marble. Fill countersunk holes in stone after fixing. Joints between slabs to be filled with approved grout. Repair holes in base.

Following re-anchoring the marble sheet, the 4No. old screw holes are to be resin filled in the same way as the deep counter-sunk holes.

Clean, polish and wax finished repairs.

A specialist contractor is to undertake painted marble finish to areas of resin repair.

Column No.5

Current condition

This half pilaster is in very poor condition. On all three sides the central flat sheets of Brechia pavonazzo are bowing outwards, particularly the wide central section. The south side bowing marble sheet should be stabilised and slightly drawn in. The north and east sides require complete replacement.

Proposed repairs

The green capital should be dismantled and rebuilt upon new mountings. Anchor back the brechia pavonazzo marble as described above by the use of 6No countersunk holes, stainless steel screws, rawlplugs to face sheet of marble. Fill countersunk holes in stone after fixing. Joints between slabs to be filled with approved grout. Replace the north and east faces with sheet marble. Repair holes in base.

Clean, polish and wax finished repairs.

A specialist contractor is to undertake painted marble finish to areas of resin repair.

Column No. 6

Current condition

This column is in poor condition. On all four sides the central flat sheets of Brechia pavonazzo are bowing outwards, particularly the wide central section. The bowing marble sheet should be stabilised and slightly drawn in. The large patch on the east face will require further attention.

Proposed repairs

The green capital should be dismantled and rebuilt upon new mountings. Anchor back the brechia pavonazzo marble as described in more detail above by the use of 6No countersunk holes, stainless steel screws, rawlplugs to each face sheet of marble. Fill countersunk holes in stone after fixing. Prior to pulling stone into place remove existing large patch repair. Following fixing slab firmly in place make 2No. repairs using salvaged stone and resin fixed (triangular shape approx. 500mm highx150mm wide & square shape 50x50mm). Make good fracture leading down from 50x50mm repair and 300mm of arris using resin/stone dust. Joints between slabs to be filled with approved grout. Repair holes in base.

Following re-anchoring the marble sheets, the 12No.old screw holes are to be resin filled in the same way as the deep counter-sunk holes.

Clean, polish and wax finished repairs.

A specialist contractor is to undertake painted marble finish to areas of resin repair.

Column No.7

Current condition

This column is in fair condition, however, on all four sides the central flat sheets of Brechia pavonazzo are bowing outwards, particularly the wide central section. The bowing marble sheet should be stabilised and slightly drawn in. At low level the marble face is failing and resin repair should be made prior to anchoring back the brechia pavonazzo.

Proposed repairs

The green capital should be dismantled and rebuilt upon new mountings. Make face resin repairs to low level of brechia pavonazzo and level face prior to installing new fixings. Anchor back the brechia pavonazzo marble as described above by the use of 6No countersunk holes, stainless steel screws, rawlplugs to each face sheet of marble. Fill countersunk holes in stone after fixing. Joints between slabs to be filled with approved grout. Repair holes in base.

Following re-anchoring the marble sheet, the 10No. old screw holes are to be resin filled in the same way as the deep counter-sunk holes.

Clean, polish and wax finished repairs.

A specialist contractor is to undertake painted marble finish to areas of resin repair.

Column No.8

Current condition

This pilaster is in poor condition. The capital moulding requires re-aligning and there is green staining on the brechia pavonazzo. Two faces require replacement marble to be set in.

Proposed repairs

The green capital should be dismantled and rebuilt upon new mountings. Anchor back the brechia pavonazzo marble to the south face as described above by the use of 6No countersunk holes, stainless steel screws, rawlplugs. Fill countersunk holes in stone after fixing. Replace the north and west faces with sheet marble. Joints between slabs to be filled with approved grout. Repair holes in base.

Clean, polish and wax finished repairs.

A specialist contractor is to undertake painted marble finish to areas of resin repair.

Column No.9

Current condition

This pilaster is in poor condition. The brechia pavonazzo sheets are in extremely poor condition and are beyond saving. These should be carefully removed and sound sections used for repair elsewhere.

Proposed repairs

Dismantle the pilaster from the top down, cleaning pieces to be re-used as work progresses. The green capital and base should be dismantled and rebuilt upon new mountings. Infill the circular holes in the base as noted above. Reinstall the brechia pavonazzo to all three faces. Joints between slabs to be filled with approved grout. Repair holes in base.

Clean, polish and wax finished repairs.

Column No.10

Current condition

This column has three sides (facing the main space) which still maintain the brechia pavonazzo marble. The fourth (south) face has been plastered. The west face will require a repair. All brechia pavonazzo will require anchoring and the joints pointing. The plaster face is reasonably sound.

Proposed repairs

The green capital should be dismantled and rebuilt upon new mountings. Anchor back three sides of brechia pavonazzo marble as described above by the use of 6No countersunk holes, stainless steel screws, rawlplugs to each face sheet of marble. Fill countersunk holes in stone after fixing. Make resin / stone dust repairs to 250x50mm on

west face of column. Joints between slabs to be filled with approved grout. Repair holes in base.

Clean, polish and wax finished repairs.

Column No.11

Current condition

The faces are intact but have heavy making good with plaster and cement. The brechia pavonazzo is bowing and the joints are open.

Proposed repairs

The green capital should be dismantled and rebuilt upon new mountings. Following removal of previous repairs, clear away as much debris from behind the marble. Anchor back all four faces with countersunk screws and rawlplugs as above. Fill countersunk holes. Make good damage to marble sheets including 6m of cracks to the face and previously filled holes in brechia pavonazzo with marble dust resin compound. Joints between slabs to be filled with approved grout. Repair holes in base.

Clean, polish and wax finished repairs.

A specialist contractor is to undertake painted marble finish to plastered face of column and areas of resin repair.

Column No.12

Current condition

The brechia pavonazzo finish to this pilaster is totally shattered and will be removed and replaced by new marble panels.

Proposed repairs

The green capital should be dismantled and rebuilt upon new mountings. Carefully dismantle the column cladding from the top down. Replace the damaged sheet marble of the column with new brechia pavonazzo marble finish. Ensure that the corner re-entrant arris detail is replicated at the corner joints. Reinstall and repair the green marble at the base.

Clean, polish and wax finished repairs.