ARCHBISHOP'S PALACE TOWER
OTFORD

WORK REQUIRING URGENT TREATMENT

Recommended by Ford & Ptnrs

6.1.1 Interior ground floor repairs (3.7, 3.10, 3.15).

3.7 The doorway lintel suffers from water penetration from above and there are also worm and other infestations. It would be prudent to assume that this lintel may need to be replaced as part of the emergency repairs. It consists of two sections of oak.

3.10 The iron fixings for the gate are splitting the stonework at the upper level. The iron bar at high level across the opening to prevent access will have to be removed. Some repointing will be necessary in the brick reveals in the longer term and the hard cement renders will also need to be removed.

3.15 There are some large cement based repairs to at least two of the quoins and these should be removed. All quoins have evidence of a degree of salt action and salts and at least two are cracked but they are probably still stable. Conservation and repair is required but it is not likely to collapse in the near future. The grille needs replacement urgently for anti-pigeon protection.

FIRST SCAFFOLD LIFT (Interior)

South Elevation

6.1.2 Interior first scaffold lift repairs (3.31, 3.32, 3.33, 3.34, 3.37, 3.41, 3.42, 3.43, 3.51, 3.54, 3.55, 3.59, 3.60, 3.61).

3.31 There are some isolated loose bricks on top of the offset for the ceiling are loose and it would be beneficial to bed these to ensure they are not lost.

3.32 There is a great deal of disturbed brickwork in the entrance from the southern walkway at first floor level and it is collapsing and bricks are fracturing below due to water retention and freezing. The jamb is in a similar condition and there is a large tree, possibly Elder, growing out the side and it is suspected that the downpipe is also leaking.

3.33 Significant work is required as a matter of urgency for structural reasons in this corner to consolidate but a longer term decision on rebuilding will have to be taken when the funding bid goes in.

3.34 The timber lintel to the doorway below is at the point of collapse and should be urgently replaced with simple concrete lintels at this stage to give structural stability.

South-West Elevation

6.1.2 3.37 The modern building in of brickwork is hollow with a very large void behind. It is suspected this will have to be rebuilt and the void packed properly for structural reasons to ensure this corner remains stable.

West Elevation

6.1.2 3.41 There is a major void in the wall at the junction of this elevation and the south-west elevation. This is presumed to be for a principal timber for the floor. All the modern brickwork is hollow and clearly the void behind was never properly packed and repaired.

6.1.2 3.42 Concern is expressed that there is movement as the timber bressumer is moving, the left hand side is rotten with very little bearing left. The replacement of this lintel or providing secondary support is required as an emergency measure for structural reasons. It would also be worth removing some of the brickwork above to see the condition of the void behind and to allow for structural packing. This will mean that the brickwork above will act as a beam rather than put pressure on the timber bressumer below.

6.1.2 3.43 Significant conservation will be needed of the Reigate stone jambs and the hard cementitious pointing should be removed as a matter of urgency to allow them to breathe.

North Elevation

3.51 The concrete lintel above the window appears secure. The window heads are heavily sand and cement repaired but are stable. The amount of sand and cement renders and pointing on the window reveals are unfortunate and it would be good to remove that now to allow the building to breathe. The modern metal grilles are probably not causing undue damage to the window reveals at present.

North-East Elevation

3.54 There is a bow on the timber bressumer and there is some loss of bearing on the left hand side and a large sand and cement repair was removed. This is probably stable and could be propped as a temporary measure, rather than replaced at this stage. Some of the original brickwork above is loose and some work is therefore required as a temporary measure.

3.55 Concern is expressed about the condition of the original jambs around this window and all the cementitious material must be removed urgently to allow them to breathe and a proper assessment should be made on the extent of the repair necessary, either as an emergency measure or in the longer term. This window reveal is in the worst condition.

East Elevation

3.59 This area of 20th century brickwork is in imminent danger of collapse and water is cascading into the void behind from the failed roof at high level. The surrounding surviving original brickwork is in imminent danger of loss. Large tree roots are growing through this space and urgent work is required immediately if we are to avoid losing significant fabric. The wall below has been so saturated that it is likely that when it dries out significant faces of bricks will also be lost and allowance should be made for repair.

3.60 The brickwork above the modern lintel is completely hollow. Buried within the brickwork are the remains of what is thought to have been the ceiling boards. These are rotten but are of historic interest. Packing behind the voids will be required in the longer term but this is not needed at this stage.

3.61 The hard cementitious material should be removed from the voids to allow them to breathe. There is significant loss of surface on the jamb stones on the right hand side of the window due to the water cascading from first floor level. Once these dry out, significant areas are likely to be lost in the longer term.

SECOND SCAFFOLD LIFT (Interior)

South Elevation

6.1.3 Interior second scaffold lift repairs (3.64, 3.65, 3.67, 3.70, 3.75, 3.82, 3.83, 3.85, 3.86, 3.87).

3.64 The doorway leading into the southern range has suffered from significant water penetration, freeze/thaw action and other problems. The right hand jambs are disintegrating completely and will not survive much longer, nor will the external brickwork which will be discussed externally. This archway now needs to be braced as a matter of urgency with centring, including the heads and the left hand jambs, to ensure it does not collapse and a decision taken to see if it can be saved or if it needs to be replaced. Unfortunately, it is likely that most of the stonework will need to be replaced but, whatever happens, it needs urgent structural support.

3.65 The voids above the archway need to be pointed and grouted to ensure it does not collapse.

3.67 The archway into the garderobe has also suffered from saturation and salt action but it is structurally stable at present. However, it would probably be worth putting some centring in it to ensure it remains stable. There are voids surrounding it on all sides and it has a timber bressumer on the other side with a void above so some immediate packing of that would be needed for structural reasons.

South-West Elevation

3.70 The anti-bird mesh has been lost and needs to be replaced as a matter of urgency to prevent birds entering the interior. The cill is concrete and this is not helping the saturation and ideally this should be removed and replaced with lime to allow the structure beneath to breathe. The modern brickwork below is saturated and moving.

West Elevation

3.75 The anti-bird mesh should be replaced with something more secure. The hard cementitious repairs should be removed to allow the building to breathe. The window appears structurally sound at present but will need longer term conservation.

North-East Elevation

3.82 The inappropriate materials need to be removed from this window as a matter of urgency to give it a chance to breathe. The surrounding stonework is probably secure at present but an allowance should be made for some mortar repairs. The concrete cill should be replaced with a lime as a temporary measure to allow it to breathe.

3.83 There are voids in the brickwork below and some urgent minor pointing to tighten things up would be beneficial and it can then be left alone. Because the recesses of the battens are fairly deep on this elevation, going beyond the brickwork, it might be also prudent to tile pack these as structural repairs.

East Elevation

3.85 The remains of the battens are rotting and it might be prudent to put some tile packing into these recesses as an emergency item to ensure the inner faces of brickwork do not become unstable. Comments about the saturation of the brickwork in the southern corner are repeated here and it will suffer once it starts to dry out and more extensive repairs might be required in the longer term.

3.86 The anti-bird mesh has been completely lost and birds are entering. This needs replacement as a matter of urgency. This applies to all the window openings on this floor.

3.87 All the jamb stones are heavily weathered and the inappropriate materials need to be removed to allow the windows to breathe. The window cill is shattering and, unfortunately, will probably need replacement in the longer term. This will be considered from the outside. The internal concrete cill could be removed to allow the building to breathe. Some tile packing around a couple of the jamb stones would be prudent for structural reasons.

THIRD SCAFFOLD LIFT (Interior)

South Elevation

6.1.4 Interior third scaffold lift repairs (3.90, 3.91, 3.93, 3.94, 3.97, 3.98, 3.100, 3.101, 3.102, 3.103, 3.105, 3.106, 3.107, 3.109, 3.110, 3.112, 3.115, 3.116, 3.119, 3.120).

3.90 The south-east corner is in serious distress because of the extent of water penetration from the roof above. The brickwork is very saturated and is collapsing in areas and major areas of historic fabric are being lost, as are areas around the opening. Urgent emergency stabilisation and, probably, rebuilding will unfortunately be necessary in order to save this corner and all the brickwork below. The extensive plant growth indicates that this has been going on for a very long time.

3.91 The rest of the brickwork is in reasonable condition but there are bricks, particularly around the pockets for the floor joists, which will need to be rebedded urgently to avoid their loss. Bricks need rebedding in the opening into the garderobe. The jambs are generally in acceptable condition but there are major voids behind the right hand jamb and the brickwork on which it stands (which is technically on the south-western elevation) is modern and not attached to anything and is in danger of collapse in the longer term. That will need to be rebuilt to support the masonry above.

South-West Elevation

3.105 Water penetration is visible around the roof in a couple of locations. The roof will be discussed separately. The brickwork above the opening into the garderobe is clearly under great distress with loose brickwork and water penetration above. Conservation and stabilisation is required to avoid the loss of material. The adjacent jamb stones are badly fractured and one is obviously not going to survive. It would be worth replacing this now with a tile repair as a temporary measure to support the surviving jamb above, removal of the hard cementitious repair below and a similar approach taken with that jamb stone.

3.106 The blocking to the window clearly suffers from some water penetration but some repointing is probably all that is required at present.

West Elevation

3.107 The two-light window has been blocked with brickwork salvaged from the building. The jamb stones have been sand and cement repaired and some replaced with brickwork. Unfortunately, the sand and cement repairs on the right hand side have all collapsed and the jamb behind is now in very poor condition. This should now be repaired with a tile repair to support the masonry above. The concrete lintel above the window is secure. The surviving stonework on the window has been heavily sand and cement repaired, particularly the mullion, and it is likely that this will have to be replaced in the longer term. The rest of the fabric is probably secure at present but suffering from water penetration from above, which will be discussed as part of the roof inspection.

North-West Elevation

3.108 This elevation has the relieving arch for a former fireplace. The brickwork is essentially original with the recesses for panelling battens. Some areas of brickwork have been lost and this brickwork will need some careful stabilisation to avoid the loss of further material in the longer term. The top of the wall was complexly rebuilt with modern brickwork in the 20th century and timbers to support the roof structure above.

3.109 A couple of bricks have been lost from the head of the fireplace surround but it is probably still stable. Whilst doing stabilisation works, it would probably be worth putting centring in to give is some stability.

3.110 The inspecting architect noted water coming down the chimney flue but was unable to see into the flue. An allowance should be made for some emergency repair in this to stabilise any loose or collapsing brickwork.

North Elevation

3.112 The jambs are all heavily eroded and cubing. The hard sand and cement repairs should be removed and it is likely that, unfortunately, an allowance will have to be made for some emergency tile repair insertions to stabilise the surrounding brickwork, which is already moving on both the left and right hand sides.

North-East Elevation

3.115 The brickwork would benefit from some stabilisation to ensure that further material is not lost, particularly on the right hand corner where bricks are physically loose. This is needed to ensure longer term survival.

3.116 The hard material should be removed from the jamb stones and an allowance made for some tile repairs to ensure they are secure. The lintel is secure. The window is in reasonable condition, although heavily sand and cement repaired.

East Elevation

3.119 Severe concern is expressed about the imminent likelihood of collapse of the roof structure. The inspecting architect was worried when standing beneath it. It is only remaining in position because the plywood sheeting is holding the roof rafters together and it is in immediate danger of collapse.

3.120 Significant allowance should be made for the conservation and repair of the brickwork around the opening into the staircase. The sand and cement repairs should be removed from the window jambs and it is likely that major tile repairs will be required around this window due to its continuing saturation.

ROOF

3.122 There has been a catastrophic collapse of the roof structure in the south-east corner and the only reason it is staying in place is that the plywood sheets are holding the rafters in position. There is water penetration through most elevations.

3.123 The whole roof structure will have to be dismantled, all the plywood sheeting taken off, the joists reused where possible but new joists inserted and a completely new timber structure in the south-east corner and the roof redesigned so it takes water away to the exterior of the building.

3.125 This corner will have to be structurally supported before any work is carried out to the interior of the Tower.

Garderobe Interior

3.127 There was likely to have been a doorway in the west wall but this is now a window. There is robbed out material at low level and this probably needs to be reinstated for the longer term stability of this piece of walling. The window contains a modern steel frame with anti-pigeon mesh and this appears stable. A great deal of material has been robbed out around the right hand side of the window and this should be reinstated using a tile repair to stabilise this corner of the window and to ensure the longer term stability of the window. However, generally the structure is in reasonable condition and is stable.

3.128 The next point of access to the garderobe from the scaffolding is from the second floor. One is able to look down onto the dividing walls that originally separated the pits. These need some consolidation on the top to ensure they do not deteriorate further. The space is again constructed of original brickwork with the remains of renders surviving on a number of the walls. There is a further brick flue in one corner and this goes up to the next floors and is likely to be an insertion. It still retains timber bearers, probably for the fixing of panelling. This brickwork is in reasonable condition. The interior of the shaft has some weathering and perhaps pointing will be required in the longer term to stabilise it.

3.129 The next small space is accessed through an arch from the second floor scaffolding. There is an original window on the west elevation protected by anti-pigeon mesh. This mesh is in poor condition. The timber bressumer above appears stable, although there is erosion on the stonework. Longer term conservation will be required. Some plaster has been lost below this window.

3.131 The third scaffold lift is similar to the second with the exception that the shaft in the corner has been robbed out and the top of the wall needs consolidation if it is to remain stable. The large void in the southern wall adjacent to this requires attention.

3.132 There is clear evidence within this space that the floor would have gone in about 5' above the current scaffold level and remains of plaster survive. The walls generally are fairly stable, despite the fact that the shaft generally is open to the top. There is loss of plaster on the internal walls but not a great deal can be done about that. Bricks have been robbed out around the doorway leading into the main Tower and some minor work would be desirable to consolidate this.

3.134 The west window is original but the head stones, bressumer and cills have been robbed out and the jamb stones are parting from the wall. This window needs urgent conservation and stabilisation if it is to remain secure. The anti-pigeon mesh should be replaced and an assessment undertaken of works required in the longer term.

3.135 All the brickwork above the doorway leading into the main tower is about to collapse and there is an urgent need for the insertion of temporary lintels to support this material. Consolidation and probably tile repairs will then be required to ensure no further material is lost.

3.137 The top of this turret needs urgent consolidation to avoid the collapse of one or two areas. It would be very prudent to put a temporary roof over this to slow down the rate of decay, carry out the consolidation necessary and then mothball the turret ready for proper conservation in due course.

stable.

4.48 The major tree should be removed from the cill below and consolidation carried out to try and slow down the decay.

West Elevation of Garderobe

4.51 The brickwork is in satisfactory condition but unfortunately parts have been sand and cement pointed. The small Kentish ragstone window is heavily sand and cement repaired, the jamb stones are failing and it is unlikely they can be saved. The cill is also in poor condition. A small amount of work now will give stability, along with centring, and the anti-pigeon mesh needs to be replaced. Major conservation will be required in the longer term.

South-West Elevation

4.52 The brickwork in this elevation and the clasping quoins on the corner are in reasonable condition. The single light window is heavily sand and cement repaired and it will need major conservation and repair in the longer term. The jamb stones, whilst delaminating and friable, are probably salvageable for weathering purposes but the window needs new anti-pigeon mesh as a matter of urgency.

West Elevation

4.55 The central mullion has been replaced with modern sandstone. The jamb stones and cill are heavily sand and cement repaired or weathered but they are probably salvageable in the longer term if careful conservation is undertaken and new windows inserted to try and shed water off. The anti-pigeon mesh needs to be replaced.

North-East Elevation

4.60 It should be a longer term aim to decide if this is replaced or mortar repaired to allow a new window to be inserted. The anti-pigeon mesh should be completely replaced.

4.61 The brickwork has been heavily sand and cement repointed, which is unfortunate and this should be removed. The quoins on the two external corners are generally in reasonable condition but there are a couple that are likely to need replacement in the longer term.

East Elevation

4.62 This matches the elevation at ground level and the bottom section of the window is visible. The window cill is in poor condition, as are the jambs which are heavily sand and cement repaired and badly affected by water penetration from above. The central mullion is sandstone. This window will need longer term conservation and repair and new anti-pigeon mesh.

4.63 The sand and cement pointing in the brickwork should be removed. The brickwork is also affected by the water entering through the failed roof and this again reinforces the need for the roof to be repaired.

THIRD SCAFFOLD LIFT (External)

Staircase South and West Elevations

4.68 Although partly sand and cement pointed, the brickwork is holding up remarkably well. However, some allowance should be made for some conservation and repair work to give it stability. The work would be fairly minimal at this stage to include some grouting of cracks and removal of plant growth. The quoins are in reasonable condition.

South Elevation

4.71 The wall over the entrance into the Tower is heavily affected by water penetration from above and this again reinforces the need for the roof to be tackled. Vegetation growth should also be removed and some repointing carried out.

South-West Elevation

4.74 This is really a continuation of the previous elevation with the head of a window at low level. Significant parts of the string course have been weathered back to the line of the brickwork and a decision should be taken regarding their replacement for weathering purposes or a sand and cement and lead cap provided. The brickwork has been fairly heavily sand and cement over pointed and this will need to be removed to allow everything to breathe but it is holding up remarkably well.

4.75 The head of the window will need some repair but can probably be kept if a lead weathering is inserted to shed water away.

West Elevation

4.78 The head of the two-light window will require significant conservation and repair if it is to survive, followed by discussions on ways to provide weathering.

North-West Elevation

4.79 This is a continuation of previous elevations and has a string course. All the brickwork has been heavily sand and cement pointed and this needs to be removed. Quoin stones are weathered but not disintegrating and could therefore be retained for a period of time. The string course is a replacement.

North-East Elevation

4.82 This is a mirror image of that previously described. The window is open. All the brickwork has been heavily sand and cement repointed and this should be removed. The quoin stones are weathered but in reasonable condition. The string course is in acceptable condition.

East Elevation

4.84 This elevation matches those below and contains the string course and the head of the two-light window. All the brickwork has been sand and cement pointed and this needs to be removed. There is a great deal of plant growth in the string course and there are fractures caused by the saturation of the brickwork from the failed roof. There is evidence that there was some detail at the head of the window but that has now been lost and this reinforces the need for the roof to be tackled.

4.85 The window is in reasonable condition but conservation is required, the hard repairs taken out and more appropriate repairs inserted in the longer term. New anti-pigeon mesh should also be provided.

Stair Turret

4.86 The three facets are similar to those described previously and there is a string course and a good quality window surviving in the north-eastern facet of the staircase and clasping quoins as previously described. There is a surviving gargoyle on the south-eastern corner of the string course with a further facet facing south-east. The gargoyle is a beautiful little survival. The brickwork has been heavily sand and cement pointed and should be repointed in the correct materials. All the quoin stones are showing weathering but none have yet reached the point of collapse. Much of the string course is a 20th century replacement.

4.87 There has been modern replacement around the window but if more appropriate replacement is undertaken this window could be conserved and kept for the longer term. It retains its original ferramenta, which is nice to see. Anti-pigeon mesh should be inserted.

FOURTH SCAFFOLD LIFT (External)

Stair Turret

4.89 The quoins on the north elevation are parting from the brickwork. This is due to the water penetration from above and pointing, grouting and possibly some pinning, will be required. The hard pointing should be removed from the north-east elevation and a small amount of work is required around the window at high level to give some consolidation.

4.90 The quoin stones on the other facets are all weathered but are stable. The hard pointing should be removed from all the other facets, as well as a fairly substantial tree on the south elevation.

South Elevation

4.93 The south elevation are the walls of the entrance into the Tower and the east and south walls of the garderobe. These are in brickwork and have been heavily over pointed in the past, probably with a sand and cement based material. Much of the pointing is coming out due to the water penetration from high level. There is also a substantial tree. The quoins are in reasonable condition, although they are weathered and some conservation would be desirable.

4.94 The hard pointing should be removed from the south and east facets of the garderobe but these are not suffering as badly as the first elevation.

South Elevation of Garderobe

4.95 This is also in brickwork, heavily over pointed in the past and with a good quality single light window that is heavily sand and cement repaired. The sand and cement repairs should be removed as it is causing the stonework to delaminate and split. The cill is in poor condition. This window should be weathered to try and slow down the rate of decay. The slight movement crack above the window is likely to be due to water penetration from above.

4.96 The elevation would benefit from the removal of the hard pointing to allow it to breathe, and for some consolidation of the window to ensure no further fabric is lost in the immediate future.

South-West Elevation

4.97 Brickwork is heavily sand and cement pointed. The blocked has also been completely sand and cement repaired and it is likely that all the material inside is in poor condition. This should be removed and mortar repairs carried out to weather it. The quoin stones are in reasonable condition and it is the hard pointing and saturation that are causing the damage.

West Elevation

4.99 All the hard pointing and repairs should be removed and careful conservation undertaken to ensure no further material is lost. The quoins are all weathered but are thought to be structurally sound. Careful conservation will be required around them to ensure they do not weather back further and cause destabilisation of the brickwork.

North-West Elevation

4.100 This elevation requires the removal of all the hard pointing. It is saturated from the roof above. Work is required around the quoin stones to give weathering to slow down the rate of decay. It is likely that once this elevation can breathe, some of the bricks will disintegrate. There is movement around some of the quoins and water is getting in behind the quoins at high level and this will need to be tackled to prevent further loss.

North Elevation

4.101 All the brickwork has been heavily sand and cement pointed. This should be removed to allow the brickwork to breathe. Quoin stones on the corners are heavily weathered and work is required to ensure water does not get in and around them and also to protect the brickwork.

4.102 The jambs and cills of the two-light window are heavily weathered and it has a concrete mullion. Urgent work is required on the jambs and cill to prevent further loss and further consideration will have to be given to how much further consolidation or replacement is needed to conserve this fabric.

North-East Elevation

4.103 All this brickwork has also been heavily sand and cement repointed and this needs to be removed. The blocked window has also been heavily sand and cement repaired and has concrete mullions. This window needs urgent conservation to avoid the loss of more significant material. The quoin stones also need conservation to try and slow down the rate of decay. The window cill needs urgent repair as water can now enter the brickwork below.

East Elevation

4.104 The hard pointing in all the brickwork needs replacing with more appropriate material. It is completely saturated as a result of the failed roof at high level. The two-light window has been heavily sand and cement repaired and the jamb stones on both sides and the cill are in danger of loss. Urgent consolidation work is required to hold this in position. The brickwork below the window is saturated and material is about to be lost. There is also a great deal of plant growth. The central mullion is concrete and the stool on which it sits is eroding and work is required to ensure it remains stable.

6. Recommendations

6.1 Immediate Conservation and Repair Needs

6.1.1 Interior ground floor repairs (3.7, 3.10, 3.15).
6.1.2 Interior first scaffold lift repairs (3.31, 3.32, 3.33, 3.34, 3.37, 3.41, 3.42, 3.43, 3.51, 3.54, 3.55, 3.59, 3.60, 3.61).
6.1.3 Interior second scaffold lift repairs (3.64, 3.65, 3.67, 3.70, 3.75, 3.82, 3.83, 3.85, 3.86, 3.87).
6.1.4 Interior third scaffold lift repairs (3.90, 3.91, 3.93, 3.94, 3.97, 3.98, 3.100, 3.101, 3.102, 3.103, 3.105, 3.106, 3.107, 3.109, 3.110, 3.112, 3.115, 3.116, 3.119, 3.120).
6.1.5 Roof Interior (3.122, 3.123).
6.1.6 Garderobe interior (3.127, 3.128, 3.129, 3.131, 3.132, 3.134, 3.135, 3.137).
6.1.7 Spiral staircase interior (3.138, 3.143, 3.145, 3.147, 3.148, 3.149, 3.151, 3.152).
6.1.8 Exterior ground floor repair (4.5).
6.1.9 Exterior first scaffold lift (4.16, 4.17, 4.18, 4.19, 4.21, 4.22, 4.34, 4.37).
6.1.10 Exterior second scaffold lift (4.42, 4.43, 4.46, 4.47, 4.48, 4.51, 4.52, 4.56, 4.60, 4.61, 4.62, 4.63).
6.1.11 Exterior third scaffold lift (4.68, 4.71, 4.74, 4.75, 4.78, 4.79, 4.82, 4.84, 4.85, 4.86, 4.87).
6.1.12 Exterior fourth scaffold lift (4.89, 4.90, 4.91, 4.93, 4.94, 4.95, 4.96, 4.97, 4.99, 4.100, 4.101, 4.102, 4.103, 4.104).
6.1.13 Exterior top scaffold lift (4.106, 4.107, 4.108, 4.111, 4.113).
6.1.14 Roof (4.114, 4.115, 4.116).

6.2 Long Term Conservation and Repair Needs

6.2.1 Ground floor interior repairs (3.8, 3.9, 3.11, 3.12, 3.14, 3.15, 3.17, 3.18, 3.20, 3.21, 3.22, 3.23, 3.24, 3.27, 3.28).
6.2.2 First scaffold lift interior repairs (3.30, 3.38, 3.39, 3.43, 3.44, 3.47, 3.50, 3.51, 3.53, 3.55, 3.56, 3.61).
6.2.3 Interior second lift repairs (3.66, 3.68, 3.71, 3.72, 3.74, 3.78, 3.80, 3.87).
6.2.4 Interior third scaffold lift repairs (3.95, 3.99, 3.101, 3.107).
6.2.5 Garderobe interior (3.127, 3.128, 3.129).
6.2.6 Spiral staircase interior (3.140).
6.2.7 Exterior ground floor repair (4.2, 4.4, 4.5, 4.8, 4.9, 4.10, 4.11, 4.12, 4.13, 4.14, 4.33, 4.37).
6.2.8 Exterior first floor scaffold lift (4.24, 4.26, 4.27, 4.28, 4.29, 4.30, 4.31, 4.32, 4.35, 4.37, 4.39).
6.2.9 Exterior second scaffold lift (4.43, 4.50, 4.51, 4.52, 4.53, 4.54, 4.55, 4.56, 4.57, 4.58, 4.60, 4.62, 4.64).
6.2.10 Exterior third scaffold lift (4.72, 4.73, 4.74, 4.76, 4.77, 4.80, 4.81, 4.83).
6.2.11 Exterior top scaffold lift (4.110).

6.3 Gatehouse Immediate Conservation and Repair Needs

6.3.1 Roof repairs (5.3, 5.4)
6.3.2 Masonry repairs (5.7, 5.10, 5.13, 5.15, 5.19)