STRUCTURAL AND CIVIL
CONSULTING ENGINEERS

ANDREWS NEWBY PARTNERSHIP

# THE TOWN HALL, FESTIVAL HALL & ROSE ROOM.
# HEATH ROAD,
# PETERSFIELD.
# HAMPSHIRE.
# GU31 4EA.

## STRUCTURAL APPRAISAL

**For**

## PETERSFIELD TOWN COUNCIL.

**By**

**Andrews Newby Partnership**
**Forder House**
**High Street**
**Buriton**
**Nr. Petersfield**
**Hampshire**
**GU31 5RX**

**CNB/4367**

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## Appendices

## 1.00 SUMMARY.

1.01 The Town and Festival Hall structures can be divided into three areas, namely the original Town and Festival Hall building dating from the 1930's, the rear Rose Room extension from the 1980's and the latter "Modular" single storey east side, kitchen, reception and cloakroom area.

Town and Festival Hall Building.

1.02 The original structure is of part steel framed construction, supporting precast concrete upper floors and roof constructions, and with internal masonry and external cavity masonry walls. The elevations include typical features, curved corners and rendered bands from the era and architectural style.

1.03 The building exceeds its anticipated structural design lifespan; however, the structure may continue to perform satisfactorily provided the structure has and will continue to be protected from the weather and other detrimental effects. The majority of the structure is internal and hence protected. Externally some details of the particular construction are unknown, such as the "background" to the rendered bands and these require intrusive investigation to ensure they are not a source of reduced protection to the external elements of structure. Similarly, local element corrosion may cause cracking and a pathway for dampness and needs to be addressed.

1.04 The following structural defects were noted during our survey and require rectification.

a) Localised cracking within the external brickwork, locally to the upper east and west elevations, thought due to corroding embedded steelwork on the east side. Further intrusive investigation is required to the west where the cause is not visually apparent.

b) Vertical cracking though the curved facing brickwork at low level to the west and east corners. To the west, further investigation of the foundation and condition of adjacent below ground drainage is required.

c) Refurbishment of the east fire escape staircase to improve longevity of the structural frame (also the removal of the storage area below the east fire escape staircase where, if combustible materials are stored, would present a fire hazard).

1.05 Further comments relative to the building fabric are,

a) Although recovered recently the lifespan of the roof covering(s) is less than other areas and is likely to require further attention within the next 15 years.

b) Cracking within the feature rendered banding, possibly bonded to varying background materials. Intrusive investigation is required to ensure this is also not a pathway for dampness to the structure.

c) There are areas of internal dampness local to minor cracking, internally to the curved bays.

Continued,

d) There is evidence of damp penetration to the internal and external basement walls.

e) Replacement of delaminating and rotten timber doors is required, particularly to the east fire escape.

f) Repairs/redecoration and/or replacement of timber widows to the west side at lower level.

East "Modular" Building, Kitchen, Reception Room and Cloakroom(s).

1.06 The structure has been assembled from four individual timber framed units with an "in-situ" constructed flat roof forming the corridor between the units and the east side of the main building. Such buildings are generally used for temporary accommodation. If installed circa 1980 to 1990 its 30 to 40 years age is well beyond its intended design lifespan.

1.07 The cladding has been removed locally during our survey and generally the supporting wall studs were found to be in a satisfactory condition. The overall construction is however minimal in terms of robustness and has reduced weathering capabilities in the longer term. Defective weathering is apparent at the junction of the roof construction with the surrounding walls and is a constant source of intermittent rainwater penetration.

1.08 The following structural defects were noted during our survey and require rectification.

a) Rainwater ingress is likely to have caused localised decay to some of the roof timbers (not all have been exposed within the localised investigation).

b) Vehicle damage to the front south elevation.

1.09 Further comments relative to the building fabric are,

a) The roof covering has a limited lifespan.

b) Local diversion at ground level of the rainwater discharge from the main hall roof is required, direct to below ground drains. Currently discharging to a channel drain in front of the timber framing.

c) There is evidence of timber decay below the windowsills.

d) There are defective weathering junctions between the corridor/modular unit flat roofs and external walls of both the Hall and Rose Room extension.

e) Refurbishment is required of the timber framed windows, doors, and cladding.

Rose Room Extension.

1.10 The structure is steel framed, supporting upper precast concrete floor and roof slabs, with internal masonry and external cavity masonry walls. The rose room entrance to the rear, has an independent steel framed canopy.

Continued,

1.11 No structural defects were noted during our survey. The vertical masonry movement joints do require maintenance, that is, replacement of the mastic sealant which has perished. Also, the grouting to the base of the north east fire escape stair needs attention.

a) Movement joints, mastic sealant to be replaced.

b) Reinstate grout to base of external north east fire escape stairs.

1.12 Further comments relative to the building fabric are,

a) Similar to the foregoing areas, the lifespan of the roof covering(s) is less than other areas and is likely to require further attention within the next 15 years.

b) Refurbishment of the north east fire escape staircase to improve longevity of the structural frame.

c) Decoration of the rear entrance canopy steelwork is required. The paint coating has peeled, and corrosion of the steel work may follow.

d) Redecoration is required of the windows, doors, cladding.

General Items.

1.13 There have been many changes to the Building Regulations in recent years, not least Part L, those for the "conservation of fuel and power". Insulation values will be significantly less than current standards and upgrading is required to many elements, together with windows, doors etc. Likewise, protection of the upper level of the east fire escape stairs from the weather and continued use of a spiral stair as a suitable means of escape.

1.14 It is likely following a CCTV survey that some repairs may be required to the below ground drainage, both foul and surface water.

## 2.00 INTRODUCTION.

2.01 Following an initial visit to the property during January 2020, the Andrews Newby Partnership provided a "Brief & Fee Proposal" dated 30th January 2020 for a Structural Appraisal of the "Modular" kitchen, dining, cloakroom, building. This was subsequently updated following the lifting of the main "Covid-19" restrictions, to include the Town Hall, Festival Hall and Rose Room. Instructions were received to proceed from Mr John Tucker, Festival Hall Manager, on 27th August 2020.

2.02 Our inspection was carried out during Thursday 10th September 2020, during which time the weather was dry and sunny. Access was gained to all elevations externally, observations generally being from ground level only. Internally, most areas and rooms were accessed from the various floor levels. The main roof was accessed from the fixed ladder and hatch.

2.03 For the purposes of this Appraisal, the front of the property faces south.

2.04 Photographs taken during the appraisal are contained within Appendix A.

Continued,

2.05 No structural calculation checking has been carried out. Any archive drawings have not been checked for compliance with regulations appropriate at that time.

2.06 The appraisal excludes any reference or comment on the building services.

2.07 No testing of the structure has been carried out, for example "carbonation" testing of concrete structures.

2.08 We have not inspected woodwork or other parts of the structure, which are covered, unexposed or inaccessible. We are therefore unable to report that any such part of the property is free from defect.

2.09 The inspection of timber in respect of diseases, insect or vermin infestation is beyond the scope of the Report and specialist advice should be sought, where appropriate.

2.10 The ANP Structural Appraisal does not undertake to identify the presence of all or any of the materials made of asbestos nor material containing a proportion of asbestos or the presence of toxic mould. Accordingly, we do not accept any liability for any direct or indirect costs incurred as a result of the presence of asbestos or toxic mould in the property.

2.11 An asbestos register/report had been recently updated for the property and made available to us.

## 3.00 THE BUILDINGS, SITE AND GEOLOGY.

3.01 The building includes, the Festival Hall, located centrally, with the Town Hall to the front and the Rose Room to the rear. To the east is a single storey modular building with a connecting corridor and fire exit.

3.02 Reference to historic Ordnance Survey Maps, shows the building first appearing between the 1931 and the 1961 edition and noted as the "Town Hall, UDC". The original building is thought to have been constructed in the 1930's with the rear extension added during the 1980's.

3.03 The original building of the Town Hall offices and Festival Hall has varying floor levels. The Town Hall offices are generally located towards the front on two levels, with smaller ancillary rooms over three upper floor levels and a basement to the east side, between the front offices and the Festival Hall. A central staircase gives access to all levels within the Town Hall.

3.04 The Festival Hall occupies the full height, with mezzanines to the perimeter serving stage lighting, equipment and control rooms. To the north, the mezzanine corridor is part of the Rose Theatre extension, the original rear wall aligning with the flank wall of the Festival Hall. To the west, at ground and stage floor levels, dressing rooms and the stage door are located within a single storey part of the building.

3.05 A kitchen, reception room and additional cloakroom(s) are located within the single storey "Modular" building and connecting corridor to the east side of the Festival Hall.

Continued,

3.06 The Rose Room entrance and bar is located on the ground floor of a two-storey extension. The upper floor contains individual office suites accessed from the rear car park and internal staircases.

3.07 Reference to the British Geological Survey maps indicate the site to be underlain by the junction of "superficial deposits" of clay, silts, sands and gravels, and the "bedrock geology" of the Folkstone Formations, generally Sandstone.

## 4.00 EXTERNAL INSPECTION.

Town Hall. Front (south) Elevation.

4.01 The elevation is generally of facing brickwork with painted rendered bands above the ground and first floor fenestration. Two brick facings are evident, in general a mixed "red" but with a darker red/brown of snapped brick headers to the curved returns over the depth of the windows. Brick piers, 4No in total are thought either loadbearing masonry or casings to steel columns. The entrance canopy has an in-situ reinforced concrete construction cantilevered from below the first floor. Photograph 1.

4.02 Structural cracking is evident to the south west ground floor curved corner brickwork. The cracking is generally vertical and at its widest through the bullnose sill bricks. This section of wall is located close to an inspection chamber serving the below ground drainage. Photograph 15.

4.03 To the opposite end, the south east ground floor curved brickwork has a consistent hairline vertical crack below the east window reveal. Photograph 18.

4.04 The roof level painted rendered banding has a noticeable horizontal recess at approximately three brick courses depth below the vertical flashing of the parapet coping. This is thought to relate to a change in the construction at or just below roof level. It is more prominent to the curved sections at both ends of the elevation, with vertical cracks extending down from this level where the curved section meets the straight walling. Photograph 13.

4.05 There are a number of local broken or displaced feature brick/tiles, below the bullnose sill tiles. These tiles form a continuous band below the corner windows.

Town and Festival Hall. Side (east) Elevation.

4.06 The side elevation is similar to the front in layout and materials and continues to the rear of the Festival Hall. Photographs 5 & 6.

4.07 A steel framed fire escape situated towards the south of the elevation, serves the first-floor council offices and the middle upper floor areas. The escape stairs are steel framed with open pattern treads and risers. The structure is supported on steel columns and from bearings within the outer brickwork of the external wall. Photograph 5.

Continued,

4.08 The paint finish is peeling from the majority of the balustrade, strings, beams and posts. The balustrade is minimal and whilst stiffened by its plan shape, is unlikely to be justifiable by structural calculation to the current loading requirements. Where the staircase takes a bearing from the brickwork, local corrosion and expansion of the steel is thought to have cracked the brickwork. Photographs 21 & 22.

4.09 A small fenced storage compound has been created below the staircase. This may present a fire risk and should be removed.

4.10 The escape doors opening on to the stair have deteriorated, especially the single personnel door where it extends beyond decoration to delamination of the facing plywood. Photographs 19 & 20.

4.11 The ground floor corridor roof abuts the side elevation of the Festival Hall. The north rainwater pipes from the hall passes over the roof and discharges on the ground towards a drainage channel in front of the modular building. The southern pipe passes through the roof.

Town and Festival Hall. Side (west) Elevation.

4.12 The west side of the Town and Festival Halls is similar to the east. There is single storey accommodation in front of the main elevation, comprising, the stage loading dock, stage doors, dressing and cloak rooms. Those alongside the Festival Hall are thought to be extensions of the original hall building, partly constructed with the rear Rose Room. Photographs 2 & 3.

4.13 A steel spiral fire escape stair is located on the original town hall elevation.

4.14 From the upper escape landing, cracking is evident vertically through the brickwork at roof/parapet level of the internal corner. Photograph 14.

4.15 Towards the rear of the ground floor accommodation, the decoration of the window frames has deteriorated, the paint is peeling, and the woodwork is exposed. Photograph 16.

Rose Room Rear Extension. Side (west), Rear (north) and Side (east) Elevations.

4.16 All elevations of the rear extension are of facing brickwork, with curved external corners on the west elevation, similar to the original.

4.17 At first floor level, timber framed bay windows are supported from concrete sills, cantilevered or possibly tied back via secondary steel framing. Like the previous window frames, the paintwork has deteriorated and requires redecoration. Photographs 3 & 4.

4.18 The rear entrance canopy is steel framed, the paintwork is peeling and requires redecoration. Photograph 12.

4.19 To the rear elevation, due to the overall length of the brickwork, two movements joints have been included. The mastic within the joints has exceeded its lifespan and should be replaced.

Continued,

4.20 To the east elevation a single flight fire escape stair serves the first-floor accommodation. Both the steel framed stairs and the handrail require redecoration. The base of both strings has steel levelling packs, but neither are grouted. Photographs 23 & 24.

Modular Building and East Corridor Entrance, Front (south) and Side (east) Elevations.

4.21 The Modular Building is constructed of four prefabricated units forming the cloakroom, meeting room and kitchen. Photograph 7.

4.22 The elevations are clad with vertical timber boarding below the timber framed high-level glazing.

4.23 The detail of the vertical cladding is such that in some areas it does not rapidly disperse rainwater, i.e. the drip below the high-level windows and the trim at the base of the cladding.

4.24 The front south elevation is particularly prone to thermal movement, that is expansion/contraction of the timber boarding. At the time of our inspections, some of the vertical boards and joints remained outwardly displaced.

4.25 We are advised that the front elevation has suffered vehicle damage on a number of occasions. There are currently no barriers to the rear of the parking bays immediately in front of the building. There is currently some minor damage to the vertical boarding.

4.26 A localised area of boarding was removed from both the front and side elevations. Both showed the vertical boarding laid over a polythene membrane before fixings direct to the plywood and timber stud framing. To the front elevation, the plywood has been replaced locally with OSB. Photograph 44.

4.27 The opening up of the side elevation revealed the base of the main corner posts to the individual prefabricated units. The twin posts sit within steel shoes, cast within the concrete base slab. At this location the base of the timber is in a satisfactory condition. Photographs 42 & 43.

Town and Festival Hall Roof.

4.28 Access is from the internal fixed roof ladder and hatch. All exposed sides have flexible edge barriers, set with a safety margin from the roof edge. Local rigid barriers have been provided adjacent to the access.

4.29 The Town and Festival Hall roofs were constructed together and therefore have similar features. Both sections support a solar panel system contained within the barriers. Photographs 9 & 10.

4.30 There are a limited number of rainwater outlets and some local areas are constrained against the flow of rainwater, some small areas of local ponding may occur as a result.

4.31 One redundant ventilation pod has peeling paintwork. A similar assembly appears to have been removed, but the upstand remains.

Continued,

4.32 We are advised that both areas were recovered approximately 5 years ago. More recently we understand the parapet coping stones were reset in an attempt to reduce localised damp penetration to the head of the walls of the Town Council offices, particularly the curved bays.

Rear North Extension, Rose Room Roof.

4.33 Like the Town and Festival Halls, we are advised that this roof was recovered approximately 5 years ago. Photograph 8.

4.34 The rear extension roof is set slightly lower than the roof of the Festival Hall and is separated by the head of the original Festival Hall rear wall.

4.35 At the junction, there is a mono pitch continuous roof light incorporating intake/extract ventilation cowls. The type and strength of the rooflight is unknown, some materials can become brittle with age and protection to the perimeter would help prevent a fall from height.

Modular Building and East Corridor Roof.

4.36 Both roofs could be viewed from the rigid barrier adjacent the roof access. Photograph 11.

4.37 The modular building roof is separated in the east/west direction by three upstands located at the junctions of prefabricated units. The roof falls from west to east and has two dome roof lights over the southern cloakrooms.

4.38 The upstands have been recovered and the flashing repaired at the junction with the higher south wall of the rear extension. The latter has been a source of previous water ingress and it is though unlikely a cavity tray has been installed at this location. Similarly, along the junction of the Festival Hall east wall with the corridor roof.

Stage Loading Dock, Dressing and Cloak Room Roofs (west).

4.39 These roofs could not be viewed from inside the Festival Hall roof protective barrier but could be seen in part from the spiral staircase on the west elevation.

## 5.00 INTERNAL INSPECTION.

Basement.

5.01 The basement is accessed from an external staircase alongside the mid-east elevation. The stair and retaining walls are formed from in-situ concrete. Photograph 34.

5.02 Within the basement, similar to the external stair construction, the in-situ concrete walls are visible. The underside of the ground floor construction forms the ceiling. This is the only location where the original ground floor structure is exposed but confirms its similarity to the upper floor and roof constructions, that is closely spaced precast concrete beams. Photograph 32.

5.03 Local areas of dampness are present to the basement walls. Photograph 33.

Continued,

Town Hall Ground Floor and First Floors.

5.04 Within the Town Hall, above the entrance doors, there is damp/decay evident to the coving, ceiling and wall finishes. Photograph 25. This is located immediately behind the cantilevered concrete entrance canopy which will form a continuous structure and most likely to have created a "cold-bridge" through the external wall. These conditions are now avoided in current construction by using a local structural thermal break material.

5.05 The central staircase rises from the front ground to first floors with the intermediate landing serving the first floor of the central three storey utility area. steps either side of the main stair descent to the festival hall and the ground floor of the central utility areas.

5.06 The south east first floor offices appear the most recently decorated. Photograph 26. The ceiling and wall finishes appear directly applied to the underside of the concrete roof beams and the internal masonry. Down-stand beams are thought, steel sections encased within concrete.

5.07 At ground floor level, dampness and damage to the finishes is apparent below coving level of the curved corner bay, that is behind the rendered band of the external elevation.

5.08 To the south west bay at first floor level, cracking and dampness is evident below the window cill, above the skirting and with vertical cracking at the junction of the straight and curved walling. Photographs 28, 29 & 30.

Festival Hall.

5.10 The structure of the hall utilises similar precast concrete beams, to those seen elsewhere in the original construction, to form the structural flat roof deck. These in turn are supported on steel beams spanning the width of the hall. It is thought due to the building size, it will have steel framing within the brick piers, or an increased wall thickness combined with brick piers throughout. Photographs 35, 36 & 37.

5.11 Access to the stage lighting and control room is via a spiral stair within the utility area created within the rear extension. This provides a corridor at first floor level along the outside of what was previously the rear north wall. The original windows still remain.

5.12 Access was not gained beneath the stage.

Rose Room, Utility Areas, Offices. Rear Extension.

5.13 The rear extension was constructed during the 1980's. It is, in the main, steel framed, with a precast concrete beam and block first floor construction. The first-floor structure can be seen within the ground floor rooms serving the stage lighting, music areas and the spiral stair to the first-floor corridor.

5.14 At ground floor level, the columns supporting the first floor are offset from the original rear wall of the festival hall.

Continued,

5.15 Lay-in grid ceiling tile systems are located below the first floor and roof structures, the ceiling voids were not accessed. Photograph 41.

Stage Loading Docks, Dressing and Cloak Rooms. Ground Floor.

5.16 It is thought that these areas are not part of the original construction, but subsequent extensions. Whilst there are similarities within the brickwork, rendered banding at parapet level and curved corner sections, the windows are like those of the Rose Room rear extension. The ground floor level is split, it being raised to the front and following the step of levels seen between the council offices and the festival hall.

5.17 At the higher floor level, including behind the stage loading dock, the construction is suspended. The remainder, nearer to the external ground level is likely to be ground bearing.

5.18 The floor to the forward most dressing room has a noticeable "spring" underfoot. Photograph 39.

5.19 At the west stage entrance, dampness is evident over the head of the doors at the junction of the flat roof and external walling of the hall. Photograph 40.

East Corridor, Ground Floor.

5.20 The corridor is an extension to the original building, located between the Festival Hall and the modular building. The flat roof is of timber joisted construction, with a timber decking to the rear and "wood-wool" slabs to the front section. The latter "wood-wool" slabs are now a "prohibited" material and special attention is required, should they be disturbed, or removed and need to be disposed of.

5.21 There are a number of areas where rainwater ingress is an ongoing problem, namely at the junction of the rear extension/side wall of the hall and at the junction with the modular building. Two small areas of the plasterboard ceiling were removed for inspection.

5.22 At the junction with the Rose Room, the timber decking, timber firrings and joist were exposed. Within the void debris remains from previous repairs carried out to the roof covering above. Photographs 46 & 47. Between the corridor and modular building, timber joist and underside of the wood wool slabs were exposed. Photograph 48.

5.24 Evidence of damp staining to the ceiling suggests the ongoing rainwater ingress is generally along the line of the junction with the external walls of both the Festival Hall and Rose Room and suggesting a fault with, or a lack of adequate cavity trays and defective flashings above.

Kitchen, Meeting Room, Cloakrooms. Modular Building.

5.25 Similar damp staining and damage to the finishes is evident within the kitchen at the junction with the rear extension. The defect is likely to similar to that described within 5.24 above.

Continued,

5.26 A small area of boarding was removed from the front wall within the corridor to the cloakrooms. Photograph 45. The vertical loadbearing studs have been previously displaced by the vehicle impact from the outside, this in turn has caused past damage to the finishes, including a radiator/pipes fixed to the wall and the skirting/boxing below.

## 6.00 BUILDING ARCHIVE DOCUMENTS.

6.1 We, Andrews Newby Partnership, have provided Consulting Structural Engineering services to the Town Council in the past and have assisted with,

a) The structural design of the rear extension.

b) The appraisal and preparation of remedial repair details for vehicle damage to the west side dressing and cloak rooms.

c) The detailing of the structural opening required for the roof access hatch and ladder.

d) The appraisal, reporting on and remedial works following a fire within the east front side council offices.

6.2 A limited amount of the more recent electronically archived information was available for the above but still provided some detail of the construction in these areas.

## 7.00 DISCUSSION AND CONCLUSIONS.

Town Hall Offices and Chambers, The Festival Hall.

7.1 The building exceeds its anticipated structural design lifespan; however, the structure may continue to perform satisfactorily provided the structure has and will continue to be protected from the weather and other detrimental effects.

7.2 The majority of the structure is internal and hence protected. Externally some details of the particular construction are unknown, such as the "background" to the rendered bands and these require intrusive investigation to ensure they are not a continuing source of reduced protection to elements of structure. Externally there is both horizontal and vertical cracking to the rendered bands.

7.3 There is currently evidence of dampness internally to these areas, particularly to the south east and west corners which indicates rainwater penetration through this area of the building fabric. Local past repairs to the parapet copings and replacement of the roof coverings may have improved matters but have not necessarily solved all the defects.

7.4 The construction of the curved bays includes "snapped headers" within the brick coursing. This combined with the curved form may have created an irregular finish to the inner cavity face of the brickwork. The cavity may have been prone to collection of mortar on the cavity ties which could form a pathway for dampness to the inner leaf wall and finishes. Similarly, if of solid wall construction, in whole or in part, this would be a potential source of dampness.

Continued,

7.5 There are different brick types and finishes to the external walling, both on the curved and straight sections. One type has a smooth and more regular mortar than the other. In the past, "Architectural tiles" have been used to imitate brickwork, they are more regular and are "pointed" in a similar manner to brickwork. Should these have been used in some areas, the background construction behind would vary accordingly and may be significant in respect of potential sources of rainwater ingress and movement between dissimilar materials.

7.6 Separation and cracking locally within the external brickwork have been caused by corroding embedded steel, such as the balustrade and structure of the fire escape stairs to the east elevation. The corrosion needs addressing and the brickwork repairing.

7.7 The remainder of the steel fire escape requires redecoration and the stored materials below should be removed as they may present a fire hazard.

7.8 The escape doors serving the stair have deteriorated, both the decoration and the ply boarding. The single personnel door will need to be replaced.

7.9 The facing brickwork is prone to thermal expansion and contraction particularly to the front, south, elevation. It is now standard practice to introduce movement joints to prevent distortion and cracking due to temperature variations. Due to its age, the building has no joints and the brickwork may crack at its weakest points. Such cracks are evident to the southeast curved corner brickwork.

7.10 To the south west bay, cracking to the ground floor curved corner brickwork is more pronounced and would appear related to local foundation movement. There is below ground drainage nearby and this requires investigating to check if leaking and hence a potential for weakening the subsoil.

7.11 To the mid front elevation, the cantilevered in-situ concrete canopy is likely to prove a source for damp penetration if flashings, cavity trays and the roof covering are not maintained. The continuous structure may also cause a "cold bridge" through the wall and hence give rise to localised condensation internally. There is evidence of deterioration to the finishes internally above the entrance doors.

7.12 Local dampness is evident within the basement and the access staircase, the room is not habitable and used instead for storage and central heating plant.

<u>Kitchen, Meeting Room, Cloakrooms. Modular Building and East Corridor.</u>

7.13 The structure has been assembled from four individual timber framed units with an "in-situ" constructed flat roof forming the corridor between the units and the east side of the main building. Such buildings are generally used for temporary accommodation. If installed circa 1980 to 1990 its 30 to 40 years age is well beyond its intended design lifespan.

7.14 The local removal of the side cladding has shown the timber to be in a fair condition, including the main corner posts where supported within steel shoes at the slab level. The overall construction is however minimal in terms of robustness and has reduced weathering capabilities in the longer term.

Continued,

7.15 Defective weathering is apparent at the junction of the roof construction with the surrounding walls and is a constant source of intermittent rainwater penetration. Previous repairs have been carried out to the flashings; however, it is thought that a cavity tray needs to be installed. This applies to both the east elevation of the festival hall with the corridor and the south elevation of the rose room with the corridor and modular building.

7.16 It is possible that some of the roof timbers may have been affected by the past rainwater ingress, those visible within the local opening-up have water staining and therefore may continue to decay. The timbers were directly above the local water staining on the ceiling finishes.

7.17 The front elevation has suffered vehicle damage and a suitable barrier should be provided to prevent further impacts. The vertical boarding has also been displaced by thermal movement and rainwater is discharging over the ground and needs to be directed to the gully or channel.

Rose Room, Utility Areas, Offices. Rear Extension.

7.18 The structure is steel framed, supporting upper precast concrete floor and roof slabs, with internal masonry and external cavity masonry walls. The Rose Room entrance to the rear, has an independent steel framed canopy.

7.19 No structural defects were noted during our survey. The vertical masonry movement joints do require maintenance, that is, replacement of the mastic sealant which has perished. Also, the grouting to the base of the north east fire escape stair needs attention.

7.20 Decoration of the rear entrance canopy steelwork is required. The paint coating has peeled, and corrosion of the steelwork may follow.

Stage Loading Docks, Dressing and Cloak Rooms. Ground Floor.

7.21 The floor to the south dressing room requires further investigation, it "springs" under foot. The construction is thought to be timber and either decay or "loss of support" may need to be addressed.

7.22 Similar to the east flat roof areas, the junction with the original side wall of the Festival Hall requires investigation, flashings and cavity trays are likely to require attention.

General (all areas).

7.23 From our experience and with reference to the Geological Maps of the area, the founding subsoil are most likely to comprise sands of reasonable bearing capacity. They may however be weakened by a rise in groundwater levels or by leaking drains. It is important that the drainage around the building is maintained.

General, Building Fabric (all areas).

7.24 Most of the windows to the north rear extension and to the side dressing rooms need redecoration.

Continued,

General Items, Building Fabric (all areas).

7.25 There have been many changes to the Building Regulations in recent years, not least Part L, those for the "conservation of fuel and power". Insulation values will be significantly less than current standards and upgrading is required to many elements, together with windows, doors etc. Likewise, protection of the upper level of the east fire escape stairs from the weather and continued use of a spiral stair as a suitable means of escape requires further evaluation.

## 8.00 RECOMMENDATIONS

8.01 The following is recommended.

Detailed or Specialist Intrusive Investigations.

a) Carry out a cavity wall inspection, to examine any embedded metals, including but not limited to wall ties. The survey would also cover the construction of the curved bays at high and low level, it would also enable the junction of the flat roofs and external walls to be checked for the presence and condition of the cavity trays.

b) Carry out a CCTV survey of the below ground foul and surface water drainage.

8.00 The following repairs are expected, based on the current visual survey.

Structural.

a) Removal of local corroding steel elements, crack and other local repairs to the structural masonry. Generally, the Town and Festival Hall external walls.

Building Fabric.

b) Repairs and/or installation of new flashings and cavity trays at the junctions of the east and west flat roofs with the external walls of the Festival Hall and Rose Room. Also, above the front entrance canopy. Subject to 8.01 a) above.

c) Local removal and replacement of the rendered bands to the elevations of both the Town and Festival Hall. Repairs to the background, improve weathering details. Subject to 8.01 a) above.

d) Replacement of the mastic sealant within vertical movement joints, rear extension.

e) Vehicle barrier protection to the front south elevation of the modular building.

f) Refurbishment of the fire escape staircases (3No). Redecoration and/or replacement of the timber fire escape doors/frames.

g) Redecoration of the rear, Rose Room, entrance canopy.

Continued,

h) Redecoration or replacement of the timber framed windows, to the rear north and side west elevations.

i) Repairs to the internal plaster and other finishes followed by redecoration where previously damaged by rainwater penetration and dampness.

Other works.

j) Provide a further roof protective barrier around the continuous roof light over the rear access corridor to the Festival Hall.

8.02 Following a CCTV survey, works maybe required to correct the below ground (foul and surface water) drainage/soakaways.

8.03 It is not known whether the intended future alterations of the building will require other changes to the structure. The above further intrusive investigations and repairs should be considered relative to any proposed redevelopment to avoid unnecessary repetition or abortive works.

Pease do not hesitate to contact us with any questions or comments you may have.

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**C. N. BEAVIS, C Eng, MIStructE.**
**For and on behalf of**
**ANDREWS NEWBY PARTNERSHIP.**