LDN Architects

GRANT LODGE, ELGIN
FABRIC INSPECTION REPORT

AUGUST 2012

LDN Architects llp
29 St Leonards Road
Forres IV36 1EN

T: 01309 673221
F: 01309 676397
E: architects@ldn.co.uk

Address of Property:	Grant Lodge, Elgin
Date of Inspection:	21st August 2012
Weather Conditions at Time of Inspection:	Dry and bright
Inspection Carried Out By:	Pinny Neill, Architect and Ian Fraser, Associate, LDN Architects llp, 29 St Leonards Road, Forres IV36 1EN

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1.0 INTRODUCTION

1.1	Brief description of building:	Two-storey mansion house with basement to the rear and attic level. Cement harl with ashlar margins and dressings. Pitched slated roof with hips, stone parapet to the front. The front elevation is preceded by a porte-cochere, which is flanked at either side a projecting bay from the ground floor principle rooms. To the west at first floor level there is a cantilevered projecting bay, adjacent to this at ground level there is another projecting bay with a curved front. The sash and case windows vary between 6/6 and 8/12. There are three fixed casements within the entrance hall. To the rear off the house there is a single storey ancillary wing, which has been adapted for use as a public toilet block.
1.2	Brief history:	The Pluscarden Estate was acquired by the Grants in 1677 and a new lodge was commissioned in 1766. The original design for the house was carried out by Robert Adam, however there are no surviving plans to determine whether his design was actually built. In 1790 extensive alterations took place; a new wing was added to the rear of the property, the roof was renewed and new ashlar chimneys were built. In 1849 the house was extensively refurbished; the entrance bay was pushed out and surmounted by a decorative balustrade, onto this a porte-cochere was built, projecting bays were added to each of the front principle rooms, and parapets were added to the wall heads. Two conservatories were added to each of the side elevations and at first floor level to the west a projecting bay was added. The need for more ancillary space was counteracted by the addition of a single story wing to the rear of the building, which was to house the coal cellar, ladder, etc. There was also extensive work carried out to the interiors. George A Cooper acquired the estate from the Grants and in 1903 he gifted it to the people of Elgin for use as a Library. It remained in use until structural problems and decay lead to the commission of a new library in Cooper Park. Once complete all the facilities within Grant Lodge were relocated and it has since lain unoccupied. The building then became a target of vandalism and a fire in July 2003 caused considerable damage to the structure and the interiors.
1.3	Listing:	Category B-Listed (20th August 1981), Historic Scotland ID No. 30851.
1.4	Conservation area:	No.
1.5	Date of last survey:	A Fabric Inspection was carried out by LDN Architects llp in October 2005, as commissioned by The Highland Buildings Preservation Trust on behalf of The Moray Council. LDN have also been able to refer to a condition survey commissioned by Moray Council from Davis Langdon in October 2011.

1.6 Name of local official who accompanied party on survey: Not applicable.

1.7 Summary of changes since previous report in 2005

(a) It was noted that since the 2005 survey a section of the stone balustrade to the central projecting bay above the porte-cochere has disappeared including the stone turned balusters, as has the whole of the pierced stone parapet wall on the adjacent west bay window. These need to be reinstated. It may however be that they were taken down for reasons of public safety and have been stored by Moray Council.

(b) Since the last survey, one square column on the porte-cochere has been replaced. This column was noted as being badly split in the last survey.

The previous report included the following recommendations which has been reviewed.

Recommendation	LDN Comment
• The Conservation statement dating from 2006 suggested that it may be appropriate to remove the welsh slates and reslate the roof using salvaged Scots slates laid in diminishing courses.	While less desirable from an aesthetic point of view, this report now proposes that the later welsh slates are retained and overhauled both from a cost point of view but also due to the difficulty of obtaining suitable slates in that quantity. It is judged that while the appearance of the north wing would be enhanced, sufficient of the roof is behind parapets that obscure it from ground level to allow LDN to review this decision and justify it when the conservation policies are reassessed as part of the present study.

1.8 Provision for disabled access: At the porte-cochere there is a ramp to either side however these do not comply with current building regulations. There is no provision for travel between the various levels within the house.

2.0 REPORT AND RECOMMENDATIONS

Notes:

a) LDN have not examined any part of the fabric which is hidden, unexposed or reasonably inaccessible and cannot guarantee that such part is free from defects. Generally, store cupboards will not have been emptied, items of furniture not moved and floor finishes not lifted except where loose and the flooring is accessible. Inaccessible parts of the roof will have been excluded where access was not possible by ladder.

The building is at present boarded up and so, of necessity, the survey was undertaken using artificial lighting.

No testing has been undertaken of heating installations, water supplies, or drainage systems above and below ground.

b) LDN Architects have not inspected the electrics but are aware that the permanent installations were affected by a fire in 1993.

c) Grant Lodge is freestanding and is unaffected by any adjoining property.

d) LDN had reference to a structural report by A F Cruden & Associates and access to a report commissioned from Fairhurst in February 2011 that summarised their involvement with the building as far back as 1987.

e) The following standardised priority categories as defined by the General Trustees are used in this report:

Urgent: Where work has to be carried out forthwith to render the building safe or otherwise to preserve its integrity and must be carried out in early course, certainly within 12 months.

Essential: Where work is of a nature that it must be carried out for the wellbeing of the building and should be done within 5 years or earlier if possible.

Desirable: Where the work would be beneficial but can be delayed.

f) The following schedule is not intended as a detailed specification.

g) Costs assume work will be undertaken by a competent tradesman, pricing as though on a competitive basis.

h) For the purposes of this report the porte-cochere is deemed to face south

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
REPORT AND RECOMMENDATIONS								
(A)	ROOFS & RAINWATER DISPOSAL							
A1	Main Roof Construction	Central ridge beam with large rafters and raised tie, half checked with peg and spike connections. The ridge beam in the oldest part of house is tied to the main floor joist for the attic with a metal rod.	Small isolated sections of woodworm infestation could be seen although it appeared that these were no longer active and mainly confined to roof timbers that still contain sections of bark attached.	Not withstanding the note below, generally the roof structure appears to be in good order.				
		The rafters in the oldest part of the house butt against the ridge beam, there appears to be no checks or fixings. The two extensions have different widths of ridge beam. Some relatively minor splitting of roof timbers was observed but this is not considered to be too serious.	A considerable amount of timber rafter replacement and splicing has been carried out in the past, presumably as a result of water penetration, rot infestation and fire damage. Repairs have not been carried out to a satisfactory standard for example some of the splices have twisted.	The repairs should be inspected by a structural engineer, and if required they should be renewed to suitable details.	U			
A2	Sarking	Traditional timber close boarded sarking, generally 28mm thick. Clear evidence of previous repairs in the past.	Some of the sarking is stained at various locations and this is presumed to be of a longstanding nature.					

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable	U	E	D	PHOTO REF
A3	External Finishes	There are a series of pitched slated roofs with hips. Underslating felt is laid below. The slating generally appears to be Welsh slates laid to regular courses.	The slaterwork is generally free from moss but there are a number of chipped slates. Generally it is in reasonable condition.	The chipped slates should be replaced when the roofs are overhauled.	D				
		The flat roof above spaces xF.04 and x.F.08 has previously been replaced in sarnafil.	The sarnafil appears to be in reasonable condition however it is highly inappropriate for a historic building of this character. There is ponding to the north of the roof and there is evidence in xF.08 below that there has been significant water ingress at one time. A moisture meter was used but levels at this time were normal. The ponding could be the result of a back up of water from a blocked gutter and downpipe.	Further investigation should be carried out. Consideration should be given to replacing the sarnafil in a more appropriate material such as lead.	U				
		The flat roofs to the Porte-cochere and projecting bays are also assumed to be finished with sarnafil.	No access to these roofs was provided so an inspection of their condition could not be carried out. However, if they are finished in sarnafil it is a highly inappropriate for a historic building of this character.	It is recommended that the sarnafil cladding is removed and a more appropriate weathering material is applied, for example lead. A closer inspection of the areas should also be carried out.	E				

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable	U	E	D	PHOTO REF
A4	Ridges	Lead ridges over approx. 75mm dia. timber roll.	The lead is showing signs of fatigue and is over stressed due to lengths of lead being around 2m. The fixings penetrate the lead sheet and they have been sealed with lead cover pieces welded to lead sheet. In some areas these cover pieces have lifted. Fixing through the lead weakens the sheet and can cause moisture ingress. This may also cause tearing of the leadwork where expansion or contraction is taking place. There are some areas along the ridge that have suffered from wind uplift.	The current condition is poor and does not meet the current recommended standards for a historic building. The ridges should be renewed in code 8 lead in accordance with 'LSA Rolled Lead Sheet The Complete Manual'.	E				001
A5	Abutments	-	-	-					
A6	Parapet Walls	The parapet walls to the front perimeter at attic level, the porte-cochere and the projecting bay window on the east have been clad in sarnafil. The cladding covers the inner face and has been taken down over the face of the upper moulding on the cornice.	The cladding appears to be in good condition however it is highly inappropriate for a historic building of this character.	It is recommended that the sarnafil cladding is carefully removed and a more appropriate weathering material is applied, for example lead.	D				002

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable				PHOTO REF
						U	E	D	
A7	Flashings	Lead pitched vallleys	The lead is in lengths greater than 1.5m and it has begun to show signs of erosion and creeping.	The valleys should be renewed in code 7 lead in accordance with 'LSA Rolled Lead Sheet The Complete Manual'.	E				003
		Lead hips over approx 75mm dia. timber roll.	The lead hips are showing signs of fatigue. The fixings penetrate the lead sheet and they have been sealed with lead cover pieces welded to the lead sheet. (refer to ridges for problems associated with fixing through the lead).	The lead hips should be renewed in code 8 lead in accordance with 'LSA Rolled Lead Sheet The Complete Manual'.	E				004
		Aprons to dormers	Where access was possible it appears that the lead aprons to the dormers have been previously renewed, another sheet of lead can be seen below the top sheet. The fixings penetrate the lead sheet and they have been sealed with lead cover pieces welded to the lead sheet (refer to ridges for problems associated with fixing through the lead). The upper sheet is showing signs of fatigue and it has also been subjected to wind lift due to unsatisfactory dressing at the bottom.	Allow for the lead aprons to be renewed in code 7 lead in accordance with 'LSA Rolled Lead Sheet The Complete Manual'.	E				005

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable	U	E	D	PHOTO REF
		Lead aprons to chimneys fronts.	There is a considerable amount of mortar running along the raggle, in which the lead is turned into, it appears that this has begun to have a corrosive effect on the lead flashing.	Allow for the lead aprons to be renewed in code 7 lead in accordance with 'LSA Rolled Lead Sheet The Complete Manual'.	E				006
A8	Gutters	Perimeter parapet gutter	Visual access was restricted to a gap in a window board but it assumed that the perimeter parapet gutter has been renewed in Sarnafil.	Better access to be provided in order to make an assessment on the condition but the assumption is that these gutters are in good condition. Clearly from all the joist repairs there was a previous serious problem with these parapets and LDN suspect that it must be due to a lack of available fall between widely spread outlets. For grant eligibility it should be assumed that the gutters are renewed in lead laid to new falls but LDN would want to carefully review these options and consider additional outlets and alternative materials.	E				007

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable	U	E	D	PHOTO REF
		Half round cast iron gutters	The cast iron gutters have been primed in red oxide. There is a build up of debris within the gutters.	The gutters should be cleared of debris and the interior should be painted with bitumen. The exterior should be re-primed with rust inhabiting primer (only if necessary and if the current primer has failed) and finished with 2 coats of external gloss, colour to be confirmed.	E				008
A9	Downpipes	Cast Iron downpipes, approx 75mm dia. with swans neck to top.	The cast iron downpipes have been primed in red oxide since 2005. The downpipe in the corner adjacent to the flat roof is blocked. It is assumed that as the rainwater goods have been overhauled since 2005, in general the hoppers are in good condition.	An allowance should be made for rodding all downpipes and re-caulking all joints. The downpipes should be patch-primed with rust inhabiting primer (only if necessary and if the current primer has failed) and finished with 2 coats of external gloss, colour to be confirmed.	U				009
			The gulley arrangement to the base of some pipes is unsatisfactory. It varies between pipes disappearing into the ground to visible open gulleys, some of which are broken.	A new drainage strategy to north courtyard should be investigated. New cast iron connections and rodding eyes should be allowed for.	E				010

Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
		Where the rainwater pipe discharges from the South end of the North block it appears that this may be malfunctioning causing the sunken area at the rear door to be permanently damp.	As part of the reorganisation of the rainwater discharge system all sub-soil drains should be checked out to ensure that they are discharging water adequately away from the base of the walls.				
		It is also noted that the rainwater pipe around the angled extension on the East elevation has be crudely patched and the installation appears to be coming away from the building.	This should be replaced in cast iron to match existing details.	D			
Hopper heads	Cast Iron hopper heads have been primed in red oxide and are fitted to the downpipes on the front elevation. There is evidence on the stonework that these have been moved up by one full length.	It is assumed that as the rainwater goods have been overhauled since 2005, in general the hoppers are in good condition.	The hoppers should be cleared of debris and they should be patch-primed with rust inhabiting primer (only if necessary and if the current primer has failed) and finished with 2 coats of external gloss, colour to be confirmed. One of the decorative hoppers which drains the roof of the porte-cochere is missing. Allowance should be made to cast a new one to match the others as these are an important component of the building's appearance.	E			011

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable	U	E	D	PHOTO REF
		On the east elevation an unsatisfactory hopper has been formed and it has been clad in Sarnafil.		Renewing the hopper in cast iron, with the pattern to match original detailing, should be considered.	D				012
A10	Rooflights	3no. Cast iron rooflights. 2no. approximately 750x450mm and 1no. 750x1300mm.	The cast iron frames are showing signs of corrosion. The glazing putty is suffering from significant erosion.	The frames should be wire brushed, primed and painted. The glazing putty should be 100% renewed and any broken panes should be replaced.	E				003
			It was noted that the back gutters are tightly slated preventing the windows opening fully	Adjust slatework around rooflights when overhauling roof.					
		Missing rooflight from above lightwell	The lightwell rooflight has been slated over; there is slight evidence of bulging in the slating above the lightwell.	If desirable rooflights should be re-introduced and the lightwell re-opened up.	D				
A11	Dormer windows	Curved top dormers (sarnafil weatherproofing), with slated haffits and timber fascia boards to the front. There are no gutters.	Better access would need to be provided to determine the condition of the dormer tops. Generally the slated haffits appear to be in good order. One slate to the dormer adjacent to the rear flat roof appears to have lifted. The decoration to the timber fascia boards is worn.	The lifted slate should be re-fixed if in good condition. The timber fascia boards should be rubbed down, primed and painted with 2 coats of exterior eggshell, colour to be confirmed.	E				006

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable	U	E	D	PHOTO REF
(B)	**OUTSIDE WALLS, WINDOWS, DOORS ETC**								
B1	External Walls	The building at some stage in the past has been rendered externally with a smooth cement render and painted, which is fairly unsympathetic to the building. The render has been applied to all elevations with the projecting South bay and porte-cochere and adjacent bay windows left with their natural stone finish exposed.	The cement render is not in great condition; there are areas where it has failed and the stonework has been left exposed. Where intact, the render may be causing unseen damage to the masonry behind.	The cement render should be carefully stripped off and after determining the condition of the stonework below. The stonework should be lime rendered. The window and door margins, where existing and where appropriate should be left exposed.	E				013
		Ferrous fixings/ pipes.	There are numerous ferrous fixings/ pipes located in the stonework around the building.	These should be removed and the stone filled or indented.	E				014
	-- Quoin Stones	The corner quoin stones have been left exposed and they have been dressed (stugged finish). The tooling may indicate an intention at some stage to carry the render over the margin stones.	Some cement repairs have been made to the quoin stones.	The cement repairs should be removed and, if required, the stone indented. Allow for BGS testing of the existing stone to identify a suitable replacement.	E				015

Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
-- Rybats	The rybats for some of the windows and doors have been left exposed. These too have been dressed (stugged finish).	Some cement repairs have been made to the rybats to counteract the delamination. This is not a suitable repair and it has begun to fail. It is noted that this has occurred to the main entrance and the adjacent sidelight.	The cement repairs should be removed and, if required, the stone indented.				016
-- Base Course	Exposed ashlar base course.	There are areas that have been subjected to plastic repairs, some of which are failing. This has been a previous attempt at repairing the delamination that has occurred.	The plastic repairs should be dressed back to a stable surface and a partial indent should be installed. The delamination should be dressed back and an assessment should be made whether the stone is to be indented. An allowance should be made for a full re-point of all ashlar/ exposed stone. Allow for mortar analysis of the existing pointing.	E			017

Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
-- South Elevation	Projecting central bay and bay windows either side in sandstone. Main wall plane in cement render with sandstone wall head course, cornice and Sarnafil covered parapet course, window surrounds and ground floor stringcourse. Porte-cochere to the front of this. Exposed quoin stones set behind plane of render.	Movement on the South elevation has taken place between sections of wallhead and the wall below with corresponding diagonal cracking in through the render. Movement has also occurred in the lintels to windows and again cracking showing around the perimeter of the lintel. Diagonal cracks also extend in several locations from window jambs to the adjacent walling.	Further inspection needs to be carried out by the structural engineer and remedial proposals need to be drawn up.				002
-- Porte-cochere	Comprising stone columns and pilasters linked by stone beams and cornice, parapet to flat roof over.	Noticeable movement has taken place between the porte-cochere and the main front wall of the building. This can be seen by the opening up of the joint between the main wall and the pilasters of the porch structure.	Further inspection needs to be carried out by the structural engineer and remedial proposals need to be drawn up. It is likely that this could involve underpinning.				018

Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable			PHOTO REF
				U	E	D	
		The pilasters and columns show signs of delamination with some cracking occurring where movement has taken place. The 2No. outer square corner columns of the porte-cochere appear to have moved outwards at their heads and this is reflected in the opening up of joints in the high level bearing lintel on the porch structure. The splitting and delamination to the stonework appears to have been counteracted by applying a slurry wash in places. Since 2005, a car has run into the East square column and it has been replaced in new sandstone. This column was noted as being split in 2005.	The delamination is considerable at the base of the pilasters, this will be affecting the stability. Consideration needs to be given as to whether indents would be a suitable repair or whether complete replacement of the pilasters should be carried out.		E		019 020 021 022

Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
		The edge beams on either side have in the past had cast iron channels inserted for additional support. These channels are showing signs of corrosion.	Further investigation should be carried out to determine the exact condition. We suspect that east side beam may be concrete. Assume that it may be necessary to dismantle the roof above in order to resolve issues with beams and movement.				023
		A number of stones in the decorative pilaster at high level on the main wall are delaminating and further patch repairs have been carried around the lintel.	The effected stones and cement repairs should be dressed back to a sound surface and an assessment should be made as to whether it is necessary to indent.				012
		The north side of the West bay window the window some cracking has taken place due to ferrous hook fixings.	The ferrous fixings should be the removed and full stone indents inserted.				
-- West Elevation	Elevation divided in two, either side of projecting bay; to the south including bay reflecting the aesthetic of the mid Victorian alterations with exposed sandstone features, while to the 1790's north extension has almost completely been coated in cement render with no margins.	In addition to comments above about delamination, cracking etc, note that where conservatory has been removed at south end, stringcourse has been faked up in cement.	Allow for indenting new stringcourse to complete.				

Element	Description	Condition	Recommended Repairs	Priority U = Urgent	E = Essential	D = Desirable	PHOTO REF
	The façade drops almost a full storey along its length.						
	Canted oriel window at first floor, in timber with lining boards and decorative supporting brackets but appears to be supported on steelwork Sarnafil capping.	Some timber decay in boarding and brackets.	Overhaul.				
-- North Elevation	There are a series of external concrete steps and large concrete external landing leading to xG.05.	The I beam supporting the landing is badly corroded.	If it is to be retained the corroded I beam should be looked at by a structural engineer and assessed for replacement.				024
		The entrance door has exposed concrete margins around the opening with a projecting canopy and the 3No. window openings adjacent have slightly raised painted margins which sit out from the wall face. The joints between the margin units are approximately 10mm wide and carried out in a cement mortar. Above the door there exists an in situ concrete canopy.	The concrete steps, landing and canopy are inappropriate to the historic character of the building and consideration should be given for their removal.				

Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
		The balustrading to these steps and balcony is showing signs of rusting.	The balustrading should be wire brushed, painted with rust inhabiting primer and finished with 2 coats of gloss, colour to be confirmed.				
		In the South West corner exists a small concrete angled pad stone with bolts cast in and the purpose of this is unclear at present.	It is suggested that the ferrous elements be removed.				025
	The north side of the one storey ancillary block was altered to provide facilities for the park and this involved inserting concrete dressings to new openings.						
-- East Elevation	Main elevation with exposed stone margins. But in this instance set behind the plane of the later render, as are the quoins. Evidence of the later extension with the toilet windows in the rear (North) side of the south block.. In this case no ground floor stringcourse.						

Element	Description	Condition	Recommended Repairs	Priority U = Urgent	E = Essential	D = Desirable	PHOTO REF
	On south facing side of east courtyard, façade has been treated like the north wing with the cement render being taken over the window dressings. There is also a dummy or blocked up window.	Elevation in particularly poor state due to overflowing rainwater goods resulting in algae on render. Where steps go down to basement level it is suspected that this rainwater pipe is blocked resulting in damp in the basement after heavy rain.					
	It is noted that on east side of north extension earlier openings have been blocked up where the single storey ancillary building abuts the main building.		If the ancillary buildings are removed than the original opening could be re-instated.				026
	The North most corner margin stones on East gable.	There are some signs of crude patching. An area of damage approximately 2m from ground level and some open jointing exists at the base where it meets the base course. Minor delamination damage is also noted.	The inappropriate past repairs should be dressed back and the stones should be indented.				027

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
	-- Cement harl.		It was noted that an area of render had been removed from the North facing side of the East wing revealing the render to be extremely soft and with a greyish tooled edge on the stonework with the render being approximately 10-15mm thick and comparatively soft. The render is missing from the face of the masonry.	As noted above the cement harl should be removed.				
B2	DPC	None.						
B3	Cills	Sandstone cills.	There are several cracked cills around the building. This is especially apparent on the west elevation. Particularly on the west side of the north wing, the cement render has been taken over the cills and it is difficult to predict their underlying condition.	Further investigation should be carried out to determine the cause of the cracking.				028

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable			PHOTO REF
					U	E	D	
B4	Lintels	Generally sash and case windows throughout, 6/6 or 8/12. All the windows have been boarded up on the external face so the external condition is unknown.	Generally ropes and lead weights have been removed from all cases. The sashes in the attic have been damaged and the astragals have been removed on some. The sashes in the area where the past fire occurred are badly damaged; approximately 4 sashes have been affected.	It has been noted that at attic level 5 sashes will need to be rebuilt due to damage and decay. Further sashes throughout the building will also need to be either replaced to match existing details or rebuilt. New ropes and lead weights will be required for each sash and case. The fire damaged sashes will require to be rebuilt. An allowance should be made for replacement glass; this will be specifically required at attic and basement levels.				
		3no. fixed casement windows within the entrance hall.	Sound.					
	Ironmongery	No ironmongery was visible due to the timber boards on all openings.	It is assumed that the condition will be poor.	A full set of suitable ironmongery for each sash and case will be required.		E		
	Balcony	Redundant balcony structures exist below 2No. windows on the East elevation.	There is some damaged to the balcony and potential a decorative upstand may be missing.	A decision if reinstatement will require to be undertaken should be made but allow for repair.				026

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable	U	E	D	PHOTO REF
B6	External Doors	Main entrance (exterior of door concealed with a timber board).	The half panelled/glazed door to the main entrance has been badly damaged in past when entry to the building was forced.	If the door can be retained (condition to be looked at once boarding is removed) then a new timber side rail will be required.	E				
		Other	Generally the other doors to the building are double leaf, external opening fire escape doors.	These doors should be removed and replaced with something more suitable.	D				

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
(C)	**CHIMNEYS**							
C1	Chimney	The chimney stacks (4no.) are of dressed ashlar regularly coursed surmounted by the double stepped moulded stone coping.	There are approximately six flues to the rear stacks and four to the front stacks. There are no vented caps to the short buff cans however they do not appear to be open; slates may have been placed on top.	An allowance should be made for re-setting of chimney cans and re-haunching. Elephant's feet should also be fitted to the cans of non-working flues.				029
		Front East chimney	The south face of the chimney has significant delamination.	The ashlar stonework should be dressed back to a sound surface and an assessment should be carried out to determine whether the stone requires indenting.				030
		Pointing in lime putty.	There are several open joints on each of the chimney stacks.	The existing pointing should be raked out and new pointing should be carried out in lime putty, specification to match existing.				031

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
(D)	INTERNAL FABRIC – INCLUDING ROOF SPACES AND CELLARS							
D1	Wall Finishes	Plaster on the hard.						
		Plaster on lath.	The majority of the principal rooms are still plaster and lath. This is particular apparent in the fire damaged rooms, xF.05, xF.06, xG.03, xG.04 and xG.05, where it has been exposed.	Allow for repairs to be made to match the existing details.		E		
		Dry lining.	The basement rooms, and first floor rooms xF.01, xF.02 and xF.11 have all been drylined. Inspection from areas that have been opened up showed that this has been brought out a considerable distance from the external stonewalls in places.	In order to damp proof the basement walls the linings will all have to be removed and then reinstated. At first floor level the linings could be left in-situ as appropriate as the finishes are in reasonable condition.		E		
		A few spaces in the basement are stripped back to the stonework. See main roofspace D6 for comment on attic	See D10 for further comments					
D2	Floor Finish	Timber boards on joists.	The floor in xF.07 slopes towards the partition wall.	This could be due to the structural issues with the floor, further inspection to be carried out.				

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable	U	E	D	PHOTO REF
			The ground floor joists have been replaced in xB.06. The ends sit on either concrete pads or a new timber wall plate. The wall pockets have been opened up and brick piers inserted to allow air circulation.	Structural Engineer to inspect the past repairs and advise if they are adequate.	E				032 033
			The ground floor joists below the fire damage have had splice repairs carried out. This has exposed corroded cast iron I beams which were previously installed to strengthen the floors.	All elements are to be inspected by the Structural Engineer and advice is to be given on remedials.	E				034
		Timber boards replaced with chipboard.	In spaces xF.01, xF.02 and xF.11 the chipboard is in reasonable condition however they are coated with the adhesive from previously removed carpet tiles.	Dependant on the desired floor finish consideration should be given to replacing with timber boards to match the existing.	D				
D3	Sub Floors	A solid concrete floor runs the length of the basement. A 50mm screed has been laid to a fall in corridor xB.12.	There is evidence of staining in xB.03, xB.04 and xB.05, this could have been from a past oil spill.						

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
D4	Ceiling Finish	The ceiling finish at first floor level is a plain plaster ceiling with a simple cornice.	In xF.08 the ceiling is damaged due to water ingress. xF.02, xF.03 and xF.05 have been affected by the past fire.	Repairs should be made to match existing details. Any length of cornice lost should be replaced to match the profile in the relevant room.				
		The exception to the above statement at first floor level is xF.06, which is a combed lath and plaster ceiling, with a large decorative plaster cornice running the perimeter of the room.	The ceiling and cornice are damaged on the South wall, which has been effected by a previous outbreak of fire. The comb at that end also exhibits a crack running up from the cornice to the central moulded section, the crack continues down the right hand end of the door lintel below.	The crack should be monitored. The plasterwork in this area, including the cornice should be renewed to match original details.		E		035 036
		At ground floor level the ceilings are plaster on lath with a plain plaster finish, and either simple or no cornices, this is with the exception of the principal rooms listed below.	There has been a loss of some of the ceiling finishes due to a previous fire.	Repairs to be made to all damaged areas.		E		
		Coffered ceiling in xG.01.	At the north end of the ceiling there is cracking visiable at the downstand beam and it appears to have sagged in the centre.	Further inspection is required at the downstand to determine if there are any structural problems.				037

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
		The plastered ceiling in xG.04 has a decorative border that runs around the perimeter of the ceiling.	The decorative detail on the ceiling and the cornice at the south side has been lost due to previous interventions. The plasterwork is also badly stained from the past fire damage.					038
		No access was provided to the service wing but as the roofs are poor, ceilings may be likewise	See G5 for general comment					
D5	Decorative Order	Finishes are generally emulsion or gloss.	Tired and either fire or water damaged.	A suitable decoration scheme should be drawn up based on evidence of original finishes and implemented throughout. Allow for paint scrapes and specialist report.				
		There is a small remaining section of wall paper in xA.05.						039

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
D6	Main Roof Space	The second or attic floor has been stripped back to expose the sarking and rafters, struts and ceiling joists. Certain chimneys are bare stone (coursed rubble) and other cross-walls retain plaster on hard finishes, fireplace openings etc . No access to void over room xF.06	Not applicable except in room xA.02 which is sheeted in sterling board.					
D7	Internal Doors	A modern screen and door to provided fire seperation has been installed between areas xF.04 and xF.08.	This is inappropriate for a building of this historic character.	It would be recommended that it is replaced with something more suitable (it is assumed something will have to provide fire separation to the stair hall)	D			

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable	U	E	D	PHOTO REF
		Panelled doors remain in-situ in the principal rooms at ground level. There is also one at the main entrance to xF.06.	Fair.	A minor overhaul to the doors should be carried out. An assessment should be made in regards to the fire resistance of the doors. Allow for new ironmongery.	E				
D8	Staircases	The main staircase, open to the entrance hall, is stone and only connects ground and first levels.	Three props were identified under the first landing, two of which have fallen out.	Structural Engineer to inspect and advise on stability of the stair.	E				
		The service stair is a traditional stone pen check stair. Once the stair gets above first floor level it becomes a traditional timber stair to the attic spaces.	The stair appears to be in sound order. Although the base is very damp and this has resulted in the metal balustrade rusting and splitting the lower stone treads	Allow for repairs					
D9	Balustrades	Simple cast iron balustrades and timber handrail to main stair.	It is assumed that a diagonal prop was added at the bottom of the stairs due to concern over the stability of the balustrade.	The stability and fixings for the balustrade should be tested.	E				040
		Simple cast iron balustrades and timber handrail to service stair.	Some sections of the balustrades have been blocked off with timber boarding; it is assumed that some of the balustrades are missing.						

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable	U	E	D	PHOTO REF
D10	Basement	The basement sits in the same footprint as the ground floor.	The basement is very damp and the worst effected area is xB.13. As noted under section A9, the lack of connections at gulleys and having no rodding eyes in the downpipes has lead to blockages, which in turn has directed the water into the building.	Refer to the recommended repairs in section A9.	E				
			The finishes in the basement rooms have either been stripped back to the stone or floor joists to allow for drying out/ timber repairs, or they have been drylined.	If the above is carried out then the spaces in the basement should be damp proofed and drylined.					
D11	Safe lintels	Some of the lintels have been replaced with concrete beams.	The replacement lintels over the opening between xG.04 and xG.05 are a mixture of beams laid on the horizontal and vertical.	Structural Engineer to inspect and advise on the suitability of the renewal.	E				
		Existing timber safe lintel, xF.06.	The lintel has been affected by the previous fire and may have been weakened.	Structural Engineer to inspect and advise if replacement is required.	U				

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
(E)	**FITTINGS**							
E1	Kitchen xB.11.	A rudimentary range of kitchen units with stainless steel sink and water heater exists in this space. The door into this space is a flush door with aluminium furniture.	Fair.	Fittings to be removed.				
E2	Fittings	A medley of shelving and other furniture remain insitu	Poor	Allow for its disposal.				

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
(F)	**HEATING AND LIGHTING INSTALLATION, DRAINS ETC**							
F1	Heating	In the principal rooms, below the windows, there are several decorative cast iron radiators in-situ.	The condition appears fair.	The existing cast iron radiators should be retained and connected into the new system. The radiators should be flushed out and re-decorated.				
		A large boiler exists in the basement and there is also a blockwork enclosed metal oil storage tank	The oil tank appears to be partially full	Allow for pumping the tank				
			It is unclear whether the boiler or the associated pipework retains asbestos lagging.	If not available, allow for an asbestos survey.				
		Storage heaters have been fitted into the basement and some of the first floor rooms.	The working condition is unknown. However, this type of system is inappropriate and unsuitable for this type of building.	The storage heaters should be removed and replaced with a suitable system.		E		
F2	Water Supply	It has not been noted where the mains supply enters the building.	There is flooding from a backed up washbasin in xG10. Water is available in xB11, xG10, xG11 and xA.02.	New facilities will be required.				
F3	Foul	Toilets have been inserted into the southeast corner at ground level.	Soil pipes penetrate the east wall and it is assumed they connect into the mains sewage system underground.	Adequate toilet facilities will be required for the proposed new use.				

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable			PHOTO REF
					U	E	D	
		Kitchen sink is located in xB.11, and toilets are located in the ancillary building to the north.	It is assumed that there is a line of drainage to the north of the building.	A survey of the existing drainage should be carried out if there are no past plans of the routes.				
F4	Hot Water Services	None, the existing boiler is not in use.	The existing boiler would be inefficient for modern requirements and should be replaced with a suitable system.	The existing boiler should be salvaged.				
F5	Ventilation	Sash and case windows.	There is no formal trickle ventilation, only natural leakage. All windows are currently inoperable.	See item B5 above.				
F6	Electrics	Non-operable due to the effects of the previous fire. The existing switchgear is located in xB.17.	Assumed unsafe and defunct due to past fire.	A new electrical system and switchboard would be required.		E		
F7	Fire Fighting Equipment	None noted.		A suitable fire system should be designed and installed. Refer to proposals from the Services Engineer.				
F8	Telephone	No telephone points were noted during this survey. It should be assumed that there are points within the building due to the past use.						
F9	TV Provision	No aerials where noted on the roof.						

	Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable			PHOTO REF
				B/F				
(G)	GROUNDS, BOUNDARIES AND ANCILLARY BUILDINGS							
G1	Paths Within Grounds	Tarmac finish extends into courtyard footprint.	mossy	unsuitable				
G2	Signage, Notice Boards etc	None.						
G3	Boundaries	The building is bound by tarmacadam roads.	Tarmac meets base of walls	Allow for gravel margins				
G4	Landscaping	There is no designed landscaping pertaining to the building. There is just the surrounding parkland.	Soft landscaping on banks meets base of walls	Allow for land drainage and gravel margins				
G5	Outbuilding -- Single storey ancillary building	The low pitch slated roof runs eastwards and terminates into a small pyramidal roof at a slightly higher level.	There are a number of chipped and missing slates. Moss has built up on the south pitch.	Due to the number of damaged/ missing slates, and the condition of the hips and ridges, the roof should be stripped and re-slated.	E			041 042
		Zinc ridge over approx. 75mm dia. timber roll.	It appears that the ridge has been replaced in zinc. The fixing penetrate zinc sheet and there are a number of straps that are either missing or they have lifted due to the wind.	When the roof is stripped and re-slated the ridge should be renewed in code 8 lead in accordance with 'LSA Rolled Lead Sheet The Complete Manual'.	E			042

Element	Description	Condition	Recommended Repairs	Priority U = Urgent E = Essential D = Desirable U	E	D	PHOTO REF
	Lead/ zinc hips over approx. 75mm dia. timber roll.	Certain sections of the lead hips have failed over time and these sections have been over clad in zinc. The zinc is fixed with straps that have been subjected to wind lift.	The hips should be renewed in code 8 lead in accordance with 'LSA Rolled Lead Sheet The Complete Manual'.				042
	External walls	In general terms the masonry structure of this extension appears reasonable apart from the damage to the ingo stones and cills of the windows on the South side. A small crack also exists running down from the right hand side of the East most rear opening to ground level.	As noted above in B1, the cement render should be carefully removed and replaced with a lime render.				043
-- Single storey ancillary building, "boot room"	Flat felt roof with a small with a small parapet to the front.	The felt roof is covered in moss. Below the moss there is evidence of bubbling and decay, which indicates that the roof may be at the end of its life span. No access to the interior was available.	Allow for the roof to be replaced in code 8 lead in accordance with 'LSA Rolled Lead Sheet The Complete Manual'.				044
	External Walls	The external walls are coated in smooth cement render.	As noted above in B1, the cement render should be carefully removed and replaced with a lime render.				

3.0 SUMMARY

3.1 Roofs and Rainwater Goods

The roof spaces have been inspected and apart from the structural concerns, due to previous poor repairs, the general condition of the fabric is believed to be good. The Structural Engineer will be providing their own report on the above.

The condition of the roof finishes is seen to be fair. Currently the underside of the sarking boards are dry, although there is evidence of staining that suggests there have been problems in the past. These problems may have been counteracted by the application of slating felt on top of the sarking. There are a number of slipped and chipped slates and these should be re-fixed/ replaced where necessary if the Welsh slate is being retained.

Two causes for concern is the condition of the leadwork and the inappropriate sarnafil external finish. The leadwork is showing signs of fatigue and there is evidence of cracking from expansion and contraction. Past repairs have been attempted but these have not been satisfactory, for example the failed areas have been overlaid with either new lead or zinc. Sarnafil is a highly inappropriate material on a historic building of this character and only has a maximum expected lifespan of 20 years. It runs the length of the parapet gutters, overclads the stone parapet and is also the covering for the rear flat roof, which is ponding. Further inspection should be carried out along the parapet. It would be highly advisable to replace all there areas in a more suitable material such as lead.

The roof on the single storey ancillary building will need to be stripped and re-slated with new leadwork to the ridges and hips. The single story 'boot room' to the east has a felt roof and evidence suggests that this has failed however further inspection would be required from the interior to confirm.

The rainwater goods have been painted with a red oxide primer, it is assumed this has been carried out fairly recently, and appear to be in a fair condition. There are no rodding eyes or connections to the gulleys and this is causing a build up rainwater, which in turn is causing considerable damage to the fabric of the building. This needs to be rectified as a matter of urgency.

3.2 External Walls and Finishes

The external walls have been rendered with a smooth cement which is unsuitable and some areas across the elevation have failed. It is highly likely that the cement render will be causing damage to the stonework below because it does not allow it to breath; this will only become evident once it has been carefully removed. There is a fair amount of evidence of delamination to the ashlar stonework and columns across the elevations of the buildings and a detailed stonework survey needs to be carried out to highlight the specific areas and the proposed repairs. There are a number of cracked lintels that will need to be inspected by the structural engineer to determine the cause. These will require renewal in a suitable sandstone.

Externally timber boards conceal the sash and case windows, however it is assumed that they will need full decoration. It has been noted from the interior that they are inoperable and therefore all the windows would require a full overhaul in order to bring them back to a suitable standard.

3.3 Internal Finishes

The internal finishes in the attic level have been stripped back in the past to allow for structural inspections to be carried out. There are some surviving examples of plaster on the hard and a section of wallpaper is visible in xA.06. The original boarding has been removed to expose the floor joist and a walkway has been provided to give access to all the attic spaces. The original light well is lath and plaster and is in relatively good condition. The rooflights over the lightwell have been removed in the past and the area slated over.
Generally the finishes in the principal rooms are original lath and plaster or plaster on the hard. As noted in D1 and D4 a past fire has damaged some of the finishes. For example sections of plasterwork have been completely destroyed and moulded cornices have also been affected. There are good examples of the moulded timber panelling, architraves and skirting's in xF.06. Some of the timber panelling has been overclad with smooth timber boarding which has allowed the detail below to be preserved. In xF.01, xF.02 and xF.11 the original finishes have been stripped out, the spaces have been drylined and had a simple cornice and skirting installed. There are enough good examples of moulding profiles in the other principal rooms to allow a judgment to be made on a suitable replacement detail.

The basement is very damp and the worst effected area is xB.13. As noted under section A, the lack of connections at gulley's and having no rodding eyes in the downpipes has lead to blockages, which in turn has directed the water into the building. The finishes in the basement rooms have either been stripped back to the stone or floor joists to allow for drying out/ timber repairs, or they have been drylined.

One of the most noticeable alterations to the interior of the building is a series of downstands and columns, which are a result of a requirement to strengthen the floors for use as a library.

3.4 Fitments

Grant Lodge has been stripped of any original internal fitments. There are some modern chairs and desks stacked in xB.11, xB.12 and xG.05.

3.5 Services

The building was originally heated from an old oil fired boiler in the basement that fed partially decorative cast iron radiators. A secondary electric system was installed in the form of storage heaters. These are mainly located in the basement spaces and are inappropriate and unsuitable for a building like this.

The current toilet provisions in the building are inadequate and will need to be assessed against the proposed occupancy capacity and upgraded.

3.6 Externals

Grant Lodge is bound by tarmacamdem roads to the North, West and South, beyond the roads is the Cooper parkland. There is no designated external space for the Lodge. The building's relationship with the surrounding sites needs to be greatly improved.

APPENDICES

- Floor Plans **(under separate issue)**
- Photographs

Photograph 001: *Fixings for the lead ridges penetrate the lead shee. These have been clad with lead cover pieces, which have lifted. Fixing through the lead weakens the sheet and may also be a source of water ingress.*

Photograph 002: *The parapet walls have been clad in sarnafil.*

Photograph 003: *The lead valleys have begun to show signs of erosion and creeping.*

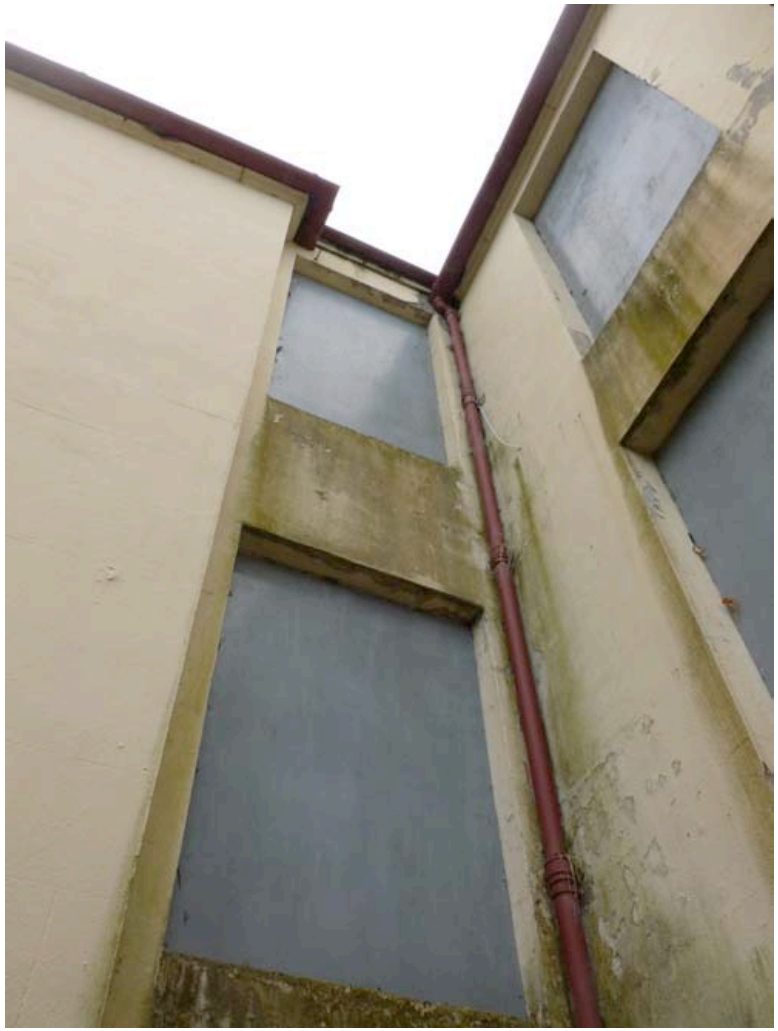
Photograph 004: *The lead hips are showing signs of fatigue, and as noted in the photograph above, the fixings penetrate the sheet.*

Photograph 005: *An additional piece of lead has been fitted over the existing lead aprons to the dormers. The additional piece of lead has been subjected to wind lift and is showing signs of fatigue.*

Photograph 006: *At the lead apron to the chimneys there is a considerable amount of mortar running along the raggle, in which the lead is turned into, it appears that this has begun to have a corrosive effect on the lead flashing.*

Photograph 007: The perimeter parapet gutter has been clad in sarnafil.

Photograph 008: The existing half round cast iron gutter has been primed in red oxide. There is a build up of debris within the guttering.



Photograph 009: *The existing downpipes have been painted in red oxide. The downpipe, shown above, has been blocked by vegetation, which has in turn caused a build up of water in this location.*

Photograph 010: *The gulley arrangement to the base of some pipes is unsatisfactory. It varies between pipes disappearing into the ground, to visible open gulleys, some of which are broken.*

Photograph 011: *The cast iron hopper heads have also been primed in red oxide and are fitted to the downpipes on the front elevation. The photograph above shows that the hoppers have been moved up by one length.*

Photograph 012: *An satisfactory hopper head, clad in sarnafil, has been formed on the east elevation. The staining on the face of the elevation indicates that there is a blockage.*

Photograph 013: *The building has been rendered externally with a smooth cement render and painted, which is fairly unsympathetic to the building. The cement render is not in great condition, and as shown above, large sections have failed.*

Photograph 014: *There are numerous ferrous fixings/ pipes located in the walls around the building that are causing damage to the stonework.*

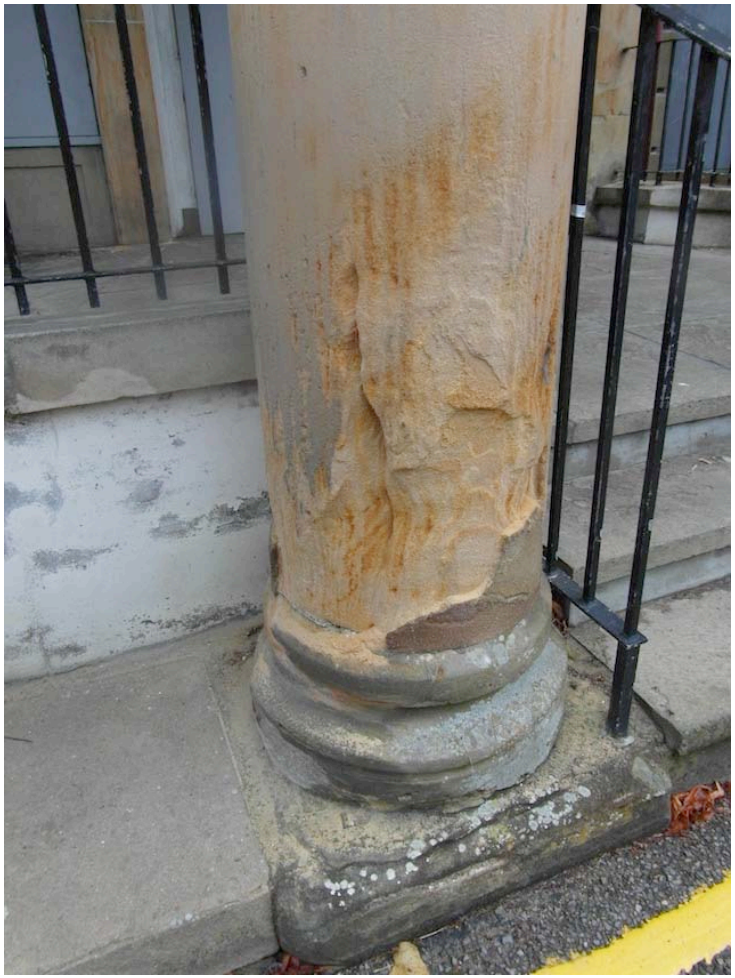
Photograph 015: *The corner quoin stones have been left exposed and they have been dressed (stugged finish). The tooling may indicate an intention at some stage to carry the render over the margin stones. Some cement repairs have been made to the quoin stones.*

Photograph 016: *The rybats for some of the windows and doors have been left exposed. Cement repairs have been made in an attempt to repair the delamination.*

Photograph 017: *There are significant areas of delamination to the exposed ashlar base course.*

Photograph 018: *Noticeable movement has occurred between the porte-cochere and the main front wall of the building.*

Photograph 019: *The joint between the high level lintel on the porch structure has opened up which is a result of the movement in the two corner columns.*



Photograph 020: *The splitting and delamination to the stonework appears to have been counteracted by the application of a slurry wash in places.*

Photograph 021: The delamination of the stonework is considerable at the base of the pilasters.

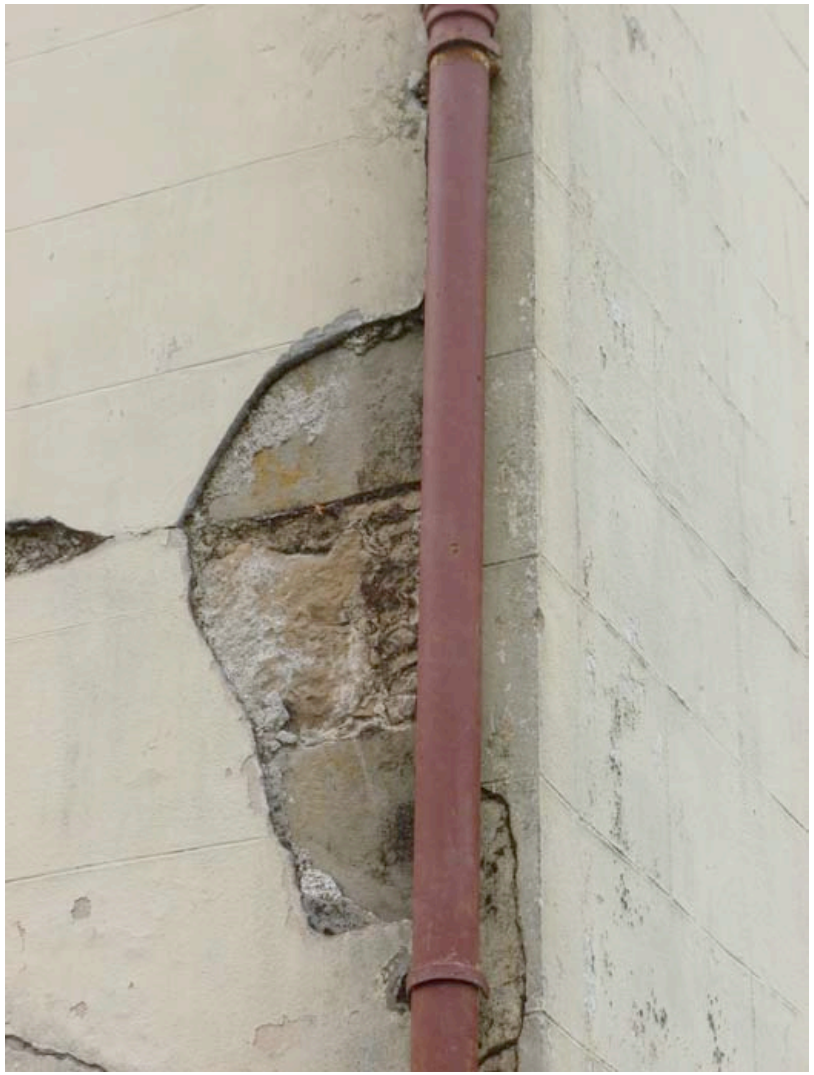
Photograph 022: Plastic repairs have been applied to the base of the column to counteract the delamination.

Photograph 023: *The edge beams to either side of the porte-cochere have, in the past, had cast iron channels inserted for additional support. These channels are showing signs of erosion.*

Photograph 024: *The I beam supporting the external concrete landing, on the north elevation, is badly corroded.*

Photograph 025: *In the southwest corner of the building exists a small concrete angled pad stone with bolts cast in and the purpose of this is unclear at present.*

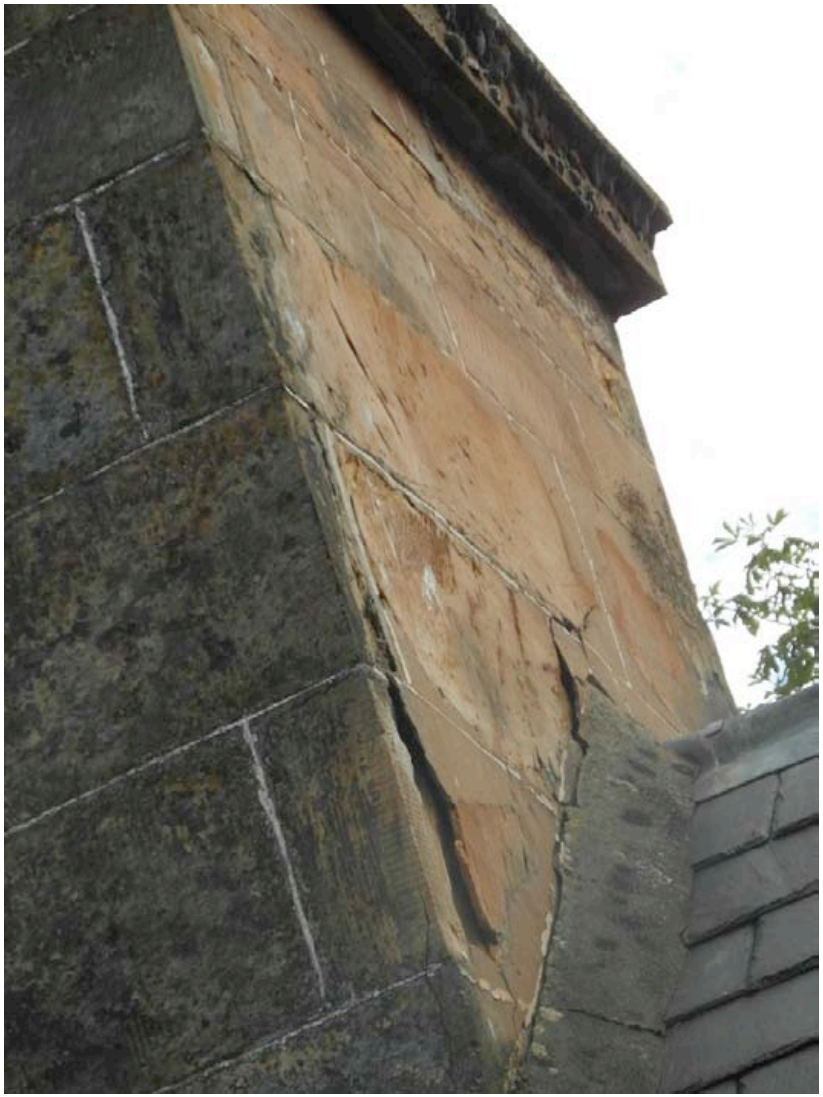
Photograph 026: *It is noted that on the east side of north extension earlier openings have been blocked up where the single storey ancillary building abuts the main building.*



Photograph 027: *The render has failed approximately 2m from ground level on the north most corner on the east gable. Delamination has occurred to the stones that are now exposed.*

Photograph 028: *There are several cracked cills around the building. This is especially apparent on the west elevation as shown in the photograph above.*

Photograph 029: *The chimney stacks (4no.) are of dressed ashlar regularly coursed surmounted by the double stepped moulded stone coping.*



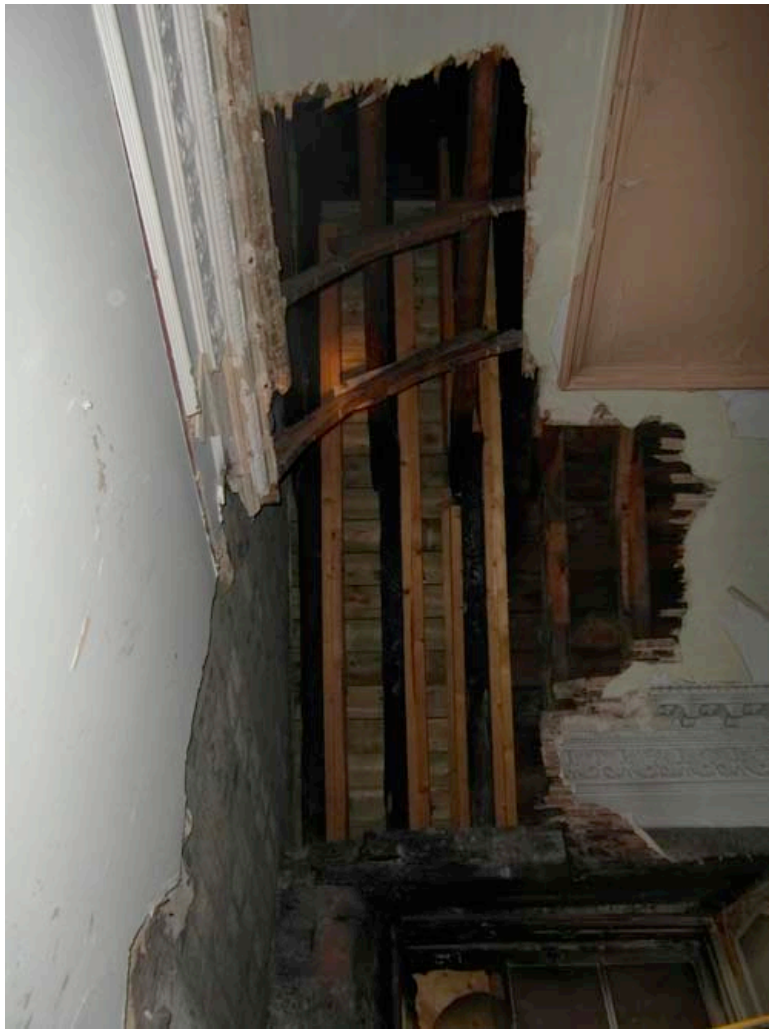
Photograph 030: *The south face of the front east chimney has significant delamination.*

Photograph 031: There are several open joints on each of the chimneystacks.

Photograph 032: The ground floor joists have been replaced in xB.06. The ends sit on either concrete pads or a new timber wall plate. The wall pockets have been opened up and brick piers inserted to allow air circulation.

Photograph 033: *Replacement ground floor joists below the fire damage.*

Photograph 034: *Some of the ground floor joists below the fire damage have had splice repairs carried out. This has exposed corroded cast iron I beams which were previously installed to strengthen the floors.*



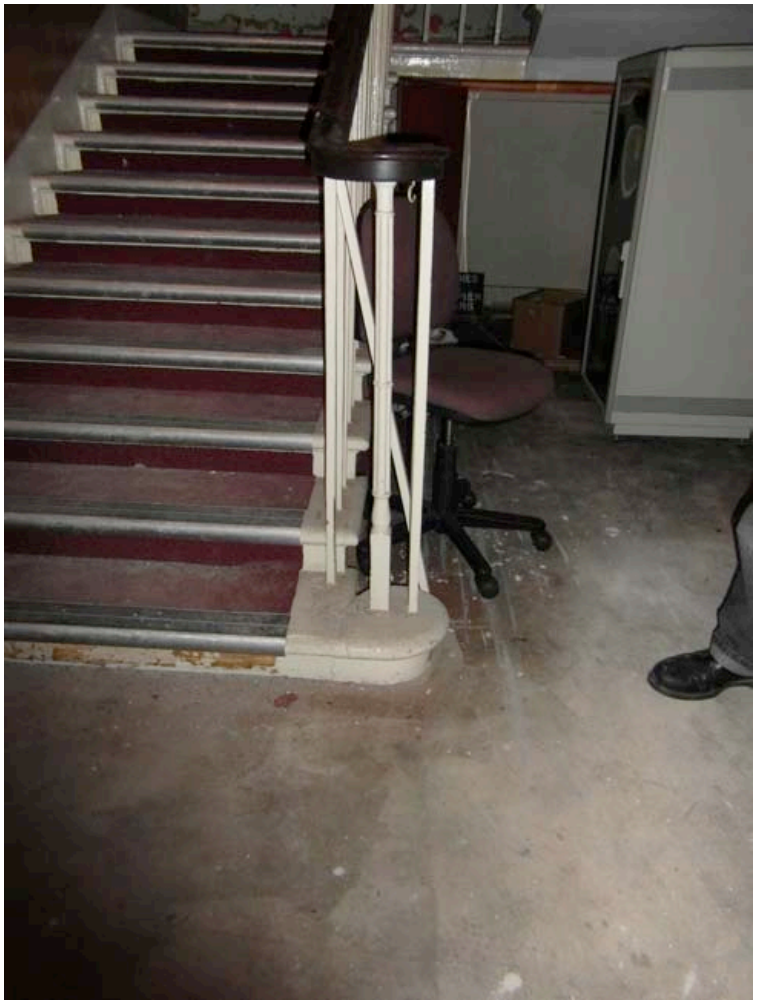
Photograph 035: The ceiling has been damaged in xF.06 on the south wall by a previous outbreak of fire.

Photograph 036: The coomb of the ceiling on the south wall exhibits a crack running up from the cornice to the central moulded section, the crack continues down the right hand end of the door lintel below.

Photograph 037: *At the north end of the coffered ceiling in the entrance hall there is cracking visible at the downstand beam and it appears to have sagged in the centre.*

Photograph 038: *The plastered ceiling in xG.04 has a decorative border that runs around the perimeter of the ceiling. The decorative detail on the ceiling and cornice at the south side has been lost due to previous interventions.*

Photograph 039: There is a small remaining section of wall paper in xA.05.



Photograph 040: Simple cast iron balustrades and timber handrail to service stair. It is assumed that a diagonal prop was added at the bottom of the stairs due to a concern over the stability of the balustrade.

Photograph 041: Single storey ancillary building. There are a number of chipped and missing slates.

Photograph 042: The single storey ancillary building terminates into a small pyramidal roof at a slightly higher level. It appears that a section of the ridge on the lower roof has been replaced in zinc.

Photograph 043: *One of the openings on the ancillary building has been reduced in size.*

Photograph 044: *The roof of the 'boot room' is clad in felt and is covered in moss. Below the moss there is evidence of bubbling and decay, which indicates that the roof may be at the end of its life span.*