

WILES & MAGUIRE



THE OLD STATIONMASTER'S HOUSE LIVERPOOL ROAD RAILWAYS STATION, MANCHESTER

GRADE I CONDITION INSPECTION REPORT

For the Landmark Trust
Date of primary Inspection 21st Oct 2021
Weather: Dry and warm. Heavy rain the previous day
Inspection status: First by this Architect

.......... Andrew Wiles AABC

WILES & MAGUIRE
The Danesmead Wing, 33 Fulford Cross, York, YO10 4PB, Tel: 01904 655447
enquiries@wamarchitects.co.uk

INTRODUCTORY COMMENTS

i) INTRODUCTION:

The following is the results of an inspection undertaken by Andrew Wiles, a conservation architect on 21st October 2021. The aim being to gain a snapshot of the condition of the Old Stationmasters House and inform the costs of repair and maintenance going forward.

The investigation looked at all accessible areas of the building and areas of the roof that could not be seen draw on evidence from a recent drone survey.

The report is a departure from the usual format used by the Landmark Trust in that it features an extended commentary and description of the current status prior to conversion. We have used the same priority notation and condition comments as used in a standard LT report. The costs stated represent a broad position which will be developed in greater details as part of a separate exercise by a QS.

Throughout the document the street front is referred to as the "South Elevation" and the Railway Platform is the North although true north is roughly offset by about 30 degrees.

i) SUMMARY OF CONDITION:

Overall we would consider that this building is in a generally GOOD condition.

It has benefitted from a substantial programme of re-roofing and structural repair in the 1980s or 90s and this remains a beneficial legacy to the building going forward. The same process of repair and conversion has stripped the building of most of the historical fixtures and fittings that could be considered original and its Grade I listing can be said to only really relate to its historical associations. These are though very strong.

While the building remains overall in good conditions there are still a few items needing upgrade or repair. The report covers them in detail but we highlight the following here:

- The gutter to the south and west elevations have a long way to go to drain to the pipe and we suspect there has been a history of this backing up and overflowing if not maintained. Water washing down the wall at the outer corner has washed out the mortar from large areas of brickwork. The gutter looks much better maintained now but the lack of mortar in the joints will allow water to penetrate the wall thickness and damage the internal plaster. This is affecting the second and first floors and there is significant but localised issues with salt growth.
- The roof slating is generally all in place but there are issues with the associated leadwork. The slate fan at the outer SW corner is missing a capping to the top of the rolls and further down the slope the soakers used for weatherproofing are coming loose. While this allows water to penetrate these areas are protected by a stout bituminous roofing membrane.
- At the abutment of the north extension with the old station building there is a section of lead flat back gutter that is laid to a poor standard of detailing. The sheets are too large and there is an inside corner which makes the lead prone to cross cracking. There is one section that has been roughly patched with flashband and is currently sealed. There are a couple of other areas that will soon split. This needs improvement.
- The sash windows are all relatively modern and while made to a pretty good standard they are old enough for significant areas of paint loss that has allowed water to get into the side trims. They are all capable of refurbishment though.
- The timber roof light over the stairs is currently functional but the components are looking extremely weather-beaten and may be on the edge of failure. One sheet of glass is cracked.
- The walls in the basement look to be made of a poor quality common brick with a high salt content. At some point these were painted over with an acrylic paint and the resultant salt

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

INTRODUCTION

growth has been quite dramatic blowing the face of many of the bricks and littering the floor with dust and fragments.

ii) NOTATION ON RECOMMENDATIONS AND PRIORITIES:

Condition:

G: Satisfactory/no consequential damage,

F: Isolated failure/limited consequential damage,

P: Extensive Failure/consequential damage,

M: Maintenance

Priority

1: Urgent,

2: In year 1,

3: In year 2,

4: In year 3,

5: In year 4,

6: In year 5 and beyond,

7: Improvement

8: Further Investigation needed

iii) NOTES ON 'INDICATED SCALE OF COSTS':

For each action point raised there is also an indication of the scale of costs associated with the problem typically, Small (S), Medium (M) or Large (L). There are also items that have no monetary costs (Z)

(S) A small cost would be typically under £1000 and may be an aspect of regular maintenance or a job which could be picked up as part of a batch of work by small contractor.

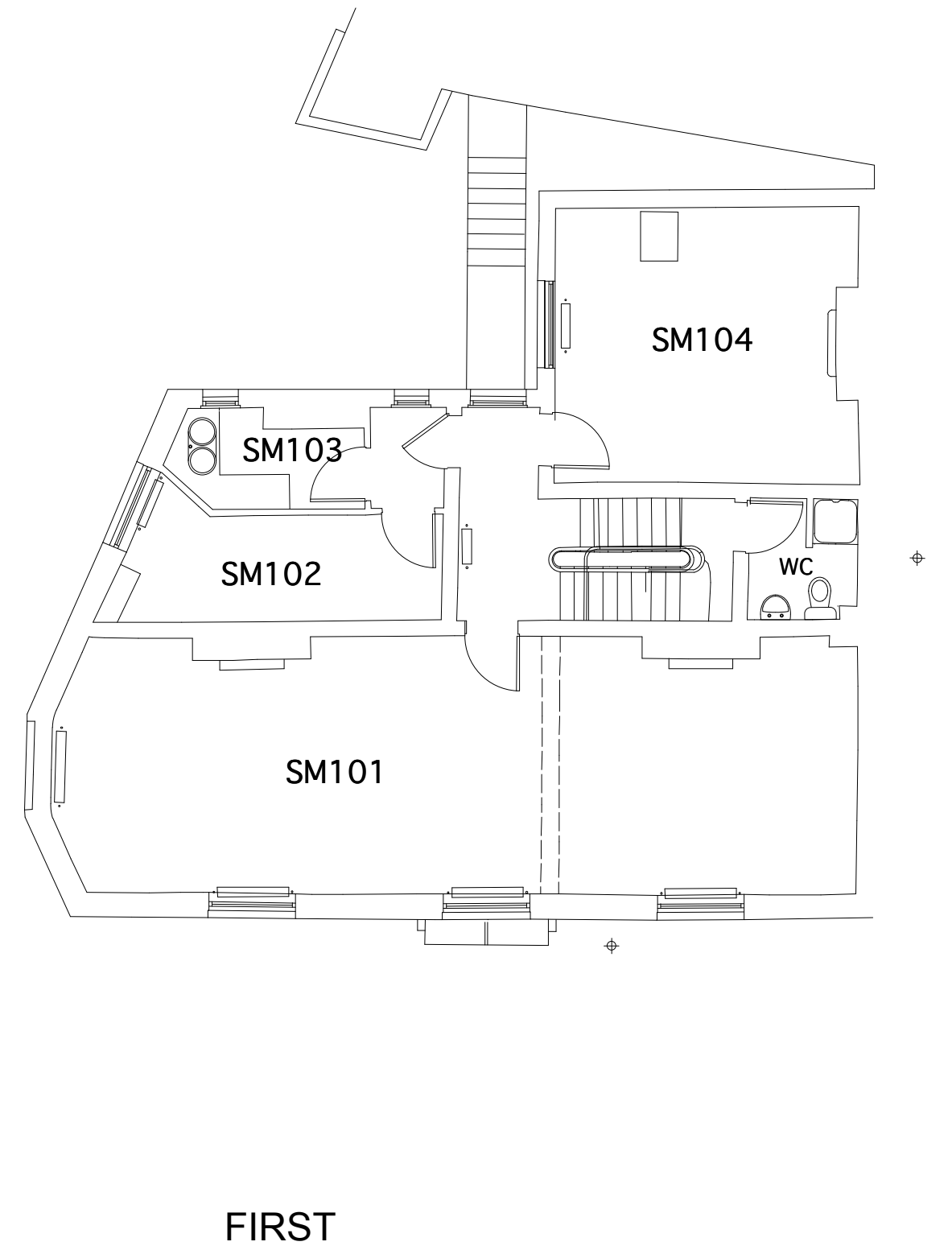
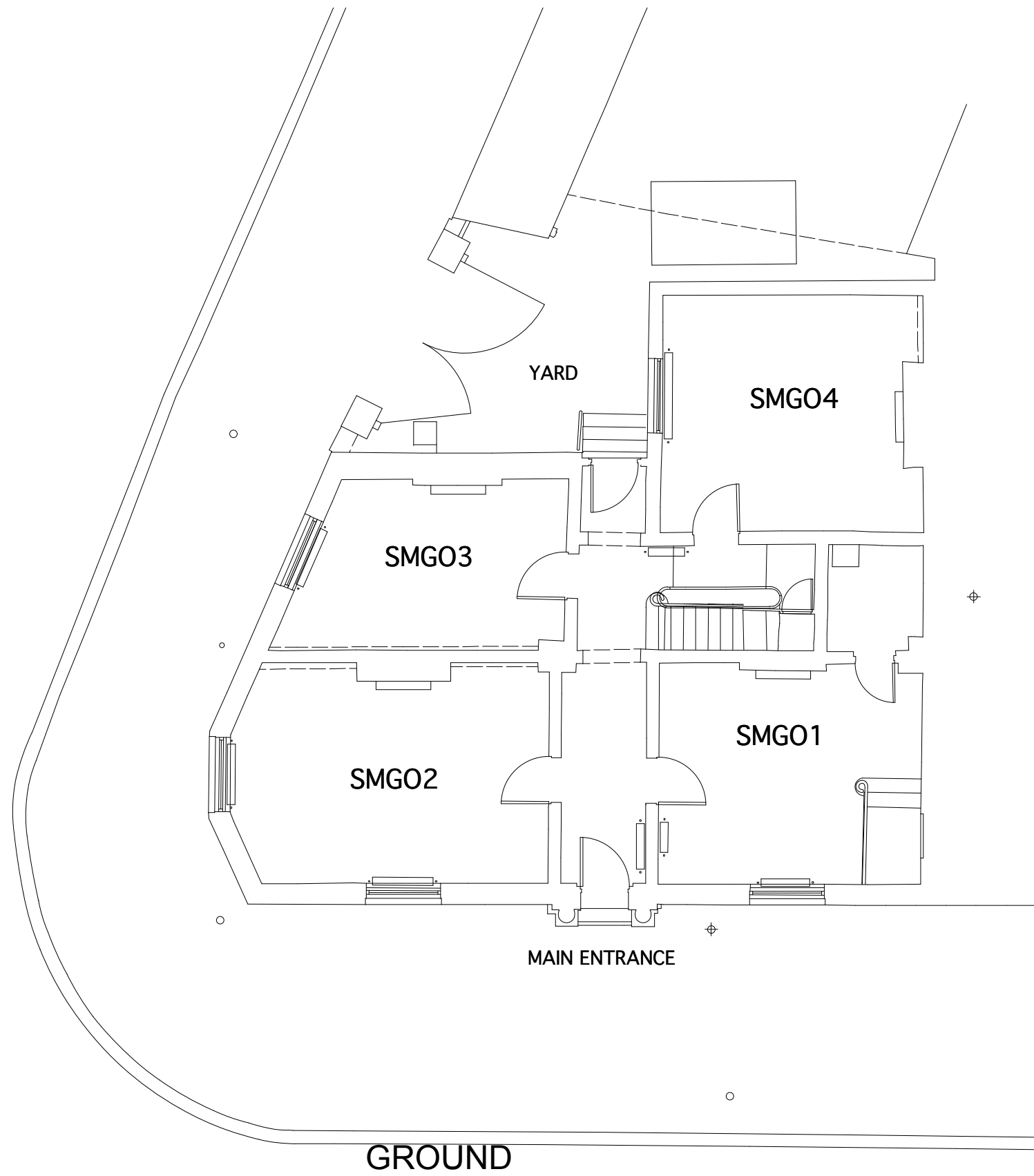
(M) A medium cost would be something which would need an external contractor to complete and usually need a small scaffold or access equipment. We would also imagine that this would take several days or a weeks to complete. We would suggest that the value of this work would be anything under £10,000.

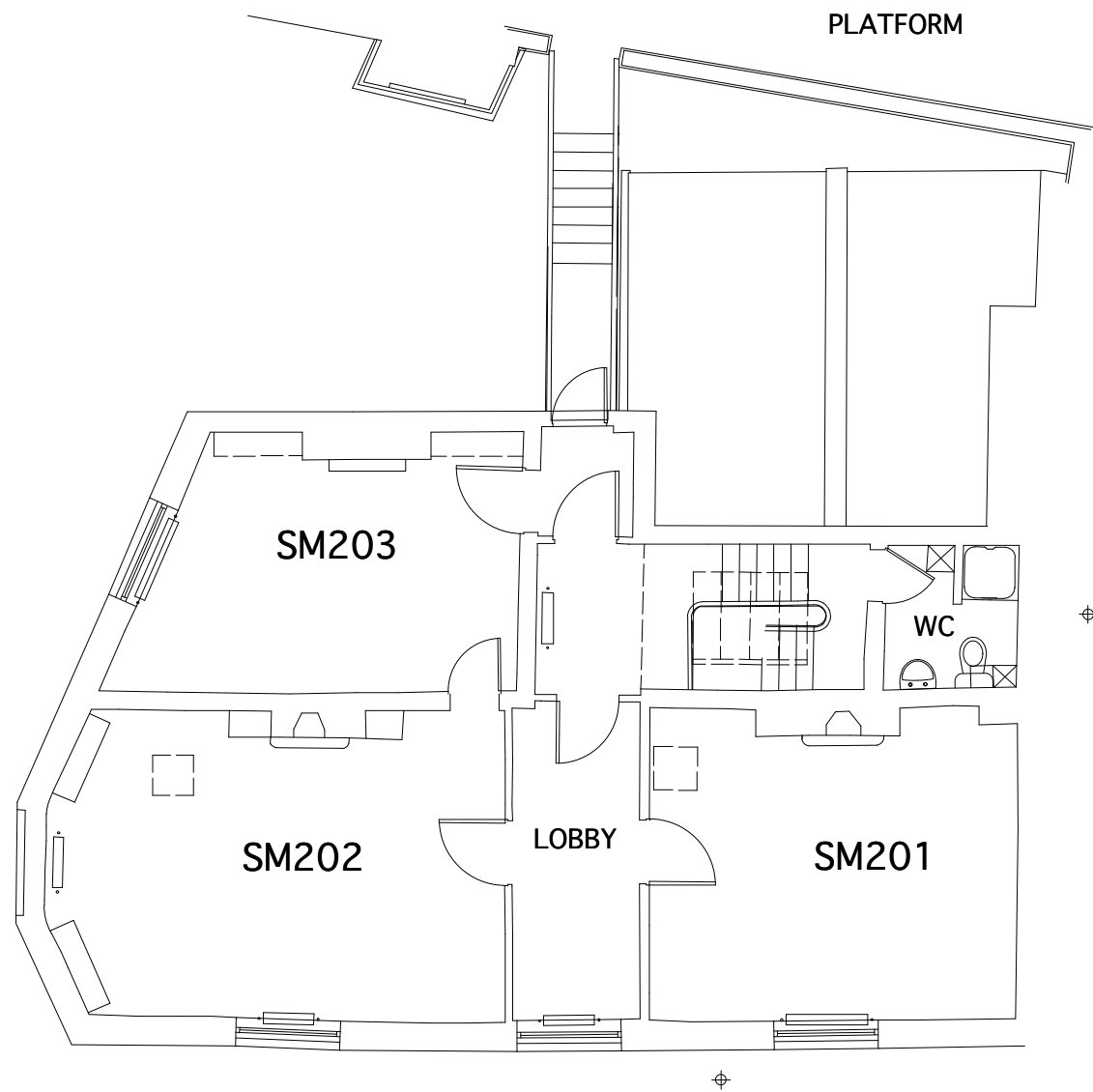
(L) The larger cost are those that would be similar to (M) but in the cost range over £10,000. Depending on what is suggested it is likely that this will require Statutory Approval and grant aid.

(Z) Items with no monetary cost are those that typically just need monitoring or a change of operational or management activity

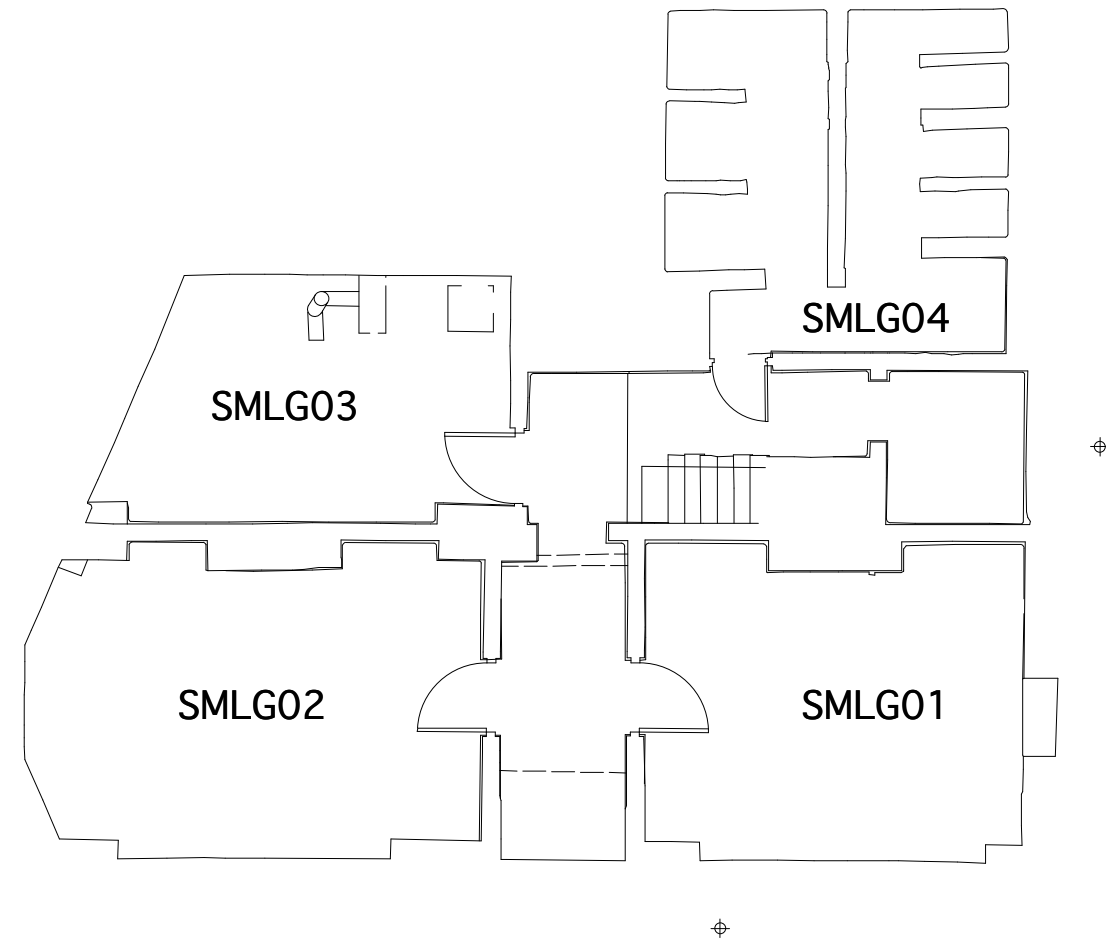
G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation





SECOND



BASEMENT

1.1

North Extension Roof

General Description

Relatively large duo pitch roof extending out from the North Elevation at first floor level. Heavy weight Welsh slates laid to even courses, with a black tile ridge. Cast iron eaves gutter in an ogee style mounted on a timber fascia with dentil blocks below. At the west side is a lead back gutter detail and stepped flashings at the inside corner around the stair access door. The east side has similar detailing but there is a broad lead flat gutter area which has to work around a chimney stack to the adjacent station building.

Statement of Condition

Structurally all seems even and true, we know from the internal inspection that this is a relatively new roof structure. It is all under-felted.

On the west pitch, there is one broken slate near the ridge and two slates that have had to be tagged in place with tingles. On the east side there seems to be some unevenness in the lay of the slates, with a couple of them slipping. There is quite a variety of thicknesses of slates on the East side too, with patching in done with thinner slates making it not coalesce very well. The slates need an overhaul.

On the west side the lead back gutter area and the cast iron gutter have a reasonable amount of debris to clear. From what we can see of the lead back gutter it looks OK.

Looking from below the eaves gutter could do with a repaint and the joints sealing. Leaks look to have rotted one of the dentils so this will need replacement too.

On the east gutter area some debris from the adjacent construction work will need to be cleared.

The back gutter area beyond the stack of the outshot roof has a relatively wide section of gutter, which is formed of a single piece of lead. This has to narrow down to only around 8 inches wide as it passes the stack. The large sheet of lead has prominent ridges in two locations, suggesting that it has been suffering from expansion and contraction, and cracking will develop along the line of those ridges in the future. There is some very old-looking lead flashing at the abutment with the station wall. This has various splits and punctures due to its age.

Where the gutter narrows past the stack, it was originally a simple butt joint and weld. This has broken down in the past and been patched with a strip of flashband. There are stained ceilings internally that must predate this patching. This patch looks quite damaged now.

The final outlet into the hopper would have originally had a more substantial lead spitter. This has been bossed back and torn, leaving a fairly ambiguous and misshapen discharge into the hopper.

The hopper and the pipe are clear at this time, though reasonably rusty. The fixing spikes for the hopper do not look to be particularly well secured, and one of them is missing. The downpipes are 3 inches in diameter, which is inadequate for the amount of roof space being taken, as it also carries part of the main roof above.

The down pipe offsets through a wall to the train station platform, where it may connect onto a piece of asbestos pipe? This needs to be investigated.

The verge and ridge pointing is fair. It looks to have been renewed. Some rough pointing to the north end of the ridge.

Beyond the north gable verge, there is a gap down to ground level. The north face is the side of the railway arch and there is a projecting stone string course around 1.5m down. The mortar joints in this are washed out and it is quite choked with buddleia growth at the moment. It is quite a hard to maintain area.

Standing above the east lead gutter is a section of thin wall that screens off the railway platform. There is abutting this a chimney stack or some kind of thin-walled structure disappearing into the temporary roof above. There has been a problem with long-term movement in this zone. A wide joint has been filled with expansion joint mastic. We see a need to determine who that will ultimately belong to and will be a maintenance liability on it.

The back gutter area can not be accessed and maintained without having to step across this gap. We

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

ROOFS

would support the introduction of an open metal grille floor to the east end of this slot so there is no risk of falling through.

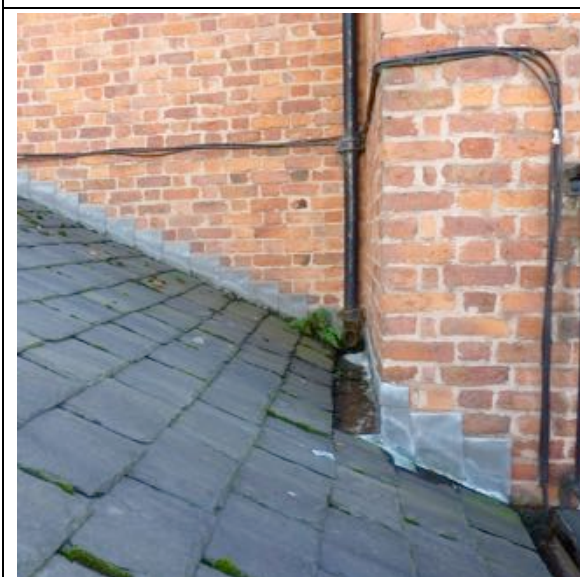
Photos:



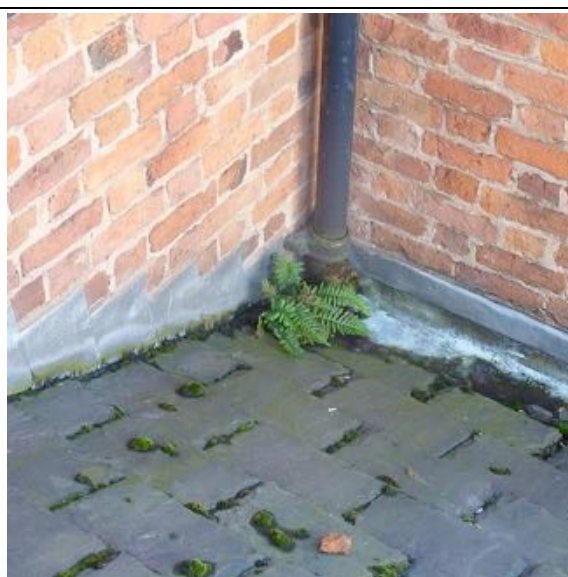
General view of the roofs from the north. The chimney stacks seem in reasonable condition. Some face loss of bricks on the north side on the upper roof.



Slates to the East pitch with numerous cracks and chips. These are relatively small and thick slates for welsh.



General view of the West pitch showing build up of plant debris in back gutter.



ROOFS



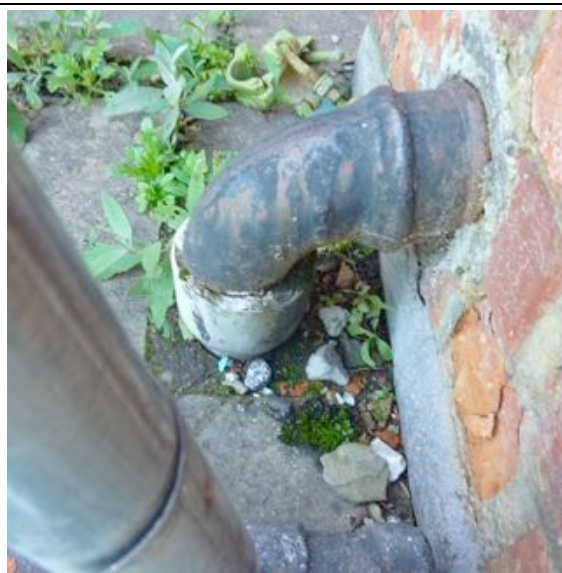
General view of the end of the flat lead gutter at the east side. The end drip into the hopper is too short and has been quite mangled, probably by attempted theft. The chimney stack projecting forward means the gutter has to drain around it.



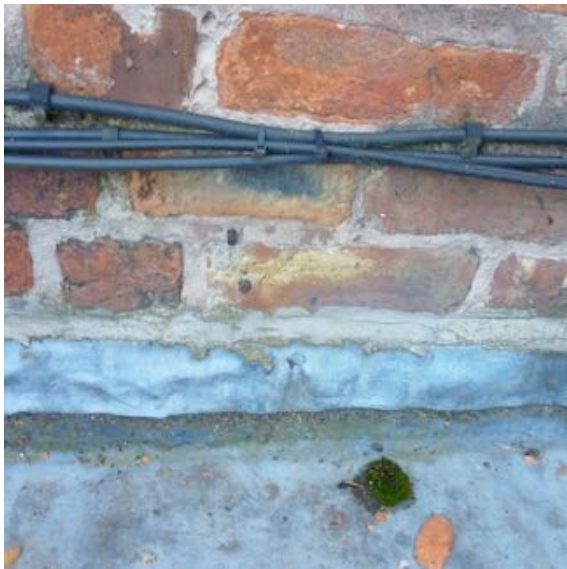
Fixings to the hopper under the outlet coming away, paintwork in poor order.



Pipe under the hopper goes through the wall onto the platform where it looks like it connects onto a section of asbestos pipe?



ROOFS

	
Lead flat valley to the east pitch has an awkward 'pinch point' to the south of the chimney stack. There should be a step here but instead there is just a welded butt joint that looks to have failed. It is patched with flashband.	The joint adjacent is welded to a large single sheet of lead that has started to develop work-hardened ridges due to expansion and contraction. These will develop into splits.
	
Minimal sized flashing to the lead flat. This is split in several locations.	

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

The Old Stationmaster's House, Manchester.

7

WILES & MAGUIRE - Condition Report: Oct 2021

ROOFS



At the part wall of the house and the station itself there are some tall areas of wall that will be difficult to maintain. The responsibility for future maintenance should be established.

Work items:

Cond'n	Action	Item	Cost
M	1	Clear the eaves gutter and the lead flat areas of debris. This comment would apply to all of the North roof areas.	(S)
M	1	Weedkill and suppress the plant growth in the string course of the North railway arch. Point in the gaps.	(M)
F	2	Reset slipped or cracked slates, replace thin slates used in patching with ones that match the originals. This comment would apply to all of the roof areas.	(M)
P	2	Take up and renew the lead gutter on the east side creating a drip or flexible joint at the point where it flows past the chimney stack. Re-form the spitter and renew the cast iron hopper and pipe.	(M)
F	3	Refurbish and paint the cast iron eaves gutter and fascia, seal the joints and replace any damaged timber corbel blocks. This comment would apply to all of the roof areas.	(M)
M	7	Install galvanised metal tread grill panels to the slot between the platform and the north gable to make it safer to access and maintain the East flat gutter and roof	(M)
M	8	Investigate the material used for the RWP connection on the Railway Platform. Is it asbestos?	(S)
M	8	Determine who will have the maintenance liability on the tall fin wall above the east lead gutter.	(Z)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

1.2

North Roof over Stair WC

General Description

A small area of mono pitch roof over the stair WC around 600mm up from the North extension roof with the walls of the main building and the stair at either side. Roof pitch finished in welsh slate of relatively thin units compared to the extension. Deep lead flashings at the top. Simple lead back gutter at the East which takes the discharge from the small section of the main roof above.

Statement of Condition

All of the slates are in fair condition. One broken at the outer corner, probably where it has been used as a step. It looks like a section of lead and some mortar has been introduced instead of putting a tile back. A section of supporting mortar has broken away no real problems though.

The lead back gutter is in fair order, not too wide a sheet but quite butchered at the end. It has possibly been damaged by lead theft. Good overhang on the remains of the drip to the hopper.

The base of the back gutter seems fairly strong but it slumps back towards the slates, possibly just badly made. A fairly large build-up of moss against the slate edge to clear due to the ponding.

Brickwork walls above this roof are all in fair order and fully pointed, with no damage to brickwork. The verge of the roof over the staircase is losing its pointing.

The ogee gutter to the roof above is again set on a fascia with some nice dentil course detailing. The gutter is very rusty and it looks like it is full and overflowing at the stop end to the west. It is not particularly streaking down the wall, though. It looks like there have been regular leaks at the joints, meaning that a couple of the dentils have rotted. The rest of them look in reasonable condition.

This is quite an awkward to maintain corner and we would support the idea of extending the upper roofs over this area so the eaves gutter can carry water across the access bridge area rather than concentrating it in the back gutter area.

There are quite a lot of bunched cables running across the roof. We presume they are for data or control systems and this that are no longer relevant should be stripped away.

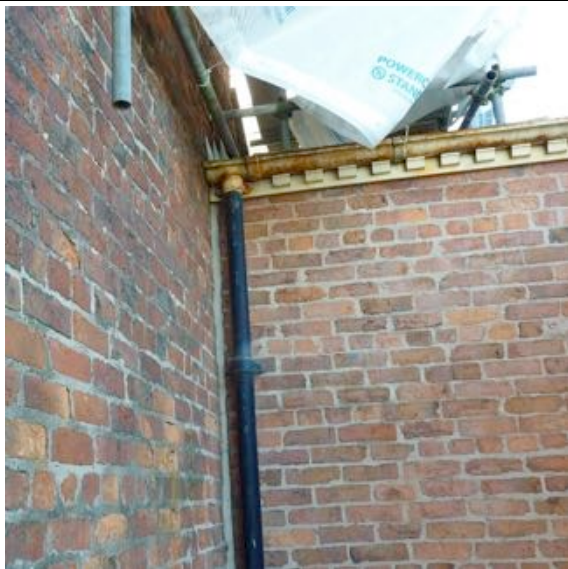
Photos:

	
General view of the roof over the toilet. Vent stack for the entire building comes through the roof.	Detail view of the end of the flat gutter. It may have been subject to attempted theft resulting in broken slates and cracked mortar.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

ROOFS

	
The flat gutter has a definite tilt back towards the roof resulting in moss building up at the edge of the slates. The lead flat probably sits on top of the masonry of the old external wall with the station wall butted up alongside to the East.	Pipe coming down from the upper roof into the gutter.

Work items:

Cond'n	Action	Item	Cost
F	3	Point in the mortar slate verge of the roof over the stair	(S)
G	4	Re-boss the misshapen end of the lead back gutter.	(S)
M	7	Re-construct the roof over the WC so that it is part of the pitch of the upper roof and there is one eaves gutter tracking over to the area of the access bridge.	(M)
G	8	Determine if the multiple cables running across roofs and attached to brickwork are still required and remove them if they are at risk of trapping debris or getting in the way of general maintenance. Otherwise leave them.	(S)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

1.3

North Roof of Main Building

General Description

This entry covers the rear roof pitch to the main building. It is basically an L shaped range with a lead valley at the inside corner. The pitch directly facing north extends over the staircase where there is a large roof light. There is also a chimney stack penetrating the roof pitch near the rooflight.

The return pitch to the north gable is not a true right angle so the roof slate courses are not parallel to the eaves. There are two chimney stacks on the ridge line, one at the very north gable end.

View from the east back gutter of the lower roof.

Statement of Condition

On the north-facing pitch, there does seem to be some slight settlement either side of a high point near the west cheek of the north chimney stack. From internal inspection we know there is a masonry fin wall on that line so it will be bend on the purlins either side that is causing the distortion. This does seem all quite minor though.

From what we can see of the slates to the upper roof pitches all seem in fair order. The slates are currently in place. At least six or seven of them are on lead tingles.

A couple of individual slates look like they might be suffering from age delamination as there are suffering light surface shaling. The roof has been re-slatted in recent decades so these may be poor quality second hand replacements.

Ridges seem fair, though missing a fair amount of their bedding mortar, particularly at the east end of the north facing pitch where the scaffold has come over from the station house repairs.

From what we can see, the condition of the lead valley is generally good. It does look to be quite old, though, and the sheets are in quite long lengths. It may be tha they were not renewed when the slating was re-done.

We can see the back of the timber rolls at the apex of the west facing fan roof. This will be covered morte in the following entries but it can be clearly seen that the lead capping is missing.

Chimney stack rising up out of the staircase roof is mostly fair but some of the brickwork of the upper tabling course is fractured and will need replacement. There are also one or two fractured bricks in the main body of the stack.

The stacks on the ridge line of the return roof do not seem to be in too bad condition from what we can see.

The exterior timber covers to the roof light over the staircase are in quite poor condition now. They look like they were originally purpose-made cappings of some system but they have long since perished. From an internal view the joint is not letting in water so these may be decorative covers more than the glass sealant. We also know from the internal view that the single skin of georgian wired glass is cracked in one case.

The lead weather cover at the top of the roof light seems of quite a thin gauge and is quite distorted.

The whole rooflight assembly needs to be replaced and the opportunity taken for it to be upgraded to double glazing units.

The condition of the eaves gutter has been covered in previous sections.

Photos:

--	--

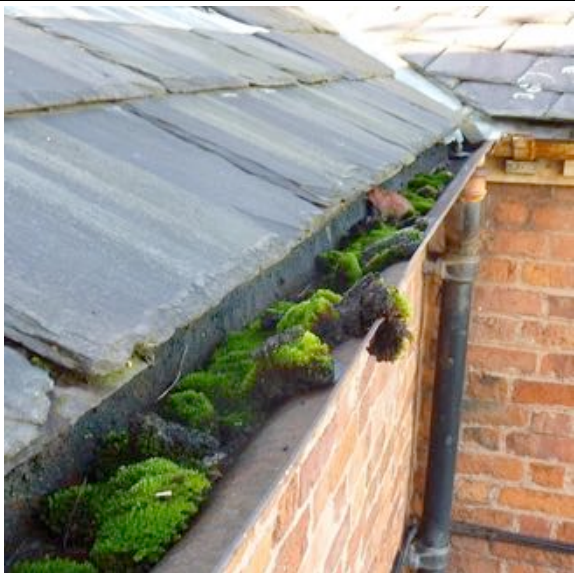
ROOFS

	
General view of the west part of the roof	Very thick slates used on the west part of the roof. Some possible surface delamination noted.
	
Lead valley seems in fair order	The apex of the valley is missing the capping piece and the exposed timber rolls look very weather beaten. There is no significant leak internally at this point though.

ROOFS

	
Tile ridge at the east end (by scaffold) missing mortar	General view of the rooflight. The ridge line can be seen to crown behind the chimney and this would seem to be on the line of the internal spine wall.
	
Detail of the condition of the rooflight timbers	Detail of the condition of the rooflight timber and lead

ROOFS

	
Gutter full of debris	Evidence of log term overtopping or leaks to the gutter inner corner.
	
Slop end of gutter above the toilet roof leaking	Long term leak from one of the gutter joints has rotted out the dentil on the fascia

Work items:

Cond'n	Action	Item	Cost
F	2	Reset and point all ridge tiles.	(M)
P	2	Replace the timber framed rooflight for a higher specification traditional patent glazing frame with sealed double glazed inserts.	(M)
F	7	Renew the lead linings to the valley gutter.	(M)

1.4

South Roof of Main Building

General Description

This entry covers the single south facing roof pitch to the main building with the west fan and roof covered separately. It is a plain slated pitch with a cast iron ogee gutter at the eaves. The east end of the pitch currently encroached by the scaffolding for the station building.

Statement of Condition

As mentioned in the previous entry there is some undulation on the roof either side of the central blockwork spine wall. Looking down the line of the eaves from the west the gutter pushes outwards by about 100mm. This all looks to be a historic problem and the building of the blockwork wall was probably to replace a weak historic truss. It is not significant distortion.

The slates are generally all in place, limited evidence of lead tingles. There is possibly some slippage where there is loss of mortar to the ridges.

There is no rainwater pipe on this elevation, meaning the gutter has to track a long way round the building until it gets to a downpipe at the rear. Any blockage in the pipe or a general deluge and we can not really see a gutter of this size coping with the water and it will overflow. This seems to be an issue historically on the west wall but the south wall seems free of mortar washing out or algae growth.

Ideally we would recommend that this gutter has a new pipe added towards the east end to share the load out but we think it is unlikely that negotiations to get a viable drain to suit this could be negotiated with the council. Adding a larger capacity gutter and downpipe is probably the most practical solution.

For the existing gutter the paintwork seems in fair order with no particular signs of any major leaks in the gutter. There is probably one joint near the west end which has weaped for a while and has brought the paint off the fascia below and damaged the dentil. There are a couple of dentils missing generally from the fascia, it looks like they came away some time ago though.

Two chimney stacks look fair viewed from this direction.

Photos:

	
General view of the roof (and the building) from the south. The gutter has to drain by going all the way around the corner to the north west corner where there is a 75mm pipe connected by an offset. This must be at regular risk of blockage.	Evidence of long term leaks or over-topping of the gutter at the west end of the gutter.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

ROOFS

	
Crowning of the ridge line over the internal cross wall	Mortar loss to the ridge tiles. The chimney stacks seem in reasonable condition. Some face loss of bricks on the north side.

Work items:

Cond'n	Action	Item	Cost
7	F	Replace the ogee gutter and downpipe serving the south and west roof eaves with ones of a larger carrying capacity.	(M)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

1.5

West Roof of Main Building

General Description

This entry covers the west facing areas of the main upper roof including the angled fan of small pitches at the outer corner. It is a plain slated pitch with a cast iron ogee gutter at the eaves.

It was very hard to find a vantage point to look at the roof from some distance and our comments partly draw on the results of a drone survey from recent years.

Statement of Condition

From what we can see there does not seem to be any slumping or distortion to the roof line. It also looks like all of the slates are generally in position.

The fan area is formed from a timber roll dividing each patch of cut slate but instead of there being lead sheet over the join there is a series of short soakers under each slate course, this is, in our experience, unusual. At the crown of the fan the rolls are supposed to be capped by a shaped piece of lead over the joint but drone footage has revealed that that shaped piece of lead is missing. Water will certainly be getting into the top of the ridge apex but the roof is thoroughly protected with heavy grade under slating felt, so the water isn't actually penetrating the roofspace. As the felt is exposed to UV it starts to degrade which is the most likely way for water to penetrate if nothing changes.

We suspect that the exposed timber rolls will have perished but they may be protected by pressure impregnation of preservative.

Using binoculars, we can see that on the southernmost of the three ridges, the soakers are also slipping away from under the slates which suggests they are not fixed. These need to be reset before there is further associated damage. This does not seem like a very good weatherproofing detail all ways round, maybe a change to a traditional wide lead ridge would be better?

It is hard to judge from a distant view but it does look as if the actual roof pitch is less than the recommended minimum of 20 degrees. The use of a heavy roofing felt makes this less of an issue but driving rain probably penetrates under the slates at this corner.

There is a long term issue with damp in the wall plaster at the corner internally. Looking in the roofspace the eaves timbers and brickwork are dry so we suspect the water is coming through the wall rather than via a roof leak.

We have already mentioned that the gutter has a long way to go before it can reach a downpipe, and the joints in the gutter must be custom-formed. There is a risk of them getting a build up of moss and blockage unless they are regularly cleared. There has been a long term problem with leak at the northern joint at the corner of the octagon, flat facing section, with discolouration and paint loss to the fascia and a lost dentil and streaks down the face of the brickwork.

This is quite an isolated leak area though, so will not account for the widespread damage to the plaster noted internally. We think that in the past the gutter has overtopped more frequently and washed out the mortar and eroded the face of the bricks below. This is discussed more in the elevation entry.

When the gutter finally gets round to the pipe at the north elevation, there is a swan-neck offset connecting to a 75 mm pipe, which in turn has a 90° bend before it discharges into a hopper. We can imagine that not only is this arrangement very undersized for the size of roof it is draining, but also the offset and the 90° bend must be prone to blockage. There is some greening of the wall down at ground level, and it may be that the gutter simply overflows in storm conditions and soaks that low level wall. We have already recommended that the gutter and pipe are changed.

Photos:

ROOFS



View of the downpipe which has to take all of the water from the south and west roof pitches. The rust would suggest this is often blocked and overflowing.



The damp staining to the boundary wall at low level may be where the over-topping rainwater pipe drops its water.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

The Old Stationmaster's House, Manchester.

18

WILES & MAGUIRE - Condition Report: Oct 2021

ROOFS



Photos showing the poor detailing and condition of the lead covered rolls at the faceted section of roof. It is quite an unusual detail and clearly not one that has proven effective.

Work items:

Cond'n	Action	Item	Cost
1	F	Access the apex of the fan and introduce a shaped lead cover to the timber rolls. Repair the timber if required and re-set the slipped soakers to the other areas.	(M)
7	F	Strip back the slating arrangement from the fan area and re-make with traditional lead covered ridges rather than the soakers	(L)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

2.1

South Elevation (to street)

General Description

South elevation is a balanced Georgian arrangement of pedimented door and symmetrical sliding sash windows. Although the upper part of the elevation is historic, the lower third from the windowsills downwards, is a relatively modern construction. The stone door case is a modern fantasy structure, of natural stone (?) although the actual entrance door itself seems mean in width to be in balance with the rest of the elevation.

Statement of Condition

No signs of significant structural movement cracking in the elevation.

There has definitely been some historic settlement on the brick panel over the central and eastern first floor windows causing distortion to the line of the rubbed brick lintel. This looks like old movement but there are still some slightly slipped bricks to possibly reset and point.

Looking along the south elevation from the west, there is a definite bend on the line of the gutter. Distortion probably 75 to 100 mm. It may be that there had previously been a breakdown in a roof truss and that has been replaced in modern times by a blockwork wall extending to the ridge and tying it all together.

The brickwork overall is in good order, no need for any re-pointing.

The timber windows are all relatively modern and are of quite good quality vertical sliding sashes with hardwood sills and traditional weights and pulleys.

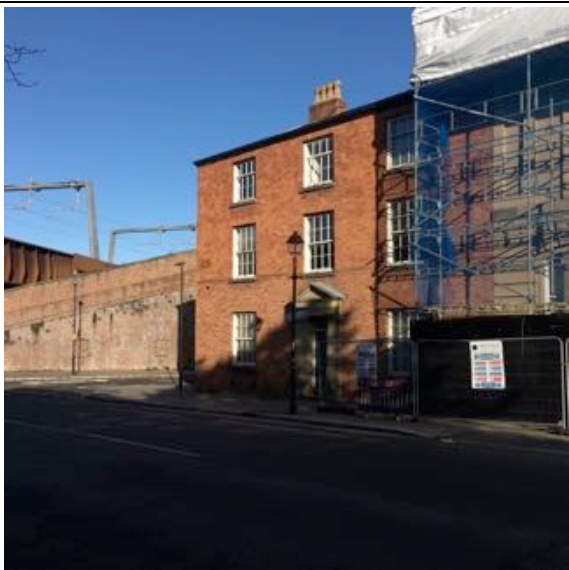
There is a general paint loss to all. From internal view the upper windows all seem to be capable of refurbishment with only the odd parting bead needing replacement. The ground floor window on the west has some more significant rot damage to the lower sash box but this could easily be repaired.

The timber front door is sound but the finishes are rather weather beaten. It is a substantial item capable of refurbishment. It currently does not have a door handle just a keypad and turn lock.

The stone door case is a heavyweight item using such large pieces we wonder if it could actually be cast concrete (art stone)? It is picking up a surprising amount of surface erosion for something that is not particularly old, nothing particularly needing attention. Some mortar joints in the pediment to point.

The front steps create a rise of about 300 mm up from the pavement. The top step has crack damage to the western edge. It looks like it has been possibly re-glued.

Photos:

	
General view of the south elevation from the east. The section of wall below the first floor window cills	Slumping of the panel of brickwork under the two second floor windows at the centre and east/

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

ELEVATIONS & EXTERNAL AREAS

is all a modern rebuild (1980s or 90s.)



Detail of slumping panel of brickwork. This currently looks stable but there is one voussoir that has slipped



Typical condition of the ground floor windows. The rot damage is mainly limited to the softwood fascia board of the sash boxes. The cills are oak.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

ELEVATIONS & EXTERNAL AREAS

The main door is now quite weather beaten and there is no door handle just the key pad. The door is 4-panel whereas all other doors are 6-panel.	Cracked section of the door step may have been re-clued.
The blocks used to make up the door case are very large and we suspect they may be cast stone?. Some localised surface erosion and there are vertical joints to point	

Work items:

Cond'n	Action	Item	Cost
F	3	Refurbish the sash windows replacing damaged components, snapped sash cords and undertake minor areas of rotten architraves. Repaint to complete. General comment all elevations.	(M)
G	3	Refurbish the front door. Add a traditional handle and lock and remove the keypad.	(S)
F	3	Point the open joints to the masonry door surround	(S)
F	7	Reset and pin rubbed bricks to the first floor window lintols which have slipped slightly	(S)
F	8	Monitor the rate of erosion to the masonry door surround.	(Z)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

2.2

West Elevation

General Description

This entry covers the brick walls that wrap around the south-west corner in two facets and lead onto a flat west facing wall. The detailing is generally the same as at the south side but with two of the upper windows on the facet wall bricked in.

Statement of Condition

Main flat of the west elevation facing the side road

No signs of any structural cracking, the rubbed brick voussoirs over the windows are free of settlement issues.

Brickwork and pointing all generally all in good order.

Windows generally in good order but need a clean up and re-paint. It looks like the two bottom windows have new stone windowsills and the top one still has a historic stone windowsill. Xpelair fan in the west window could be removed.

To the north of the elevation are a set of green painted external gates which are in quite good order. The threshold of these gates is unfortunately now set around 50mm lower than the finished level of the external pavement and there is a patch of plants growing at the difference in the floor levels.

It seems bizarre that the council when renewing the pavement in recent years did not match up the levels inside and out even though they put in a dropped kerb to facilitate drive-in access. This needs to be reconciled but we are not sure that the Council will agree to modify the recently finished pavement. It will probably have to be resolved in the yard itself.

There is quite a gap between the wall on which the gates are mounted and the main wall of the building. It does not look as if it was ever intended to be particularly keyed to the main wall.

SW Facet wall areas

No signs of any significant structural cracking or distortion.

Internally there is a movement crack just to the south of the blocked window reveal at mid level. There is some minor surface breakage of the bricks and dislocation but nothing particularly representing a significant external crack. This may just be a not very well bonded piece of structure at this corner.

There is some quite deep erosion of the mortar joints some residual surface salting to the upper wall areas. It looks like the area has been very wet in the past, probably due to the gutter overflowing or leaking past the joints in the custom made connections. While the wall looks fairly dry now the washing out of mortar is extensive and it has strangely not been patched in as part of the more recent repairs to roofs and windows in the 1980s or 90s. It could be that a primitive version of hydraulic lime mortar was used at the time and this broke down and has since washed out. This all needs re-pointing.

There are issues with salt growth and plaster damage internally around this area and it must be the case that water is penetrating where the mortar is missing and staying in the wall.

It may also be the case that the two upper floor windows that are now bricked in were once open and have just had brick inserted and not keyed in or bonded. As well as these being a thin layer of brick that will allow water to pass through more readily there may also be gaps or cracks at the jambs and cill where water can leach in. Water may also be sitting on the top face of the stone cill and tracking back into the wall. These blocked windows need a close look and may need some expansion joint mastic injecting to cracks and maybe a lead cover on the cill tops.

The ground floor window seemed to be all right from the inside, but has suffered quite a bit of damage to the north jamb. The bottom sash for certain will need to be replaced. The sill looks quite good.

Photos:

ELEVATIONS & EXTERNAL AREAS



General view of the west elevation.



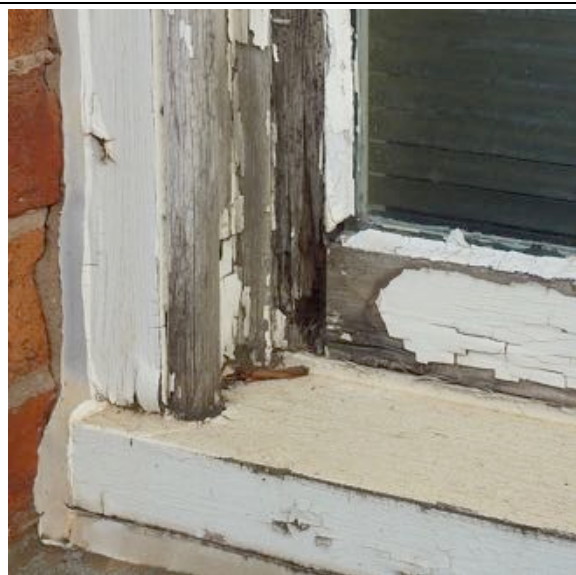
View up the corner of one of the faceted sections. This looks to be quite precise with no distortion.



Detailed view of the brickwork to the facet areas. Widespread washing out of the mortar to the upper areas.

ELEVATIONS & EXTERNAL AREAS

We suspect that water is being trapped on the top of the stone cills and tracking into the wall.



Rot in the frame and sash to the ground floor window in the facet area is more advanced than other areas.



The re-laid street paving is around 50mm up from the level of the historic back yard which is unhelpful especially as the plan was for this to be the way in for wheelchairs. The slot is trapping soil and debris.

Work items:

Cond'n	Action	Item	Cost
P	2	Repoint the upper wall areas of the SW facets with lime mortar. Examine the blocked windows and seal any routs where water may be penetrating. Add lead cover to the stone cills to encourage water to run away	(M)
F	3	Replace the lower sash and parts of sash box to the window in the SW facet Repaint to complete.	(M)
F	7	Re-work the paving levels in the courtyard so that it matches the new level of the external pavement. Modify the gates to suit the new arrangement.	(M)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

2.3

North Elevation incl Courtyard, Railway Arch and Bridge

General Description

The main north gable of the main building is a tall elevation with simpler detailing and brick quality than the South. It does look as if the upper part of the gable may have been rebuilt at some point. Plain sash windows, Four concrete steps up to the back door. Air conditioning control unit in the yard. Air intake, some of the control systems for the boiler set in to the lower wall. Surface water drain gulley running back towards the gates.

The steel access bridge to the railway platform links to a door in the second floor.

The north extension extends out at the first floor and is broadly similar to the main North wall above. This has quite large sash windows at both floors. The North gable to the extension is plain brickwork and may have had the upper part rebuilt in modern times.

The courtyard is basic cast in situ concrete extending into the adjacent brick railway arch. There are at least two manhole covers in the yard.

Statement of Condition

Gable of main building

The brickwork and pointing to the upper gable of the north wall of the main building all seems in good order. The pointing to the slate verge looks in reasonable order and may be relatively new.

Brickwork to the lower walls overall seems in good order. there is definitely a junction line between the west elevation and this return wall. It could be that the whole wall is a later insertion which has been block-bonded into the older west front.

The windows and the door facing this side seem relatively modern. Everything seems in good order. Industrial handrailing up the steep steps is practical but the whole arrangement seems very crude.

At the west edge of this wall is the rainwater downpipe for the gutter serving the main South and West elevations. We have already commented that this is undersized and here is an offset bend connection to the gutter this will contribute to the risk of blockage. The pipe is rusty in places which is further evidence of it backing up, the flanges may also be cracked. This needs replacing.

North Extension

Brickwork to the west face of the extension is all in good order. No signs of any cracking at the joint between the extension and the main building.

We can see that the ogee gutter on the side of the extension has the same fascia and dentil details as other walls. We can also see that there has been a leak in the gutter, causing some rot in the dentils, the need for refurbishment will be picked up in the roof entry.

Brickwork to the North gable of the extension is in fair order. There is some slight erosion to the bricks but that has all been levelled up with mortar.

There is a substantial 6 inch rainwater pipe connected to the west wall which does serve the drainage of the station platform above. We assume there is a shared liability for the management of that pipe and drain if the maintenance liability changes ownership.

On the same subject we note that the yard has to handle the discharge from a large rainwater pipe coming down from the adjacent bridge area. There is drain gulley at the base of it and it is almost as if it is supposed to filter its way into the drain past the lid.

From the size of that pipe and the greening of the concrete we imagine that this could create localised areas of flooding. There is again a shared maintenance problem to resolve drain if the maintenance liability changes ownership.

Access Bridge and platform

This looks to be a relatively modern all steel construction with bolted connection to runners. Handrails simple but strong with a sturdy top rail that is certainly 1,100 mm high at the top landing. Checker plate floor.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

ELEVATIONS & EXTERNAL AREAS

The steelwork gantry is quite heavily corroded but still looks like there is plenty of redundancy in the structure. All capable of refurbishment. No signs of brick cracking at the beam seatings, but this cannot be ruled out in the future

The historic stone flagging to the old railway platform beyond the staircase is a little uneven with some minor trip hazards. Repair will depend on whether this is the liability of the trust, we presume it will stay with the Museum.

Main yard and the Railway Arch

The yard is all a bit of a mess at the moment with quite a lot of plant growth to clear. The drainage gullies across the yard is just open sections of pipe and there is a risk of water filtering down in the gaps between. The whole area needs a good clear out and maintenance.

The brick railway arch seems to be incredibly well built. It has been painted internally in the past and there is general surface scaling of this paintwork and some salt work. Nothing that seems to be particularly damaging the brickwork.

The arch is very heavily occupied by pigeons who have created a real mess. If the space was to be used as car parking or access this may be a significant problem as they will deposit mess all over the cars. There may also be some raptors using the space, because there are bird carcasses too and ripped up feathers.

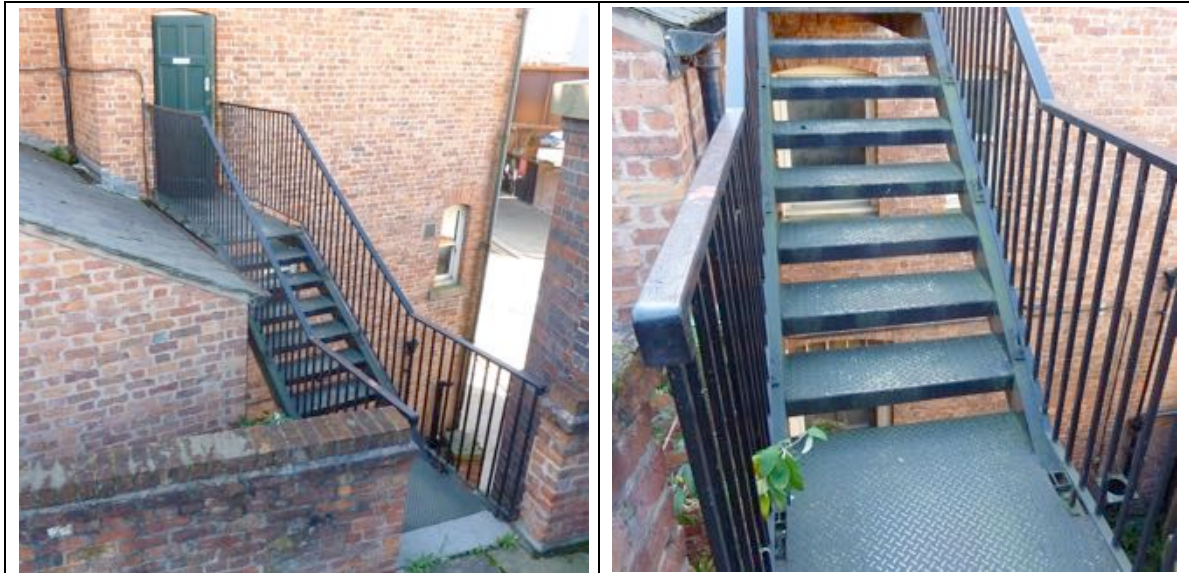
Photos:

	
General view of the upper part of the main building gable . It may be that part of this has been rebuilt	Evidence of the side elevation being built later than the front elevation and 'block bonded'

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

ELEVATIONS & EXTERNAL AREAS



General vies of the steel platform access bridge. This needs a general repaint.



Ferrous fixings for the end of the access bridge to the gable wall. Bolts are into the joint not the brick.

Corroded beams to the underside of the access bridge.



G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

ELEVATIONS & EXTERNAL AREAS

General views of the accessible area of the old train platform. Quite a few potential trip hazards.



View of the slot between the railway arch on the left and the gable of the north extension. A stone string course on the railway arch has extensive shrub growth on the vertical joints.



Window cill at the upper level of the north extension is showing signs of de-lamination

The steps up to the back door are very steep

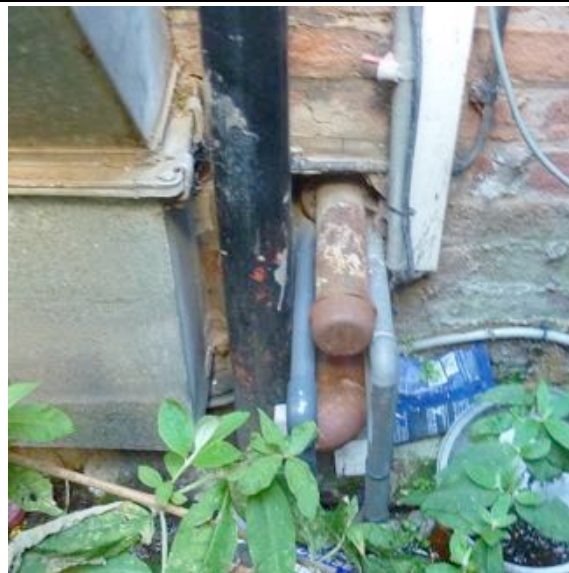
ELEVATIONS & EXTERNAL AREAS



Localised face loss to the brickwork behind the air con unit. Face loss is not really a problem elsewhere so could this be related?



The main WC drain coming out of the wall by the steps.



Jumble of pipework entering the basement boiler room through a broken section of cast iron grille. The gaps are big enough for vermin to enter the building.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

ELEVATIONS & EXTERNAL AREAS



Drain gulley to the rainwater pipe serving the extension roof is blocked with debris and plant growth.



At the NW corner of the yard is a large pipe carrying rainwater from the upper level of the bridge. There is no actual drain gulley at this point and water must flood the yard and seep down past the drain cover.

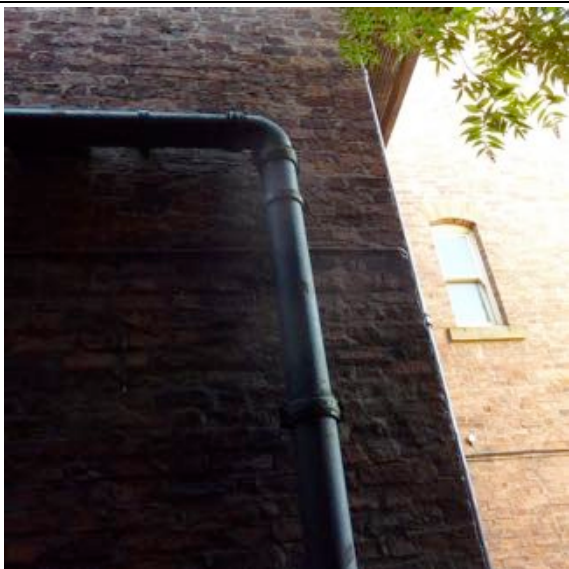


Photos showing the pipe that discharges into the yard.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

ELEVATIONS & EXTERNAL AREAS

	
Large drain pipe that drains the upper platform area attached to the north wall of the extension	High levels of pigeon waste in the railway arch.
	
General views of the railway arch interior.	

Work items:

Cond'n	Action	Item	Cost
M	1	Resolve the responsibilities for maintaining the large rainwater pipes that gather and discharge into the rear yard area. This on-cost may factor in any lease negotiations.	(Z)
M	2	Clear the rear yard of plant growth and check all of the drains. Make sure the open gullies are not leaching water into the ground.	(S)
F	3	Repaint the rusty rainwater pipe on the main north gable of the house.	(S)
G	3	Clean down and repaint the steel access bridge	(M)
M	8	Monitor the wall connection of the steel bridge in case cracking develops in the bricks.	(Z)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

3.1

SW Roof Space (over room SM202)

General Description

The roof space is quite sizeable, and extends back to the east wall of the cross landing lobby where there is a fire break wall built up at this point in concrete blockwork.

There is a king post half-truss towards the west which curiously is installed at an angle, bearing at the south to the east of the window in the room below and at the north end, it is probably only about 2.4 metres from the west wall. Radiating out from the apex of this are some timber hip rafters (3 number).

Many of these timbers at the west end all seem much newer than the majority of the rafters and the truss, there is also a heavy bituminous roofing felt so this will all date from the same refurbishment.

There is a section of older brickwork forming the north wall, which incorporates the chimney fireplace in the room below. It is a offset to the vertical.

There is a very thin layer of insulation, no more than 75 to 100 mm.

Statement of Condition

Overall the roof space seems clean and dry with no smell of damp or significant current water penetration. No signs of any ragging or deterioration to the roofing felt from what we can see too so it can not be that old.

At the apex of the truss some daylight can be seen and this must correspond to where the lead capping is missing. The truss itself does not seem to be damp or excessively stained so it may be that the lap of the felt is sufficient to not let water penetrate.

By contrast, the end of the ridge board adjacent to the stack looks stained as if there is water penetrating at the flashing to the base of the stack. There is a bucket set below it but it currently is dry. Water may penetrate when the wind blows in certain directions. The flashing needs to be checked and repaired if required.

Looking into the rest of the roof space, we note some newer timbers on what would be the roof north pitch, these may extend beyond the wall to where the roof light is? There are also quite a lot of new timbers introduced as structural hangers for the ceiling below. Ceiling joists themselves are just 75x100mm so not particularly strong.

To the west of the access hatch can be seen brickwork support into the rafter ends around the faced wall. This is where there is the damp-damaged wall below.

This all looks relatively modern work, with galvanised strapping on the ends of the rafters. It is a strange-looking arrangement and it almost looks as if the inside face of the wall has been somehow relined, leaving a shallow cavity behind. Beyond this, there is a further 250 mm of brickwork, making the whole set around 450 mm thick.

No signs of any damp in this wall and the felt extends well beyond it to where we can see that there is a tilt fillet. There are no obvious signs of water ponding at the tilt fillet and trickling through. It is more likely that the water in the room below is all penetrating from outside at that level not via a roof leak.

The brickwork on the old north wall has been built up in recent times to offer more support the purlin end, and potentially to offer some fire compartmentalisation. If that latter is the case then the barrier is not consistent, as there are gaps at the edge of the brickwork. These gaps should maybe be sealed up more.

From what we can see there is no access to the roofspace over the adjacent room 203 to the North. This should be added so all areas can be inspected.

There is a very, very thin layer of insulation: only 75 to 100 mm, this would need to be much thicker to reduce heat loss to current best practice.

We note that near the access hatch are several trays of mouse or rat poison. These must have been put there for a reason but we can not think why as this is a domestic environment. It may be that bat droppings have been mistaken for mouse droppings?

Recent Bat survey of the adjacent Station building identified a very low likelihood of there being bats.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

ROOF SPACES

Photos:

	
General view looking east towards the blockwork partition. New timber ceiling hangers on the C/L of the room	View of the apex on the truss and the hip rafters. Some old staining but it does look currently dry. There is daylight seen but the lap of the felt seems to keep water out.
	
Possible occasional leak at the back gutter of the chimney stack.	

ROOF SPACES



Shots into the eaves of the 'faceted roof' area. The brickwork is all a modern rebuild and looks bone dry.



Further shots of the brickwork and plasterboard at the eaves of the faceted roof. This is all bone dry.



ROOF SPACES

The partition wall between this roofspace and the next one to the north has been built up in modern times but it does not go high enough to act as a fire barrier. This may as well be built right up.	Poison bait on top of the insulation but we saw no evidence of mouse or rat droppings. This may be an issue if evidence of bats was mistaken for an unprotected species.
--	--

Work items:

Cond'n	Action	Item	Cost
F	1	Check whether there is a defect in the flashing at the west of the stack and repair if necessary.	(M)
M	3	Create a roof space access hatch over room 203	(S)
G	7	Increase thickness of the thermal insulation. Comment applies to all roof spaces.	(S)
G	7	Build up the top of the north wall to better compartment the roof space against fire penetration	(S)
M	8	Investigate why mouse poison has been deployed in the roof space. Is there an issue?	(Z)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

3.2

SE Roofspace (over room SM201)

General Description

Extension of the main roof space beyond the fire break wall at the lobby. It is decked out for access to water tanks although these are disused and empty. Some pipework still retained so it is probably an expansion collection tank. There is good service lighting.

Detailing and materials are broadly similar to the rest of the roof, with one massive purlin along the south side and a back wall of the staircase on the north side. Facing brickwork at the east end. Small ridge beam, slender rafters and bituminous roofing felt. Additional timber ceiling joist hangers suspended from the purlin.

Statement of Condition

Structurally all sound. There is a pair of steels running diagonally across from the chimney stack to the east wall which will be to support the weight of a full tank.

From what we can see, no evidence of active water penetration. It does look like there have been some problems in the past, primarily with penetration at the back of the north chimney stack as the timbers are stained. They currently feel dry.

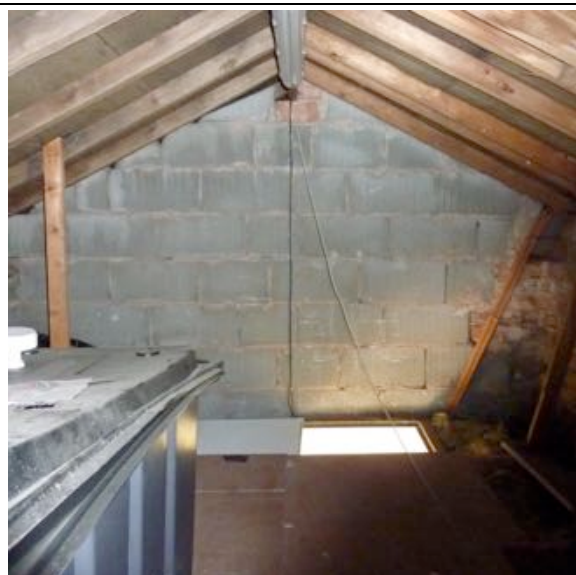
Hidden behind the water tank in the east wall is an opening through into the roof space of the adjacent station building. The hole is about 300 by 500 mm high and this will need to be sealed in to compartment for fire.

No mouse bait in this roof space. No signs of any bat droppings. The insulation needs upgrading.

Photos:

	
General view looking east. The water tank is currently empty. It may be an pressure overflow catcher	Steel beams set into brickwork. All looks relatively recent.

ROOF SPACES



General view looking west to blockwork partitions. South purlins supported by blockwork wall, would this once have been a timber truss?



North wall evidence of past leaks around back gutter of chimney stack. Currently all dry.

Hole in wall behind the water tank links to the adjacent station building

Work items:

Cond'n	Action	Item	Cost
G	2	Seal in the link hole between this roof space and the adjacent station building to maintain fire separation	(S)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

3.3

North Extension Roof Space (over room SM104)

General Description

Roof space under duo-pitched roof finished in heavy grade bituminous roofing felt. Two substantial oak purlins, one each side, approximately 250 or 275 by 100 mm. 100 x 50 mm rafters above. The whole roof structure looks to be built all as one go. Central hangers along the ridge for supporting the ceiling, plus suspended from the purlin. Substantial ridge board too.

North wall of the gable is blockwork, the south gable is historic brickwork, rebuilt at the top in new bricks.

No access possible to the actual space (no crawl boards).

Statement of Condition

The main structure looks to be in excellent condition and must be considered a modern construction.

We can see the timbers of the eastern eaves works around the chimney stack. The back gutter area of the stack has got widespread evidence of past water penetration as does the section beyond the stack. We noted that there are issues with the lead in that area externally with splits in the lead. Currently, timbers look to be dry but this needs monitoring.

Looking to the north east corner we can see that there is a fair amount of ragging to the underslating felt at the north end. Possibly some stolen slates or damaged slates at corners let UV light in which has degraded the felt? No particular signs of any leaks internally.

View of the west eaves is difficult as it dips down below the level of the insulation.

From what we can see of the west eaves, some possible damp penetration at the wall plate where the underfelt tips over the tilting fillet. Hard to see if that is a consistent problem along the whole length of the roof. There is no evidence of this leak on the ceiling below.

Photos:

	
General view looking South. All of the timbers look to be fairly modern	View to the North East corner showing some ragging and breakdown of the roofing felt. This may have been damaged during an attempted theft of the lead to the flat gutter.

ROOF SPACES



Views of the timbers to the east eaves showing evidence of past water penetration under the lead flat valley,. Currently this looks dry.



General views of the North wall. This all looks to be a fully new construction.

Work items:

Cond'n	Action	Item	Cost
M	8	Monitor the eastern and western eaves in case of new leaks	(Z)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

4.1

Room SM201 and Lobby (SE corner)

General Description

Fitted out as a tidy office. Plaster wall and ceiling finishes. Carpet tiles over chipboard. Six-panelled, good-quality fire door with closer into the central lobby. Vertical sliding sash window in the south wall. There is a heating riser in the north-east corner.

Lobby has the same detailing as the office. There is a window in the south wall and to the north a small partition to the staircase, which has a fire door and Georgian wired glass. Door into room SM202.

Statement of Condition

Room SM201

The internal walls are all free of structural movement cracking.

The north wall to the stair and the west one to the Lobby are both of masonry construction. Finishes are all in fair order. Reasonable quality 6 inch skirting, not a historical profile.

The ceiling looks to be of plasterboard and there are fine cracks showing at the joints in each panel. This would suggest they are a cheap retro fit butted sheets and not tapered edge boards with a scrim bridge.

All of the floor creaks quite badly. It is probably due to the boards not being fixed down very well. It looks like the boards are nailed down rather than screwed. They may be jagged shank screws which would mean the chipboard is more likely to break than come up easily.

Ideally these would all be changed for traditional T and G floor boards but this is desirable rather than essential.

The sliding sash window opens easily and is well balanced. There is degradation to the paintwork on the outside face, but there still seems to be plenty of life left in it. The sill externally has lost its paint, but it is still quite firm. Possibly hardwood. There is a drip groove in the underside of the bottom rail, which shows that it is good quality. All of the joints seem good. The sash has locking bolts.

It was noted that one of the parting beads have come out of their grooves and will need to be re-set. A general refurbishment of the windows has been raised as an issue in the external entry.

There is a decent cast iron rainwater pipe at the window. It is belting out quite a lot of heat. It was noted that there is a rusty joint on one of the connections. Timber panel behind the radiator is cracked due to the heat, but does not seem to be otherwise damaged.

There are the remnants of a fine fire surround in the north wall and this has an open grate. It was noted that there is quite a lot of dust in the grate, which must be caught falling from within the stack. It is only small fragments though so no evidence of mid feather failure.

Strip light fittings and plenty of fire and smoke detectors. All of the rooms have a relatively generous provision of sockets, most of which are mounted at high level in the plaster.

Lobby area

There is localised settlement of the centre of this small floor of 25 mm, measured by laying a straight edge across from doorway to doorway. The floor creaks and is a little springy but there is no significant distortion or cracking in the ceiling below. It may be that the short joists in the lobby are way undersize or damaged. The floor needs to be opened up to investigate.

The walls have the same detailing as the adjacent office, the west wall is a lightweight stud wall rather than masonry. Hairline cracking in the thin stud partition, which corresponds to one across the ceiling – just very lightweight construction. It is probably not helped by the heat being pumped into the building by the radiators.

Finishes otherwise all tidy with a nice brass coat hooks in the west wall.

There is a small partition to the staircase, which has a fire door and Georgian wired glass; however, it does not seem like the rest of the partition is fire-proof (unless it has intumescent paint) It may probably just a smoke seal.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

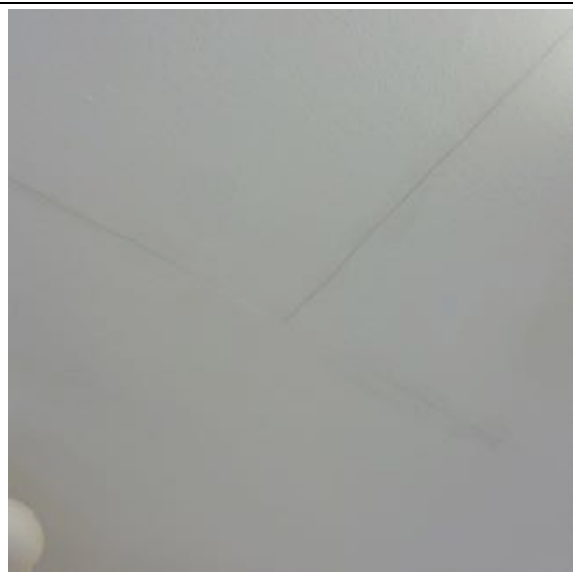
SECOND FLOOR

The window is secured shut with security bolts. It still has its sash cords, so it probably would open. The condition is generally similar to previous windows. Loss of paint to the outside surface, but the timbers look to be firm. One cracked pane of glass.

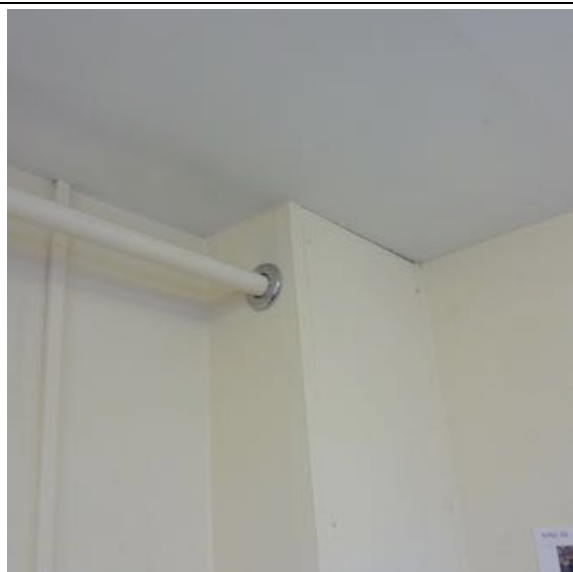
Photos:



General views of the interior finishes. Generally the whole building is finished in this way (with a few exceptions)



Cracks between individual sheets of plasterboard on the ceiling. They were probably butted rather than taper edge and scrimed and as this is a very hot room we are not surprised there are cracks. This is common in all rooms.



Pipe boxing in the room corner runs the height of the building from the basement. This will feed the tank in the room above.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

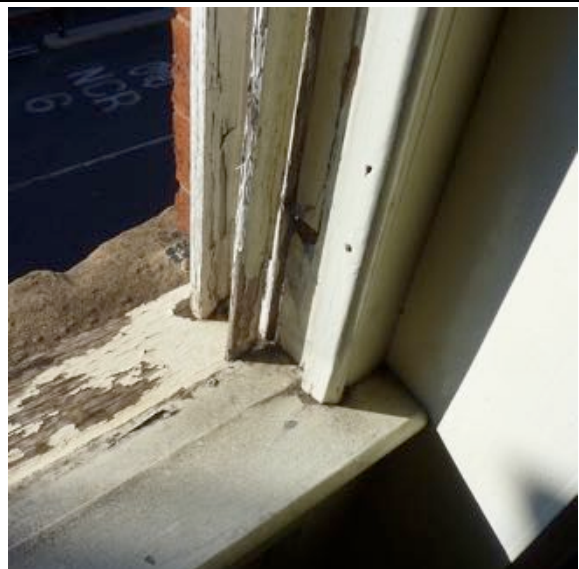
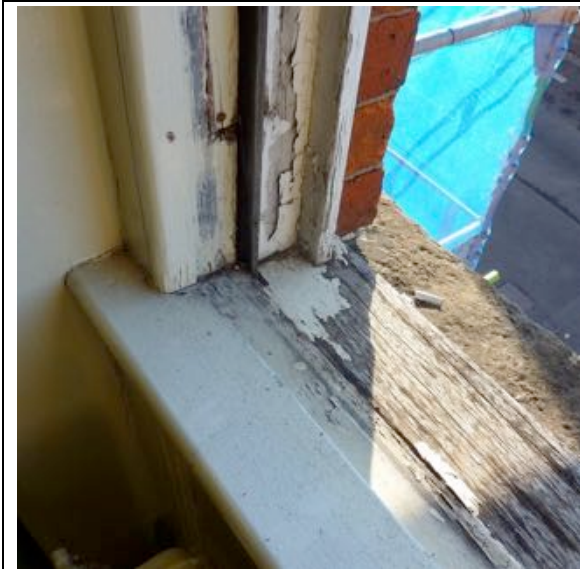
SECOND FLOOR



Dust in the fireplace shows this is an open flue.



Rusting pipe connection to radiator. Very 'ordinary,' skirtings.



Condition of the window. The cill is oak and quite firm despite losing the paint. The parting bead is loose and needs replacement.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

SECOND FLOOR

	
Chipboard flooring common to all areas.	In the lobby, crack to the lightweight partition wall and running over the ceiling.
	
The partition to the staircase has a fire door and georgian wired glass but is the flat painted panel fire rated?	Cracked pane of glass to the lobby window.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

SECOND FLOOR



The floor of the lobby is distorted by 25mm over a short distance.

Work items:

Cond'n	Action	Item	Cost
F	2	Investigate the cause of distortion in the lobby floor and devise a method of strengthening and correct the slump.	(M)
F	3	Replace cracked pane of glass in the lobby window	(S)
G	7	Take up and replace all of the chipboard flooring to T+G softwood	(L)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

4.2

Room SM202 (SW corner)

General Description

Office incorporating the faceted outer wall at the west. Detailing is all generally similar to previous rooms.

There is an historic fire surround and open grate in the north wall with a shaped chimney stack.

Doorway through into an adjacent office to the north. Roof access hatch. Single window in the south wall.

Statement of Condition

Most areas free of any cracking in the walls. Some very fine cracking noted in the north wall heading to the west wall on the centre line, nothing too significant. The diagonal truss in the roof space above bears in this area so there may be some thrust imposed.

Some small amount of fine cracking over the window head in the south wall which may again be from the truss.

No particular evidence of the floor sloping.

The west wall plasterwork has suffered long-term from salt damage due to water penetration from above. Currently the wall feels dry and it was noted that there had been some significant rain on the previous day.

The wall at the ceiling level also looks currently dry which correlates with a view already expressed that the water be penetrating externally from an overflowing gutter through open mortar joints.

The problem may be worse due to the gypsum plaster and the heavy salting might not have been worse if it were lime work? The presence of the hot radiator in this area probably does not help as it will encourage a damp wall to grow salt. The wall plaster all needs to be stripped back and renewed (once the external issues are resolved)

Creaky floorboards as previous.

There is the same opening of the joints in the plasterboard ceiling, again it is probably just not carried out very well and the joints are not taped.

There is no damp in the ceiling at the west edge but there is a patch of damp damaged ceiling plaster alongside the chimney breast on the west side. As discussed in the roofspace entry this must be down to an issue with the chimney flashing. Currently it seems dry.

Staining on the boards under the carpet in this area. Again, dry at the moment.

The chimney piece is in good order. Some fine dust down in the chimney grate. No significant fragments, though.

Window in opens quite easily and we can see some parting bead damage. Sash cord on the west side is not original. It is easily capable of refurbishment and it has still got plenty of paint on the outer sill.

Photos:

SECOND FLOOR



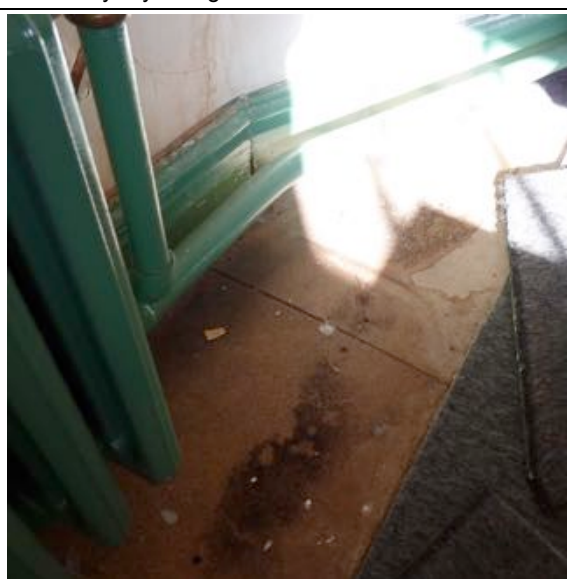
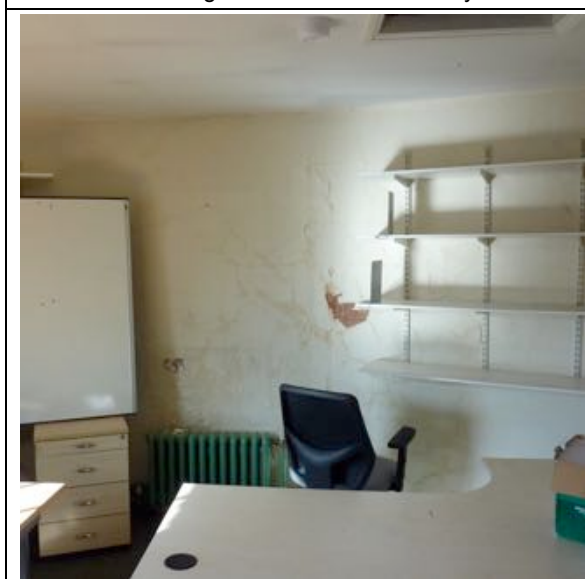
General view showing link door to room adjacent



Fireplace has dust in the grate so must still be an open flue.



Stain to the ceiling the west of the chimney stack. This is currently dry though



G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

SECOND FLOOR

General view of the west wall showing widespread plaster damage. There is no damage to the upper 500mm or to the ceiling so the damp must be coming in at mid level.

The floor at the west end must have been damp in the past but is now dry.



Salting particularly bad above the radiator as this will be force dried. This will also coincide with the height of the window cill to the blanked window on the outside.



Cracking across the ceiling as is common in all of the rooms.

Both upper and lower sashes work well. Both are balanced on traditional cords and weights.

Work items:

Cond'n	Action	Item	Cost
P	4	Cut back the salt damaged plaster to the west wall of SM202 and SM101 and renew in lime plaster. This to be done after the external issues are dealt with.	(M)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

4.3

Room SM203 (NW corner)

General Description

Smaller room adjacent to the large west room with the faceted wall. This room is broadly finished as the others and has a generous window, looking westward over the railways. One of the best views in the building.

Fireplace in the north wall looks to be a replica in an Art Deco-style and there does not seem to be a fireplace opening behind it.

Fire door out into the lobby leading to the platform staircase. The intervening office door looks to have a heavy grade fire door, too.

No roof access in this office.

Statement of Condition

Overall, the condition is good. No damp damage to the ceiling.

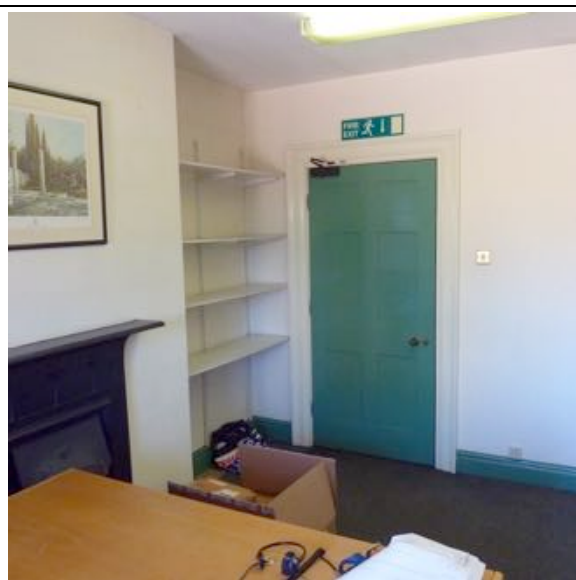
Diagonal cracking in the south wall at the west edge would be continuous from what is recorded in the room behind. Some cracking in the ceiling. It is all very fine. Minor cracking in the top of the chimney stack. It does not look to be anything significant.

The window can be opened easily, the upper sash panel is not completely housed into its seat but it can be pushed up. Probably needs the balance adjusting. The sill externally is in good condition despite having lost its paint. Staff parting beads all in place.

Chipboard floor is creaking quite badly. There are a large set of filing cabinets on the north wall which would have imposed quite a bit of weight when full. No permanent deflection noted on the floor.

There is a dehumidifier or a possible self contained AC cooling unit in this room. Whether this was for the comfort of the individual or a response to an underlying damp problem is hard to say.

Photos:

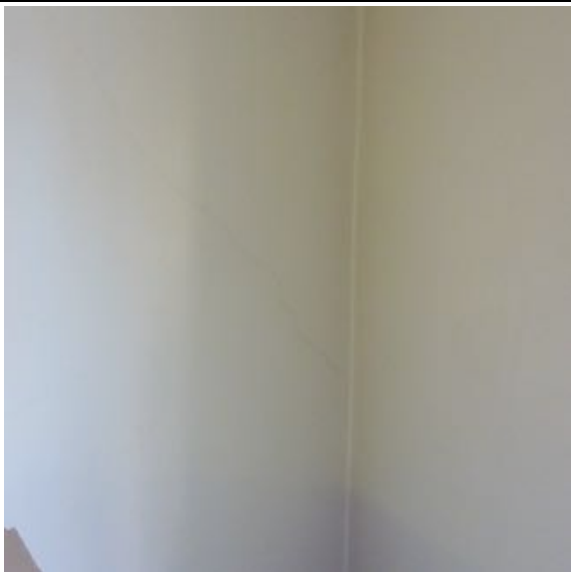


General view of the interior



These cabinets would have imposed quite a load on the floor when full. No signs of any issues though.

SECOND FLOOR

	
Room has one of the best views in the building.	Fake fireplace
	
Weather beaten but sound window cill	Replacement sash cord in purple will be hard to paint out.
	

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

SECOND FLOOR

The south wall has a diagonal crack to the western part which is visible in the adjacent room too. It is quite fine.	Possible past leak from the radiator valve?
--	---

Work items:

Cond'n	Action	Item	Cost

4.4

Upper Staircase Landing, platform lobby and Small WC

General Description

The staircase hall has simple painted plaster finishes, sloping plasterboard ceiling (falling to the north) with timber roof light and Georgian wired glass.

Simple timber staircase with square balusters and a mahogany handrail, well bleached by light. Skirting looks to be contemporary with the staircase.

Radiator at the top of the landing. Part glazed screens going left and right at the top with Fire doors into the lobbies. The doorway out to the railway track bridge seems very narrow.

On the mid landing of the stair is a door into the gents WC. This is a relatively compact space, fully lined out with ceramic wall tiles under a separate sloping ceiling falling to the east.

Statement of Condition

On the staircase landing there is no significant cracking noted in the south wall but on the north, there is some noticeable cracking just adjacent to the door link out to the station. Going through into the lobby beyond, there is quite a substantial crack over the outer door, which would be continuous with the same zone. There is no cracking in the ceiling to join those two lines up.

There is a change in roof structure form at that point from the pitched ceiling to flat. There is also the imposed load of the valley rafter above so this might be a case of uneven loading. Some further investigation and tying in may be required.

The finish on the plaster walls is otherwise fair.

Plenty of opening up on the joints in the plasterboard soffit around the roof light. No water damage staining though.

The timber roof light seems in quite good order on the inside and does not look to be particularly old. There looks to be some form of gasketing to the glass. We note externally that the timber cover strips have perished so leaks may develop more in the future. It was noted that one of the panes of Georgian wired glass is cracked but it doesn't seem to be leaking. We have already recommended that this rooflight be replaced.

Floor surfacing on the top landing is again chipboard, it is is generally stable with no spring. There is a possible slope across the staircase landing, settling down towards the north-east, hard to say for certain.

Lobby to the External Door

The floor is chipboard, but has a dropped section for a mat. The mat has slumped, creating a trip hazard. Under the mat is chipboard again, so it does not look like they have over-boarded on original planking.

Fire escape lighting to the staircase door.

Externally, it looks like the door has had some attempted break-ins, or has just been damaged due to rough handling, this will need repair.

The Staircase

The staircase upper landing handrail guarding the landing is only just over 950 mm, so it does not meet

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

SECOND FLOOR

current standards that say it should be 1100mm. This might not need correction as this is a listed structure but it may be worth raising on safety grounds. The gap between the verticals is less than 100 mm.

There is a certain degree of wobble on the handrail and this may be something that might have to be augmented to withstand drunken bodies leaning against it? If a metal sub frame was added this could be detailed to raise the height slightly to 1100mm?

The handrail above the nosing of the treads is 900 mm which complies with current standards. At the landing, adjacent to the toilet, the timber handrail is again a little wobbly but serviceable.

The toilet partition wall, which is masonry, is surprisingly close to the handrail at the turn leaving only a 500 mm gap to get past. This seems surprisingly tight. As there is an escape option out to the train platform we assume this pinch point would we presume not affect fire escape?

It would be feasible to take part of the toilet wall away to increase width but this would be difficult as this is quite a substantial masonry wall at least 225 mm thick.

It is noted when viewed from the floor below that the plaster soffit under the north end of the mid landing is cracked although there was no spring in the structure at that point.

Continuing down the staircase, the stairs seem quite solid and free of spring. The handrails continue to still feel a little wobbly. Down at first floor landing level, the curve of the balusters does mean that there are some gaps that are wider than 100 mm. This may need the gaps to be reduced with a secondary rod.

Landing WC

This is a relatively compact space, fully lined out with ceramic wall tiles under a sloping roof, designated a gents toilet. The door is a fire door.

This is all very tatty inside with dated finishes, particularly the floor, which is very grubby. The ceiling is quite rough, but there are no signs of any active water leaks. The whole space needs a full refurbishment really.

No spring in the floor. Plywood lining on the floor under the grubby lino, which probably accounts for the fact that it feels quite solid. We cannot tell what the underlying boards are.

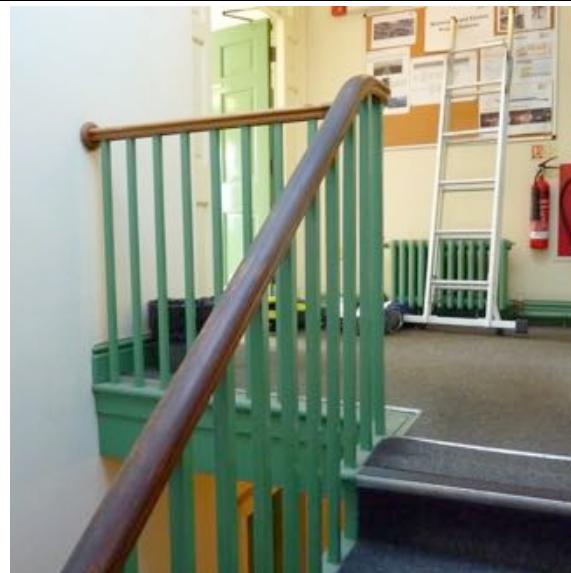
Internal dimension, front to back, measures 1,800 mm, so it is around 250 mm less than the dimension measured outside the roof above. It may be that the east wall is an old external wall truncated at the ceiling level to take the roof structure rather than the rafter ends built into the station building.

There is a large vent boxing introduced against the north wall which is currently preventing the door from opening to its full extent.

This is an active working toilet and drain, there is a random collection of surface-mounted equipment. At one corner, there is an old shower unit but one would have to be very short in order to use it, though.

Photos:

SECOND FLOOR

	
General view of the upper landing and rooflight.	The handrail at the top landing is less than 1100mm so it does not meet current regulations. It is also a little wobbly so might not withstand a drunken person grabbing for it.
	
Fine cracking where the flat ceiling of the landing meets the north wall.	This cracking adjacent extends into the outer lobby area to the north where it is more prominent.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

SECOND FLOOR

	
Damage to the door frame to the door out to the platform bridge might indicate a past break in?	Door mat to the door to the bridge slumped creating a trip hazard
	
General view of the interior of the landing toilet.	Door swing massively constricted by the boxing out of the extract fan.

SECOND FLOOR

	
Boxing out of the ceiling for the soil vent pipe. No signs of any leaks around this.	The old shower head. You would have had to be very short to use this.
	
Cracked pane of georgian wired glass to the roof light. No actual signs of any leaks, we presume there is a mastic tape under the glass	General view of the staircase treads and ballusters.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

SECOND FLOOR

	
The landing wall by the WC only has a small clearance to the handrail. The balusters are greater than 100mm apart at the landings.	Cracking to the soffit of the stair plasterwork under the landing shown in the photo adjacent.

Work items:

Cond'n	Action	Item	Cost
G	1	Level up the entrance mat to the back door to take out the potential trip hazard.	(S)
F	2	Investigate the cause of cracking to the wall around the platform access door and devise a method of tying in. There is also cracking in the landing below this which should be looked at too.	(S)
G	7	Increase the height of the landing handrail to 1100mm to improve fall protection. Use a metal sub frame that stiffens up the balusters too. Introduce rods to the lower landings where the gaps between the balusters are greater than 100mm	(S)
G	7	Completely strip out the tired old fixtures and fittings to the landing WC and renew. Re work the extract from the room below so that the boxing does not stop the door from opening.	(M)
F	5	Repair the door and frame out to the railway platform where it has been damaged by intruders.	(S)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

5.1

Room SM101 (South Front)

General Description

A single large room running from the east to the west wall. Plastered wall finishes. A single doorway in from the stair landing, which is a fire door. Three windows in the south wall, with generous tall sashes. Semi-octagonal, bay-fronted wall at the west end. Flat plaster ceiling, finished in plaster board by the look of it.

Two fireplace chimney breasts remain on the north wall. These both have fake fire pieces. The skirting is generally similar to the floor above. Cast iron radiators. Carpet tile floor over chipboard.

Statement of Condition

The eastern half of the room is free of any structural movement cracking.

The centre of the north and south wall has some fine cracking running up from the east side of the door case towards a shallow boxing and ceiling, which we presume is a steel beam supporting the masonry wall above. Quite minor really.

There is a small fine crack running up from near the top of the western window in the south wall, west jamb. This would correspond to light cracking in the room above which we thought was associated with the truss load point. It is all very minor.

The west wall like in the room above, has been affected by water penetration, causing blowing of the plaster. There is also a fairly substantial crack in the plaster at what would be the outside corner between the central flat facet and the south angle section. There is a horizontal line extending out from the bottom of the crack across the wall, which roughly corresponds to the height of the other windows on the south wall, so both these cracks may be a dislocation of a section of masonry infill to an old window?

It may be that the infill is tied with iron cramps and water penetration at the joints has led to corrosion and splitting apart of the wall.

Unlike the damaged wall in the room above the plaster in this area does seem to have some residual surface damp, although most of it seems dry. It could be that there is water sitting on a windowsill externally and tracking its way in. we have already recommended external investigation to damp ingress routes and to this should be added a survey for embedded iron.

It all looks quite horrible and like the room above it all needs cutting back and re-plastering. The radiators are probably not helping, pumping out heat and blooming the salt.

Thankfully the heat and the damp does not seem to be badly affecting the skirting, which is nicely made to follow the shape.

There is a general squeaking of the floorboards as you walk around the room, but there does not seem to be the same extent of creaking that you get on the floor above. There is also no particular spring.

The difference between floors is 3030 mm and the distance from floor to the underside of the beam is 2750 mm, so the thickness of the floor including the beam is only 250 mm. The beam itself downstands from the ceiling by no more than 50 mm. This seems to be quite a minimal structure to support the masonry wall above but it all seems sound.

There is fine cracking in the plasterboard ceiling generally, nothing that would correspond to the slumping of the floor to the lobby above.

The east window can be opened, but the sash cords have snapped. External sill seems in reasonable order.

Central window has some paint loss to the sill, but it still looks to be quite resilient. The window operates fine.

All of the radiators and pipework seem good. No particular signs of any leaks.

The west chimney breast has a vent into the stack, which is quite a nice detail. The two fireplaces are fake.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

Photos:



G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5:In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

FIRST FLOOR

	
Old damp staining to the top of the wall and the edge of the ceiling on the West wall.	The wall did feel slightly damp behind the radiator. Is water sitting on the cill externally and tracking in?
	
Snapped sash cord	The fireplaces to this room are fake and the hearth is blocked up. There is a vent to the chimney breast to the west fireplace so the flue may still be open behind?

Work items:

Cond'n	Action	Item	Cost
F	2	Investigate the west wall for evidence of corroding iron cramps used for the window infil. If these are present they may have to be removed by localised opening up.	(M)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

5.2
Rooms SM102 and 103 (NW corner)

General Description

These rooms lie at the west side of the stair landing and are accessed from a fire door off that landing. One of the rooms is fitted out as a kitchen, and the other one is a presumed store. Both of the inner rooms have thin doors which are probably older, not fire doors. Floor is carpet tiles on plywood, so they may be sitting over original boards. The lobby area and the kitchen are finished in vinyl.

Statement of Condition

These are much more knocked about spaces than the rest of the building and probably did not get decorated when other areas did.

No signs of any significant structural movement cracking noted in the kitchen and vestibule. Some fine cracking noted in the outer vestibule in the north wall – very fine and has been filled once.

In the storeroom just to the south of the window, a vertical crack running down from the ceiling, quite fine and looks quite old. Intermediate partition is lightweight. Cracking on the line of the ceiling between the partition and the ceiling.

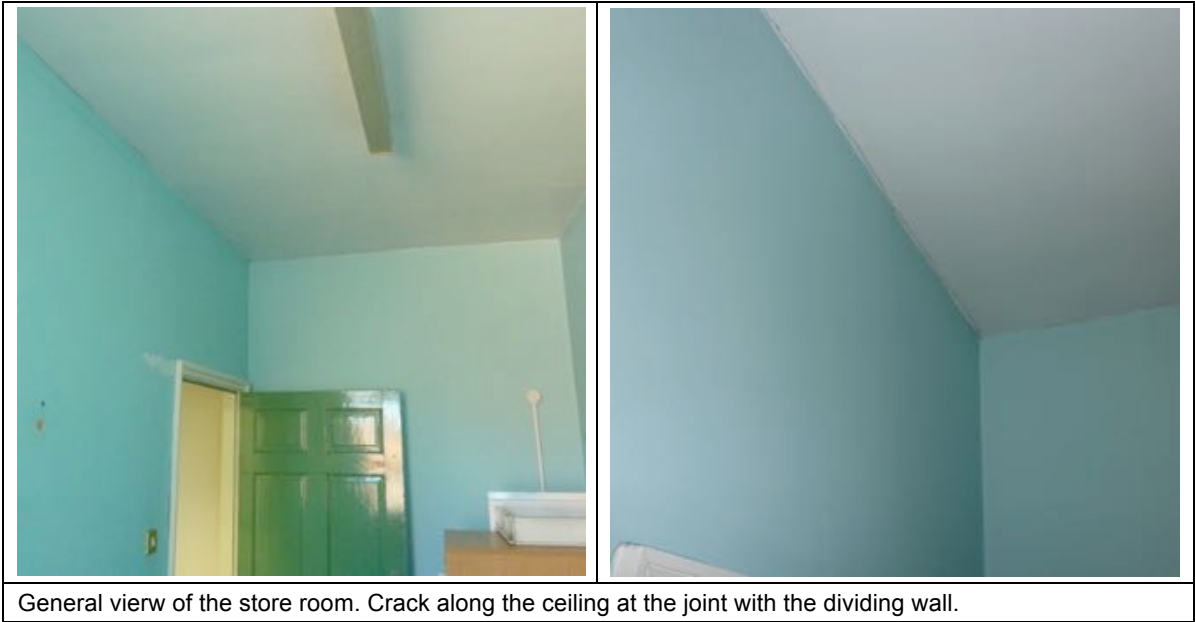
The kitchen window looks in fair order may have been painted shut. The vestibule window opens, this is a relatively modern window with Georgian wired glass.

The west window in the storage room looks relatively modern large sash window which has been painted shut but it looks like it probably would open.

Plywood boxing in the corner of the storeroom has a heating manifold.

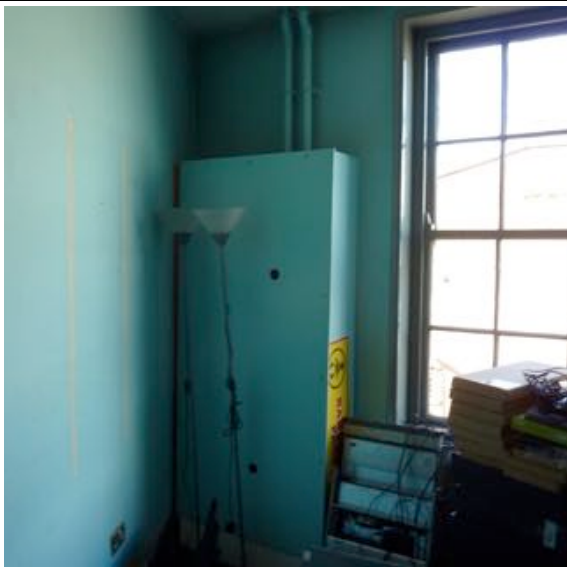
All of the doors have little brass number tags on them, quite a nice feature really and we wonder if they should be retained.

Photos:



General view of the store room. Crack along the ceiling at the joint with the dividing wall.

FIRST FLOOR

	
The large boxing in the corner of the store room covers up a large heating manifold.	General view of the kitchen
	
Grubby lino to the floor of the outer vestibule.	The doors to the inner rooms are thinner and not fire doors. Are these originals? The brass number tags are an interesting 'British Rail' style feature, should they be retained.

Work items:

Cond'n	Action	Item	Cost

5.3

Room SM104 (North Extension)

General Description

First room reported on within the north extension.

Plaster finishes, ceiling as other areas. Large sash window in the west wall over the yard. Quite a cool room whether that is on purpose is not known. Fire door out onto the stair landing.

Statement of Condition

No significant cracking in the external walls. Some diagonal cracking noted into the north wall on the centre line, resolving itself onto some horizontal and vertical lines. This could possibly be an old window opening blocked?

A little bit of spring on the floor, but nothing too significant. Floor is chipboard with carpet tiles.

The west window seems in fair order but the sash cords are broken. No particular reason why it could not be opened by the look of it. External sill looks in fair condition. Some minor delamination of the stone sill externally.

The georgian wired glass of all of these rear windows needs to be replaced.

Chimney breast on the east wall has the remains of a historic hob grate type fireplace but the actual opening is completely sealed up.

There is some damp staining of the ceiling which would be around the stack back gutter above which we have already is not well detailed. This is currently dry.

The door from this room out onto the landing is 850 mm wide, so if this were to become part of a circulation route from a wheelchair lift, that would work quite successfully.

There is a significant amount of active tech attached to the walls in this room that still turned on. This will all need to be decommissioned.

Photos:

	
The external stone cill is quite de-laminated. Note the georgian wider glass to these rear windows.	Good quality 'hob grate' fire place. The flue is walled up though.

Work items:

Cond'n	Action	Item	Cost
G	7	Replace the Georgian wired glass in all of the rear facing windows	(M)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

5.4
Mid Staircase Landing and Small WC

General Description

This entry covers the mid landing of the stair which has already been well described in a previous entry. There is a sash window to the north wall by the entrance in to room SM104.

Statement of Condition

Stair Landing

Some cracking noted at the ceiling level above the window and running up from the head of the door into room 104. This may connect to similar cracking at this point on the landing below.

Otherwise the stair landing structure seems free of cracking.

Good condition window in the north wall opens fine. Georgian wired glass.

Staircase extends down to a further mid landing, this time with the ladies toilet on the landing. Narrowest point on the turn of the landing is 620 mm which is slightly better than the floor above. Still a bit of wobble on the handrail and the gaps between the balusters at the turn are wider than 100 mm.

First floor to ground floor is 3340 mm.

Ladies WC

The ladies toilet on the intermediate landing is very much the arrangements and materials as the gents toilet above. The door is not hampered by the timber boxing like the room above. The the flat ceiling makes it much more airy although front to back it is still only 1800 mm, suggesting that it is butting up against an inner wall, rather than the station itself. Again, it has a shower but it looks as if it has long since ceased to function.

Ceramic wall tiling – no particular cracks. Extract vent added to the ceiling. Boxing in the gents above.

Floor tiles could be Marley tiles with a small asbestos content. Soil vent stack boxing in the south-east corner.

Some damp damage to the ceiling against the east wall could be dating back to when the shower above was being used.

Photos:

	
There is a wider gap between the mid landing handrail and the wall, but not by much.	Possible use of asbestos containing Marley floor tiles.

FIRST FLOOR

	
Staining to the WC ceiling must date from when the shower was in use.	The shower has long since been a functioning facility.

Work items:

Cond'n	Action	Item	Cost
2	8	Investigate whether the floor tiles in the ladies WC have an asbestos content	(S)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

6.1

Room SMG01 (SE corner – including space under landing WC)

General Description

Simple fit out to generally the same spec as other floors. Good quality fire door into the entrance lobby. Large sash window to the south side. Chipboard floor with carpet tiles. Flat ceiling with downlights and a cooling fan. Cast iron radiator in the window. Fake fireplace in the north wall.

There is a door into the station hall in the east wall which looks to be a later introduction, as is the handrail and steps for the change of level.

Under stair cupboard area with an antique telecoms communication unit – uncertain whether it is still an active communication facility. Certainly has signal lights on.

Statement of Condition

Fine movement cracking noted to run up from the north side of the door into the entrance lobby. Some fine cracking running diagonally up from the west jamb of the window as well.

Walls and ceiling otherwise all in a tidy condition. The steps up to the east door are in good order, they do take up quite a bit of the room though.

The external window has an arrangement of security bars lined up with the glazing bars, which is quite nicely done. We would expect that the window could probably open but is locked.

In the north-east corner of the main room is a boxing, quite sizeable. Cannot tell what it contains but we presume that it is probably heating pipes.

Under landing WC

In the cupboard under the landing there is a crack in the west wall and this runs across the ceiling. Not sure what the ceiling is made of, it could potentially be made out of asbestos.

It is generally dry but in a knocked about condition. there is a boxing around the soil vent pipe which drops to the basement and has also been co-opted for use as the main wiring riser. Not a lot of space in there.

Floor in the under stair area is chipboard

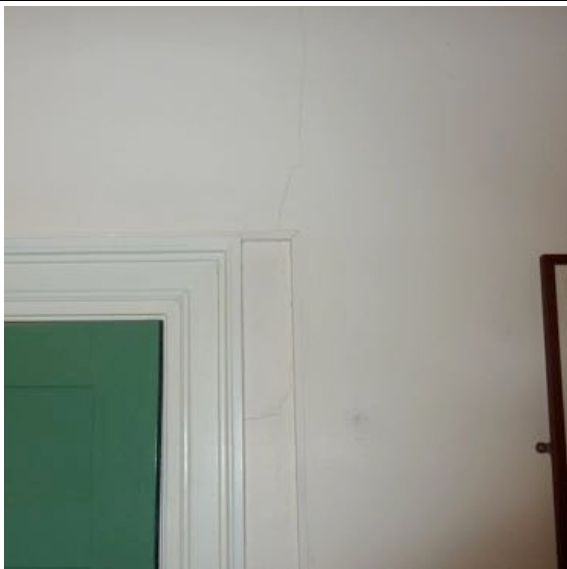
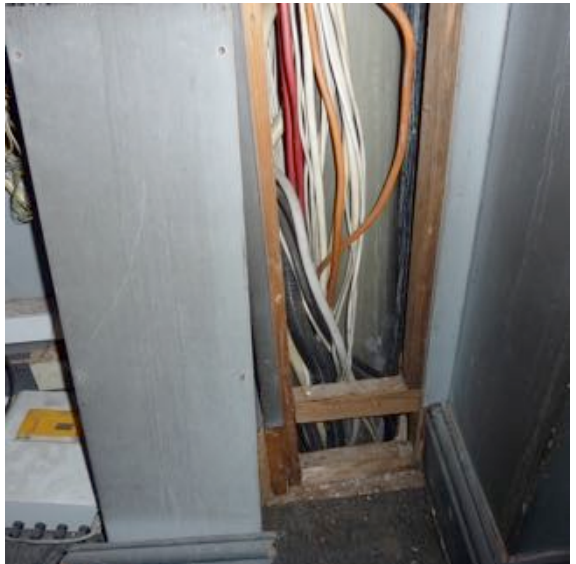
Photos:

	
General view looking to the West	Access door and flight of steps up to the station hall in the SE corner

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

GROUND FLOOR

	
Fine cracking running up from the door to the lobby	Metal grilles to the windows are quite tasteful.
	
Crack in the ceiling of the room under the landing WC. Ceiling material feels quite hard, could it be asbestos?	The boxing out for the soil vent riser also carries a lot of cables.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation



Quite a lot of telecom equipment in the room under the stair WC. Is this still live?

Work items:

Cond'n	Action	Item	Cost
M	2	Check that the ceiling in the under landing cupboard is not finished in asbestos.	(S)

6.2

Room SMG02 (SW corner)

General Description

Room extending into the faceted bay at the west end. There is a window in both the south and west walls. Fake fireplace in the north wall. Cooling fan in the ceiling and good quality fire door into the lobby. Carpet tiles over chipboard.

This could be quite a nice room, but is a bit public.

Statement of Condition

Cracking running down to the south of the west window jamb and this may be continuous with what is happening in the room above. We suspect that this may be down to corroding iron cramps around a masonry infil panel.

Some old cracking either side of the top of the window in the south wall. Also some vertical cracking in the east wall either side of the door case, all quite fine cracking.

There is a nib in the north-east corner, with a rib running along the ceiling to either side of the fireplace. We wonder if this is some kind of structural beam helping to support the party wall above?

Wall and ceiling finishes are generally good. Some residual staining to the ceiling at the west end will be the result of issues on the floors above.

Both of the windows seem in fair condition. The south window has lost its sash cord on one side so probably does not open. The window on the west probably does. They have metal security guards on the inside finished to a good standard.

Generous provision of radiators in this room and it is quite hot. A lot of surface-fixed wiring which would be quite labour intensive to remove.

Photos:

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

GROUND FLOOR



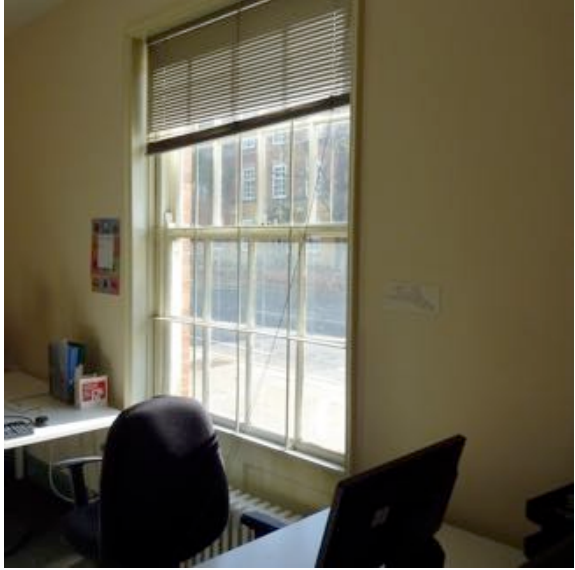
General view looking East. In the left corner is a nib and a beam along the ceiling. This may date from when this was open plan and used as a shop?



Damp staining to the edge of the ceiling at the west end but the wall otherwise free of the damp and salting on the floors above.

Fake fireplace.

GROUND FLOOR

	
South window has a good quality security grille.	The west window frame is quite dirty. We know from the external survey that this sash is rotten at the corner.

Work items:

Cond'n	Action	Item	Cost

6.3

Room SMG03 (NW corner)

General Description

A much more knocked ab out back room probably used as a store. Large window in the west wall. Fire door to lobby. Plywood floor in one section, the rest looks like chipboard.

Room contains an air conditioning unit. This must have been to cool the large cluster of data network which is still in the room.

Statement of Condition

Quite a lot of stored material in the space so not easy to inspect. From what we can see all seems in fair order.

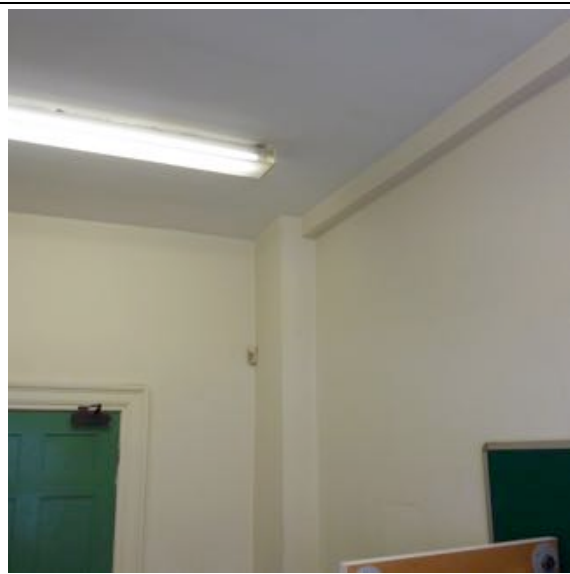
As with the previous room there is a nib in the south-east corner with a beam connecting across at the ceiling. This would suggesting that the infill wall below is relatively thin? Some fine cracking in the centre line of the south wall.

We suspect that the beam across the ceiling supports the chimney breast above and historically the two rooms were knocked into one when this was a shop?

West window has been screwed shut. It looks as if it would open though. Paintwork externally looks not bad, internally it is quite tatty.

Shallow projecting nib in the north wall with a fake fire surround.

Photos:



The same nib and beam noted to the room previous is in this space too



The room still has a large cabinet of data communications that is kept cool by the air-con unit.

Work items:

Cond'n	Action	Item	Cost

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

6.4

Room SMG04 (North Extension)

General Description

Large room fitted out much the same as the floor above. Large window in the west wall. Fire door to lobby.

Statement of Condition

Two areas of fine vertical crack running down the north wall, possibly the line of where some old windows were blocked.

Finishes all in fair order. Against the east wall at ceiling level there is trunking, possibly carrying some communication cables. This appears to exit the north wall and it looks like there has been some water penetration back through that connection. Looking outside the building there is nothing coming in to that location though.

Window looks in good condition and has Georgian wired glass. Generally all tidy.

Photos:

	
General view	Data trunking against the ceiling at the NE corner looks like water has been getting through.

Work items:

Cond'n	Action	Item	Cost

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

6.5

Central Entrance Hall

General Description

A T shaped space linking up the front and rear doors and the staircase. Fitted out much as other rooms with plastered walls and a carpet tile over chipboard floor.

There is a fire control panel near the door into SMG02

Statement of Condition

Various lines of fine vertical cracking noted on the east and west doors into the side rooms. These have been filled and have reopened but they do not seem to be particularly significant

There is cracking noted to be running down the west corner of the front wall alongside the main door. In the case of the crack by the front wall this must be in the joint between the rebuilt facing wall and the original. Could there be a lack of tying in?

The masonry arch moving through to the back door has small diagonal cracking running out from one 45° on the east side.

A lot more scuffing of the paint finishes to the walls on these spaces but they remain all generally quite tidy.

Creaky chipboard flooring as other areas. We are surprised that this does not have tiling or something a bit more refined.

The front door has a nice Georgian styled glazed over door panel. This is a later addition though. The door is again not particularly old it is surprisingly a four panel door when everything else is six panel, maybe it has been renewed with something off the shelf.

The back door is crude but serviceable. It has Georgian wired glass.

There had been a discussion earlier about whether an access from the yard could be created by coming into the north extension. The distance between the yard and the ground floor inside is 700 mm. The distance between the ground floor and the cellar floor is 2100 mm. The apex of the vault under the north extension is 1750 mm up from the floor. The external ground level is therefore round about 400 mm below the level of the top of the masonry vault so there would have to be some substantial cutting away of that historic structure.

This would suggest an access from the yard via the extension is not feasible.

One could come in from the yard into room SMG03 but the ceiling of the room below would need to be removed as well as quite a lot of pipework and fixtures. At least it is not cutting away a historic vault.

Staircase

Base of the handrail for the staircase is, like the floors above, a little wobbly. It is though stiffer maybe than some of the areas higher up and this may be because it is quite a tight curve.

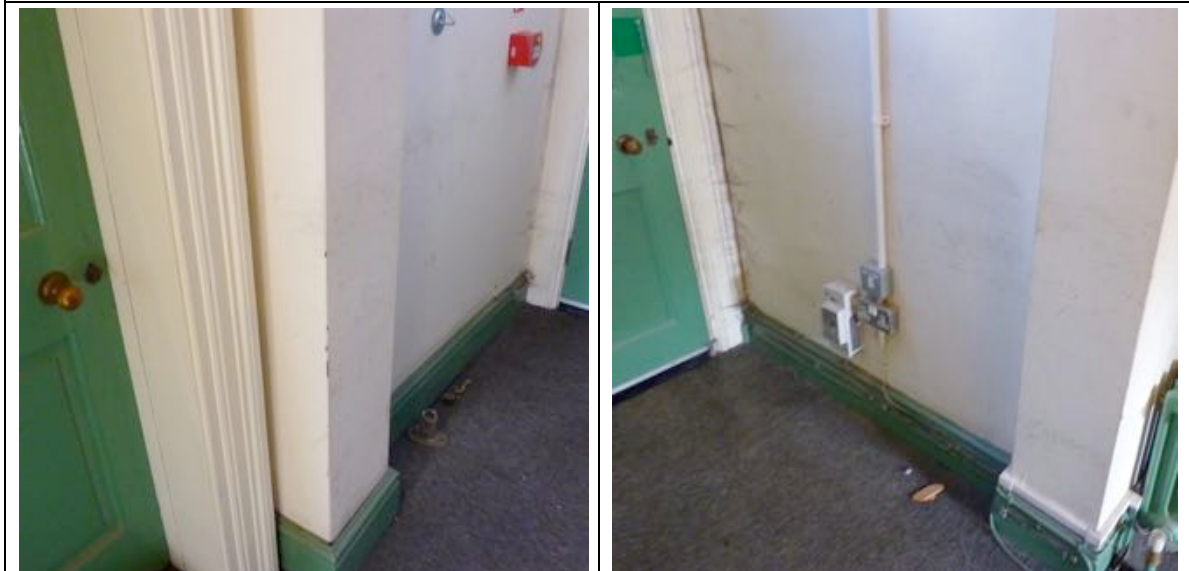
The timber panelling under the staircase encloses the access to the cellar. It looks like it has been fire-lined from the inside. There is certainly a fire door.

Photos:

GROUND FLOOR



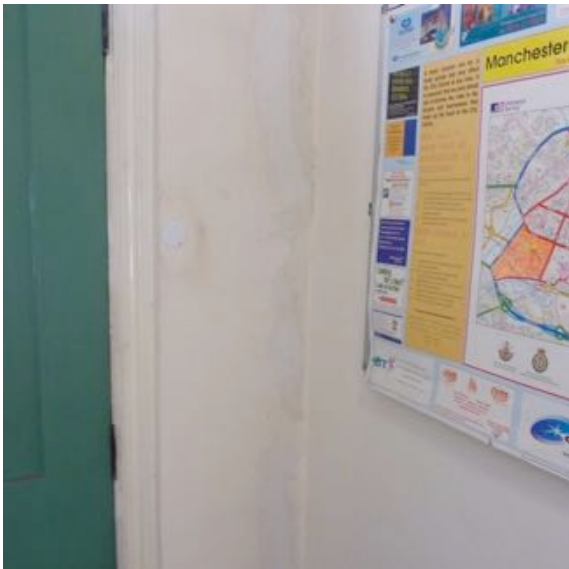
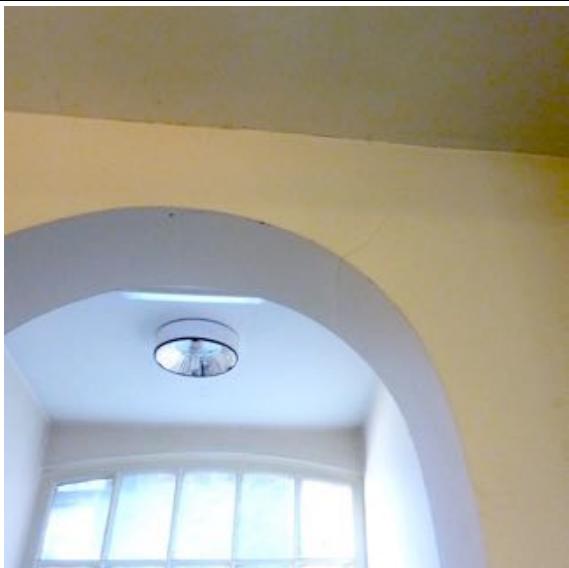
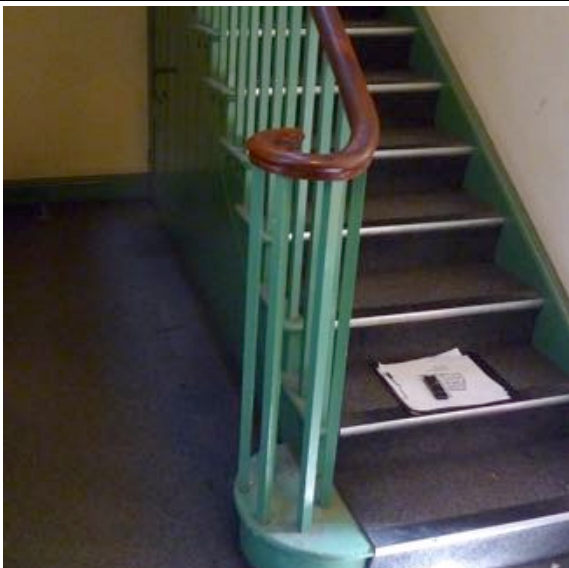
General view looking south to the front door. Main fire panel on the west wall.



Quite a heavily trafficked area so lots of bumps and knocks to the wall plaster and skirtings.



GROUND FLOOR

Cracking to the west wall over the door	Cracking to the east wall over the door
	
Cracking to the west of the front door	
	
Cracking to the arch leading to the back door.	General view of the bottom of the staircase. The handrail is a little wobbly but not excessive.

Work items:

Cond'n	Action	Item	Cost
F	4	Make good to small areas of impact damage to the wall plaster and timber trims.	(M)
F	8	Monitor the crack in the wall by the front door. This may extend into the cellar.	(Z)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

7.1

Room SMLG01 (SE corner)

General Description

Room within the cellar with the south street wall to one side and inner loadbearing party walls to the rest. Majority of the walls are painted brickwork apart from the south wall, which has had a render facing. Painted concrete floor. Ceiling is flat plasterboard painted. Fire door in from a central corridor and a fire door through into the cellar under the station hall beyond.

There is a substantial communications hub located in this room. Fibre optic cables coming in from the street in this location. Quite a lot of flow and return pipes, also a substantial gas main and electric main running through from underneath the station building.

In the conversion this room may have to be retained by the museum as the fibre optic cable inlet point may take a lot to move.

Statement of Condition

From what we can see there are no signs of any structural movement cracking.

There has been substantial damage to the surface of the brickwork of all walls other than the south (which is encased in render). The bricks are heavily salt damaged and the fire skin has ruptured leaving them fractured and pocketed. There is a lot of scale and salt lying on the wall.

We expect that the bricks used in these locations were not fine facing bricks but common building bricks that may have had a high salt content and been soft burnt. They may have performed reasonably well when damp could dissipate from them but refurbishment has changed the conditions in which they have to survive. The cast concrete floor is water proof and this has been turned up the face into a deep skirting. This will be driving water up the wall.

This brickwork has also been painted over with what looks to be an acrylic emulsion finish and this has made things worse sealing the water into the bricks.

The salt crystals are large and are capable of blowing the face of the paint skin off and shattering the bricks. It all looks a right mess.

Structurally the walls are still all good, but they are going to need some localised patching in with new brick because of the extent of the face loss. The remains of the paint should all be removed and the bricks left to breathe and pointed in lime mortar. For what use the space will get we do not think there is any need to lime wash the walls.

Floor is dry, no signs of any water penetration through the south rendering or up through the floor. The south rendering does have some fine cracking running through it, but is still hard bonded to the external wall.

Ceilings seem in fair order. Quite well sealed, although there is some damage towards the east end by the installation of pipes that would affect the fire integrity. This will need some patching with intumescent putty.

Photos:

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

BASEMENT

	
General view towards the NW. Extensive build up of salt and brick waste on the floor. The floor is concrete as is the skirting profile.	General view towards the SW, hard render to the south wall.
	
Hard render to the south wall is cracked but still well bonded. No leaks.	Main fibre optic intake to the whole station complex comes in the south wall. This may be too expensive to move and may have to be maintained.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

BASEMENT



Work items:

Cond'n	Action	Item	Cost
F	1	Patch in the area of ceiling that has been damaged by pipework installation in case it affects the fire integrity.	(S)
P	3	Remove the remains of the acrylic wall paint and try to passivate the salt growth in the face of the brickwork. Cut out and replace bricks with severe face loss and consolidate with lime mortar. This comment applies to most of the basement rooms.	(L)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

7.2

Room SMLG02 (SW corner)

General Description

Room broadly similar to previous. Render finishes to the whole south and west wall. Gas main enters the west wall. Some painted brickwork to the east and north wall. Hard to get to because it is behind storage.

Statement of Condition

Cracking noted at the extreme south-east corner, possibly to do with where the cable has been brought through from the hallway and the brickwork removed. There is cracking in the hallway above this position.

Overall, wall areas seem to be free of significant cracking. No real issues with damp penetration through the render.

As with the other room the brickwork walls are suffering from face spalling and need consolidation.

The fire integrity of the ceiling seems complete.

There is a large cabinet against the south wall which actually has an emergency battery power supply. We assume this is for the data communications networking so will need to go with the museum. There is a lot of servicing in these rooms that needs to be surveyed and agreement made for how it will be separated.

The cellars has a gas meter intake but we could not really see a direct water or power intake direct from the street. These seem to be fed from the Station building alongside.

Photos:

	
Large electric feed cable comes though the wall from the lobby area. There is cracking in this location	Gas main comes in the west wall. The gas pipe heading to the left feeds into the main station building

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

BASEMENT



Main electrical panel for the building and a large battery back up unit.

Work items:

Cond'n	Action	Item	Cost
M	8	Survey the servicing layout of the cellars to determine what needs to be relocated to the museum and what stays with the building.	(M)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

7.3

Room SMLG03 (NW corner – Boiler room)

General Description

This room has been co-opted into a boiler room. Rendered on the west and north walls, the rest is bare brickwork. Concrete floor again. A very hot room. Air intake on the north wall. Huge pipework manifold, some of which has visibly been disconnected.

There is a service feed in from the street through the west wall, currently just carrying a green cable – not sure what that is, possibly data as it feeds through to the room above.

Statement of Condition

No structural issues from what we can see. Overall, it is quite tidy really.

Brickwork on the south wall has lost most of its paint finish. The brickwork does not seem to be in as bad a condition as the front rooms but there is still plenty of salt damage. This is not surprising given the heat in the room.

Daylight showing through the wall vents into the yard beyond. The grillage is not very consistent and there is clearly a way in for vermin. This needs to be better sealed, but still maintaining the ventilation.

The soil pipe enters the room at the east from the corridor at ceiling level and goes straight out of the north wall. This exits above ground to a bend and an access point. The vent is at roof level.

Photos:



General view looking south east. The gas feed comes in across the ceiling from the adjacent room.

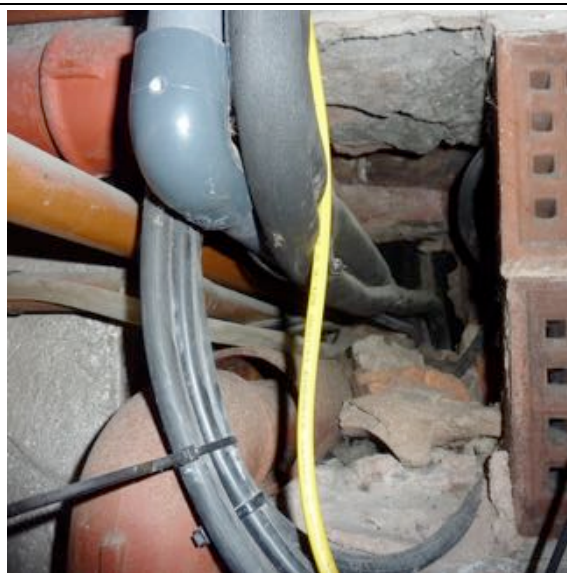
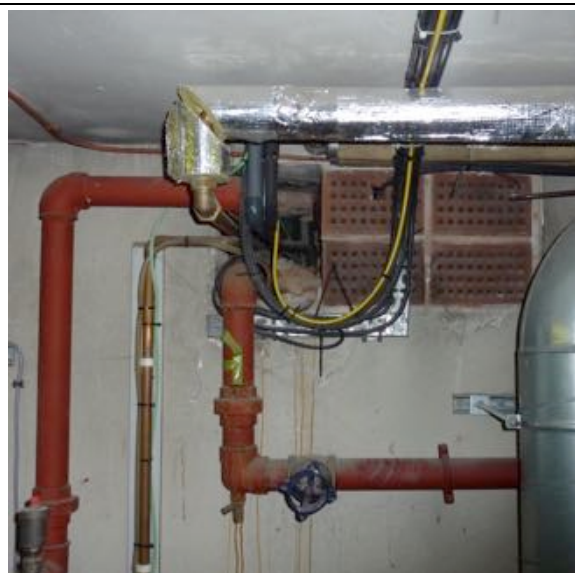


Boiler and manifold equipment. Some of this is live, some is cut off.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

BASEMENT



Various heating and drainage pipes crowd into one opening in the north wall. The void is not well sealed and vermin could enter the building on this route.



The bricks to the south spine wall are salted but do not have the extensive damage as other rooms.

Cable feed in through the west wall. This looks like there would be capacity to bring other cables in this way.

Work items:

Cond'n	Action	Item	Cost
M	2	Improve the grillage around the boiler air intakes to ensure there is no route in for vermin	(S)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

7.4

Room SMLG04 (North Extension)

General Description

This room is different from the others in that it has low headroom under what is possibly an historic vault. The low ceiling makes it not much use.

Statement of Condition

Currently all seems quite dry.

The integrity of the brick vault may have been called into question in the historic past as there have been brick nibs built at the sides and a brick central spine wall added. The vault does look quite flattened and misshapen but there is no cracking. Maybe this was once under a yard or hard standing where greater load bearing strength was needed?

These brick walls have been faced with render, but, as with other areas, the extremely high levels of salt in the brickwork which de-bonded the render and it has burst out the face leaving it all looking quite a mess. All of this render needs to be removed and any bricks that look to be too weak will need to be replaced. These are very thin nibs so it may be better to just renew the whole construction from the floor up.

The central spine wall is thicker and seems to be faring better.

The render to the back wall on the north side looks in good condition, with no cracking at all.

There is a large intake and some data cabling or power coming in from the platform direction.

Photos:

	
General view from the north looking back to the access corridor	Face loss to the brickwork of the central spine wall. This is thicker than the nibs so decay is less concerning.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

BASEMENT



The render encasement to the thin brick nibs has failed in quite a spectacular fashion.

Work items:

Cond'n	Action	Item	Cost
P	3	Remove the remains of the render facings. Cut out and replace bricks with severe face loss and consolidate with lime mortar. Rebuild the full nib if repair will leave it more unstable.	(M)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

7.5

Basement Access Corridor

General Description

The circulation areas are generally similar to interior of the rooms. The south wall to the street is rendered.

The steps down from the ground floor are old sandstone slabs set on brickwork.

It is interesting that some of the wall areas have large lumps of stone built into them adjacent to the doors which may have been for adding extra strength to a lock mechanism. Maybe this area was for secure bonded storage?

Statement of Condition

The condition of the walls is generally the same as the front rooms with surface salt into the brickwork bringing off the paintwork. There are plenty of facing bricks to be patched in. In the circulation area, the section running towards the south wall is rendered, and at the end of it there is a horizontal crack in the render running from wall to wall

The flight of brick and stone steps is quite an uneven construction. The stone slabs have been overpainted in the past and, like the brickwork, the stone has suffered from delamination. It would be good to get all of the paintwork removed.

The bottom step has been over coated with the cement rendering upstand from the floor as well. This makes the bottom step particularly subject to delamination.

Photos:

	
General view of the walling in the corridor. Note the large stone blocks set into the walls, we suspect these were involved in securing the old doors to a high level of security.	Room under the staircase. The soil pipe emerges through the ceiling.

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

BASEMENT



The access steps have suffered, like the walls from being over painted.

Work items:

Cond'n	Action	Item	Cost
P	3	Remove the paint finishes from the stone flags of the steps and consolidate the finishes. The bottom step flag stone may need to be replaced.	(M)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

RECCOMENDATIONS BY PRIORITY

WORK REFERENCE 1 – URGENT

Item	Description	Cost
1.1 North Extension Roof	Clear the eaves gutter and the lead flat areas of debris. This comment would apply to all of the North roof areas.	(S)
	Weedkill and suppress the plant growth in the string course of the North railway arch. Point in the gaps.	(M)
1.5 West Roof of Main Building	Access the apex of the fan and introduce a shaped lead cover to the timber rolls. Repair the timber if required and re-set the slipped soakers to the other areas.	(M)
2.3 North Elevation, Courtyard, Bridge and Railway Arch	Resolve the responsibilities for maintaining the large rainwater pipes that gather and discharge into the rear yard area. This on-cost may factor in any lease negotiations.	(Z)
3.1 SW Roofspace (over SM202)	Check whether there is a defect in the flashing at the west of the stack and repair if necessary.	(M)
4.4 Upper Stair Hall and Landing WC	Level up the entrance mat to the back door to take out the potential trip hazard.	(S)
7.1 Room SMLG01 (SE Corner)	Patch in the area of ceiling that has been damaged by pipework installation in case it affects the fire integrity.	(S)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

RECCOMENDATIONS BY PRIORITY

WORK REFERENCE 2 – Resolve within 1 Year

Item	Description	Cost
1.1 North Extension Roof	Reset slipped or cracked slates, replace thin slates used in patching with ones that match the originals. This comment would apply to all of the roof areas.	(M)
	Take up and renew the lead gutter on the east side creating a drip or flexible joint at the point where it flows past the chimney stack. Re-form the spitter and renew the cast iron hopper and pipe.	(M)
1.3 North Roof of Main Building	Reset and point all ridge tiles.	(M)
	Replace the timber framed rooflight for a higher specification traditional patent glazing frame with sealed double glazed inserts.	(M)
2.2 West Elevation	Repoint the upper wall areas of the SW facets with lime mortar. Examine the blocked windows and seal any routs where water may be penetrating. Add lead cover to the stone cills to encourage water to run away	(M)
2.3 North Elevation, Courtyard, Bridge and Railway Arch	Clear the rear yard of plant growth and check all of the drains. Make sure the open gullies are not leaching water into the ground.	(S)
3.2 SE Roofspace (over SM201)	Seal in the link hole between this roof space and the adjacent station building to maintain fire separation	(S)
4.1 Room SM201 and Lobby	Investigate the cause of distortion in the lobby floor and devise a method of strengthening and correct the slump.	(M)
4.4 Upper Stair Hall and Landing WC	Investigate the cause of cracking to the wall around the platform access door and devise a method of tying in. There is also cracking in the landing below this which should be looked at too.	(S)
5.1 Room SM101 (South)	Investigate the west wall for evidence of corroding iron cramps used for the window infil. If these are present they may have to be removed by localised opening up.	(M)
6.1 Room SMG01 (SE Corner)	Check that the ceiling in the under landing cupboard is not finished in asbestos.	(S)
7.3 Room SMLG03 (NW Corner)	Improve the grillage around the boiler air intakes to ensure there is no route in for vermin	(S)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

RECCOMENDATIONS BY PRIORITY

WORK REFERENCE 3 – Resolve within 2 Year

Item	Description	Cost
1.1 North Extension Roof	Refurbish and paint the cast iron eaves gutter and fascia, seal the joints and replace any damaged timber corbel blocks. This comment would apply to all of the roof areas.	(M)
1.2 North roof over Stair WC	Point in the mortar slate verge of the roof over the stair	(S)
2.1 South Elevation	Refurbish the sash windows replacing damaged components, snapped sash cords and undertake minor areas of rotten architraves. Repaint to complete. General comment all elevations.	(M)
	Refurbish the front door. Add a traditional handle and lock and remove the keypad.	(S)
	Point the open joints to the masonry door surround	(S)
2.2 West Elevation	Replace the lower sash and parts of sash box to the window in the SW facet Repaint to complete.	(M)
2.3 North Elevation, Courtyard, Bridge and Railway Arch	Repaint the rusty rainwater pipe on the main north gable of the house.	(S)
	Clean down and repaint the steel access bridge	(M)
3.1 SW Roofspace (over SM202)	Create a roof space access hatch over room 203	(S)
4.1 Room SM201 and Lobby	Replace cracked pane of glass in the lobby window	(S)
7.1 Room SMLG01 (SE Corner)	Remove the remains of the acrylic wall paint and try to passivate the salt growth in the face of the brickwork. Cut out and replace bricks with severe face loss and consolidate with lime mortar. This comment applies to most of the basement rooms.	(L)
7.4 Room SMLG04 (North Extension)	Remove the remains of the render facings. Cut out and replace bricks with severe face loss and consolidate with lime mortar. Rebuild the full nib if repair will leave it more unstable.	(M)
7.5 Basement Access Corridor	Remove the paint finishes from the stone flags of the steps and consolidate the finishes. The bottom step flag stone may need to be replaced.	(M)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

RECCOMENDATIONS BY PRIORITY

WORK REFERENCE 4 – Resolve within 3 Years

Item	Description	Cost
1.2 North roof over Stair WC	Re-boss the misshapen end of the lead back gutter.	(S)
4.2 Room SM202 (SW Corner)	Cut back the salt damaged plaster to the west wall of SM202 and SM101 and renew in lime plaster. This to be done after the external issues are dealt with.	(M)
6.5 Central Entrance Hall	Make good to small areas of impact damage to the wall plaster and timber trims.	(M)

WORK REFERENCE 5 – Resolve within 4 Years

Item	Description	Cost
4.4 Upper Stair Hall and Landing WC	Repair the door and frame out to the railway platform where it has been damaged by intruders.	(S)

WORK REFERENCE 6 – Resolve 5 Years and beyond

Item	Description	Cost

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

RECCOMENDATIONS BY PRIORITY

WORK REFERENCE 7 – Improvement

Item	Description	Cost
1.1 North Extension Roof	Install galvanised metal tread grill panels to the slot between the platform and the north gable to make it safer to access and maintain the East flat gutter and roof	(M)
1.2 North roof over Stair WC	Re-construct the roof over the WC so that it is part of the pitch of the upper roof and there is one eaves gutter tracking over to the area of the access bridge.	(M)
1.3 North Roof of Main Building	Renew the lead linings to the valley gutter.	(M)
1.4 South Roof of Main Building	Replace the ogee gutter and downpipe serving the south and west roof eaves with ones of a larger carrying capacity.	(M)
1.5 West Roof of Main Building	Strip back the slating arrangement from the fan area and re-make with traditional lead covered ridges rather than the soakers	(L)
2.1 South Elevation	Reset and pin rubbed bricks to the first floor window lintols which have slipped slightly	(S)
2.2 West Elevation	Re-work the paving levels in the courtyard so that it matches the new level of the external pavement. Modify the gates to suit the new arrangement.	(M)
3.1 SW Roofspace (over SM202)	Increase thickness of the thermal insulation. Comment applies to all roof spaces.	(S)
	Build up the top of the north wall to better compartment the roof space against fire penetration	(S)
4.1 Room SM201 and Lobby	Take up and replace all of the chipboard flooring to T+G softwood	(L)
4.4 Upper Stair Hall and Landing WC	Increase the height of the landing handrail to 1100mm to improve fall protection. Use a metal sub frame that stiffens up the balusters too. Introduce rods to the lower landings where the gaps between the balusters are greater than 100mm	(S)
	Completely strip out the tired old fixtures and fittings to the landing WC and renew. Re work the extract from the room below so that the boxing does not stop the door from opening.	(M)
5.3 Room SM104 (North Extension)	Replace the Georgian wired glass in all of the rear facing windows	(M)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

RECCOMENDATIONS BY PRIORITY

WORK REFERENCE 8 – Investigation

Item	Description	Cost
1.1 North Extension Roof	Investigate the material used for the RWP connection on the Railway Platform. Is it asbestos?	(S)
	Determine who will have the maintenance liability on the tall fin wall above the east lead gutter.	(Z)
1.2 North roof over Stair WC	Determine if the multiple cables running across roofs and attached to brickwork are still required and remove them if they are at risk of trapping debris or getting in the way of general maintenance. Otherwise leave them.	(S)
2.1 South Elevation	Monitor the rate of erosion to the masonry door surround.	(Z)
2.3 North Elevation, Courtyard, Bridge and Railway Arch	Monitor the wall connection of the steel bridge in case cracking develops in the bricks.	(Z)
3.1 SW Roofspace (over SM202)	Investigate why mouse poison has been deployed in the roof space. Is there an issue?	(Z)
3.3 North Extension Roofspace (over SM104)	Monitor the eastern and western eaves in case of new leaks	(Z)
5.4 Mid Stair Hall and Landing WC	Investigate whether the floor tiles in the ladies WC have an asbestos content	(S)
6.5 Central Entrance Hall	Monitor the crack in the wall by the front door. This may extend into the cellar.	(Z)
7.2 Room SMLG02 (SW Corner)	Survey the servicing layout of the cellars to determine what needs to be relocated to the museum and what stays with the building.	(M)

G: Satisfactory, F: Isolated failure/limited damage, P: Extensive Failure M: Maintenance

1: Urgent, 2: In year 1, 3: In year 2, 4: In year 3, 5: In year 4, 6: year 5 and beyond, 7: Improvement 8: Investigation

Brian Jones

Structural Design

Croft House, 84 Long Lane, Harden, Bingley. BD16 1BU

Mob 07973 798340 Email: ab_jones50@hotmail.com

STATION MASTER'S HOUSES

LIVERPOOL ROAD

MANCHESTER

STRUCTURAL CONDITION

REPORT



12th December 2021

Brian Jones B Eng(Hons) C Eng MICE MStructE Chartered Engineer

BRIEF

Andrew Wiles of Wile & Maguire Architects has requested Brian Jones of Brian Jones Structural Design to assist him in dealing with Redevelopment Options for The Landmark Trust, who intend to convert the building to recreational use. Richard Thompson is also involved as the Quantity Surveyor for the project.

The inspection has been made on 30th November 2021 in the company of Andrew Wiles and Richard Thompson together with a local contractor who carried out opening-up.

At the time of the inspection Andrew Wiles had already compiled a detailed condition report together with five options for the Clients consideration. This report answers matters arising from both the report and the proposals options.

GENERAL DESCRIPTION

The Grade I Listed building is valued for its historical significance as part of the 1830 setting for George Stephenson's pioneering railway from Manchester to Liverpool. The building abuts the original Liverpool Road Station and a portion of the civil engineering works that supported the elevated permanent way including the River Irwell Crossing.

The site is underlain by Bunter Sandstone in the Triassic division of the New Red Sandstone geological series. Which are in turn overlain by recent alluvial deposits, which will be of mixed types ranging through clays, silts and sands.

The building is in solid load-bearing brickwork with suspended timber floors throughout with the exception of a barrel-vaulted cellar under the north wing. The blue slate covered roof is pitched with hips and a valley at the west end. Internal walls are also in brickwork with a concealed beam over the open plan first floor room created on the south side during earlier conversion works to offices, which constitute the present use as part of the Museum of Science and Industry.

INVESTIGATIONS (Refer to Architect's Report)

Item 4.1 Room SM201 and Lobby "investigate the cause of distortion in the lobby floor"

The floor boarding was removed to expose the joists, which were found to be 75 x 175 mm at 400 mm spacing. The span of the joists is 4.3 metres. It is probable the original use was domestic, but since the building has been converted to office use with greater foot-fall, the superimposed loading will have been more intense. Deformation in timber where failure has not occurred is usually caused by long term gradually worsening creep deflection in members with insufficient stiffness 'I', Moment of inertia.

'I' provided $33.5 \times 10^6 \text{ mm}^4$ I required $4340 \times (2.5 + 0.6) \times 0.4 \times 4.3^3 / 8800 = 48.6 \times 10^6 \text{ mm}^4$ 45% overloaded.

2

Item 4.1 (continued)

The simplest way to correct the problem will be to add a similar sized joist beside each of the existing, M 12 bolted to the existing at 900 centres. Note that the strength aspect of the arrangement is not critical. The elastic modulus of the section required with a superimposed load of 2 Kn/ sq m appropriate for a hostel is $492 \times 10^3 \text{ mm}^3$ That provided with the strengthening would be $765 \times 10^3 \text{ mm}^3$, well in excess of the requirement.

Concern was raised about the effectiveness of the support to the new block wall built between the lobby and room SM 201 adjacent to the lobby floor deformation. The block wall carries significant roof load but the depth of construction that could conceal a steel beam is quite shallow with a minimal down-stand in room SM 101 below.

The absence of any signs of distress in the plasterwork are sufficient to give assurances that the arrangement is competent.

Item 4.4 Upper Stair Hall and Landing WC “ Investigate the cause of cracking to the wall around the platform access door - - - and in the landing below”.



SECOND FLOOR REAR DOOR OPENING



FIRST FLOOR REAR WINDOW OPENING



GROUND FLOOR REAR DOOR OPENING



EXTERNAL VIEW

3

It is therefore probable that the cracking in the internal finishings near the rear openings are related to a minor differential effect from foundation level that the masonry is able to absorb without cracking. The stages of development of the building cannot be traced with any certainty as it seems there has been substantial rebuilding, but any changes may have an effect at foundation level where the walls most probably rest on river deposits of some type. Any leaking of water to ground could cause saturation leading to a loss of strength in cohesive and silty type material. Ensuring all the drains are out-falling into a

The visible cracks are in the finishings, not the masonry, but there is evidence portions of the wall have been increased in thickness at some time. At high level the roof valley terminates in this area. It has a 5.5 metre span on plan and almost 6 metre on the slope. A photograph of the valley appears on page 14 of the Wiles & Maguire Report. There are load-bearing walls at third points along the valley so it is reasonable to assume they would have been used to break the span in the substantially modern re-roofing exercise that included the rafters. main sewer and not to ground will minimise the risk of further foundation disturbance if this was involved. As can be seen in the photograph above, the north wing has been constructed at a different time, seeming to pre-date the rest of the building with a more industrial appearance founded on a barrel vaulted foundation. This may account for the disturbance, with the two portions reacting differently to variations in ground conditions or the foundation depths not being the same.



INVESTIGATIONS (CONTINUED)

There was concern that the infill panels to the southwest corner might be in cavity construction with embedded ties. The construction is in Flemish bond, which is probably 215 thick which is formed without ties. There were no signs of horizontal cracking that is an indication of embedded tie corrosion.

Item 6.5 Central Entrance Hall – “Monitor the crack in the wall by the front door. This may exist in the cellar”

The extent of re-building that has been required may be an indication that the original construction had deteriorated to the point where it had to be replaced rather than remodelled for aesthetic reasons, as with the front entrance portico. It is not possible to be certain of the reason for such extensive rebuilding, so monitoring is a prudent strategy.

REDEVELOPMENT OPTIONS - STRUCTURAL IMPLICATIONS

GENERAL COMMENTS ON COMPETENCE OF EXISTING STRUCTURE

On opening up the floor the joists were found to increase in depth and therefore strength at the lower levels.

Restricting the second-floor rooms to bedrooms is unlikely to lead to problems such as those affecting the front lobby. Installing heavy furniture should be avoided. As the joists are somewhat undersized by current standards for dwellings, the floors will remain to feel flexible under-foot. Ensuring the boards are adequately fixed down will add some stiffness.

The use of 225 x 75 mm joist at first floor level suits communal use as shown in all versions of the proposals.

275 x 75 mm joists at ground floor are very robust for the proposed uses.

75 x 50 mm joists on two bearers over the vault in SMG 04 need to be considered, as stated below.

OPTION VERSION 1

Lift from basement to second floor:

A 200 mm thick concrete slab doubly reinforced with A393 mesh will be required to support the lift and the enclosure walling.

140mm blockwork will be required for the wall with the lift tracks but the rest can be 100 mm thick with 145 x 100 precast concrete lintels.

The lift shaft can be used to support trimmers to the ground floor sunken area or all the existing joists west of the lift set at the lower level with a staging for the bathroom floor at the original level.

5

OPTION VERSIONS 2 & 3

The same comments apply as for Version 1

Partitions in the rear wing room SMG 04 are more extensive but sound insulated timber studding could be used with deepened sole and head plates to ensure the loads are carried by the bearers rather than the shallow joists.

OPTION VERSION 4

The compact lift can be encased in timber studding.

Floor lowering near new rear entrance done as before.

OPTION VERSION 5

Because the ground conditions are most likely to be river deposits of a variable nature, the external addition is probably best on a raft foundation with provision for movement next to the existing walls.

SUMMARY

Work carried out to the building in recent years has probably eliminated the type of problems a building of this age usually suffers from such as deformed roof timbers, bulging walls and failing floors. The joisting a second floor level is slender by current standards but provided semi-permanent dead loading is kept to a minimum and the rooms designated for on-communal use, they should remain serviceable.

One area of floor deformation can be rectified by inserting additional joists.

Internal cracking to plasterwork may be related to poor underground drainage.

The ground and first floor joisting is very adequate and amenable to the proposed changes.

A Brian Jones

A B Jones BEng(Hons) CEng MICE MIStruct E

Chartered Engineer