BUILDING SURVEY REPORT

OF

THE ROUNDHOUSE

CHURCH STREET,

MELKSHAM, SN12 6LS

10 DECEMBER 2019

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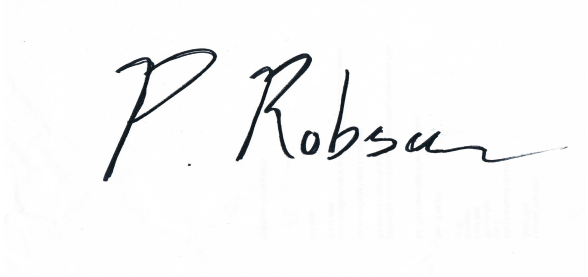
ATHORISATION

This report has been prepared by



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(Philip Robson BSc (Hons) MRICS)

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RE – FULL BUILDING SURVEY REPORT ON – THE ROUNDHOUSE, CHURCH STREET, MELKSHAM

Further to e-mailed instructions from Linda Roberts on 5 December 2019 for inspection of the above-mentioned premises, please find below our findings and advice. Our limitations are attached to this report.

1. Instructions and Brief

Our inspection was carried out on a visual basis. A cherry picker access platform was not utilised. However, we were able to gain closer inspection of the main roof covering via binoculars from ground level.

2. Executive Summary

The following report includes a number of sections containing our findings. This section is the executive summary. If you have any questions after reading it, please do not hesitate to contact us to discuss it further.

It is sometimes difficult to explain all defects without using some technical language. As part of our service we are more than happy to talk through the survey as many times as you wish until you are completely happy to make a decision.

General Synopsis

From a building surveyor's perspective (and for those areas inspected) the building is generally in a tired and structurally concerning condition, for its age but will require on-going repairs works with structural restraining of the stone elevations to safe-guard the integrity of the walls. Ironically, although of 'Listed' status, due to character, age and architecture the actual build quality of such a 'mill' was arguably never meant for such a long-life and most examples would have taken down in the mid-20th Century.

There are a number of shortfalls which require consideration and remedial work. The key items are as follows:

a) The elevations exhibit cracking relating to ongoing 'slumping' of the stonework due to partial failure of the timber lintels and a loss of bonding between inner and outer skins, as the lime mortar is softening from excessive water ingress. A structural restraining anchor system is recommended to arrest further movement. This can be set in the mortar joints with additional cross bracing through to better tie the stonework from future movement.

b) Certain window lintels and roof wall plates exhibit wood boring insect holes. This may well be dormant/historic but deflection and damage is noticeable and exacerbating movement within the elevations. Further weakened timbers need to be cut out and replaced.

c) Access and urgent external decoration will be required to the windows over the next year to prevent wet rot becoming an expensive issue.

d) It would be very beneficial (although probably not permitted by Conservation Officers) to install a guttering system around the roof perimeter to stop rain continually washing out the lime mortar and adding to the damp penetration.

e) Considerably high damp readings were recorded to low level inner walls and to isolated areas of the upper walls. Given the 'Listed' status limitation will be applicable on damp proofing works. Therefore, comprehensive repointing should be considered following any steel 'restraining' Heli-bar works.

We have costed, in this report and indicated in the appended Planned Maintenance **Programme estimated costs in the region of £21,100 over the next 10 years** with certain elements requiring cyclical costings.

3. Site inspection

Philip Robson BSc (Hons) MRICS of Robson Building Surveying Ltd inspected the property on the 10 December 2019. The building is vacant. At the time of our inspection the weather was damp and cold with intermittent showers and temperatures in the region of 8^0c.

4. Description of the Property

The Round House in Church Street, Melksham, SN12 6LS was built in the early 18th century as a Wool Drying House. It was heated by an iron stove, with a flue pipe leading to a hole at the top of the roof cone to take the smoke out of the drying area. Radiating out from the centre to the walls were wooden beams covered with wooden slating, over which the scoured wool was hung.

It was later used as an Armoury by the local Volunteer Riffle Corps. It has also been stated that it has been used as an animal feed store. The Round House is, fundamentally a commercial building.

The circular elevations are formed in natural rough 'brought to course' stonework solid walls with inner imperial brickwork and a rubble central sandwich with lime/cement pointing.

The roof structure is formed around timber conical rafters seated on wall plates and rising to a central finial. The roof covering appears to be the original stone tiled formation. A thermal quilted insulation is noted above the plaster board ceiling line that is affixed to the internal rafter slope. We suspect that an underfelt has been positioned below the stone tiles some decades ago, but this is not proven.

The windows serving the property are not original but reflect the character in painted timber casements with single glazing. Isolated windows utilise internal steel security grilles. Timber window lintels are still evident above openings. The external door are formed in a replacement double oak door leaf and frame with secondary internal double door in modern painted softwood with glazing panels.

There are no rainwater goods or fascia boards noted to the property.

Internally, the fit-out allows for a concrete slab ground floor with a PVC based tile adhered to the surface. No insulation is provided below. The mezzanine floor is formed in structural timber beams spanning between inner walls with floor joists then spanning perpendicular across the beams. laid above the ceilings to floor areas.

Internal walls are the inner face of exposed plain imperial bricks. A cementitious plinth is noted at lower level, which appears to be a basic tanking method to resist lower bridging / penetrating damp through the walls base.

There are no internal doors.

The staircase in the Roundhouse is of plain timber and MDF veneer with varnished finishes and follows the internal curve of the inner wall from ground to mezzanine.

Below the timber staircase, the fit-out allows for a small vitreous ceramic sink unit. Presently, no provision for a toilet is made.

The electrical services consist of a single-phase incoming electricity supply, which enters close to the entrance door, to a modern Domestic consumer board with miniature circuit-breakers, digital meter and main fuses. There is also allowance for single phase surface mounted conduit to small power double sockets.

There is no provision for an incoming gas supply.

Internally, the electrical installation also allows for fire alarm systems, intruder alarm, 2 x electric wall mounted heaters and an overhead/door electric convector heater. Artificial lighting in the form of fluorescent tubes with diffusers.

Sink water drains out towards the right/rear side at low level in a 35mm upvc waste pipe, and continues below the ground to the small inspection manhole, near the front entrance. This drains out to the road sewer.

5. General Condition of the Property

Generally, the structure of the building is in a concerning state with movement exhibited between ground and mezzanine floor openings and damp ingress due to failing lime mortar to the elevations and inner core of the wall. Works are required over the next year to the elevations, to ensure the structure is safe-guarded.

We have identified below, on a paragraph basis, the areas that require both more intrusive investigations to identify particular building fabric failings and construction details that fall below a desired standard.

In light of the likely cost of the works concerned and the size of the property, we would describe the nature and scope of these works as relatively medium scale.

We have provided approximate costings at each paragraph if we feel there is scope and necessity for repair to prolong the buildings life and arrest more costly repairs, if no action is taken. Note – all cost estimates, where applicable, allow for safe access via scaffold in a 'one-off' cost, which we would envisage scaffolding to be in the **region of £1,400.**

A) ELEVATIONS

A1) Numerous areas of the elevation, particularly to the roadside and courtyard side are noted to have received a basic frontal repointing in a lime-based mortar system. This is washing out to the lower courses (external ground level – one metre high) due to splashback and the lack of roof guttering. Targeted lime repointing and application for a sympathetic roof guttering system are recommended to elongate this buildings life. **Cost estimate £2,500.**

A2) The elevations exhibit cracking relating to ongoing 'slumping' of the stonework due to partial failure of the timber lintels and a loss of bonding between inner and outer skins, as the lime mortar is softening from excessive water ingress. A structural restraining anchor system is recommended to arrest further movement. This can be set in the mortar joints (between stone coursing) with additional cross bracing through to better tie the stonework from future movement. Systems available from reputable engineering companies such as Falcon Structural Repairs would offer the correct solution. **Cost estimate £3,400.**

A3) There is no structural evidence of the external walls being pushed out by the roof structure, which can be the case when the roof timbers are not provided with 'collars' to prevent roof spread.

A4) The keystone and vertical stone head serving the entrance door has slumped slightly from right to left with the keystone noted to have dropped. This, together with the lime mortar 'wash-out', has induced the cracking noted above the doorhead up to the first floor window sill. The door and elevation would need to be propped whilst the stone head is replaced and keystone re-set. At the same time, a heli-bar reinforcing rod system need to be inserted

within the lime mortar joints serving the stonework in order to arrest any future cracking. **Cost estimate £800.**

A5) Consideration should be given to possible insertion of an Aco drain around the immediate frontage of the building in order to better drain rainwaters and ground waters from this vicinity, through the door threshold.

A6) The natural stonework serving the first floor front window also exhibits some erosion between the mortar joint of stone and right side natural stone reveal, which requires accessing and repointing all around in a sympathetic lime mortar. **Cost estimate £350.**

A7) To the rear elevation, the painted timber windows require redecoration over the next six months in order to avoid wet rot setting in. Both the rear natural stone surround serving ground and first floor were also noted to have open joints and completely washed away abutments to the stone and stone reveals at ground floor level. On a similar basis to the front elevation, the mortar joints need to be raked clean and new lime mortar introduced, along with a Heli-bar reinforcement system approximately every 200mm-300mm to allow reinforcement to the natural stonework where rainwater is washing away the lime pointing. **Cost already included.**

B) FOUNDATIONS

B1) Presumed to be stonework corbelled in nature, indeed in this type of building there may be no foundation and the building is seated on loadbearing strata. No intrusive access was made to ascertain this.

B2) No issues relating to below ground movement or structural inadequacies were noted during our inspection.

C) ROOF

C1) The roof is furnished with a natural stone tile, which would be the original finish. The roof is heavily moss-encrusted and would benefit from scaffold access and gentle brushing off the excessive moss. The roof does not utilise any guttering and therefore rainwater is cascading down the elevations and this is exhibited with the staining noted to the stonework and the washing out of lime mortar in numerous locations. **Cost estimate £1000.**

C2) Internally, the roof has a plasterboard and skimmed finish, which follows the roof line and therefore no loft access hatch. These boards have been tapered and laid in-between the timber softwood hip rafters that descend down from the apex finial and are bird's-mouth seated to the timber wall plate which has been affixed to the top of the wall. The apex would, originally, have been openable to allow the drying stove heat to rise and escape.

C3) There are no obvious signs of roof spread internally, which is surprising, given the nature of the roof construction. A roof such as this will be constantly wanting to push outwards and it is surprising that a timber collar or flitch plate not been included to prevent this.

C4) The timber wall plates do not show any concerning moisture readings but it is apparent that wood-boring insect infestation has been occurring. Numerous areas of timber wall plate are noted to have the tell-tale signs of wood-boring insect attack with areas noted to be missing to the rear. it is apparent that newer sections have been cut-in, but again further works are required to cut out damaged sections and replace with a like for like timber which will require a fixing down through the brick/stone structure. **Cost estimate £1,100.**

D) LEADWORK

D1) Not applicable. No leadwork was utilised on the building.

E) RAINWATER GOODS

E1) None present at the Round House at roof level. Recommendations are made to seek Listed Building permission for inclusion of a sympathetic guttering/downpipe in cast iron to prevent rainwater washing out the lime pointing in future years.

F) WINDOWS AND DOORS

F1) All the internal windows are timber single glazed casements, with modern locking stays. These are not the original timber windows for The Roundhouse and appear to have been re-fabricated some time over the last 20 years. They have been sympathetically fabricated.

F2) Externally, the white painted timber windows would benefit from preparation and redecoration over the next year; in certain instances, the paint is completely diminished and wet rot will be setting in if works are not undertaken in this next summer. **Cost estimate £1,200.** This will be a cyclical cost every 4 years.

F3) The front oak door is in reasonable condition, although given no gutters serving the roof, rainwater is cascading the front of the door and deterioration is beginning to occur at low level around the door. The front door is not the original installation. This is a replacement oak frame and double door set within the original stone surround and keystone. In this location, the stonework is noted to be rather eroded to the side reveals, with cementitious-based repairs undertaken between the natural stonework and the stone reveal. Shrinkage cracking has occurred to the left side would benefit from raking out of the unsympathetic mortar repair and replacement in a more sympathetic plastic stone with lime included.

F4) The ground floor window timber lintels appear to be original and may well have been treated with a preservative in order to prolong their life and harden the wood. All the ground floor window lintels exhibit shakes, which are relating to shrinkage of the wood over the centuries. It is also noticeable that some of the end bearing supports where the timber lintels are dressed into the reveals are neither of adequate depth; it should be 150mm and in most cases they are just 100mm to the rear but acceptable elsewhere. It is conceivable over the next 5 years these timber lintels should be replaced on a like for like basis. **Cost estimate £2,200.** Isolated wood-boring insect attack is also noted to the rear window lintel with generally deterioration due to early stages of wet rot to the ends of the lintel bearing into the front face of the elevations.

F5) The large timber lintel over the front door appears to have been treated with a preservative to harden the wood. There are signs of wood-boring insect attack to the top left side (when facing from the road), but this appears to have been eradicated and is not on-going. The doorhead is ‘out of true’ but it does not appear to be detrimentally affected.

F6) The surrounding stone mullions and reveals serving the windows have been partially refurbished in brickwork or flaunched in a cement render system with the front window above the entrance door the only exception, where the stonework can still be seen. Clearly over the centuries it has been necessary to undertake certain repair works which are cost-effective. At this time, it appears to be fit for purpose though probably would not be to a Conservation Officer’s approval.

F7) The original stone surround serving the front first floor window is in an average state of repair where clearly the abutting side reveals to the head and sub-sill exhibit a degree of loss of connection with an iron catch noted to have corroded and blown apart the stonework to the left side reveal internally, however, there is no sign of any structural movement due to this. It would be beneficial to remove the cast iron elements as it will only continue to expand and damage the surrounding material.

F8) The timber windows would benefit from renewal of the external putty and redecoration will have to be considered over the period when redecoration takes place.

F9) One pane to the right-side ground floor was noted to be cracked and should be replaced.

F10) The right side windows also utilise an internal steel security prison-style grille at ground and first floor levels. These are in robust repair and offer reasonable security provision. They will require redecoration over the next 2 years.

G) FLOORS

G1) The ground floor appears to be furnished in a concrete slab construction, which has been overlaid in a PVC-based tile (300 x 300). The concrete slab is even, with no signs of any structural deficiencies over the floor slab. There does not appear to be any damp proof membrane included within the floor slab and it is recording 16% moisture readings when tested.

G2) The PVC floor tiles are noted to be warping and lifting at the entrance threshold, which is a direct result of water being trafficked into this area and dampening the floor. The floor would benefit from a more watertight finish and consideration should possibly be given to an Altro-based vinyl system over the floor, which could be in sympathetic colours.

G3) The first floor mezzanine is constructed in timber beam, floor joists and floorboards. The beams are 210mm x 100mm in cross-section, which are pocketed into the internal brick walls at first floor level. These timbers appear to have been treated with a preservative to harden the timber wood, with spliced joints also apparent. These would not be the original timbers, although they are a few decades in age.

G4) Furthermore, the 100mm x 50mm floor joints, which are seated on these bearing beams, only appear to have been installed in the last 20-30 years with the floorboard finish all appearing adequate; there are no signs of wood-boring insects to any of the floor timbers, although it is apparent that the point loadings of these supporting beams do sit directly onto the brickwork and timber window lintels, which will be inducing point loading and as such a crack is noted to the left side ground floor window reveal, which is a direct relation of this point loading. As previously mentioned, it would be beneficial to rake in Heli-bar reinforcement into the joints of the mortar every 300mm internally, prior to repointing and it should have allowed for beams to be seated on pad-stones in order to spread the load more evenly. **Costed elsewhere.**

H) INTERNAL WALLS

H1) Although the Roundhouse utilises solid stone and brick wall structure, the internal wall finish is formed in a clay-based Imperial-sized header and stretched bond brick which has been keyed into the external stonework to provide a structural bonding in the circular structure. Generally, the internal brickwork, although dated, is in a reasonable state of repair. The brickwork does exhibit numerous areas where the original lime and cement mortar pointing has now been repointed in a pure cement sand, namely below the first floor front window and to sections around the brick reveals serving the rear and side windows.

H2) The brickwork, as one would expect, exhibits a degree of slumping over its area. Given the building's age, this is to be expected where the lime mortar within the wall has become dampened and this, along with the expected timber fillet inserts, which are often included within the inner sandwich section of the brick/stone walls in order to level up the walls begin to rot and compress. Minor hairline cracking is noted to the front elevation just to the inner brickwork, descending down from the wall plate in close proximity to the first floor timber banister rail, along with isolated brick displacement directly below the timber wall plate. these areas would benefit from piecemeal re-bedding of the loose bricks and the insertion of a galvanised heli-bar across the vertical crack (close to the banister) fitted every 300mm or every third course of bricks; this can be bedded 1"-1.5" into the internal lime joint which crosses over the crack by at least 200mm each side and then re-bedded in lime mortar. This will prevent the crack from widening any further. **Costed elsewhere.**

H3) Generally, any loose lime mortar should be checked in a piecemeal fashion with a sympathetic lime mortar repair undertaken to the brickwork. Due to the Listed nature of the property, any areas of pointing will require checking by a Conservation Officer prior to the whole works being undertaken.

H4) At ground floor level, a sand and cement system has been parged approximately 250mm up the inner face of the wall to act as a damp proof course. This may allow for a waterproof additive within its mix and damp meter readings are minimal at this location, however, the brickwork directly above these areas does reflect higher moisture readings in excess of 25%, which diminish, the higher recordings are taken, which is indicative of rising dampness up through the structure.

H5) Isolated areas are also noted to have higher damp readings when tested with a Protimeter but to a degree in a building of this age and characteristic, it is to be expected and although we could discuss systems of damp proofing, I would suspect a Conservation Office would not allow any forms of injected damp proof coursings or tanking systems beyond what is presently utilised. They would recommend that better repointing externally is undertaken and if anything, a lime plaster internally but given the exposed brickwork internally, it seems that consent to do this would not be forthcoming.

H6) Over the faces of internal brickwork, numerous old wall plugs have been drilled into the bricks with plastic plugs inserted and occasional screws still protruding outwards. Again, these should all be removed and it would be aesthetically beneficial to infill the holes in plastic stone repairs which are sympathetic in colour and would require Listed Building approval, however, the mortar holes can be infilled with a lime mortar.

H7) A similar 1mm crack is descending down from the rear internal brick sill down to first floor level, which requires a Heli-bar approach as previously discussed.

J) CEILINGS

J1) There are small hairline cracks to the plasterboard ceiling soffit, which relate to the abutting plasterboard joints and a lack of scrim taping; this in addition to the cold bridging which will be taking place between the external and internal surfaces. Additionally, numerous nail heads have popped where the plasterboard is fixed up to the underlying supporting timbers. Some on-going maintenance will be necessary in the next few years. **Cost estimate plus internal tower scaffold £1,200.**

J2) There is a small hole to the ceiling soffit between the soffit and the wall plate, which exhibits some mineral fibre insulation. This may be a point where bird ingress can occur and the point should be infilled.

K) INTERNAL DOORS

K1) See section F.

L) STAIRS

L1) The staircase is formed in timber, with MDF-based treads and risers supported over a stud framework. The stair winds around the internal right side of the property to the mezzanine and is not the original installation. This has been refurbished some time over the last few decades; indeed the Building Regulation appear to be compliant in that the handrail and horizontal at mezzanine would be compliant in height. also, allowance has been made to tape the nosings to ensure they are a lessened tripping hazard. **Cost estimate £100.**

L2) Generally, the timber staircase appears fit for purpose and structurally sound, though would benefit from redecoration over the next one/two years.

M) SANITARY INSTALLATIONS AND STAFF FACILITIES

M1) Allowance for isolation valves to the vitreous ceramic small sink, with cold tap.

M2) Generally, it is a basic installation which then drains via uPVC trap and waste pipework back out through the right side wall. There are indications of a blocked trap to there is sink and basically the vitreous ceramic sink is dated and would benefit from replacement in any case.

N) ELECTRICAL

N1) The electrical supply appears to have been refurbished within the property over the last 5 years. The supply enters to the front of the building just to the left side of the entrance door where it rises to 100 amp main fuses, digital meter, plastic MK miniature circuit-breakers and residual RCD. Circuits exist for socket alarm panel and hand-wash, over-door heater, main lighting, metered external lighting, park lamp-post, bulkhead back of building.

N2) The electrical supply is earthed and this connection is made to the water stop tap.

N3) The electrical supply was last inspected on 22nd February 2016 and its recoded next date of inspection is February 2021.

N4) Generally, there are numerous internal power sockets which are fed via surface-mounted trunking, with sockets fixed and protruding.

N5) Allowance is made for Running Man electrical signage, fluorescent-based lights with diffusers and alarm panel system.

N6) The property is alarmed from intruders.

O) COLD WATER

O1) The incoming water protrudes through the wall to the right side of the property in a polypropylene-based system with stop tap before provision in copper 18mm pipework.

P) HEATING AND HOT WATER

P1) The property is heated by two electrical convector heaters (one at ground level and the other at first floor mezzanine), which was not tested as part of the survey, along with an overhead electrical convector door heater.

P2) Given the uninsulated property such as this with solid walls and single glazing, although mineral fibre is present in the roof, I would suggest that the property could be rather cold in the winter months for any business activity.

P3) The incoming cold supply then feeds a Dimplex Handyman 3 instantaneous electric hot water hand-wash facility. This will require replacement over the next 10 years. **Cost estimate £300.**

Q) BELOW GROUND DRAINAGE

Q1) The building does utilise a 100-150mm invert drain below ground with the inspection chamber close to the front access door. The brick chamber and concrete benching were all clear and flowing freely. The drain is believed to flows, below ground, towards the road sewer.

Q2) You have informed us that a toilet may be installed in the future. At this time the sink drain is not of sufficient size to handle a toilet waste unless a macerator is used, which is not ideal as blockage can become a problem. A basic CCTV test should clarify that the below

ground drain is adequate for a toilet waste but Listed Building Permission would be required to drill the floor slab ready for a 110mm waste pipe to connect out to the inspection chamber.

R) BOUNDARY AND GROUNDS

R1) There is a movement crack between the Roundhouse and the neighbouring stone boundary wall. The boundary wall may not be regarded as a maintenance obligation to the property but the crack requires infilling. It is better that the wall is not connected to the property to avoid induced and unwanted movement to either structure.

S) STATUTORY

S1) Planning and Building Regulations –
The property is a Listed Building Grade II and any alterations / changes and repairs recommended in this report will require Listed Building permission.

S2) Asbestos –
The Control of Asbestos Regulations 2012, Regulation 4: The Duty to manage asbestos in non-domestic premises, states that the responsibility for asbestos management lies with the Dutyholder. Asbestos has been tested, labelled and noted in the following areas –

- None noted.

S3) Flooding Risk -
We have not undertaken detailed investigations into the potential for flooding of the land on which the building lies. However, we have consulted the Environment Agency website and the property only fall within a 'low risk' flood zone 0.1% in so far as flooding from rivers and seas is concerned.

S4) Tree proximity -
The proximity of trees to buildings can give rise to concern because structural damage can be caused by root systems growing around, under and sometimes through foundations. The risk of damage caused by tree roots depends on;

a. the proximity of the tree to the building concerned
b. the height, age and species of tree
c. the design and depth of a building's foundations
d. the type of sub-soil.

A large mature tree was close to this property in the paved cloister immediately to the right of the property. The tree is some 8 metres away but substantially higher than the Roundhouse.

The branches will require annual pruning to avoid any damage occurring to the roof and elevations. There is clear colour difference between the tree side elevation and the road side with the tree side being far more prone to prolonged dampness. **Cost estimate £550 per year.**

There was no indication of tree root incursion affecting the building at the time of inspection.

Following periods of drought, there is usually a dramatic increase in the number of subsidence claims involving low-rise buildings, especially if the foundations are shallow and particularly in areas of shrinkable clay soils.

Photographs



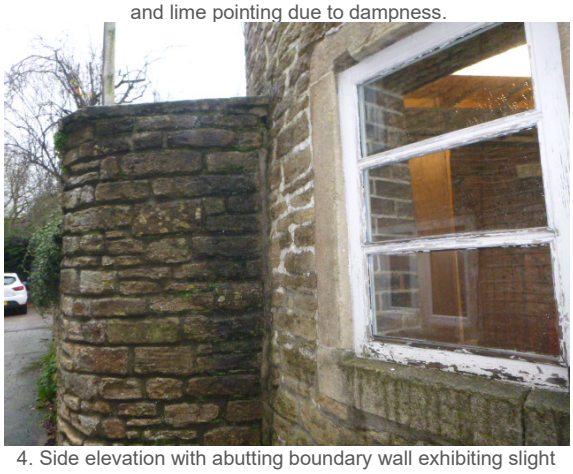
1. View of the Roundhouse and entrance door.



2. Rear elevation with tree proximity and darkening of the stone and lime pointing due to dampness.



3. Stone tiled roof with moss and no allowance for guttering.



4. Side elevation with abutting boundary wall exhibiting slight movement.



5. PIR light and staining where rainwater is dripping down the building face constantly.



6. Eroded stone and mortar holes to the roadside elevation.



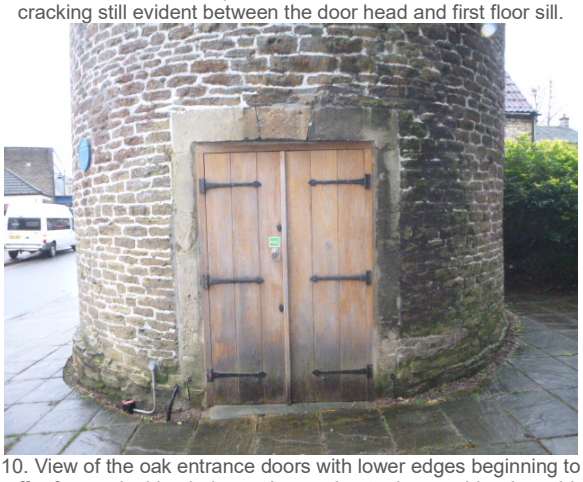
7. Eroded stone to the lower coursing due to splashback and rainwater saturation.



8. Past repair to the key stone over the front door but hairline cracking still evident between the door head and first floor sill.



9. Example of stone erosion to the head of the rear ground floor window,



10. View of the oak entrance doors with lower edges beginning to suffer from splashback damp. Aco and guttering would reduce this propensity.



11. Painted casement windows are exhibiting early signs of deterioration and should be redecorated over the next year.



12. Plaque to the frontage of the building.



13. View inside the adjoining inspection chamber.



14. Internal view of the Roundhouse and staircase with internal brick finish.



15. View of the first floor beam seated on the timber window lintel.



16. Deterioration of the main door timber lintel where pocketed into the solid wall.



17. Evidence of historic wood boring insect attack to the lintels, which has weakened them.



18. Mortar repair to vertical cracking below first floor windows is manifesting again and Heli-bar reinforcement is recommended to internal and external stone/brickwork to an Engineered solution to arrest cracking.



19. Further view of internal brickwork and vertical hairline cracking between the first floor window and door head.



20. Internal view of the ceiling and roof rafter structure with central finial.



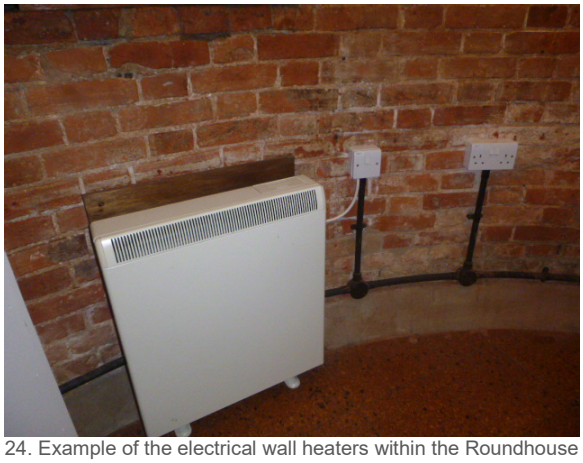
21. Isolated ceiling hole with mineral fibre noted behind indicates past work has been undertaken to the roof.



22. View of the timber wall plate supporting the roof structure with evidence of wood boring insect attack.



23. View of the electrical installation with Main fuses, digital meter, consumer unit and RCD protection..



24. Example of the electrical wall heaters within the Roundhouse and surface mounted electrical sockets.



25. View of the main and secondary doors.


26. View from the entrance door to the rear of the ground floor.

6. Conclusion

We have not costed every single paragraph as you may feel that certain items are improvement related rather than essential repairs. The following are the more salient points reviewed in this report.

a) The elevations exhibit cracking relating to ongoing 'slumping' of the stonework due to partial failure of the timber lintels and a loss of bonding between inner and outer skins, as the lime mortar is softening from excessive water ingress. A structural restraining anchor system is recommended to arrest further movement. This can be set in the mortar joints with additional cross bracing through to better tie the stonework from future movement.

b) Certain window lintels and roof wall plates exhibit wood boring insect holes. This may well be dormant/historic but deflection and damage is noticeable and exacerbating movement within the elevations. Further weakened timbers need to be cut out and replaced.

c) Access and urgent external decoration will be required to the windows over the next year to prevent wet rot becoming an expensive issue.

d) It would be very beneficial (although probably not permitted by Conservation Officers) to install a guttering system around the roof perimeter to stop rain continually washing out the lime mortar and adding to the damp penetration.

e) Considerably high damp readings were recorded to low level inner walls and to isolated areas of the upper walls. Given the 'Listed' status limitation will be applicable on damp proofing works. Therefore, comprehensive repointing should be considered following any steel 'restraining' Heli-bar works.

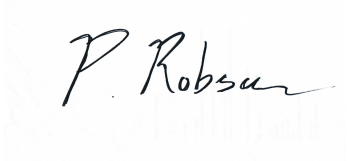
We have identified approximate costings in the region of **£21,100 excluding VAT** over a 10-year period in respect of repair, maintenance and health and safety works. Certain elements are cyclically costed.

You should exercise some caution as to future works required at this property as they are costly and it would be worth clarifying if there are any grant aid options available to you to assist with funding.

Hopefully the above report is beneficial to you and we have interpreted your instruction correctly to the best of our abilities.

Should you wish to raise any queries, please contact me directly.

Yours faithfully



Philip Robson BSc (Hons) MRICS
ROBSON BUILDING SURVEYING LTD

FOOTNOTES

With regard to each of the figures contained in the attached schedules please note that the costings:

1. include allowances for preliminaries, main contractor's overhead costs and profit

2. are based on approximate quantities estimated from the visual inspection we carried out on the day of our inspection and are not based on detailed measurements

3. have not been corroborated by tenders from the marketplace and it should be noted that market conditions and tender factors are likely to produce figures which might differ from those given hereafter

4. have been prepared on the basis of general rates prevailing in the marketplace at present and are exclusive of:

   Financing charges, if any,
   Value Added Tax,
   Professional fees and
   Statutory fees.

5. assume that all building work will be undertaken to similar details and using materials similar to those existing

6. assume each item of work will be carried out under separate building contracts with appropriate contractors and at different times. It should be noted however that, if some works are carried out together under a single building contract, certain savings might accrue due to economies of scale

APPENDIX A –
PLANNED MAINTENANCE PROGRAMME
10 YEARS.