

Structural Engineers Report For:

Westwinds, St Andrews Road, Dinas Powys,
CF64 4HB

VISUAL INSPECTION REPORT

Prepared for:

Studionesh Limited

REF: 19305

Document Control

Project	Westwinds, St Andrews Road, Dinas Powys, CF64 4HB
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11th March 2024

Issued by Email to Nesh Pawar (studionesh@gmail.com)

Dear Nesh,

Structural Inspection - Westwinds, St Andrews Road, Dinas Powys, CF64 4HB

In accordance with your instructions, we undertook a structural survey of the above property on 06th March 2024. The purpose of our inspection was to provide you with an assessment of the overall condition of the property, and to provide you recommendations for any remedial works if required.

Our findings are restricted to structural matters only and we would state that we have not examined parts of the building that were covered, unexposed or inaccessible and are therefore unable to state that any such component is free from defect.

This report shall be for the confidential use of our client, and the report shall not be reproduced in whole or in part, or relied upon by a third party without the express written authorisation of Vale Consultancy.

1 Description

- 1.1. The property at the above address is a two-storey, detached dwelling, situated in St Andrews Road, Dinas Powys, CF64 4HB. The building is currently an unoccupied, and appears to have been unkept for some time, with overgrown vegetation to the front and rear, and general poor condition of the internal space. The structure is assumed to be traditional cavity masonry wall, approximately, and has been rendered, painted, and clad at the upper half of the external walls. The roof is cut-roof construction, with timber rafters and timber purlins. No access was provided into the attic space. Two outbuildings are located to the front of the property, which have internal steels and timber floor joists creating a first-floor space.
- 1.2. All descriptions relating to the direction of the building are as looking from the main road.

2. Observations

- 2.1. External inspection of the above property revealed an obvious lack of maintenance to the main property and outbuildings, which was evident with the overgrown vegetation and condition of the property finishes. See photographs 1, 2 & 3.
- 2.2. Existing timber floor joists and timber rafters in the two outbuildings were noted to be in a state of disrepair and were no longer in suitable condition. Timber joists and rafters have areas of damp at the bearing points, which has caused the timber to fail. See photographs 4 & 5.
- 2.3. Exposed timbers to the rear of the property, where the conservatory butts up to the main property, were majorly rotten and are no longer in a suitable condition. The existing floor in the conservatory was wet to the touch, with vegetation and severe damp areas noted. There was vertical cracking at the masonry reveal into the conservatory, approximately 2-3mm in width. See photographs 6 & 7.
- 2.4. The existing ground floor was noted to be suspended timber floor joists, which were visible in the living area. There was an approximate 400-500mm void beneath the timber floor joists, and exposed timber floor joists appeared to be in satisfactory condition. See photographs 8 & 9.
- 2.5. Minor hairline cracking was noted over a number of doorways at ground floor, which were approximately 2-3mm in width and were localised above the doorway only. See photograph 10 & 11.
- 2.6. Various cracks were noted to the internal face of the external walls, which are likely cracks within the internal finishes. See photograph 12.

- 2.7. At first floor, various cracks were noted to the internal face of the external walls, which are likely cracks within the internal finishes. These cracks were hairline up to 2mm in width.
- 2.8. Damp issues were noted at first floor level at various window reveals, which likely correlates with damages to the external cladding. See photograph 13.

3. Conclusion and recommendations

- 3.1 In our professional opinion, the property at the above address exhibits signs of neglect and poor maintenance, which has left areas of the property in a state of disrepair.
- 3.2 The outbuildings to the front of the property require replacement of floor joists and timber rafters in areas, which will allow there to be a habitable space at first floor. Existing steel beams did not display any signs of distress or excessive deflection, although will require to be assessed if the first floor is to be used as a habitable space.
- 3.3 External cladding is to be made good in areas to avoid water ingress into the interior building, which is likely the cause of damp noted throughout the property. Water ingress through the external walls may also result in cracking of masonry and wall finishes.
- 3.4 The rear conservatory was in a poor state, and will likely require extensive work to repair. Existing timber joists appear to be damp in areas which will likely need replacing. The existing floor needs to be cleared of all debris and material, to expose the slab below. It is highly likely that the floor will need to be re-laid with a new concrete slab or timber floor joists.
- 3.5 We recommend that internal wall finishes are removed throughout the property to assess the condition of the masonry. This will also allow cracking over door heads to be assessed, to determine whether existing lintels need replacing. No cracking was present externally indicative of ground movement, which suggests that internal cracking is the result of diminished finishes or lintels. If cracking has continued through into the brickwork, we recommend stainless steel helical bars are introduced at max. 450mm vertical centres, to reinstate the structural integrity of the masonry.
- 3.6 No issues were noted with the ground floor or first floor timber joists, although the entirety of the floor was not exposed.

If you have any queries with the contents of this report, please do not hesitate to contact me.

Yours sincerely,



Ben Robbins BSc (Hons)
Structural Engineer at Vale Consultancy

Appendix A
Photographs 1 - 13

Appendix A



Photograph 1 – Front elevation



Photograph 2 – Front elevation



Photograph 3 – Poor condition of rear sun room



Photograph 4 – One of two outbuildings to front of property



Photograph 5 – Poor roof condition in outbuildings



Photograph 6 – Rear sun room timbers



Photograph 7 – Vertical cracking into rear sun room



Photograph 8 – Exposed first floor timber joists



Photograph 9 – Suspended ground floor timber joists



Photograph 10 – Diagonal cracking over doorway



Photograph 11 – Vertical cracking over ground floor doorway



Photograph 12 – Cracking to internal face of external walls



Photograph 13 – Damp areas throughout the property