

STRUCTURAL REPORT IN RESPECT OF:

**SILVER BIRCHES
HERONSGATE
RICKMANSWORTH
WD3 5DN**

ON BEHALF OF: RICHARD WARMAN

MARKS HEELEY LTD

APRIL 2023

The Stables, Cannons Mill Lane, Bishops Stortford, Hertfordshire, CM23 2BN
Tel: 01279 465900 Fax: 01279 465999 general@marksheeley.co.uk

MARKS HEELEY

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1.0 PURPOSE OF REPORT

1.1 We were requested to inspect and report upon the general structural condition of Silver Birches, Herongate, WD3 5DN.

2.0 DESCRIPTION OF PROPERTY

2.1 This is a 2 storey 2 bedroom detached residential dwelling, believed to have been constructed in the 1940s.

2.2 Construction is with solid brick external walls, supporting a suspended first floor and a timber formed pitched roof.



3.0 INSPECTION

3.1 See Appendix 'A' for Record Photographs of our inspection, carried out on 6 April 2023, and Appendix 'B' for locations of photographs.

3.2 Our inspection was mainly visual with no opening up works attempted.

3.3 EXTERNAL

We identified the following defects:

3.3.1. Extensive decay to all timber elements, see photographs 5, 6 and 9.

3.3.2. Eroded/broken roof tiling, see photographs 7 and 8.

3.3.3. Corroded/defective soil stacks, see photograph 10.

3.3.4. Defective single-glazed windows, see photograph 12.

3.3.5. Defective rainwater goods, see photograph 15.

3.3.6. Wall cracks in external walls, see photographs 13 and 14.

3.3.7. Chimney stack, open mortar joints, see photograph 11.

3.3.8. Remove dangerous concrete canopy, see photograph 4.

3.4 INTERNAL

We identified the following defects:

3.4.1. Evidence of defective damp course, see photographs 16 and 17.

3.4.2. Cracks to ceilings at the centres of floor spans. Ceilings bowed and out of level, see photograph 20.

3.4.3. Roof timbers showing early signs of decay, see photographs 21 and 23.

3.4.4. Ground floor timber boarding out of level, reflecting damp penetration from below.

3.4.5. No evidence of any damp course, see photograph 24. Thresholds all level.

4.0 DISCUSSION

- 4.1 We have found numerous defects to the property.
- 4.2 Note the property covers a footprint of approximately 7.5m x 7.5m.
- 4.3 Each of the defects found will attract significant costs to remediate.
- 4.4 With solid brick external walls and there being a general lack of any insulation to the property, it would clearly not satisfy any of the thermal characteristics required by Building Regulations that have been in force from the 1950s onwards.

5.0 BUDGET COSTS

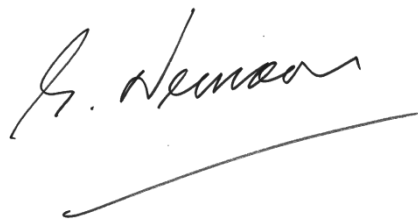
- 5.1 We have given, below, a brief summary of the extent of remedial works required, and budget costs for each.

Element	Budget
5.1.1. Replace all timber elements external; fascia's, boarding, etc.	£25,000
5.1.2. Replace all defective windows/doors	£35,000
5.1.3. Replace all rainwater good and stacks	£25,000
5.1.4. Replace all roof riling and treat	£35,000
5.1.5. Strengthen and treat all roof timbers	£25,000
5.1.6. Insulate all external walls	£40,000
5.1.7. Dry-line internal walls	£35,000
5.1.8. Provide new damp course	£30,000
5.1.9. Remove ground slab and introduce damp membrane, replace slab	£35,000
5.1.10. Reduce all external levels, new paths, etc.	£25,000
5.1.11. Strengthen defective timber floor joists	£20,000
Budget Total	£333,000

6.0 CONCLUSION / RECOMMENDATIONS


- 6.1 As noted, the buildings footprint is around 7.5m x 7.5m, and providing approximately 85m², typical rebuild costs of £1,800 per m², would equate to a total of £153,000.
- 6.2 We would, considering the extent of remedial works required to make the property structurally satisfactory, recommend rebuild options.

Author:



Graham Newman
IEng, AMIStructE

Co-Author/Checked:



Richard Hope
BEng (Hons), CEng, MICE

APPENDIX A

RECORD PHOTOGRAPHS



1 – FRONT ELEVATION



2 – REAR/SIDE ELEVATION



3 – SIDE ELEVATION



4 – DEFECTIVE CANOPY



5 – DEFECTIVE TIMBER



6 – DEFECTIVE TIMBER



7 – BROKEN/ERODED TILES



8 – ROOF DEFECTIVE



9 – DECAYED TIMBER



10 – CORRODED SOIL STACKS



11 – ERODED BRICK JOINTS



12 – DEFECTIVE WINDOWS



13 – WALL CRACKING



14 – WALL CRACKING



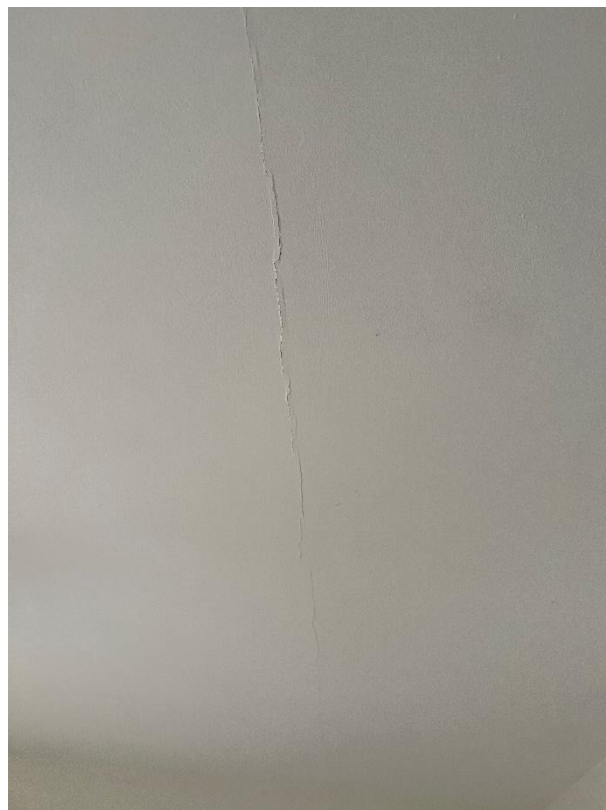
15 – DEFECTIVE RAINWATER GOODS



16 – INTERNAL DAMP PENETRATION



17 – INTERNAL DAMP PENETRATION



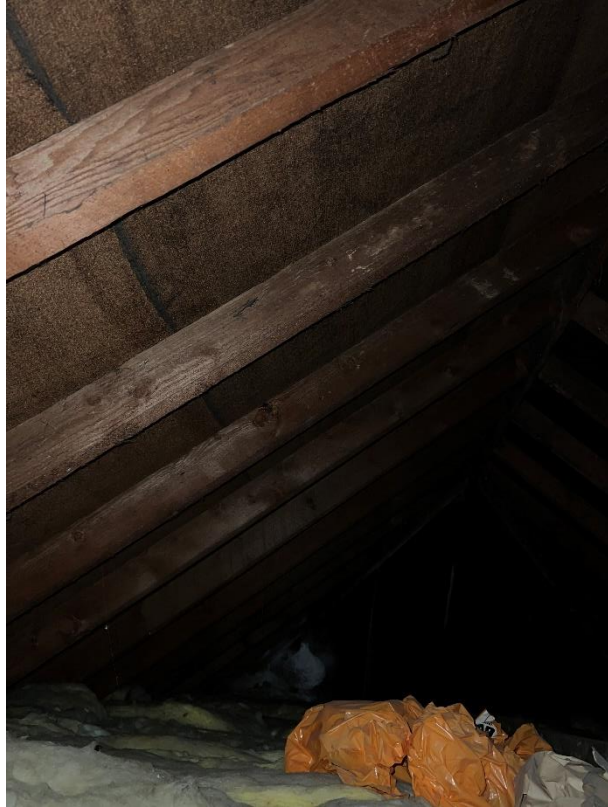
18 – CEILING CRACKS



19 – ROOF TIMBERS EARLY SIGNS OF DECAYS



20 – DEFLECTED CEILING



21 – ROOF TIMBERS EARLY SIGNS OF DECAYS



22 – UNDERSIZED RAFTERS



23 – ROOF TIMBERS EARLY SIGNS OF DECAYS



24 – LEVEL THRESHOLD NO D.P.C.



25 - KITCHEN



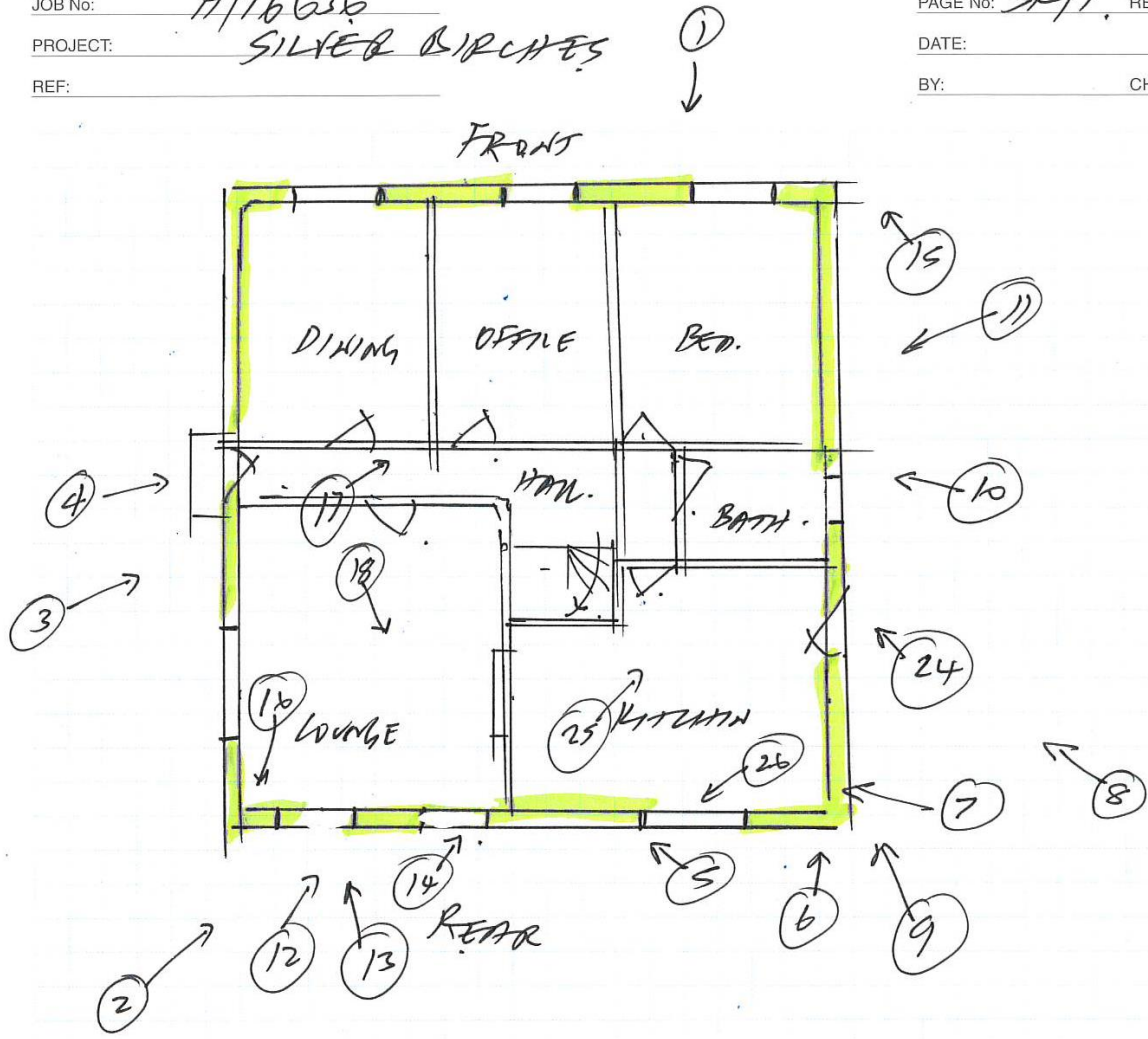
26 - WINDOWS

APPENDIX B

PHOTOGRAPH LOCATIONS

JOB No: H/16636
 PROJECT: SILVER BIRCHES
 REF: _____

PAGE No: 54/1 REV: _____
 DATE: _____
 BY: _____ CHKD: _____



GROUND FLOOR PLAN

(19 TO 23 AT 1ST FLOOR.)