

**Specialist Report on
Condition of Remaining Timbers of:**

**Lower Lighthouse,
Skellig Michael,
Co. Kerry.**



Inspection by Jerry Galvin – 19/08/2021.

Report by Jerry Galvin – 20/08/2021.



Kilcummin Rd,
Deerpark, Killarney, Kerry.
V93 E290
☎: +353 87 256 8839
✉: info@glen-wood.com

Registered No : 8236554H
Directors : J. F. Galvin
N. M. Galvin

20th August 2021.

Fergus McCormick
Senior Architect
Office of Public Works
fergus.mccormick@opw.ie

File Ref.: 4612/G

Re: Lower Lighthouse, Skellig Michael, Co. Kerry.

Dear Fergus,

A survey of the above was carried out on 19th August 2021.

The purpose of the inspection was to carry out an appraisal on the condition of the existing remaining timbers – mainly suspended timber floors at first-floor level.

Some opening up had been carried out previously, and many of the ground-floor ceilings had been removed.

Suspended Timber Floors – 1st-Floor Level

The suspended timber floors consist of timber joists spanning from front to rear. The joist ends are embedded in the masonry and seated on a horizontal timber wall plate directly beneath – **pic. no 1**.

It is obvious that the masonry has been subject to significant damp ingress over a prolonged period. Any timbers embedded in such masonry will be subject to deterioration.

Where a number of pockets have been formed between joist ends previously, joist ends were found to be totally defective – **pic. no 2**. In most instances, ends of joists are totally defective – **pic. no 3**.

The wall plate beneath can also be deemed totally defective in all instances – **pic. no 4 & 5**.

In some instances, significant notching was carried out to the top of joists – **pic. no 6.**

It is obvious that, over the years, additional timbers have been placed alongside the existing joists, though in most instances, such timbers were not extended into the walls – **pic. nos. 7 & 8.**

In my opinion, all existing first-floor joists, wall plates, etc. are beyond practical repair and should be fully removed and replaced. When removing such timbers, care should be taken to ensure that all fragments of defective timbers, fine debris, etc. is meticulously removed from the sockets/pockets formed in walls by their removal – **pic. nos. 9 & 10.** Care must also be taken that the full extent of defective wall plates, etc. are fully removed – **pic. no 11.**

Upon removal of the timber, and prior to being built up (in new masonry) pockets/sockets formed in the masonry by the removal of such timbers should be meticulously cleaned out (hoovered) and sterilised with a masonry fungicide prior to being built up in new masonry. This can be carried out on a DIY basis by the mason using a *Knapsac*-type sprayer with a proprietary masonry fungicide, e.g., *Trisol 23* or similar approved. The fungicide can be supplied by our company in a concentrated form.

Lintels

Over a period of time, it is obvious that many of the lintels have been replaced in concrete – **pic. nos. 12 & 13.** Many of these are in poor condition due to corrosion of the steel reinforcement within – **pic. no 14** and will require replacement.

A number of timber lintels remain – **pic. nos. 15, 16 & 17** and these will require complete removal and replacement.

Bond Timbers

A number of embedded bond timbers remain in the masonry in a number of locations – **pic. nos. 18, 19 – 25.**

Further embedded timber grounds were noted in window reveals – **pic. nos. 26 – 30,** which will require removal and replacement.

Timber wall plugs were found in many joints – **pic. nos. 31 – 34 & 35.**

It is essential that all remaining timber grounds, bond timbers, timber plugs, etc. are meticulously removed from the masonry.

Much of the internal plaster has been removed. This will expedite the drying out of the masonry and also fully reveals any concealed embedded timbers within the walls. It is essential, therefore, that any remaining internal plaster is removed, to ensure that all such timbers are identified.

Windows

The windows of the main house are of the timber sash type. These will require a thorough inspection by a sash-window repair specialist.

In most instances, the base plate seated on the sill was found to be very damp and soft as a result – **pic. no 36**. In most cases, the bases of frames are embedded in masonry internally – **pic. nos. 37, 38 & 39**, which causes the base frame to deteriorate.

Replacement windows are often simply seated on top of the existing sill – **pic. no 40**. Significant ingress of rainwater occurs at this junction, where no proper upstand exists, and the existence and integrity of an upstand in the sill is of great significance.

Upstands can be retrospectively installed on existing sills where sills are being retained and where no upstand exists, and a further timber strip should exist at the base plate of the window to cover the upstand from externally.

Windows should be embedded in a bedding mastic at the base when being installed.

As already mentioned, the windows will require removal and restoration by a sash-window repair specialist – **pic. nos. 41 – 48**.

External doors will also require a thorough inspection and refurbishment, particularly base details of door frames, etc. – **pic. no 49**.

Dry Rot

The deterioration noted in all cases is due to wet rot. No visible evidence of dry rot fungus was noted.

The meticulous removal of defective timbers, drying out of the masonry, and sterilisation of pockets will all contribute to the prevention of any future dry rot infestation.

Ground Floors

The ground floors of the building are of concrete construction. There is no visible evidence of a membrane or insulation – **pic. no 50** and owing to the age of the floors, it is unlikely that any exists.

Ideally, therefore, all floors should be removed and replaced incorporating a damp-proof membrane/radon barrier and insulation.

Stairway

The stairway is relatively new – **pic. no 51** and will be suitable for re-use, if deemed suitable otherwise.

Finally, if you require any further information on any of the above, please do not hesitate to contact me.

Yours Sincerely



Jerry Galvin


GLEN WOOD
PRESERVATION LTD.

☎: +353 87 256 8839

✉: info@glen-wood.com