Refurbishment and change of use of Pilcot Mill to provide ancillary rooms in associated use with the main house, retaining the heritage assets and mill's working mechanisms. Ground floor comprises a boot room, utility space and cloakroom. The first floor to comprise a Living space and home office. The installation of a new staircase serving all floors including a new attic guest suite.





### **Owners of Pilcot Mill and Pilcot Mill House:**

Mark and Lorraine Fullbrook are owners of Pilcot Mill House and Pilcot Mill and they intend to refurbish both buildings. This design statement deals solely with the Mill building. The hero of Pilcot Mill will be the mill and it's machinery. They intend to promote everything it has going for it; repairing the machinery to a standard that it can stand for hundreds more years; Minimum of change to show the beauty of the mill and its machinery; for it to be again a living breathing building that maintains and/or re-uses existing fabrics and will be a lovely garden office and occasional guest room used in conjunction with the main house. The refurbishment will be extensive including the replacement of the timber constructed ground floor with a stone clad insulated concrete floor with under floor heating and designed to mitigate against flooding.

# The Building:

Pilcot Mill is a Grade II listed Corn Mill that was decommissioned in 1928. The Mill building has been partially restored by the former owner and it has attracted the enthusiastic working assistance of the local Hampshire Mill Group (HMG) over many years. HMG are in current discussions with the owners and their agent Architect, Kim Strasman and they have contributed to the proposed design and produced their own documents for appraisal of Hart District Council in a Pre-Application Enquiry.

The applicant has received a refurbishment proposal from a specialist conservation contractor, G & H Spender Engineering, whose proposals documents are included as part of this planning application. The specialist contractor was recommended to the applicant by the Hampshire Mills Group because they have undertaken a number of similar projects, the most notable, a recently refurbished working mill, the Whitchurch. Silk Mill. The contractor will be employed to refurbish the workings of the mill in accordance with their proposal including the rebuilding of the water wheel, to be fitted with new authentic buckets and equipped with a new laminated timber axle, to be weatherstripped where it passes through the

external wall. The building and mill workings are mostly intact, and the historic machinery will be refurbished and incorporated into the new layout as exhibitions pieces.

SOUTH EAST RIVERS TRUST has also contributed to the proposed design and care of the Hart River that passes by. They have produced a report to accompany the submission entitled "Pilcot Mill River Restoration project – Land Information Pack. This work will be undertaken during or following the overall building project.

# Design Statement Refurbishment of Pilcot Mill, Dogmersfield, Hampshire. RG27 8SX

## **Use and Amount of Development:**

The external appearance of the existing building will remain intact in its present form with the brickwork and weatherboarding retained and repaired or replaced as necessary, like for like. There will be alterations to the window position on the ground floor of the northern elevation to accommodate a new staircase that runs in straight flights over two floors.

The window and door openings will be retained, and the existing single glazed windows and wooden doors removed and replaced with grey or white timber, double glazed windows and doors, purpose made by Bereco, factory finished in their heritage slender section heritage range. (Or similar approved specialist supplier) The door leading to the Wier on the east elevation will be removed and replaced with a fixed toughened glass vertical window split over two floors. The first-floor external stable door on the west elevation will be retained internally as a shutter and the opening similarly fitted with a fixed toughened glass vertical window.

The building will be insulated from within and will be arranged over three floors, each floor on the upper levels accessed via a new staircase located at the northern end of the building. The upper-most third floor will be removed entirely because of the restricted head height and a new attic guest bedroom installed at the level of the existing second floor, including a small ensuite shower room. Roof windows will be required on the eastern roof slope to daylight and ventilate this area. Roof windows in the ensuite shower room help provide adequate head height above the sanitary fittings.

Section drawings through the existing building indicate the restricted head heights on each floor. The new stair works with only inches to spare of 1.95 and 2 metre clear head height to satisfy current building regulations. (The current steps and ladders would be deemed illegal by modern standards, but these may be retained as a historical record) In some areas of the building there will be a compromised head height below 2 metres.

## Layout

The owners have asked for the retention of the current open plan arrangement on each floor. The uppermost second floor story will comprise a guest bedroom with ensuite shower room and the first-floor room will comprise a living room, doubling up as a home office / study for daytime use. The ground floor is accessed through the existing main doorway and will be used as a reception and coffee space with a new cloakroom containing a toilet and basin.

The pre-application enquiry requested the involvement of building control at Hart District Council for proposed design of the general Access as defined in approved document M and for means of escape in case of fire as defined in approved document B1.

The ground floor cloakroom is designed in accordance with minimum standard dimensions for cloakrooms and sanitary facilities relating to Access option M4(1)

The existing building having an historic and architectural merit of open plan will be used in a modern context of residential use in association with the main house. The council were asked to consider approved document B1 clauses 2.21 to 2.23 and offer suggestions for mitigation measures in the absence of having a protected route to the exterior of the building from the uppermost story. It was

agreed the clauses would not apply because the height between ground floor and attic story measures less than 4.5 metres.

#### Scale

There is no alteration to the scale of the existing building except where the overall roof height will be increased by 150mm (six inches) The existing roof tiles will be removed and set aside for reuse. The roof timbers will be repaired and strengthened where necessary and new rigid insulation will be mounted above and between the existing timbers forming a warm roof using new tannalised battens and counterbattens and breather membrane. The roof structure will be covered with matching red salvaged plain clay peg tiles and the timbers exposed from the underside. The existing head heights in the building are challenging and the new staircase has been designed with limited tolerances and where the minimum head height of 1950mm could be breached in specific areas. (Refer to Section XX) A structural engineers design will be required in due course to strengthen the existing timber structure and ensure safe passage of the stairway.





### **Appearance**

The applicants are planning to conserve as much of the existing structure as possible and install contemporary design where whole elements are to be replaced. See above, their selection of a cantilevering stairway in straight flights and using honey-coloured limestone slabs where the entire timber ground floor structure will be replaced with an insulated concrete floor with underfloor heating, designed to withstand flooding. The existing solid brick flooring at ground floor level will be retained.

The applicants propose the use of toughened and laminated structural glass flooring to provide a clear view of the important working parts of the mill; over the pit wheel for example and flooring above the short stair rising from ground floor to the penstock door.

The external appearance of the building will not change because all insulation will be installed from within. The weatherboarding will be removed and set aside where appropriate and replaced like for like where decayed and not fit for reuse. The timber frame will be repaired and clad with new sheathing plywood, breather membrane, new battens, counter- battens, multifoil insulation and the weatherboard re-clad externally. Exterior brickwork to be repointed with lime-based mortar and treated with water-repellent externally.

The timber windows will be replaced with double glazed, grey or white bereco heritage range timber windows, purpose made to fit each existing window opening.





Examples of toughened and laminated structural glass flooring

# Landscaping

The external landscaping will follow advice of the landowner's information pack produced for Pilcot Mill by the SOUTH EAST RIVERS TRUST

Copy of this document will be submitted with the pre-application enquiry.

#### **Access**

Access will be through the existing front door. Flood mitigation on the ground floor is incorporated in the design - all electrical points are at least three feet above floor level - the downstairs cloak room will incorporate a one way soak away gully in the floor, and there will be no fitted furniture on the ground floor, other than the toilet, allowing easy removal to higher floor if risk of flooding.



View of the Mill, Upstream from the South



The Stone Floor (First floor) – The Hopper, Crown wheel and Mainshaft will be retained as part of the refurbishment plan. These elements will be cleaned, repaired as necessary and painted in dark grey. Note the sack flaps, bottom left of this photo to be retained.



View of the Mill, Downstream from the North



The Damsel, Horse, and Shoe containing the Millstones. This is where the grain would have been fed from a hopper into the shoe, which is vibrated by the damsel, shaking grain into the centre of the runner stone. - All to be retained and refurbished.



The Ancillary drives over the Crown wheel will be cleaned, repaired as necessary and painted in dark grey



Ancillary drive- showing the millers hand engaging the drive. The ancillary drives were an important part of the mechanism to operate the sack hoist, pulling sacks from the spout floor (ground floor) to the bin floor (the second floor)

Another ancillary drive would operate the grain scourer and aspirator on the same floor as this – the stone floor (first floor of the mill)



A single bed stone and runner stone will be retained as part of the refurbishment. The remaining mill stones will be removed to architectural salvage, unless a pragmatic use is found internally.



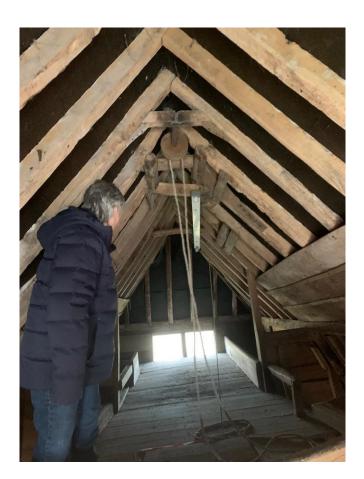
The loading doorway on the stone floor will be retained. The stable door arrangement will be refurbished and pinned back to the wall and used as an internal working shutter. The opening will be infilled with fixed double glazing to comprise 6mm toughened and laminated glass, to conform to current building regulations standard.



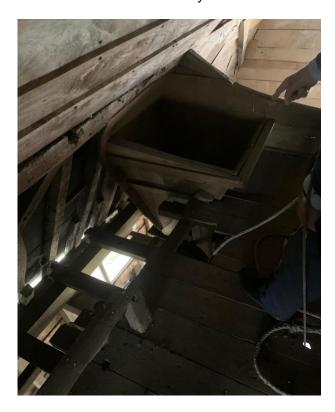
David Plunkett of Hampshire Mills Group (HMG) standing by the post attached to the flour dresser. The dresser separates the whole meal into bran and unbleached white flour.



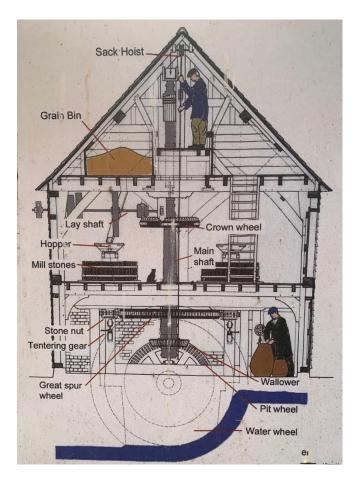
The dresser will be retained in the refurbishment plans and relocated to allow passage of the new staircase



The Hoist pulleys and mechanism seen here with the owner of the Mill will be retained as part of the refurbishment plans. However, the upper floor of the bin floor will be removed together with some of the grain bins to facilitate the new layout. Hoppers will be retained where possible and an illustrative graphic with technical description of the bin floor mounted nearby on the wall.



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The illustrative graphic above on site explains the functioning of the former mill.

### Ground Floor of the Mill:



The Great spur wheel made entirely of wood is located on the ground floor. This mechanism together with its stone nut, tentering gear, wallower and pit wheel will be retained. These interacting elements will be cleaned, repaired as necessary and painted dark grey in the refurbishment plans.



The Pit wheel seen here will be retained and the water shaft linking to the Water wheel outside cut back and retained as the timber shaft internally. The opening seen here will be bricked up and the new wall will receive the end of the wooden shaft internally and will receive a new cast iron water shaft externally. The new cast iron water shaft could be motorised externally to turn the water wheel which will become principal external feature of the refurbished building



The existing water wheel will be refurbished over time and fitted with 32 new water buckets painted dark grey and fabricated to resemble the original cast iron buckets.

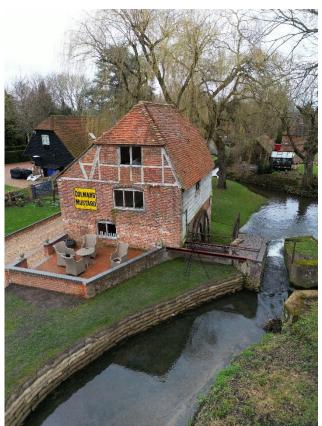


An original water wheel bucket is stored on the ground floor. A replica of this bucket has been made up in cast iron and is currently stored in the building.



Blacksmiths tools will be removed to salvage. General items with no historic value and other unrelated items will be removed from the building.

The Landowner Information Pack of Pilcot Mill produced by the SOUTH EAST RIVERS TRUST describes the proposed work to the weir and river banks. They propose installation of a fish pass within the second channel seen here and the narrowing of the river to improve flow.



The refurbished water wheel will become a main external feature of the refurbished building.



