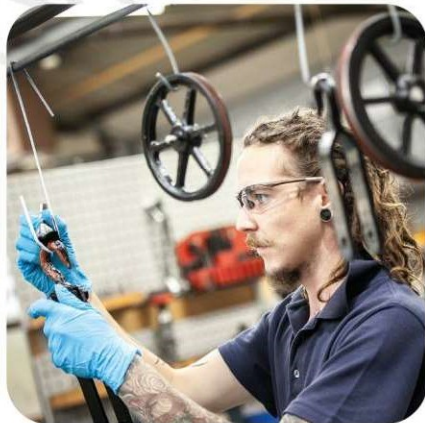
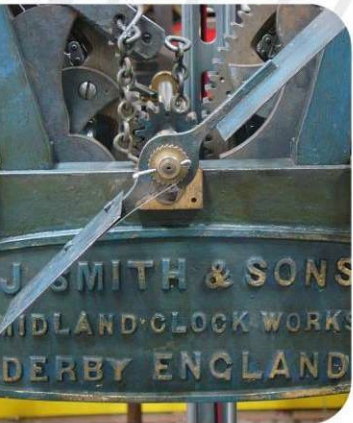
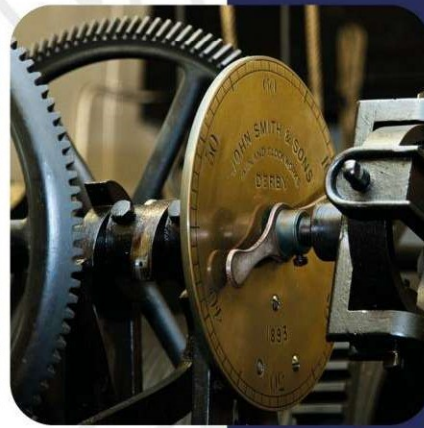


Proposal



Proposal for
Machynlleth Town Clock

Prepared by
Sam Welton

Date
17 January 2023

Our Ref: H/16662/SW
Date: 17/01/2023

Machynlleth Town Council
town-clerk@machynlleth-tc.gov.uk

Dear Sir/Madam,

Machynlleth: Town Clock Tower – Clock Removal & Rebuild

Following our regional engineer Brian Parry's recent clockmakers report on the condition of the clock and tower, I am pleased to provide our proposal and quotation for removing the clock system for a full overhaul to allow work to be carried out on the structure of the tower, along with the further works to the bell hammers, angle levers and dialworks.

Brian has been looking after this clock for many years, but on his most recent visit he raised several concerns relating to the safe access to full clock system due to worsening damp in the tower. The clock itself is has also been affected by these poor conditions and is beginning to rust despite regular maintenance. Action must be taken before the clock develops any serious problems and the tower falls into a state of disrepair. You will find further details and photographs in the proposal below.

We trust it meets with your expectations but please do not hesitate to contact me if you require clarification or further assistance.

Kind regards

Sam Welton

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1. Proposal

This large flatbed striking & quarter chiming clock was originally manufactured by J B Joyce & Co. in 1876. Since then, it has been converted to motor driven operation with two large motors on the strike & chime, plus a synchronous movement driving the timekeeping train. Just over a year ago, in November 2019, the two large motors were replaced and the strike & chimes converted to electronic control using one of our C270 controller units. In order to ensure that these new motors last as long as possible, as well as to maintain the condition of the mechanical clock itself, the condition of the tower must be addressed.



As detailed in Brian's clockmakers report, the tower is suffering from worsening damp caused by unglazed holes in the stonework letting in the weather. As you can see from the photographs below, the water ingress has already started to have a detrimental affect on the clock and timber beams which support parts of the peripheral clock system. The tower as a whole should be assessed by qualified professionals, made waterproof, and any rotten timbers replaced.



We propose to attend on site, carefully dismantle the clock system and return it to our workshop for a thorough strip, clean, and rebuild. This would include the full mechanical flatbed portion of the clock with both motors and the synchronous movement, all electronic equipment related to the clock, the lead off, con-rods, bevel sets and dialworks, bell hammers and angle levers. In our workshop the clock will be dismantled to its component parts, cleaned, and each part restored to good condition. Then lubricated, rebuilt, and put on test.

Whilst the clock is away, work can be done to restore the tower to a suitable condition. Once this process is complete the newly refurbished clock can be returned, carefully lifted back into the tower, and installed back in position. All electronic and peripheral clock equipment would be refitted, set up and tested in situ to ensure continuous reliable operation.

