BETHERSDEN. ST MARGARET

STATEMENT OF SIGNIFICANCE

St Margaret's Church is currently Listed Grade I. The building consists of a nave, north aisle, south aisle, north chapel, south chapel, chancel and west tower. The nave and aisles are of the 14th century and the chancel, chapels and tower are of the 15th century. There was a restoration in 1873.

The church is approached through the south porch, which is a simple structure with a 19th century roof and older tiled floor. The porch leads to a point near to the west end of the south aisle. To the west of the entrance, the area is clear of pews and floored with striking coloured tiles of the 19th century. The font is located in this area and, by the walls, fitted cupboards and bookcase units have been installed. The open space extends into the west end of the nave where simple wooden benches provide an area of flexible seating. The corresponding space at the west end of the north aisle is occupied by the new vestry for the incumbent and a kitchen facility. The tower is separated from the nave by a lofty arch, which has been infilled with a timber and glazed screen. The lower part of the tower has been converted into a simple room, now used as a choir vestry, the ceiling of which provides the floor of the ringing chamber. Higher in the tower is to be found a turret clock, the face of which is visible on the east side of the tower. It now has an auto winding device to minimise the need for human intervention and to preserve the mechanism. It is the only public clock in the village and serves the needs of residents and visitors alike. The old vestry, converted in 2015 to a lavatory and a cleaning cupboard, and which is of 19th century origin, is entered through a door in the north aisle next to the kitchen facility. Moving eastwards, the nave and aisles have moveable pews, which in 2007 replaced fixed Victorian pews on platforms, both of which had been extensively damaged by beetle and rot. The chancel is furnished with clergy and choir stalls. The sanctuary is furnished with an altar, clergy chairs, credence table and timber rails. There is an early 19th century stone reredos with painted texts of the Lord's Prayer and creed. The north chapel is occupied almost entirely by the organ with a small space at the west end used for the storage of ecclesiastical and secular records, which go back as far as 1515. The south chapel, or Lady Chapel, is furnished with a small altar, clergy stall, moveable rails and simple wooden chairs. This chapel has been fitted with a light blue carpet.

Some fragments of 15th century stained glass have been incorporated into the upper parts of three of the windows. The roofs and ceilings were heavily restored in the 19th century restoration. The floor finish in the building is a mixture of coloured tiles, memorial slabs and stone. Coloured marble has been used to finish the floor in the sanctuary. The windows in the building contain a mixture of stained glass, coloured quarries and clear quarries. A particularly interesting feature is a new millennium window installed in the north aisle. There are a number of wall-mounted monuments and memorials.

Notwithstanding its medieval origins, particularly evident in the stonework of the arcades and the windows, the restoration of the 19th century has had a strong impact on its character.

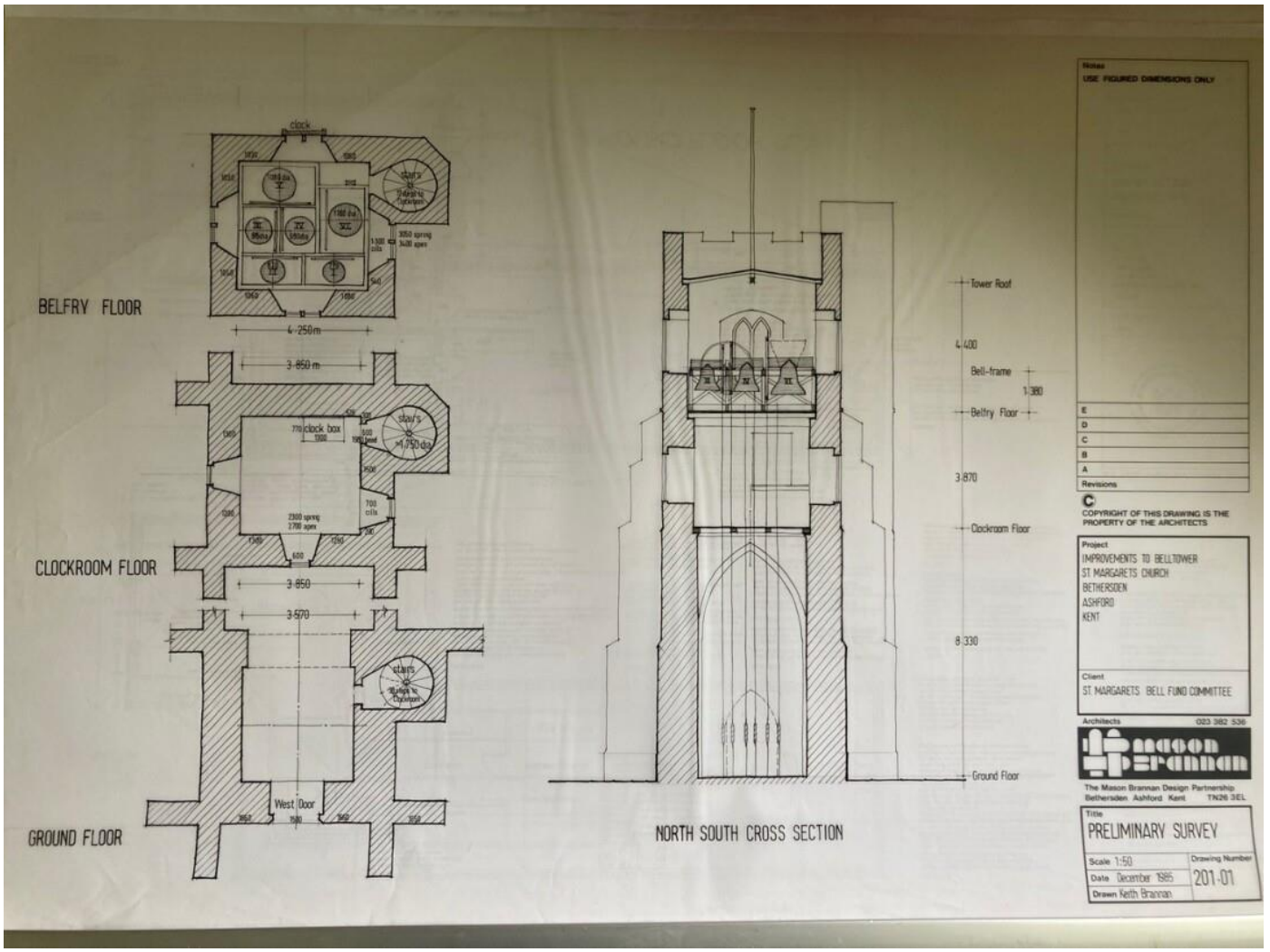
BETHERSDEN St MARGARET- STATEMENT OF NEED

There have been bells in Bethersden since a least 1335, the date of the oldest bell in the existing ring. There is a record of 5 bells in the tower in 1552. Since then, there have been various recastings and repairs. The frame of 1759, much modified over the years, is now, in conjunction with the worn out fittings, making this heavy ring of bells, difficult to ring. To keep the tradition of English bellringing, it is proposed to carryout a complete rehang of the bells in a new cast iron and steel frame to replace the existing timber frame which has severe decay in many critical places such that, even if repairs are done at this stage, it is likely to fail in a short time. The view is that replacement will give the parish best value for money in that further major expense will not be required for the foreseeable future.

The specification is broadly as that provided by Whites of Appleton, a well-established company. The only alteration is that tuning is not to be carried out as it is felt that the tonal qualities of the bells is somewhat unique and should be preserved. The one exception being to tune the 3rd bell as it's principal note is out. Although the 1335 bell has not been tuned in its life, it has unfortunately, had its canons removed, as have all the bells, in previous partial restorations.

These proposed works should see the bells in good order such that it will be possible to teach new ringers and for them to be rung more easily by ringers of all capabilities.

Tower plan



BELFRY FLOOR
CLOCKROOM FLOOR
GROUND FLOOR
NORTH SOUTH CROSS SECTION
Tower Roof
Bell-frame
Belfry Floor
Clockroom Floor
Ground Floor
West Door
Notes
USE FIGURED DIMENSIONS ONLY
Revisions
COPYRIGHT OF THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS
Project
IMPROVEMENTS TO BELLTOWER
ST MARGARETS CHURCH
BETHERSDEN
ASHFORD
KENT
Client
ST MARGARETS BELL FUND COMMITTEE
Architects
023 382 536
The Mason Brannan Design Partnership
Bethersden Ashford Kent TN26 3EL
Title
PRELIMINARY SURVEY
Scale 1:50
Date December 1985
Drawn Keith Brannan
Drawing Number
201-01

THE BELL INSTALLATION AT THE CHURCH OF SAINT MARGARET, BETHERSDEN, KENT

22nd March 2022



ALL RECOMMENDATIONS GIVEN IN THIS REPORT ADHERE TO THE 1993 CODE OF PRACTICE FOR THE CONSERVATION OF CHURCH BELLS AND BELL FRAMES ISSUED BY THE CHURCH BUILDINGS COUNCIL

A FACULTY WILL BE REQUIRED BEFORE ANY WORKS COMMENCE

WHITES OF APPLETON. CHURCH BELLHANGERS,

69 EATON RD, APPLETON, ABINGDON, OXON. OX13 5JJ

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The western tower contains a ring of six bells with a tenor pitch of F minus $^{18}/_{100}$ of a semitone, detail as follows:

BELL	DIAMETER	DATE	FOUNDER
Tenor	3'- 8"	1630	Joseph Hatch
5th	3'- 5"	1662	William Hatch
4th	3'- 2$^1/_2$"	C14th	Peter de Weston
3rd	2'- 11"	1896	Mears & Stainbank
2nd	2'- 8$^1/_2$"	1634	Joseph Hatch
Treble	2'- 5$^3/_4$"	1953	Mears & Stainbank

BELLS

The 4th bell is listed in the Church Buildings Council "Schedule of Bells for Preservation" in the Canterbury Diocese.

The canons have been removed from the Tenor, 5th, 4th and 3rd bells. The 3rd retains its "Doncaster" pattern canons or supporting loops. The Treble was cast with a flat crown. The Treble and 3rd bells were cast without cast-in crown staples, but staple roots remain in the other bells. Cast-in crown staples, or their remaining roots, are the principal cause of bells becoming cracked in the crown due to the corroding iron expanding within the brittle bell metal. At the time of inspection, no cracks were identified in the bells with the headstocks in place. The tenor and 5th have multiple holes in their crowns from various hangings, false staples and root removal attempts. Further turning and drilling for new support bolts will weaken the crowns.

The Treble and 3rd bells remain in their original unturned positions. The 2nd has been eighth-turned and the remainder quarter-turned. The bells are worn and indented in their soundbows where struck by their respective clappers and require turning.

The Treble and 3rd bells have been machine tuned, although only minimally in the 3rd. The Tenor has been chip-tuned. The 2nd and 5th have been skirted around their lips in attempts to raise their strike notes. The 4th is a maiden casting (i.e. not tuned). With the exception of the Treble, which is true-harmonically tuned, the individual partial tones of the back five bells are somewhat wild and misaligned, the hum partials being very sharp and the prime partials very flat, especially in the 4th. Using the nominal of the tenor as the datum (691hz.) and Just Intonation, the deviation of the nominals of the other bells are such that the 5th is 3.38hz. flat, the 4th 1.75hz. flat, the 3rd 6.17hz. sharp, the 2nd 2.00hz. sharp and the treble 11.33hz. sharp.

The chief partial tones of the six bells are as follows:

BELL	HUM	PRIME	TIERCE	QUINT	NOMINAL	NOTE
	Cycles per second (hz.)	Cycles per second (hz.)	Cycles per second (hz.)	Cycles per second (hz.)	Cycles per second (hz.)	+/- Cents
Tenor	190.5	341	426.5	542.5	691	F(2) -18
5th	205.5	358	471.5	578.5	774	G(2) -21
4th	231.5	380	519.5	656	862	A(2) -35
3rd	273.5	454	574	783	927.5	Bb(2) -8
2nd	276.5	480.5	630.5	776	1038.5	C(3) -12
Treble	291.5	580.5	691.5	916	1163	D(3) -16

BELL FRAME

The bell frame is of oak and thought to date from 1759, having been made by John Foster. It is of a long-headed low-sided design consisting of upper and lower cills with pairs of opposing diagonal braces and double jack braces between.

The foundation of the frame consists of nine oak beams spanning the tower east-west, the ends of which originally rested on timber wall plates set on offsets within the east and west walls. The ends of some of these beams had deteriorated so concrete beams have been set into these offsets in order to better support the original oak beams. Smaller section concrete lintels have been inserted in the north and south wall offsets, as well as some repairs and ties fitted where masonry cracks had developed.

The Tenor, 5th and 3rd swing side-by-side in an east-west direction in the centre of the tower. The Treble and 2nd swing mouth-to-mouth in a north-south direction on the western side of the tower. The 5th swings in a north-south direction in the north-east corner. The bell ropes fall in a clockwise circle.

Strengthening ironwork consists mainly of vertical tie-rods in most of the framesides, although some are missing in the treble, 3rd and 4th pits. There are flat plates on some of the upper cill pit corner joints but these will have limited effect on reducing frame movement.

When the tenor was rung full-circle, horizontal frame movement at top cill level was measured at $^1/_8$" which is enough to affect the "go" of the bells. Vertical movement was approximately $^1/_{16}$" to $^1/_8$". When the 5th bell was rung full-circle, horizontal movement was measured at $^1/_8$".

The condition of the frame is poor in places. The timber has decayed in several areas, notably the lower cills. Despite the number of foundation beams and the concrete beams installed to better support the beam ends, the fact there is still vertical frame movement and dipping is cause for concern. Horizontal movement could be reduced further by fitting some additional vertical ties rods and by fitting corner angle plates in the pit corners, but with the lower cill and foundation in poor condition, this would be for little gain. Installing further support under the frame (e.g. steel beams) will still result in a weak timber part of the foundation and not provide a long-term solution to the decaying structure or a frame that will adequately support full-circle bells to the point where the "go" is acceptable.



A partial view of the bell frame.

BELL FRAME (cont.)



Concrete beam supporting decayed timber beam ends under the bell frame.

RINGING FITTINGS

These comprise of the following:

Headstocks & Bearings

Elm headstocks are fitted to all six bells. All have loose corroded plate gudgeons (these were tightened by others during our inspection). All headstocks have twisted, taking the gudgeons out of alignment. All show signs of wood-boring insects. These headstocks have been adapted from when independent staple units were fitted and when the treble was recast with a flat crown.

Single-row ball bearing units are fitted. These are of an obsolete design with no end-float facility for taking up frame-movement, which allows the gudgeons to be pinched in the frame, affecting the "go" of the bells.

Supporting Ironwork

All but the 3rd are each supported by four bolts through the crown. The 3rd bell is supported by V-bolts and copses. All ironwork is heavily corroded and loose, although this was tightened by others at the time of the inspection.

Clappers & Staples

The clappers of the tenor and 5th are of ductile iron and the remainder are of wrought iron, all of which are in a very poor state of repair and have excessive lateral side-play due to worn bushes.

The clappers are suspended from independent cast iron staple units. The clapper pins are worn within the castings, again allowing excessive lateral side-play.

RINGING FITTINGS (cont.)

Wheels

These are of traditional spoking, consisting of oak spokes, and ash and elm rims. They are in fair to poor condition; the shrouding nails having corroded and some timber being damaged by wood-boring insects. Some of the spoke joints are loose.

Each wheel is fitted with a pair of corroded iron rod braces.

Pulleys

These consist of hardwood cages housing hardwood sheaves revolving on plain metal spindles with grease cap units. All are worn.

Stays, Sliders & Runnerboards

The stays are of ash and of the curved design. The sliders are also of curved ash, these being notably worn at the pivots.

The runnerboards have worn slots, allowing the sliders to dip.

Bell Ropes

The bell ropes are all-flax and in fair condition.

Clock/Ellacombe Hammers

A clock hammer is fitted to the tenor bell. There is a set of disused Ellacombe chiming hammers.



The tenor bell with headstock and support bolts.

TOWER

The western tower is of flint and stone, and consists of four levels:

- Ground floor vestry some 8'- 0" high.
- First floor ringing chamber with rope guides some 18'- 2" high.
- Second floor clock chamber with rope chutes some 12'- 7" high.
- Third floor bell chamber some 14'- 5" high.

Access to the ringing chamber is by way of a timber staircase. Access to the other upper levels is by way of a stone spiral staircase in the south-east corner.

There are no bell trap-ways in place.

There is insufficient electric lighting in the upper levels of the tower.

CONCLUSIONS

The bells are in a sound condition, but the crowns of the tenor and 5th have multiple holes drilled in them. All six bells require turning, and in order to do this, additional holes for the bell support bolts will need to be drilled. The tenor and 5th bells will therefore have to be specialist weld-repaired to fill and make good these multiple holes and to restore the strength and integrity of the castings in preparation for new support bolt holes being drilled in their newly turned positions. The clapper indentations could also be built back up and filled whilst undergoing this process, to prolong the useful lives of these two bells. It would be prudent to also remove any remains of the iron cast-in crown staple roots to relieve stress and reduce the chances of the bells becoming cracked in the crown. Tonally, the ring as a whole is poor and we recommend that the opportunity is taken to tune the bells whilst they are out of the tower for restoration.

We are very much of the opinion that the bell frame is in such poor condition that it is no longer fit for purpose. Due to the amount of rot and damage, we would not recommend restoration and repair as this would be an uneconomical and unviable long-term approach. Any sections that are worthy of retention should be for display examples only and could be placed either in the church or the intermediate chamber of the tower. We recommend a new metal bell frame is installed, using cast iron framesides mounted on a steel grillage foundation, galvanised to inhibit corrosion. An alternative would be to leave the existing frame in-situ, relocate the clock to the bell chamber (with suitable protection) and install a new frame in the clock chamber, ensuring an additional floor is fitted in the base of the bell frame to create an essential sound-void.

The existing fittings have well outlived their useful lives and should be replaced with modern design fittings of suitable leading dimensions and to fit the new bell frame.

RECOMMENDATIONS

TOWER

Electric lighting (including emergency lighting) should be installed at all levels of the tower for safety reasons.

Trapways should be constructed or prepared for use in all floors to enable the bells, fittings and framework to be removed and installed within the tower.

The roof/lifting beams should be approved for lifting purposes by a structural engineer. Alternatively, we recommend the installation of galvanised steel lifting beams above the existing bell installation.

BELLS

The existing centre holes should be enlarged to allow clapper adjustment.

The remains of the cast-in crown staple root iron should be removed to relieve stress and reduce the chances of the bells becoming cracked in the crown.

The tenor and 5th bells should be specialist weld-repaired in the crowns to fill the multiple holes and restore the strength and integrity of the crowns in readiness for turning, also building up and filling the clapper indentations.

The canons should be carefully removed from the crown of the 3rd bell.

Resin pads should be cast on the crowns of all but the treble bell ready to receive modern headstocks.

The bells should be tuned to bring the ring as a whole into tune and the somewhat wild partial tones into better alignment. The "listed" 4th bell may be left uncut if permission is not granted to tune this bell.

When the bells are rehung, they should be balanced, centred and turned to present unworn surfaces to the blows of their respective clappers.

BELL FRAME

Construct a new bell frame for **six** bells on one level, either following the removal of the existing bell frame or in the existing clock chamber, using heavy **cast-iron** framesides with machined bases & bearing tables. Firmly bolt the framesides to a heavy galvanized steel, horizontally cross-braced grillage consisting of a double set of Universal Beams that span the Tower in both directions.

Have the PCC's appointed Building Contractor firmly build the cleated ends of the grillage beams into the four walls of the tower at the required level; pockets and level padstones having been constructed prior to the installation.

Hot-dip galvanise all bell frame steelwork, also powder-coating the X-ends, and paint the castings with three coats of high quality exterior grade paint.

BELL FRAME (cont.)

Lay treated rebated 75mm timber floorboards in the base of the new bell frame so as to form a new floor and an essential sound-void beneath the bells, the outer ends of the boards adjacent to the walls being supported by two treated timber wall plates secured to the walls with stainless steel resin anchor fixings.



A cast iron bell frame on a galvanised steel grillage.

RINGING FITTINGS

These should be renewed as follows:

Cast iron hollow-section steel headstocks complete with fixed steel gudgeons turned in true alignment, heavy-duty double-row self-aligning ball bearings in totally enclosed dust-proof cast iron housings with end-float facilities and adjustment screws to facilitate the setting and

Galvanised 8.8-grade steel supporting bolts, nuts, lock-nuts and insulation washers.

Independent crown staple units, each with a "maintenance free" stainless steel clapper pin.

Machined and profiled ductile iron clappers, each with a machined Tufnol bush resiliently mounted in Neoprene rubber at its point of swing and a greasing point.

Traditional hardwood wheels each fitted with two steel angle braces and stainless steel rim fixings.

Hardwood pulley units with hard-wearing nylon sheaves each running on two "sealed for life" ball races. These to be of single or double designs in order to achieve the optimum rope circle below.

Slider pivots with facilities to take up wear at the pivot and to prevent the sliders from lifting.

Air-dried straight grained ash stays and sliders and hardwood runner boards.

RINGING FITTINGS (cont.)

Ceiling and floor rope bosses.

A set of best quality flax bellropes with close-woven pure wool sallies and pre-stretched Terylene top ends.

All new timber fittings should be treated with bat-friendly insecticide/preservative and all non-galvanised metal fittings painted with three coats of high quality exterior grade paint.



The proposed headstock design for each of the six bells.

Tel: 01865 862549

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Directors
B. R. WHITE (Managing)
G. J. CLIFTON
J. A. HASELDINE
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Church Bellhangers

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APPLETON, ABINGDON, OXON
OX13 5JJ

e-mail: bells@whitesbellhangers.co.uk

Estimate

22nd September 2022

CHURCH OF SAINT MARGARET, BETHERSDEN, KENT

REHANG THE BELLS IN A NEW CAST IRON BELL FRAME

DISMANTLING

Following a site meeting, discussion and agreement with the Church Authorities, attend the Tower with our Bellhangers and all necessary tools, lifting equipment and protective materials to ensure the floors, trapways and doors are not damaged, providing all required ramps, timber, barriers and pallets.

Using our tested and insured lifting equipment and all required supports, dismantle the six bells and their fittings, lower them to the ground and remove all old fittings and framework from the tower. Leave the framework in the churchyard for sale/disposal by others.

Take detailed measurements of the tower in order to manufacture the new frame and fittings to the correct leading dimensions.

Carefully move the bells to the lorry via the churchyard and transport the bells to our Works (Goods-in-Transit Insurance is provided).

Leave the site cleared of all protective materials and in a clean and orderly manner.

BELLS

Carefully enlarge the existing centre holes in the crowns of the bells to allow clapper adjustment and to remove any remaining cast-in crown staple root iron to relieve stress and reduce the chances of the bells becoming cracked in the crowns (the treble and 3rd do not have cast-in crown staple remains).

Carefully remove the canons from the crown of the 3rd bell.

Transport the tenor and 5th bells to Messrs. Soundweld and specialist weld-repair the crowns to fill the multiple holes and restore the strength and integrity of the crowns in readiness for turning, also building up and filling the clapper indentations. Transport the two bells back to our Works.

Cast resin pads on the crowns of all bells in readiness to receive their new headstocks, also drilling the crowns for the new bell support bolts.

Fill any resultant staple voids with resin and machine flat level internal crown pads to provide the new clapper staple units with a firm seating.

Carefully re-tune the six bells to bring the ring into tune as a complete ring and their partial tones into better alignment. *See "Possible Deductions".*

BELLS (cont.)

Voice the bells to establish their optimum clapper striking positions.

When rehung, balance, centre and turn the bells to present unworn surfaces to the blows of their respective clappers.

BELL FRAME

Construct a new bell frame for six bells on one level in the existing bell chamber using heavy **cast-iron** framesides with machined bases & bearing tables. Firmly bolt the framesides to a heavy galvanized steel, horizontally cross-braced grillage consisting of a double set of Universal Beams that span the tower in both directions.

Hot-dip galvanise all bell frame steelwork, powder-coat the X-ends and paint the frameside castings with three coats of high quality exterior-grade paint.

The PCC's appointed Building Contractor should firmly build the cleated beam ends of the new grillage into all four walls of the tower in the existing bell chamber, having constructed wall pockets and level padstones beforehand.

Lay treated and rebated 75mm timber floorboards in the base of the new bell frame so as to form a new floor and an essential sound-void beneath the bells, the outer ends of the boards adjacent to the walls being supported by two treated timber wall plates secured to the walls with stainless steel resin anchor fixings.

RINGING FITTINGS

Design, manufacture and fit new full-circle ringing fittings to optimum graded leading dimensions, as follows:

- Cast iron hollow-section headstocks with fixed steel gudgeons turned in true alignment, heavy-duty double-row self-aligning ball bearings in totally enclosed dust-proof cast iron housings with end-float facility and adjustment screws to facilitate the setting and maintaining of even clappering.

- 8.8-grade galvanised steel supporting bolts, nuts, locknuts and insulation washers.

- Independent crown staple units, each fitted with a "maintenance free" stainless steel clapper pin. These to be of the adjustable design for the canon-retaining headstocks.

- Machined and profiled ductile iron clappers, each with a machined Tufnol bush resiliently mounted in Neoprene rubber at its point of swing and fitted with a greasing point.

- Traditional hardwood wheels each fitted with two steel angle braces, stainless steel rim screws and galvanised fixings.

- Hardwood pulley units containing hard-wearing nylon sheaves each revolving on twin "sealed for life" ball bearing races. These to be of double or single type designs to obtain the optimum rope circle below.

RINGING FITTINGS (cont.)

- Straight-grain air-dried ash stays and sliders and hardwood runner boards.
- Slider brackets with facilities to take up pivot wear and to prevent the sliders from lifting.
- Near-silent solid machined ceiling and rope guide bosses and timber floor rope bosses.
- A set of best quality flax bell ropes each with a close-woven pure wool sally and a pre-stretched Terylene top end.

All timber fittings to be treated with bat-friendly insecticide/preservative and all non-galvanized metal ringing fittings to be painted with three coats of high quality exterior grade paint.

REHANGING

Transport the bells and their fittings from our Works to the Church.

Attend the Tower with our Bellhangers and all necessary tools and lifting equipment. Reinstate the protective materials, ramps, coverings and barriers.

Hoist the bells into the Tower and hang them, complete with their new fittings, in the new bell frame, firmly bolting the self-aligning ball bearings to the bearing tables.

Creating new rope-ways to provide the optimum and correctly spaced ringing circle in the ringing chamber, fit the new rope bosses, timber flapping boards in the clock chamber if required, adapt the existing rope guides (also fitting new bosses and brackets) and new bell ropes, set up the clappers for even clappering with our laser timing meter, adjust the handstroke and backstroke sets, test-ring the bells both singly and "in peal" with the local ringers and leave them in good order for full-circle ringing following any required final adjustments.

Make good any unusued former rope hole positions with treated hardwood panel as required. Clean the new bell chamber and ringing chamber and transport all debris away from site.

Remove all protection materials and coverings from the the tower and church, and leave in a clean and tidy order.

Twelve months after the completion of works, carry out a free inspection and maintenance/service visit.

For the sum of:

EIGHTY-NINE THOUSAND, NINE HUNDRED & NINETY-THREE POUNDS
(£89,993.00)
Plus VAT

POSSIBLE ALTERNATIVE

Instead of removing the existing bell frame, leave the frame in-situ and construct the new bell frame in the existing clock chamber.

For the alternative sum of: **£86,353.00 + VAT**

NOTE

These estimate figures are based on current prices and are therefore subject to fluctuation.

EXCLUSIONS

This estimate specifically excludes the following:

1) The construction and preparation for easy lifting of trapways in all floors to enable the bells to be lowered to the ground and subsequently hoisted into the new bell frame.

2) Written approval from a Structural Engineer confirming that the proposed installation is suitable for the tower and that the existing roof/lifting beams are suitable for lifting purposes.

3) Builders Works: The cutting of pockets and the casting of level padstones for the ends of the new steel beam frame grillage and subsequently building the cleated beam ends in. We can supply working drawings and specifications and are happy to liaise with the PCC's appointed local Building Contractor. The installation of galvanised steel lifting beams if required.

4) Any required works to the clock, including the clock hammer and the possible relocation if installing a new bell frame in the clock chamber.

TERMS OF PAYMENT

1) 33% when the bells have been dismantled and transported to our Works.

2) 33% when all is completed in our Works.

3) The balance, less any deductions due, when works are completed in the tower net 30 days from the date of final invoice.

POSSIBLE DEDUCTIONS

1) **Fit & able-bodied** local labour to assist us with dismantling & lowering of the bells, old fittings and all framework (minimum 3 persons). **£2,340.00**

or

If leaving the existing bell frame in-situ. **£1,300.00**

2) Transporting of the bells from the Church to our Works (inclusive of loading at the Church). **£1,104.00**

3) Transporting of the bells, frame and fittings from our Works to the Church (including off-loading into the Church). **£2,286.00**

4) **Fit & able-bodied** local labour to assist with the hoisting and rehanging of the bells, new fittings and new bell frame (minimum 3 persons). **£2,730.00**

5) Lodgings and all meals to be supplied for our Bellhanger(s) whilst on site **£45.00 per day per man**

6) Omit the tuning of all six bells (**not recommended**). **£3,755.00**

or

Omit the tuning of the "listed" 4th bell only. **£652.00**

HEALTH & SAFETY

The deductions given in (1) and (4) assume that we will only send one/two Bellhanger(s). If the number of helpers is below the number requested, we reserve the right to send an extra Bellhanger and adjust the deduction accordingly. We reserve the right to withdraw the options for local labour assistance under circumstances such as COVID-19 restrictions. For health and safety reasons someone **MUST** be present in the tower at all times when only one Bellhanger is present. If this at any time is not the case, he will leave the site and the deductions will be adjusted accordingly.

PLEASE NOTE THAT OUR INSURANCES COVER LOCAL PERSONS ASSISTING WITH THIS PROJECT UNDER THE INSTRUCTION OF OUR BELLHANGER(S) BUT NOT WORKING IN THE TOWER ON THEIR OWN. THE INSURANCE COVER IS SUBJECT TO SATISFACTORY COMPLETION OF A HEALTH, SAFETY AND MEDICAL FORM BY EACH ASSISTANT.

TO COMPLY WITH HEALTH & SAFETY LEGISLATION WE WILL SUPPLY HARD HATS FOR ANY VOLUNTARY LABOURERS. HOWEVER, THEY WILL BE REQUIRED TO SUPPLY THEIR OWN SENSIBLE PROTECTIVE CLOTHING AND FOOTWEAR. SOFT FOOTWEAR SUCH AS TRAINERS IS NOT ACCEPTABLE.

THE DIRECTORS AND STAFF OF WHITES OF APPLETON LTD. ACCEPT NO RESPONSIBILITY WHATSOEVER FOR ANY ON SITE WORKS UNDERTAKEN WHEN THEY ARE NOT IN ATTENDANCE.

A FACULTY MUST BE OBTAINED BEFORE ANY WORKS COMMENCE