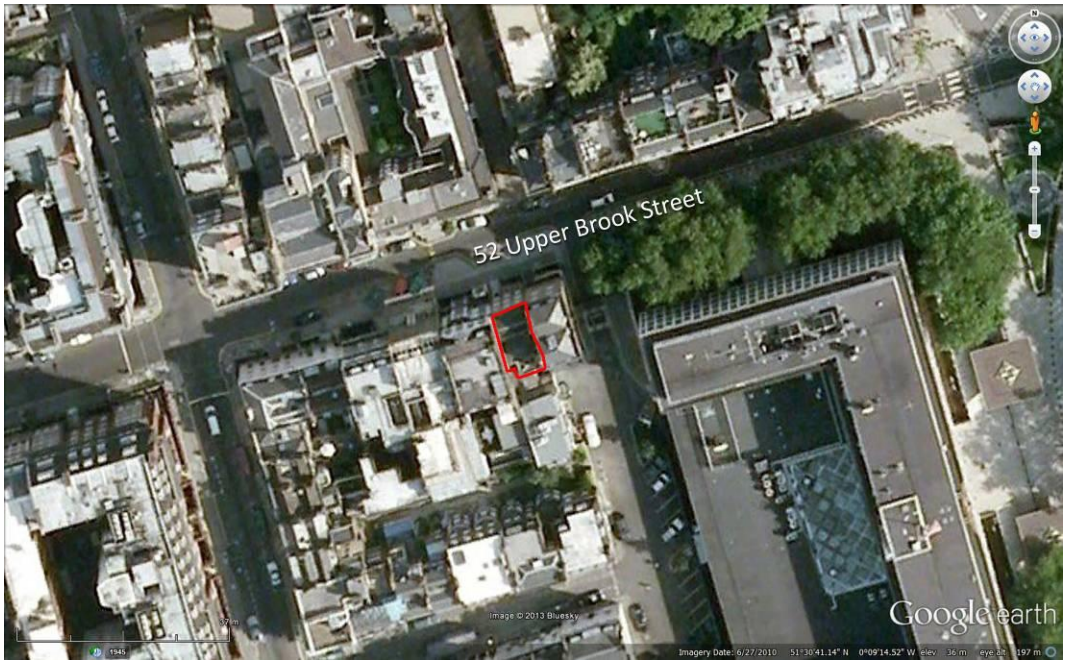
BJHC
Barry Hillman-Crouch
Design & Recording Services

52 Upper Brook Street, Mayfair. London. W1Y 1PG.

Description and analysis of the upper floors and ceilings. Surveyed 14 11 2014.

2010 Google earth. Location of 52 Upper Brook Street, Mayfair.



2010 Google earth. Detail of the site showing the roof plan.

Location.

No 52 is situated on the southern side of Upper Brook Street, Mayfair, London. W1Y 1PG. The house is the second in the remaining terrace. Listing NGR: TQ2819580783.

Barry J Hillman-Crouch MStPA DipFA BSc HND. Tel. 0794 2010703.
e-mail barry@hillman-crouch.fsnet.co.uk. Website www.dowsingarchaeology.org.uk

Listing

© Mr Kieran Morris LRPS

IoE Number: 207325. Location: 52 UPPER BROOK STREET W1. WESTMINSTER, CITY OF WESTMINSTER, GREATER LONDON. Photographer: Mr Kieran Morris LRPS
Date Photographed: 19 March 2001. Date listed: 05 February 1970.
Date of last amendment: 05 February 1970. Grade II.

TQ 2880 NW CITY OF WESTMINSTER UPPER BROOK 68/29 STREET, W1 5.2.70 No. 52 G.V. II Terraced house. 1730 with early C.19 and early C.20 alterations. Multi-coloured stock brick, slate roof. 3 storeys with early C.19 attic storey, basement. 3 windows wide. Entrance to right, semicircular arched with stucco architrave, 6 panel door and radial pattern fanlight. Recessed glazing bar sashes, original glazing bars and exposed boxing to those on 2nd floor, with red brick dressings and flat gauged red brick arches. Red brick plat band to 1st floor. C.18 lead rainwater head between Nos. 52 and 53. Cast iron area railings with pineapple finials. Interior retains original plan but early C.20 decoration. Survey of London; Vol. XL

Listing NGR: TQ2819580783

Scope of this Report

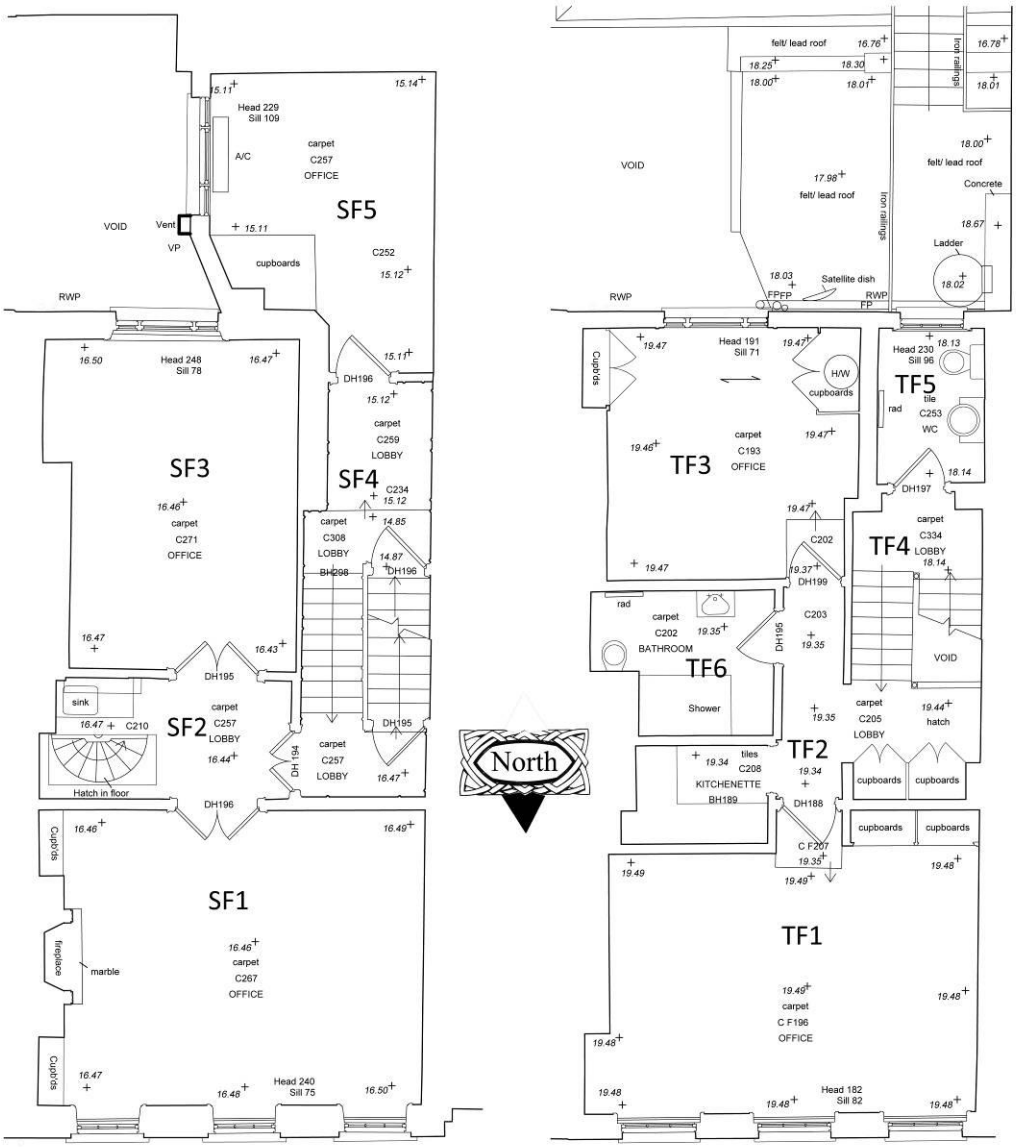
This report follows an earlier commentary on the roof structure: *52 Upper Brook Street, Mayfair London. W1Y 1PG. Description and analysis of the roof structure. Surveyed 01 11 2013.* The report contains the proposed phasing for the roof.

This new report comments on the newly exposed timbers forming the ceilings and floors of the two upper storeys, their design, fabric and form and likely date of construction and alteration. The findings are summarised on the last page.

Description – External – Photograph

52 Upper Brook Street north elevation. The upper storey was raised circa 1873.

Description - Internal



52 Upper Brook Street - Street Frontage

April 2014. Plans of the upper floors as existing. Some partitions have already been removed. SCP Architects Ltd.

Second Floor – Room SF1 – Front Room.

Second Floor. Room SF1 looking W.

Second Floor. Room SF1 looking W. Ceiling Structure.

Second Floor. Room SF1 looking E. Exposed fireplace and panelling.

The ceiling structure near the fireplace. Looking E.

Detail of the ceiling structure near the fireplace. Looking SE.

The Second Floor Ceiling/ Third Floor.

The original main joists are machine sawn softwood. The floor joists are cut from machined softwood. In places they have been rough chamfered with a spoke shave to allow the flush fitting of the original laths of which all have been removed. The long common joists are pegged into the main joists but at the front of the house short joists have been jointed as right angles with overlong tenons. Secondary battens are placed along the top of them and it is likely they formed the box gutter for the parapet of the earlier roof.

The ceiling was plaster-boarded and insulated with vermiculite granules. The galvanised plasterboard nails would indicate this was done in the 1970's or 1980's before the introduction of plasterboard screws driven by battery powered hand tools.

The floor above is entirely C21st and of astonishingly poor quality. Instead of battening the original joists to achieve a flat floor surface, each node has been packed with wood and plastic shims marked Harpun Fasteners Slangerup (Harpoon Quick Fix) manufactured by the Danish Harpun company. This has been done because the floor has a noticeable fall into the centre of the building.

The floor is fitted with chipboard floor sheets marked with EN-13986-E1, a European standard that governs the content of formaldehyde in building materials that was established in 2004. However the untreated softwood counter battens and overall lack of dirt implies this work was done more recently.

Early plaster work on the firebreast has been covered with LC20th render.

During the works all the LC20th plasterboard was removed from the ceiling and the walls. This revealed two small remaining timber panels either side of the firebreast. Stripping back the firebreast revealed the original plasterwork with an inch thick scratch coat and another inch thick top coat. The same sequence can be seen in the back room SF3 where the firebreast was boarded over. The panels and the firebreast are painted arsenical green, a very common Victorian colour that lost popularity in the last decade of the C19th.

Details of the remaining panels either side of the fireplace.

It is likely both rooms were panelled throughout and this would account for the lack of render on the brick walls. Most of the panelling was removed in the C20th by the time the plasterboard was put up.

Second Floor – Room SF3 – Back Room.

The ceiling in the back room SF3.

The ceiling in the back room SF3 has been rebuilt in the LC19th with doubled-up joists and wrought iron repair brackets on the main joists. The ceiling again sinks into the middle and this can easily be seen by looking at the varying depths of the C21st packing for the chipboard floorboards. Also noted were some wrought iron tie rods that have been removed from the timber and brickwork and left laying in the floor void.

Detail of the doubled-up joists. Looking N.

The firebreast in Room SF3. Looking E.

Detail of the fireplace.

Room SF3 has a L19th cast iron register plate fireplace branded Mt PALACE STOVES LONDON. Unfortunately it has been ruthless smashed before it was covered up. Ten minutes with a screwdriver could have removed it.

Third Floor – Room TF1 – Front Room.

Looking SE in Room TF1. Note the line in the brickwork denoting the old roofline.

Looking W in Room TF1.

Room TF1 is very similar to its counterpart below. The brickwork at each end has been altered to raise a new ceiling with the insertion of the bright yellow London Stock bricks seen in the exterior facade. At the western end the line in the brickwork suggests the original brickwork extended forward of the older roofline.

At the eastern end is a wide firebreast with a small fireplace with a brick segmental arch and wooden dowels and iron fittings remain to fix the fire surround. There is a pair for the fireplace in the back room TF3.

Looking SE at the ceiling near the fireplace.

Looking SW at the ceiling

The ceiling is quite complicated and designed to be easily nailed into position rather than pegged. There are two full width main joists housed in the brickwork into which are pegged four bridging joists which have been numbered I-III with a saw blade. Between each bridging joist is a primary brace onto which the common joists are nailed.

The ceiling joists at the front of the house. Looking E.

The pattern is repeated at the front of the house, nailing short common joists to primary braces. The common joists are not morticed but rest on a narrow batten nailed to the side of the main joist. Extra timbers lay on the main joist to support the box gutter. Periodically hangers descend from the paired rafters to support the weight of the ceiling.

Looking N into Room TF1. Note the RSJ.

The rear main joist has showed signs of failure and has been reinforced with an RSJ supported on blockwork. The recent partition has been removed.

Third Floor – Room TF3 – Back Room.

Looking S into the Back Room TF3.

The ceiling in Room TF3 looking SE.

Detail of the main joist in the central valley.

The same junction looking upwards.

Room TF3 at the back of the house has a very similar form of ceiling structure to that of Room TF1 at the front but it must be later. For one thing all the joints are pencil marked. Secondly the main valley joist has been reinforced with side plates and the narrow bridging joists for the new room are secured with mortice and wedges.

Detail of the carpentry marks at the same junction.

Detail of the main joist showing curved grooves to allow the common joist to be rotated in.

The flanks of the main joists are grooved to allow the common joists to be rotated in while the other ends are nailed in place against the primary braces. The main joists are numbered with a chisel point.

Decay testing the timbers.

Concern was expressed over the apparent softness and damage to the timbers that has been caused by a leaking roof and condensation from the bathrooms. The main valley joists were tested with a Sibert Decay Testing Drill and the results presented in Appendix 1. No cause for concern was discovered at the test sites.

Phasing and Discussion

Apart from the availability of more detail the survey results do not change the phasing of the ceiling and roof structure presented in the earlier report. The techniques used to build the ceilings are M-LC19th. The rear room TF3 clearly has a later ceiling dating to the latter part of the C19th.

Significance

The ceiling structure is representative of a Victorian refit of the house. There are structural problems throughout the house that has led to LC20th steel repairs and the levelling of the floors in an amateurish fashion. The floors have sunk into the middle of the house and this will need redressing.

Acknowledgements

I am indebted to Mr Devinder Bedi, the current owner for engaging me to record the roof. I also acknowledge the work of Katharine Barber which I have cited in the text.

Bibliography

Barber, Katherine. 52 Upper Brook Street, City of Westminster, Conservation Statement. March 2013.

Alcock et al. Recording Timber-framed buildings: an illustrated glossary. CBA Reprint 2008.

Hall, Linda. Period House Fixtures and Fittings 1300-1900. Countryside Books. 2005.

Harris, Richard. Discovering Timber -framed Buildings. Shire Publications. 1978.

Hewett, Cecil. English Historic Carpentry. Phillimore. 1980

Hillman-Crouch, B J. Historic Ironwork Repairs in Timber-framed Buildings. 2003. Published on the internet in 2006. http://www.dowsingarchaeology.org.uk/Ironwork/iron-index.htm.

P. d' A. Jones and E. N. Simons. Story of the Saw. Spear & Jackson Limited 1760-1960. Published in 1961 by Newman Neame (Northern) Limited.

SUMMARY SHEET

Site name/Address: 52 Upper Brook Street, Mayfair London. W1Y 1PG.	
Parish: Westminster	District: Westminster
NGR: TQ2819580783	Site Code: N/A
Type of Work: Historic Building Recording	Site Director/Team: Barry Hillman-Crouch
Date of Work: 01 11 2013/ 14 11 2014.	Size of Area Investigated: 10x20m
Location of Finds/Curating Museum: N/A	Funding source: Owner
Further Seasons Anticipated?: ?	Related EHER Nos:
Final Report: 52 Upper Brook Street, Mayfair. London. W1Y 1PG. Description and analysis of the upper floors and ceilings. Surveyed 14 11 2014.	
Periods Represented: LC19th - C21st	
SUMMARY OF FIELDWORK RESULTS: A machined softwood timber roof of nailed clasped side purlin designed with rafters nailed to a ridgepiece. Designed with three two pent roofs with lead rain gulleys. Built in 1873 or just before. All timbers passed through a planing mill. There is a lead lined drainage rill to vent the central gulley. Repaired in the EC20th with new battens and some rafters turned over. Repaired in the LC20th/EC21st with the addition of breathable membranes, rubber membranes and new leadwork. Minor roof repair in the C21st over the lead lined drainage rill. When exposed the timber-framed ceilings where seen to be made of primary braced interrupted machined softwood joists designed to be easily installed by side nailing or dropping onto battens. The rear room on the top floor was added later in the C19th as all the joints were pencil marked and the joists rotated into slots cut into the main, narrow joists. Iron tie rods and brackets were used to reinforce the failing frame which has had many C21st interventions including an RSJ to support the main valley beam. Almost the entire floor has been laid with chipboard boards on piles of plastic shims to address the fall of the floor into the middle of the rooms.	
Previous Summaries/Reports: Barber, Katherine. 52 Upper Brook Street, City of Westminster, Conservation Statement. March 2013. 52 Upper Brook Street, Mayfair. London. W1Y 1PG. Description and analysis of the roof structure. Surveyed 01 11 2013. Barry J Hillman-Crouch MStPA DipFA BSc HND.	
Author of Summary: Barry J Hillman-Crouch MStPA DipFA BSc HND.	Date of Summary: 22 11 2014

Appendix 1 – Decay Testing of Timbers on the Third Floor

Scope of the Investigation

This report illustrates the result of decay testing the main joists in the ceiling of the top floor. The work was carried out on the 14 11 2014 by Barry Hillman-Crouch. The exterior of the building was not examined for likely sources of water ingress but a previous investigation noted that the roof and lead lined gutter leaked.

Methodology

The timbers were tested for voids and density of timber with a Sibert DDD200 decay testing drill. This is a scientific instrument that passes a 2mm filament rotating at high speed into the fibres of the timbers and records the resistance on a paper trace which directly illustrates the quality of the timber. While it is called a drill it actually swages a hole which closes up when the probe is withdrawn.

The Sibert DDD200 can penetrate up to 200mm. It is an unwieldy instrument that needs to be aligned at exactly 90 degrees to the timbers otherwise it will not function. It also should not be used in timbers that have severe shakes or are peppered with nail heads which will destroy the probe. The instrument itself is 800mm long and this can limit the places it can be used.

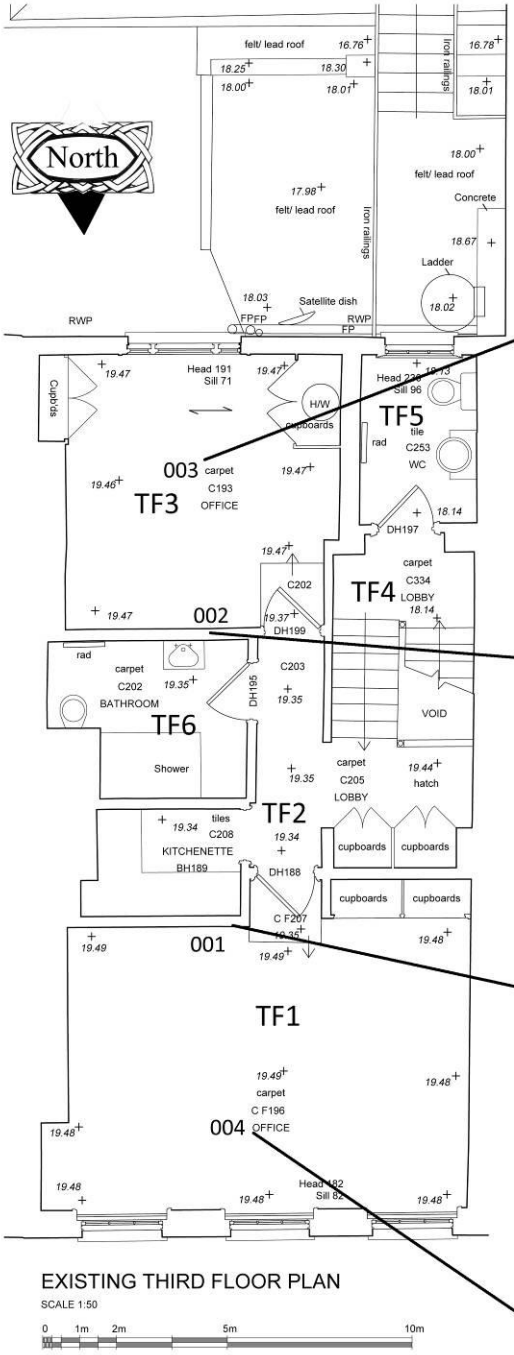
Drill sites are identified on the subject timber and marked with white chalk and numbered for later identification on the paper trace.

Results.

The results are presented graphically and are simple to interpret. The paper trace gives a scaled indication of the density of the timber. Simply, the closer the lines are together, the more dense the timber. For oak, a good timber would exceed 4 lines per centimetre (700Kg/M3) and ideally be above 6 rings per centimetre (800Kg/M3). For softwoods a good timber would produce more than 3 lines per centimetre (650Kg/M3). The hardness of wood is often determined by its age. The wood can be soft but still sound if it is green or naturally more flexible.

Limitations and Disclaimer.

The traces record real time resistance to the probe. The timber is generally softer the more moisture it contains – this may not mean it is rotten. The drill only records the density of the timber at the point of drilling. The results are open to interpretation and any further notes should be considered advisory. Spurious results can result from internal shakes but these are normally apparent at the time of drilling.



52 Upper Brook Street - Street Frontage

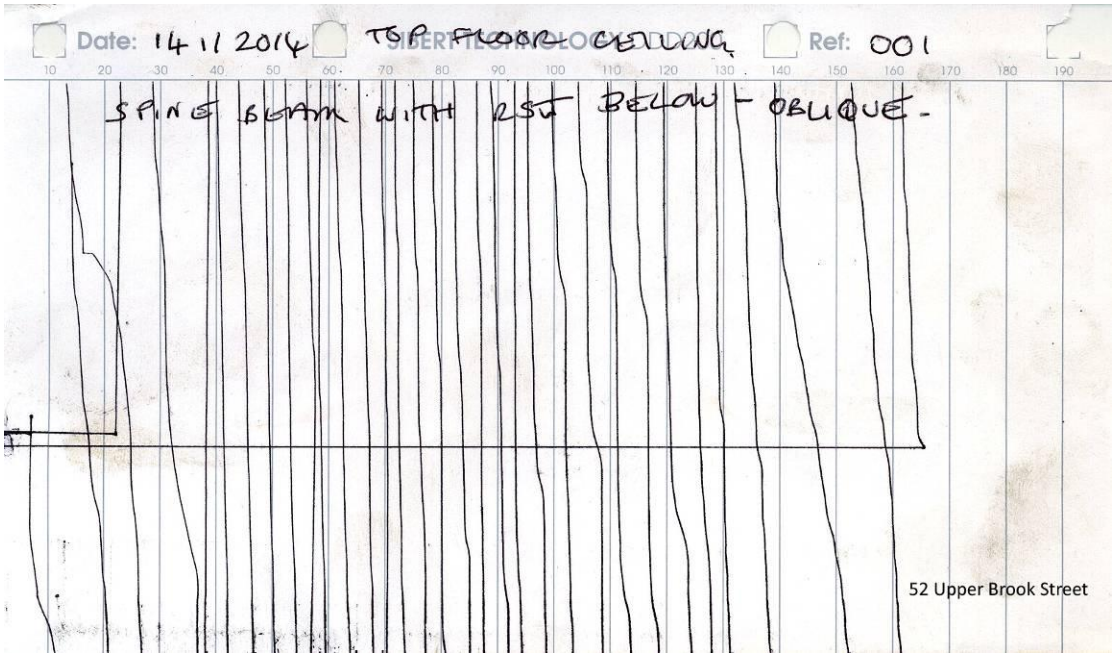
Drilling 003

Drilling 002

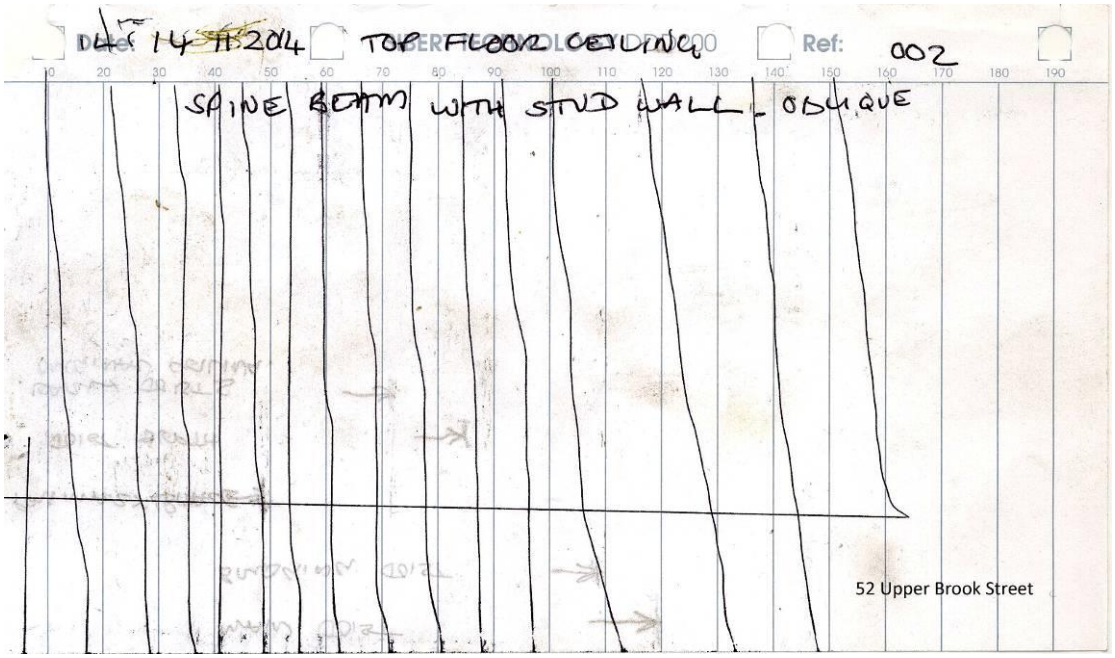
Drilling 001

Drilling 004 - Test drilling on dry timber

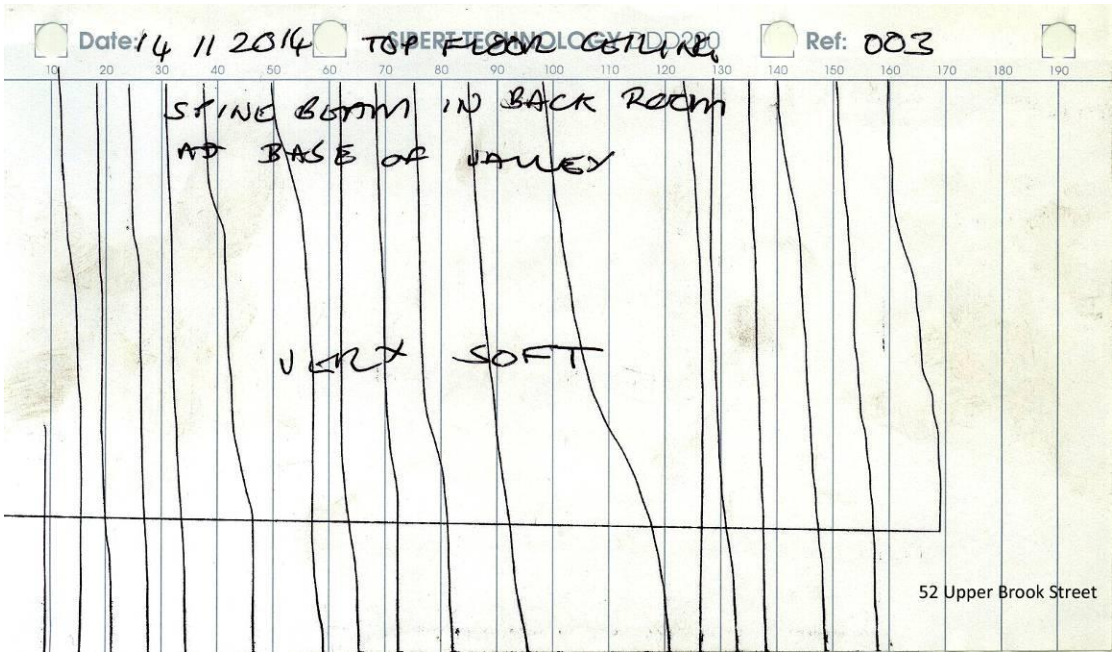
Location of the drillings.



Drilling 001. Top Floor Room TF1 spine beam with RSJ



Drilling 002. Top Floor Room TF1 spine beam stud wall beneath.



Drilling 003. Top Floor Room TF1 spine beam in TF3 at base of valley.

Driulling 004. Top Floor Room TF1 spine beam in the middle of the front room.

Test Results.

The softwood is relatively soft in comparison to oak for example. However it demonstrates a consistent density lessened only where the timber is obviously damp. Comparing the test sites with Drilling 004 shows that a normal dry timber compares well to the others.