

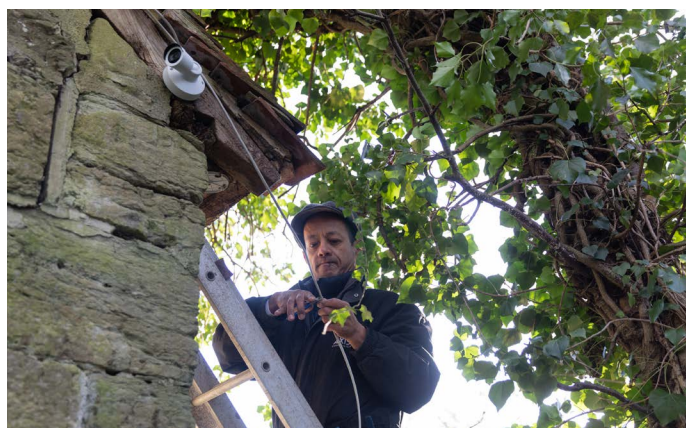
2. Getting started: security, surveys and assessments

Before you start a project do your homework. The SPAB Approach to building conservation emphasizes the need for 'understanding'. This chiefly applies to a building's history and structural condition, but it can be extended to other issues including locality, neighbours and access routes. In a congested city access and parking issues may add considerably to the costs of a project and are issues to consider at a very early point. An isolated area will also have its own set of issues to navigate.

Securing the property

First steps on acquisition are likely to include making the property secure and obtaining insurance.

With the SPAB's project the building had suffered break-ins, vandal damage and architectural theft in the past. Our aim was to make the building more secure, through mending windows and doors, and introducing reversible internal physical measures, but we wanted to avoid it looking boarded-up and neglected – an invitation to further attack.



Axis Communications installing security cameras. January 2019

To complement physical measures, we also introduced a surveillance system. This required electricity and a telephone line to be reinstated at an early point. Obtaining insurance for a semi-derelict property that would be empty for some

time was not straightforward. We were helped by an experienced insurance broker and by a good relationship with an existing insurer. Without these things, insurance would have been very costly to obtain. Even so, our insurer also imposed conditions about the frequency of visits to the building.

Surveying the building

Once possession is obtained and security is improved, the investigation of the building and its problems should begin. Even with project buildings, the inclination is sometimes to skimp on the costs of survey work. This is a false and potentially calamitous economy. Where a building of traditional construction is concerned – solid walled, or timber framed – it is essential that an experienced building surveyor or architect is used. There are many qualified architects and surveyors, but relatively few will be old building specialists, look for those with conservation accreditation. Schemes are run by RICS, RIBA and AABC and all vet candidates. Names can be provided via the SPAB's technical advice line (0207 456 0916) if required. An informed professional should offer you a carefully considered appraisal of the building's condition and any problems it has. If at all possible this survey should occur before purchase. In the case of the SPAB's project, it was arranged with the previous owner that a conservation architect should spend a day at the building investigating its problems and repair needs.

An architect or surveyor may advise calling on others for specialist help. This too can be money well spent. A structural engineer's opinion is the one most likely to be required in a project building with repair needs. Again, there are engineers

who are experienced, and engineers who are experienced in old buildings issues. The Institution of Structural Engineers has a register (CARE) which includes those it has accredited in building conservation. Our engineer's expertise was needed to consider a significant problem of structural movement in a gable end wall. The diagnosis was complicated, encompassing tree root impact, roof spread, an extension poorly attached to the original building and long-term maintenance failures. The problem – though visually alarming – was entirely fixable without the need for rebuilding. While on site he explored other issues and his advice – as with most other old buildings – was to commission an independent assessment of the condition of timberwork throughout the building.



Old House Project drawings. January 2019

Timber is a wonderful and versatile material for construction. Our project building has a roof structure nearly 600 years old which is as sound in most respects as the day it was constructed. But timber is always vulnerable when exposed to moisture. If gutters leak, timber lintels may decay; if ground levels rise timber cills will erode; if slates slip then battens and rafters will deteriorate. Moisture is the agent, but the mechanisms of decay will be through insect or fungal attack. This is a natural process that occurs in every garden and woodland, but it is not good for old buildings. A timber survey, like a structural survey, should be carried out by someone familiar with historic structures and by someone who has no vested interest in its outcome. All too often owners commission a 'free' survey from firms which sell

'damp proofing' or 'timber treatment' products. These commonly involve solutions that are poorly-suited to old buildings or downright ill-advised. Timber decay is best resolved by three things: regular maintenance, improved environmental conditions and localised repair.

Legal advice

As soon as the purchase of a particular building becomes a serious prospect, legal help will be required. Your lawyer should be a property specialist and should help establish such things as whether there are legal covenants or charges on the property. A lawyer will look at the boundaries of the site, as shown on the Land Register, and whether there are rights of way over any part. In the case of the SPAB's project we discovered that a high pressure gas pipeline had been constructed across part of the land and it proved, on discussing the matter with the gas company that the presence of this pipe prohibited any structures being constructed on, or heavy vehicles passing over, this part of the property. A lawyer may also commission a survey that examines issues such as ground conditions and flooding risks.

Fortunately, no significant problems were raised in the SPAB's case, though in the weeks following our purchase a stream nearby overflowed, leading to a flood of an adjacent road. No harm was done to the building, but it illustrated the importance of understanding flood risks which can pose significant threats to old buildings.



extension at St Andrews. January 2019

Early investigations: water services, archaeology, environmental factors, dendrochronology, asbestos

Interestingly the deeds for the house revealed that it benefitted from a quirk of mains water history. When piped water came to the area in the later 19th century, the property was part of the estate of a nearby country house. A deal was struck between the estate and the water company which meant that, in return for a small area of farmland, the estate and its properties would receive free piped water in perpetuity. This legal arrangement remained, even though individual properties were sold off by the estate in the 20th century. The SPAB's building did not initially have a working water supply, but after some minor excavation work with the help of the water company's detection equipment, a stop cock and outlet were found. Water flowed when the stop cock was turned on. It was tested by the water company and found to be 'potable' – i.e. fit to drink.

Though this incoming supply of fresh water had been easily reinstated, a question remained about foul drainage. Further minor excavations revealed pipework leading away from the house and its external privy. We explored these with the assistance of a company that uses video cameras to investigate drainage. They needed to cut a small hole in the waste pipe but established through this that foul water seemed to be taken away from the house to an on-site cesspit or septic tank. Mains sewerage seemed a better long term option as a sewer exists in the road immediately adjacent to the house. A drainage company was asked to explore the difficulty of connecting a foul drain from the house to the sewer. They concluded that this would be reasonably straightforward, but their consultation with the highways authority established that it would require the road to be temporarily closed for the excavation work. Road closure will involve some additional expense for traffic management and we have also made a point of mentioning the likely short-term inconvenience to neighbours and to the parish council.

Connecting the drains would involve excavation on site and this offered the potential for archaeological discoveries. Given that the SPAB's building is a former medieval chapel, there was strong reason to explore the site's archaeology.

The SPAB enlisted the help of the county archaeological society and also appointed a buildings archaeologist. Specialists of this kind can be found through the Institute for Archaeology (IFA). Obtaining archaeological advice may not be possible on every old building project, but their input is more than an antiquarian indulgence. Archaeological input is all part of 'understanding' – a fundamental plank of the SPAB Approach. Understanding the building helps develop well-informed and sympathetic plans; in the case of below-ground archaeology trial excavations can help ensure a suitable route for service run or the best location for an extension. Within the standing structure, archaeological investigation can also help establish the sequence of building and where things such as electrical wiring or pipework can be positioned.



Matthew Slocombe carrying out exploratory work to investigate drainage. November 2019

Alongside archaeological investigation documentary research can be valuable. A good place to start is with a county's Historic Environment Records which will list known data about a site and its surroundings. The best repository for historic records about a building or

site is usually a public record office or local history library, the Access to Archives website often yields summary information about information and where it's held.

Archaeological and historical investigation helps build a picture of a building's past through unravelling a series of clues. It should not lead to any attempt to recreate past features but will inform decisions about the building's future. With the SPAB's project, and with the assistance of Historic England, we were able to use a technique called dendrochronology. This involves taking a small sample, discretely cored from a historic timber.



Vegetation coming through the mullion windows at St Andrews. November 2018

The core produces a sequence of tree rings from the timber that can be compared against a reference sample where the dates are firmly known. The technique has mixed success – sometimes a reliable timber sample cannot be obtained, or the sapwood is missing so the final years of the tree's growth are absent. But when it works well the results can be startling. In the SPAB's case dendro work established the date of the main roof structure as 1484 – the middle year of Richard III's short but notable reign. In another area, however, the timber sampled proved to be re-used so the date could only show the age of the material, not the year it had been used in construction.

Among our earliest steps was to commission an asbestos survey. This is necessary in any old

building, even where asbestos is not anticipated. In the past asbestos was included in many building products, such as textured plaster finishes or as insulation to pipework. Fortunately the SPAB's building did not have any present, but it's vital that your building is given the all-clear before work starts. Asbestos, when disturbed can create a very serious and potential fatal health threat but can be removed safely by experts.

An asbestos survey helps pave the way for other investigative work – especially where this may involve some limited disturbance. The SPAB, which places great value on historic surfaces and finishes as the layer which hold character and history – plaster, paints, wallpapers, timber finishes – was keen to commission an investigation from a paint and surfaces expert. Although many surfaces had clearly not been disturbed for many years their precise age and interest were uncertain. The investigation, which involved on site inspection, sampling plaster, pigments and papers, followed by microscopic analysis, concluded that most ground floor surfaces were old – but not that old. Despite the building's medieval origins, the analysed finishes were mostly of the 19th and 20th centuries.



Part of the 1930s decorative scheme at St Andrews. November 2018

The majority seemed to date from 1880-1930. This tied in well documentary information about changes of ownership and use. It helped greatly with understanding the sequence of development - the building's 'story' and also offered assurance

that if changes were made nothing of great antiquity, such as medieval, ecclesiastical wall painting, was likely to be harmed. However it did emphasize how important the years 1880-1930 were to the history of the house.

With a project involving a building with repair needs, the focus will inevitably be on the building's fabric and its problems. Important though is to consider the flora and fauna of the site as part of a 'whole house approach'. In a disused building any land around the site is likely to be neglected. The temptation will be to clear it immediately. Some clearance may be unavoidable for access, investigation and surveying, but a 'scorched earth' policy is to be avoided.



*A view of the 19th century post office extension at St Andrews.
November 2018.*

Neglected land can be a haven for plants and wildlife. The Society's site was extensively overgrowth. In some cases the vegetation was invasive and potentially harmful – ivy covered some walls of the building – but there was also the relic of an old garden, with some interesting planting. We involved a garden expert at an early point, who helped voluntarily looking at and identifying plants. We also involve the local wildlife trust, who gave some initial advice and have been commissioned for a fee to carry out such things as a bat survey. Some plants and animal have statutory protection, so it is vital to understand what a site may hold before causing damage or disturbance.

Who to consult before getting started

The SPAB can recommend accredited professionals for your project.
Call 0207 456 0916 for more information

A surveyor architect with a conservation accreditation

If there is structural damage, an engineer with a conservation accreditation

The local conservation officer

Your neighbours or local parish council

Asbestos specialists

If your site is particularly historic contact the

Institute for Archaeology (IFA)

Local wildlife trusts who can offer initial advice on an overgrown site and its surroundings