Conservation Bulletin, Issue 4, February 1988

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PROGRESS ON BUILDINGS AT RISK

The lead article in the first issue of the *Conservation Bulletin* February last year dealt with buildings at risk. We are continuing to give high priority to this area of our work, and this article is intended to illustrate what has been happening on a number of cases and the variety of means and solutions which are employed.

Often the process is a slow one. Of the two cases mentioned in 1987, Stank Hall Barn is now being repaired with the help of an ancient monuments grant from English Heritage and a grant from Leeds City Council, and we are continuing to work on a solution for St George's Hall, Liverpool. It is sometimes necessary to carry out emergency repairs as we are doing at Revesby Abbey to ensure that the building survives. But the restoration of buildings in Stamford demonstrates that difficulties of adaptation often have more to do with people's fixed ideas than with the nature of the building.

We are determined that buildings should not be lost needlessly, and we shall continue to help owners and local authorities to be imaginative.

REVESBY ABBEY, LINCOLNSHIRE

Revesby Abbey is listed grade I but has been empty for the last 20 years, even though consent for demolition was refused in 1977. Its architect, William Burn, was a brilliant Victorian designer of country houses, but few of his best works survive intact. At Revesby the grand reception rooms with their decorated plaster ceilings have been altered only by decay.

English Heritage is using Section 101 of the 1971 Planning Act (normally used by local authorities), and on 16 December contractors went in to do the urgent works which the owner is unwilling to do. The Secretary of State has the power to reclaim the cost. Revesby Abbey is now again for sale. The emergency repairs will prevent further deterioration, so that a new user will have a chance to buy and restore it.

Revesby Abbey, Lincs

PELL WALL HALL, MARKET DRAYTON, SHROPSHIRE

Pell Wall Hall is a large country house built in 1822, the only remaining complete house design from Sir John Soane's late period. The present owner has allowed it to deteriorate since acquiring it 20 years ago, and in 1986 a fire reduced it to a shell.
Since 1984 English Heritage has been supporting North Shropshire District Council's attempts to compulsorily purchase the hall. The compulsory purchase order was confirmed early this year, and the building should now pass to the British Historic Buildings Trust for refurbishment and conversion into residential units. English Heritage has offered grants towards the purchase of the hall and its subsequent full repair as part of the conversion scheme, and last year grant-aided S101 emergency repairs were carried out by the District Council.

ELSHAM TOP FARM, HUMBERSIDE

Elsham Top Farm possesses a magnificent nineteenth century range of chalk-built barns and cartsheds, but unfortunately these are now derelict and partly roofless. Given the nature of chalk, rapid deterioration threatens. English Heritage is backing Glanford District Council's attempts to save the range and has confirmed that it is important enough to be eligible for a grant. The owner has now withdrawn an application to demolish while future uses are considered, and the pending public enquiry has been cancelled. English Heritage is actively seeking new uses – hostel-type accommodation, workshops, and warehousing are possibilities – and in the meantime is helping with temporary roofing to protect the building.

52–55 Newington Green, London N16

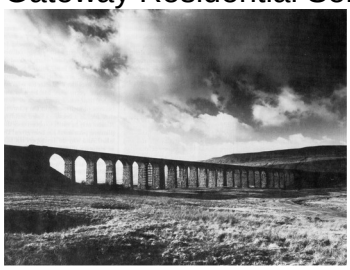
Hill Hall, Theydon Mount, Essex

53–55 NEWINGTON GREEN, LONDON N16

52–55 Newington Green, a row of four red-brick, gabled houses of the 1650s, form London's earliest known surviving terrace. They had become structurally fragile and generally neglected. English Heritage bought 53 and 54 in 1987 as a result of a compulsory purchase order served by the Greater London Council. It will soon also take over 55 from the London Residuary Body, on which its London Division has already carried out works of consolidation. 52 remains in private ownership.
The intention is to repair and consolidate all three buildings and then to pass them on to new owners who will complete the restoration and use them sympathetically. Completion of our part of the work on 53 and 54 is due in summer 1988. The re-sale will be tied to strict covenants controlling future use and care of the buildings.

HILL HALL, THEYDON MOUNT, ESSEX

Hill Hall is a brick courtyard house built c1557–77 by Sir Thomas Smith, significant for the precocious classical treatment of its elevations and a cycle of mural paintings.
The house was largely gutted by fire in 1969 and eventually in 1980 passed into the guardianship of the Department of the Environment and, subsequently, English Heritage. The fact that the bricks in the cores of the walls are set in loam, not mortar, meant that only complete reinstatement of the roof and external envelope would ensure its long-term survival.
A long-term lessee was sought to undertake sympathetic repair and conversion to a use compatible with full public access. English Heritage has accepted a proposal from Gateway Residential Services for a nursing home, and work is expected to begin this year.



Ribblehead Viaduct, North Yorks

ST MARY-IN-CASTRO, HASTINGS, EAST SUSSEX

St Mary-in-Castro Church has been described by Pevsner as the best church of the 1820s. Built in 1828 to a neo-classical design by Joseph Kay, it has a highly original horseshoe-shaped plan.
The building has deteriorated badly in the last ten years. In early 1986, when it was still in private ownership, Hastings Borough Council carried out urgent works to prevent the collapse of the roof, and later that year they established a working party, including English Heritage, to consider its future.
Hastings Borough Council have now purchased St Mary-in-Castro and an adjacent house, and have started a full structural repair, while considering possible future uses. They are receiving substantial grants from English Heritage towards both purchase and repair, and English Heritage is closely involved both in the control of the repair programme and in consideration of future uses for the building.

ST MARY'S HILL, STAMFORD, LINCOLNSHIRE

In 1986 English Heritage opposed at public enquiry an application to demolish an important group of unlisted eighteenth and nineteenth century buildings in the Stamford Conservation Area, and subsequently commissioned a feasibility study. The resulting scheme, now to be implemented, is a vindication of the adaptability of traditional buildings. Although a major argument for demolition of these buildings was their inadequacy in space and design for the new owners, a medical practice, the new scheme has satisfied their requirements with space to spare and with a modest saving in cost. The buildings are plain structures of local limestone rubble and Collyweston tile-stone roofs, but their contribution to the townscape is most important. With imagination another part in the jigsaw of a major town's heritage has been saved.

RIBBLEHEAD VIADUCT, NORTH YORKSHIRE

English Heritage is supporting the fight to keep open the Settle–Carlisle railway line with an offer in principle of a £1 million grant for the Ribblehead Viaduct. The offer was made to the Department of Transport in the spring of 1987 after British Rail had put in its

application to close the line. It is now thought that Transport Ministers are close to a decision.
English Heritage engineers have also argued that the cost of repair could be a lot less than British Rail's most pessimistic estimate. The possible cost has been BR's main argument for closing the line, but if Ribblehead Viaduct can be repaired, the railway can stay in use and with it a number of other historic viaducts and buildings on the line. The railway could also be an economic lifeline for the historic towns and villages in the area. All in all, it justifies an exceptional grant.

VANESSA BRAND

EDITORIAL

CONSERVATION – GOOD OR BAD?

The speech of HRH The Prince of Wales at the Mansion House did not start the debate on the role of architects and planners within the community: it did, however, give impetus and publicity to what many have been thinking or saying for some time. It also reflected a wider debate about the way in which we protect and preserve the best of our historic buildings, villages, and towns.
The history of conservation is a long and distinguished one. Since the last war, not only has the power and influence of the conservation movement been considerable, but the scope of its concern has been extended. Over 100 years ago, it was recognised in legislation that we should protect the most important of our monuments. Recognition that we must protect the great individual buildings came much later, as did a measure of protection to the contents of buildings and to the historic gardens and parks in which the great country houses were set. Subsequently, partly due to the pioneering work of the Historic Buildings Council, came the commitment to conserve the most important of our historic areas within cities, towns, and villages.
Conservation and its advocates are now well entrenched, but sadly only after appalling losses of historic buildings have been incurred. Now there are signs of new pressures against conservation. One of them comes from moves to reduce regulation and controls which are seen as inhibiting growth. Another comes from the recovery of growth in the economy which is generating development pressure on old areas and buildings, such as the retailing boom in historic centres.
Of course, the economic and social needs of the community continue to necessitate change, and it is not valid – and never was – for those committed to conservation to argue that it is a self-evident good which requires no justification. Some of the arguments are powerful.
It can be claimed, for example, that conservation is stultifying in cultural terms and that, by concentrating on the past, we may deny each generation the opportunity to enrich a varied and living architectural legacy.
The basic argument for conservation must surely be that a deep and enduring interest in, and respect for, its past is an inseparable part of any civilized culture or nation. The best buildings from the past are exemplars. They provide a source of inspiration and a point of departure for today's designs and buildings. To seek to retain the best buildings or monuments of the past cannot but enrich our sense of national identity.
That does not mean that a nation has to become a museum: nor that change is always dull or unacceptable. It does mean, however, that those monuments, buildings, and areas which are essential parts of the fabric of our past and present should be identified, and that there should be a pause for consideration before decisions are reached on whether to alter or destroy them. By law, the test whether a building should be listed is whether it is of special architectural or historic interest. Those are the sole criteria for listing purposes, and

one hopes that they will remain so. Wider considerations are brought to bear in listed building consent and scheduled monument consent procedures which allow full opportunity for change to take place, as it does constantly.

A second argument runs that conservation can deny or frustrate economic change which is essential if the country is to survive. At the national level, the economic case for conservation can be easily seen. Tourism is the most obvious example, but not the only one. Shopping is another. It is no coincidence that many of the most successful shopping centres are in historic towns. An attractive built environment is an important factor in the location of firms and in growth, which brings its rewards not just to the firm undertaking restoration work, but to those who move there and the area itself.

A third argument is that even if change is permitted, it takes place only after bureaucratic procedures, consuming excessive time and money which should be committed to more productive work.

No doubt all the bodies, including English Heritage, involved in advising or taking decisions on listed buildings or scheduled monuments are all vulnerable from time to time to the charge of causing delays. However, we ought to distinguish between the legitimate opportunity for all parties, including the conservation world, to put their views and unacceptable delay, whether through the executive, the planning machine, or the developer himself. It does seem worthwhile asking, on occasions, why practices which are said to cause delay are being followed. Why, for example, are some listed building consent inquiries held after the relevant planning permission has been given, rather than concurrently with it? Is it because of inefficiency in the planning machine? Is it because a listed building consent may be easier to obtain once the planning permission has been given? Or what? And why do developers not talk to statutory planning authorities more often at an earlier stage and thus reduce the risk of abortive work? Why do those who wish to demolish listed buildings not seek immunity certificates early on? It does seem that, even if existing procedures absorb some time, there are ways in which some delays can be avoided without loss of the essential pause for consideration.

Fourthly, it is argued that conservation is a cause advocated by the elite for the elite with little thought for the social or other consequences – ‘preserve us from preservers’, as one article ran when the repairs order was served in respect of Revesby Abbey.

That argument looks hard to sustain when one compares the reaction against the tall blocks of flats built in the 1960s and early 1970s with that shown by most of the people who live and work in some 6000 conservation areas, or when one considers the vast numbers of people who visit historic towns and buildings for the sheer joy and pleasure that those places offer. The appointment of project coordinators in conservation projects, such as at Calne, also show how deeply all groups within a community can be involved in conservation work.

Of course, English Heritage does not come to the debate as a disinterested party. We have a statutory duty to help in preserving the best of our past. But we also believe that conservation is not only justified but justifiable in social, economic, and humanitarian terms – and we hope to promote and contribute to that debate over the corning months in the Conservation Bulletin.

PETER RUMBLE

Chief Executive

THE LISTING OF POST–1939 BUILDINGS

It is often when a period of architecture is out of fashion that it is most at risk. Thus the Euston Arch of 1836 was demolished in 1962, an act which would be unthinkable today. The press, the public, and royalty are often heard to berate architects for the destruction of

many towns and cities since the Second World War, and for what they see as the ugliness of post-war architecture, for its lack of decoration, its ‘inhumanity’, and its often severely rectangular forms. With pitched roofs and Post-Modernism currently in vogue, emphasising decoration and symbolism, there is a temptation for owners to ‘update’ buildings by remodelling their architectural features, or even to rebuild. This temptation is increased by economic pressures and new commercial requirements (for example, the need for taller storey heights in offices to accommodate computer trunking); also, after thirty years or more, many early post-war buildings are due for major maintenance, which might itself be seen as an opportunity for modifications.

Up to April of last year, statutory protection by listing was confined to buildings designed before 1940. However, the Department of the Environment’s brief is to list buildings of ‘special architectural or historic interest’, and it would have been patently illogical to assume that suddenly British architects could build nothing of architectural quality. It was also felt that after thirty years it should be possible to undertake an objective assessment of the architecture of a period; thus, the issue of listing post-war buildings had to be faced. The DoE agreed to introduce a ‘thirty year rolling rule’ for listing; each year a fresh group of buildings would ‘come of age’ and be considered for listing.

The first building to be listed on the ‘Thirty Year Rule’ was Sir Albert Richardson’s Bracken House of 1956–59, threatened with demolition last year (illustrated in *Conserv Bull,* No 3, 5). Furthermore, the DoE agreed to launch the new rule by listing a further 50 to 70 buildings of the period 1939–57; a public ‘competition’ to generate suggestions was announced, and English Heritage was also asked for its advice.

Templewood School, Welwyn Garden City, by Hertfordshire County Council, 1949–55; recently considered for listing

As well as considering public suggestions, English Heritage carried out an exercise to identify buildings which seemed listable. The resulting suggestions were then discussed at a special meeting of the Listing sub-committee of the Historic Buildings Advisory Committee, to which several extra individuals were co-opted for their special knowledge of post-war architecture.

Architectural historians have as yet done little work on the post-war period, and officers had to go back to contemporary journals and guidebooks in their search. Strict selection criteria were applied in compiling the list of suggestions for the Committee; buildings were selected either because they were of high architectural quality (whatever their ‘style’), or because they reflected innovations in technology, planning, or ‘style’, or on account of their association with persons or events of exceptional national significance.

In compiling the list of suggestions an attempt was made to reflect the stylistic diversity of the period, ranging from the Classical Revival manner of Erith or McMorran to the more radical Modernism of the Smithsons or Chamberlin, Powell and Bon. The whole range of building types was considered, but no attempt was made to impose an arbitrary quota for each type. Building licensing (abolished in 1954) had ensured that only essential work was permitted for much of the period, so that, not surprisingly, schools, housing, and the industrial field were found to be far richer areas than, for example, that of entertainment or public buildings.

The South Bank Exhibition of 1951, part of the Festival of Britain, was surely the most important British entertainment complex of the period, but its architecture was mostly, by nature, transient. Only the Royal Festival Hall survives today. This was a building of great

ingenuity; the auditorium was conceived as an ‘egg in a box’, set within a cocoon of foyers, which helped to insulate it from the noise and vibration of the adjacent railway line. Externally the building has been much altered, but the interior retains many original features. This building, designed by the London County Council Architects’ Department, has also been hailed as ‘the first major British public building designed in the contemporary style of architecture’ (B Cherry and N Pevsner, *The Buildings of England, London 2: South.)*

The predominance of public patronage was a striking characteristic of the period. Britain’s housing, and especially its schools programmes, attracted international attention. The Hertfordshire Schools and later those built on the CLASP system (Consortium of Local Authorities Special Programme) in Nottinghamshire and elsewhere were famous worldwide for the development and use of prefabricated systems, and they have major historic importance on this account. However, the nature of their importance itself raises problems in selecting such buildings for listing, since they were by nature produced in series rather than as ‘one-off’ designs. It would thus be appropriate to list only a very limited selection, bearing in mind factors such as the importance of specific examples as prototypes of particular systems or developments, and the presence of works of art such as murals.

The area of public patronage, in particular, also raises the issue of ‘quality’, and how it should be assessed. Many educational and other buildings of the post-war period were built to very tight budgets in cheap materials; nevertheless, it is vital not to dismiss them on these grounds. Instead, they must be assessed on their own terms, in their historical context; such works can display quality in other ways, such as inventiveness in planning or form, ingenuity, either technological or architectural, in the use of the scarce resources available, or particular subtlety of architectural detail.

Church of St John the Divine, Willenhall, Coventry, by Sir Basil Spence, 1955–7; recently considered for listing

The churches designed by Sir Basil Spence for the Coventry suburbs provide a particularly interesting example of inexpensive building of high aesthetic quality. St John the Divine, Willenhall, St Oswald, Tile Hill, and St Chad, Bell Green, were built to a standard basic design for cheapness. All have tall, aisleless spaces, enclosed by a concrete frame and walls, and a freestanding tower with an open concrete framework; however, the relationship of tower, church, and church hall vary according to site, while the east and west ends of the churches range from being fully glazed to almost fully enclosed, providing variations in lighting and general character. All are crisp and light, with considerable elegance. These churches have a family resemblance to Coventry Cathedral itself, Spence’s masterpiece; by contrast, this is built in materials of the highest quality, and is filled with fitments by the best artists and designers of the age (Spence’s design was also, of course, notable in its period for the high degree to which it preserved and incorporated the bomb-damaged ruin of St Michael’s Church).

The inexpensive materials and experimental techniques sometimes used in post-war buildings may in some cases give rise to maintenance problems, such as have already occurred with some pioneering concrete buildings of the 1930s. Despite this, there will be some buildings which are so important in the context of their period that they must nevertheless be preserved, despite the expense of doing so. After all, although the terraces of John Nash were sometimes notoriously badly built, they are buildings of acknowledged aesthetic interest and are preserved as such. Listing is the first step in this process.

Following the special meetings of the Listing sub-committee, English Heritage's recommendations for the 'first fifty' post-war buildings have now been submitted to the DoE, and a decision is imminent. It is hoped that in future years further buildings of the period 1940–57 will be added to the list, as research proceeds, in addition to buildings of later date.

The later 1950s and early 1960s were exciting years for British architecture, a period of great creativity and stylistic variety, and of major building opportunities such as the expansion of the universities. In the coming years this will be increasingly appreciated. The evaluation of these buildings for listing will be an exciting exercise.

DIANE CHABLO

14–15 KING STREET, LUDLOW, SHROPSHIRE

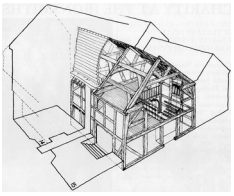
In mid-1986, buildings to the rear of 14–15 King Street, Ludlow were stripped out as a preliminary to their partial demolition and reconstruction. Members of Ludlow Civic Society discovered that this work had revealed an early framed structure of unusual interest. Further investigation showed this to be a building two storeys in height, two bays in length. The main trusses were of tie-beam configuration, with a central strut from tie-beam to collar and V-struts to the principals. Between the principals spanned two rows of chamfered purlins with curved wind-braces. The central truss also incorporated chamfered brackets to support both the tie-beam and the main beam forming part of the massive first floor structure.

One quarter of the first floor was clearly originally left open, and, though the precise purpose of the building, dated to the early fifteenth century, has not yet been established, this large void suggests a commercial use, requiring the movement of goods between floors.

English Heritage's Historic Buildings Advisory Committee in July 1986 declared the building to be of outstanding national importance, and the owners, Messrs Simons of Lincoln (Estates) Ltd, who had already received consent to demolish it, agreed to join discussing how their rehabilitation scheme could be modified to allow for its retention and incorporation. In these negotiations with South Shropshire District Council, English Heritage was represented by Paul Drury and Christopher Brereton from the Historic Buildings Division. Messrs Simons appointed Ian Stainburn of Ledbury as their historic buildings consultant.

Central to the discussion was the considerable difference in floor levels between front and rear buildings, which necessitated a substantial linking staircase. It was agreed that the rear building could be adapted for commercial use, and moreover that the floor void should be reopened to provide visual continuity between the two floor areas and to give some impression of the original configuration. English Heritage, considering that the revised proposals would preserve and enhance the character of this unusual building, offered a grant under Section 3A of the Historic Buildings and Monuments Act 1953 towards the cost of repair of both the rear building and the sixteenth century timber-framed shops fronting onto the street. The offer, amounting to £82,000, indirectly compensated the developers for the reduction in the anticipated return on the buildings resulting from the commercially less attractive split-level ground floor.

Ian Stainburn collaborated with Simons Design Associates in drawing up plans and specifications for the repair element of the revised scheme and in monitoring the progress of the work. A high standard was achieved, especially in the piecing-in of new oak to make good defects in the frame, and the wholesale replacement of timber was avoided. Interesting finds during the course of the work included a massive moulded stone fireplace lintel believed to have been removed from Ludlow Castle. Work was completed in April 1987.



14–15 *King Street, Ludlow: drawing by Ian Stainburn*

This case illustrates the successful cooperation between English Heritage, the local planning authority, and an owner sensitive to the special nature of the building, prepared to respond constructively to the discovery of its significance at a late stage and to accept the loss in development value involved in changing his proposals. It demonstrates the effectiveness of a prompt offer of grant in such circumstances, as well as the crucial role of a vigilant local amenity society in saving an intact medieval building of hitherto unrecognised importance.

ROBERT CHITHAM

ANCIENT MONUMENTS LABORATORY OPEN DAYS

The Ancient Monuments Laboratory will be holding two Open Days on Friday 22 April and Saturday 23 April 1988. Visitors will be able to look round the Laboratory, see the wide range of work that is undertaken, and meet the staff. The Friday is reserved for those professionally involved in archaeology, whilst the Saturday will be for English Heritage members as well.

The Laboratory provides scientific services for those working on projects funded by English Heritage. It is divided into five sections: archaeometry (dating and geophysical prospecting), conservation, environmental archaeology, ancient technology, and computing and records. Staff members from each section will be on hand to discuss their work. There will be demonstrations of the equipment used, as well as displays of artefacts and materials under study.

Anyone wishing to attend should write for a ticket, specifying on which day they want to come, to: Mrs L Savory, Ancient Monuments Laboratory, English Heritage, Fortress House, 23 Savile Row, London, WIX 2HE.

As this is a working laboratory, we regret that babies and children under the age of 12 cannot be admitted for reasons of safety.

THE ENGLISH HISTORIC TOWNS FORUM

England’s finest historic towns currently face intense development pressures. The current boom in retailing, increasing tourism, other commercial developments, and traffic problems all pose grave threats to their historic form and appearance. The English Historic Towns Forum has been established for local authorities to exchange information about the management of historic towns. Meetings were held last year in Bath and Carlisle, and further meetings are planned for 1988: at Warwick on 18–20 May and Canterbury on 2–4 November. Plans are under way to publish an occasional practice digest. The first issue will concentrate on the management of tourist coaches. The Forum is administered by the Huntingdon Centre in Bath (coordinator Sally Ann Miller 0225-333895), who will be glad to provide further information.

A NEW BUILDING CONSERVATION PUBLICATION FROM ENGLISH HERITAGE

The Research and Technical Advisory Service of English Heritage have just produced a five volume series, entitled *Practical Building Conservation* and edited by John and Nicola Ashurst. Three volumes will appear in May 1988, followed by the fourth and fifth volumes

about August 1988. The five volumes will be titled *Stone, Earth and Fired Clay, Plasters, Mortars and Renders, Metals,* and *Wood, Glass and Resins. Practical Building Conservation* will provide a comprehensive and practical reference source for all those involved in the restoration, preservation, repair, or maintenance of historic buildings. It will be published by the Gower Publishing Group at £14.95 per volume or £65.00 the set.

‘A FAREWELL TO FLEET STREET’

The London Division of English Heritage have organised an exhibition at the Museum of London on the buildings and setting of London’s newspaper district – Fleet Street, the home of the printing trade for 500 years – at a turning point in its history. The exhibition is open until 8 May, Tuesday to Saturday, 10am to 6pm, and Sunday, 2 to 6pm, admission free. An illustrated booklet with the same title to accompany the exhibition, price £4.95, is available from the Publications Section of English Heritage at the address on the back page or through booksellers.

CHARITY AT THE IRONSMITHS

CONSERVATION AND REPAIR OF THE LEAD SCULPTURE ‘CHARITY’, FISHERMEN’S HOSPITAL, GREAT YARMOUTH

Through the Research and Technical Advisory Service (RTAS), the Ornamental Ironsmiths Workshop of English Heritage undertakes repair, conservation, and replacement work on monuments and objects in the care of English Heritage. When the work programme permits it, work can also be undertaken on projects for private clients. Such a project took place in early 1987, and involved the lead sculpture ‘Charity’ from the Fishermen’s Hospital, Great Yarmouth. The work involved a combination of specialist craft and analytical services within English Heritage.

SURVEY AND CONDITION

The lead sculpture depicts the maternal figure of Charity with an infant in her right arm and a young child clinging to her left knee. It stands in front of the Fishermen’s Hospital of 1702, on its central axis, and appears to date from that time. The sculpture is a very finely cast and modelled piece of work. It was included in *English leadwork, its art and history* by Lawrence Weaver (1909), the definitive work on historical lead sculpture, and has been declared outstanding by the Inspectorate of English Heritage.

The sculpture was surveyed on site in May 1986 and found to be very battered and neglected. The surface had been coated with a black bituminous paint which had degraded to reveal other light decorations below. The original visual intention of the design was barely recognisable. Charity’s right arm had come off and had been kept in storage along with the infant it once held. The upper arm had been capped with a lead stump at the elbow. Charity was leaning forward, causing distortion and fracturing at the ankles. A disfiguring mild steel brace had been fixed to the base of her spine in an attempt to arrest further movement. A second brace had been fixed under the left elbow of the young child at her knee. A concrete plinth has been cast around the feet of the figures in a misguided attempt to provide further stability.

Details of the sculpture of Charity before and after conservation: inappropriate solder repairs, corroded ferrous fixings and supports, dents, vandal marks, and the remains of deteriorated paint coatings can be seen (above); on completion the sculpture has received a new internal support and the original paint decoration has been reinstated (below)

Closer inspection of the surfaces revealed inappropriate previous repairs in solder, several large dents possibly from a fall, and a considerable number of marks and graffiti. Several of the foundry joints between cast sections had begun to fracture. As is usual with this sort of work, the true condition became clear once the figures had been removed to the workshop and cleaned.

WORK UNDERTAKEN

RTAS took charge of the figures in January 1987. Before any work commenced, paint samples were taken for microscopic analysis to determine the original colours. Lead figures of the eighteenth century were normally painted, often to imitate stone, and at times in naturalistic colours. Close visual inspection had already revealed at least two colours.

Corrosion products and decaying paint layers were then removed with wooden implements and gels. Inspection of the sculpture at this stage showed that the original core and armature had been removed. The castings were generally 4–6mm thick, thus enabling them to stand as well as they had. In a few places where the casting thickness went down to 2–3mm, fractures had occurred.

Once the paint on Charity's torso had been removed, it could be seen that areas such as the breasts, fabric folds, and the belt had been made up in a lead oxide in order to cover defects in the original casting. When the lead cap to Charity's right arm was removed, the arm was found to have been stuffed with newspaper (dating from December 1960) and then filled with foundry loam. The smeared solder repair at this point was removed to reveal a large section of the original drapery. Whenever possible, fractured joints or other tears were made good by lead burning. As this work proceeded it became clear that, while the figures were artistically superlative, the quality of their casting was poor.

Charity was fitted with a stainless steel armature which extended through the new stone cap on which she now stands to an adjustable fixing within a new brick plinth. An armature was also provided for the right arm which had broken away due to an inherent design fault as well as thinness of casting. The original fixing points of the baby had been located during the cleaning process, and he was refixed in his original position by a system of small stainless steel dowels.

The completed sculpture in the courtyard of the Fishermen's Hospital

The lower areas of Charity and most of the standing child were peppered with dents up to 25mm long and 3mm wide and deep, probably due to vandals. Whilst it was not intended to make the group look anything other than an early eighteenth century work of art, it was felt that the cosmetic work was necessary and the large dents were made good.
The figures were finally washed down to ensure a thoroughly grease and dust-free surface for the application of the paint. All paint layers were applied by brush. Following the application of two coats of traditional lead-based primer paint, Charity was repainted in the four naturalistic colours which had been identified by paint analysis. The painting was undertaken by the skilled historical artists of the English Heritage Conservation Studio.
On completion of the works, the architect and owners were supplied with an illustrated report on the works undertaken including maintenance recommendations.
The 'Charity' project has been nominated for the National Art Collections Awards of 1988.

NICOLA ASHURST

BOOK REVIEWS

Ancient monuments in the countryside: an archaeological management review, by Timothy Darvill. Published by English Heritage, November 1987, price £12.50.
Although the ancient monuments of England have been recognised for centuries as important documents about the past, there has never been a coherent, encompassing policy for their protection. This book is but a first step towards the identification of ancient monuments in the countryside and the development of a strategy for their management. As such, it is a distinct movement forward.
The task for English Heritage in developing a sensible and workable policy is formidable. For many people, the 13,000 or so monuments protected by scheduling were considered to represent not only all antiquities worthy of such statutory protection, but also an adequate sample of the range of physically-identifiable monuments of our past. In the past 20 years, that belief has been shown to be tangibly and philosophically wrong. Many more monument types have been identified and characterised; the Sites and Monuments Records held by the counties indicate the existence of some 600,000 archaeological sites. Modern techniques, and the development of new kinds of archaeological theory, suggest that even more traces of ancient people's activities still exist to be detected both now and in the future. We are directed towards that future in this book.
The arrangement of the book is traditional. An introductory statement on the nature of archaeological evidence and the current legislation governing it is succeeded by the main body of text, and concluded by a glance at the future. The brief given to the author was clearly to present the evidence in a clear and orderly way, and this he has done well. He has chosen to divide the countryside of England into two sets, the 'semi-natural' and the 'man-made'. Under the former are wetland, coasts and estuaries, rivers, lakes, and alluvial spreads. Under the latter are grassland, woodland, heath, arable, parkland, and upland moor. It is debatable if the division is so clear in every case, and one might argue that some wetlands for example are today as man-made as any (or should it be man-unmade?). The physical destruction going on in estuaries, lakes, and bogs has altered these 'scapes' beyond any natural recognition. And the man-made woodlands and upland moors are arguably as much the result of natural regeneration, in one case, and degeneration in another, as to cross over the division. The only reason to debate this point is to suggest that the terms semi-natural and man-made are inappropriate – all of the countryside in England today has had not only the hand of man upon it for millennia, but also the influence of nature, the often imperceptible geological processes, as well as the dramatic episodes of flood or hurricane. We have to accept that all of the countryside is in a constant state of evolution, and it is not possible to freeze, hold, or fossilise any part of it, nor right to try to impose impossible conditions upon it.

What is needed today is obvious – an arrest to the speed of change now affecting all of our land. In the past decades, the rate of 'development' of all kinds has been such that the countryside cannot maintain its slow and stable evolution. The archaeological monuments on and in the land are but a part of the natural and human record of the past, and are important documents of ancient aspiration, achievement, and failure. Along with the land, our archaeological monuments have been subjected to great pressures and calamities, and the Sites and Monuments Records of the counties provide ample documentation of the losses. That we cannot fully assess the nature and the loss of the human heritage is due to the somewhat uneven character of the SMRs of the counties, to put it at its most delicate.

The book's main chapters follow a well-devised pattern. A particular landscape type is briefly described, and its archaeological value noted. There follows a history of the development of the type through time, and then its archaeology is described in some detail; why such a landscape was occupied, and the kinds of archaeological traces known to survive within it. Threats to the land are then outlined, and management programmes noted. As an example, arable land may be singled out here. Fertile and the focus of settlement for five millennia, once-forested but soon cleared arable land has been intensively worked time and again, and its archaeological traces thus obscured or obliterated. Yet settlements, field systems, ritual monuments, forts, and industrial sites are well known and have been the subject of much of the traditional dryland archaeology of England. There is rather sparse note made here of burial mounds, although a photograph of a ploughed barrow is enough evidence of the major problem. Management of monuments in arable land is 'curatorial', mostly designed, it seems, to hold the damage to current limits rather than to eliminate it. About the only suggestion made is to provide buffer zones around monuments, or to incorporate monuments in new and uncultivated headlands or boundaries. Yet the title and stated aim of the book is to show that monuments should not be treated as isolated sites; they are an inseparable part of the land, and cannot be fully comprehended without their landscape context. For arable land, more dramatic changes are needed, and until firmer guidelines are provided by English Heritage for farmers, through education and legislation, monuments will continue to be eroded, year by year, relentlessly, until flattened and invisible to all but the faithful. Then the problem will be to persuade the public that the site is still important enough to warrant anything at all.

This is not the book's task. Its aim is to educate us in the wealth of ancient monuments still recognisable in the countryside, and to begin to set out the parameters for future management practices. Protection of the heritage is not automatic in this country, nor almost anywhere in the world, but this book will go some way to setting a standard for all field archaeologists in England, and a guide for those abroad, in the nature and needs of the archaeological heritage. It deserves a wide readership, but will it reach those who plough the arable land, those who afforest the uplands, those who drain the wetlands, and those who dredge our waterways? And will it reach those who are in the business of educating the workers of the land in the future? It should, and English Heritage should ensure that it does.

JOHN COLES

Building legislation and historic buildings, by Alan Parnell. Published by the Architectural Press in association with English Heritage, price £29.50.

This report by Alan Parnell, an architect and fire-safety consultant, was commissioned by English Heritage to provide a practical guide for those concerned with the conservation of historic buildings. It is the first of a number of technical and advisory books which English Heritage is to publish.

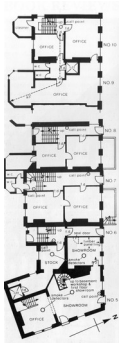
In the past, legislation has tended to concentrate on suitable ways of constructing and using new buildings rather than on the problems caused by restoring existing ones or adapting them for different purposes. More buildings than ever before are considered, through listing alone, to be worthy of a measure of protection from demolition or unsympathetic refurbishment. Yet old buildings are constantly being altered, improved, and extended to fulfil changing needs. When work is carried out, it may have to be of a different character from the rest of the building so as to comply with more stringent standards than those used in the original construction. The older the building, the greater the contrast is likely to be, and of course the greater will be the building's architectural and historic interest. There is therefore considerable scope for conflict.

Ultimately, we judge safety to be more important than architectural or historic character. So, unless ways of achieving the desired standards are sufficiently flexible and sympathetic, the historical character of buildings may suffer. Protection from fire, for example, can be accomplished by using hidden sprinkler systems rather than obtrusive fire and smoke barriers. While some requirements, such as those of fire resistance and means of escape, must be maintained to prevent injury or loss of life, it may be possible not to insist too rigidly on others, like sound insulation and ventilation, which are more concerned with levels of comfort and convenience than safety.

The Wig and Mitre, Lincoln: one of the case studies covered in the report

To assist those concerned 'with day-to-day problems such as these – architects, local planning authorities, building control and fire-prevention officers – the report has been carefully structured. It begins by explaining the legislation in use during the 1960s and '70s and its effects on historic building work. The 1976 Building Regulations, for example, laid down not only the standards required, but also the technical means by which they were to be achieved. Even though other means of carrying out the same work might have resulted in less damage to the building, it was normally only possible to sidestep the strict regulations by obtaining a relaxation or dispensation.

The report then examines different ways of achieving the desired standards covering individual elements of the building based on extensive discussions with members of the building professions, local authority officers, and owners, and incorporates the results of a nationwide questionnaire published in the *Architects',journal.* Details were obtained on the effects on 147 properties of the 1976 Regulations, the Fire Precautions Act, the Housing Act, and other legislation, and a cross-section of these make up the 31 case studies in the report. They have been selected to cover as wide a range of building types and legal situations as possible and to provide solutions of general application.



Kingsmead Square, Bath: ground floor plan of the four-storey Georgian buildings at nos 5–8 and second floor plan of nos 9 and 10, showing details of the alterations and renovations carried out to this historic building in the course of its conversion into offices, shops, and a wine bar. The plan shows the positioning of smoke detectors, fire alarm call points, and the arrangement of fire doors (f.d.) – panelled doors were rebuilt to incorporate fire-resistant layers – at access points. Certain areas of timber panelling, as marked on the plan, were also retained from the original structure, but had to be treated to make them more fire-resistant.

The Wig and Mitre, Lincoln: interior view, showing partition walling removed, while retaining beams and the open roof area

The possibility of finding sympathetic solutions depends much on the efficiency, experience, and attitudes of enforcement officers. Procedures that have been adopted by local authorities in administering and enforcing the legislation, and their application to historic buildings, are therefore scrutinised. Possible deficiencies are highlighted, and ways of overcoming them are recommended. Recent changes in legislation allow greater freedom in the way standards can be achieved by indicating possible procedures, but allowing designers to produce their own, more sympathetic solutions.

The report puts the case for special consideration to be given to all historic buildings, and for ensuring that all legislation should take architectural and historic factors into account. Further investigation into the performance of traditional forms of construction could provide the basis for better codes of practice and other guidance documents and point to more suitable forms of relaxation and exemption. The problems of reconciling respect for the fabric of historic buildings and legislative enforcement are dealt with in the final chapter. The wide-ranging case studies are fully illustrated with photographs and plans. The report provides a mine of information and ideas and should prove of considerable practical value to anybody involved with works to historic buildings.

DAVID WARREN

GRANTS OFFERED BY ENGLISH HERITAGE AUGUST–NOVEMBER 1987

The following statistics represent the grants offered by English Heritage between August and November 1987 for a wide range of conservation projects throughout the country.

HISTORIC BUILDINGS

Cost		
Section 3A	(£000)	Number
New offers (secular)	1675.6	45
Increased offers (secular)	197.4	23
New offers (churches)	1196.8	105
Increased offers (churches)	744.0	95
TOTAL	3813.8	268

A grant of £99,278 has been offered for extensive repairs to the **Baptist Chapel, Hope Street, Rochdale** (Greater Manchester), the last remaining notable non-conformist chapel in Rochdale. The Chapel was built in 1810 and enlarged in 1848. It has a complete set of fittings which are thought to date from 1855. The Chapel played an important part in the development of the 'Gadsbyite' Baptists under John Kershaw.

HISTORIC AREAS

Cost		
Section 10	(£000)	Number
New offers	1131	137
Increased offers	115	26
TOTAL	1246	163

Since closing ten years ago the **Cross Bath** and **Old Royal Baths, Bath** (Avon), have decayed very badly. A grant of £10,040 has been offered towards the first stage of a programme of repairs.

The newly established Derbyshire County Council Historic Buildings Revolving Fund has received an offer of a grant of £39,500 for its first project at **20–26 High Street, Whitwell** (Derbyshire). The project involves the repair of four cottages which form a prominent group in the village. The cottages will be open to the public before they are eventually sold. The project provides an important illustration of how buildings can be adapted for modern use without destroying their historical integrity.

A grant of £76,780 has been offered towards the cost of repaving part of the **Promenade** and **High Street, Cheltenham** (Gloucestershire) in York stone. This is the first stage in a long-term programme of renovation in the major shopping streets of Cheltenham.

Cost		
Section 5B (local authority purchase grants)	(£000)	Number
New offers	99.9	4
Increased offers	0	0
TOTAL	99.9	4

LONDON

Cost		
Section 3A	(£000)	Number
New offers (secular)	544.2	11
Increased offers (secular)	14.7	2
New offers (churches)	266.2	8
Increased offers (churches)	23.2	4
TOTAL	848.3	25

Cost		
Section 10	(£000)	Number
New offers	651.2	47
Increased offers	17.0	8
TOTAL	668.2	55

Cost		
London Grants	(£000)	Number
New offers	206.7	32
Increased offers	5.3	1
TOTAL	212.0	33

Cost		
Town Schemes	(£000)	Number
New offers	27.9	2
Increased offers	0	0
TOTAL	27.9	2

By coincidence, two grants have been offered for contrasting repair projects in Highgate. One of £198,772 is for repairs to **Highpoint**, an internationally-famed modern movement development of reinforced concrete flats designed by Lubetkin and Tecton in 1935 and 1938. The other is a grant of £26,988 towards the latest phase in the rescue of **Highgate Cemetery**. It is for the repair of the terrace catacombs.
A grant of £38,759 has been offered for the repair and conversion of **Wapping Hydraulic Pumping Station** to a rehearsal room and recording studio for the Academy of St Martin's in the Fields. Still in the East End, a grant of £122,360 has been offered for the repair of **Taplow House** on the **Boundary Estate**, the pioneer London City Council housing scheme of the turn of the century.
Grants to churches include £69,614 towards the repair of **St Martin's Ludgate**, one of the few Wren City churches to survive virtually unaltered, and £47,921 towards the repair of **St John's, Bethnal Green** which was designed by Sir John Soane.

ANCIENT MONUMENTS

Cost		
Rescue Archaeology (including London)	(£000)	Number
New offers	325.6	41
Increased offers	117.2	13
TOTAL	442.8	54

Cost		
Section 24	(£000)	Number
New offers	1029.3	41
Increased offers	14.7	1
TOTAL	1044.0	42

Cost		
Section 17	(£000)	Number
New offers	19.9	24
Increased offers	0	0
TOTAL	19.9	24

A major grant of £400,000 has been offered for repairs to the **Pattern Store and Masthouse Mould Loft, Chatham Dockyard** (Kent). This forms part of a long-running scheme of repairs at the dockyard.
The largest proportion of new grants offered have been for the continuation of long-term programmes of repair. Grants totalling £226,265 have been offered to complete repairs at **Dudley Castle** (West Midlands), where work is about to start on its principal buildings, including the Hall and Great Chamber which date from medieval times and include Renaissance restyling and sixteenth century additions.
A further grant of £76,460 has been offered at **Jervaulx Abbey** (North Yorkshire), probably one of the only Yorkshire Abbeys to survive in its post-Dissolution parkland setting. The repair programme has been carefully designed to retain the present character of the monument and to protect the plants which add to its picturesque setting.
A grant of £76,870 has also been offered to the Fakenham Museum Trust to complete the repair of the country's last surviving town gasworks – **Fakenham Gasworks** (Norfolk). The gasworks began to open to the public in 1987 and will be fully operational in 1988.
Rescue archaeology grants include a grant of £22,787 to the Cumbria and Lancashire Archaeological Unit and the University of Liverpool Institute of Prehistoric Science and Archaeology for a joint project at the **North-West Wetlands** which span several counties. The aim of the project is to evaluate the extent of the archaeological resource in the wetlands and to develop an appropriate management strategy.

DELILAH: A NEW DEVELOPMENT IN COMPUTING FOR ARCHAEOLOGY

Records compiled by those who excavate archaeological sites are both numerous and complex. The need to intensify the scale of recording is a product of the considerable advances in archaeological science which have taken place in the past two decades, thereby greatly extending the range of material regarded as informative.
Given the enormous volume of data with which they now have to deal, and the recognition of the need to produce ordered and accessible archives for future researchers, archaeologists have inevitably made increasing use of computers. English Heritage's Central Excavation Unit has been at the forefront of computer applications in archaeology, and the installation of a network computer system at the unit's base at Fort Cumberland, Portsmouth, has presented new challenges and opportunities.
In order to extend computer usage by the unit staff and, in particular, to allow field officers and finds specialists to directly address, edit, and analyse the data collected on site and in subsequent research, the CEU is developing its own 'user friendly' database package called DELILAH. This is specifically designed for the processing of archaeological information.
In future it is hoped that all staff engaged in a project will be able individually to interrogate and add to a growing database or 'research archive', allowing a more rapid and effective exchange of information between specialists concentrating on different classes of material, with considerable savings of time for the project director and computing staff. The system can be utilised by staff with little experience of computers. Field trials at the Stanwick excavations last summer proved that the direct input of finds data considerably streamlined what had previously been a weighty form-filling exercise.
The functions of DELILAH are already being extended with the acquisition of a facility which will allow drawn data to be accessed, stored, and generated as required. With this development virtually the whole of an archaeological archive can be stored on disc or tape, and we can look forward to the day when these media will be the principal means of communicating excavation and research data.
DELILAH is already arousing a great deal of interest in the wider archaeological world, and a 'Delilah Interest Group' has already been formed which we hope will develop into a

user's group. The adoption of DELILAH by other archaeological units will be a major technical innovation which it is one of the purposes of the Central Excavation Unit to promote.

JOHN HINCHLIFFE

THE REGISTER OF PARKS AND GARDENS OF SPECIAL HISTORIC INTEREST

With the imminent issue of *Greater London,* the Register of Historic Parks and Gardens will be completed and ready for assessment. This four-year task has identified and described some 1200 historic parks and gardens round the country. There is now for the first time a comprehensive basis for analysis and comparison, with each one described in a standard succinct format providing general details of area and garden type, as well as history, design, planting, and other special characteristics. Like all such surveys, however, it is not completely consistent, and it can be readily noticed that aims and methods have altered before finally settling into the standard product represented by the second 20 volumes of the Register. The final version is much to the credit of its main compiler, Dr Christopher Thacker.

Inclusion in the Register brings with it no statutory controls or restrictions. It is an inventory, comparable with the *Buildings of England* series by Professor Pevsner. Its value lies in the dissemination of information, so that the owners, local authorities, developers, and so on are made aware of the importance of this facet of our heritage.

Painswick, Glos: The Classical Seat, before clearance work

The English country house has been called our greatest contribution to world art; the parks and gardens which go with them are as much a part of their history, development, and importance as the furniture, the pictures, and the fabric of the buildings. Houses are designed to complement their setting and vice versa. The interplay of the changing and developing house with its surroundings is as fascinating as it is important to the proper understanding of the historic and social structure of England and the artistic heritage that resulted from it.

The different County Registers dramatically reflect the social standing of each county's landowners. The largest register, apart from London, is Gloucestershire, whereas Durham, Tyne and Wear, and Cleveland can barely muster a slim volume between them. In some counties country house landscapes with famous landscape designers, like Brown and Repton, are to the fore, while in other counties Victorian and Edwardian gardens by the likes of Nesfield, George, and Peto predominate. The London Register has a very high proportion of municipal gardens, some designed as such, but many like Wanstead and Clissold Park, originally the pleasure grounds of country houses.

The compilation of the Registers proceeded by collecting references from published sources, the biographies of the great landscapists, and, particularly important, the back numbers of *Country Life* which has reported on gardens since its inception. Fieldwork has been limited except in the case of London. Quick completion of a material register was given priority over production of a more definitive *magnum opus.* Assistance has been received from the Garden History Society and the York Institute for the Study of Historic Parks and Gardens who have supplied notes, reports from site visits, and other data. A particularly important tool has been the Royal Commission on Historical Monument's

invaluable collection of aerial photographs produced through the stereoscopic viewer. Owners were also given the opportunity to vet the final descriptions.

Painswick: The Classical Seat, after clearance

Reliance mainly on written sources, rather than on detailed fieldwork, inevitably means that the coverage of the Register will be found to be incomplete and that descriptions of parks and gardens will sometimes need amending in the light of more up-to-date information. We are aware too that there is a heavy emphasis among the entries on parks and gardens which are either publicly owned or the property of the National Trust and the better-known great landowners, whereas smaller gardens, whether in the town or country, and municipal parks are probably under-represented. In short, the Register reflects the current state of knowledge; it is nevertheless a considerable achievement, because it has marshalled this knowledge succinctly, judiciously, and in a readily accessible form.

The completed Register is the starting point for a more active gardens policy by English Heritage. We have recently appointed a permanent garden historian, David Jacques, and plan to be more active in advisory work, trying to influence planning and development proposals which might affect historic parks and gardens and, if resources permit, developing a permanent garden grants scheme. The intention is to improve and expand the Register as this other work progresses. The Register has already proved its value by providing a basis for surveying the damage caused to historic parks and gardens in the south and south-east of England by the great storm and for the administration of the emergency grants for restoration work which we have introduced.

MARTIN ROBERTSON

GARDEN GRANTS

The possibility of garden grants has long been considered but has been prevented by lack of resources. However, the great storm of 16 October Led the Commission to reorder its priorities so as to offer emergency aid. Lord Montagu announced that grants of up to £250,000 would be given to assist with storm-damage clearance and replanting. This figure is regarded as provisional and may vary depending on the level of eligible demand and the available finance. All owners of historic gardens and parks included in the relevant county Registers were notified of the grant scheme and 240 replied. Consultants have been sent to visit all of them in order to assess the damage. At the same time, our Gardens Committee is deciding which sites are outstanding for the purposes of Section 3A grant-aid. The first of the grant money will be spent within the 1987–8 financial year. It is hoped that non-outstanding historic parks and gardens will receive aid from the Countryside Commission.

DAVID JACQUES

TELEPHONE KIOSKS

A PROGRESS REPORT

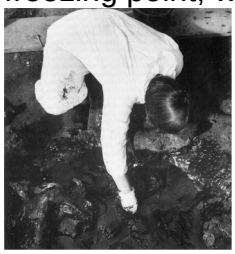
The telephone kiosk listing programme has continued, unabated, since last summer. Many local planning authorities and a large number of parish councils, as well as individuals, responded to our requests to help identify K6 kiosks for preservation. To date, well over 2000 kiosks have been brought to our attention, among them a number where planning authorities have served Building Preservation Notices.

Partly because of this clear indication of public awareness, the Department of the Environment announced during January that they had reached an agreement with British Telecom to double to 1000 the target number for listing. In fact, the five hundredth kiosk was listed at about the same time.
The new target will be reached fairly quickly to judge from information we have already or which we know to be on its way to us.

PETER WHITE

CONSERVATION IN ACTION – SAVING THE NEOLITHIC

The first stage of one of the most intricate and taxing tasks ever undertaken by staff of the Ancient Monuments Laboratory was completed at the end of October 1987. For over 15 years the AML conservation section has provided a specialised service in lifting fragile remains and has developed an expertise particularly in the removal intact of larger structures. In the winter of 1986, it was faced with the problem of removing what has been described as the oldest timber structure yet found in the country. Rescue excavations on a Neolithic long barrow, near Haddenham in Cambridgeshire, revealed traces of wood under the peat in a remarkable state of preservation. The find was potentially of great importance to archaeologists as, although hundreds of long barrows survive in north-west Europe, and a number have been excavated, none has been found with almost complete wooden chambers.
Specialist assistance was required to help record and remove the material which once had been stout oak, but which, after burning and subsequent burial for 5000 years, was extremely fragile; decisions were made to continue excavation throughout the winter and to complete the work in the summer of 1987. The small team from the laboratory needed considerable support from volunteer and seconded conservators; in addition, two tons of equipment and supplies had to be ferried onto the site, which was half a mile from the nearest road. The project continued through mud, flooding, frost, and snow, as well as heatwaves in the summer.
On 17 December, after the roof level of the wooden mortuary structure, 8m long by 2m wide, had been located and excavated, the AML conservation team started to make the first of four large moulds. These were necessary because of the fragile nature of the wood and in order to act as a record of the structure *in situ.* Polysulphide rubber, capable of providing an accurate facsimile while remaining flexible in wet conditions just above freezing point, was chosen.



Haddenham, Cambs: making the polysulphide mould of the lower timber floor

Although the task of recording the fragile surface remains by moulding needed all the resources the team could muster, even more complicated was the task of removing the wood which had become compressed and distorted after thousands of years' burial. Because of the archaeological requirements, the roof section was removed slowly and with great care by cutting it into over 200 small, and very fragile, blocks. At every stage the work was integrated with the excavators needs to examine and record each detail. For the final phase of lifting, in early summer, it was decided to cut much larger sections – complete slices of the lower timber floor which rested on various sand, clay, and gravel horizons. A new technique was evolved using hydraulic rams to insert quarter-inch steel

plates under each section. These were carefully boxed using a combination of polyurethane foam, mixed on site, and specially strengthened thick plywood sides. By, the summer the team had developed techniques for removing much larger blocks, the final pieces weighing up to 400kg.

With 95% of the structure lifted for dendrochronological and other specialist analysis at the University of Sheffield, it is hoped that some sections will subsequently be conserved and displayed together with casts taken from the surface moulds.

The summer also brought an *urgent* request from the Trust for Wessex Archaeology. The team moved into action again on the site of the Dorchester Bypass and, before contractors started, managed to remove four substantial blocks of chalk with Neolithic graffiti. Both of these projects, involving the removal of fragile 5000 year old artefacts, had never been attempted before and provided excellent opportunities to develop and refine techniques.

JOHN PRICE