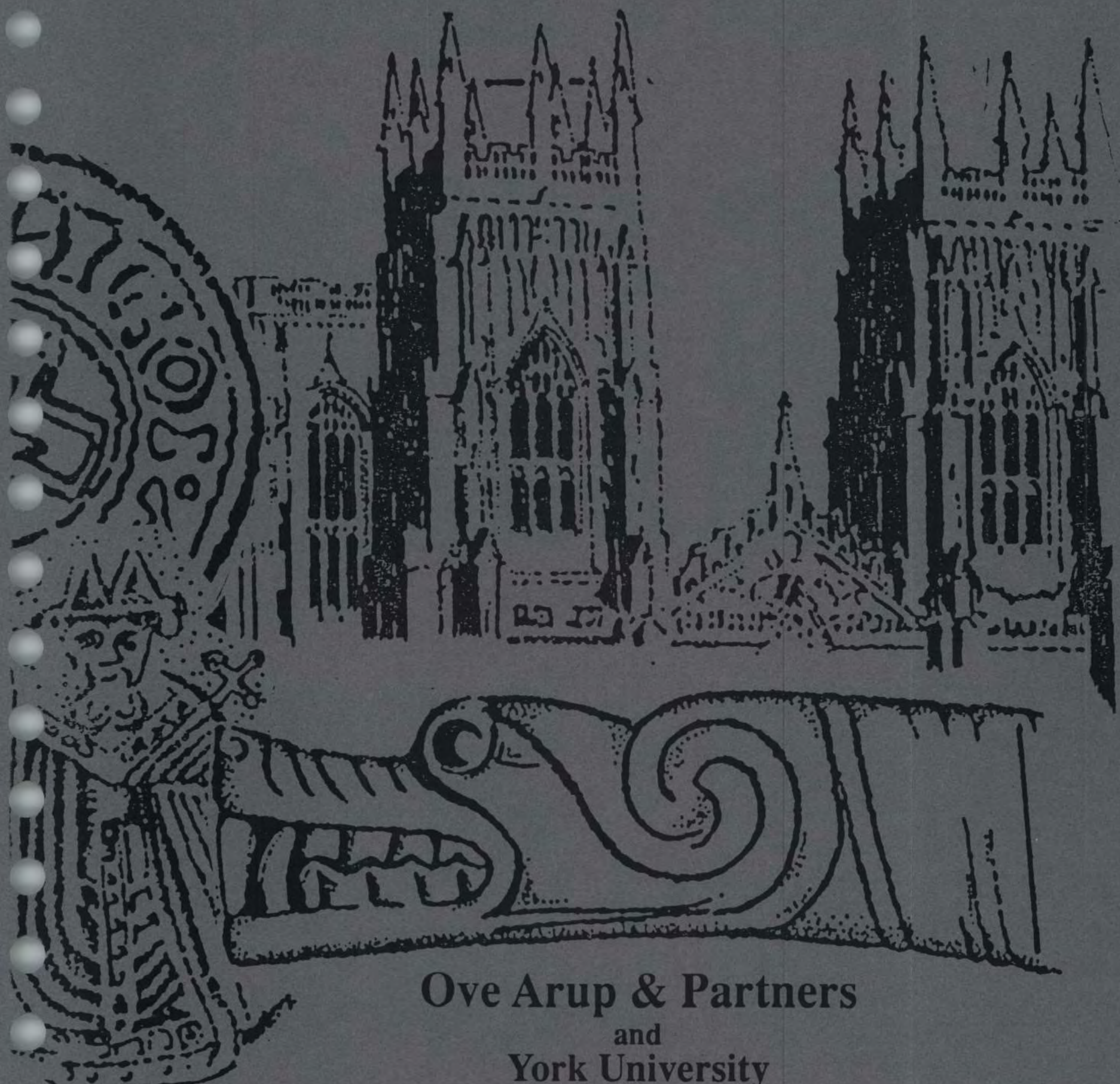


ENGLISH HERITAGE • YORK CITY COUNCIL
**YORK DEVELOPMENT &
ARCHAEOLOGY STUDY**



Ove Arup & Partners
and
York University
in association with Bernard Thorpe

**YORK DEVELOPMENT
AND ARCHAEOLOGY STUDY
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Section 7

7. DEVELOPMENT PROCESS

7.1 Aims of This Section

The next stage of this Study concerns the effect of archaeological factors on the development process. The work has been approached by reviewing the current practice within planning authorities and the attitudes of developers.

The work of the study team has included the following activities:

- (a) general research work on the approach of planning authorities in York and elsewhere in the UK, to handling archaeology in the planning process;
- (b) general research work on developers' current attitudes to the archaeology factor in York and elsewhere in the UK;
- (c) review of the enhanced level of archaeological information which will be available in the future in York and its likely impact on the development process;
- (d) consideration of how this information should be presented and any other changes which could facilitate the development process in future.

7.2 Development Process: Archaeology and Planning

Only a very small proportion of known sites of archaeological importance enjoy legal protection as 'Scheduled Ancient Monuments'. For the vast majority of known sites, and for sites which have not been investigated but which are believed to contain archaeological deposits, the planning system, together with provisions under the Ancient Monuments and Archaeological Areas Act 1979, remain the only means of protection or of ensuring that archaeological evidence is recorded when development takes place.

The role of planning and archaeology in the development process in York has increased in importance given the need to reconcile development pressures with the City Council's economic objectives and the desire to update York's archaeological resource in order to further understand the City's past.

This section of the Study Report presents a critique of existing practice both in York and elsewhere, a discussion of best practice and recommendations can be found in sub-section 7.4.

7.2.1 Statutory Provisions

Under the Ancient Monuments and Archaeological Areas Act 1979 (the 1979 Act), the Secretary of State maintains a list of ancient monuments which are afforded statutory protection under the Act. He can add any monument which appears to be of national importance to this list. Although the term 'monument' is very widely defined in the Act (sections 61(7),(8) and (13)) to include buildings, structures, works - above or below ground - caves, excavations and sites containing remains, most monuments listed are visible above ground.

York's 19 scheduled ancient monuments therefore include the expected City Walls (together with their associated gates, mottes and ramparts), the Museum Gardens, Cliffords Tower, York Castle (old building), St. Leonards Hospital, Siward's How, Lamel Hill Round Barrow, etc. Thus, although the Act is sufficiently broad to allow the scheduling of archaeological deposits in-situ, few are included in the list relating to York. Scheduling however, does protect archaeological deposits buried under the monuments.

7.2 Development Process: Archaeology and Planning (Cont'd)

7.2.1 Statutory Provisions (Cont'd)

English Heritage, through its Monument Protection Programme, is revising the schedule of ancient monuments, which has been inherited and added to incrementally over the years, to make it more representative of monuments of national importance in the country as a whole. So far, the programme has addressed rural areas, and has not as a priority, recommended the enhancing of the schedule in urban areas such as York. A change in scheduling policy, without the need to alter legislation, could conceivably introduce measures to protect key archaeological strata in York.

The other arm of the 1979 Act (Part II) provides for the designation of Areas of Archaeological Importance (AAIs). Designation confers powers for carrying out investigation prior to the development of a site in the historic centres of (so far) five cities; Canterbury, Chester, Exeter, Hereford and York. AAI provisions are neither conservation nor preservation measures. Designation under the Act serves only to introduce the possibility of mandatory delay of development to allow archaeological investigation to proceed. In AAIs developers are required to give 6 weeks notice to the Planning Authority of any proposals to disturb the ground. The investigating authority (in York, the York Archaeological Trust) nominated by the Secretary of State has power to enter and excavate the site. The Act does not provide funding as of right and represents an indication to developers of government concern for archaeological heritage. In the terms of their definition, AAIs are 'archaeologically expendable', in that, in time, as information is extracted from the sites and therefore removed from its context, archaeological voids for development are created. Eventually de-designation could result as the sites become archaeologically exhausted.

AAI designation is therefore only of limited use, especially if preservation of deposits in-situ is the aim of the local authority.

Other statutory provisions which relate to York are found within the Town and Country Planning Act 1990 and include measures for the protection of listed buildings and for the designation of Conservation Areas. These measures are not directly applicable to York's archaeological resource, but they are relevant in that they help conserve parts of the environment, thus incidentally helping to preserve any archaeological deposits within those particular sites. Listed buildings may also be scheduled ancient monuments.

Practice in York, and a comparison with other local authorities is discussed below with reference to internal consultation procedures, publicity, development control policy and forward planning.

7.2.2 Consultation Procedures

York now possesses 'in-house' archaeological advice within its Development Services Department in contrast to the other three AAI cities reviewed by the consultants; Canterbury, Chester and Hereford.

Canterbury and Hereford retain the services of the Canterbury Archaeological Trust and the City of Hereford Archaeology Unit respectively to advise them on archaeology. Both bodies are partially funded by the Councils but depend heavily on outside funding. Both bodies are the 'investigating authorities' under the 1979 Act. Chester City Council retains in-house archaeology expertise, although this is located within the Department of Leisure Services rather than the Planning Division of the Technical Services Department. The investigating authority for the Chester AAI is the City Archaeologist.

7.2 Development Process: Archaeology and Planning (Cont'd)

7.2.2 Consultation Procedures (Cont'd)

In York, with regard to consultations in connection with planning applications, the role of the York Archaeological Trust, which is the investigating authority, has changed following the appointment of a Principal Archaeologist within the City Council. In Canterbury and Hereford, the local Trust and Unit are provided with a frequent computer listing of applications received and can select those for further consultation. In both cities, close relationships apparently exist between the planners and the Trust/Unit, though involvement of the latter are to a large degree dependent on the planning officers' discretion regarding degree of involvement in the application negotiation and determination process. Similarly, in Chester, the Council's archaeology service is provided with frequent computer listings of applications and is regularly consulted on relevant applications.

In non-AAI towns, similar relationships exist, although the location of archaeological advice within local authorities varies. In Carlisle, Coventry, Leicester and Southampton, for instance, archaeologists employed by the Councils are located in leisure service departments, whereas Worcester retains archaeological advice within the planning department. Many smaller authorities without outstanding archaeological resources rely on a County Archaeological Service for advice. Warwick and Stratford-on-Avon District Councils, for instance, consult the Warwickshire County Field Archaeologist. In general terms, the network of County Council Archaeological Officers are the major providers of local archaeological advice in England.

Within York City Council, the Principal Archaeologist adopts a pro-active consultation role, by vetting weekly lists of planning applications and selecting those with archaeological implications. Archaeological comments or recommended courses of action (e.g. watching brief; preservations; evaluation; or refusal) and details are given to the respective development control caseworker who co-ordinates all responses with the applicant. Should meetings with the applicant be necessary, the Principal Archaeologist would attend. Normally, the only third party archaeologist consulted is the YAT. AAI Notices are received and scrutinised by the Principal Archaeologist: if adequate they are passed to YAT (the investigating authority); if insufficient information is included, further details are requested from the applicant. Normally, AAI Notices are only received where planning applications are submitted, and the two procedures under the statutory provisions can run in tandem. There does not seem to be a follow-up or 'reminder' procedure for applicants who have failed to respond to requests for further information regarding the AAI Notice.

Clearly the presence of an archaeologist within local authority planning departments increases the opportunity for archaeological input into planning application determination.

7.2.3 Developer Contact

Planning departments in the AAI authorities all send out the Standard Operations Notice forms to applicants for completion, together with covering standard letters. Generally these are sent out with planning application forms. None of the AAI authorities give a leaflet or offer 'developer friendly' documents to potential applicants or applicants.

All archaeologists approached expressed a desire to contribute to pre-application discussions with developers alongside the local authority planners, and many were concerned by the risk that such discussions could be held without archaeological input. Archaeologists in AAI cities expressed an interest to become involved in sites outside the AAI if necessary. A number of archaeologists located within leisure services or other departments expressed the view that their developer contact would be enhanced if they were located within planning departments. However, archaeologists in Chester felt that they had sufficiently close links with developers and planners without the need to be located in the same unit as their planning colleagues. Clearly a number see their role as being in rescue rather than presentation or display of finds.

7.2 Development Process: Archaeology and Planning (Cont'd)

7.2.3 Developer Contact (Cont'd)

Some archaeologists in non-AAI towns considered that they had close links with developers and were sufficiently aware of developments in the pipeline, or sites to be vacated, so that they could be confident of ensuring their involvement in developer/planner discussions. Clearly successes in these situations are achieved by way of personality of the archaeologist concerned rather than any council procedure or arrangement.

York, Canterbury and Chester are fortunate in that there seems to be considerable developer awareness that these are historic towns where archaeology may impose a development constraint. Hereford, together with all other local authorities consulted wished to improve this awareness. In Hereford, there seems to be a general lack of developer awareness of AAI procedures.

There seems to be no procedure in York or any other AAI town for ensuring that works which do not constitute the need for planning permission, comply with AAI procedures. Thus permitted development which is covered by Schedule 2 of the General Development Order 1988 is unlikely to be detected, and these developers (which may be individuals, bodies or agencies unfamiliar with making planning applications) may be unaware of AAI requirements. There may therefore be a need to target these groups (which could include statutory undertakers) for AAI and archaeological publicity.

Few authorities appear to produce leaflets or any other publicity aimed at developers. The only examples known are Leicester City Council, Carlisle City Council and Essex, North Yorkshire and Wiltshire County Councils. This small number is surprising given the press attention directed to rescue archaeology in the 1970s and the media and presentation skills which should have been developed by archaeologists as a result (Appendix D). Also, the presence of archaeologists within leisure service or museum departments could presumably be used to advantage to utilise the communication and presentational skills that many of these departments undoubtedly have.

The Code of Practice produced by the British Archaeologists and Developers Liaison Group did not feature prominently in any discussions with archaeologists or planners. No strong feelings were expressed about it, although its existence was generally welcomed.

7.2.4 Current Planning Policies and Practices

Most Structure Plans recognise the importance of conserving sites of special historic or archaeological importance. The approved North Yorkshire County Structure Plan policy (which applies to York) is particularly strong and succinct:

'Policy E5
DEVELOPMENT PROPOSALS WHICH COULD RESULT IN DAMAGE TO, OR THE
DESTRUCTION OF, SITES OF ARCHAEOLOGICAL IMPORTANCE WILL NORMALLY
BE REFUSED'.

7.2 Development Process: Archaeology and Planning (Cont'd)

7.2.4 Current Planning Policies and Practices (Cont'd)

Other Structure Plans contain more lengthy policies which, whilst not so succinct, do give positive guidance. The approved North East Wiltshire Structure Plan (No. One. 1987) is an example:

'IMPORTANT AREAS OF ARCHAEOLOGICAL INTEREST WILL BE PROTECTED FROM DEVELOPMENT PRESSURES AS FAR AS POSSIBLE. PROPOSALS FOR DEVELOPMENT WHICH WOULD DAMAGE OR DESTROY IMPORTANT ARCHAEOLOGICAL SITES WILL NOT NORMALLY BE PERMITTED. IN OTHER CASES, CONSIDERATION WILL BE GIVEN TO THE USE OF AGREEMENTS INCLUDING THOSE UNDER SECTION 52 OF THE TOWN AND COUNTRY PLANNING ACT, (1971) TO FACILITATE SITE INVESTIGATION AND RECORDING BEFORE ANY DAMAGE OR DESTRUCTION CAN OCCUR, AND WHERE POSSIBLE TO SECURE THE PRESERVATION OF ARCHAEOLOGICAL FEATURES OR DEPOSITS'

Similarly, as another example, the proposed modifications to the Staffordshire Structure Plan 1986-2001 (August 1990) gives positive guidance as to the Council's intentions in the form of three policies.

- '89 Sites of significant archaeological interest will, wherever possible, remain undisturbed and unaffected by new development so as to be available for scientific research and/or public presentation.
- 90 Planning permission for development affecting Sites of archaeological interest will be determined in the light of information supplied following an archaeological evaluation to determine the importance of the remains. Any approval may be conditional upon appropriate opportunity for archaeological excavation and recording prior to and/ or during development.
- 98 The County Council will, where appropriate, encourage the recording, preservation and public presentation of sites of archaeological interest by means of financial assistance being made available or by means of the acquisition or guardianship of such sites under the terms of the Ancient Monuments and Archaeological Areas Act 1979.'

York is unique amongst the five AAI cities in not having a local plan either approved or on deposit.

Many District Councils, where no local plan exists, have prepared informal planning guidance documents or plans. These are beneficial in that they can direct development and state council policies whilst avoiding the laborious local plan statutory procedures, although they do carry less weight for development control purposes than a statutory local plan.

York City Council does not have any policies or informal planning guidance relating to archaeology but it is understood that such a document is in the course of preparation.

7.3 Development Process: Developer's Attitudes

7.3.1 General Attitudes

Bernard Thorpe have discussed the key issues with a range of companies during the course of the practice's daily work. This has included Grosvenor Square Properties, Chessingham Estates, and City Land as well as a number of architects. More formal enquiries were made to Pilcher Properties, General Accident, Hammerson Developments, Trafalgar House, Commercial Union, Grand Metropolitan, Inter City Properties and Kayland. Discussions have been held with Arup project engineers responsible for development projects which have involved archaeological issues. Bernard Thorpe have also consulted two funding institutions (Westpac and Norwich Union).

A meeting has been held with the British Property Federation (BPF) which represents the property industry as a whole and whose members include companies involved in funding, developing and owning property. The Organisation is the joint sponsor of the Code of Practice which formalises and supports voluntary co-operation between archaeologists and developers. The Code and the associated liaison group was initiated jointly by BPF and the Standing Conference of Archaeological Unit Managers. The Organisation considers that a realistic understanding between the parties concerned produces results as good, or better, than those based on the requirements of Part II of the Ancient Monuments and Archaeological Areas Act 1979. The BPF would fight any moves to formalise such an approach in statutory planning procedures but welcomes the use of the Code being encouraged in development plans.

In general, developers seem to favour this flexible, negotiated approach and not new legislation. However, this does not remove the need for enhanced information and firmer guidelines. At the one day BPF conference on Archaeology and Planning in 1989, Mr C Edwards of Prudential Portfolio Managers commented that developers need:

- | | | | |
|---|-----------------|---|---|
| - | certainty | - | good quality information and advice to be able to evaluate risks, costs and returns as early as possible; |
| - | dependability | - | contracts must be adhered to; |
| - | professionalism | - | respect for the objectives of other professionals; |
| - | justification | - | any donations must be limited to viability. |

He suggested developers do not need more legislation, planning conditions and Section 106 agreements.

At the same conference, Mr Fahie of Imry Merchant Developers expressed the view that the degree of co-operation in the field was directly proportionate to the quality of the analysis, the negotiations, planning and documentation prior to the dig and that Developers should take a proactive role during this stage.

Problems have arisen where archaeologists have approached the site agent or architect rather than the developer himself and these individuals are often reluctant to return to their client to inform him of potentially increased costs due to archaeology which had not been anticipated.

In most cases reviewed, developers had been aware of the presence of archaeological remains on their site at the beginning of the development process, and where applicable, the powers of the Archaeological Areas Act. This is particularly the case in York where most developers make an allowance for a site evaluation in the initial feasibility appraisal. However, even in the case of this relatively small expenditure, some housing developers in the more stagnant markets in the South are now experiencing difficulty.

7.3 Development Process: Developer's Attitudes (Cont'd)

7.3.1 General Attitudes (Cont'd)

The developer often has no conception of demands which may be imposed once the initial evaluation is complete, in terms of:

- (a) time delay
- (b) excavation costs, and
- (c) design changes

In many cases, it is the time delay which imposes the most severe cost penalties through interest charges. Of the £5 million cost penalty involved at 85 Queen Victoria Street (Huggin Hill Baths) over £3 million was from interest charges.

In some cases, there have been particular difficulties where public sector organisations fail to agree on a course of action and by the emergence of local pressure groups each with their own set of demands.

It is believed Imry Merchant spent up to £11 million in funding the six month long dig and alterations to design to accommodate the needs of the Rose Theatre. Hammerson Group paid £2 million to cover excavation and re-design at 85 Queen Victoria Street, EC4 where the Roman Huggin Hill Baths were discovered. Clear guidelines are required with respect to site mitigation strategy so that allowances can be built in to the initial feasibility appraisal.

Flexibility is also considered vital in terms of the ability to negotiate building design, timing of demolition or phasing of development. Imry Merchant were permitted an extra two storeys to make up for the lack of a basement due to the presence of the Rose Theatre, but there is obviously less scope for such solutions in a city like York.

Concern remains about the considerable expenditure involved in funding excavation works. English Heritage estimated that £14 million was donated by developers in 1988, and the figures for 1989 were likely to be considerably higher. Developers emphasise that their funding is provided by the small investor through pension schemes, life policies, mortgage endowments etc., and therefore any such donations must be justified. Methods of carrying out 'economical' archaeology will become increasingly important. Through careful planning, the archaeologist can share trenches, site accommodation, equipment and vehicles with the contractor. In some cases, this approach has halved excavation costs. In addition, competitive tendering for archaeological work could become more common. This has already resulted in reduced costs to developers in London.

Occasionally, discoveries are made once planning permission has been granted. On the whole, it is considered to be in the developer's interest to respond to the needs of the archaeology in these cases to avoid bad publicity. This may not be the case if a small development company is involved.

7.3.2 Attitudes to Archaeology in York

Until recent years York was of little interest to developers as rental levels (other than in prime retail locations,) did not warrant major investment in development sites. During the last five years this has changed and York has become an increasingly attractive city for those wishing to invest in property. Developers took a keen interest following the surge in demand by tenants and resultant increase in rental values, together with the availability of sites. Previously, developing many of these sites had not proved to be an attractive proposition and therefore plots, often close to the city centre, had remained undeveloped.

7.3 Development Process: Developer's Attitudes (Cont'd)

7.3.2 Attitudes to Archaeology in York (Cont'd)

A number of re-development sites have become available as owners relocate their businesses to out-of-town locations. Many of these relocations are funded by the release of this high value freehold property whilst the current occupiers move in to more up-to-date and efficient buildings elsewhere.

In the buoyant market which existed until quite recently, archaeology was considered with caution but not as a major issue. It appeared to be perceived as being no more complicated than dealing with listed buildings, particularly for local developers. However, local developers were more conscious of archaeological issues and tended to carry out more preparatory work. In this climate, the financial obligations for site evaluations were built into the developer's initial feasibilities.

These attitudes are changing as a result of less certain market conditions. Developers would now wish both the planning and archaeological situation to be absolutely clear prior to making unconditional offers. Bernard Thorpe are already experiencing this on a number of sites which, development conditions, have required remarketing exercises in recent months.

There is no doubt that the archaeological and historic nature of York has contributed to its attractive image as a location but equally some developers may have considered the risks too great and will have invested elsewhere.

7.4 Development Process: Impact of the Enhanced Information

The site specific archaeological information reveals that sites range from those where development will be unconstrained by archaeology to those with important deposits which should either be preserved in-situ or researched by excavation. In the case of the latter, the developer has a number of alternative choices, each with different time and cost implications:

- (a) A full archaeological excavation preceding site development, lasting for several years with attendant cost implications; or
- (b) A shorter investigation leading to the preservation of remains in-situ, possibly with a special foundations solution;
- (c) No development possible, the find could be of sufficient worth to be opened to the public; or
- (d) Destruction of remains.

The procedures outlined in Sections 5 and 6 means that a developer should be able to determine and cost a mitigation strategy quite early in the development process. Uncertainty about the effect of archaeology should be restricted to the possibility of encountering major and significant unsuspected remains which requires a late change in design or delay to development.

Developers' key concerns in assessing the attractiveness of a project revolve around costs, uncertainty and the resulting time delay as explained in para 7.3.2. These factors are likely to vary for each individual site, and in addition, the implications of the enhanced information will be different for potential purchasers and existing owners.

7.4 Development Process Impact of the Enhanced Information (Cont'd)

7.4.1 Development Process: Developer's Requirements

Developers purchase sites by a variety of methods including private treaty, tender and sometimes even auction. In order to establish the price they are prepared to offer, they carry out a development feasibility. The main objective of the developer is obviously to realize an appropriate return on his investment. With the exception of small schemes and refurbishments, it is unlikely that the developer will achieve quick returns (on many occasions any returns will be delayed for a minimum of 12 months and, often on larger schemes, this timescale can extend to well over two years).

In undertaking their initial feasibility studies, developers have to make a number of assumptions and consider a range of issues including:

- (a) Does the site have development potential?
- (b) Is the location right and suitable for the type of development proposed?
- (c) What planning permissions will be available for the site?
- (d) Will suitable tenants be available on completion or before?
- (e) What rent will they pay and what will the capital value of the scheme be?
- (f) How much will the scheme cost?
- (g) How long will the site take to develop?
- (h) Will it be possible to obtain finance, how much will it cost, and what will the terms be?

In the case of York, experienced developers are aware of the potential archaeological importance of sites and to a certain extent will adopt cautious assumptions. In most cases this will result in the inclusion of a minimum requirement for an archaeological site evaluation lasting 6 months (at a cost of anything up to £50,000) in the feasibility assessment. This level of expenditure will be become less acceptable as the market stagnates.

All these issues include an element of risk and, as in any investment, the greater the risk, the greater the profit expected. As risk increases, demand generally falls and the availability of finance for development reduces. The level of demand for sites will therefore also depend on how developers perceive future risk in terms of:

- (a) Interest rates, will they rise or fall?
- (b) What will the conditions in the market be when the property is ready for occupation?
- (c) What competition is there now or likely to be in the development period?
- (d) What will be the nature of the economic, and political climate, in x months or years time?

7.4 Development Process Impact of the Enhanced Information (Cont'd)

7.4.1 Development Process: Developer's Requirements (Cont'd)

Having satisfied himself on these and many other questions the developer will undertake an appraisal. The format of these assessments vary greatly and often involve discounted cash flows and computerised methods. However the traditional approach is illustrated on Table 7.1. This is a hypothetical exercise but represents a development at the large end of the range of projects likely to take place on a single site in York. Two options are tabulated: one with no archaeological constraint and the other including a 12 month excavation costing £1m.

This residual method of valuation establishes site value following deduction of development costs from the capital value of the completed scheme. Therefore it can be seen that any increase in costs or time delay which impacts on interest payments will have the effect of reducing site value.

7.4.2 Effect of Archaeological Information

The availability of more detailed information about the archaeology of a site would allow a developer to assess likely delays and costs which could then be incorporated in his feasibility assessment. The same information will allow site owners to assess the likely affect of archaeology on site values.

There are two key issues:

- (a) How will costs affect land values.
- (b) How will developers and land owners respond to changes in land values and cost imposed by mitigation strategies.

7.4.3 Increased Costs Due to Archaeology

The strategies outlined in Sections 5 and 6 mean that in general a developer will be able to assess the likely costs and delays of alternative mitigation strategies. These costs and delay effects could then be included in viability studies and due account taken of the effect of archaeology on residual land values and the imponderables such as perceptions of future rental market conditions.

The quantifiable increased costs, inter alia, include:

- (a) the archaeological site evaluation at £10-50,000 (1990 prices).
- (b) the additional construction cost of the agreed mitigation strategy in comparison with the unconstrained cost.
- (c) The cost of formal archaeological excavation.
- (d) interest charges arising from any delay imposed by the mitigation strategy.

Our research shows that most developers would accept increased costs for (a) if they did not exceed £50,000. It is clear from developer reaction that the significant cost which could arise in (b) and (c) cannot be borne by the individual developer. The effect of such costs is shown on Table 7.1 under Option 2 which includes a 12 month, £1 million excavation. The residual land value falls by 80% and total profit falls. A developer who acquired land on the basis of a viability study which did not allow for archaeological factors would suffer losses if subsequently forced to bear all the costs arising from the example in Option 2.

TABLE 7.1 RESIDUAL LAND VALUE: TYPICAL OFFICE DEVELOPMENT

Residual Valuations for 40,000 square foot office with 40 parking spaces.

Estimated Rental Value

Offices: 40,000 sq ft @ £15/sq ft p.a.	600,000
40 parking spaces @ £500/space p.a.	20,000
gross income	620,000 p.a.

Estimated Capital Value

Years purchase in perpetuity at:	OPTION 1	OPTION 2 (with excavation)
1. 7.5% (Yield) 13.3 years giving gross value	8,264,000	
2. 8.5% (Yield) 11.76 years	-	7,291,000
Less realisation costs @ 2.75%	227,276	200,508
Estimated realisable value	8,037,324	7,090,692
say	8,000,000	7,100,000
Outlay		
Site investigation	50,000	50,000
Building cost; @ £75/sq ft	3,000,000	
@ £81/sq ft to allow for 1 year delay		3,240,000
Professional Fees	360,000	388,000
Finance: 50% of COAs for 18 months @ 17%	428,400	462,570
Marketing: say	20,000	20,000
Agents fees: say	93,000	93,000
Void and rent free periods	50,000	50,000
Development cost	4,001,400	4,303,570
Developers profit @ 20%	800,280	860,714
Total cost	4,801,680	5,164,284
say	4,800,000	5,165,000
Remaining to represent: site value; interest over development period; and profit	3,200,000	1,935,000
Interest @ 17% compound over 2 years	718,301	142,153
Archaeological cost, including interest over 12 months	-	1,085,000
Profit @ 20%	533,089	322,500
Residual Value say	1,950,000	385,345

Note:

This feasibility is purely as an example in order to demonstrate the principles involved. It is not intended to reflect the detail normally to be expected in a valuation of this nature nor are the figures to reflect accurate or true rents, values or costs.

7.4 Development Process Impact of the Enhanced Information (Cont'd)

7.4.3 Increased Costs Due to Archaeology (Cont'd)

It is therefore important that developers are able to allow for the effect of archaeology on their development proposals and make due allowance for cost when acquiring land.

7.4.4 Uncertainty

Increased uncertainty on some sites will increase risk. This will result in developers and their financiers taking a more cautious view of the potential of the site. The developer may have to face increased funding costs if Institutions perceive there is a higher risk factor involved, this may result in the limitation of the amount of capital they are prepared to inject into a development or alternatively higher interest rates.

Developers already face a lengthy time delay between initial investment and the realisation of returns and if either the economic or political climate is uncertain as it is currently, they will take a particularly cautious approach. By adding further to the timespan of development, the developers will need to make assumptions over a much longer period. This will result in an increase in margins required, particularly if inflation is rising and if predictions for the economy are not good, and will ultimately again impact on the residual land value.

7.4.5 Land Values

Our study showed that in the southeast, under buoyant market conditions, land values are often sufficient to fund significant archaeological excavation work. This is not the case in York where on hypothetical, but typical York development, viability calculation shows that the cost of a major excavation could exceed the residual value of a site.

As shown in our hypothetical example archaeological cost, although only one of many factors, will significantly depress residual land values. If other market factors, such as demand, remained static then in the long run land values in York would adjust to take account of these costs. One effect of this could be to make redevelopment less attractive.

7.4.6 Owner Occupiers

There are many sites currently owned by developers or individuals who would either wish to undertake redevelopment themselves or sell the site for development purposes. If redevelopment proves not to be viable because of the archaeological factor, an existing freeholder will look for alternatives in order to realise a return on the property. Continuation of existing use or alternatively refurbishment may be considered. This could result in a reluctance to redevelop properties and in some cases this may be against the City's interest. Eyesores or non-conforming uses, which could otherwise be replaced by attractive buildings, could remain. Vacant sites could be left undeveloped for long periods of time. In addition, the lack of availability of suitable sites being released through relocation, could restrict the potential for businesses moving into the City and could therefore increase green belt pressures.

7.4.7 Sites Free from Archaeological Problems

A restraint on the supply of land available will inevitably give rise to an increase in the value of those sites that can satisfy developers' requirements and are free from archaeological issues. If land values rise then consequently rents will need to increase as the development process becomes more expensive.

7.5 Development Process: Improvements to the Development Process in York

This stage of the study has identified a number of issues which need to be addressed in order to provide a sound basis for catering for development in York whilst allowing the Council to meet its more general curatorial duty as one of the bodies responsible for protecting York's archaeological heritage. These issues and related recommendations are set out below.

7.5.1 Release of Available Information

As discussed, the implications of the enhanced level of information will be different for each site, for potential purchasers, and existing owners. On some sites, uncertainty will be reduced, on others it will be increased, unless the City is able to narrow down treatment options.

It is considered that the archaeological information should be made available to potential purchasers at the time when serious enquiries are being made, and equally, owners should also be informed.

The information should be 'user friendly' and clearly identify the mitigation with likely cost and time constraints. This would be possible if a research strategy was put in place as recommended in Section 5.

Where appropriate, this early information could also include predetermined foundation solutions and indicate whether phased excavation and development is possible.

7.5.2 Consultation Procedures

It is clear that York City Council benefits from the appointment of an archaeologist within the Directorate of Development Services. It allows archaeological consultation to take place at an early stage in the process, enables archaeology to become an integral part of the planning decision - making process, and allows the Council to input its own archaeological views into development decisions (rather than relying only on external advice).

7.5.3 Developer Information

York benefits from a great awareness of the presence of archaeology among developers in comparison to other cities.

Nevertheless, it is clearly advantageous to contact and alert developers as early as possible to archaeological constraints. As well as the production of 'developer-friendly' site specific information (as discussed in 7.4.1), it would be worthwhile to produce an advance 'alert' document of a general nature which, as well as promoting York to development investment would also alert developers to the presence of archaeological resource and the provisions of the 1979 Act relating to AAIs. Such a document could take the form of a leaflet, and that produced by Leicester City Council Planning Department (July 1989) has much to commend it.

The Leicester leaflet is well presented and illustrated and has the following headings:

- Archaeology: Why is it important?
- What area is most affected?
- Early negotiations

7.5 Development Process: Improvements to the Development Process in York (Cont'd)

7.5.3 Developer Information (Cont'd)

- What will the developer have to do?
- Could an application be refused on archaeological grounds?
- A code of practice
- Conclusions

It represents a summary of the City Council's 'A Policy for Archaeology and Planning (Feb 1988)' and was distributed to local architects, estate agents, and solicitors. It is sent out by Area Planning Officers in response to planning enquiries. A similar approach could be of benefit to York City Council, who could also target statutory undertakers and residents groups, etc. (see Appendix B for a draft Guide for Developers in York).

In any case, a clear planning brief for each site to complement the archaeological information would be most beneficial.

7.5.4 Planning Policy and Practice

Government advice and planning case law now clearly establish archaeology as a 'material consideration' in a local planning authority's assessment of a planning application. The DOE's Planning Policy Guidance (PPG 16) 'Archaeology and Planning' states that:

'The desirability of preserving an ancient monument and its setting is a material consideration in determining planning applications whether that monument is scheduled or unscheduled'. (Para 18).

Archaeological conditions attached to planning permissions are now commonplace. DOE advice on such conditions is contained in PPG 16, paragraphs 29 and 30.

Significant evidence of refusal of planning permissions on archaeological grounds has not been forthcoming. It seems that authorities, in most cases, are able to negotiate a satisfactory agreement (whether under Section 106 of the 1990 Act or not) to avoid the need for refusing an application. Justification for refusal is given in PPG1 where 'development would cause demonstrable harm to interests of acknowledged importance'. Refusal (on the grounds of insufficient information) to safeguard archaeology is harder to justify unless linked to strong development control policies. The Planning Authority can however direct an applicant to provide further information under the provisions of Article 4 of the Town and Country Planning (Application) Regulations 1988.

Canterbury City Council hopes to adopt the following policy which addresses the issue of submission of information:

'The City Council may require planning applications affecting areas of known or suspected archaeological interest to be accompanied by an assessment of the site's archaeological importance.'

A policy such as this moves implicitly towards the requirement of an Environmental Assessment to be submitted with an application.

7.5 Development Process: Improvements to the Development Process in York (Cont'd)

7.5.4 Planning Policy and Practice (Cont'd)

Environmental assessment regulations (S.I. 1988/1199) derive from an EEC Directive (85/337) which require an environmental assessment to be carried out, before development consent is granted, for certain types of major project which are judged likely to have significant environmental effects.

'Archaeological sites and features' are listed (in Appendix 4 of 'Environmental Assessment - A Guide to Procedures', DOE/Welsh Office 1989) as being matters which may need to be considered as part of the contents of an environmental statement. The circular (15/88) accompanying the Regulations states that:

'Smaller urban development schemes may require EA in particularly sensitive areas. e.g. central area redevelopment schemes in historic town centres' (Appendix 'A', para. 17)

Given this sentence in the Circular, there would appear to be no reason why Environmental Assessments could not be required by York City Council for 'smaller urban development schemes' within the city's historic core, where the most significant impact, and therefore the predominant element of the environmental statement, would relate to archaeology.

It is perhaps worth noting that the draft PPG stated that "In some limited circumstances" a formal Environmental Assessment may be necessary, while the final version of PPG16 omitted the word "limited". (Paragraph 22).

The Consultants are not aware of any environmental statement which gives this degree of emphasis to assessing archaeological impact but believe the legislation to be broad enough to allow such statements to be sought.

The recent issue of Planning Policy Guidance: Archaeology and Planning (PPG 16) means that there may be no need to resort to environmental assessment regulations to require developers to produce archaeological assessments.

The DOE Planning Policy Guidance: Archaeology and Planning (PPG 16; paras 21-2) says that it is reasonable for the Planning Authority to request the prospective developer to arrange for a field evaluation to be carried out 'before any decision on the planning application is taken'. This government view, whilst not going so far as environmental assessment provisions, clearly puts the onus of evaluation on the developer as part of the application. However, developers are likely to take the view that this is an unacceptable expense because it would have to be undertaken with no guarantee that planning permission would be forthcoming. The Council already defines appropriate uses or developments in principle for certain sites in order to encourage developer confidence before applications are determined (or indeed submitted) by issuing planning briefs; this helps to secure an appropriate development framework.

7.5 Development Process: Improvements to the Development Process in York (Cont'd)

7.5.5 Plan Preparation

York would benefit from the existence of a statutory local plan which (inter alia) addressed archaeological issues in the City. Government advice is clear on the need for local plans:

'The Secretaries of State are concerned that large areas of England and Wales are still without formally adopted and up-to-date local plans. They wish to urge on local planning authorities the importance of local plans as the basis for sound and effective development control, especially in areas where there is strong and persistent pressure for new development. The planning system must make proper provision for development and at the same time take account of the interests of conservation and the need to protect the local environment. Local plans provide the medium for doing this' (PPG 12. para.1).

The Planning and Compensation Bill seeks to make the production of comprehensive District-wide local plans by local planning authorities mandatory. This is an issue which York City Council is likely to have to address.

Should the Council not immediately wish to embark on a District-wide local plan or should there be a delay or alterations in the Bill, there remains the possibility of another option: the production of a statutory Archaeology Subject Plan for the City of York.

A subject plan may deal with topic raising issues of general policy, rather than the comprehensive area coverage required by a District Plan.

To the Consultant's knowledge no archaeology subject plan exists in the country, the usual topics for inclusion being minerals, recreation, green belt or countryside. Once again however, the relevant legislation remains in place, with the opportunity there to be taken.

The production of a subject plan would have the following advantages:

- the opportunity to consider a major issue in York to include aspects of related issues of development and without the need to address other District-wide issues such as housing, employment, etc. in a statutory procedural way;
- the opportunity to build on the contents and archaeological strategy of this study and to present it in a public and developer-friendly manner;
- the opportunity to address issues in archaeology, such as a strategy for balancing preservation in-situ, research and public presentation and display;
- the opportunity to include policies on conditions for archaeological assessment or evaluation, and protection;
- should mandatory district plan come into force, the archaeology subject plan policies could be incorporated within it;
- and finally, a subject plan would have the statutory backing to stand up as a material consideration at Appeal and in any award of costs.

7.5 Development Process: Improvements to the Development Process in York (Cont'd)

7.5.6 Funding

In the case of sites of major archaeological significance, development could be uneconomic, even with land values falling back if the onus for funding of extensive archaeological excavations in advance of construction is left with the developer. This would result in sites remaining undeveloped and unattractive buildings remaining in place, whilst those free of problems could come under substantial development pressures. It is only some form of financial assistance which could avoid such problems on sites likely to have significant remains and requiring a full excavation process. Even then owners may be reluctant to take advantage of such funds.

Therefore, the problem of funding on these significant sites remains. Funding Institutions would not be willing to advance monies to finance archaeological investigations even if there were to be an involvement, at a future date, with a development on the site in question.

If central government funding was available to pay for excavation when this was necessary many of the conflicts between the development and archaeology would more easily be overcome. It is clear that large scale funding will not be forthcoming and this has led us to consider other forms of funding.

7.5.7 Funding by Levy

The key issue in developing a policy for archaeology is funding excavation and research on these sites where this is considered the most appropriate action. If funds could be provided by means of a general levy or 'heritage tax' on all development in a designated area many of the problems which currently arise would be removed. The levy would fund archaeological intervention and possibly be used to compensate developers who suffer loss due to the effects of archaeology in their development.

This is attractive on a theoretical level. However such a levy would require legislation and if applied only in certain designated areas could deter investment in development in those areas.

In addition it is likely that a levy would be interpreted as a hypothecated tax by H.M. Treasury and therefore be unacceptable under their policy grounds.

We do not consider funding by levy worth pursuing because of the need for legislation and the political difficulties of introducing an hypothecated tax.

However, for the longer term, we recommend that English Heritage considers how such methods of funding could be introduced.

7.5.8 Other Funding Sources

It is clear from our researches for the present that local authorities, and in particular York City Council, are not able to fund the scale of operation implied by a mitigation strategy requiring archaeological excavation before development starts.

English Heritage and private sector sponsors may support such excavations in advance of approved development but this would depend on the merits of the site's archaeology and the significance of the deposit.

7.5 Development Process: Improvements to the Development Process in York (Cont'd)

7.5.8 Other Funding Sources (Cont'd)

We believe there is potential for raising funds for specific major excavation, research and publication exercises where this is consistent with the Research Framework. Potential sources include the EEC, research foundations, trusts and other non-governmental institutions. We believe York is an internationally important archaeological site and could expect to tap this source of funding (see Section 5.5.5 and Table 5.2).

7.5.9 Conclusion on Funding

Developers are constrained by our policies to adjust their foundations in order to minimize damage to the deposit rather than pay for major excavations in every case. The design of foundations so that the deposit is disturbed as little as possible would be a condition of planning permission and should not greatly increase the cost of the development. Developers who wish to dig out deposits for a basement in the site they are developing will need to promote archaeological research, i.e., excavation of that deposit before it is destroyed. Although they may not be expected to pay for this research themselves, they must either allow time for fund raising or contribute cash in lieu.

7.5.10 Summary: Cost Implications for Developers

- (a) Developers will be expected to pay for archaeological site evaluation.
- (b) Developers will be constrained to adjust their foundation design so as to minimise damage to the deposit.
- (c) Developers may wish to allow time or access, and make some financial contribution, if they wish to promote, encourage or allow archaeological excavation on particular sites if the planning authority deems excavation to be appropriate. The onus on developers will be greater where they require the provision of, for example, a basement.

Section 8

8. SITE SPECIFIC STUDIES

8.1 Scope of Studies

York City Council identified 35 sites in the study area which are likely to be developed in the near future. These sites are located on Figure 8.1 and listed in Table 8.1. The sites were assessed using standard desk top study techniques and presented in a standardised format. The studies covered the following:

- (a) A review of archaeological data from adjacent sites drawn from the database.
- (b) A review of geotechnical data.
- (c) A review of documentary sources such as historic and ordnance survey maps.
- (d) Site inspections.

The specific site assessments for each site are given in Appendix B.

Also in Appendix B will be found a guide for developers for the archaeological zones in the city and what may be expected there.

8.2 Standard Format for Site Assessment

Each site assessment record is presented in a standard format which could be supplied directly to interested parties. The format is as follows:

A location map at 1:1250 scale showing the site and adjacent data points.

- 1.1 Location, topography and archaeological zone
- 1.2 History derived from maps
- 1.3 Geology
- 1.4 Archaeology
 - 1.4.1 Deposit Model
 - 1.4.2 Research Rewards
 - 1.4.3 Evaluation Required
 - 1.4.4 Formal intervention Required
 - 1.4.5 Mitigation Strategy

8.3 Summary of Results

Findings from the site specific studies have been used in the main part of the study. The scope of the site specific study was not enough to enable parameters such as archaeological value to be devised. Broad archaeological findings are given in Table B.I. The grid location of the sites, the areas involved and the research zones within which they are located are given in Table 8.1.

One specific site was investigated in relation to all parameters. Site No. 26 was the subject of a separate case study which is included in Section 6.8. It can be seen from this case study how much is involved in a detailed consideration of a specific site.

Appendix B therefore contains preliminary assessments only. In the majority of cases a detailed site evaluation is required to determine the appropriate mitigation strategy.

8.3 Summary of Results (Cont'd)

The total area affected by the proposed development sites included in the site specific studies amounts to 24.35 ha in the historic city, with a further 28 ha lying outside the known limits of the historic core.

Two of the sites (Site Nos. 2 and 33) have already been developed. For two of the others (Site Nos. 8 and 32) it is not possible, on the information to hand, to provide even a preliminary assessment.

The general deposit model (section 4), together with the desk-top studies for each site and the research agenda for York (Section 5) make it highly probable that the remaining 31 sites have high archaeological value, and development there should allow for the preservation of the deposits.

Table 8.1 - SITE SPECIFIC STUDIES: INFORMATION ON SPECIFIC SITES

SITE NO.	SITE NAME	GRID LOCATION	AREA AVAILABLE (ha) (approx)	RESEARCH ZONE
1	BLOSSOM ST	596 514	0.5	16 (SW SUBURB)
2	BLOSSOM ST, LION & LAMB	592 512	0.3	16 (SW SUBURB)
3	CLEMENTHORPE, CO-OP COAL	603 511	0.2	15 (S SUBURB)
4	BISHOPHILL, CAR PARK	601 514	0.3	11 (COLONIA)
5	KING STREET	603 516	0.1	9 (E OUSE)
6	CONEY STREET, EVENING PRESS	601 518	0.5	9 (E OUSE)
7	FALKLAND STREET	602 512	0.15	11 (COLONIA)
8	FOSS ISLANDS	610-614/ 517-522	27	13 (E SUBURB)
9	CARMELITE STREET	607 517	0.8	5 (SW FOSS)
10	PEASHOLME GREEN W	607 610/ 518-521	9	5 (W FOSS)
11	PEASHOLME GREEN	608 520		
12	PEASHOLME GREEN	608 518		
13	PICCADILLY, BASS SITE	607 515	0.5	4 (E SUBURB)
14	CARMELITE STREET (WITH NO. 9)	607 518		
15	LAWRENCE STREET	611 514	1.0	13 (E SUBURB)
16	LEEMAN ROAD, CONCRETE WORKS	591-593/ 518-520	4.0	17 (W SUBURB)
17	LEEMAN ROAD, FOXTONS	597-519	0.25	17 (W SUBURB)
18	PEASHOLME GREEN, LEEPER HARE	6079 5207	0.1	2 (CANABAE)
19	PICCADILLY, TESCOS	605 517	0.15	3 (CONFLUENCE)
20	PICCADILLY, JEWSONS	607 514	0.6	4 (E SUBURB)
21	PICCADILLY, POLAR MTRS	606 515	0.6	8 (E FOSS)
22	PICCADILLY, CASTLE GARAGE	606 513	0.15	8 (E FOSS)
23	PICCADILLY, CASTLE CAR PARK	605 515	1.0	6 (W FOSS)
24	PICCADILLY, REYNARDS	606 515	0.2	8 (E FOSS)
25	PICCADILLY, PICCADILLY MTRS	606 514	0.2	8 (E FOSS)
26	OUSEBRIDGE, QUEEN'S STAITHE	601 516	0.1	10 (W OUSE)
27	SKELDERGATE, SCOTTISH HERITABLE TRUST	610 515	0.1	10 (W OUSE)
28	SKELDERGATE, LADY ANN MIDDLETON'S HOTEL	602 514	0.2	10 (W OUSE)
29	SKELDERGATE, NCP	601 515	0.4	11 (COLONIA)
30	ST ANDREWGATE	605 519	1.0	2 (CANABAE)
31	ST MAURICE'S RD, SLINGSBY'S	606 522	0.15	12 (NE SUBURB)
32	QUEEN STREET - BR	594-596/ 513-516	2.5	16 (SW SUBURB)
33	BACK SWINEGATE	603 520	0.25	1 (FORTRESS)
34	TOFT GREEN - BR	596 515	0.25	11 (COLONIA)
35	TOFT GREEN - SOUTH SIDE	598 516	0.1	11 (COLONIA)

Section 9

9. CONCLUSIONS AND RECOMMENDATIONS

9.1 General

It is clear that York is an internationally significant archaeological site and that new development poses a potential threat to the archaeological deposits underlying the City's historic core. This means that York City Council needs to consider archaeological issues when, as planning authority, it sets planning policy and exercises development control.

At present these matters are dealt with piecemeal under general guidance offered by national policy and within constraints imposed by the Ancient Monuments and Archaeological Areas Act 1979 (the 1979 Act). The general thrust of national policy is summarised by the DOE Planning and Policy Guidance Note (PPG16) as:

'Where nationally important ancient monuments, whether scheduled or not, and their settings are affected by proposed development there should be a presumption in favour of their preservation'.

This guidance establishes the principle of preservation and we have taken this as the central theme around which we have created a development framework, as required by the second aim of the study.

We have met the first aim of the study 'To update the knowledge of the City's archaeological resource' and from this developed an archaeological research framework.

9.2 Archaeological Framework

9.2.1 Archaeological Deposit Model

We have created a computerised database and from this produced maps to show depth of deposits and contours of the existing and natural ground surface, and the boundaries between Roman, Anglian, Anglo-Scandinavian and Medieval deposits. These maps provide a preliminary archaeological deposit model for the study area.

The database and deposit model produced in this study provide a starting point for a process of data collection and map revision. This important task should be controlled and managed by the Director of Development Services who will need to define procedures for acquiring data and updating the deposit model in the light of new data.

We recommend that the City Council consider adopting a suitable Geographical Information System (GIS) which would contain the database and allow automatic update of the deposit model. We understand that the city are assessing the need for GIS software.

9.2.2 Archaeological Research Framework

The Research Framework was produced from a research agenda based on the current state of knowledge about the archaeology of York. The framework is expressed as nine Research Projects which cover a selective, but broad scope of relevant research interest. We think this broad expression of the Research Framework is necessary to provide a context for the projects which relate directly to development activity. We are also concerned to ensure that our conclusions and recommendations are not devalued by criticisms of a too narrow archaeological research base.

9.2 Archaeological Framework (Cont'd)

9.2.3 Archaeological Value

Our approach is that the archaeological response to possible impact of a proposed development be based on an assessment of the archaeological value of the deposit contained in the development site. This value is a function of deposit quality and the needs of the current archaeological research framework.

Some high value sites can be considered as prime candidates for major archaeological excavation. By contrast, low value sites, even with good deposit quality, need only be considered in relation to preservation of deposit.

The objective is to ensure that archaeological excavation on a development site occurs only where this can be justified by reference to the Research Framework. In most other cases preservation of the deposit will be sufficient.

9.2.4 Archaeological Site Evaluation

Present knowledge of the deposit quantity and significance in any particular site is not sufficient to establish the archaeological value of the site with sufficient reliability. Each development site will therefore require an archaeological evaluation. A three stage archaeological evaluation procedure is proposed to correspond with the amount of information required at different stages of the development evaluation. The first two stages are non-destructive but the third may require some archaeological excavation. Some sites and some developments may not need the third stage. But it should be the general case that all the three stages will be reached. Whilst this will raise the cost to the developer there are distinct compensatory benefits. These include the removal of doubts about what will happen when development starts. But perhaps the main benefit is that this programme will mean that very few formal archaeological excavations will be needed. The norm will be preservation.

9.2.5 Archaeology Management

The City Council influences and controls development by means of powers provided by the Town and Country Planning Act 1990. York does not have a Statutory Local Plan to assist in the direction and control of development in the historic zone. As a minimum, the City needs to prepare an Archaeological Subject Plan, to provide the statutory backing needed to impose planning conditions, or refuse planning permission, on grounds relating to archaeology.

The Subject Plan would build on the framework and recommendations set out in this report and embody the Research Framework as a basis for defining the archaeological aims and objectives of the plan. A Local Plan would of course cover/include the aims for both archaeology and development.

We see the need to ensure that one authority oversees the archaeological input to planning matters and the intervention on development sites allowed by the 1979 Act.

We recommend that consideration is given to having the Director of Development Services redesignated as the Investigating Authority under the 1979 Act; the council should consult with the Department of the Environment, English Heritage, York Archaeological Trust and other interested parties.

9.3 Development - Building Construction

In Section 6 we deal with the apparent conflict between building foundations and preservation of archaeological deposits.

All known geotechnical data available to the study team have been used to prepare a computer database. From this information we have established that the horizon of suitable bearing soil is often quite deep and piles are the normal foundation type appropriate for buildings in York. We show that the typical piled foundations used in York represent an acceptable preservation strategy provided certain construction techniques are adopted.

From development and archaeological requirements we have developed seven Archaeological Mitigation Strategies which could potentially maximise both archaeological preservation and development value.

We have made detailed procedural recommendations in relation to archaeology and foundations.

9.4 Development Framework

9.4.1 Development Management

The second aim of this study was to provide '... a framework ensuring development of sites in a way which can conserve the most outstanding archaeological resources'. We have described the structure which needs to be in place to allow a framework to be created and used in practice. These tools include:

- (a) a deposit model and archaeological database.
- (b) a research framework.
- (c) an archaeological subject plan (or preferably a Statutory Local Plan)
- (d) a standard approach to site evaluation.

The aim of our development framework is to ensure that all archaeological deposits should be preserved, except where an agreed mitigation strategy allows for destruction after formal archaeological excavation. This excavation should occur only on sites where the mandatory site evaluation reveals a deposit of high archaeological value.

9.4.2 Approach to Planning

We recommend that an approach to planning procedure is established which requires the following:

- (a) The council to publish a document explaining their policies and encouraging developers to discuss site constraints with Council Officers before submitting planning applications.
- (b) planning applications to be supported by an archaeological site evaluation undertaken to a standard scope of work.
- (c) a mitigation strategy to be proposed by the developer to take account of the form of development and results of the site evaluation.

9.4 Development Framework (Cont'd)

9.4.2 Approach to Planning (Cont'd)

- (d) that an approved mitigation strategy then becomes a condition of a planning permission or is incorporated in a Section 106 Agreement.
- (e) that in circumstances where the mitigation strategy does not allow the required level of preservation then planning permission is refused on these grounds.

We expect that refusal would be unusual, but the possibility needs to be real to ensure that mitigation strategies do meet archaeological requirements.

9.4.3 Mitigation Options

In Section 6 we have set out seven mitigation strategies which can be categorised under four basic and one composite options as follows:

Option A : Deposit of Little Value

Construction permitted with arrangements for professional archaeologists to monitor the disturbance of deposits on site during construction.

Option B : Deposit Preserved In Situ

The deposit is preserved by adopting foundation solutions which destroy less than 5 percent of deposit.

Option C : Deposit Preserved By Record (Archaeological Excavation)

Construction is permitted, provided that the deposit is investigated by a properly funded formal excavation.

Option D : Deposit Preserved by Record (Excavation) With Some Conservation

As in Option C but the mitigation strategy here also requiring the conservation of ancient structures in-situ.

Option E : Composite Strategy Combining Options A-D

On some sites some areas may be preserved (Option B) and other areas excavated (Option C or D); MS.7 would apply in such cases.

9.4.4 Interrelation Between Mitigation Strategies and Options

Option A is detailed as Mitigation Strategy 1 in Section 6.

We expect that Option A will apply only where it can be demonstrated by site evaluation that much of the useful deposit has already been destroyed by previous activity on a site. Mitigation Strategy 1 (disturbed deposit of no archaeological value) in Section 6 applies in Option A.

Option B is detailed as Mitigation Strategies 2 and 3.

Mitigation Strategies 2 shows how development can be undertaken to ensure preservation by adopting construction methods which ensure that no more than 5% of the archaeological deposit is destroyed. Mitigation Strategy 3 provides a facility for the remaining deposit to be excavated during the life of the development. We believe that Option B will cover a large majority of potential development sites.

9.4 Development Framework (Cont'd)

9.4.4 Interrelation Between Mitigation Strategies and Options (Cont'd)

We consider that piled foundations are consistent with Option B. This is because on typical developments a piled foundation would preserve at least 95% of the archaeological deposit underlying a building and leave it legible. We consider that this represents preservation provided appropriate piling techniques are used as described in Section 6. The facility (MS.3) of removable ground floors is easily affordable in most cases. The real expense would come later when floor areas had to be removed for excavation. The facility may well provide a convenient solution on many sites.

Option C may apply in those cases where a developer wishes to destroy more than 5% of the total archaeological deposit and that deposit has high archaeological value.

Excavation could take place either before development begins (MS.5) or during construction (MS.4).

The developer could fund the entire excavation or attempt to collaborate with interested archaeological organisations who would assume responsibility for raising funds. In certain cases national funding would also be available.

We think that Option C will be appropriate on sites of very high archaeological and very high development value where basements are essential.

Option D will be applied only when evaluation suggests that the site contains a large structure of long term display value. The mitigation strategy will generally strive to permit display in a way which assists the commercial exploitation of the site.

In some cases remains worthy of preservation and display may be revealed only during construction or as part of a controlled archaeological excavation. It may be possible to insure against such an eventuality but this is unlikely to provide a clear cut solution.

Option E is a combination of the four main options (MS.6 -MS.7).

This combined solution may well prove to be the most used in practice. We considered it to be the best answer in the case study and it is likely to be equally applicable to other sloping sites, particularly near the river.

9.4.5 Major Archaeological Interventions

An Option C type mitigation strategy may be required where excavation is desirable and can be funded by the archaeological community. The form of this operation would be such that planning permission would be required and this would provide the means for the Council to control the timescale and extent of the operation. In this case we envisage that the sponsoring archaeological organisation would be acting as developer with some limited fixed tenure on the site. This operation should be seen as a conforming land-use activity adding to the general level of cultural activity in York. The need for planning permission provides a means to ensure appropriate standards for the operation and its controlled impact on the urban scene.

9.4.6 Publicity and Developer Liaison

As described in Section 7 we recommend that the City Council produce a series of publicity documents which describe the objectives of the archaeological policy and how this affects planning and consultation procedures. Draft material will be found in Appendix B.

9.4 Development Framework (Cont'd)

9.4.6 Publicity and Developer Liaison (Cont'd)

The documents would cover:

- (a) policy background.
- (b) site evaluation procedures and outline scope of work.
- (c) outline mitigation procedures.
- (d) pre-discussion and documentation needed to support planning applications.
- (e) contacts for advice (eg, City Archaeologist).
- (f) list of qualified Archaeological Contractors.
- (g) Condition for deposition of records and finds in a public area in York.

9.5 Funding

9.5.1 Funding by Government Agencies

Automatic funding of archaeological projects by government agencies should not be assumed. However, where the project is part of a systematic research programme government support should be requested and may be expected as far as the research programme justifies.

9.5.2 Funding by Developers

Our research into the attitudes of the development industry showed an awareness of archaeology and a willingness to accommodate some archaeological activity on site either by funding or time allowed for excavation. However, the amount of funds the developers think reasonable and time made available are generally inadequate for all but evaluations.

As a general principle, developers do not think that they should pay the full cost of preserving the archaeological heritage. Given land and development values in York it is unlikely that development activity can be expected to fund significant archaeological intervention.

9.5.3 Funding by Levy

Funding of archaeological preservation by a general development levy provides a theoretical solution. Such an approach would require legislation; it is also likely that a levy would be opposed by H.M. Treasury on the grounds that it is an hypothecated tax. We think these two factors mean that funding by levy is a remote possibility and therefore cannot answer the more immediate results which need to flow from this study.

York is a major international site and we consider that funds could be raised to support high standard formal archaeological intervention, where opportunity and research objectives coincide.

9.6 Role of York City Council

The recommendations given here should be viewed as an integrated and indivisible package. If implemented positively they should encourage new building development, while continuing to preserve, and where possible reveal, York's internationally famous assets.

9.6 Role of York City Council (Cont'd)

The archaeological research framework provides the context for considering the impact of development on archaeology. It also establishes a broad research programme which can proceed without the need for large scale intervention in sites in the historic core.

The important role of the City Council in working to implement the various elements of the archaeological and development frameworks has been recognised in discussions with council officers, English Heritage and the consultants. A set of guiding principles has been agreed and is set out below.

GUIDING PRINCIPLES

1. The archaeological deposits of the City of York are a cultural resource of international importance and shall be preserved whenever possible.
2. The modern development of York shall not be unduly hindered by archaeological constraints.
3. The planning process shall be used to balance the conflicts inherent in the first two principles.
4. Any proposal to develop on a site of archaeological importance shall be supported by an archaeological evaluation.
5. Any planning application to develop on a site of archaeological importance shall be accompanied by a mitigation strategy, informed by the archaeological evaluation, designed to reduce, the archaeological damage to be caused by the development to a minimum.
6. On the majority of sites in the area of archaeological importance the destruction of 5% of the volume of surviving archaeological deposit shall be regarded as an acceptable compromise between the need for preservation and the need for development. This 5% shall normally be regarded as a maximum and not a norm. The location and form of destruction shall also be carefully considered.
7. The City Council shall be prepared to refuse planning permission, and to defend this decision at Appeal, if a proposed mitigation strategy is inadequate.
8. Developers shall be encouraged to enter into voluntary agreements under Section 106 of the Town and Country Planning Act 1990 (or other appropriate legal agreements), as a condition of the grant of planning permission. This agreement shall cover all aspects of the archaeological mitigation, including findings.
9. Large scale archaeological excavation projects shall be encouraged and granted planning permission if they:
 - (i) fit into an archaeological research framework agreed by the City Council
 - (ii) are carried out to the highest professional standard
 - (iii) are adequately resourced in time and money.
 - (iv) follow a scope of work agreed with the York City Council.
 - (v) deposit the finds and excavation records in a public archive in York, and lead to appropriate publication.

9.6 Role of York City Council (Cont'd)

GUIDING PRINCIPLES (Cont'd)

10. The City Council shall:
 - (i) maintain an archaeological database for the City;
 - (ii) adopt an archaeological policy for the City;
 - (iii) encourage non-destructive archaeological research; and
 - (iv) encourage educational and academic use of the archaeological resource
11. English Heritage shall encourage and support the City Council in the implementation of all these principles.

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Glossary of Terms

YORK DEVELOPMENT AND ARCHAEOLOGY STUDY

GLOSSARY OF TERMS

Anaerobic Archaeological Deposit

Underground deposit without access to air, having high preservation of organic materials.

Ancient Monuments and Archaeological Areas Act (1979)

Act which extends legal protection of designated Guardianship and Scheduled sites to include designated Archaeological Areas. In these areas intervention by an Investigating Authority is allowed before development.

Archaeological Deposit

Layers of collapsed buildings and rubbish from past societies now lying under ground.

Archaeological Deposit Model

Estimate of extent, depth and quality of an extant deposit.

Archaeological Deposit Quality

Estimate of degree of preservation and legibility of deposits for the better understanding of past history.

Archaeological Evaluation

Estimate of the archaeological value of deposit, site or town; including remote sensing and limited excavation in areas less than 100m².

Archaeological Excavation

Scientific removal and recording of an archaeological deposit from a specific area.

Archaeological Excavation Strategy

Structured programme for archaeological excavation.

Archaeological Funding

Money required to pay for professional staff and equipment for archaeological projects on and off site.

Area of Archaeological Importance

Official designation of an area of archaeological deposits requiring protection or recording before development.

Archaeological Investigation

Any archaeological field operation, including site evaluation, excavation, building recording.

Archaeological Intervention

Any archaeological field operation, which requires access to a site.

Archaeological Programme

Programme for archaeological protection, intervention and publication in a town or region; mission statement.

Archaeological Publication

Analysis and synthesis of archaeological data and its presentation as a book or article.

Archaeological Recording

Compilation of descriptive measurements of deposits or standing buildings in the form of written notes, drawings, and photographs.

Archaeological Research Agenda

What archaeologists would like to know in order to understand the past of a region or city.

Archaeological Research Framework

The state of present knowledge, and of the present rules for acquiring it.

Archaeological Research Projects

Individual programmes of action which contribute to the Research agenda.

Archaeological Resource

Total surviving remains of past societies which allows their history to be written.

Archaeological Site

Area of land containing historic buildings or deposits which is subject to investigation.

Archaeological Value

The current perceived worth of a deposit or building to modern society in terms of its potential for revealing the character of past societies.

Archaeological Zones

Designated area containing deposits of particular character.

Assemblages

Groups of archaeological finds discovered together or groups of similar finds discovered separately.

Basement

Building or room of building sunken below street level.

Building Recording

Data acquisition of a standing structure.

Data Acquisition

The making of selected records (description, location and other parameters) of strata, finds and structures encountered in the field.

Archaeological Database

Sets of records of archaeological strata and finds.

Data Recovery Level

Measurement of effort applied and precision achieved in the acquisition of data.

Environmental Sequence

The natural landscape and natural resources available to people of consecutive centuries.

Formal Excavation

Excavation and recording of archaeological deposits at data recovery levels C-F over 100m² or more.

Hinterland

Territory surrounding a town, generally 1000 km² or more in extent.

Inspectorate of Ancient Monuments

The office in the Department of the Environment responsible for the curation of the national archaeological resource.

Investigating Authority

Individual or authority who has the right to archaeological intervention before development under the Ancient Monuments and Archaeological Areas Act 1979.

Mitigation Strategy

Proposed means whereby development can proceed on a historic site without unrecorded destruction of the archaeological resource.

Post-Excavation Programme

The preparation of archaeological records made in the field for publication and deposition in a public archive.

Preservation Strategy

Proposed means of preserving archaeological buildings or deposits where they are found or predicted to lie.

Public Archive

A maintained office for the deposition, curation and public access of archaeological records and finds.

Remote Survey

Mechanical or electronic method of predicting the position and extent of buried, invisible archaeological deposits.

Rescue Excavation

Field research of a deposit forced by its imminent destruction.

Scope of Work

Description of work required or permitted on site.

Site Specific

Investigation or evaluation relevant to a designated site.

Sub Soil

Natural geological deposits not disturbed by humans.

Canabae

In Roman towns, an area of workshops and industrial activity.

Colonia

In Roman towns, an urban residential area provided by the state; chartered town.

Insulae

In Roman towns, areas between streets, generally quadrilateral.

Mansio

In Roman towns, a hotel or state hostelry.

Milthraem

In Roman towns, a temple dedicated to the worship of Mithras (eastern divine).

Wic

In Anglo-Saxon England, a market administered by the King.

Extramural Area

Area outside the walls; suburb

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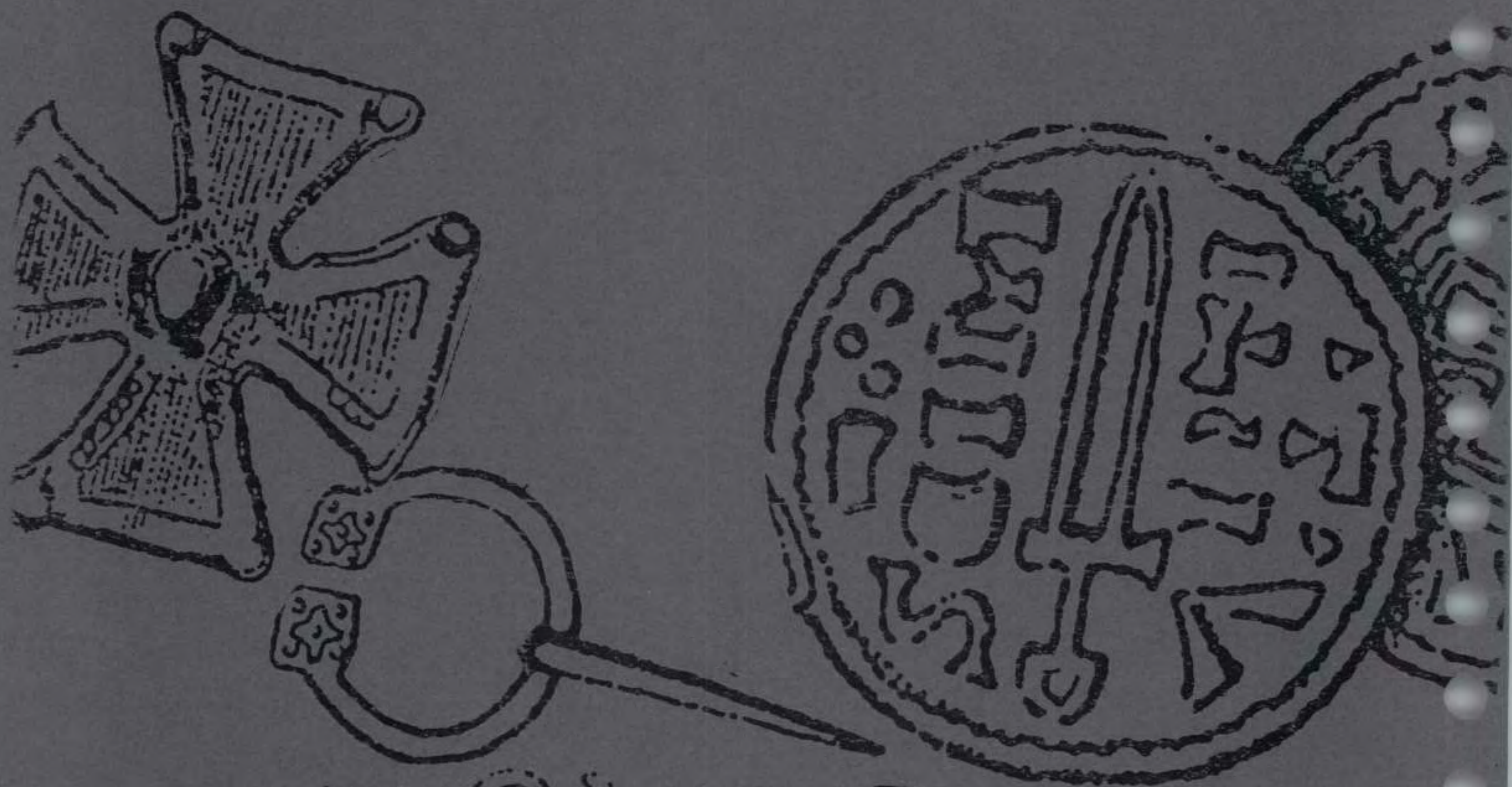
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