

NYS 714  
NYE 357

NYCC HER	
SNY	714
ENY	357
CNY	1499/1814
Parish	6100
Rec'd	09/05/2001



ARCHAEOLOGICAL  
SERVICES  
WYAS

**Knaresborough Bus Station**  
**Knaresborough**  
**North Yorkshire**

*Archaeological Evaluation*

*April 2001*

*Report No. 892*

C L I E N T

Leeds Federated Housing Association Ltd

**Knareborough Bus Station**  
**Knareborough**  
**North Yorkshire**

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SNY	714
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*Archaeological Evaluation*

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*Summary*

*An archaeological evaluation at Knareborough Bus Station, off High Street in Knareborough Town Centre, has revealed three main phases of activity on the site dating from the late medieval to the modern period. A 'garden' soil of probable late medieval and early post-medieval date was observed across the site, presumably relating to plots of land fronting High Street. The soil may have continued to develop until the 18<sup>th</sup> century, when the site was terraced for the construction of several buildings, fronting, and to the rear of, High Street.*

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## **1. Introduction**

- 1.1 Archaeological Services WYAS were commissioned by Liz Ewbank of Leeds Federated Housing Association to undertake an archaeological evaluation on land at Knaresborough Bus Station, Knaresborough, North Yorkshire. The works took place in advance of a proposed mixed use housing and retail development. The site is centred on NGR SE 3515 5697, immediately south of High Street in the town centre (Figs 1 and 2).
- 1.2 The evaluation was undertaken between the 21<sup>st</sup> and 27<sup>th</sup> March 2001. At the commencement of the works the site was in use as a bus station and the surface of three trenches were reinforced concrete, with a fourth covered by concrete paving slabs. The underlying geology of the area is limestone marl.

## **2. Archaeological and Historical Background**

- 2.1 Knaresborough was an important defended medieval town with a castle established early in the 12<sup>th</sup> century. Little of the original castle survives as it was almost completely rebuilt by Edward I in the 14<sup>th</sup> century, a programme of rebuilding later completed by Edward II (Kershaw 1998). The earliest documentary reference to Knaresborough is in the Domesday Book of AD 1086, although the place name ('Chednaresburgh') suggests a pre-Conquest defended settlement (Kershaw 1998). The earliest defensive structure would probably have been in the form of a bank and ditch around the town. The parish church was in existence by AD1114, when it was granted to Nostell Priory. By 1169 there were burgesses at Knaresborough and the first record of a market is in 1206 (Falkingham 2001). In the 13<sup>th</sup> century the town was the centre of an iron-working industry based on the quarrying of ironstone from the Forest of Knaresborough. However this industry was in decline by the early 14<sup>th</sup> and the lack of fuel meant that the Forest could only support a few smithies, making nails. The town was also the focus of a thriving woollen industry, which continued until the 17<sup>th</sup> century before being replaced by linen weaving (Falkingham 2001). The present buildings in the town are thought to be mostly of 18<sup>th</sup> century construction, corresponding with one of the most prosperous times in the history of Knaresborough, and the heyday of the linen industry (Turner 1990). The 19<sup>th</sup> century saw the gradual decline of the linen weaving industry, following the growth and development of the nearby town of Harrogate (Tyler 1978). The first edition Ordnance Survey map of 1854 (6" to the mile) shows a tightly packed complex of buildings fronting High Street, which were presumably demolished prior to the construction of the existing bus station.
- 2.2 Archaeological work in the town centre has been limited, as previous work has focussed upon the castle. The line of the medieval town ditch is thought to follow the line of Gracious Street, to the east of the proposed development, and High Street is thought to have been the main street of the medieval town. As such it is likely that medieval burgage plots fronted onto High Street and extended back to the site of the present car park, to the rear of the bus station. In 1959, a well, thought to date to the 14<sup>th</sup> century, with preserved timber panels intact, was discovered during building work on Market Street in 1959. In 1993, a watching brief to the rear of 14 High Street, on the supposed line of the town ditch, revealed no archaeological activity, albeit within restricted limits of excavation (Yorkshire Archaeological Trust 1993). In 1994, a watching brief at 34 and 34a Market Place, the site of a 18<sup>th</sup> century Grade II Listed



building, revealed possible remains of an associated unmortared wall and cobbled surface, with no evidence of earlier pre-18<sup>th</sup> century occupation. More recently, trial trenching at Berry's Avenue in 1998 revealed that post-medieval and modern activity had probably truncated earlier deposits (MacNab 1998).

### **3. Method**

- 3.1 The aim of the evaluation was to establish the presence or absence, extent, condition, character, quality of survival, importance and date of any archaeological remains at the site. Furthermore the evaluation aimed to gather sufficient information to enable an assessment of the potential and significance of the archaeology of the site, and therefore the impact that development will have upon this.
- 3.2 A written scheme of investigation for the evaluation was prepared by Gail Falkingham of the North Yorkshire County Council Heritage Unit (Falkingham 2001, see Appendix V). A method statement for the investigation was then prepared by Archaeological Services WYAS.
- 3.3 In accordance with the method statement, four trial trenches were opened up covering an area of approximately 12m<sup>2</sup>. The positions of trenches 1 and 2 were altered to accommodate suspected services, and the size of the trenches slightly reduced. The size of Trench 4 was also slightly reduced to minimise disturbance to the existing surface. The trenches were located at safe and convenient locations within the working bus station. The three trenches excavated through reinforced concrete were initially cut by a floor saw and the concrete removed with a JCB equipped with a breaker. The paving slabs over a fourth trench were lifted by hand, although concrete below this was also removed with a JCB. All bedding and modern materials in each trench were removed as far as possible with the machine.
- 3.4 Thereafter, with the exception of Trench 3, excavation proceeded manually to depths not exceeding 1.5m. In Trench 3, and following the discovery of an infilled cellar immediately below the concrete surface, and the unsafe nature of the trench sides, the decision was taken with the approval of a representative of the North Yorkshire County Council Heritage Unit, to terminate excavation and recording of the trench.
- 3.5 A written, drawn and photographic record was made of all encountered archaeological deposits and features. The on-site recording was undertaken in compliance with the Archaeological Services WYAS standard method (Boucher 1995). All contexts and samples from them were given unique numbers. Appropriate samples of up to 10 litres were taken for ecofactual and environmental assessment. Bulk finds were collected by context. All trenches were planned at a scale of 1:20, with individual trench sections drawn at a scale of 1:10. Colour transparency and black and white negative photographs were taken of all trench sections.
- 3.6 The trenches have been located on an Ordnance Survey Landline digital map base of the area and all plan and section datum levels were tied into an Ordnance Survey Bench Mark (OSBM) on the Market Cross at 76.69mOD.
- 3.7 Following completion of the trial trenching, the site archive was prepared in accordance with the specification outlined in the Management of Archaeological Projects, MAP 2 (English Heritage 1991). The site archive contains all the information collected during the fieldwork. The site records have been checked, indexed and cross-referenced as necessary. The archive is currently held and stored by Archaeological Services WYAS in an appropriate stable environment. The archive



will be deposited with the Harrogate Museum following the completion of post-excavation work (Accession number: HARGM 10626). An inventory of the archive is presented in Appendix I.

## **4. Results**

### **4.1 Summary**

4.1.1 A total of 43 contexts were assigned to deposits and features investigated in three trenches: Trench 1 (101-112), Trench 2 (201-211) and Trench 4 (400-419). An inventory of the contexts is presented in Appendix II. Provisional phasing, incorporating the results of the artefactual and environmental assessments, is discussed in a further section of the report (see 7).

### **4.2 Trench 1 (Figs 3 and 5)**

4.2.1 Trench 1 measured approximately 1.5m by 1.5m and was located towards the south-eastern corner of the proposed development site, approximately 10m west of High Street. Beneath the reinforced concrete surface were a series of modern bedding and demolition deposits (101-104) associated with a horizontal truncation level (112). The horizontal truncation, 0.42m below the present surface, presumably represents the modern construction level for the bus station. Fragments of glass (103) and animal bone (104) were recovered from the modern deposits.

4.2.2 The construction level (112) truncated a wall foundation (105), traversing the eastern extent of the trench in a north-west to south-east direction. The wall was 1.43m in length and comprised of roughly worked sandstone blocks (the largest measuring 0.24m by 0.2m and 0.18m in depth), loosely packed within a dark brown silty clay matrix. The wall (105) lay within a well-defined foundation cut (106) which had a slightly irregular U-shape in profile and measured up to 0.6m in depth. The foundation cut (106) for the wall appeared to truncate a cobbled surface (110), which measured up to 0.18m in depth and covered the remaining area of the trench. The surface (110) was constructed of water worn cobbles set in a soft brown sandy matrix and covered in mortar.

4.2.3 The cobbled surface (110) overlay a homogenous deposit of dark brown silty clay (111) covering much of the trench, and measuring up to 0.4m in depth. This deposit (111), provisionally interpreted as a 'garden' soil, contained frequent coal and charcoal inclusions, in addition to fragments of pottery, animal bone, glass, metalworking slag, a ferrous nail and a clay tobacco pipe stem.

4.2.4 The soil (111) appeared to seal a sterile deposit of dark purplish brown clay (107) filling a linear gully (108). Gully 108, like the wall foundation (105), traversed the eastern extent of the trench in a north-west to south-east direction. The gully had a slightly irregular U-shaped profile, with well defined edges in plan and section, and measured up to 0.6m in width and 0.42m in depth. Gully 108 was cut into a sterile homogenous deposit of reddish brown sand (109), possibly a subsoil or the natural limestone marl. This ?natural deposit covered the remaining area of the trench and measured up to 0.6m in depth, which at 1.5m from the surface, was the point at which excavation of the trench ceased.



### 4.3 Trench 2 (Figs 3 and 6)

- 4.3.1 Trench 2 measured approximately 1.9m by 1.6m and was located towards the south-western corner of the development site, approximately 26m west of High Street. Beneath the reinforced concrete surface (201), was a modern demolition deposit of brick rubble (202) associated with a horizontal truncation level (210). The horizontal truncation, 0.4m from below the present surface, presumably represents the modern construction level for the bus station. Fragments of pottery were recovered from deposit 202.
- 4.3.2 The construction level (210) truncated a wall foundation (208) traversing the northern extent of the trench in a north-east to south-west direction. A shallower section of the same wall ran perpendicular to the main wall foundation, but was only visible in the south-west facing section. Wall foundation 208 was comprised of loosely mortared and roughly dressed sandstone blocks (the largest measuring 0.3m by 0.2m and 0.18m in depth) and occasional cobble stones. The main section of the foundation wall measured up to 0.8m in width and 0.84m in depth, with the shallower section of wall measuring up to 0.2m in depth. The foundation appeared to have been placed within a foundation cut (211) which varied in its profile and depth, and which was not altogether distinct, particularly in the south-west facing section of the trench.
- 4.3.3 A series of deposits (203-5) abutting the foundation to the south and west, appeared to lie within the same foundation cut (211). The deposits comprised a layer of light yellow mortar (203), a layer of mid brown sand (204) and a layer of light greyish brown sandy gravel (205). The latter deposit (205) contained a lead water pipe, which traversed the trench in a north to south direction, before disappearing into the main section of the wall foundation (208).
- 4.3.4 A small area of concreted floor (209), 0.08m in depth, was exposed above the wall foundation (210) in the north-western corner of the trench. It was not possible within the confines of the trench to determine whether the floor was associated with the wall (208), or represented a later phase of activity pre-dating construction of the present bus station.
- 4.3.5 The horizontal construction level (211) for the wall foundation (208) and the construction layers (203-5), appeared to truncate a homogenous deposit of dark greyish brown silty clay (206). Deposit 206, provisionally interpreted as a 'garden' soil, covered much of the trench, and measured up to 0.6m in depth, deepening towards the south and west. The deposit (206) contained common coal and charcoal inclusions, in addition to fragments of pottery, animal bone and metalworking slag.
- 4.3.6 Deposit 206 in turn overlay a deposit of reddish brown sandy clay (207), which also covered the whole of the trench, and measured up to 0.6m in depth. The upper level of the deposit (207), possibly a disturbed subsoil or the natural limestone marl, contained some inclusions, including fragments of pottery, animal bone and a ferrous nail. However, towards the trench base, approximately 1.4m from the trench surface, the deposit became increasingly sterile, at which point excavation of the trench ceased.



#### 4.4 **Trench 4** (Figs 4, 7 and 8)

- 4.4.1 Trench 4 measured approximately 1.9m by 1.6m, and was located towards the north-eastern corner of the development site, approximately 10m west of High Street. Beneath the paved surface and a layer of concrete, were a series of modern bedding and demolition deposits (413-5) associated with a horizontal truncation level (419). Also revealed beneath the modern surface were the infilling (400) of a cellar, and the filling (401) of a drainage trench (402). The horizontal truncation (419), 0.4m below the present surface, presumably represents the modern construction level for the bus station, and it is assumed that the drainage trench (402) was inserted at the same time.
- 4.4.2 The drainage trench (402) contained a 14mm diameter ceramic pipe within a filling of mid-yellowish brown silty clay (401). The drain traversed the centre of the trench in a north-west to south-east direction, and measured up to 0.9m in width and 0.8m in depth. The filling of the drain, including the ceramic pipe, had been sealed in concrete at its northern extent, and although the southern extent was still open, it had clearly gone out of use. A single fragment of glass and a clay tobacco pipe stem were recovered from the fill (401) of drainage trench (402).
- 4.4.3 The cellar infilling (400) revealed beneath the modern surface had slumped into the trench from the east following the collapse of part of the wall foundation (410) in the south-west facing section. The infilling probably formed part of the modern demolition of buildings on the site, prior to the construction of the bus station. Fragments of decorative tile and pottery were recovered from the fill 400, which also contained numerous fragments of bricks, mortar and glass (not kept).
- 4.4.4 The modern construction level and the cut for the drainage trench either truncated or respected the line of, three wall foundations (408, 409 and 410) and an associated deposit (416). Walls 409 and 410 appeared to form the foundations for the southern and western walls of a building fronting onto High Street. Wall 410 was clearly more robust than any of the other walls revealed during the investigation, comprising large heavily mortared and roughly dressed sandstone blocks (the largest measuring 0.52 by 0.26 and 0.24m in depth) and water worn cobbles. The wall was randomly coursed and measured at least 1.6m in length, 0.55m in width and 0.8m in depth. It was not entirely clear if the wall had been placed with a construction cut or built up from a horizontal truncation level. A construction cut (411) for the wall could be seen to continue below the base of the trench, but the western side of the wall had been followed by the line of the later drainage trench (402) and the presence of a cut at a higher level could not be confirmed. Wall 410 was observed to abut Wall 409 to the south, before part of the wall collapsed into the trench.
- 4.4.5 Wall 409 traversed the southern extent of the trench in a north-east to south-west direction, and was only visible in the north-west facing section of the trench. It appeared to continue beyond the corner with wall 410, but was truncated at its western extent by the drainage trench (402), thus removing any potential relationship with Wall 408 to the west. Wall 409 comprised loosely mortared and randomly coursed squared sandstone blocks (the largest measuring 0.26m by 0.24m and 0.12m in depth). The wall (409) measured up to 0.64m in length, and up to 0.8m in depth, and fragments of animal bone were recovered from within the walls' makeup. The wall appeared to have been built up from a horizontal truncation level (418) although this could not be confirmed within the confines of the trench.



- 4.4.6 To the west of, and apparently cut by, the drainage trench (402) was a further wall foundation (408). Wall 408 appeared to form the north-western corner of a building located south of the trench, and to the rear of a building (409 and 410) fronting onto High Street. Wall 408 was comprised of a very large rectangular dressed limestone block (measuring 0.78m by 0.5m and 0.3m), laid on a flat base of half-bat hand-made bricks. The bricks had been laid on edge, one course and 0.13m in depth, above a horizontal construction level (407). A single line of stones had been placed above the brick base and mortared to the eastern side of the large stone block. Additional sandstone blocks (the largest measuring 0.2 by 0.18m and 0.18m in depth), were also mortared to the northern side of the large block. These stones may have been a later refacing of the wall, although they appeared to lie above the same horizontal foundation level (407) as the bricks and the large stone block (408).
- 4.4.7 Abutting the wall (408) to the north, and also seemingly overlying the horizontal construction level (407), were a series of deposits (403, 416 and 417) all of which comprised a mid yellowish brown silty clay. In section, the deposits appeared to potentially represent separate layers. In particular, deposit 403 was initially thought to be filling a cut for Wall 408. This was to some extent supported by differences in the range of artefacts recovered from each deposit, and the higher concentration of cobble stones (maximum size 0.17m by 0.14) in deposit 417, perhaps representing a surface. Fragments of pottery, animal bone, metalworking slag, glass and tile were recovered from deposit 417, and fragments of pottery, animal bone and metalworking slag from deposit 403. However, in the small area taken down in plan, no real definition could be found between the deposits and an association with the construction level (407) seems more likely.
- 4.4.8 Also associated with the horizontal truncation level (407) was a linear gully (406) traversing the centre of the trench, the filling (405) of which was sealed by deposit 417. The gully may have been a precursor to the later drain (402), having been cut roughly along the same north-west to south-east alignment, albeit turning at its northern extent towards the west. Gully 406 was U-shaped in profile and measured up to 0.6m in width and 0.74m in depth. The gully was filled by a deposit (405) of mid greyish brown silty clay, containing frequent inclusions of cobble stones and sandstone fragments, and the occasional fragment of brick. A single fragment of pottery was also recovered from the filling (405) of the gully.
- 4.4.9 The horizontal construction level and the gully could be seen to truncate an earlier homogenous deposit (404) of mid-dark greyish brown silty clay on the western side of the trench. The deposit, provisionally interpreted as a 'garden' soil, measured up to 0.54m in depth and contained frequent inclusions of coal and charcoal, particularly towards the surface of the deposit. Fragments of pottery, animal bone, metalworking slag and a copper alloy belt buckle were recovered from the deposit (404).
- 4.4.10 Deposit 404 overlay a more sterile deposit of mid greyish clay (412), which in contrast to deposit 404, contained only occasional cobble stone, sandstone, coal and charcoal inclusions. A single fragment of animal bone was also recovered from the deposit, which measured up to 0.1m in depth. The deposit (412), provisionally interpreted as a 'subsoil', sealed the natural limestone marl at the trench base, 1.44m below the trench surface. At this point excavation of the trench ceased.



## **5. Artefact Record**

### **5.1 Summary**

- 5.1.1 A total of 342 artefacts were recovered from the evaluation, all from stratified contexts in Trenches 1, 2 and 4, although this included 264 fragments of animal bone which have formed part of the environmental record from the site (see 6). The other categories of artefact recovered were, in order of quantity, pottery, iron working slag and ferrous objects, glass, brick and tile, clay tobacco pipe and copper alloy objects. An inventory of the artefactual material recovered is presented in Appendix III.
- 5.1.2 The pottery and metalworking slag from the site was sent for external specialist assessment in the hope of providing information to assist in the dating and interpretation of the archaeological features and deposits excavated during the evaluation. The reports are reproduced here and are followed by brief assessments of the remaining categories of artefacts.

### **5.2 Pottery assessment by Dr C. Cumberpatch**

#### **5.2.1 Introduction**

The pottery assemblage from Knaresborough Bus Station comprised forty-eight sherds of pottery weighing 1064 grams, and representing a maximum of forty-five vessels. The details of the assemblage are summarised in Table 1.

#### **5.2.2 Results**

Only three sherds of pottery were recovered from Trench 1, all from Context 111. Two of the sherds are medieval to early post-medieval date and one dates to the 18<sup>th</sup> century.

In Trench 2, two pottery sherds of 19<sup>th</sup>/early 20<sup>th</sup> century date were recovered from context 202. Both were table ware types, but neither could be identified to a specific type of vessel. Five sherds of pottery were recovered from context 206, three of which were Cistercian ware dating to the 16<sup>th</sup> century. Of the two slightly earlier sherds, one (Late Medieval Gritty ware), appeared to have been chipped to form a pot disc. These objects, found on sites of varying date throughout Europe, are of unknown purpose, although some were probably counters. Five sherds of pottery were recovered from context 207. With the exception of a sherd of late 17<sup>th</sup> to early 18<sup>th</sup> century Yellow ware and a large sherd of recent stoneware (both probably intrusive), the pottery resembled that from context 206, both in terms of the date (later medieval and early post-medieval) and the range of material.

Trench 4 produced the largest component of the pottery assemblage. Nine sherds from context 400 appeared to be of recent date (later 19<sup>th</sup> to early 20<sup>th</sup> century), although the designs on the cup and the plate are of a type which was current from the 1790s onwards. Thirteen sherds were recovered from contexts 403 and 417. The pottery from context 403 appeared to be slightly earlier than that from context 400, although the types present are difficult to date precisely, and a range within the later 18<sup>th</sup> to mid 19<sup>th</sup> century seems plausible. The pottery from context 417, associated with context 403, appeared to be slightly earlier in date, and can best be dated to the early to mid 18<sup>th</sup> century. The date range and the types of pottery present in context 404 resembled that from context 206 and, in part, from 207, in Trench 2. Cistercian wares and later medieval sandy wares (Hambledon type and local Green Glazed types) suggest that



the deposit dates to the early post-medieval period. context 405 produced only one small sherd of late (later 18<sup>th</sup> to early 19<sup>th</sup> century) slipware.

### 5.2.3 Discussion

The pottery evidence suggests that there was activity on, or close to, the site during the later medieval / early post-medieval period (15<sup>th</sup> and 16<sup>th</sup> centuries), followed by a cessation of activity until the later 18<sup>th</sup> century. The range of wares is unremarkable, although an assemblage of this size cannot be considered to be truly representative of the situation in the wider area and only further work would allow more wide-ranging conclusions to be drawn.

The suggestion that contexts 111, 206, 207 and 404 represent a garden or plough soil cannot be confirmed or refuted by the condition of the pottery. The sherds are sharp edged and in reasonably good condition and do not show the degree of wear that one might expect as a result of the abrasion resulting from long-term cultivation. This having been said, it is true that no studies of the differential effects of mechanical stress in plough or garden soils as opposed to contexts where movement is less have yet taken place. There is some, limited, evidence to suggest that caution should be used when interpreting certain types of soil as representing gardening, both from studies of pottery assemblages (Cumberpatch 1996a, 77) and from studies of the nature of the use of space in medieval towns (Cumberpatch 1996b, 195-6). How far this data is relevant to the Knaresborough situation is not clear.

### 5.2.4 Recommendations

Although small, the assemblage is of general interest in the context of the wider archaeology of the town and should be deposited in an appropriate museum where it will be available for study and comparison with larger assemblages in the future.

## 5.3 Ferrous metalworking slag assessment by J. Cowgill

### 5.3.1 Discussion

All the slags recovered from Trenches 1, 2 and 4 (see Table 2) were generated by iron smithing, the manufacture, repair or recycling of iron objects. Hammerscale found in the sample retents is generally in a fresh condition and has not been particularly crushed or trampled with the exception of the plate fragments from a construction/occupation layer (403) in Trench 4. The majority of the slag was derived from some of the earliest deposits encountered at the site in the form of a 'garden' soil (contexts 111, 206 and 404), probably associated with late medieval/early post-medieval buildings fronting onto High Street. The slag and hammerscale was presumably discarded here from a nearby smithy. The crushed hammerscale and clinker from contexts 403 and 417 are from a post-medieval deposit that abutted the foundation wall of a probable outbuilding, sited behind contemporary buildings also fronting High Street.

### 5.3.2 Recommendations

No further work is required on this assemblage, however, if further work is undertaken at the site, the possible presence of an iron smithy in the locality should be considered (based on the quantity and condition of the hammerscale recovered).



#### 5.4 **Brick and tile**

5.4.1 A total of five fragments of ceramic brick and tile were recovered from the investigations, all from Trench 4. Two fragments of decorated tile came from the cellar infilling (400) and two fragments from a construction/occupation layer (417). A single fragment of brick was recovered from the base of a wall foundation (408).

5.4.2 The brick and tile, as part of a larger assemblage, has the potential to provide information to assist in dating, but also relating to the nature, quality and appearance of structures at different periods on the site. Specialist analysis of the ceramic building materials is recommended as part of an additional stage of works.

#### 5.5 **Copper alloy object**

5.5.1 A single copper alloy object was recovered from the investigations, from the 'garden' soil deposit (404) in Trench 4. The object appears to be a strap end belt buckle of pronged type, a similar example of which can be found in the London Museum's Medieval Catalogue (1993; A3150, 273 and No. 2, Plate LXXV). Here the object is described as a 'Jew's Harp' type of probable 14<sup>th</sup> century date. Such objects were associated with both military and civilian use, although the context of the example from Knaresborough suggests the latter is more likely.

5.5.2 The copper alloy object has, particularly as part of a larger assemblage, the potential to provide additional information relating to late medieval and early post-medieval occupation in Knaresborough. X-ray, conservation and specialist analysis of the object is recommended as part of an additional stage of works.

#### 5.6 **Clay pipe**

5.6.1 Two fragments of clay tobacco pipe stem were recovered from the 'garden' soil (111) in Trench 1, and the fill (401) of the modern drain (402) in Trench 4. The fragments are undiagnostic and therefore provide limited potential for obtaining additional information to assist in interpretation of the site. Specialist analysis of the objects is only recommended as part of a much larger assemblage.

#### 5.7 **Ferrous objects**

5.7.1 Two ferrous objects, both nails, were recovered during the investigation, from the 'garden' soil layer (111) in Trench 1 and the subsoil layer (207) in Trench 2.

5.7.2 The ferrous material has the potential, as part of a larger assemblage, to provide information relating to possible activities and trades taking place on, or in close proximity to, the site during the late medieval and early post-medieval periods. X-ray and further analysis of the ferrous objects are recommended as part of an additional stage of works.

#### 5.8 **Glass**

5.8.1 A total of nine fragments of glass were recovered from four contexts during the investigations. In Trench 1 glass was recovered from a construction layer (103) and the deposit of 'garden' soil (111). In Trench 4, glass was recovered from the fill (401) of the modern drain (402) and a construction/occupation layer (417).

5.8.2 The glass, particularly as part of a larger assemblage, has the potential to provide information to assist in dating but also relating to the nature, quality and appearance of structures at different periods on the site. Specialist analysis of the glass is recommended as part of an additional stage of works.



## **6. Environmental Record**

### **6.1 Summary**

6.1.1 A total of 264 fragments of animal bone were recovered during the evaluation, all from stratified contexts. In addition, a total of seven environmental samples were taken from selected deposits. With the agreement of a representative of the North Yorkshire County Council Heritage Unit, the animal bone and environmental samples were subject to specialist assessment to assist in the interpretation of the features and deposits excavated at the site. An inventory of the samples is presented in Appendix III.

### **6.2 Animal bone assessment by Dr J. Richardson**

#### **6.2.1 Introduction**

As part of archaeological evaluation, it was appropriate to undertake the assessment of all animal bone fragments recovered by hand and from sieved retents. Most of the animal bone fragments were associated with late medieval/early post-medieval activity, although the recovered assemblage was small. Nevertheless, it is hoped that an assessment of these faunal remains may provide some indication of the activities occurring in the late medieval/early post-medieval yards and/or burgage plots.

#### **6.2.2 Methodology**

As the animal bone assemblage was so small, all bone fragments were identified to species, species group (such as sheep/goat) or a lower order category such as 'cattle-sized' where possible (Table 3). In order to avoid counting a single element more than once, however, non-reproducible bone zones were also noted (Table 4). Age data (dental wear and epiphyseal fusion) and butchery marks were considered, but metrical data were not recorded given the small sample size. The recording of erosion, fragmentation, gnawing and burning allowed bone condition and preservation to be assessed. To facilitate analysis, the animal bones were assigned to one of three phases; late medieval/early post-medieval, post-medieval or modern.

#### **6.2.3 Results**

Some 264 bone fragments were retrieved from the trial trenching at Knaresborough Bus Station, from deposits ranging from the late medieval to the modern era. Bone condition was consistent regardless of phase. Bone fragments were generally dense and undamaged, although 7% of bones had been gnawed by dogs and 9% had been burnt. Fragmentation was also ubiquitous and with evidence for butchery, suggests that carcasses had been reduced during cooking and consumption.

The animal bone assemblage from late medieval deposits was dominated by sheep (sheep-sized and sheep/goat) bone fragments (39%) and cattle bone fragments (30%) (Table 4). These animal bones indicate the consumption of lamb/mutton and beef, but this diet was probably supplemented with meat from goats, pigs, fish, chickens and geese. Certainly butchered cattle and sheep bones were identified, although additional resources such as milk and eggs can only be alluded to.

From such a small assemblage, fusion data were extremely limited and dental wear data were absent. Sub-adult cattle and pigs were identified from late medieval deposits, as well as adult sheep(/goat). Young animals may have been targeted specifically for their meat, while adult sheep may have been kept as breeding stock or for their milk or fleeces.



Unfortunately insufficient bone data were retrieved from post-medieval and modern deposits to allow for comparison.

### 6.3 Recommendations

Although 94% of the bone came from late medieval/early post-medieval deposits, the assemblage was still too small to be statistically valid. Consequently the observations made here are very tentative and they may change should additional faunal material be excavated.

Nevertheless, the assemblage is of limited value, *only* due to its size. Bone preservation is adequate (although metrical analyses were precluded by fragmentation) and a comprehensive range of species was identified. Although meat consumption was recognised, further excavation and a larger sample size would help clarify the importance of secondary products such as dairying and wool production.

### 6.4 Botanical assessment by Dr. J. Richardson

#### 6.4.1 Introduction

As part of archaeological evaluation, it was appropriate to undertake the assessment of selected soil samples. With the exception of the sample from context 403 (associated with post-medieval building foundations), all soil samples came from contexts dated to the late medieval/early post-medieval period. It is hoped that an assessment of environmental remains from these deposits may provide some indication of the activities occurring in the late medieval/early post-medieval yards and/or burghage plots.

#### 6.4.2 Method

A sub-sample of between one and five litres of soil was processed from seven discrete deposits, representing late medieval and post-medieval activity. For the purposes of assessment, these sub-samples were subjected to a system of flotation in an Ankara-style flotation tank. The floating remains (the flot) were collected in a 300 $\mu$ m sieve and the heavy fraction (the retent) was collected in a 1mm mesh. The flots, once dry, were scanned using a binocular microscope and the results are presented below in Table 5. The retents were scanned by eye and a number of ecofacts and artefacts were noted. These are listed in Table 6.

#### 6.4.3 Results

Of the seven samples processed, four are described as dark brown 'garden' soils and represent the accumulation of material associated with late medieval activity (contexts 111, 206, 404 and 412). Context 403 is also described as a dark brown soil although this was associated with post-medieval construction. Context 107, the red-brown sandy-clay fill of Gully 108, predates the 'garden' soils, while the red-brown clay of context 207 probably represents the natural subsoil.

##### Flot samples

One fragment of cereal chaff and a few charred weed seeds from Context 107 and a single weed seed from Context 404 provide scant evidence of crop processing.

Charcoal fragments were present in low numbers from four samples, but only Context 403 provided pieces of sufficient size to be identified to species.

### Retent samples

A scan of the retents revealed only a single chaff fragment from Context 206, but wood charcoal was recovered from all samples. The deposits described as 'garden' soil contained the majority of the charcoal fragments, a proportion of which could be identified to species.

The most common material isolated from the retents was flake hammerscale and spheroidal hammerslag. This was abundant from the 'garden' soils (Contexts 111, 206, 403 and 404) and is indicative of iron smithing.

#### 6.4.4 Conclusions

In the absence of charred cereal grains and given the scarcity of cereal chaff or weed seeds, evidence of crop processing was not clearly identified from the environmental record. This is not surprising given the urban nature of this area and the likelihood that prepared foods (e.g. bread) could be readily purchased in the late medieval period.

While charcoal fragments can be blown considerable distances, the quantity of charred wood from the 'garden' soils indicates more localised activity. These remains may indicate fuel use for either domestic or industrial (e.g. iron working) purposes.

#### 6.4.5 Recommendations

Given further excavation, it is recommended that primary deposits and deposits that appear to be charcoal-rich are systematically sampled. This will allow the presence/absence of cereal species to be confirmed and fuel use to be determined. In this urban context, the continuation of bulk sampling and processing will also allow the extent of iron-working debris to be appraised.

If the charcoal found within the 'garden' soils is not to be identified to species, the flots and retents from the trial trenching can be discarded.

## 7. *Discussion*

### 7.1 Summary

7.2 Despite the small area of investigation, three main phases of activity on the site can be inferred from the stratigraphic sequences observed in Trenches 1, 2 and 4. The assimilation of information from the stratigraphic sequences and the analysis of the pottery have provided a broad chronological framework for activity at the site. This may be usefully compared with future investigations either on the present site or within Knaresborough town centre.

### 7.3 Phase 1

7.3.1 The earliest phase of activity appears to be represented by the development of a subsoil and a cultivated soil across the site, above the natural limestone marl. Bedrock was only observed in Trench 4, albeit below a thin deposit of marl. It would seem that the natural geology of the site changes between its northern and southern extents, with the limestone marl deepening considerably towards the south of the site, and limestone bedrock appearing at a higher level to the north of the site.



- 7.3.2 The soils observed at the bases of Trenches 1, 2 and 4 (109, 207 and 412) appeared to represent a subsoil at the interface of the natural marl and the overlying 'garden' soil with no clear distinction between subsoil and marl in Trenches 1 and 2. Artefacts from the upper surface of the deposit in Trench 2 suggest that the subsoil/natural was disturbed and mixed with material from the overlying garden soil, whilst the lower levels of the deposit were completely sterile. The disturbance of the soil may not be apparent in the abrasion of the pottery (see 5.2.3), but is suggested by the range of dates assigned to the ceramics (see 5.2.2). The exact cause of this disturbance remains unclear (see 7.3.4).
- 7.3.3 The gully (108) cutting the subsoil/natural deposit (109) in Trench 1 was stratigraphically the earliest feature on the site. The edges of the feature appeared well defined, however like the subsoil into which it was cut, its filling was quite sterile, perhaps indicating a natural origin. The gully was on the same projected line as Gully 408 in Trench 4, however the features were cut from different levels and the fills and profiles of the features were not consistent between trenches. This might indicate that the gully in Trench 1 was a natural channel, the line of which was subsequently followed by the later gully in Trench 4. Pottery from the overlying 'garden' soil (111) provides only a tentative *terminus ante quem* in the late medieval and early post-medieval periods for the filling (107) of the feature (108).
- 7.3.4 The garden soil observed in Trenches 1, 2 and 4 (111, 206 and 404), may have been a cultivated or uncultivated soil at the rear of properties or burgage plots fronting High Street. It is common for such plots to be the focus of industrial and other activities (Dunkley and Cumberpatch 1996), although there was no evidence for features cut into or within the limited excavated extents of the soil at Knaresborough. Any subsequent reworking of the soil could have blurred the interface between a feature and the soil into which it was cut, although this would be difficult to demonstrate archaeologically, other than perhaps in identifying artefact concentrations and/or through analysing soil micromorphology over an extended area. That industrial activities were taking place in the vicinity of the site is not in question and unsurprising for a medieval town. The presence of hammerscale, coal and charcoal in this soil certainly indicates a smithy in close proximity to, if not on, the site.
- 7.3.5 The balance of evidence suggests that the soil represents a homogenous build-up of material, perhaps developing over a couple of centuries. The similar spatial distribution of the metalworking slag in Trenches 1, 2 and 4, is indicative of a ubiquitous background of industrial debris. Whether this could be confirmed or refuted by sampling different levels of the deposit, for example, is debatable given the potential reworking of the soil. Modern depositional processes suggest such soils can develop in a short space of time and fresh sherds of unabraded pottery dating back to the Victorian period or earlier can frequently be found in modern garden soils subject to manual rather than mechanical cultivation. The late medieval and early post-medieval soil at Knaresborough certainly appears to have been a focus for the discard of domestic debris, which appeared to be more concentrated in Trenches 2 and 4.



7.3.6 The dating of pottery from the subsoil and garden deposits in each of the trenches suggests that the soil was developing throughout the late medieval and early post-medieval periods, with a range of dates from the 13<sup>th</sup> to the 16<sup>th</sup> century. The hiatus apparent in the dating of the pottery (see 5.2.3) may be the result of 18<sup>th</sup> century terracing of the site, and would also account for the incorporation of limited post-medieval ceramics in a soil containing predominantly late medieval and early post-medieval material.

#### 7.4 Phase 2

7.4.1 The second main phase of activity at the site appears to be represented by the terracing of much of the site for the construction of buildings fronting onto and to the rear of High Street. It was not clear to what extent the terracing had truncated the earlier Phase 1 deposits, as the diffuse interface between some of the wall foundations and the 'garden' soil may indicate that the soil continued to accumulate in certain pockets of the site. Most of the buildings represented in this phase are probably of 18<sup>th</sup> century date, in line with the known date for most of the present buildings in Knaresborough (Turner 1990), and may correspond with those shown on the first edition Ordnance Survey map of 1854.

7.4.2 In Trench 1, Wall 105 appeared to form the foundation of a rear wall for a building that previously fronted High Street. Although the cut (106) for the wall foundation appeared to truncate an earlier cobbled surface (110), it seems likely that the wall supported by the foundation (105) and the surface (110) were contemporary. Pottery of 18<sup>th</sup> century and earlier date, from the soil (111) immediately below the cobbled surface, provides a useful *terminus post quem* for its construction. Previous work in the area of the Market Place in Knaresborough had also revealed a cobbled surface and wall of 18<sup>th</sup> century date (see 2.2).

7.4.3 In Trench 4, Wall 410 also appeared to represent the rear wall foundation for a building fronting High Street. The wall appeared to form a corner with Wall 409, although it was not clear why Wall 409 continued to the west. Perhaps it was to join up with an outbuilding, the north-eastern corner of which was formed by Wall 408. It was also unclear why Wall 410 had a considerably deeper foundation than the other walls in the trench. Together, walls 409 and 410 appeared to form the boundaries of a cellar to the east of Trench 4, judging by the considerable quantity of debris, which collapsed into the trench from this side. A large number of the buildings currently fronting onto either side of High Street also appear to be cellared.

7.4.4 The unusual construction and range of materials in Wall 408 was difficult to interpret within the confines of a small trench. The large stone block forming the corner of the wall was almost certainly re-used and may indicate more than one phase of building. The series of deposits abutting Wall 408 were also assigned to this phase, although interpretation of the deposits was limited within the confines of the trench. They may all have been part of the same construction layer, or there may be further definition within the deposits, perhaps occupation levels or even a surface.

7.4.5 None of the wall foundations could be dated with any certainty, although the dating of associated deposits in Trench 4 implies an 18<sup>th</sup> century date for Wall 408. A similar date seems likely for walls 409 and 410 given that Wall 409 appeared to be based at the same foundation level as Wall 408, and that Wall 410 was abutting Wall 409. However, the differences in materials, construction and foundation depth may indicate a more piecemeal development of the buildings in this area. It is noteworthy that wall



foundations in Trenches 1 (105) and 4 (410) were on the same projected north-west to south-east alignment. The projected line of rear walls of some of the existing buildings on High Street, either side the development site, corresponds with the line followed by the two walls.

- 7.4.6 Gully 406 in Trench 4 may have been a precursor to the later drainage ditch in the same trench. The gully appears to have been inserted as part of the same construction phase as walls 408 and 409, being cut from the same foundation level. An 18<sup>th</sup> century date for this phase seems certain given that a sherd dated to the 18<sup>th</sup>-early 19<sup>th</sup> century was recovered from the filling of the gully, which itself was sealed by a deposit (417) containing exclusively 18<sup>th</sup> century material. Gully 406 may have followed the line of a possible natural channel observed in Trench 1 (see 7.3.3). The gully certainly appeared to have been utilised for drainage given the concentration of water-worn cobble stones within its filling (405).

## 7.5 Phase 3

- 7.5.1 The final main phase of activity at the site appears to have been the demolition of the Phase 2 post-medieval and Victorian buildings as part of construction of the modern bus station. Horizontal truncation (112, 210 and 415) was noted in each of the three trenches at the same level, as were similar demolition deposits and bedding material (102-4, 202 and 413-5) for the modern surface. The abundance of mortared brick material in the demolition deposits may indicate that the above ground level of the Phase 2 buildings on the site, like many of the buildings currently fronting High Street, were constructed in brick at the time of their demolition. The cellar to the immediate east of Trench 4 appears to have been infilled with considerable quantities of domestic material of 19<sup>th</sup>-20<sup>th</sup> century date. The drain (402) in Trench 4 was almost certainly inserted as part of the construction of the bus station, and partially along the line of the Phase 2 drainage gully.

## 8. Conclusions

- 8.1 The archaeological evaluation at Knaresborough Bus Station has revealed a similar sequence of development across the site, from the late medieval to the modern period. Locally significant and diverse artefactual assemblages were recovered from stratified deposits.
- 8.2 A cultivated soil appears to have developed presumably to the rear of properties or burgrave plots fronting High Street during the late medieval and early post-medieval periods. These plots were almost certainly a focus for the habitual deposition of domestic debris and may also have been used for horticultural or industrial activities. Conclusive evidence for such activities was not forthcoming within the limited extents of the evaluation. The soil may have continued to develop until the 18<sup>th</sup> century, when the site was terraced for the construction of post-medieval buildings. The buildings utilised similar construction materials to present buildings fronting High Street. The final activity on the site saw the post-medieval buildings demolished as part of the construction of the present bus station.
- 8.3 Given the limited nature of previous archaeological investigations elsewhere in Knaresborough Town Centre, any further development on the site, or within its vicinity, has the potential to contribute significantly to our understanding of late medieval and possibly earlier life in the town.

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### **Project management**

Ian Roberts BSc MIFA

### **Report**

Richard O'Neill BA

### **Graphics/illustrations**

Mark Roughley MA

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Richard O'Neill BA and Dave Cudlip BA

### **Specialists**

Jane Cowgill, Dr Chris Cumberpatch and Dr Jane Richardson

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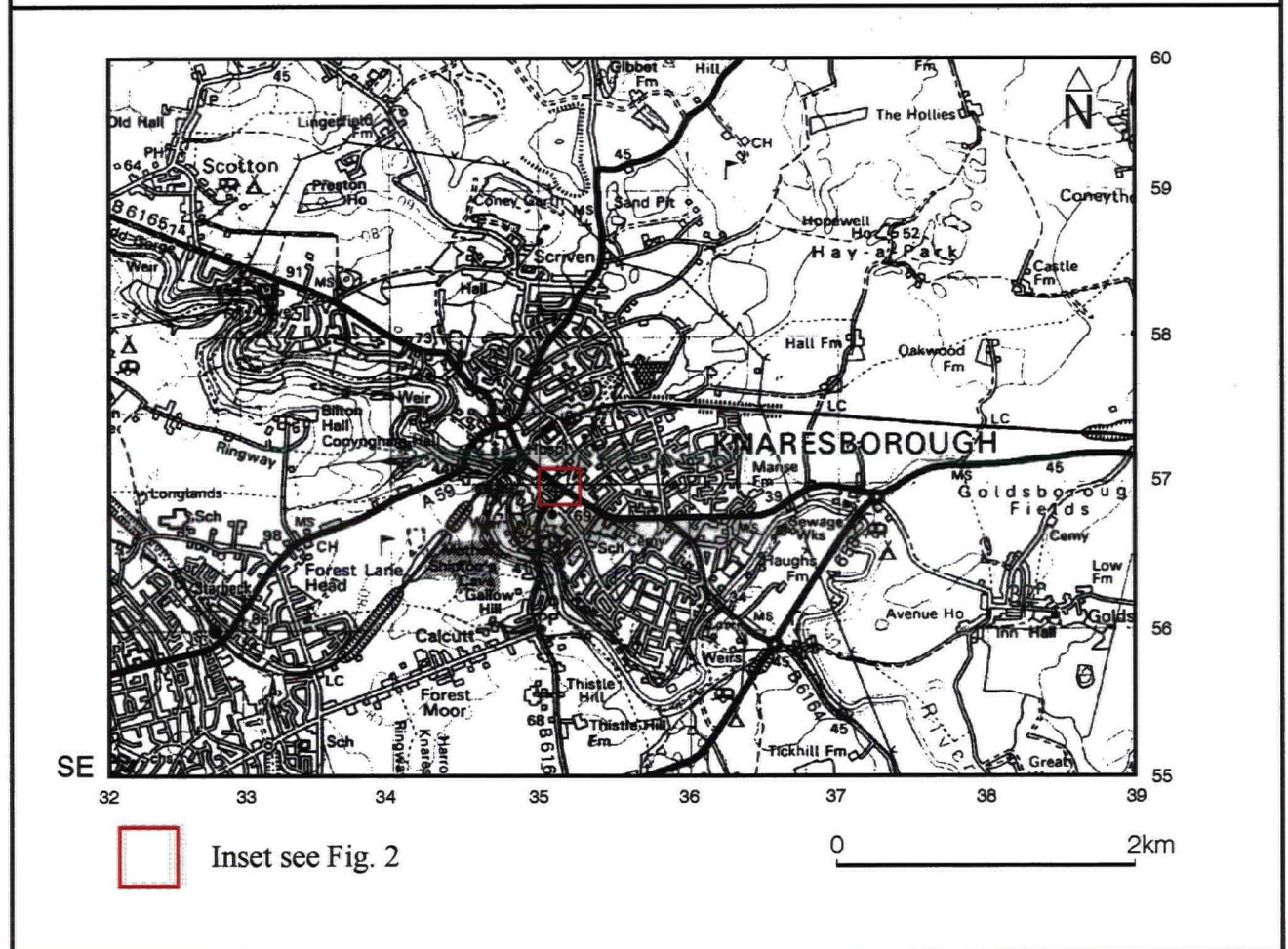
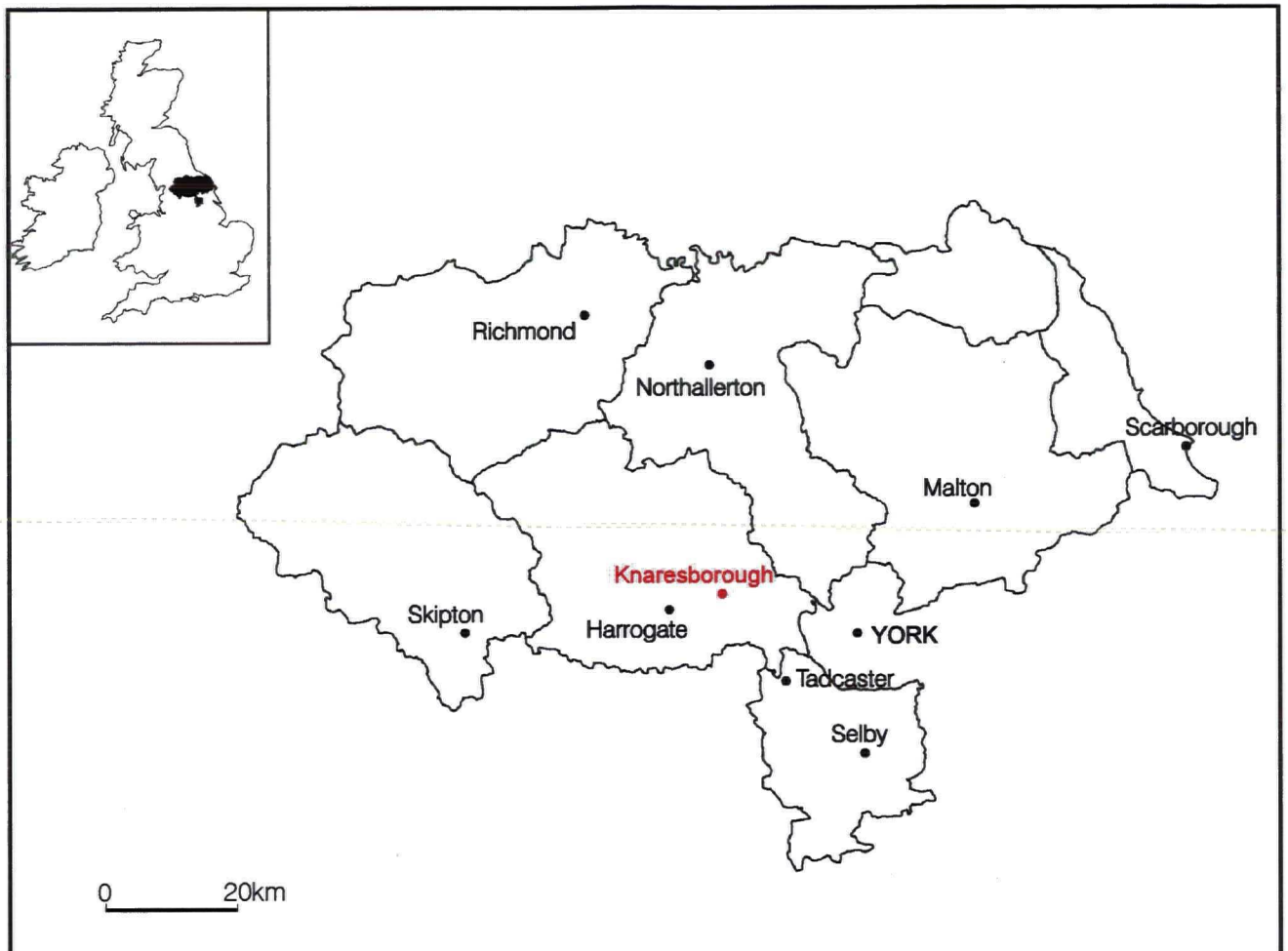
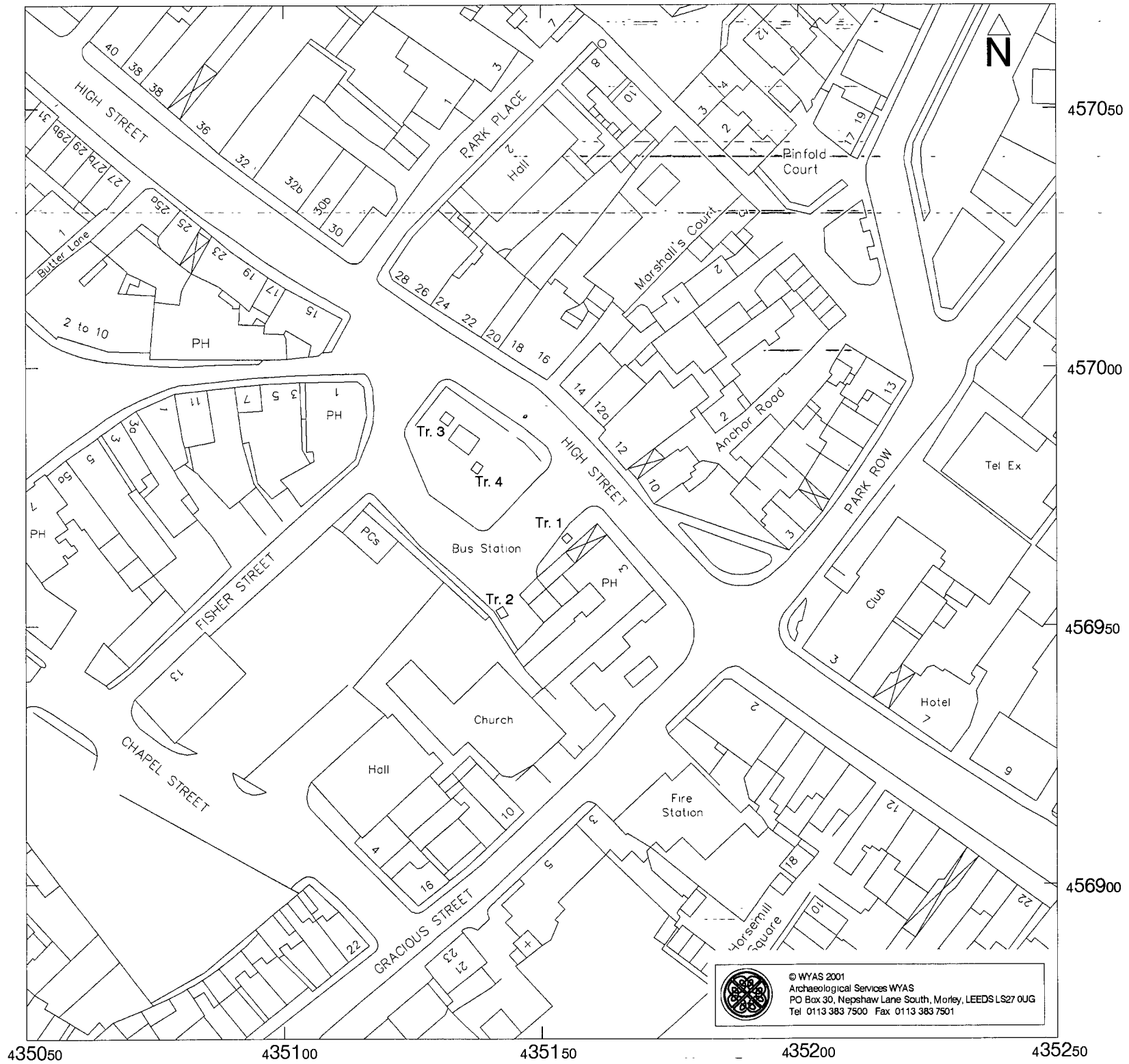


Fig. 1. Site location





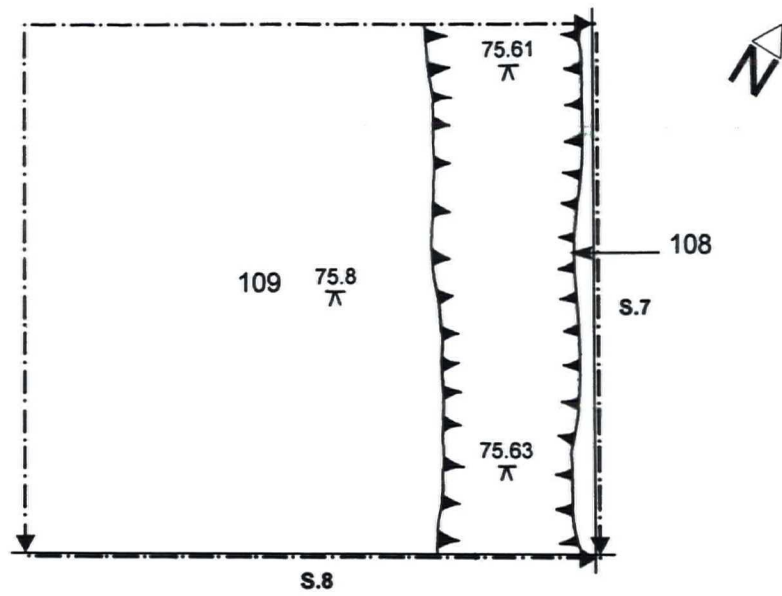
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 PO Box 30, Nepshaw Lane South, Morley, LEEDS LS27 0UG  
 Tel 0113 383 7500 Fax 0113 383 7501



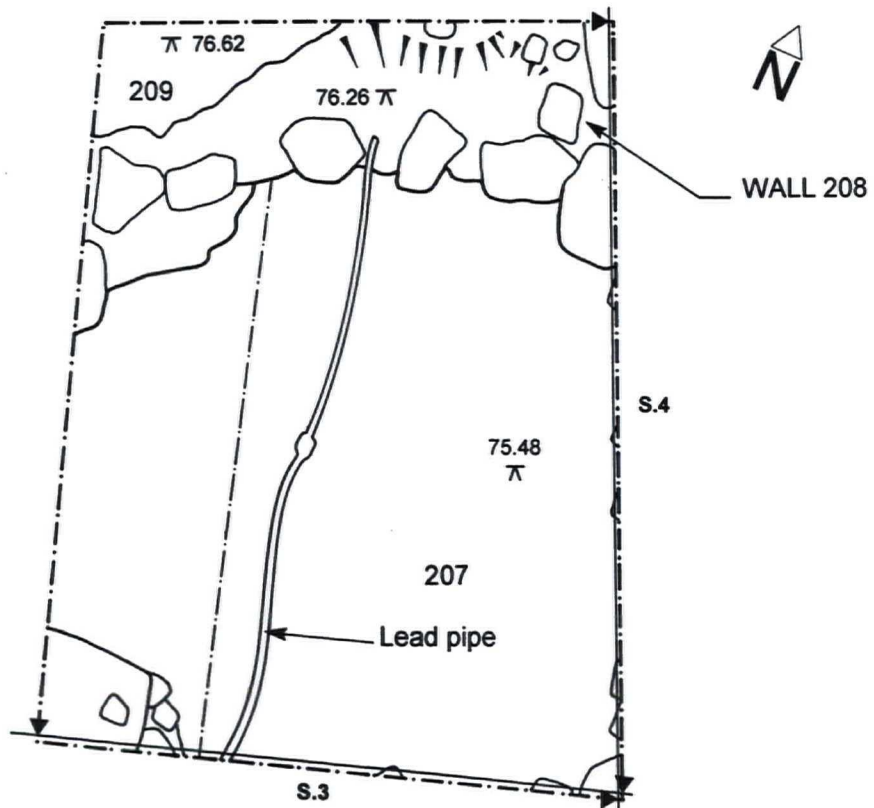
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Fig. 2. Location of evaluation trenches

### TRENCH 1



### TRENCH 2

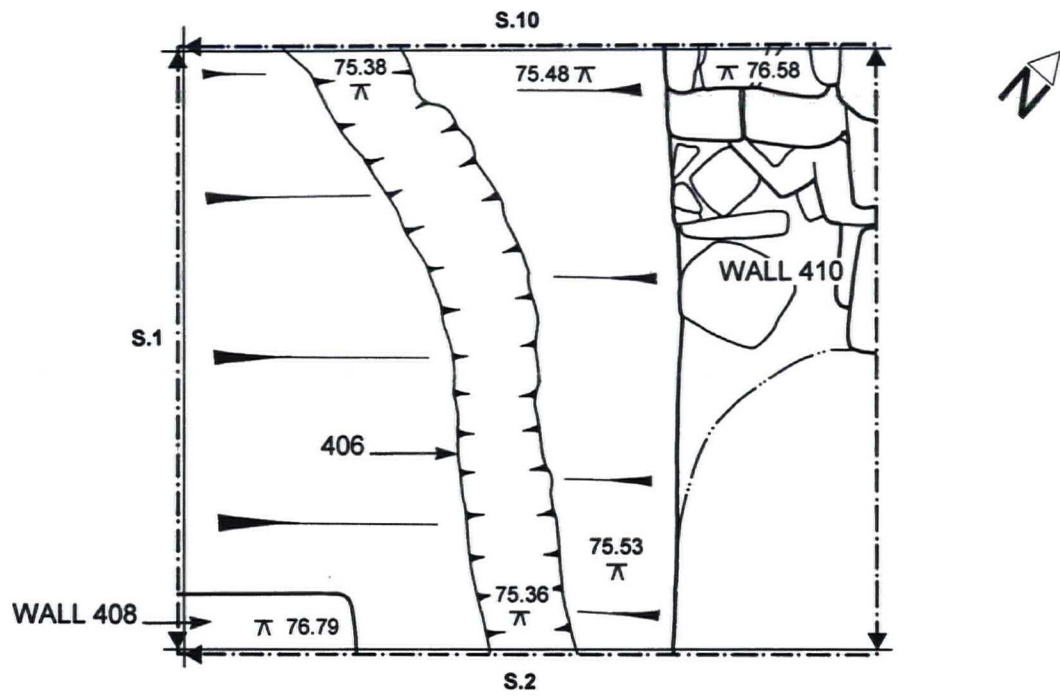


0 1m

Fig.3. Plans of Trenches 1 and 2



# TRENCH 4



0 1m

Fig.4. Plan of Trench 4

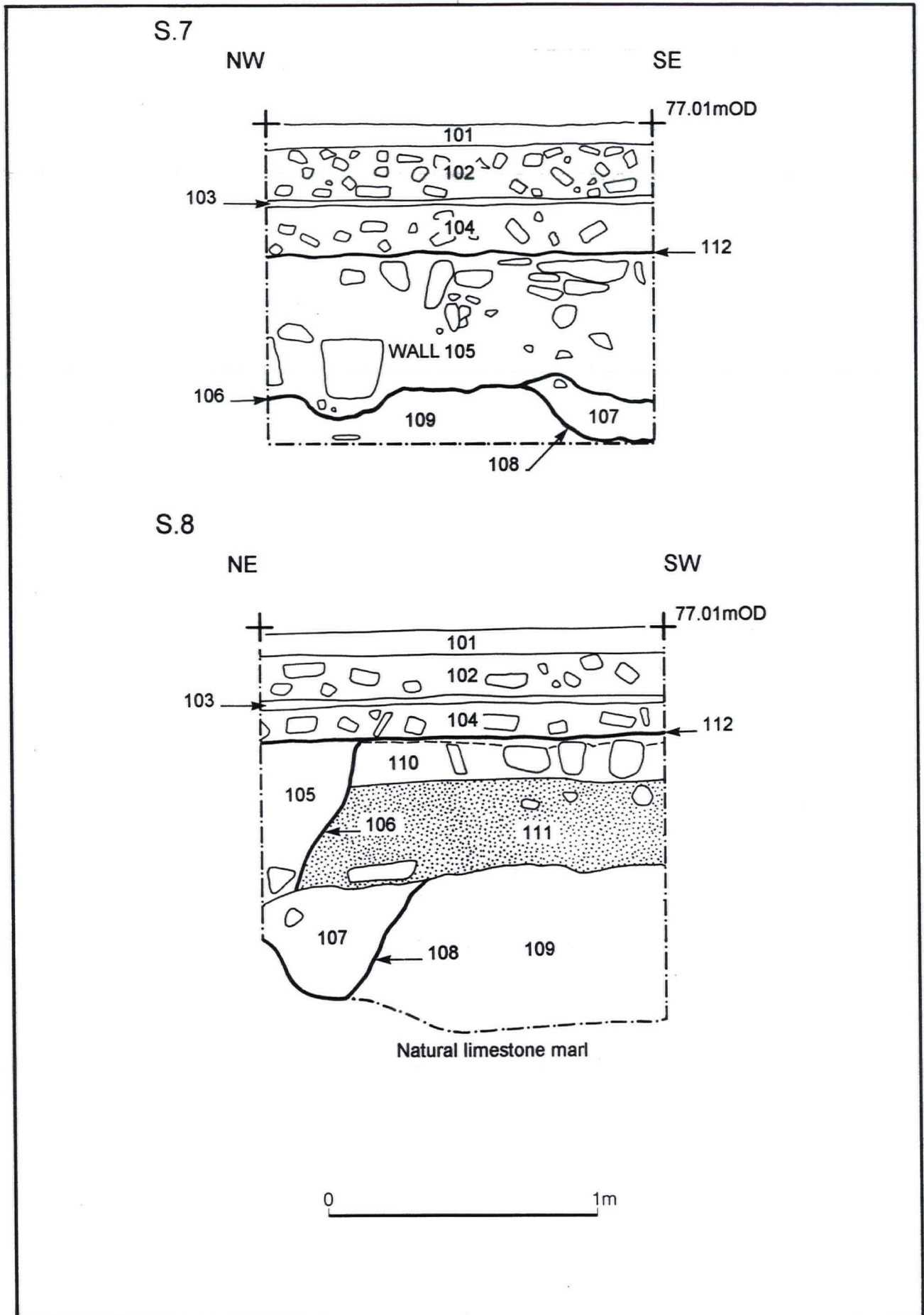


Fig.5. Sections, South-west and North-west facing in Trench 1



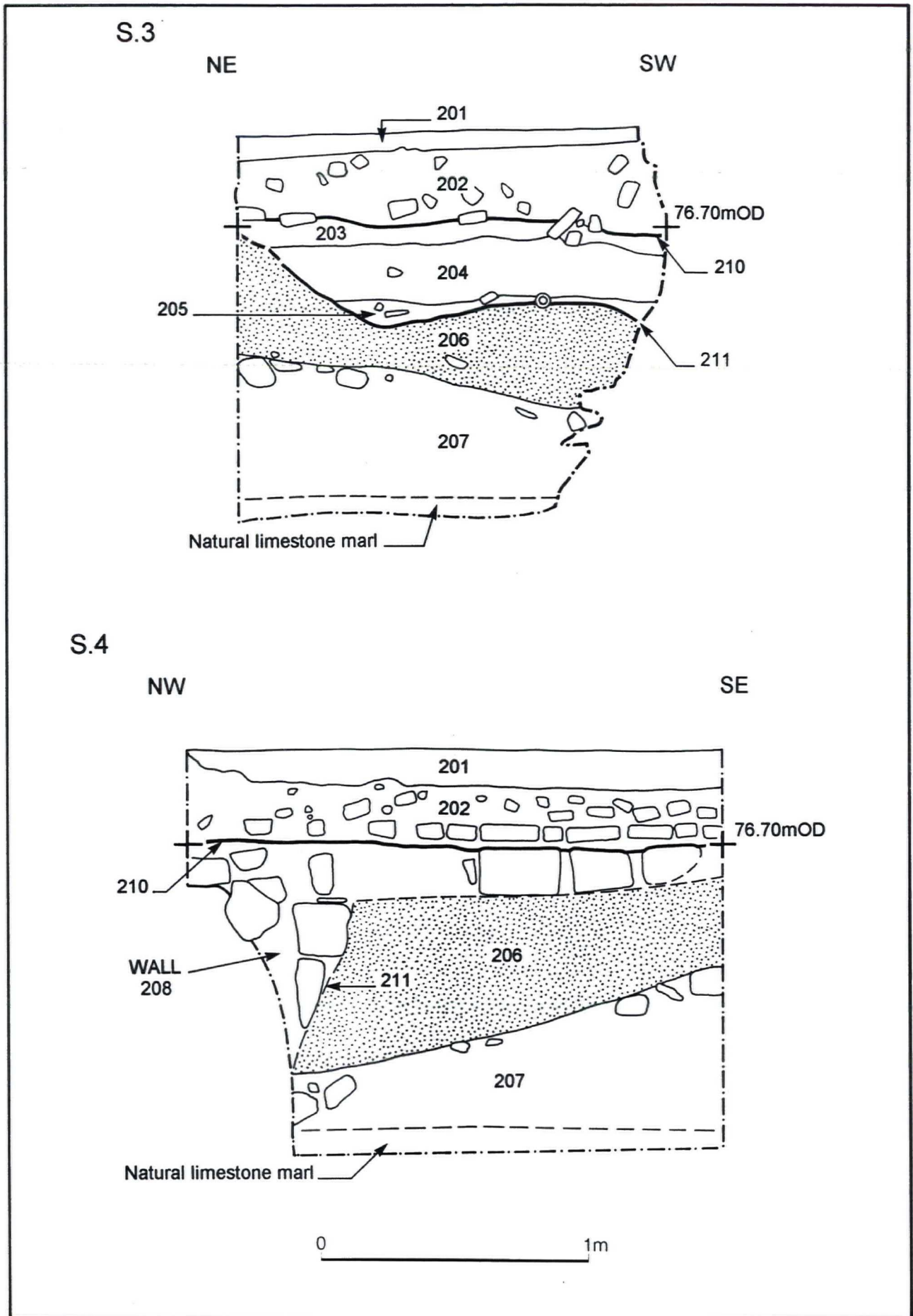


Fig.6. Sections, North-west and South-west facing in Trench 2

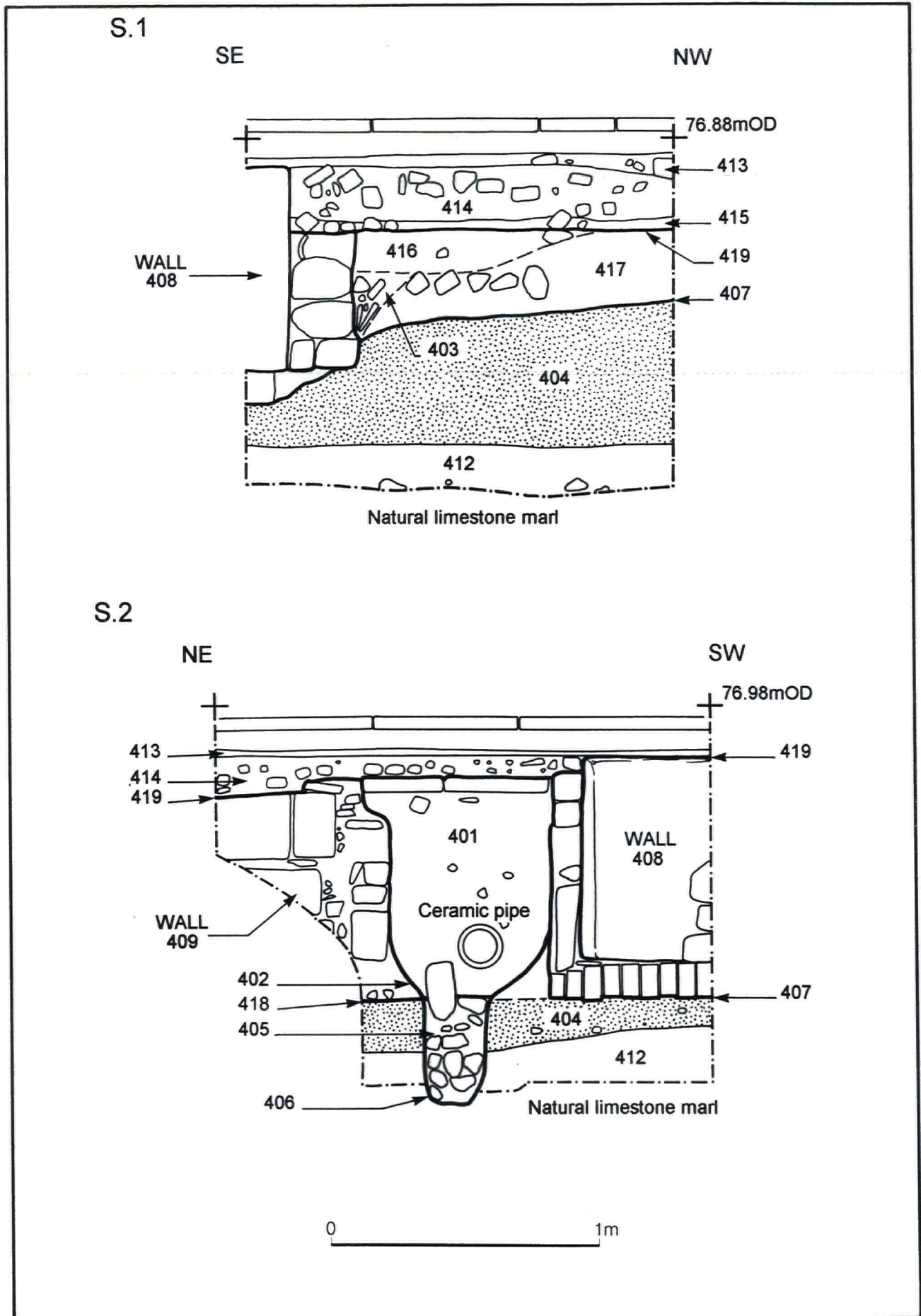


Fig.7. Sections, North-east and North-west facing in Trench 4



S.10

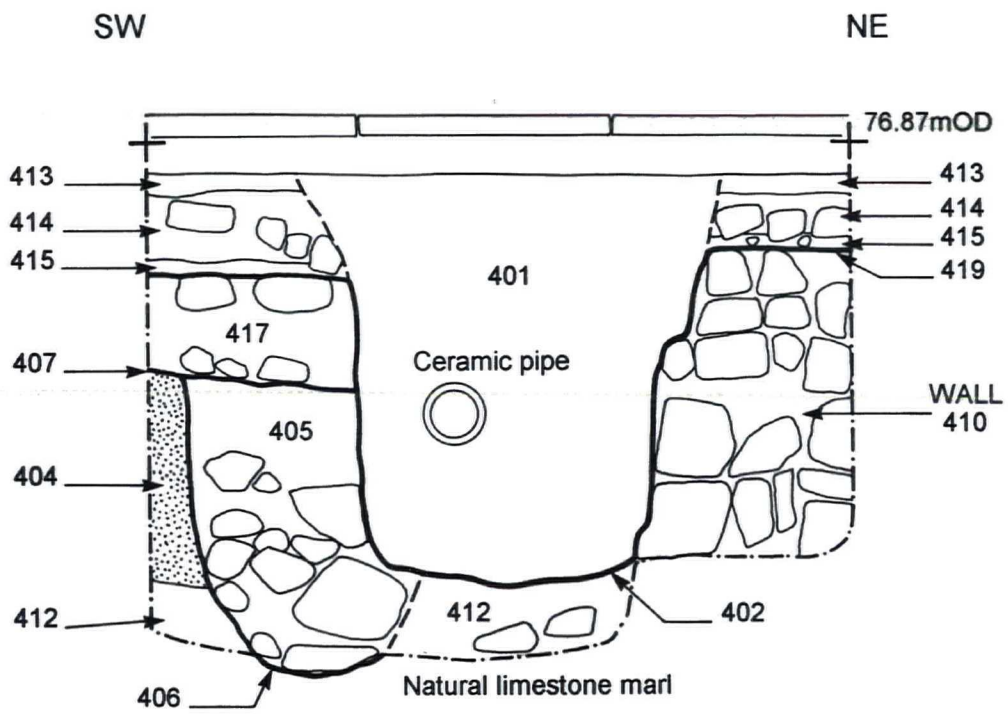


Fig.8. Section, South-east facing in Trench 4

Table 1. Pottery

Context	Type	Number	Weight	ENV	Part	Form	Date range	Notes
111	Glazed Gritty ware	1	36	1	BS	U/ID	C15th - C16th	Brown glaze internally and externally, rilled profile
111	Gritty ware	1	5	1	BS	U/ID	C13th - C14th	Unglazed gritty ware
111	Yellow ware	1	3	1	Base	U/ID	C18th	Yellow glaze internally
202	Whiteware	1	7	1	Base	U/ID	C19th	Moulded (?leaf) design internally
202	Whiteware type	1	15	1	BS	U/ID	C19th - EC20th	Blue and white bands around vessel
206	Cistercian ware	1	8	1	BS	U/ID	C16th	Part of pipeclay decorative motif
206	Cistercian ware	1	7	1	Handle	Cup/tyg	C16th	Rod handle
206	Cistercian ware	1	5	1	Rim	Cup/tyg	C16th	Profiled rim
206	Late Medieval Gritty ware	1	11	1	BS	Pot disc	C14th - LC15th	Patchy green glaze externally; roughly shaped pot disc
206	Late Medieval Sandy ware	1	33	1	BS	U/ID	C15th - C16th	Oxidised sandy ware; spots of glaze internally
207	Cistercian / Blackware	1	7	1	BS	U/ID	C16th - C17th	
207	Late Medieval Gritty ware	1	9	1	BS	U/ID	C13th - EC15th	Patchy green glaze externally
207	Late Medieval Sandy ware	1	10	1	Rim	Jar	C15th - C16th	Glazed internally and externally
207	Stoneware	1	48	1	BS	U/ID	C19th - C20th	Pale brown externally, buff internally
207	Yellow ware	1	9	1	Rim	Jar	C17th - EC18th	
400	Stoneware	2	142	2	Rim	Casserole dish	C19th - EC20th	Brown glazed stoneware; lid seated rim, possibly both part of the same vessel
400	Stoneware	1	61	1	Handle	Casserole dish	C19th - EC20th	Handle, possibly from a casserole type dish
400	Transfer Printed Whiteware	3	250	1	Profile	Plate	C19th - EC20th	Willow I / Willow III pattern internally
400	Transfer Printed Whiteware	2	172	1	Profile	Cup	C19th - EC20th	Two Temples / Pagoda pattern externally; frieze internally
400	Transfer Printed Whiteware	1	113	1	Base	Vase	C19th	Wide, splayed base with floral design
403	Brown Glazed Coarseware	1	4	1	BS	U/ID	C17th - EC19th	Brown glazed internally and externally
403	Creamware	5	17	5	BS	U/ID	MC18th - EC19th	
403	Pearlware	1	4	1	Rim	Plate	EC19th - MC19th	Shell edged pearlware
403	Pearlware	1	4	1	BS	U/ID	EC19th - MC19th	
404	Cistercian ware	2	3	2	BS	U/ID	C16th	
404	Cistercian ware	1	23	1	Base	Cup/tyg	C16th	Parallel wire marks on underside
404	Hambledon type ware	2	16	2	BS	U/ID	C14th - C15th	Thick green glaze externally
404	Local Green Glazed ware	3	12	3	BS	U/ID	LC13th - LC16th	Green glazed externally; one with raised ridge
404	Local Green Glazed ware	1	4	1	BS	U/ID	LC15th - C16th	Green glazed internally
404	Low Countries Red ware	1	7	1	BS	U/ID	LC14th - EC16th	Patchy clear glaze externally
405	Late Slipware	1	1	1	BS	U/ID	C18th - EC19th	Brown with yellow band
417	Brown Glazed Coarseware	1	7	1	BS	U/ID	C18th	Thin walled vessel
417	Brown Glazed Coarseware	1	1	1	Rim	U/ID	C18th	Glazed internally
417	Colour glazed ware	1	5	1	BS	U/ID	C18th	Brown glaze externally with patchy yellow; yellow glazed internally
417	Slipware	2	5	2	BS	Open vessel	E-M C18th	Feathered slipware
	<b>Total</b>	<b>48</b>	<b>1064</b>	<b>45</b>				



Table 2. Slag and associated debris.

Cont.ext	Sample No	Type	Count	Weight	Comments
107	7	Hammerscale		<1g	Spheroidal hammerscale
111		Slag	1	70g	Charcoal; hearth bottom fragment (plano-convex slag accumulation); abraded?
111	6	Hammerscale		2g	Most plate hammerscale; some spheroidal hammerscale; prill
206	1	Hammerscale		4g	Most plate hammerscale; some spheroidal hammerscale; prill; not crushed
403	3	Slag		1g	Iron smithing
403	3	Hammerscale			Crushed plate hammerscale
404		Hearth bottom	1	83g	Charcoal; smashed
404	4	Hammerscale		1g	Plate hammerscale, some not crushed; few small spheroidal hammerscale
417		Iron	1	10g	Object
417		Stone	1	49g	Slagged
417		Clinker	7	92g	Slagged?

Table 3. Animal bone fragments by context and phase

Context	Phase	Cattle	Sheep	Goat	Sheep /goat	Pig	Horse	Cat	Canid sp.	Micro fauna	Fish sp.	Domestic fowl	Goose sp.	Bird sp.	Sheep-sized	Pig-sized	Cattle-sized	Not identified
111	I	3	1		2					1	5				1		3	10
206	I	95			1			1			1						2	5
207	I	1	2			1		1					1		2		5	
404	I	11	1	1	11	1	1			1	1	1		3	30	2	22	18
412	I																1	
403	II								1					1				4
409	II														1	2	3	
417	II																2	
104	III	1																

Phases: I = late medieval. II = post medieval, III = modern

Table 4. Animal bone zones by context and phase

Context	Phase	Cattle	Sheep	Goat	Sheep /goat	Pig	Horse	Cat	Micro fauna	Fish sp.	Domestic fowl	Goose sp.	Bird sp.	Sheep-sized	Pig-sized
111	I		1		1					2					
206	I	5			1			1		1					
207	I	1	2			1		1				1	1		
404	I	8	1	1	7	1	1		1		1		2	4	
403	II												1		
409	II														1
104	III	1													

Phases: I = late medieval. II = post medieval, III = modern



Table 5. Results from the flot samples

	Context number	Sample Number	Flot volume	Cereal Grain	Charred Seeds	Cereal chaff	Charcoal		Uncharred plant	Comments
							qty.	large frags.		
Trench 1	107	7	<1 ml		+	+	+		+	tiny charcoal fragments, modern seeds include <i>Silene</i> sp. and <i>Sambucus nigra</i>
	111	6	3 ml						+++	magnetic material +, many <i>Sambucus nigra</i> seeds
Trench 2	206	1	<1 ml							clinker
	207	2	<1 ml				+			tiny charcoal fragments
Trench 4	403	3	<1 ml				+	*		2 large charcoal fragments
	404	4	4 ml		+		+		++	modern seeds of <i>Sambucus nigra</i>
	412	5	<1 ml						+	modern seeds of <i>Sambucus nigra</i> , clinker

Key : + = rare (0-5), ++ = occasional (6-10), +++ = common (11-50), ++++ = abundant (>50), \* = sufficient charred material for AMS date

Table 6. Results from the retents

	Context number	Sample number	Retent volume	Cereal Grain	Charred Seeds	Cereal chaff	Charcoal		Animal bone	Comments
							qty.	large frags.		
Trench 1	107	7	220 ml				+			magnetic material +, sample almost wholly inorganic
	111	6	700 ml				++++	*	++	magnetic material +++++, pottery +, tile +, modern <i>Sambucus nigra</i> seeds
Trench 2	206	1	450 ml			+	+++	*	++	magnetic material +++++, pottery +, modern <i>Sambucus nigra</i> seeds and clinker
	207	2	25 ml				+			almost wholly inorganic
Trench 4	403	3	650 ml				+++	*	+	magnetic material +++++
	404	4	450 ml				++++	*	+++	magnetic material +++++, pottery +, modern roots and <i>Sambucus nigra</i> seeds
	412	5	100ml				+++	*		magnetic material +, nutshell fragment

Key : + = rare (0-5), ++ = occasional (6-10), +++ = common (11-50), ++++ = abundant (>50), \* = sufficient charred material for AMS date

**Appendix I**  
**Inventory of archive**

<b>File no.</b>	<b>Description</b>	<b>Quantity</b>
1	Context register	3
1	Context cards	43
1	Trench sheets	4
1	Environmental samples register	1
1	Environmental sample forms	7
1	Environmental laboratory forms	7
1	Finds registration forms	2
1	Provisional and updated stratigraphic matrices	2 (A3)
1	Site notebook	7
2	Drawing register	1
2	Drawings	10
2	Photographic registers	2
2	Monochrome sheets and negatives	4
2	Colour negatives	2



## **Appendix II**

### **Inventory of contexts**

<b>Context</b>	<b>Trench</b>	<b>Description</b>
101	1	Deposit: layer
102	1	Deposit: layer
103	1	Deposit: layer
104	1	Deposit: layer of brick rubble
105	1	Masonry: wall foundation in 106
106	1	Cut: for wall foundation 105
107	1	Deposit: fill of cut 108
108	1	Cut: of linear gully
109	1	Deposit: layer of subsoil/natural
110	1	Masonry: cobbled surface
111	1	Deposit: layer of 'garden' soil
112	1	Cut: for modern construction layers
201	2	Deposit: layer
202	2	Deposit: layer of brick rubble
203	2	Deposit: layer
204	2	Deposit: layer
205	2	Deposit: layer
206	2	Deposit: layer of 'garden' soil
207	2	Deposit: layer of subsoil/natural
208	2	Masonry: wall foundation in 211
209	2	Masonry: concrete floor
210	2	Cut: for modern construction layers
211	2	Cut: for wall foundation 208 and perhaps floor
400	4	Deposit: cellar infilling
401	4	Deposit: fill of cut 402
402	4	Cut: of modern drainage trench
403	4	Deposit: layer
404	4	Deposit: layer of 'garden' soil
405	4	Deposit: fill of ?drainage gully 406
406	4	Cut: of ?drainage gully
407	4	Cut: for wall foundation 408 ?and associated layers
408	4	Masonry: wall foundation in 407
409	4	Masonry: wall foundation in 418
410	4	Masonry: wall foundation in 411
411	4	Cut: for wall foundation 410
412	4	Deposit: layer of subsoil
413	4	Deposit: layer
414	4	Deposit: layer of brick rubble
415	4	Deposit: layer
416	4	Deposit: layer
417	4	Deposit: layer, perhaps ?surface
418	4	Cut: for wall foundation 409
419	4	Cut: for modern construction layers

## **Appendix III**

### **Inventory of artefacts**

<b>Fabric</b>	<b>Trench</b>	<b>Context</b>	<b>Quantity</b>	<b>Details</b>
<b>Animal bone</b>	1	104	1	
	1	111	26	
	2	206	105	
	2	207	13	
	4	403	6	
	4	404	104	
	4	409	6	
	4	412	1	
	4	417	2	
<b>Total</b>			<b>264</b>	
<b>Brick</b>	4	408	1	
<b>Total</b>			<b>1</b>	
<b>Clay pipe</b>	1	111	1	
	4	401	1	
<b>Total</b>			<b>2</b>	
<b>Copper alloy object</b>	4	404	1	Belt buckle
<b>Total</b>			<b>1</b>	
<b>Ferrous objects</b>	1	111	1	
	2	207	1	
<b>Total</b>			<b>2</b>	
<b>Ferrous slag</b>	1	111	1	
	4	404	1	
	4	417	9	
<b>Total</b>			<b>11</b>	
<b>Glass</b>	1	103	1	
	1	111	5	
	4	401	1	
	4	417	2	
<b>Total</b>			<b>9</b>	
<b>Pottery</b>	1	111	3	
	2	202	2	
	2	206	5	
	2	207	5	
	4	400	9	
	4	403	8	
	4	404	10	
	4	405	1	
	4	417	5	
<b>Total</b>			<b>48</b>	
<b>Tile</b>	4	400	2	
	4	417	2	
<b>Total</b>			<b>4</b>	



## **Appendix IV**

### **Inventory of samples**

<b>Sample</b>	<b>Trench</b>	<b>Context</b>	<b>Type</b>	<b>Description</b>
1	2	206	GBA	'Garden' soil
2	2	207	GBA	'Subsoil'
3	4	403	GBA	?Construction/ occupation layer
4	4	404	GBA	'Garden' soil
5	4	412	GBA	'Subsoil'
6	1	111	GBA	'Garden' soil
7	1	107	GBA	Fill of gully 108

***Appendix V***

***Specification for archaeological evaluation***

Prepared by the North Yorkshire County Council Heritage Unit



# BUS STATION, HIGH STREET, KNARESBOROUGH, NORTH YORKSHIRE.

## WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION

### 1. Summary

- 1.1 Redevelopment of the present Bus Station site on High Street, Knaresborough is proposed. This will comprise a new building at the rear of the site for ground floor retail use, with residential accommodation above, and a relocated bus station on the street frontage. The site lies within an area of potential archaeological significance, within the historic core of Knaresborough. Knaresborough was an important, defended medieval town, with a castle established in the early 12<sup>th</sup> century. The line of the town ditch is followed by Gracious Street, to the east of the application site and High Street was the main street of the medieval town. It is likely that medieval burgage plots fronted onto High Street and extended back to the site of the present car park, to the rear of the bus station.
- 1.2 The Heritage Unit has advised the Local Planning Authority that a scheme of archaeological evaluation on the site is undertaken by means of trial trenching. An archaeological condition has been attached to planning permission to secure this. The aim of this work is to establish the nature and extent of any surviving archaeological remains. This will enable the archaeological impact of the development to be fully appreciated and any appropriate design mitigation and/or further archaeological work agreed. This scheme of investigation has, therefore, been prepared to define the scope of the archaeological evaluation, at the request of Leeds Federated Housing Association.

### 2. Purpose

- 2.1 This written scheme of investigation represents a summary of the broad archaeological requirements to enable an assessment of the impact of development proposals upon the archaeological resource. This is in accordance with Policies HD 4 and 5 of the Borough Local Plan and the guidance of Planning Policy Guidance note 16 on *Archaeology and Planning*, 1990. It does not comprise a full specification, and the County Council makes no warranty that the archaeological works are fully or exactly described. The details of implementation must be specified in a contract between the Client and the selected archaeological contractor.

### 3. Location and Description (centred at NGR SE 3515 5697)

31. A full planning application and Conservation Area Consent application (refs. 6.100.1465 I and H respectively) were submitted to Harrogate Borough Council by the Leeds Federated Housing Association in July 1999. The proposals entail the relocation of the present bus station and three new bus stands to the High Street frontage area, with a new rectangular block to the rear for ground floor retail use, with two storeys of residential accommodation above. Details of the existing site survey and proposed development layout are provided on drawings prepared by PCP Architects Ltd, refs: 9719/100, scale 1:100 dated 07-12-98 & 9719/-11, scale 1:100 dated 12-11-00. A ground investigation by means of two trial holes was undertaken on the site on 20 February 2001 by WSP Environmental, the draft trial hole records for which have been made available. This has shown that in the street frontage area, made ground was recorded to a depth of c. 1 metre, at which point brick and sandstone walls founded on a limestone slab were encountered. Below this, soft clay was encountered at 1.3 metres. Trial hole 2 to the rear of the site encountered concrete to 0.45 metre, with clay



below to 1.4 metres (WSP Environmental letter to Leeds Federated Housing Association dated 22/02/01).

- 3.2 Knaresborough lies on the eastern side of the River Nidd, about four miles north east of Harrogate, North Yorkshire, built on an outcrop of Magnesian limestone. It is an important historic town, with medieval, and potentially earlier origins, the development of which was gradually eclipsed by the growth of Harrogate as a fashionable spa in the late nineteenth century (Tyler, 1978).
- 3.3 The proposed development site lies on the south side of High Street, at its eastern end, close to the junction with Gracious Street. The site is currently in use as a bus station, with a pedestrianised frontage area under paving slabs, with tree and shrub planters and bus stands/shelters and benches and raised footpath areas to the perimeter. There are also a number of lighting columns, manhole covers and drainage channels throughout the site. The western site boundary is formed by Fisher Street, and to the rear is the Chapel Street car park.

#### **4. Historical and Archaeological Background**

- 4.1 There has been limited archaeological work within the town of Knaresborough as previous work has focussed largely upon the Castle. Accordingly, the nature and extent of any surviving archaeological remains within the historic core is unknown. The earliest documentary reference to Knaresborough is Domesday Book of AD 1086. The place name, however, implies a defended settlement of some kind prior to the Conquest. There are no surviving records for the construction of the bank and ditch around the town and it has been suggested that they may have originated as a Saxon burh. The castle was built early in the 12<sup>th</sup> century and the parish church was in existence by AD 1114, when it was granted to the Priory of Nostel. By 1169 there were burgesses at Knaresborough and the first record of a market is in 1206. In the 13<sup>th</sup> century, the town was the centre of an iron-working industry based on ironstone mined in the Forest of Knaresborough, although this industry was in decline by the 14<sup>th</sup> century. The town also had a flourishing woollen industry which continued until the 17<sup>th</sup> century when it was replaced by linen weaving. However, this went into a gradual decline in the 19<sup>th</sup> century with the growth and development of the nearby town of Harrogate (Tyler 1978).
- 4.2 Redevelopment of the bus station could disturb and destroy any surviving evidence of pre-medieval activity, the town defences, and features and finds relating to former settlement, industry and trade within the medieval and later town. Further archaeological information for the Knaresborough area is held by the North Yorkshire Sites and Monuments Record (SMR). The SMR can be consulted by prior appointment by contacting the SMR Officer, North Yorkshire County Council, Heritage Unit, County Hall, Northallerton, North Yorkshire, DL7 8AH; Tel. 01609 532331, Fax. 01609 779838.

#### **5. Objectives**

- 5.1 The objectives of the archaeological evaluation work within the proposed development area are:
- .1 to determine by means of trial trenching, the nature, depth, extent and state of preservation of any archaeological deposits to be affected by the refurbishment proposals. Trial trenches of sufficient size and depth to provide this information will need to be excavated, and archaeological deposits will need to be explicitly related to depths below existing surface and actual heights in relation to Ordnance Datum.
  - .2 to prepare a report summarising the results of the work and assessing the archaeological implications of proposed development,

- .3 to prepare and submit a suitable archive to the appropriate museum.

## 6. Tenders

- 6.1 Archaeological contractors should submit their estimates or quotations to the commissioning body with reference to the County Council's *Guidance for Developers – Archaeological Work and Research Questions for Assessments, Evaluations and Small Scale Interventions in North Yorkshire*.

## 7. Variations to Work

- 7.1 An allowance of time, or a contingent sum for bad weather, should be agreed as part of any contract. Variations to work arising from the presence of structures or archaeological remains not anticipated by the written scheme of investigation or the archaeological contractor should be subject to consultation with the Archaeologist, NYCC and the commissioning body, and put into effect as appropriate with the written agreement of the parties involved.

## 8. Access, Safety and Monitoring

- 8.1 Access to the site should be arranged through the commissioning body.
- 8.2 It is the archaeological contractor's responsibility to ensure that Health and Safety requirements are fulfilled. Necessary precautions should be taken near underground services and overhead lines.
- 8.3 The project will be monitored by the Archaeologist, North Yorkshire County Council, to whom written documentation should be sent before the start of the trial trenching confirming: a) the date of commencement, b) the names of all finds and archaeological science specialists likely to be used in the evaluation, and c) notification to the Harrogate Museums Service of the nature of the works and opportunity to monitor the works.
- 8.4 Where appropriate, the advice of the Regional Advisor for Archaeological Science (Yorkshire) at English Heritage may be called upon.
- 8.5 It is the archaeological contractor's responsibility to ensure that monitoring takes place by arranging monitoring points as follows:
  - .1 a preliminary meeting or discussion at the commencement of the contract to agree the locations of the proposed trial trenches.
  - .2 progress meeting(s) during the fieldwork phase at appropriate points in the work schedule, to be agreed.
  - .3 a meeting during the post-fieldwork phase to discuss the draft report and archive before completion.
- 8.6 It is the responsibility of the archaeological contractor to ensure that any significant results are brought to the attention of the Archaeologist, North Yorkshire County Council and the commissioning body as soon as is practically possible. This is particularly important where there is any likelihood of the contingency arrangements being required.

## 9. Brief



- 9.1 Five areas of trial trenching should be excavated within the application site, placed to sample different locations and topography. Archaeological contractors should quote for a nominal area of 50m<sup>2</sup> to be investigated to determine the nature, depth, extent and state of preservation of any archaeological deposits across the site. These five trenches are envisaged to range in sizes between a 4m x 4m trench and 3m x 2m, depending upon local topography and services/drainage.
- 9.2 During a meeting between the Archaeologist NYCC, PCP Architects and the Leeds Federated Housing Association, the five trench locations were identified on the existing site survey plan – one in each corner, and one towards the centre within the pedestrianised area. Archaeological contractors should liaise with Ms Ewbank of the Leeds Federated Housing Association regarding the final positioning and sequence of excavation of the trial trenches, as these will need to be arranged in agreement with the operators of the bus station.
- 9.3 The project should be undertaken in a manner consistent with the guidance of MAP2 (English Heritage, 1991). Archaeological investigation should be carried out over the full area of each trench, either by area excavation or sectioning of features in order to fulfil Objective 5.1.1 above. Sondages or slit trenches should be used only to facilitate the recording of the trench; they should not be used to provide a representative sample of the trench. Where excavation below a safe working depth constrains investigation, consideration should be given to stepping back, shoring the excavation. In case of query as to the extent of investigation, a site meeting shall be convened with the Archaeologist, North Yorkshire County Council.
- 9.4 All deposits should be fully recorded on standard context sheets, photographs and conventionally-scaled plans and sections. Each trench area should be recorded to show the horizontal and vertical distribution of contexts. Normally, all four sides of a trench should be recorded in section. Fewer sections can be recorded only if there is a substantial similarity of stratification across the trench. The elevation of the underlying natural subsoil where encountered should be recorded. The limits of excavation should be shown in all plans and sections, including where these limits are coterminous with context boundaries.
- 9.5 Overburden such as turf, topsoil, made ground, rubble or other superficial fill materials may be removed by machine using a mini-digger fitted with a toothless or ditching bucket. Mechanical excavation equipment shall be used judiciously, under archaeological supervision down to the top of archaeological deposits, or the natural subsoil (C Horizon or soil parent material), whichever appears first. Bulldozers or wheeled scraper buckets should not be used to remove overburden above archaeological deposits. Topsoil should be kept separate from subsoil or fill materials. Thereafter, hand-excavation of archaeological deposits should be carried out.
- 9.6 The need for, and any methods of, reinstatement should be agreed with the commissioning body in advance of submission of tenders.
- 9.7 Metal detecting, including the scanning of topsoil and spoil heaps, should only be permitted subject to archaeological supervision and recording so that metal finds are properly located, identified, and conserved. All metal detection should be carried out following the Treasure Act 1996 Code of Practice.
- 9.8 Due attention should be paid to artefact retrieval and conservation, ancient technology, dating of deposits and the assessment of potential for the scientific analysis of soil, sediments, biological remains, ceramics and stone. All specialists (both those employed in-house and those sub-contracted) should be named in project documentation, their prior agreement obtained before the fieldwork commences and opportunity afforded for them to visit the fieldwork in progress.



- 9.9 All artefacts and ecofacts visible during excavation should be collected and processed, unless variations in this principle are agreed with the Archaeologist, North Yorkshire County Council. In some cases, sampling may be most appropriate.
- 9.10 Finds should be appropriately packaged and stored under optimum conditions, as detailed in First Aid for Finds (Watkinson & Neal, 1998). In accordance with the procedures of MAP2 (English Heritage, 1991), all iron objects, a selection of non-ferrous artefacts (including all coins) and a sample of any industrial debris relating to metallurgy should be X-radiographed before assessment. Where there is evidence for industrial activity, large technological residues should be collected by hand, with separate samples collected for micro-slugs. In these instances, the guidance of English Heritage/Historical Metallurgy Society (1995) should be followed.
- 9.11 Samples should be taken for scientific dating, principally radiocarbon dating, where dating by artefacts is insecure and where dating is a significant issue for the development of subsequent mitigation strategies.
- 9.12 Buried soils and sediment sequences should be inspected and recorded on site and samples for laboratory assessment collected where appropriate, in collaboration with a recognised geoarchaeologist. The guidance of Canti, 1996 should be followed.
- 9.13 A strategy for the sampling of deposits for the retrieval and assessment of the preservation conditions and potential for analysis of all biological remains should be devised. This should include a reasoned justification for the selection of deposits for sampling and should be developed in collaboration with a recognised bioarchaeologist. Sampling methods should follow the guidance of the Association for Environmental Archaeology (1995). Bulk samples and samples taken for coarse-sieving from dry deposits should be processed at the time of fieldwork wherever possible.
- 9.14 Upon completion of archaeological field recording work, a full and appropriate programme of analysis and publication of the results of the evaluation should be completed, in the event that no further excavation takes place. The post-excavation assessment of material should be undertaken in accordance with the guidance of MAP2 (English Heritage, 1991).

## 10. Archive

- 10.1 Archive deposition should be undertaken with reference to the County Council's *Guidelines on the Transfer and Deposition of Archaeological Archives*. A field archive should be compiled consisting of all primary written documents, plans, sections and photographs. Catalogues of contexts, finds, soil samples, plans, sections and photographs should be produced and cross-referenced.
- 10.2 The archaeological contractor should liaise with an appropriate museum to establish the detailed requirements of the museum and discuss archive transfer in advance of fieldwork commencing. In this instance the Harrogate Museums Service is suggested. The relevant museum curator should be afforded access to visit the site and discuss the project results.

## 11. Copyright

- 11.1 Copyright in the documentation prepared by the archaeological contractor and specialist sub-contractors should be the subject of an additional licence in favour of the museum accepting the archive to use such documentation for their statutory educational and museum service functions, and provide copies to third parties as an incidental to such functions.

## 12. Report



- 12.1 An evaluation report should be prepared following County Council's guidance on reporting: *Reporting Check-List*. The report should set out the aims of the work and the results as achieved. Diagrams should be included to illustrate the location and depth of archaeological deposits in relation to existing ground levels, and projected depths of disturbance associated with the development proposals, where these are known. The report should identify the archaeological potential of the site, the research questions applicable to the site, and the deposits, finds or areas needing further investigation. The report should also include a listing of contexts, finds, plans and sections, and photographs.
- 12.2 All excavated areas should be accurately mapped with respect to nearby buildings and roads.
- 12.3 At least six copies of the report should be produced and submitted to the commissioning body, the Local Planning Authority, the museum accepting the archive and, under separate cover, North Yorkshire County Council Heritage Unit.

### 13. Further Information

- 13.1 Further information or clarification of any aspects of this brief may be obtained from:

**Gail Falkingham, MIFA**  
**Archaeologist**  
**North Yorkshire County Council**  
**Heritage Unit**  
**County Hall**  
**Northallerton**  
**North Yorkshire**                      **Tel. 01609 532839**  
**DL7 8AH**                                      **Fax. 01609 779838**

### 13.2 References

- |  |      |  |
|--|------|--|
| Association for Environmental Archaeology          | 1995 | Environmental Archaeology and Archaeological Evaluations, Recommendations Concerning the Environmental Archaeology Component of Archaeological Evaluations in England. <i>Working Papers of the Association for Environmental Archaeology, Number 2.</i> |
| Canti, M   | 1996 | Guidelines for carrying out Assessments in Geoarchaeology, <i>Ancient Monuments Laboratory Report 34/96</i> , English Heritage   |
| English Heritage                                   | 1991 | Management of Archaeological Projects  |
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| Tyler, A   | 1978 | North Yorkshire Small Towns Survey – Knaresborough (unpublished manuscript)  |
| Watkinson, D & Neal, V                             | 1998 | First Aid for Finds (3 <sup>rd</sup> edition), RESCUE & the Archaeological Section of the United Kingdom Institute for Conservation.   |