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THE HERTFORDSHIRE ARCHAEOLOGICAL TRUST

A10 WADESMILL, HIGH CROSS AND COLLIERS END BYPASS

STAGE 2 ARCHAEOLOGICAL ASSESSMENT (CONCLUSION)

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1 INTRODUCTION

In March, 1994, the Hertfordshire Archaeological Trust was commissioned to undertake archaeological investigations to conclude the Stage 2 archaeological assessment of the proposed corridor of the A10 Wadesmill, High Cross and Colliers End Bypass.

1.1 Aims and Objectives

1.1.2 These investigations were undertaken in response to proposals by the Department of Transport to build a dual carriageway to the east of the present A10, between Ware and Puckeridge.

1.1.3 The present A10 and the proposed corridor of the new road are adjacent to areas of known archaeology. Construction of the proposed bypass will necessitate the use of substantial tracts of land which are virtually all 'green field'. Locally and elsewhere, these 'green field' sites have produced evidence of previously unknown archaeological remains, and the likelihood of buried remains being affected by road construction is high.

1.1.4 A report assessing the likely impact of the bypass on the archaeology, titled 'Wadesmill Bypass (A10), Archaeological Appraisal' was compiled by Dr Jonathan Hunn. This report requires revision in the light of the requirements of a Stage 2 archaeological assessment, as set out in the Design Manual for Roads and Bridges, Volume II.

1.1.5 Revision has necessitated the following tasks:

i) completion of the desk-based study;
ii) preparation of a project design for a field survey (Stage 3 assessment), if appropriate.

The Department of Transport also requested that the Trust rapidly walkover all the areas of the proposed road corridor which are suitable for field walking.

1.1.6 The specification (Appendix 1) requires the production of a Stage 2 report.

1.2 Description of the Route

1.2.1 The proposed scheme comprises the extension of the A10 Ware bypass northwards, bypassing the villages of Thundridge, Wadesmill, High Cross and Colliers End, and linking with the A10 Puckeridge bypass at its junction with the A120. The new road will pass entirely to the east of the present A10. The scheme includes 7.2 km (4.5 miles) of new road construction.

1.2.2 The proposed route runs from level ground at Mole's Wood (TL 357163; c.70 m OD), across the River Rib valley (base c.47 m OD), skirting Thundridge, Wadesmill and High Cross to the west and Youngsbury Park to the east, crossing a plateau of relatively high ground (c.90 m OD). It bypasses Colliers End and traverses two small valleys containing watercourses known as the Barwick Tributaries (base point c.73 m OD). Rising to a maximum height of c.110 m OD, the corridor descends the small valley of the Puckeridge Tributary (base c.84 m OD) and links to the existing Puckeridge roundabout at TL 381226.

1.2.3 Most of the route passes through arable land, characterised by large open fields. The remainder includes the emparked landscape at Youngsbury and several small parcels of woodland. Soils vary from a mixed, loamy gravelly drift over chalk to chalky boulder clays.

1.3 Background and Previous Work

1.3.1 The road construction is a Department of Transport scheme. Alternative routes have been considered in a Public Consultation Exercise, and in July 1989 the Secretary of State for Transport announced that the 'Eastern Route' (the subject of this report) is the Preferred Route. A Public Inquiry was held in September 1991 and a report has been prepared.

1.3.2 The new road will be a dual 2-lane carriageway. Additional elements of the project include the construction of slip roads, the diversion of existing routes, and the construction of bunds to reduce visual and noise intrusion. Tip sites to dispose of surplus material arising from road construction may be created, but much of the route is to be embanked.

1.3.3 Significant elements of the road construction consist of embankment; for example, where it traverses the valleys of the River Rib and the Barwick Tributaries. The possibility of preserving any archaeological sites lying within the road corridor may therefore be viable. These sites, however, must be located so that mitigation or preservation strategies can be formulated.

1.3.4 A report assessing the likely impact of the bypass construction upon archaeological remains, titled 'Wadesmill Bypass (A10), An Archaeological Appraisal', has been compiled by Dr Jonathan Hunn. The preparation of this report was funded by the Department of Transport. It consists primarily of a compilation of relevant documentary evidence; additionally, the route was walked over and a detailed record was compiled for each field, listing the soil cover, topography and land use. Two aerial photographic surveys were undertaken, without result. Four areas were subject to detailed magnetometer surveys, but the results were largely inconclusive, partly because of the effects of recent ploughing and the existence of a modern pipeline.

1.4 Method of Work

1.4.1 The archaeological assessment was conducted as described in the Hertfordshire Archaeological Trust's (HAT) Specification (Appendix 1).

1.5 Completion of the Desk-Based Study

1.5.1 The completion of the desk-based study comprised an examination of air photographs and geotechnical data. The following material was studied:

i) Aerial Photographs

Aerial photographs of the study area were examined as described in HAT's specification, and the photographs which were examined are listed (Appendix 3)

ii) Geotechnical Information

All available sources of geotechnical information were examined, with the intention of identifying:

a) areas susceptible to field walking and geophysical survey techniques;
b) areas of colluvium and alluvium;
c) areas of peat or waterlogged deposits.

1.6 Commencement of a Field Survey (Stage 3 Assessment) Rapid Field walking

1.6.1 Because of the time of year that the conclusion of the Stage 2 Assessment was commissioned (late February/early March), the Trust was commissioned additionally to undertake a rapid field walking survey while ground conditions allowed.

1.6.2 All the areas of the proposed road corridor which were susceptible to field walking (ploughed fields with low or insignificant crop growth), and to which access

could be obtained, were walked. These are described in Section 3.2 (below).

1.6.3 The field walking was rapidly executed: the fields were walked without a measured grid being in place, and such finds as were located were plotted by eye and pacing. The purpose of the exercise was to pin-point finds scatters and areas of archaeological potential.The land plots were roughly divided into northern and southern sectors and two lines were walked (south-north), some 30-40 m apart, dependent on the width of the proposed road corridor.

1.6.4 The results of the field walking survey are summarised below (Section 3.2). Appendix 5 lists the finds obtained during the rapid field walking.

2 BASELINE CONDITIONS

2.1 The General Archaeological and Historical Background of the Area.

2.1.1 The route passes through what can be termed an 'historic' landscape, i.e. it has been intensely occupied since the Bronze Age, and perhaps earlier (a Palaeolithic axe is believed to have been found at St Edmunds College, Old Hall Green (SMR No.0605)).

2.1.2 Bronze Age pottery sherds have been found at Moles Farm, Thundridge, along with pits dating to the late Bronze Age or early Iron Age (AAS No.141, SMR No.2098). Iron Age occupation of the Braughing area, to the north of the A120 interchange, is well documented, and a large undated cropmark site to the south-west of Kitchencroft Wood, Standon, possibly also dates from this period (AAS No.93, SMR Nos.2578, 4109, 4128, 4144, 4147).

2.1.3 There is much evidence of Roman activity in this area. Roman Ermine Street (SMR Nos.4670/1) follows the course of the present A10, some 300-500 m to the east of the proposed new road corridor, whilst Rigery Lane, Colliers End (SMR No.4622), also has Roman origins. Ermine Street is believed to have run from Verulamium, through Welwyn, and on to Braughing, probably on the line of an earlier track. A section dug through the road in 1948 revealed cambered metalling c.12' wide, composed of flint and chalk nodules, bound with clay. Wheel ruts were visible on the surface. The large Roman town of Braughing lies to the north of Puckeridge, and to the east of the A10. The present A120 follows the course of Roman Stane Street for much of its length. A Roman building with a tesselated pavement was found in the grounds of Youngsbury in the late 18th century (SMR No.1101). This find was associated with two round barrows, also believed to be of Romano-British date (AAS No.139, SMR Nos.1528, 4233). Isolated Roman finds have also been found, for example, to the west of the Sow and Pigs PH, Thundridge (SMR 4234), and near to Wadesmill Post Office (SMR 1527).

2.1.4 Evidence for Anglo-Saxon occupation in the area is very sparse. Munby (1977) suggests that the name Thundridge derives from the Anglo-Saxon thunor (ridge), and that the valley of the River Rib served as a main track or thoroughfare between the Saxon kingdoms of Essex and Mercia, though it is hard to find direct evidence to support this.

2.1.5 The area is likely to have been quite well populated immediately prior to the Conquest. For example, the Domesday entry for the Manor of Standon records: 6 rated hides of land, 24 ploughed lands, 6 hides in demesne, 24 meadows, right of common pasture, woodland

to feed 600 hogs, 2 'arpends' of vineyards and 5 mills. It refers to 29 villeins (including a priest), 15 bordars, 2 sokemen, a ?Frenchman, 9 cottagers and 8 servants.

2.1.6 References to Standon, historically within the Hundred of Braughing, are diverse. The Victoria County History (VCH) cites references to "Standone" in the 11th century, and "Staundon", "Stondon" and "Staunden", from the 13th century onwards (VCH).

2.1.7 Thundridge, also in the Hundred of Braughing, appears as "Tonrich" in 1086, "Tunrigge", "Thanrugge" and "Thornrugge" in the 13th century, "Thunrigge", "Thunrych" and "Thurrich" in the 14th and 15th centuries, and "Thundriche" in the 16th century (VCH). Prior to the Conquest both Standon and Braughing were held by Stigand, Archbishop of Canterbury.

2.1.8 At the time of Domesday (1087), the smaller Thundridge contained; 1 rated hide of land, 4 ploughed lands, 1 in demesne, woodland to feed 16 hogs, and 1 mill. It refers to the presence of 4 villeins, 3 bordars and 2 servants. Evidence for a possibly larger pre-Conquest settlement at Thundridge lies in the fact that the Domesday entry records that the rental for the manor was 30s, 40s when received, and 100s during the time of Edward the Confessor.

2.1.9 The medieval village of Thundridge(bury) (SMR No.1022) probably lay nearly 1 km to the east of Ermine Street, alongside the River Rib. The site is marked today by the earthwork remains of a moat (SMR No.2983) and associated features, and the remains of St. Mary and All Saints Church (AAS No.140, SMR No.2977), which was demolished in the 19th century. The church remains include a 15th-century tower, with a 14th-century window and an inserted Norman doorway. The area surrounding the church is a Scheduled Ancient Monument (SAM No.11560). Also present are the ruins of a house (demolished in c.1811) first mentioned in 1535. A brick buttress is all that survives above ground (SMR No.2982).

2.1.10 There are many features in the study area dating from the medieval period. Moated sites are numerous; a catalyst in the creation of these earthworks was the climatic change to cooler and wetter conditions in the late 13th and early 14th centuries. Water tables rose, and moated sites emerged from the need for drainage, and the use of upcast spoil mounds as a firm foundation base. Moated sites occur, for example, at Sutes Farm (AAS No.136, SMR No.2223), Thundridgebury (SMR No.2983, see above), Rennesley (SMR Nos.0046, 2085, Scheduled Ancient Monument No.22), Sutes Wood (SMR No.1177), Thundridgehill (SMR No.6407), and possibly at Plashes Farm (SMR No.2587). Marshalls, at High Cross (SMR No.2981) may also have been moated, and a moat appears

at Cowards on the Thundridge Tithe Map. J. Hunn cites Dowsetts as having a three-sided moat.

2.1.11 Munby notes that from the 12th century there was a move to siting properties along the main road, and manors and sub-manors on Ermine Street began to establish markets from this time onwards. Puckeridge, for example, is said to have developed from Milkley (Mentley Farm), dating from the early 12th century, at the convergence of two former Roman roads. Colliers End was possibly established by the manor of Standon Friars, to the east of Standon.

2.1.12 Jones (1991) cites the fact that in the medieval period Ermine Street was the boundary between the Diocese of London (to the east), and the Diocese of Lincoln (to the west).

2.1.13 High Cross was a medieval settlement (AAS No.137, SMR No.4440) probably associated with the manors of Marshalls and Sutes, and enjoyed an advantageous and prosperous location on the Great North Road. Medieval pottery and kiln waste have been found locally (SMR Nos.1176, 1390). Buildings such as the Old Post Office (Balhams Hall, SMR No.4843), a 15th-century house, and Sutes Manor House (SMR No.1993), which incorporates the remains of a 14th-century aisled hall, remain today. Marshalls is reputed to be on the site of a 13th-century house (SMR No.2981) though this has not been demonstrated.

2.1.14 During the post-medieval period, transportation became a dominant factor in shaping the development of the landscape in area around the Great North Road. Since 1555, parishes had been responsible for maintaining roads, but in the seventeenth century this system began to break down. A steady rise in the volume of trade, coupled with the vagaries of river travel and domestic stability following the Civil War, led to the creation of turnpikes. The Turnpike Act for Wadesmill was passed in 1663 (the first on the Great North Road), and temporary gates were in place by 1665. The turnpike was controlled by local Justices of the Peace, and tolls were collected until 1680, and again after 1690. In 1733 the Wadesmill Turnpike Trust was set up, when the Cheshunt Trust was extended as far as Wadesmill.

2.1.15 Daniel Bourn, writing in 1763, stated that 30-40 years before the roads had looked 'more like a retreat of wild beasts and reptiles, than the footsteps of man'. Although the turnpikes appeared to be effective, roads deteriorated by the late 18th and early 19th century. The responsibility for road improvement fell largely to the Post Office and the Board of Agriculture. In 1810 J.L.McAdam put forward his proposals for road construction using a clean, dry subsoil base, coupled with a smooth, elastic surface, differing from the more expensive Telford method of utilising built-up stone founda-

tions. McAdam lived at Hoddesdon between 1825 and 1836, and his son, James, was responsible for surveying many of Hertfordshire's roads.

2.1.16 Towards the end of the 19th century the responsibility for maintaining the North Road fell to the newly formed county council.

2.1.17 The parkland (SMR No.0382) at Youngsbury was enhanced by Capability Brown who, amongst other works, enlarged the river. The park remains virtually unchanged, except for recent large-scale tree planting, providing screening from the proposed new road. The walled garden is all that remains of the Elizabethan house (the present house dates from 1745).

2.1.18 Today the area remains rural, without large-scale housing or industrial development. The proposed road passes entirely through open countryside.

2.2 Soils

2.2.1 A description of the solid and superficial geology has already been compiled by Dr Jonathan Hunn (A10 Archaeological Appraisal). Here, the topographical significance of the route and the likely location of archaeological sites is considered. An attempt has been made to define areas of colluvium (hillwash) and alluvium (riverine deposits) because these deposits mask archaeological sites (if they are present) and prohibit the use of techniques such as field walking and geophysical surveying. Likely areas of peat and waterlogged deposits have also been pinpointed because of the possibility of recovering evidence of ancient environments.

2.2.2 Additional geological/geotechnical information has been obtained by reference to an extract from the Mott MacDonald's Interpretive Report which encompasses general site descriptions and ground conditions. This information is incorporated within Section 3.2 (below).

2.2.3 A listing of soil types by numbered plot is given below. The plot numbers are derived from Mott MacDonald's drawing 1592/L/201-208, and the information comes from the Soil Survey of England and Wales, 1983, Rothamsted, Harpenden.

2.2.4 Some plots, especially the larger ones, are listed as having two soil types because of the large scale (1:250,000) of the Soil Map of SE England from which this information is derived.

i) Hanslope

Parent material:	Chalky till.
Characteristics:	Slowly permeable calcareous clayey soils. Some slowly permeable non-calcareous clayey soils. Slight risk of water erosion.
Land use:	Winter cereals with other arable crops; some grassland.
Land Plots:	1/1, 1/1g, 2/6, 3/1, 3/2, 3/3, 3/4, 4/1, 5/1, 6/2, 7/1, 7/2.

ii) Melford

Parent material:	Chalky till.
Characteristics:	Deep well-drained fine loamy over clayey, coarse loamy over clayey and fine loamy soils, some with calcareous clayey subsoils.
Land use:	Cereals, sugar beet and other arable crops.
Land Plots:	2/2, 2/2j, 2/4, 2/6, 7/2, 7/3.

iii) Fladbury 1

Parent material:	River alluvium.
Characteristics:	Stoneless clayey soils, in places calcareous, variably affected by groundwater.Flat land. Risk of flooding. (Thomasson and Avery describe this as the Rib association, and indicate potential peat deposits, with sand/gravel layers).
Land use:	Stock rearing on permanent grassland; some cereals where flood risk low.
Land Plots:	2/2, 2/2j.

iv) Wickham 4

Parent material:	Drift over Tertiary clay.
Characteristics:	Slowly permeable seasonally waterlogged fine loamy over clayey and fine silty over clayey soils, associated with similar clayey soils, often with brown subsoils.
Land use:	Permanent and short term grassland, dairying; some cereals.
Land Plots:	4/1, 5/1, 5/4, 5/5, 5/6, 6/1, 7/3a+c.

3. IDENTIFICATION OF ARCHAEOLOGICAL SITES AND AREAS OF ARCHAEOLOGICAL POTENTIAL

3.1 General Points

3.1.1 The study area is rich in 'chance' archaeological finds, some dating from the prehistoric and Roman periods. The Hertfordshire County Council Sites and Monuments Record (the principal source of information for the desk-based study) encompasses these 'chance' finds. It also contains information about extant earthworks (which are especially prevalent in the study area), and previous excavations. The SMR evidence suggests that the study area was occupied from an early date and that the occupation has been prolonged. There is at least a reasonable probability that new sites will be located during archaeological investigations in advance of the proposed road scheme.

3.1.2 The plot numbers refer to Mott MacDonald drawings 1592/L/201-208.

3.1.3 The SMR numbers refer to Hertfordshire County Council Sites and Monuments Record numbers. AAS numbers refer to East Herts District Council Areas of Archaeological Significance.

3.1.4 The information is presented South - North.

3.2 Archaeological Sites

3.2.1 Plots 1/1, 1/1g (Arable) Fig. 1

A10 to Moles Wood

i) SMR Nos.4714

Romano-British ?habitation site

Land at Moles Farm. When the A10 Ware Bypass was constructed, a series of linear pits connected by channels, in all 15 m long, were excavated. The pits, dated by the finds of coarseware pottery to the Roman period, have been interpreted as possible puddling or clay working pits (Kiln 1977).

ii) SMR No.4670

Roman road (Ermine Street)

These plots are adjacent to the line of Roman Ermine Street (SMR No.4670), and roadside structures or ancillary features may be present. Hunn notes the presence of a wide band of stones within the field, which may represent the remains of a ploughed-out building. This complements aerial photographic evidence which points to a vague rectangular crop mark (aligned E/W) in the centre of the plot. Hunn also notes that part of the field was called 'Walls Field' (1845 map ref.); field name evidence such as this can be indicative of an archaeological site, e.g. 'Upper Walls Field', Baldock,

Herts., contained part of an extensive Roman settlement. However, field walking (completed 10/3/94) does not substantiate the above evidence, because less than five sherds of Roman pottery were found. However, the conditions for fieldwalking were not ideal because crop growth was well under way.

Eight flint flakes and three burnt flints were also found during field walking.

Refs: Kiln, Herts. Archaeology, v, (1977), 191.
RCHM AP V (vertical) Film 10896, Shots 127+128.

3.2.2 **Plot 1/1 (Arable)** Fig. 1
Moles Wood to footpath crossing
Seven burnt flints found during fieldwalking. The conditions for field walking were not ideal: there was some crop growth which may have inhibited finds retrieval.

3.2.3 **Plot 1/i, 2/1 (Arable)** Fig. 1
Footpath crossing to Cold Christmas Lane
SMR No.2098, AAS No.141
Located some 100 m east of the road corridor. The SMR refers to the discovery of five pits or ditches during the digging of a pipeline trench. One pit was completely excavated and contained large quantities of pottery and bone. The finds are indicative of an occupation site of late Bronze Age/early Iron Age date.

The aerial photographic evidence shows a large crescent-shaped soil mark, curving to the west and the north, possibly just clipped by the proposed road corridor. It is of unknown origin and is possibly geological.

The plot was field walked under slightly less than ideal conditions (i.e. the crop was just through). The exercise recovered some 13 burnt flints, some very large, though only four struck flint flakes.

The possible barrow or burial mound noted by Hunn (NGR 3694 1682) was not apparent during field walking, and judging by the grid reference, seems to be outside the proposed landtake.

Geological data suggests that 'reworked glacial till' is present, some 100 m either side of Cold Christmas Lane. The till may represent a colluvial deposit that could potentially mask any archaeological features.

Refs: Kiln, Herts. Archaeology, ii (1970), 10.
RCHM AP V Film 1054, Shot 3039; Film 10211, Shot 461.

3.2.4 **Plot 2/2 (Arable)** Fig. 1
Cold Christmas Lane to Old Church Lane
A steeply sloping field. Geological information suggests the presence of a 'reworked glacial till', some 100 m either side of Cold Christmas Lane. The till may be the result of colluviation, and if so, is likely to mask buried archaeology. At the northern base of the field, alluvial deposits derived from the River Rib are believed to be present. The deposits could be up to more than 1 m deep, and could mask buried archaeology, particularly evidence from the Mesolithic period (c.6-8000 BC), if present.

The upper slopes of the field rise to a prominent crest, an ideal location for prehistoric activity. This seems to be reflected in the finds from field walking. The northern and central part of the field produced the most struck flint overall, 11-13 struck flint flakes and two flint cores being found.

3.2.5 **Plot 2/2 (Arable)** Fig. 1
Old Church Lane to woodland by River Rib
This is a very narrow strip of land, some 400 m from the earthwork/manorial/?village remains at Thundridgebury (AAS No.140).

The field had just been turned over from grassland when field walked, and was thus difficult to survey. A whetstone (undated) was found. Geological information suggests that the flood plain of the River Rib contains deposits of alluvium, comprising soft to firm silts and clays, generally 2 m thick but up to 3 m in places. Peat layers, ranging in thickness between 0.3 and 0.5 m, are also present in places. They overlie alluvial sands and gravels, and also potentially mask early archaeology, along with the potentially important survival of environmental remains.

3.2.6 **Plot 2/2 (Woodland)** Fig. 1
Woodland by River Rib
No earthworks were identified. The plot is adjacent to the River Rib, and the subsoil is probably obscured by alluvial deposits and peat (see 3.2.5 above).

3.2.7 **Plot 2/2j (Arable)** Fig. 1
River Rib to Youngsbury Drive
This plot is situated adjacent to and on the first terrace of the River Rib, at the base of a steep slope rising to the north. The subsoil is probably overlain by substantial deposits of alluvium (up to 3 m thick). In addition, peat deposits are likely to be present. The alluvium and peat could be concealing archaeological features, particularly from the Mesolithic period.

Field walking revealed much archaeological material.

The latter was either *in situ*, or derived from higher up the slope. Some 23 struck flints (including a blade and a flint core) and 11 burnt flints were found during a rapid fieldwalking survey. In addition, two prehistoric and three ?Roman or medieval pottery sherds were found. The former may be contemporary with the flint, the latter may be derived from manuring.

A possible occupation site, either on the river terrace or on the high ground to the north, seems likely.

3.2.8 **Plot 2/4 (Arable)** Fig. 1
Youngsbury Drive to Upper Millfield Wood
This plot occupies the downslope of a prominent crested location. The crest lies just outside the road corridor, to the north west.

Geological information suggests the presence of a 'reworked glacial till', stretching for some 100 m to the north of Youngsbury Drive. This till may represent a colluvial soil derived from the high ground to the north. It may mask prehistoric features, if they are present.

Within the proposed corridor, some 11 struck flints, including a blade, were found evenly distributed across the field. Two medieval pottery sherds were also found, but these are probably derived from manuring. The adjacent crest was rapidly scanned for finds, and a moderate quantity of struck flint was observed. This indicates a possible prehistoric site on a crested location, with some flint being transferred by plough action or soil creep to the valley floor below (Plot 2/2j).

3.2.9 **Plot 2/5 (Arable)** Fig. 1
Upper Millfield Wood to Youngsbury Park boundary
Plot 2/5 is situated on the downslope of the crest described under Plot 2/4. Colluvial soils may be present because the plot is within a natural 'dip'.

Geological information indicates the presence of a 'reworked glacial till', for a *c*.300 m stretch of the corridor (the northern half of Upper Millfield Wood and this plot). The till may mask prehistoric archaeology, if it is present.

Field walking of this small plot identified six struck flints and one spurred implement or piercer. The latter may date to the late Neolithic period (*c*.3000-2500 BC). The struck flint may be derived from higher up the slope, or may be *in situ*.

3.2.10 Plot 2/6 (Woodland/grass) Fig. 1
Upper Millfield Wood and Part of Youngsbury Parkland
As Plot 2/5 (above) for soil conditions.

Hunn notes that the boundary between Plots 2/5 and 2/6 is a lynchet of medieval or earlier date.

Part of 2/6 is woodland, and archaeology, if present, will be much disturbed by tree roots. The remainder of the plot is grassland associated with Youngsbury Park, and was subject to a geophysical survey, the results of which were inconclusive (Hunn).

3.2.11 Plot 3/1 (Quarried) Fig. 1
Gravelpit Wood
An old gravel pit, possibly associated with the Wades-mill Turnpike Trust. It is visible on a 1768 map of Youngsbury, the earliest map of the area which was examined.

3.2.12 Plots 3/1 and 3/2 (Grass) Fig. 1
Gravelpit Wood to North Drive
Hunn notes that this plot was arable in 1840, prior to emparking. An E-W low bank survives, to the north of an 'entrance' to the quarry, and a low bank and deep wide trackway curve E-W, some 100 m from the north end of the plot.

3.2.13 Plot 3/3 (Arable) Fig. 1
North Drive to public footpath
A featureless arable field, which was subject to a rapid field walking survey. There was some crop growth which would have inhibited the detection of surface finds. Two struck flints (including a blade) and 6 burnt flints were found. Three sherds of ?Roman/medi-eval pottery were recovered, but were probably the result of manuring. The possible oval-shaped rise, de-scribed by Hunn, was not apparent.

Topographically, the plot favours the location of pre-historic activity, i.e. it is moderately crested.

3.2.14 Plots 3/4, 4/1 (south) (Arable) Fig. 1
Public footpath to Sutes Farm SE access track
This large plot was field walked with the crop just through. Six struck flints and eight burnt flints were found. Two Roman or medieval sherds were recovered.

The SMR (No.1177) notes that earthworks of a 'stirrup-shaped moated area, sub-divided by a cross-ditch', lay (180 m approx) to the east of the corridor, in a cleared area of Sutes Woods. Finds of pottery sherds, believed to have derived from the kilns at Marshalls, High Cross, suggest a medieval date. The SMR notes

that there is now no surface evidence of the earthworks. It is possible that ancillary features lie within the corridor.

Refs: Medieval Archaeology iv (1960), 153.
CBA Group 10 Newsletter (1960), 17.

3.2.15 **Plot 4/1 (Arable)** Fig. 2
Sutes Farm SE access track to NE access track
Plot 4/1 may contain ancillary features contemporary with the possible moated site to the east of Sutes Woods. However, field walking did not provide any evidence to support this theory.

The plot was rapidly field walked (with low crop growth present). The only finds were 3 struck flints (including a blade) and 10 burnt flints. No medieval finds were recovered.

3.2.16 **Plot 4/1 (Arable)** Fig. 2
Sutes Farm NE access track to field boundary north of Sutes Woods
A featureless arable field on a gentle downslope to the north. It was subject to a rapid field walking survey while under crop, but with low growth. The finds include five struck flints (one retouched), and eight burnt flints. An abraded Roman or medieval pottery sherd was also found. The plot also contained an above average quantity of possible post-medieval tile debris (also noted by Hunn).

3.2.17 **Plot 4/1 (Arable)** Fig. 2
Field boundary north of Sutes Woods to Barwick Tributary
An arable field, with a gentle downslope to Broad Oak Lane. The junction between this plot and that to the north was an old trackway which was still in existence in 1880 (Hunn).

The plot was field walked, though there was low crop growth when surveyed. Little material was retrieved, other than three burnt flints and a single struck flint.

The geological maps indicate a likelihood of colluvial soils at the northern end of the plot; this is supported by the scarcity of any coarse components within the soil matrix.

3.2.18 **Plot 4/1 and part of 5/1 (Arable)** Fig. 2
Barwick Tributary to Gore Lane
The plot was field walked with a low crop growth. Only eight burnt flints were recovered.

An aerial photograph indicates possible soil or crop marks in Plot 5/1 (N of Gore Lane, see below) and these may continue into this plot.

There is a possibility of colluvial soils (valley of the Barwick Tributary, see below).

3.2.19 **Plot 5/1** (Arable) Fig. 2
Gore Lane to next field boundary to the north
Aerial photographs indicate the presence of substantial crop or soil marks in the area immediately west of the corridor, adjacent to the minor road between the A10 and Barwick. The marks are linear, and comprise four square bays in a straight line, with a possible larger square enclosure to the immediate east, on the same alignment, c.65 degrees to the line of the new road. What these represent is unclear, though the presence of a building cannot be ruled out. It is also not clear if they will be affected by the new road, but it seems likely. The marks possibly represent field boundaries, but are very regular and in an odd configuration for this.

The plot was field walked (low crop). Finds include four struck flints, one exceptionally large and one retouched as a scraper, and eight burnt flints.

Ref: RCHM AP V Film 10899, Shots 0064, 0118, 0119 and 0122.

3.2.20 **Plot 5/4** (Arable) Fig. 2
Fisher's Farm land, to the SE of Colliers End
The geological deposit overlying the subsoil in the plots listed above may also be present in the southern part of this plot.

This field was harrowed and rolled and thus suitable for a rapid field walking survey. Six struck flints and two burnt flints were recovered. A c.30 m-wide band of large flint cobbles is present in the centre of the field, c.40 m from the southern boundary, across the width of the proposed road corridor. The cobbles measure up to 0.35 m in diameter, and possibly represent a ploughed-out building.

3.2.21 **Plot 5/5** (Arable) Fig. 2
Field bisected by the Gore Lane - Colliers End footpath
The plot was field walked. Five struck flints (one retouched) and four burnt flints were found, mostly at the northern end. The plough had been bringing up subsoil, and several 'reddish' patches were visible towards the SW end of the corridor, possibly indicating the presence of buried features.

The plot occupies the immediate downslope of a prominent crested location, favourable for prehistoric activity.

3.2.22 **Plot 5/6 (Arable)** Fig. 2
Land between Plashes Wood and Colliers End
This plot was not field walked because access was not granted by the owner.

3.2.23 **Plot 6/1 (Arable)** Fig. 2
Land to the rear of Hailwood, Cunningham House and Yew Tree Cottages, Colliers End
The plot was rapidly field walked, this exercise producing two small flint flakes (including a flint blade), a single burnt flint, a sherd of ?Roman or medieval pottery, a lump of imported limestone, and large quantities of tile.

That part of the field between the A10 and the proposed road corridor also contains large amounts of tile, pottery, bone and struck flint, but this was not retrieved because it was outside the study corridor.

The significance of this material is unclear; it may indicate the presence of building remains near the A10, which potentially stray into the landtake for the new road.

3.2.24 **Plot 6/2 (Arable)** Fig. 2
Dowsett's Farm land, east of the disused camp site
This plot was not field walked because access was denied.

At the southern corner of the field boundary between Dowsetts Farm and the disused camp site, aerial photographs taken in the late 1940s show a pond to the south of the boundary, within the proposed road corridor. There is no evidence of this feature today, so presumably it has been infilled and levelled. It was possibly associated with the manor of Dowsetts, and Hunn notes that this plot was called 'Pondfield' in 1840.

Geological information also records the presence of backfilled or naturally infilled ponds in this immediate area. As only the one large pond is visible, the shape and size of any further former water features cannot be assessed.

Refs: RCHM AP V Film 2939, Shot 5014; Film 11001, Shot 6.

3.2.25 Plots 6/2 and 7/1 (Arable) Fig. 2

Dowsett's Farm land, between Wellington Cottages and Ryders Grove

Adjacent to (?impinging upon) AAS 93.
Adjacent to SMR 2578, 4109, 4128, 4144 and 4147.
Possibly affects SMR 4622.
This large plot was not field walked because access was denied.
Two possible archaeological sites are apparent:

a) a continuation of the Roman road that follows the course of Rigery Lane. Even though it is believed by the Viatores to merge with Ermine Street, it may continue on the same alignment to the east of Ermine Street, on a direct course to Standon. If so, it will cross the corridor to the south of the footpath that bisects Plot 6/2. Metalling or contemporary road ditches and roadside structures may be present.

Secondly, the road corridor passes close by the extensive but undated cropmark site (AAS 93) to the south of Kitchencroft Wood. The cropmark evidence comprises D-shaped, oval, and circular enclosures, coupled with rectilinear and linear ditches, possibly representing an Iron Age site. This is reinforced by the fact that Rigery Lane, if it continues east of the A10, would pass close by this site. Rigery Lane itself is believed to overlie the course of a pre-Roman track from Verulamium to Braughing, via Welwyn.

Refs: Viatores, Road 21a.
Holmes, Transactions of the East Herts Archaeological Society, xii, 1950, p96.
HCC Archaeology Section AP 3253.

3.2.26 Plot 7/2 (south) (Arable) Fig. 2

Small plot to the east of Ryders Grove

Adjacent to (and impinges upon) AAS 93, SMR 2578, 4109, 4128, 4144 and 4147.
This plot, both sides of the N-S drainage ditch, impinges slightly upon AAS 93 (above), an area of cropmarks south of Kitchencroft Wood. These do not appear to be threatened by road construction, although it is not certain that the site has been fully defined.

The small area was field walked under low crop (not ideal for survey, but just adequate). One struck flint, six burnt flints and an abraded medieval sherd were found.

Colluvial soils may be present because the plot is on the lower slopes of the valley of the Puckeridge Tributary.

Ref: HCC Archaeology Section AP 3253.

3.2.27 **Plot 7/2 (north) (Arable)** Fig. 2
Rear of Ryders Grove to old course of A10
SMR 4671 (Ermine Street).
Plot 7/2 lies on the intermediate and lower slopes of the valley of the Puckeridge Tributary.

Geological information indicates the presence of Woolwich and Reading Beds immediately below the ground surface, though recently-deposited colluvial soils may lie at the northern end of this plot.

The SMR reference relates to the Roman Ermine Street, the old A10, prior to the construction of the A120 Interchange and Puckeridge Bypass. This is now a bridleway. It is unknown whether an archaeological section has ever been dug through this stretch of the road, but it seems unlikely. Metalling, road-side ditches, or associated structures may survive, but this will depend upon ground disturbance, largely that associated with the construction of the road.

The plot was field walked, even though it is currently 'set aside'. Stubble and straw greatly reduced the visibility of the ploughsoil, and only two flint flakes were found. The suryey was thus inadequate.

3.2.28 **Plot 7/3** (Arable) Fig. 2
Land between the old and new courses of the A10
SMR 4671.
This land plot is similar in all respects to 7/2. It is 'set aside' land, adjacent to the former course of Ermine Street, with possible road metalling and features surviving, dependent upon ground disturbance.

Field walking of this plot, though inhibited by the presence of stubble, was more satisfactory than on Plot 7/2. More of the plough soil was visible, though the view was patchy. Seventeen struck flints were recovered, mostly from the more 'visible' area of the plot, to the east of the present A10. Three burnt flints and four undated pottery sherds were also recovered. Tile was common within this plot.

Colluvial soils may be present.

3.2.29 **Plots 7/3a and 7/3c (Arable)** Fig. 2
Land to the west of the A120 Interchange
Plots 7/3a and 7/3c encompass the landtake at the A120 interchange, and were not included in the initial appraisal (Hunn). The south part of the field may be overlain by colluvial soils, but the north end occupies a crested location. Field walking of the plot was difficult because crop growth was well advanced. The finds include six struck flints, four burnt flints and four pottery sherds (possibly medieval).

4 PROJECT DESIGN FOR A FIELD EVALUATION

4.1 Introduction

4.1.1 The following areas of archaeological potential have been identified in accordance with the DTp Design Manual for Roads and Bridges, Volume 11.

4.1.2 The principal points are:

i) The prime objective should be to discover the location and importance of all archaeological remains which could be affected, and to assess how significant the preferred route's impact on them would be;

ii) Consideration will be given, in the first instance, to the use of non-invasive techniques: a combination of intensive field walking and geophysical survey;

iii) Because of the limitation of the powers of entry, ground-breaking techniques (i.e. trial trenching or test pitting) should only be deployed when no other survey technique will suffice.

4.1.3 Detailed proposals for the techniques to be employed on the various sections of the route are retained on file.

4.2 Assessment of Areas of Archaeological Potential

The areas of archaeological potential have been prioritised (Priority 1, 2 and no priority). This prioritisation has been assigned according to four principal criteria:

i) the importance of the archaeology;

ii) the probability of archaeological features being present;

iii) the location of archaeology within areas which are most 'intact';

iv) the location of archaeology within areas of proposed large-scale ground disturbance.

The results of this excercise are described below, and depicted graphically in Figures 3 and 4. To avoid confusion, only the major plot divisions are referred to.

4.3 Areas of Archaeological Potential

These are described in sequence, starting at the south end of the road corridor.

4.3.1 Plot 1/1 (south) Fig. 3
South end of the bypass to Moles Wood (north side).
Road in cutting.
i) Possible Romano-British habitation site (SMR 4714).

Priority 1

4.3.2 Plots 1/1 (north), 2/1 (south) Fig. 3
Public footpath to Cold Christmas Lane.
Road in cutting.
Possible prehistoric site.

Priority 1

4.3.3 Plots 2/2 (north), 2/4, 2/5, 2/6 Fig. 3
Old Church Lane to Youngsbury Parkland Boundary.
Road embanked, then in cutting.
Peat deposits and prehistoric site.

Priority 1

4.3.4 Plots 3/3, 3/4, 4/1 (south) Fig. 3
North Drive to SE Sutes Farm access track.
Road at grade.
Possible prehistoric site.

Priority 2

4.3.5 Plots 5/1 to 5/4 Fig. 4
South Barwick Tributary to north boundary of next field to north.
Road embanked/at grade/minor cutting.
Cropmarks, prehistoric activity and possible building remains.

Priority 2

4.3.6 Plots 6/1, 6/2 (south) Fig. 4
Land north-west of Plashes Wood, to Dowsett's Lane.
Road at grade/embanked/in cutting.
Possible prehistoric/Roman/medieval activity.

Priority 2

4.3.7 Plots 6/2 (north), 7/1, 7/2 (south) Fig. 4
Dowsetts Lane to east of Ryder's Grove.
Road in cutting/at grade.
Adjacent to cropmarks AAS 93. Access not obtained to these plots.

Priority 1

4.3.8 Plot 7/2 (north) Fig. 4
East of Ryder's Grove to Ermine Street (old A10).
Road at grade.
Ermine Street (SMR 4671). Possibility of Roman activity associated with the road.

Priority 1

4.3.9 Plot 7/3 Fig. 4
West of Ermine Street, either side of the A120 Interchange.
Road at grade.
Possible prehistoric site.

Priority 1

4.4 Mitigation

4.4.1 An effective mitigation strategy is likely to be viable only within the areas of embankment.

4.4.2 At present, the archaeology is not sufficiently defined to be able recommend an effective mitigation strategy.

APPENDIX 1

AN ARCHAEOLOGICAL EVALUATION IN ADVANCE OF THE A10 WADESMILL BYPASS

SUMMARY

The study area is the corridor of the proposed A10 Wadesmill Bypass

The following tasks are to be undertaken:

i) completion of the desk-based study, and
ii) rapid field walking of all areas which are susceptible to field walking.

The purpose is to

i) identify areas of archaeological potential, and
ii) prepare a project design for a field evaluation.

The field evaluation will prioritise the use of non-invasive techniques (field walking and geophysical surveying) as opposed to invasive techniques (test pitting and trial trenching).

1 INTRODUCTION

1.1 The Site

The 7.2 km (4.5 miles) long roadscheme is to extend the A10 Ware bypass northwards, on the east side of the existing A10, to bypass the villages of Thundridge, Wadesmill, High Cross and Colliers End, and link with the dual carriageway to the south of Puckeridge.

The proposed route is to run from level ground at Mole's Wood (c.70 m O.D.; TL 357163) across the River Rib valley, skirting Thundridge, Wadesmill and High Cross to the west and Youngsbury Park to the east. Crossing a plateau of relatively high ground (c.90 m O.D.), it bypasses Colliers End and traverses two small valleys containing watercourses known as the Barwick Tributaries. Almost immediately, having obtained a maximum height of c.110 mO.D., the road decends the small valley of the Puckeridge Tributary and links to an existing roundabout at TL 381226.

The soils vary from a mixed, loamy gravelly drift over chalk to chalky boulder clays.

The majority of the route is to pass through land of large open fields under arable cultivation. The remainder comprises the emparked landscape at Youngsbury and several small parcels of woodland.

1.2 Archaeological Background

At the southern end of the proposed bypass, at Mole's Farm, a pipe trench exposed two groups of pits c.35 m apart, dated to the later Bronze Age or early Iron Age, and thought to comprise an occupation site (R.J. Kiln, Herts. Arch., ii (1970), 10-22). Bronze Age pot sherds have also been found during the field walking of Mole's Farm.

When the A10 Ware bypass was constructed a series of linear pits connected by channels, in all 15 m long, were excavated. These were dated from coarseware sherds to the Roman period, and interpreted as possible puddling pits (SMR No.4714; R.J. Kiln, Herts. Arch., v (1977), 191. It is likely that additional features associated with these pits lie on the new roadline.

A report assessing the likely impact of the bypass on the archaeology had been compiled by Dr Jonathan Hunn, titled 'Wadesmill Bypass (A10), An Archaeological Appraisal'. The preparation of this report was funded by the Department of Transport, and it primarily consists of the compilation of relevant documentary evidence. In addition the route was walked over and a detailed record was compiled for each field listing the soil cover, topography and land use. Two air photographic surveys of the route were undertaken without result. Four areas were subject to detailed magnetometer surveys (sample interval 1 m) but the results were largely inconclusive, partly because of the effects of recent ploughing and the existence of a modern pipeline.

1.3 Reasons for and Circumstances of the Project

The road construction is a Department of Transport Scheme. Alternative routes have been considered in a Public Consultation Exercise and in July 1989 the Secretary of State for Transport announced that the 'Eastern Route' (the subject of this application) is the Preferred Route. A Public Inquiry was held in September 1991 and a report has been prepared.

The new road will comprise a dual 2-lane carriageway. Additional elements of the project include the constuction of slip roads, the diversion of existing routes, and the construction of bunds to reduce visual and noise intrusion. Tip sites to dispose of surplus material arising from road construction may be created but much of the route is to be embanked.

Significant elements of the road construction consist of embankment, for example, as it traverses the valleys of the River Rib, and the Barwick and Puckeridge Tributaries. Preservation of archaeological sites lying within the road corridor is therefore a real possibility. Nonetheless the archaeological sites must be located so that the method of road construction can be modified so as to ensure their protection.

2 AIMS AND OBJECTIVES

2.1 Research Design

This route passes through a landscape which has been intensively occupied since the Bronze Age. It is close to four areas designated as 'Areas of Archaeological Significance' in the East Hertfordshire District Council Plan and the County Sites and Monuments Record. These are a late Bronze Age/early Iron Age site at Cowards Wood (AAS 141), the medieval settlement at High Cross (AAS 137), the medieval Moated Manorhouse 'Sutes' (AAS 136), and the extensive, undated, cropmark site at Kitchencroft Wood (AAS 93). Also nearby are the deserted medieval villages of Thundridgebury (AAS 140) and the Youngsbury Roman building and tumuli site (AAS 139). The proposed road lies east of Ermine Street. For most of its route the new road lies between 300 and 500 m east of the former Roman road and the new road may encounter Roman Ermine Street at its northern end, close to the Puckeridge-Braughing Iron Age and Roman settlement.

The density of known archaeological and historical sites adjacent to the route is high and attributable to the favourable topography: gentle terrain, good agricultural soils and numerous watercourses. The probability that archaeological sites will be found within the road corridor is significant and this substantial roadscheme affords the opportunity of a landscape study.

3 METHODS STATEMENT

3.1 Completion of the Desk-Based Study

3.1.1 Aerial Photographs

An examination of aerial photographs relating to the development landtake area will be made with a view to identifying earthworks and cropmarks indicative of archaeology.

Collections of air photographs held by the Department of Transport, Hertfordshire County Council, the Local Planning Department, and the National Registers (including RAF and OS flights) will be viewed. The two main libraries of aerial photographs, the Royal Commission on Historical Monuments and the Committee for Aerial Photography, University of Cambridge should be examined.

3.1.2 Geotechnical Information

Examination of the borehole and test pit logs (information contained within the Department of Transport's Engineers Records) with the purpose of identifying areas:

i) areas susceptible to field walking and geophysical survey techniques;

ii) areas of colluvium and alluvium;

iii) areas of peat or waterlogged deposits.

3.2 Commencement of a Field Evaluation

3.2.1 Fieldwalking

Because of the time of year that the next stage of the archaeological investigation was commissioned (late February/early March) it was decided to undertake a rapid field walking survey while ground conditions allowed.

A programme of field walking will be undertaken on all areas of the proposed road corridor which are susceptible to field walking (ploughed fields with low or insignificant crop growth).

The field walking will be rapidly executed i.e. the fields will be walked without a formal grid being in place, and such finds as are located will be plotted by eye and pacing. The purpose is to pin point finds scatters/areas of archaeological potential.

The Trust will be responsible for obtaining access for the purposes of fieldwalking.

4 REPORT WRITING

A report will be submitted on completion of the desk-based study and the fieldwalking and will include the following:

4.1 Identification of Areas of Archaeological Potential:

i) Identified by the examination of aerial photographs

ii) Identified by field walking

4.2 Compilation of A Project Design for a Field Evaluation:

A project design for a field evaluation of the entire route will be prepared, and will indicate the appropriate technique to be deployed for each land parcel.

The field evaluation will prioritise the use of non-invasive techniques (field walking and geophysical surveying) as opposed to invasive techniques (test pitting and trial trenching).

The project design will incorporate the results from the exaimination of the aerial photographs and the rapid field walking survey.

The project design will be based on an appreciation of the topography of the route and the likely location of archaeological sites.

4.3 Appendices

The appendices will list the aerial photographs which were examined. The fields which are walked and finds recovered will also be listed.

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A list of the sources consulted:

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APPENDIX 3 AERIAL PHOTOGRAPHS

A list of the sources consulted:

Aerial Photographs held by Hertfordshire County Council Archaeology Section.

Aerial Photomaps held by Herts.County Council Planning Department and Archaeology Section (1971 and 1990).

Aerial Photographs held by RCHM(E) National Library of Air Photographs.

NB all good quality vertical coverage of the study area was consulted. Due to constraints of time, oblique coverage was not consulted; however, this material has recently been incorporated into the 1992 National Mapping Programme Report on Cropmarks in Hertfordshire. This report was consulted, revealing little new evidence of cropmarks within the study area.

A substantial list of all aerial photographs of the area, held by the National Library of Air Photographs, can be supplied on request (photographs from the 1940s onwards).

All available sources of APs were examined. The 1990 Photomaps held by HCC were especially good - they were taken during a hot, dry spell, when parched soil and cropmarks would be at their most visible. No new sites were identified using these particular sheets. This is not an absolute indicator of a lack of archaeology, rather a possible indicator.

The collection held by the Cambridge University Committee for Aerial Photography was consulted, but they have no coverage of the study area, other than shots of Braughing Roman Town, north of the end of the study area.

APPENDIX 4 CARTOGRAPHIC EVIDENCE

The maps consulted are listed. All the codes are derived from the Hertfordshire County Record Office (HCRO).

1740 Kings and Cowards Farms
A2840

1768 Survey of Youngsbury. Drawn by S. Driver
A2831

1778 Estates in Standon and Puckeridge.
Drawn by J. Hollingworth
43754

1790 Fabdens Farm
A2834

1793 Youngsbury, etc. Drawn by J. Hollingworth
A2830

1794 Estate in Colliers End
E/Eb1768P2

1804 Marshalls Manor in Standon
83353

1823 Wadesmill Turnpike and Alterations
D/Ecr.15/1

1824 Cowards Farm
A2841

1828 Fishers, Labdens and Dassells
A.900

Standon and Thundridge Maps

1778 A2832/3

1788 A2842

c.1800 A2836

1st Edition Ordnance Survey 1872 & 6" Series.

The tithe maps of Standon and Thundridge (HCRO DSA4 96, QS/E 61 and DSA4 105) were not examined because they had already been consulted during the preparation of the Archaeological Appraisal by J. Hunn.

APPENDIX 5

LIST OF FINDS FROM FIELDWALKING

1/1 1 (rapid centre line):
3 flint flakes, misc
 2 primary, 1 secondary
 not patinated
 dk grey and honey brown
 flakes
 retouch: none
 not burnt
1 burnt flint
2 slag
1 oyster shell

1/1 1 N:
2 flint flakes
 1 Secondary, 1 tertiary
 Not patinated
 1 grey, 1 honey brown
 Flakes
 Retouch: none
 Not burnt
1 burnt flint

1/1 1 S:
3 miscellaneous flint flakes
 1 primary, 1 secondary, 1 tertiary
 Some light patination
 Grey/brown & black
 Flakes
 Retouch: large piecer/point
 Not burnt
1 burnt flint
1 post med sherd
4 brick/tile frags
1 oyster shell

1/1 3,4 N:
5 burnt flint
1 brick frag
1 post med sherd
1 lump of slag

1/1 3,4 S:
2 burnt flint
1 ?Roman/med tile frag
2 lumps of slag

1/1 5 (rapid centre line):
1 naturally fractured flint flake
4 burnt flint
2 slag
2 sherds

1/1 5 N:
2 flint flakes
 1 Primary, 1 tertiary
 Not patinated
 Honey brown
 Flakes
 Retouch: none
 Not burnt
4 burnt flint
1 ?post med sherd
1 brick frag
1 tile frag
1 slag

1/1 5 S:
2 flint flakes
 1 secondary, 1 tertiary
 Some very slight patination
 Mid-dk grey
 Flakes
 Retouch: none
 Not burnt
5 very large lumps of burnt flint
1 tile frag
1 slag

2/2 6 Line 1 N:
4 small flint flakes
 1 Primary, 1 secondary, 2 tertiary
 Light-dk grey
 Flakes
 Retouch: none
 Not burnt
1 naturally fractured 'core'

2/2 6 Line 1 S:
2 flint flakes
Tertiary
Some light patination & diffential patination
Mid grey
Flakes
Rolled and abraded
Retouch: none
Not burnt

2/2 6 Line 2:
3 flint flakes, not sharp
2 cores
 2 primary, 1 tertiary
 not patinated
 'black'
 flakes
 retouch: none
 not burnt
1 burnt flint
1 tile frag, abraded

2/2 6 Line 2 S:
4 struck flint (2 of which are possibly naturally fractured)
1 Primary, 2 secondary, 1 tertiary
1 patinated (an earlier industry)
Mid-dk grey
Flakes
Retouch: none
Not burnt
1 ?burnt tile frag

2/2 7 Line 1 + 2:
Lumps of crud to be identified
1 whetstone

2/2j 9 Line 1 S:
16 flint flakes
2 primary, 8 secondary, 6 tertiary
some light patination
mostly dark grey
flakes, 1 blade
retouch: none
not burnt
4 burnt flint
3 ?Roman/med sherds
1 lump of ?clay
3 brick/tile frags
1 small lump of slag

3/3 16 Line 1 S:
2 burnt flint
2 ?Roman/med sherds
3 brick/tile frags
1 lump slag

2/2j 9 Line 2 S:
7 flint flakes
3 secondary, 4 tertiary
not patinated
mid-dk grey
flakes
retouch: none
not worked
1 core
2 not worked
7 burnt flint
2 ?prehistoric sherds
1 ?slate

2/4 10 Line 1 N:
5 flint flakes
1 primary, 1 secondary, 3 tertiary
1 patinated, and some light patination
mid grey and 1 light grey
flakes
retouch: none
not burnt
1 med sherd, abraded
1 tile frag, abraded

1 clay pipe stem
1 oyster shell
1 slag

2/4 10 Line 1 S:
3 small flint flakes
 1 primary, 1 secondary, 1 tertiary
 not patinated
 mid grey
 2 flakes, 1 blade
 retouch: none
 not burnt
2 burnt flint
1 ?med sherd, very abraded
1 glass, very abraded
1 clay pipe stem
1 oyster shell

2/4 10 Line 2 N:
1 small flint flake
 tertiary
 not patinated
 mid grey
 blade
 retouch: none
 not burnt
1 burnt flint
1 not worked
1 tile frag

2/4 10 Line 2 S:
2 flint flakes, relatively sharp
 2 secondary
 not patinated
 mid grey
 flakes
 retouch: none
 not burnt
1 pebble
1 iron

2/5 10 Line 1:
5 flint flakes, relatively sharp
 5 secondary
 some light patination
 light-dk grey, miscellaneous
 flakes
 retouch: none
 not burnt

2/5 10 Line 2:
1 small flint flake
 secondary
 not patinated
 dk grey
 flake
 retouch: ?spurred implement (late neo)/piercer

not burnt
2 burnt flint

3/3 16 Line 1 N:
1 flint flake, unusually 'sharp'
Tertiary
Not patinated
Dk grey
Blade
Retouch: none
Not burnt
2 burnt flint
1 lump of ?limestone

3/3 16 Line 1 S:
2 burnt flint
1 slag
2 ?post med sherds
3 brick/tile

3/3 16 Line 2 N:
1 flint flake
Secondary
Not patinated
Dk grey
Flake
Retouch: none
Not burnt
1 ?Roman/med (abraded)
1 tile frag

3/3 16 Line 2 S:
3 burnt flint
1 slag

3/4 17 Line 1 N:
3 burnt flint
2 ?Roman/med sherds
1 lump slag

3/4 17 Line 1 S:
4 burnt flint
3 tile frags.

3/4 17 Line 2 N:
3 flint flakes
1 Primary, 1 secondary, 1 tertiary
Not patinated
Light-dk grey, miscellaneous
Flakes
Retouch: none
Not burnt
1 flint not worked
1 ?post med sherd

3/4 17 Line 2 S:
3 flint flakes
 1 Secondary, 2 tertiary
 Some light patination
 Mid grey
 Flakes
 Retouch: none
 Not burnt
1 burnt flint

4/1 18 Line 1 N:
3 tile frags

4/1 18 Line 1 S:
2 burnt flint
1 ?post med sherd

4/1 18 Line 2 N:
1 small flint flake
 Tertiary
 Not patinated
 Dk grey
 Flake
 Retouch: none
 Not burnt
2 burnt flint
1 ?post med

4/1 18 Line 2 S:
2 flint flakes
 1 Secondary, 1 tertiary
 1 heavily patinated
 Dk grey
 1 flake, 1 blade
 Retouch: none
 Not burnt
6 burnt flint
1 tile frag.

4/1 19 Line 1 N:
2 small flint flakes
 1 Secondary, 1 tertiary
 Not patinated
 Dk grey
 Flakes
 Retouch: 1 ?retouch along the long edge
 Not burnt
2 burnt flint

4/1 19 Line 1 S:
1 burnt flint
2 tile frags

4/1 19 Line 2 N:
3 burnt flint
1 ?Roman/med sherd (abraded)

4/1 19 Line 2 S:
3 flint flakes
 2 primary, 1 tertiary
 not patinated, diffential patination
 dk grey
 flakes
 retouch: none
 not burnt
2 burnt flint
1 ?post med
1 tile frag

4/1 20 Line 1 N:
1 lump of quartz
1 oyster shell

4/1 20 Line 1 S:
1 burnt flint

4/1 20 Line 2 N:
1 flint flake
 Primary
 Not patinated
 'Black'
 Flake
 Retouch: none
 Not burnt
1 burnt flint
1 tile frag

4/1 20 Line 2 S:
1 burnt flint

4/1 21 Line 1 N:
3 burnt flint

4/1 21 Line 1 S:
1 burnt flint
1 ?burnt coal

4/1 21 Line 2 N:
1 burnt flint
2 ?post med

4/1 21 Line 2 S:
3 burnt flint

5/1 22 Line 1 N:
2 flint flakes, 1 large, 1 small
 Tertiary
 Not patinated
 Mid grey
 Flakes
 Retouch: 1 retouched as a scraper
 Not burnt
2 burnt flint

5/1 22 Line 1 S:
2 burnt flint
1 tile frag

5/1 22 Line 2 N:
1 exceptionally large, burnt flint flake (possibly struck)
1 burnt flint
1 small ?burnt pebble

5/1 22 Line 2 S:
1 flint flake
Reused flake, differential patination
Dk grey
Flake
Retouch: none
Not burnt
3 burnt flint

5/4 23 & 24:
1 flint flake, abraded
secondary
not patinated
mid grey
flake
retouch: none
not burnt
1 slag
2 tile

5/4 23 & 24 Line 1 S:
1 ironstone
1 sherd
1 ?lump (too dirty to distinguish)

5/4 23 & 24 Line 2 N:
1 small flint flake
tertiary
not patinated
mid grey
flake
retouch: none
not burnt
1 burnt flint

5/4 23 & 24 Line 2 S:
4 flint flakes, 1 is very sharp, the others are abraded
1 secondary, 3 tertiary
not patinated
dk grey
flakes
retouch: none
not burnt
1 burnt flint
1 slag
1 iron

5/5 25 Line 1 N:
1 small flint flake
 1 tertiary
 Not patinated
 Dk grey
 Flake
 Retouch along one edge
 Not burnt
1 naturally fractured flint
1 ?post med sherd
3 tile frags

5/5 25 Line 1 S:
1 ?burnt pebble
1 tile frag

5/5 25 Line 2 N:
3 flint flakes, unusually sharp & larger than usual
 2 secondary, 1 tertiary
 Not patinated
 Dk grey
 Flakes
 Retouch: none
 Not burnt
1 naturally fractured flint
2 burnt flint
1 iron frag

5/5 25 Line 2 S:
1 naturally fractured flint flake, ?notched
2 burnt flint
1 not worked

6/1 28 Line 1:
2 small flint flakes
 1 Secondary, 1 tertiary
 Light patination
 Mid grey
 1 Flake, 1 blade
 Retouch: none
 Not burnt
1 burnt flint
1 ?burnt ?tile frag

6/1 28 Line 2:
1 ?Roman/med tile
1 lump of ?limestone

7/2 31 Line 1:
1 flint flake
 Primary
 Not patinated
 Mid grey
 Flake
 Retouch: none
 Not burnt
1 burnt pebble

7/2 31 Line 2:
6 burnt flint
1 ?med sherd, abraded

7/2 32 Line 1 N:
1 flint flake
 tertiary
 lightly patinated
 mid grey
 flake
 retouch: none
 not burnt

7/2 32 Line 1 S:
1 burnt pebble
1 oyster shell

7/2 32 Line 2 N:
1 small flint flake
 Primary
 Light patination
 Mid grey
 Flake
 Retouch: none
 Not burnt
1 clay pipe stem

7/2 32 Line 2 S:
1 naturally fractured flint flake, with flake scars
1 slate

7/3 a Line 1 N (no S line):
1 flint flake
 secondary
 not patinated
 brown/dk grey
 flake
 retouch: none
 not burnt
1 burnt flint
1 ?med sherd, abraded

7/3 a Line 2 N:
2 small flint flakes (possibly not struck)
 Secondary
 Not patinated
 Light-mid grey
 Flakes
 Retouch: none
 Not burnt
1 burnt flint
1 ?burnt ?stone
2 ?med sherds

7/3a Line 2 S:
3 flint flakes
 2 secondary, 1 tertiary
 not patinated

mid grey
flakes
retouch: none
not burnt
2 burnt flint
1 ?med sherd

7/3 33 Line 1 N:
7 flint flakes
3 primary, 4 secondary
use of patinated flint
grey-dk grey
flakes
retouch: none
not worked
1 burnt flint
4 ?pottery sherds

7/3 33 Line 1 S:
8 flint flakes (1 unusually large), relatively sharp
5 Secondary, 3 tertiary
1 diffential patination & light patination
Light-dk grey
Flakes
Retouch: none
Not burnt

7/3 33 Line 2 N:
2 flint flakes
Secondary
Not patinated
dk grey
Flakes
Retouch: none
Not burnt
1 ?post sherd

7/3 33 Line 2 S:
2 burnt flint
1 tile