

Assessment of the finds from Lincoln Eastern Bypass (LEB03): Revised January 2004

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The non-ceramic finds from archaeological evaluation trenches dug along the line of the Lincoln Eastern Bypass were submitted to the author for identification and assessment. They are described in the following catalogue by order of material and then trench, with the exception of the stone finds where this approach would have involved repetition.

Catalogue

Bone

Trench 38

A bone object was recovered from context 1065, Trench 38. The object is a thin point, with a circular cross-section tapering from 6.0mm to 3.5mm diameter. The entire surface has been trimmed with a knife and subsequently polished, perhaps deliberately or perhaps through wear. Without either end present it is difficult to say if the point was used as an item of dress, for example a hair or dress pin, or had a practical function, such as a needle, or bodkin. It is, however, much more slender than the Anglo-Saxon pinbeater or thread-picker, used with the warp-weighted loom.

Clay Tobacco Pipe

Trench 41

A clay tobacco pipe stem was recovered from Trench 41 (unstrat). The bore diameter suggests a late 17th to 19th-century date.

Copper Alloy

Trench 41

A Roman coin was recovered from context 1122 (Tr41). The coin is an AE3 of Valentinian I (364-375AD). OBV: Bust right. REV:GLORIA ROMANORVM, emperor drags captive. Mint: probably London

Fired Clay

Several fragments of fired clay were recovered. They show considerable variation in composition and this is consistent with the use of subsoil derived in the main from the local Jurassic strata through which the Witham gap cuts. Those with rounded quartz sand inclusions are probably accidentally contaminated with terrace sand, since in no case does the quartz occur in sufficient quantity to be a

useful tempering agent. Most of the fired clay is probably from daub although some may simply be accidentally fired and in one case may be from an object (Trench95).

Trench 16

Two groups of fired clay were recovered from Trench 16, contexts 1193 and 1198. Both contain abundant inclusions of limestone although the character of the inclusions differs between the two groups. In the first (1193) the inclusions are of a shelly limestone with a groundmass of fine quartz sand and calcium carbonate. In the second, the inclusions are also a shelly limestone but with haematite staining and probably a sparry calcite cement. The latter fabric also contains rounded quartz grains up to 0.5mm across. One of the pieces from context 1198 has a flat surface and the clay is probably from daub, although there are no wattle impressions.

Trench 17

Two contexts in Trench 17 produced fired clay, in each case similar in fabric to that from context 1198 in Trench 16. The pieces include one with a flat surface. The fragments are burnt throughout and have a lighter colour close to the surface, perhaps indicating the presence of salt in the clay.

Trench 20

A lump of fired clay was recovered from an unstratified context on Trench 20. The fabric contains little or no quartz, rounded shale inclusions and has a dark grey core. There is no sign of working but some of the rough surfaces are oxidized. Probably an accidentally burnt lump of untempered clay, ultimately of Jurassic origin.

Trench 38

A large fired clay lump was recovered from context 1077, Trench 38. The lump has no original surfaces remaining and appears to have been formed of two large roughly spherical balls of clay luted together. The fabric is high-fired, reduced and dark grey in colour. It contains moderate rounded and subangular quartz sand, indistinguishable from that occurring naturally in the Witham valley terraces. There are traces of mortar or plaster at one end.

The interpretation of this lump is difficult. It was clearly subjected to considerable heat, such as might be found in a kiln or furnace, rather than being accidentally burnt.

Three fragments of daub were recovered from context 1101, Trench 38. All three have circular wattle impressions and are soft-fired and light grey in colour. This suggests the accidental burning of a wattle and daub structure. The fabric of the daub contains moderate thin-walled bivalve shell fragments and is likely to be a freshwater mud, probably dug from the Witham valley.

Trench 95

Fragments from an object of fired clay were recovered from context 2099. The fabric is similar to that in contexts 1198 and Trench 17 but the limestone inclusions have ooliths as well as bivalve shell present. The fragments form an object with a flat face which then curves gently at one end. They do not seem to come from a loom weight of Anglo-Saxon form and Iron Age and Roman loom weights have a pyramidal or triangular shape, unlike this. It is possible that they simply come from a curved corner of a rectangular structure.

Iron

Twenty-three iron objects were recovered from the evaluation trenches. It is notoriously difficult to date iron objects unless they come from secure stratified contexts and in this case 13 of the objects come from ploughsoil (context 1000) or are completely unstratified. The only stratified objects were nails.

Trench 36

An iron knife was recovered from an unstratified deposit on Trench 36. The knife has a scale tang with no sign of rivet holes in the surviving fragment. The tip of the blade is missing as is part of the blade edge near the handle. The knife has been bent through 90degrees at the handle join and the lack of corrosion products and cracks at this point suggest that the damage took place recently.

Trench 38

Thirteen fragments of iron were recovered from Trench 38. Most (10) are nails or tapering shanks of iron which are probably nails which have lost their heads. One fragment, from context 1000 is a wedge-shaped lump of metal which may be incomplete. Two strips of iron were found, also from context 1000, One is a binding strip with a two-lobe terminal and a centrally-placed square nail hole at the centre. The other end is broken but shows signs of beginning to swell out into a decorative lobe. Such strips were used to re-inforce and decorate wooden structures, such as caskets, boxes, chests and doors. The piece, however has a curvature which suggests that it might have been nailed along the rounded edge of an object, which would therefore discount a door.

The other strip is thicker and shows signs of having been bent at right angles at one end. The other end may be original and there is no sign of a nail or rivet hole.

Trench 40

Three nails, a strip of iron and a lump of slag with hammerscale inclusions were recovered from trench 40. One of the nails, from context 1046, appears to have a round head whilst the other from that context is only a shaft. The remaining fragments are unstratified.

The slag is vesicular and is probably waste from smithing.

Trench 41

Two square-headed nails were recovered from context 1083.

Trench 42

Two square-headed nails were recovered from unstratified deposits in Trench 42.

Glass

Trench 26

Two fragments of window glass were recovered from Trench 26 (context 1245). They are made from a light blue tinged glass and their colour and thickness suggests a late 17th to early 19th-century date.

Trench 34

A sliver from a dark green bottle was recovered from Trench 34 (unstrat). Although the overall form is unclear it appears to come from a bottle with a cylindrical body and bottles of this type first appeared in the mid 18th century and continue to be made up to the present day.

Trench 35

A smashed Codd bottle in a light green glass was recovered from Trench 35 (context 1092). The vessel was moulded and inscribed 'Draper/Late Bayne/Trade Mark/Lincoln'. The trade mark consists of a set square and dividers, a symbol of the Freemasons. Such vessels were produced in the decade either side of 1900 AD.

Trench 41

One small blue glass segmented bead was recovered from context 1083. The bead is complete and divided into four segments. It is of Roman date.

Trench 133

The neck of a dark green glass moulded bottle, probably of 19th-century date, was recovered from an unstratified deposit on Trench 133.

Trench 134

Three unstratified fragments of glass were recovered from Trench 134. They consist of a cylindrical phial of later 17th or 18th-century date, a fragment from the base of a dark green wine bottle, possibly of shaft-and-globe form and of mid 17th-century date, and a small fragment of window glass with a light blue tinge. The latter appeared to have two parallel, snapped edges, with some signs of grozing and forms a cell 20mm by 11mm by 1.4mm. Intricate leaded window panes were being replaced by the late 17th century by square panes but the colour of this piece suggests that it is no earlier than the late 17th century in date.

Lead

Trench 38

A lead ring was recovered from context 1101. The ring is somewhat squashed, presumably after being discarded or lost, but complete. It was probably made from a strip of lead, tapering from the middle to either end, which had four slightly concave faces. The strip was twisted, except at the two overlapping terminals to produce a spiral pattern. There is no sign of wear, which one might expect from the use as a finger or toe ring, and the terminals are too thick for use as an ear-ring. The style is reminiscent of twisted-wire finger and arm-rings used in the Viking period but this same spiralling decoration is found on late medieval rings and this object is probably of medieval date.

This object is worthy of specialist study and illustration.

Trench 42

Two fragments of melted lead waste were recovered from unstratified deposits at Trench 42. One had pooled up at the junction of a vertical and horizontal surface. The impression of the horizontal surface suggests it was rough, possibly stone and certainly not wood or sand. The other fragment is much smaller and featureless.

Stone

Seventy-eight fragments of stone were submitted. Of these, 36 were rounded pebble or cracked fragments from such pebbles. A further 15 fragments had no original faces and no signs of human working or use. Definite artefacts accounted for most of the remainder.

Pebbles and unworked stone

Of the 51 fragments of rounded pebbles and unworked stone, much of which could also come from similar objects, the majority came from Trench 34 with the remainder coming from trenches south of the railway embankment (Area D). These pebbles are of seven different types (Table 1):

Fine-grained basic igneous rock, in which the feldspar is weathered.

A friable iron/clay compound.

Iron-cemented sandstone.

Sandstone of Millstone Grit type.

White sandstone with well-sorted quartz grains up to 0.5mm across.

A similar sandstone with dark bands.

A similar sandstone with a siliceous cement.

All of these rock types occur in fluvio-glacial sands and gravels in central Lincolnshire and today can be found in ploughed fields both north and south of the Witham fens. However, it is unlikely that they would have been present naturally in the valley itself, suggesting that the pebbles were brought onto site for a purpose.

There is a hint, mainly through the fragmentation of the stones, that these are fire-cracked pebbles. Such stones have been found throughout the British Isles in later prehistoric contexts. Two suggestions for their interpretation are:

that they were used in primitive saunas, probably used in ritual cleaning.

That they were used to cook food, perhaps by heating the stones in a fire and then throwing them into water containing a joint of meat.

Table 1

Project Area	Sitecode	FINE-GRAINED BASIC	FRIABLE CLAY/IRON COMPOUND	IRON-CEMENTED SST	SSTMG	WHITE SST	WHITE SST;BANDED	WHITE SST;SILICA MATRIX	Grand Total
C	leb03 tr34			9	1	25	1	1	37
c Total				9	1	25	1	1	37
D	leb03 tr38	2	2			5			9
	leb03 tr40					1			1
	leb03 tr41					1			1
	leb03 tr42					2			2
d Total		2	2			9			13
Grand Total		2	2	9	1	34	1	1	50

Ashlar

A single fragment of tooled ashlar was recovered from Trench 36. The stone is a fine-grained limestone with occasional pellets and shell fragments and is probably from one of the exposures of the Lincolnshire Limestone.

Hones

Three fragments of hone were recovered, from Trenches 38 (unstrat) and 40 (unstrat and context 1046). Two of these are light grey schists, probably Norwegian Rag from southern Norway and the third is a fine-grained white sandstone. The latter has three used faces, two used for grinding edge tools and the third having a series of narrow grooves, perhaps used for sharpening pins or similar pointed tools.

The white sandstone was probably obtained locally, from local gravels, but the Norwegian Rag was imported in large quantities, from the 10th to the 14th centuries at least. The piece from Trench 38 has not been used.

Pencil

A single fragment of black slate pencil was found in Trench 34 (unstrat). Such pencils were used with slates in schools from at least the 16th century until the early 20th century.

Querns

Four definite fragments of quern stone and three possible fragments were found. All four definite quern fragments are from rotary querns. Three are made of Millstone Grit and one from a silicious sandstone with polished, rounded quartz grains and sparse calcareous shell fragments. This is probably a Lower Cretaceous sandstone from the Lincolnshire Wolds, perhaps the Spilsby Sandstone. The possible quern fragments include another piece of Millstone Grit and two collections of rounded fragments of vesicular lava. The latter probably come from the Eiffel mountains in southwest Germany, around the town of Mayen.

Rubble

A fragment of unworked oolitic limestone from Trench 141 might be naturally present in fluvial sands. It has black staining which is probably Manganese staining rather than evidence for burning.

?Ochre

A lump of red ochre from Trench 141 may have been humanly used or it may have been naturally present in local gravels, having originated perhaps in the Northampton Sands which outcrop nearby, for example at Greetwell. Ochre was probably used as a skin colourant and for painting and its similarity in colour to blood may have endowed it with magical properties.

Roof tile?

A fragment of grey micaceous sandstone from Trench 38 (context 1065) may be a roof slate. However, one thin edge of the fragment is worn, suggesting that it may in fact come from a rounded cobble rather than have been quarried. Similar sandstones occur within the Coal Measures and the nearest outcrop is probably in western Nottinghamshire or South Yorkshire. However, if it is in fact a fragment of glacial erratic a source in northeastern England is more likely.

Assessment

If the pebbles and other cracked stones are indeed human artefacts they probably date to the later prehistoric period. Most of these pebbles come from Trench 34.

Some of the finds are probably of recent date, for example, the glass, clay tobacco pipe and slate pencil.

The remaining finds could be of Roman, Anglo-Saxon or medieval date and include definite Roman and medieval objects. The use of Spilsby sandstone for querns is known in the Roman period whereas Millstone Grit was used in both the Roman and medieval periods. The schist hones are likely to be of Anglo-Scandinavian or post-conquest medieval date. The Mayen lava was used from the Roman to the medieval periods and was particularly common in the mid-Saxon period, from the later 7th to the mid 9th centuries.

The copper coin, the lead ring and the three iron objects, (i.e. all the iron excluding the nails) require conservation assessment and appropriate packaging. The remainder require no further conservation treatment.

The lead ring is worthy of specialist identification and illustration.

Trench	Context	class	Condition	Form	cname	subfabric	Nosh	NoV	Description	Weight	L	B	TH
tr26	1245	PMGL		WIND	PMGL	LTBL	2	2		5			
tr34	US	PMGL		BOT	PMGL		1	1	COULD BE MALLET OR TALL	6			
tr34	US	STONE		PENCIL	STONEBLACK	SLATE	1	1	SIX-SIDED	3			
tr34	US	STONE		PEBBLE	STONEWHITE	SST	1	1	UNWORKED	788			
tr34	US	STONE		PEBBLE	STONEWHITE	SST	1	1	CRACKED UNWORKED PEBBLE	192			
tr34	US	STONE		PEBBLE	STONEWHITE	SST	1	1	UNWORKED	35			
tr34	1153	STONE		PEBBLE	STONEWHITE	SST	1	1	CRACKED UNWORKED PEBBLE;RED OCHRE STAINING ON ORIG SURFACE	168			
tr34	1153	STONE		PEBBLE	STONEWHITE	SST	1	1	CRACKED UNWORKED PEBBLE;RED OCHRE STAINING ON ORIG SURFACE	55			
tr34	1153	STONE		PEBBLE	STONEWHITE	SST;BANDED	1	1	UNWORKED PEBBLE	199			
tr34	1153	STONE		PEBBLE	STONEWHITE	SST	1	1	CRACKED UNWORKED PEBBLE	45			
tr34	1153	STONE		PEBBLE	STONEWHITE	SST	1	1	CRACKED UNWORKED PEBBLE	34			

WHITE SST;SILICA									
tr34	1153	STONE	PEBBLE	STONEMATRIX	1	1	CRACKED UNWORKED PEBBLE		24
tr34	1153	STONE	PEBBLE	STONEWHITE SST	1	1	CRACKED UNWORKED PEBBLE		67
tr34	1153	STONE	PEBBLE	STONEWHITE SST	1	1	CRACKED UNWORKED PEBBLE		25
tr34	1153	STONE	PEBBLE	STONEWHITE SST	1	1	CRACKED UNWORKED PEBBLE		37
tr34	1153	STONE		STONEWHITE SST	1	1	CRACKED FRAG		15
tr34	1153	STONE	PEBBLE	STONEWHITE SST	1	1	CRACKED UNWORKED PEBBLE		75
tr34	1153	STONE		STONEWHITE SST	1	1	CRACKED FRAG		18
tr34	1153	STONE	PEBBLE	STONEWHITE SST	1	1	CRACKED UNWORKED PEBBLE		57
tr34	1153	STONE	PEBBLE	STONEWHITE SST	1	1	CRACKED UNWORKED PEBBLE		73
tr34	1153	STONE	PEBBLE	STONEWHITE SST	1	1	CRACKED UNWORKED PEBBLE		156
tr34	1153	STONE	PEBBLE	STONEWHITE SST	1	1	CRACKED UNWORKED PEBBLE		40
tr34	1153	STONE	PEBBLE	STONEWHITE SST	8	8	CRACKED UNWORKED PEBBLE		44
tr34	1153	STONE	PEBBLE	STONESSTMG	1	1	CRACKED UNWORKED PEBBLE		19

IRON-CEMENTED										
tr34	1153	STONE			STONESST	9	9	UNWORKED FRAGS;VERY POWDERY		76
tr35	1092	PMGL	BOT		PMGL LTGR	1	1	COMPLETE CODD BOTTLE;MARKED 'DRAPER LATE BAYNE/TRADE MARK/LINCOLN'		545
tr36	US	STONE	ASHLAR		FINE-GRAINED LST;SOME PELLETS STONEAND SHELL FRAGS	1	1	TOOLED BLOCK WITH TWO ORTHOGANAL FACES		1721
tr38	US	STONE	QUERN		STONESSTMG	3	1	ALL FRAGS HAVE FLAT FACES, POSSIBLY MANMADE		158
tr38	US	STONE	HONE		STONENORWEGIAN RAG	1	1	UNWORKED FLAKE		56
tr38	1065	BONE	NEEDLE?		BONE	1	1	KNIFE-WHITTLED AND POLISHED;TAPERING (6MM DOWN TO 3.5MM) BUT BROKEN AT BOTH ENDS		4
tr38	1065	STONE	QUERN		SPILSBY SST?;SILICA CEMENT;SOME STONECALC BIVALVES	1	1	FLAKE FROM ROTARY QUERN?		268

Tr38	1065	STONE	FLAT	STONESST	1	1	GREY MICACEOUS ONE EDGE WORN;POSSIBLY A FRAGMENT FROM A COBBLE?	217
tr38	1071	STONE	COUNTER	STONESANDSTONE;CM?	1	1	MICACEOUS FINE CIRCULAR DISC;SINGLE GROOVE SCRATCHED CENTRALLY ON ONE SIDE	62
tr38	1077	FCLAY SURFACES	MORTAR? ON SOME OBJECT	ABUNDANT Q SAND; LARGEST GRAINS FCLAY ROUNDED >1.0MM	1	1	AMORPHOUS LUMP;REDUCED THROUGHOUT;ONLY POSSIBLE FACE APPEARS TO BE A CURVED GROOVE BETWEEN TWO LARGE LUMPS	1766
tr38	1101	FCLAY	DAUB	SILTY WITH NUMEROUS THIN- WALLED BIVALVE FCLAY SHELL	3	3	WATTLE IMPRESSIONS ON ALL THREE PIECES	47
tr38	1112	STONE	PEBBLE	FINE-GRAINED STONEBASIC	1	1	UNWORKED PEBBLE	467
tr38	1112	STONE	PEBBLE	STONEWHITE SST	1	1	UNWORKED PEBBLE	322
tr38	1112	STONE	PEBBLE	STONEWHITE SST	1	1	UNWORKED PEBBLE;NUMEROUS POCK MARKS NATURAL?	164
tr38	1112	STONE	PEBBLE	STONE FINE-GRAINED	1	1	UNWORKED PEBBLE;CRACKED	176

BASIC										
tr38	1112	STONE	PEBBLE	STONEWHITE SST	1	1	UNWORKED PEBBLE;CRACKED	119		
tr38	1112	STONE		STONEWHITE SST	1	1	UNWORKED FRAG	38		
tr38	1112	STONE		STONEWHITE SST	1	1	UNWORKED FRAG	27		
				FRIABLE CLAY/IRON						
tr38	1112	STONE		STONECOMPOUND	1	1	UNWORKED FRAG	191		
				FRIABLE CLAY/IRON						
tr38	1112	STONE		STONECOMPOUND	1	1	UNWORKED FRAG	80		
tr40	US	IRON	STRIP	IRON	1	1		94	106	26 8
tr40	US	IRON	NAIL	IRON	1	1		26	98	7 7
							VESICULAR CINDER LUMP WITH			
tr40	US	IRON	WASTE	IRON	1	1	?HAMMERSCALE INCLUSIONS	5		
tr40	US	STONE	QUERN?	STONELAVA	8	1	FEATURELESS LUMPS	190		
							THREE USED FACES, TWO SMOOTH, THE			
				FINE WHITE SST			OTHER HAS NARROW GROOVES IN			
tr40	US	STONE	HONE	STONE(GRAINS >0.2MM)	1	1	VARIOUS DIRECTIONS	544		

tr40	US	STONE	PEBBLE	STONEWHITE SST	1	1	POSSIBLY BURNT, CRACKED	1084
tr40	1046	STONE	HONE	STONENORWEGIAN RAG	1	1		99
tr41	US	CTP	PIPE	CTP	1	1	L17TH/19TH-C BORE DIAM	4
tr41	US	STONE	QUERN	STONESSTMG	1	1	EDGE OF ROTARY QUERN (BOTTOM STONE?)	1809
tr41	US	STONE	PEBBLE	STONEwhite sst	1	1	CRAZED POSSIBLY FROM HEATING	47
tr41	US	STONE	PEBBLE	STONEwhite sst	white sst	1	CRACKED AND RED STAINED	69
tr42	US	STONE	QUERN	STONESSTMG	1	1	ONE FLAT FACE, POSSIBLY WORKED	207
tr42	US	STONE	PEBBLE	STONEWHITE SST	1	1	SHATTERED PEBBLE	382
tr42	US	STONE	PEBBLE	STONEWHITE SST	1	1	SHATTERED PEBBLE	1321
tr42	US	STONE	QUERN?	STONELAVA	3	1	FRAGMENTS OF EGG-SIZED LUMPS	150
tr141	US	STONE	LUMP	STONEBELEMNITE FOSSIL	1	1	RED OCHRE;INCLUDES	20

tr141	1082	STONE	QUERN?	STONESSTMG	1	1	VERY SMALL LUMP	16
							UNWORKED LUMP;BLACK STAINING EXT PROBABLY MANG NOT SOOT;RED STAINING	
tr141	1082	STONE	RUBBLE	STONEOOLITIC LST	1	1	= HAEMATITE NOT BURNING	502
