



# Bexhill to Hastings Link Road, East Sussex

## Tree-ring Analysis of Waterlogged Timbers

Robert Howard, Alison Arnold, Cathy Tyers and Peter Marshall



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# Summary

Examination of 18 waterlogged wood samples from the Bexhill to Hastings Link Road showed that nine of them were of oak, five appeared to be of conifer type, with the remaining four being of some other, as yet unidentified, wood type. The latter four samples were rejected prior to measurement. No similarities were identified between the nine measured individual ring series from the oak samples or the five conifer samples. The ring-width series of all 14 measured samples were then compared individually with the full corpus of relevant reference material for each wood type. There was again no secure cross-matching and all 14 measured samples must remain undated.

## Contributors

Robert Howard, Alison Arnold, Cathy Tyers and Peter Marshall.

## Acknowledgements

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## Front cover

The front cover photograph was provided by the former East Sussex County Archaeologist, Casper Johnson, and shows Site 14 being excavated.

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# Introduction

This document is a technical archive report on the tree-ring analysis of an assemblage of 18 waterlogged wood samples set aside for dendrochronological investigation from timbers excavated during archaeological works in AD 2012–14 along the route of the Bexhill to Hastings Link Road (BHLR) in East Sussex for Hochtief Taylor Woodrow Joint Venture and their archaeological consultants Jacobs Consulting on behalf of East Sussex County Council (ESCC). The discoveries along the route of the road were of exceptional interest, with several aspects of the site being of national and, indeed, international significance. Among the findings are large flint scatters dating from the late Upper Palaeolithic to the very end of the Mesolithic period, waterlogged wood (some worked), further flint scatters dating from the late Neolithic/early Bronze Age, later Bronze Age burnt mounds, the well-preserved and extensive remains of a Roman bloomery site and evidence for Anglo-Saxon occupation.

The 18 waterlogged wood samples were recovered from the following interventions.

## Site 14 and evaluation Trench 79

Site 14 lies on a spur on the edge of the wetland environment situated between the confluence of the Combe Haven and Watermill streams and may have been a natural point to access the wetland edge and possibly to cross the Combe Haven (TQ 75327 10499; Figs 1–2). The excavation of Site 14 was targeted on a wetland edge environment where waterlogged wood had been identified during the evaluation (Trench 79). Shallow weathered natural sands were identified to the west dipping down into the wetland deposits of the Watermill Stream Valley to the north-east. Shallow peat deposits were recorded overlying the weathered sands. The peat deposits increased in thickness towards the north-west before eventually developing into a palaeochannel sequence. A series of longitudinal sections and bulk sections were recorded and sampled close to areas of waterlogged wood and lithic concentrations. Evidence of beaver activity and stone axe marks were identified within the wood accumulations.

The worked or cut material exposed in the north and central area of Site 14 included a spread of naturally accumulated waterlogged branch wood and sections of two moderately large fallen oaks (Figs 3–4). Beaver-cut and some humanly worked timber and roundwood was found in the northern half of the trench. This spread of woody material extended out from that exposed in Trench 79. It included a diffuse spread of worked material and



‘possibly worked’ and beaver-gnawed material that was not laid down in any organised ‘structure’ but was most likely either casually dumped or deposited by water action.

Details of the eight timbers available for analysis from Site 14 and evaluation Trench 79 are given in Table 1.

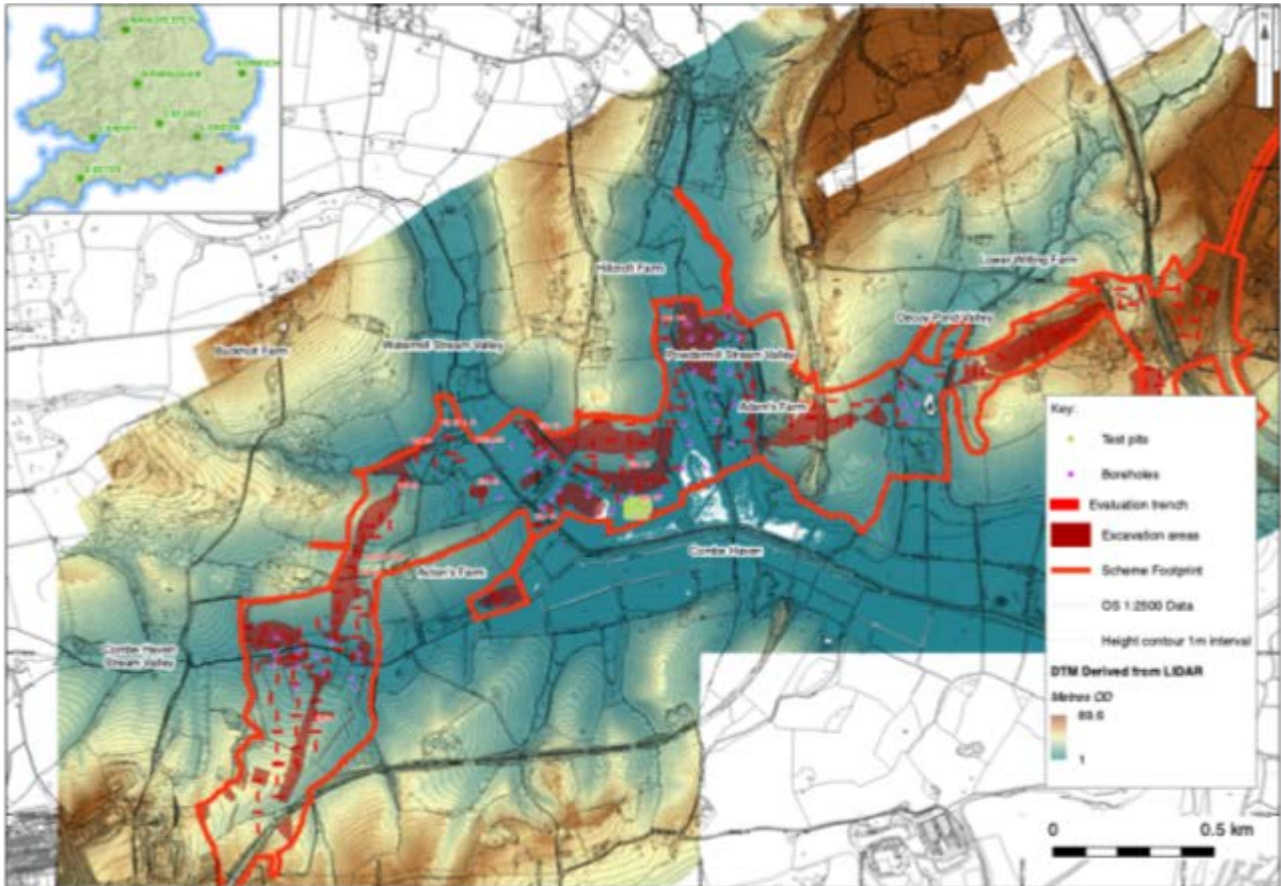


Figure 1: Map to show the general location of the Bexhill to Hastings Link Road (red outline), main river valley sequences, topography of the scheme and interventions. [© Oxford Archaeology]



Figure 2: Location of the excavation area on the Bexhill to Hastings Link Road. [© Oxford Archaeology]

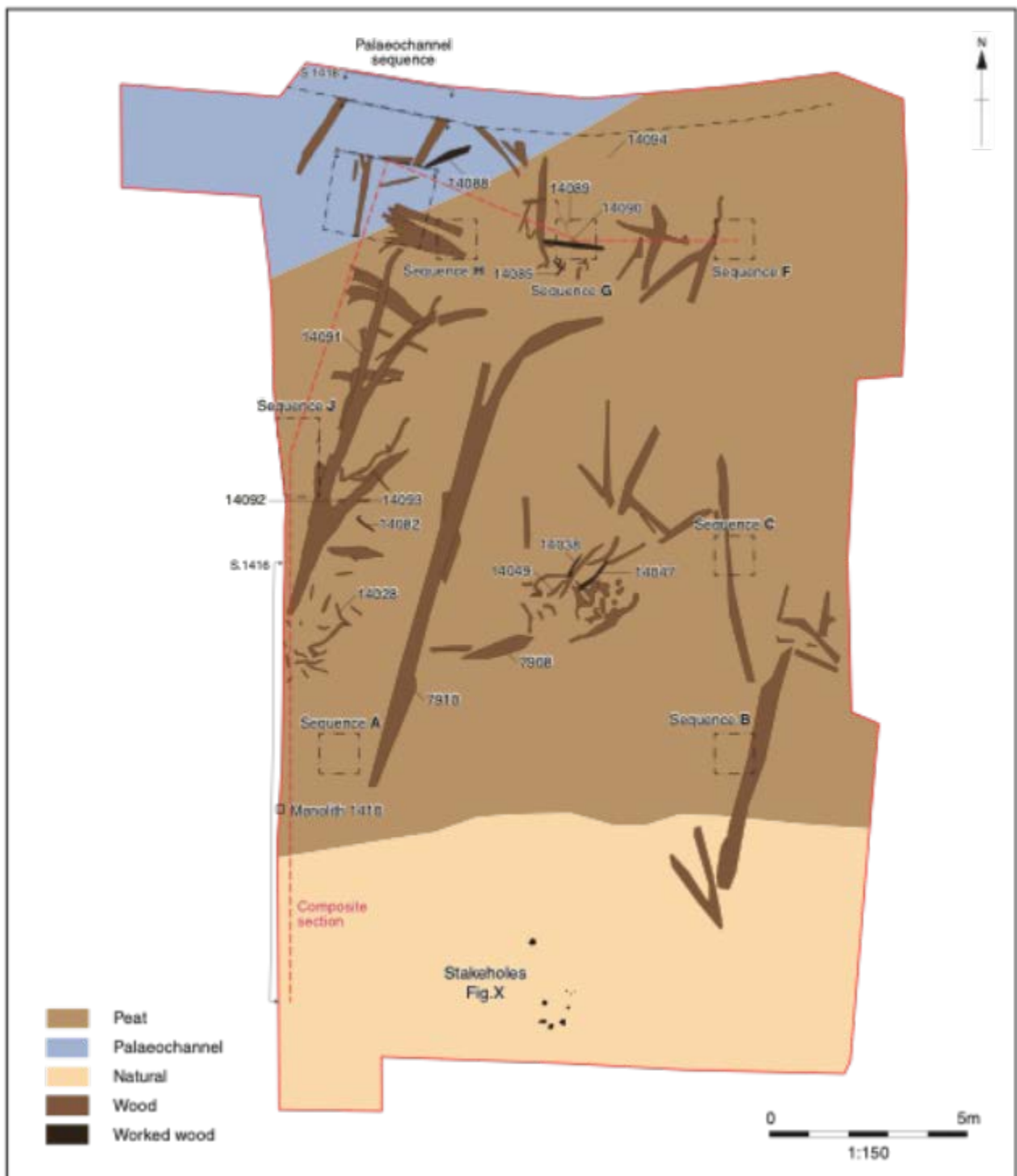


Figure 3: Plan of Site 14 showing the location of timbers 14038=14040 (BEX-H01), 14047 (BEX-H04) and 7908 (BEX-H08). [© Oxford Archaeology]

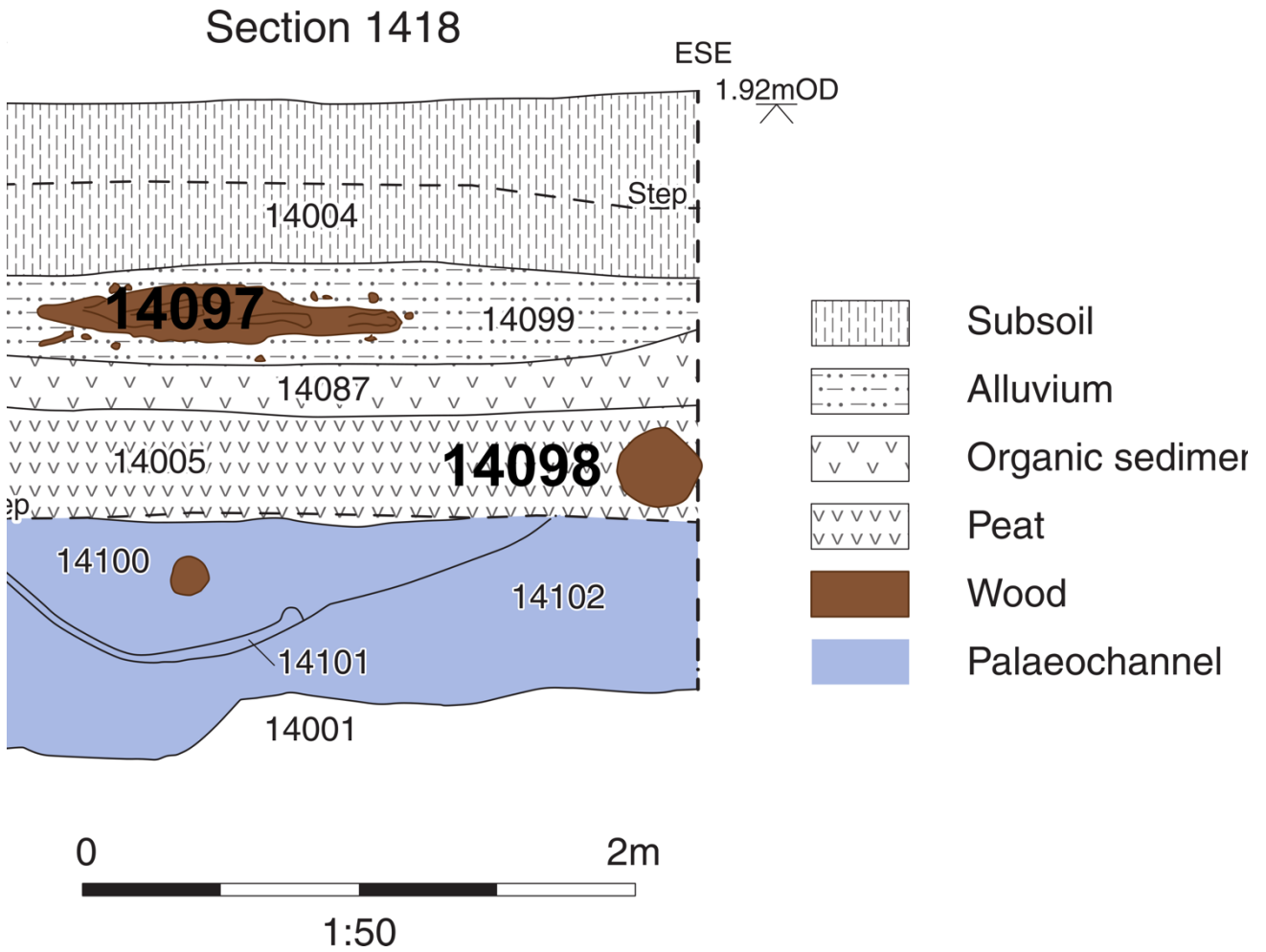


Figure 4: Site 14 section showing the location of timbers 14097 (BEX-H07) and 14098 (BEX-H08).  
 [© Oxford Archaeology]

Table 1: Details of tree-ring samples from Site 14 and evaluation trench 79

NTRDL sample number	Context number	OA sample number	Location	Thought possibly worked by excavator?	Specialist comment
BEX-H01	14038= 14040	25 (+26?)	Central accumulation	Yes. Squared off branch	A tangentially cleft oak stake with an eroded trimmed knot, a very eroded faceted point that was cut and split on both sides: it appears to have been eroded waterworn oak stake made by cleaving knotty pole in half – then displaced by water?
BEX-H02	14041	24		No	-
BEX-H03	14043	28	Central accumulation	Yes. Possible stake	Possibly very weathered water displaced cleft oak stake tip, but very uncertain
BEX-H04	14047	34	Central accumulation	Yes. Squared off	Appears to be eroded cleft oak stake
BEX-H05	14081	41		Yes. Plank	Probably cut top section of a naturally fallen oak – but uncertain
BEX-H06	14097	55	On top of upper peat layer. The rest of timber in lower layer	No	-
BEX-H07	14098	56	Near 14097 but in lower layer	No	-
BEX-H08	7908	7900	Smaller timber partially exposed.	Yes. Possible pile. Half sawn post?	Eroded naturally cleft oak log section, probably large bough, wind torn ends sapwood rotted off

## Site 16

Site 16 comprised a shallow bedrock surface at +1.68m OD that dips sharply to the south, west and east (TQ 75780 10429; Figs 1–2). The island was located where the Watermill and Powdermill Streams meet and extended into the Combe Haven basin. The bedrock surface is overlain by a shallow sequence of thin alluvium and peats approximately 1–2m bgl in depth.

Several roughly north–south aligned, large, decayed oak logs were exposed on both the north and south sides of the central low rise in Site 16 (Fig. 5). The principal decayed logs appeared to ‘point towards’ an area with ‘burnt mounds’ and other features on the rising valley side. Not unreasonably the large timbers were thought to have possibly been the remains of a timber causeway leading from the activity areas on the northern valley side spur to the south over the wet valley bottom. A single stake-like piece that had been cut with a stone axe was found lying horizontally.

Details of the two timbers available for analysis from Site 16 are given in Table 2.

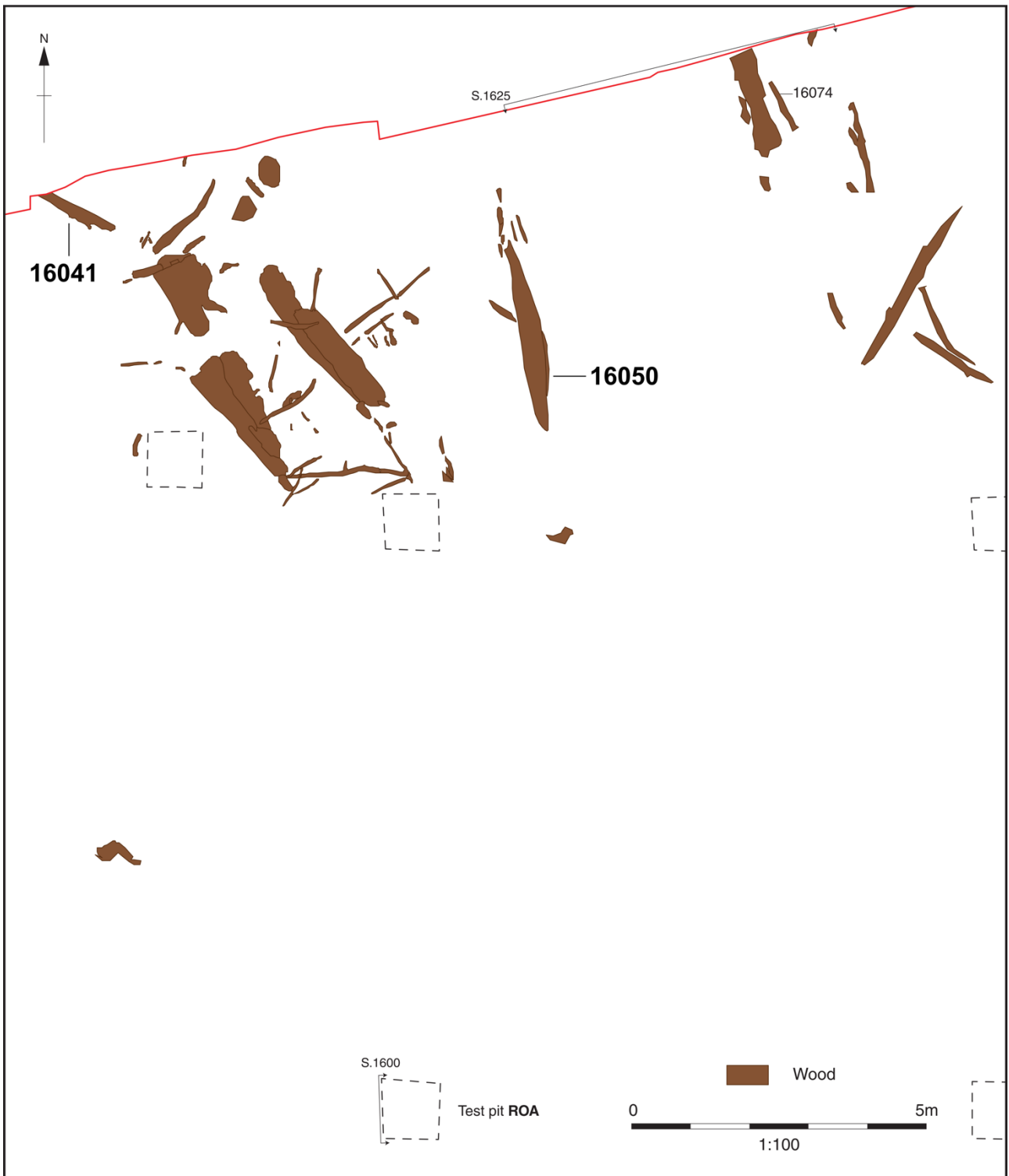


Figure 5: Sketch plan of Site 16 showing the location of timbers 16041 (BEX-H09) and 16050 (BEX-H10). [© Oxford Archaeology]



Table 2: Details of tree-ring samples from Site 16

NTRDL sample number	Context number	OA sample number	Location	Thought possibly worked by excavator?	Specialist comment
BEX-H09	16041	7	Gp 700	No	-
BEX-H10	16050	5 and 6	Gp 700	Yes – cut mark	Broken frag only with recent cut mark that cuts through patina

## Unprovenanced timber

A recording error means that the location of timber 28345 is uncertain. It was recorded within a series of timbers from Site 14, with which the description of the timber as ‘naturally eroded and very decayed fallen oaks, but older than stone axe cut and beaver-gnawed wood found at same level’ is consistent. The context number (28345) assigned to this timber refers, however, to a wheel rut on Site 10/WB116, which is not in area where waterlogged wood is likely to have occurred. Given the ambiguity we have treated it as an unprovenanced timber recovered from the road scheme (Table 3).

Table 3: Details of the unprovenanced tree-ring sample

NTRDL sample number	Context number	OA sample number	Thought possibly worked by excavator?	Comments from context sheets and drawings
BEX-H11	28345	39 & 40	No	Section of very degraded lower half of fallen oak stem

## Site WB 137 pond 2

Watching Brief 137 was undertaken as part of the monitoring of the excavation of Pond F2 to the west of Site 16 (TQ 75622 10477; Fig. 2). The road building scheme also included significant landscaping of the surrounding area including the excavation of a number of balancing and wildlife ponds. During its excavation seven timbers were recovered by machine from peat deposit 28414 and all were available for analysis (Table 4). The peat was overlain by alluvium (28413).



Table 4: Details of tree-ring samples from WB 137 pond 2

NTRDL sample number	Context number	OA sample number	Thought possibly worked by excavator?	Specialist comment
BEX-H12	28415	9	No	Poorly preserved tree trunk with decayed heartwood
BEX-H13	28416	10	No	Well preserved tree trunk
BEX-H14	28417	11	No	Well preserved tree trunk
BEX-H15	28418	12	No	Well preserved tree trunk
BEX-H16	28419	13	No	Poorly preserved tree trunk with decayed heartwood
BEX-H17	28420	14	No	Well preserved tree trunk
BEX-H18	28421	15	No	Well preserved tree trunk

## Tree-ring analysis

Examination of the 18 samples showed that nine of them were of oak (*Quercus* spp), five appeared to be of conifer type, with the remaining four being of some other, as yet unidentified, wood type (see Table 5). The annual growth-ring widths of the nine oak and five conifer samples was measured (Appendix 1). The four samples of other species were rejected prior to measurement due to a combination of distortion of the rings and the presence of indistinct ring boundaries, although approximate rings counts were obtained (see Table 5).

The ring-width data of the nine measured oak samples were then compared with each other, as were those of the five conifer samples. In neither case, however, was there any satisfactory cross-matching between the relevant samples. The data of all 14 measured samples were then compared individually with the full corpus of relevant reference material for each wood type. There was again no secure cross-matching identified and all 14 samples must remain undated. It should be noted that prehistoric reference data for conifer wood types is extremely limited and generally conifer assemblages with so few samples would not normally be considered suitable for analysis and indeed, bearing in mind the relatively sparse nature of the prehistoric oak reference network, it is also usual to maximise the number of samples from any oak assemblage in order to increase the likelihood of successful analysis.

It is likely that if it had been possible to obtain sufficient additional suitable samples the dendrochronological analysis would have been more productive but with the lack of suitable samples from this series of sites any future successful dating of the material from the Bexhill to Hastings Link Road project will be reliant on the production of relevant local or regional reference chronologies from other sites in the vicinity.

Table 5: Details of tree-ring samples from Bexhill–Hastings link road

NTRDL Sample number	Species	Total rings	Sapwood rings	First measured ring date	Last heartwood ring date	Last measured ring date
Site 14 and evaluation trench 79						
BEX-H01	Oak	85	3	-----	-----	-----
BEX-H02	Oak	108	h/s	-----	-----	-----
BEX-H03	Non-oak	nm (~20)	(~12?)	-----	-----	-----
BEX-H04	Oak	55	4	-----	-----	-----
BEX-H05	Oak	104+30nm	- (h/s)	-----	-----	-----
BEX-H06	Non-oak	nm (~95)	-	-----	-----	-----
BEX-H07	Non-oak	nm (~40)	-	-----	-----	-----
BEX-H08	Oak	175+25nm	- (h/s)	-----	-----	-----
Site 16						
BEX-H09	Oak	46	-	-----	-----	-----
BEX-H10	Oak	113	h/s	-----	-----	-----
Unprovenanced						
BEX-H11	Oak	101	h/s	-----	-----	-----
WB 137 pond 2						
BEX-H12	Oak	102	h/s	-----	-----	-----
BEX-H13	Conifer	50	h/s?	-----	-----	-----
BEX-H14	Conifer	65	h/s?	-----	-----	-----
BEX-H15	Conifer	126	h/s?	-----	-----	-----
BEX-H16	Conifer	77	h/s	-----	-----	-----
BEX-H17	Conifer	130	h/s	-----	-----	-----
BEX-H18	Non-oak	nm (~65)	(h/s?)	-----	-----	-----

nm = sample not measured but approximate ring count given in brackets

+nm = additional number of rings not measured

h/s = the heartwood/sapwood ring is the last ring on the sample

(h/s) = the heartwood/sapwood boundary is the last ring on the sample following a series of unmeasured rings

# Appendix 1: Data of measured samples

Measurements in 0.01mm units

## BEX-H01A 85

68 47 73 53 54 60 50 55 55 54 46 53 50 62 61 62 61 41 59 86  
 55 62 68 58 48 66 58 69 75 66 66 80 51 51 53 77 78 83 91 89  
 60 82 69 60 64 41 44 31 71 65 67 75 78 75 57 64 60 64 62 69  
 50 71 43 45 48 57 56 71 64 67 78 63 32 39 42 80 49 65 42 63  
 47 48 25 42 42

## BEX-H01B 85

64 46 71 52 58 60 50 46 56 50 51 56 50 54 59 62 72 42 64 70  
 75 55 67 59 56 56 59 74 67 65 68 76 53 55 58 76 78 75 96 80  
 78 75 78 53 53 44 32 44 76 80 52 78 78 67 55 51 61 65 58 75  
 50 67 41 42 45 60 53 67 66 67 74 64 29 44 48 77 48 61 46 67  
 48 47 29 42 41

## BEX-H02A 108

237 222 291 200 326 173 200 233 180 192 117 212 232 203 239 353 244 249 210 196  
 140 146 187 229 214 221 153 228 150 145 114 144 161 154 109 89 123 260 192 114  
 142 110 100 119 114 129 146 104 107 132 90 84 131 125 121 117 143 167 162 134  
 193 120 119 132 100 118 104 106 43 96 81 78 83 71 73 57 79 53 77 95  
 53 120 95 104 84 96 83 91 111 112 102 91 108 128 92 100 65 68 68 59  
 87 102 117 86 81 90 134 128

## BEX-H02B 108

238 220 300 200 318 184 199 247 175 189 112 199 240 204 240 341 242 251 199 190  
 142 150 184 234 203 210 159 224 151 143 115 150 163 154 113 95 119 253 187 117  
 144 128 93 111 112 119 150 101 102 125 86 73 132 120 123 111 140 168 168 137  
 191 120 92 127 100 128 103 109 48 98 80 78 81 72 71 60 69 58 80 93  
 56 117 100 104 89 94 81 100 115 119 108 96 99 130 91 105 66 68 65 61  
 84 100 103 87 84 87 129 132

## BEX-H04A 55

91 53 68 39 42 50 77 53 80 71 85 73 80 78 73 64 82 80 75 85  
 57 78 71 45 75 82 55 87 75 83 57 53 62 50 81 70 61 76 71 89  
 66 60 42 53 48 67 51 73 75 67 71 93 71 76 89

## BEX-H04B 55

89 48 64 40 46 52 71 55 82 71 91 75 81 74 73 64 90 74 76 83  
 60 71 68 44 69 79 53 90 70 77 53 55 60 46 77 70 57 80 67 86  
 67 60 39 47 51 61 50 70 80 68 73 89 69 79 85

## BEX-H05A 104

72 95 75 75 39 81 71 77 58 119 149 98 127 129 107 101 105 89 137 132  
 96 116 126 78 86 76 119 103 93 147 141 137 136 128 138 103 103 103 72 112  
 93 129 146 139 160 135 135 142 157 138 153 144 114 143 170 165 105 120 41 45  
 50 37 43 39 38 43 48 44 35 36 35 43 51 48 51 50 43 40 48 42  
 39 43 45 51 43 54 53 65 59 74 51 56 46 47 44 42 46 37 26 42

29 33 35 30

BEX-H05B 104

77 83 96 76 38 83 76 66 58 113 142 97 125 133 138 108 108 85 130 130  
 91 115 122 79 87 82 113 108 98 141 137 140 133 129 135 99 102 107 70 112  
 50 129 142 140 172 134 140 139 151 140 155 144 117 140 170 164 99 115 40 43  
 42 44 39 35 42 43 51 40 29 40 40 42 49 51 53 49 46 40 47 39  
 40 43 48 50 42 55 53 62 60 70 54 60 45 47 46 40 45 37 32 40  
 25 37 40 30

BEX-H08A 175

99 46 51 98 85 83 38 56 90 63 61 76 84 99 108 105 87 118 145 102  
 91 98 89 71 101 89 83 81 62 51 58 64 64 80 67 76 44 40 55 32  
 49 37 37 46 51 65 71 96 67 72 75 66 56 67 69 78 73 72 56 85  
 57 83 82 59 74 68 53 48 47 96 77 85 114 83 53 56 85 100 86 121  
 58 75 72 58 82 62 33 58 62 56 64 57 85 46 40 43 48 48 44 65  
 62 46 57 70 54 50 76 75 85 78 45 39 48 34 42 73 55 43 60 53  
 50 62 75 71 73 48 62 79 60 67 42 60 57 70 54 71 54 67 63 71  
 48 43 53 46 40 45 40 39 54 49 26 37 54 65 67 56 42 51 56 73  
 50 57 50 53 79 43 32 40 46 59 54 62 52 73 46

BEX-H08B 175

100 51 55 89 81 81 37 54 79 58 60 79 85 95 105 99 81 121 150 102  
 90 100 90 71 99 87 80 82 66 49 57 61 62 82 62 82 48 39 57 39  
 44 38 40 46 55 55 77 94 73 71 74 72 60 70 63 82 69 67 58 85  
 64 76 87 53 59 84 39 49 57 81 82 84 119 79 58 67 68 98 103 100  
 87 75 82 60 73 68 48 59 54 54 47 77 65 51 48 44 44 41 53 66  
 56 55 56 67 57 54 65 82 81 68 43 48 45 48 45 66 70 45 56 53  
 48 65 79 74 73 43 67 78 64 70 48 64 59 66 54 75 49 70 60 75  
 50 49 50 44 40 43 42 41 50 45 29 43 54 65 67 56 46 53 53 69  
 50 58 48 53 79 46 28 37 43 57 47 62 48 75 46

BEX-H09A 46

97 81 86 92 95 150 102 80 125 157 78 93 67 75 89 174 131 204 160 250  
 167 200 201 197 219 237 162 144 135 195 132 168 178 246 207 175 142 134 138 171  
 175 160 197 159 135 150

BEX-H09B 46

95 80 85 92 103 142 112 76 126 153 73 87 70 74 82 175 128 209 164 253  
 164 212 198 196 175 239 165 141 132 210 178 176 181 250 196 169 142 132 133 169  
 232 159 211 159 146 158

BEX-H10A 113

115 140 131 118 108 111 125 73 112 74 72 72 88 62 79 105 80 139 89 126  
 92 143 81 73 71 67 67 89 96 131 123 123 110 60 94 87 95 120 95 91  
 110 82 126 172 140 132 114 153 92 100 60 75 41 43 67 82 54 92 64 96  
 71 92 85 58 70 94 99 90 84 88 83 79 131 103 134 121 100 87 50 62  
 60 71 98 45 45 56 50 70 67 59 63 59 62 65 56 82 43 64 37 47  
 46 81 57 46 73 68 46 45 55 60 43 64 73

BEX-H10B 113

115 130 131 120 105 111 126 71 119 71 77 71 88 67 72 106 81 132 91 128  
 94 141 78 73 74 60 71 86 96 140 117 121 99 67 107 96 95 124 92 86  
 73 90 128 169 140 133 113 142 78 97 68 74 46 42 64 91 57 82 64 92  
 82 100 71 57 64 96 96 90 82 84 80 80 120 99 129 117 101 79 60 64  
 65 68 98 35 45 52 50 70 68 57 67 60 65 65 60 75 40 56 38 45  
 39 75 45 54 79 56 45 45 56 58 41 62 75

BEX-H11A 101

69 54 65 81 44 67 68 62 55 79 46 27 41 63 63 70 58 60 80 90  
 78 72 77 91 87 91 87 60 91 80 60 99 94 80 78 73 84 94 69 82  
 89 80 83 70 53 91 90 86 125 91 85 82 78 90 111 94 81 89 85 103  
 57 72 89 80 68 78 64 78 67 73 39 55 53 57 78 69 70 50 52 50  
 56 68 57 67 64 68 68 67 68 81 68 59 74 48 62 49 53 68 87 57  
 98

BEX-H11B 101

72 66 54 68 62 60 57 75 57 71 45 30 40 65 64 68 56 59 76 88  
 77 72 80 93 90 90 88 59 90 76 57 89 95 82 78 67 79 97 68 83  
 87 82 83 69 49 88 96 79 122 89 89 87 76 89 112 93 76 84 79 109  
 60 71 92 77 72 69 67 76 69 75 40 53 54 60 80 70 73 48 50 51  
 49 69 58 67 65 69 70 68 68 80 70 63 69 50 64 45 55 70 79 55  
 97

BEX-H12A 102

54 86 115 123 146 112 107 100 114 111 134 101 99 106 132 126 123 132 119 96  
 99 63 63 91 85 76 91 85 103 85 73 61 81 139 142 149 121 71 120 169  
 217 188 43 32 29 43 56 41 46 46 42 53 31 25 36 57 59 83 101 55  
 46 41 35 39 38 42 58 85 84 161 105 151 71 56 79 80 118 82 71 61  
 40 43 20 20 15 31 22 49 33 53 21 30 39 28 26 34 50 48 39 50  
 32 46

BEX-H12B 102

62 92 114 123 142 114 113 87 104 129 118 115 84 113 122 135 139 130 119 97  
 92 68 64 88 82 71 89 81 99 78 71 65 82 128 143 149 128 85 123 166  
 218 184 42 37 31 39 57 47 45 47 44 56 29 26 39 57 58 83 98 59  
 48 42 36 39 39 42 60 79 85 147 101 153 72 45 80 80 121 78 73 64  
 44 42 25 21 20 29 24 47 30 53 22 28 32 28 27 33 40 40 41 52  
 26 43

BEX-H13A 50

157 189 153 160 195 185 219 167 134 193 234 189 193 184 191 82 114 153 235 227  
 162 140 135 149 189 253 243 232 231 257 181 207 85 124 135 139 137 110 117 153  
 130 134 140 144 158 143 151 150 90 110

BEX-H13B 50

160 192 151 165 209 192 203 167 134 193 241 183 194 182 191 85 107 152 242 238  
 158 143 138 146 189 259 242 228 227 255 206 175 90 124 146 132 145 114 111 150  
 129 135 146 148 149 140 153 149 85 109

BEX-H14A 65

147 91 100 200 203 209 203 214 246 287 329 304 301 312 254 395 334 350 100 165

356 278 315 225 279 301 292 289 245 257 208 240 246 89 119 79 47 49 50 53  
 39 21 87 96 76 95 144 155 134 106 85 68 45 35 46 67 84 131 140 96  
 27 91 87 112 118

BEX-H14B 65

146 87 104 200 193 208 204 206 249 289 330 301 304 325 263 378 309 340 99 162  
 360 278 310 224 376 300 285 293 239 263 198 231 245 87 118 65 56 45 48 50  
 40 37 82 97 79 93 136 145 134 102 78 68 51 26 39 64 77 120 150 90  
 25 85 96 109 114

BEX-H15A 126

90 62 70 60 96 79 107 121 148 75 89 75 94 101 125 90 52 44 73 67  
 80 55 53 64 89 82 88 68 51 50 37 21 36 26 28 37 51 59 58 62  
 65 94 112 140 147 175 174 163 143 89 64 67 118 100 69 79 92 107 125 165  
 200 161 128 153 135 153 192 159 103 124 129 123 162 175 121 145 131 145 118 120  
 137 117 48 34 12 16 29 37 103 126 164 140 135 126 134 182 181 125 132 91  
 129 84 133 123 112 35 60 44 89 92 66 107 78 73 64 87 96 79 51 54  
 43 70 82 32 60 62

BEX-H15B 126

80 59 67 59 88 80 100 124 136 72 95 68 88 97 115 84 48 48 68 63  
 85 48 59 65 77 79 81 73 45 48 42 24 30 28 28 30 45 63 60 60  
 63 78 102 127 140 155 161 160 133 93 58 73 108 111 74 86 90 100 117 154  
 189 173 132 155 139 142 179 148 104 117 134 111 151 166 128 146 125 140 124 129  
 142 123 39 38 10 18 25 41 99 131 154 129 139 115 131 194 182 135 142 87  
 133 76 128 117 102 45 54 41 77 97 60 99 70 65 62 81 90 68 47 50  
 48 64 73 35 64 65

BEX-H16A 77

137 200 138 128 114 131 82 128 168 200 125 110 85 105 92 117 76 83 68 88  
 97 124 100 77 85 98 100 117 101 85 107 96 100 94 126 85 103 93 57 50  
 56 42 58 42 64 66 67 53 103 92 100 100 104 100 75 92 42 22 25 32  
 13 46 46 25 60 123 41 46 31 32 28 32 28 21 21 17 15

BEX-H16B 77

233 199 146 125 135 120 75 136 170 147 119 110 87 139 71 105 71 80 78 84  
 94 116 106 87 88 99 102 119 110 89 110 89 100 92 131 76 110 92 53 53  
 56 43 55 46 61 71 71 43 104 92 99 104 99 102 73 82 45 25 24 36  
 20 39 46 26 49 126 46 46 31 32 29 31 31 25 26 18 15

BEX-H17A 130

146 170 101 94 146 115 149 154 197 166 158 145 117 114 117 62 57 93 135 141  
 78 91 94 81 68 65 44 35 41 57 68 28 41 33 63 37 34 46 39 26  
 33 19 24 31 48 76 89 54 70 39 75 109 122 104 148 142 168 135 168 182  
 121 80 22 25 44 86 78 143 170 174 114 128 68 73 101 117 120 54 112 51  
 57 131 85 104 92 68 56 60 12 18 31 27 49 24 72 103 110 173 123 121  
 142 182 114 179 187 164 191 37 51 109 103 78 106 104 65 58 52 94 85 79  
 34 29 40 46 32 47 44 30 91 92

BEX-H17B 130

149 174 96 103 132 123 154 150 201 168 158 141 125 113 116 62 57 101 126 151

75 92 97 84 67 62 46 38 39 61 67 28 39 37 54 40 34 54 33 25  
27 24 17 32 46 89 92 48 67 39 85 115 125 102 143 145 175 121 164 187  
130 78 28 27 38 94 75 154 171 181 120 114 58 81 113 121 122 65 110 73  
56 126 82 109 92 64 54 64 21 17 31 23 54 21 76 104 111 172 111 118  
131 179 112 181 185 158 171 53 56 106 99 79 104 103 63 60 59 84 83 73  
34 30 39 49 29 45 42 32 90 91





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The Research Report Series replaces the former Centre for Archaeology Reports Series, the Archaeological Investigation Report Series, the Architectural Investigation Report Series, and the Research Department Report Series.

All reports are available at [HistoricEngland.org.uk/research/results/reports](https://HistoricEngland.org.uk/research/results/reports). There are over 7,000 reports going back over 50 years. You can find out more about the scope of the Series here: [HistoricEngland.org.uk/research/results/about-the-research-reports-database](https://HistoricEngland.org.uk/research/results/about-the-research-reports-database).

Keep in touch with our research through our digital magazine *Historic England Research*

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