A medieval cemetery at All Saints' church, Great Stanway, Essex (Colchester Zoo) September-October 2005

report prepared by
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on behalf of
Colchester Zoo

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1 Summary

The ruins of All Saints' (the former parish church of Great Stanway) stand in the grounds of Colchester Zoo. An evaluation by Archaeological Solutions in January 2005 revealed fourteen medieval inhumation graves. Following a monitored topsoil strip, CAT excavated thirty-four medieval inhumation graves on the site of the proposed new orang-utan enclosure. The graves are probably late medieval, and the absence of coffins indicates a low status. Other features include two ditches, which may have been graveyard boundary ditches. The human remains are to be reburied on site.

Plate 2: excavation site, view west.

2 Introduction (Fig 1)

2.1 This is the archive report on an archaeological watching brief and excavation on the site of the new orang-utan enclosure at Colchester Zoo, Great Stanway, Essex.

2.2 Centre of the site is NGR TL 95307 22110.

2.3 The fieldwork was commissioned on behalf of Colchester Zoo by Johnson Dennehy Planning Partnership, and was carried out by the Colchester Archaeological Trust (CAT) between 8th September and 18th October 2005. Post-excavation work took place in October and November 2005.

2.4 All fieldwork was done under a strategy agreed with the Colchester Borough Council Archaeology Officer (CBCAO).

2.5 All fieldwork and reporting was done in accordance with Colchester Borough Council's *Guidelines on standards and practices for archaeological fieldwork in the Borough of Colchester* (CM 2002) and *Guidelines on the preparation and transfer of archaeological archives to Colchester Museums* (CM 2003), English Heritage's *Management of Archaeological Projects*, 2nd edition (MAP 2), and the Institute of Field Archaeologists' *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (IFA 2001) and *Standard and guidance for archaeological excavation* (IFA 1999). Other documents used include *Research and archaeology: a framework for the Eastern Counties 1. Resource assessment* (EAA **3**), *Research and archaeology: a framework for the Eastern Counties 2. Research agenda and strategy* (EAA **8**), and *Standards for field archaeology in the East of England* (EAA **14**).

3 Archaeological background

3.1 The site is adjacent to the ruinous medieval All Saints' church (Essex Historic Environment Record or EHER no 11727).

3.2 Rodwell and Rodwell (1977) describe the church as follows: '...*comprises C14 nave and west tower, the stone vaulting in which is notable for Essex. The church fell into ruin in the C17; it formerly had a N aisle and chancel, of unknown plan. Morant mentions two aisles, but he is almost certainly mistaken. There was a church at Great Stanway prior to the C14, and it is probable that the fabric incorporates earlier work, there are Roman bricks in the structure…'.*

3.3 The Essex Historic Environment Record has a text which incorporates Rodwell and Rodwell [1977], but adds:

'... Formerly the parish church. The walls are of pebble and ragstone rubble with a large admixture of tiles and brick. The chancel has entirely disappeared except for the late C14 chancel arch, now blocked. The nave has a late C14 arcade of three bays; there are two windows in the south wall, one of the C14 restored with C17 brick. The west tower of three stages is also C14.

A survey of All Saints' church by rectified photography, measured scale drawing and fabric analysis has established that in its earliest recognisable phase, late 13th century, the church was a simple two-celled structure comprising a nave and chancel. In the latter part of the 14th century the nave reportedly partially collapsed and was subsequently rebuilt. The church was enlarged in the early 15th century with the addition of an arcade and north aisle, and the construction of a largely brick-built tower at the west end. During the early 17th century, the building was considerably altered with the complete removal of both the chancel and north aisle, the blocking of the arcade and the chancel arch and the addition of the north porch. The reduction in size of the building during this period occurred when the church was no longer in use as a parish church, but became a private chapel for the use of the Swinerton family who acquired Stanway Hall in 1601. No building activity, other than modern consolidation, occurred after the early 17th-century rebuilding. The church was desecrated during the Civil War when all its lead and timber were sold and finally fell into ruin during the late 17th and earlier part of the 18th century...'

3.4 Nearby stands Stanway Hall, a former manor house with some 15th-century timber framing (EHER no 11730). The site (ie church and graveyard) are technically within the manorial complex.

3.5 During a CAT archaeological project at Colchester Zoo in 1996, a prehistoric flint scatter was recorded during a watching brief on the construction of the elephant enclosure (Benfield 1996).

3.6 Following submission of a planning application (F/COL/04/1870), an archaeological evaluation was carried out by Archaeological Solutions (AS) of Hertford in January 2005. During the evaluation, medieval pits and ditches and fourteen graves were recorded (Archaeological Solutions Report 1730).

3.7 The current site is 500m south-west of the nationally important Late Iron Age and Roman princely burial site at Stanway (*CAR* **11**).

3.8 A watching brief on topsoil-stripping (prior to mineral extraction) on Wallace's Field, the quarry site directly north-west of the zoo, revealed a number of prehistoric flints, a prehistoric sherd, Roman potsherds, and five features probably created by the recent burning and removal of trees (CAT Report 139).

4 Aim

The aim of the initial watching brief was to observe the topsoil strip, to mark the positions of all exposed archaeological features, and to recover any finds exposed by the topsoil strip.

The aim of the later excavation was to 'preserve by record' (ie to excavate) all archaeological features (graves, ditches, etc) which, in the judgement of the CBCAO, would be adversely affected by the construction of the new enclosure.

5 Archaeological strategy (Fig 2)

During the AS evaluation of January 2005, fourteen medieval inhumation graves and other features were recorded. Although the discovery of graves adjacent to a medieval church should cause no surprise, it did confirm previous suspicions that medieval burials would be found here during any redevelopment work.

It was agreed with CBCAO that a sensible second stage would be to strip the footprint of the orang-utan enclosure, to see what archaeological features were revealed, and to hold a site meeting at which future archaeological policy could be decided.

Thus, in September 2005, the footprint of the proposed orang-utan enclosure was stripped under archaeological supervision. The excavated area coincides with the footprint of the proposed orang-utan enclosure. There was an overlap between the excavated area and AS trench 1, but all of the inhumations exposed in that trench are outside the current excavated area (and have been preserved *in situ*). AS trench 2, to the east of the church, is outside the current excavation area (se Fig 2)

6 Results

6.1 The boundary ditches (Fig 17)

Two ditches (Feature or F29 and F30) extended across the excavated area, north-west to south-east. The southern ditch had been sectioned by AS[1], and their section line was extended to give a profile across both ditches (Fig 17). Neither was very deep (0.4m and 0.65m respectively), but some of the profile will have been lost when the topsoil cover was stripped off. Allowing 0.3m of topsoil, the ditches may originally have been closer to 0.7m and 0.95m deep.

No finds were retrieved from either ditch in the current excavation, but the AS evaluation recovered one sherd of medieval pottery from the southern ditch (F29). This was probably a sherd of Fabric 13 or 20, dating to the 12th or 13th centuries[2]. It seems most likely that the ditches were graveyard boundary ditches.

It is difficult to know whether the boundary was always a double ditch, or whether the outer ditch was a later feature, dug to accommodate an expanding graveyard. There is a gap of 4m between the most northerly of the graves and the south edge of the south ditch. There would presumably have been an earthen bank south of the ditch, so the burials may have been dug closer to the boundary than is apparent in plan. If this is so, the digging of an outer ditch may be interpreted as an example of forward planning by the church authorities. Of course, this was ultimately pointless since the graveyard never expanded over the old boundary ditch.

6.2 The inhumation burials (Figs 3-16)

Thirty-four burials were excavated (graves or G1-G34). The shapes and sizes of the grave cuts can be seen on Figures 4-16. Grave alignments vary between 255° and approximately 242°. The former is more or less parallel with the church, which suggests that some graves were simply laid out parallel to it.

One grave contained an iron nail. It is possible that this is the only surviving coffin nail, but it seems much more likely that it is unrelated to the burial[3]. In the absence of coffin stains or groups of coffin nails, it is assumed that the burials were wrapped in shrouds. This idea is supported by the posture of some of the burials, which seem to have their arms drawn in closely to their sides, the effect of wrapping a body in a shroud before burial.

The skeletal material is reported on separately by Mark Winter (below).

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[1] Their context 1011.

[2] It seems clear from the descriptions in the AS report that the pottery is medieval, but there is no reference to the recognised series of Essex medieval pot fabrics published by Cunningham (1985) or in *CAR* **7** and in use in virtually all publications on medieval pottery in this county. The absence of any obvious slip-painted Colchester-type ware or glazes, and the presence of wavy-line decoration and oxidised surfaces over grey bodies, indicates that the pottery is probably or mainly Fabrics 13 and/or 20 (*CAR* **7**).

[3] A Roman date for the nail is possible, given the presence of other Roman debris on this site.

Plate 3: G5, with disarticulated skull, view west.

6.3 Grave goods

There were no grave goods, and it is assumed that the small amount of material (mainly residual Roman brick/tile) found its way into the graves by accident.

6.4 Post-medieval activity

Some features post-date the use of the graveyard. A group of three modern post-holes (F17-F19) cut the top fills of some of the graves. These lay in an arc, and were probably part of a recent fence or fences. There was also a single, isolated, modern post-hole (F32) just north of the graveyard boundary ditch F30, and two undated pits (F21-F22) 12m to the north, on the north-west edge of the excavation area.

The biggest feature is the concrete foundation of the aviary building which until recently stood on this site (F31). A hole left by the very recent removal of a tree (F12) clipped the north edge of graves F13 and F14 (G12 and G13). This had a sand fill with fragments of modern woven nylon sacking. None of these features are considered to be of archaeological significance.

Two layers of demolition debris (Layer or L4 and L5) lay to the north of the north edge of the graveyard area. These may be related to alterations to the church in the early 17th century (EHER no 11728).

Plate 4: double burial (G12), view west.

Plate 5: multiple intercutting burials (clockwise from top left graves G29, G21, G31, G30), view west.

7 Finds

7.1 The coin and bulk ironwork

by Nina Crummy

SF 1. (3) L4. Layer of demolition debris; late medieval to early post-medieval. Silver short cross penny of Henry III, slightly worn. Class 6, as North I, 976/1. Date: 1210-17. Obverse: X HENRICUS REX, narrow bust, with two curls, plain letters. Reverse: IOHAN ON WINC, linked pellets. Winchester mint. Diameter 18.5 mm, weight (unconserved) 2 g.

(26) F29. Fill of ?late medieval grave. Iron nail shank fragment. Length 33 mm.
(49) F37. Fill of medieval ditch. Iron nail shank fragment. Length 55 mm.

7.2 Human remains report

by Mark Winter

7.2.1 Introduction

The remains from the excavation were assessed at the Colchester Archaeological Trust during November 2005. Thirty-four graves were recorded containing thirty articulated individuals and further disarticulated remains. The graves were recorded by Feature number (for the grave cut) and by bag number for the associated human remains or other finds. The bag numbers are essentially subsets of the Feature number, and are referred to as 'contexts' in this report. All articulated remains were assessed for completeness, bone condition, age, sex and pathology. Double burials were additionally assessed for non-metric traits to determine if there was any further evidence for familial relationships inferred from their burial together. Disarticulated and unstratified remains were recorded so that minimum number of individuals (MNI) calculations could be conducted. Recording was conducted with reference to the guidelines set by Buikstra and Ubelaker (1994).

7.2.2 Methodology

Completeness and condition

Each articulated skeleton was given a score for completeness to the nearest 5%. The skeleton was divided into ten categories of bone groups, based on association of the elements, each worth 10% of the total skeleton. The groups are summarised in Table 1.

Table 1: skeletal element groups.

Group	Group name	Elements in group
1	Skull and mandible	All elements of the skull and the mandible
2	Vertebrae and ribs	Cervical, thoracic and lumbar vertebrae, ribs
3	Pelvic girdle	Left and right innominate and sacrum
4	Pectoral girdle	Left and right scapulae, clavicles and sternum
5	Right arm	Right humerus, radius and ulna
6	Left arm	Left humerus, radius and ulna
7	Right leg	Right femur, tibia, fibula and patella
8	Left leg	Left femur, tibia, fibula and patella
9	Hands and wrists	All carpals, metacarpals and hand phalanges
10	Feet and ankles	All tarsals, metatarsals and foot phalanges

Each articulated skeleton was also scored on a scale of condition grades 1 to 5 for condition of the bone. This is summarised in Table 2.

Table 2: bone condition grades.

Grade	Description of bone
1	Very poor condition; extensive wear of bone cortex and heavy fragmentation
2	Poor condition; extensive wear of bone cortex and some fragmentation
3	Average condition; slight wear of bone cortex with minimal fragmentation
4	Good condition; slight wear of bone cortex or minimal fragmentation
5	Very good condition; no wear of bone cortex or fragmentation

Sex determination

The sex of a skeleton was ascertained through the observation of certain traits on the pelvis and skull. It should be remembered that individuals often exhibit a combination of features. This is especially true when examining younger and older individuals, as young males often have quite feminine features while older females often develop more masculine skeletal features. It is not possible to determine sex for juveniles.

Age at death determination

Four main techniques were used to determine age at death of adult remains. The Todd scoring system and the Suchey/Brooks scoring system use morphological changes of the pubic symphyseal face to estimate age at death (Buikstra & Ubelaker 1994, 21). These changes are considered among the most reliable criteria for determining age at death (*ibid*). The Todd method has been found to be the most reliable for age at death estimation but both methods have a tendency to under-age (White & Folkens 2000, 354). The female pelvis is prone to trauma related to childbirth which may lead to averaging (White & Folkens 2000, 353), and inter- and intra-observer errors may occur (White & Folkens 2000, 354). These systems were developed using modern samples and age-related change in the target samples may differ from modern reference samples (Hoppa 2000, 190)

Changes occurring in the auricular surface also provide an indication of age at death and it is more likely to survive archaeologically than the pubic symphysis (White & Folkens 2000, 35). Changes also continue to occur here well beyond the age of fifty years (White & Folkens 2000, 355). This method is more complex and difficult to score than the pubic symphysis (Buikstra & Ubelaker 1994, 24; White & Folkens 2003, 355), and large estimation errors mean it should not be used in isolation (White & Folkens 2000, 355). The reliability of this method decreases with age (under-ageing), particularly from the mid-thirties, and some aspects are impaired when a deep pre-auricular sulcus is present (Cox 2000, 71). This technique is also subject to inter-observer errors (*ibid*).

The final method employed here to determine age at death is based upon cranial suture closure. This method can distinguish between young, middle-aged and old-aged individuals (Cox 2000, 68), but cannot assign specific ages (Cox 2000, 67). It should be noted that suture closure rates differ between males and females and open ectocranial sutures occur in males and females of all ages (Key *et al* 1994, 206).

When assessing juvenile remains, age at death was established through the observation of tooth eruption and bone fusion and development. Tooth development is more closely associated with chronological age than the development of other skeletal parts, and appears to be under tighter genetic control; however, in some individuals, teeth erupt earlier in life and eruption can occur in different orders in different individuals (White & Folkens 2000, 342). Fusion of a postcranial epiphysis is orderly and occurs at a known age, but can vary by individual, sex and population (White & Folkens 2000, 349). In instances where the skull and pelvis were not present, or it was not possible to assess fusion times, remains were interpreted as being of either adult, juvenile or child size.

For the purpose of this report, the following terminology has been applied when discussing age:

juvenile	under 20 years
child	birth to 12 years
infant	birth to 1 year
early childhood	1 to 6 years
late childhood	6 to 12 years
sub adult	12 to 20 years
adult	20+ years
young adult	20-34 years
mid adult	35-49 years
old adult	50+ years

Non-metric traits

The presence of four double burials (eight individuals) was observed. G12A and G12B, G17 and G23 formed two of these (four individuals), while G33 and G24 each contained two individuals (four in total). All double burials were assessed for primary and secondary non-metric traits. Non-metric variants are known to show familial inheritance, but questions of intra- and inter-observer error do exist (Buikstra & Ubelaker 1994, 85). It was considered beneficial to assess these remains in an attempt to strengthen evidence for relationships between them which have been inferred from their burial together.

7.2.3 Pathology

All discrete burials were assessed for signs of pathology.

7.2.4 The human remains

Completeness and condition

On average, the articulated remains were 30% complete and in condition grade 3.

Sex

Of the thirty articulated skeletons recovered, it was possible to sex seven (23.3%). Of these, three (42.9%) were identified as males and four (57.1%) as probable females.

Age

The articulated remains consisted of one individual (3.3%) who could not be aged, thirteen juveniles (43.3%), and sixteen adults (53.3%). The juveniles consisted of one individual who could not be accurately aged (7.7%), three children (23.1%), two infants (15.4%), three individuals in early childhood (23.1%) and one in late childhood (7.7%), two sub adults (15.4%), and one sub to young adult (7.7%). The adult remains consisted of twelve individuals who could not be accurately aged (75%), one young adult (6.3%), one young to mid adult (6.3%), and two mid adults (12.5%).

Pathology

Macroporosity was observed in ten individuals (33.3%). This occurred around the epiphyses of the femora and tibiae, around the acetabulum and on the vertebral centrum. This condition is often associated with increasing age. Lipping on the vertebral centrum also tends to develop with increasing age and was observed on three individuals (10%), all of whom exhibited macroporosity.

Periostitis was observed in three individuals (10%). In two cases, this was on the postero-lateral surface of the proximal third of the femora. In one instance, it was observed on the lateral aspect of the proximal third of the humeri and on the lateral aspect of the mid third of the radii and right ulna. Periostitis can occur in three different ways:

1) By extension of an adjacent soft tissue infection to the bone
2) As a manifestation of a generalised disease
3) By involvement of the surface of the bone from an osteitis or osteomyelitis (Rodriguez-Martin & Aufderheide 1998, 179).

Periostitis is not always the result of an infection and may result from other causes such as trauma or chronic skin ulceration (Rodriguez-Martin & Aufderheide 1998, 179).

Three (10%) individuals had carious lesions and one of these also exhibited lower sub-gingival calculus and remodelling of an upper molar socket. Remodelling of a molar socket was also evidenced by one further individual (3.3%). Two individuals (6.6%) had dental enamel hypoplasias and one of these had lost the crown of their lower left first molar. Dental enamel hypoplasia can be an indication of periods of stress (such as dietary deficiency and illness), and normally form during the first year after birth (Rodriguez-Martin & Aufderheide 1998, 405). Moderate to heavy wear was observed on one individual's dentition (3.3%), heavy wear was observed on the dentition of three individuals (10%), and the teeth of one individual (3.3%) had very heavy wear which had almost obliterated the crowns of the first and second lower left molars. Such wear is often associated with advancing age.

Two individuals had fractures. Both were oblique fractures, the first on the proximal third of the left femur and the second on the mid third of the left tibia.

Cribra orbitalia was observed in a sub adult and an individual in early childhood. This condition is most commonly found in infants and younger children and may be a sign of anaemia (Rodriguez-Martin & Aufderheide 1998, 349).

Non-metric traits

Non-metric assessment of burials G12 A and G12B (F13) demonstrated that both individuals had additional ossicles in the lambdoid suture, indicating that they may have been related.

Non-metric assessment of the individuals recovered from G24, G33, G17 and G23 did not provide any further evidence for familial relationships, but it should be remembered that this does not mean that none existed.

7.2.5 Disarticulated remains MNI

Eleven features produced disarticulated human remains. Examination provided a site MNI of 7, based on the distal third of the right humeral shaft, for these remains.

7.2.6 Appendix: skeletal summaries (Figs 7-13)

G1, F1 (Fig 10)

Articulated remains were recovered from context 4 and further remains were recovered from context 1. The remains from context 4 represented an individual who was 20% complete and in condition grade 2. The remains appeared to be of adult size.

Remains from context 1 represented an individual who was less than 5% complete and in condition grade 2. The remains appeared to be of adult size and the presence of an additional skull and pelvis provided an MNI of 2 for this feature.

G2, F2 (Fig 7)

Remains were recovered from context 31 and represented an individual who was less than 5% complete and in condition grade 2. Examination of the dentition indicated that this individual was 7.5 to 12.5 years old at the time of death.

G3, F3 (Fig 11)

Articulated remains were recovered from context 10 and further remains were recovered from contexts 2, 3 and 11. The remains from context 10 represented an individual who was 45% complete and in condition grade 3. Assessment of the ventral arc, subpubic concavity and ischiopubic ramus ridge indicated that this individual was male. Examination of the pubic symphysis suggested an age at death of between either 25 to 26 years (Todd) or 19 to 46 years (Suchey/Brooks). Observation of the auricular surface indicated an age at death of 30 to 34 years. Some slight macroporosity was observed on the proximal and distal ends of both left and right femora and tibiae.

The remains from context 2 represented an individual who was 5% complete and in condition grade 3. The remains appeared to be of adult size.

The remains from context 3 represented an individual who was less than 5% complete and in condition grade 3.

The remains from context 11 represented an individual who was less than 5% complete and in condition grade 3. The remains appeared to be of adult size.

The presence of a right tibia in contexts 2 and 10 provides an MNI of 2 for this feature.

G4, F4 (Fig 8)

No human remains were recovered from this feature.

G5, F5 (Fig 12)

Articulated remains were recovered from context 7 and further remains were recovered from context 6. The remains from context 7 represented an individual who was 75% complete and in condition grade 3. Assessment of the ventral arc, subpubic concavity, ischiopubic ramus ridge, greater sciatic notch, nuchal crest, supraorbital margin, glabella and mental eminence indicated that this individual was male. Examination of the left pubic symphysis suggested an age at death of between either 39 to 44 years (Todd) or 23 to 57 (Suchey/Brooks). Observation of the left auricular surface indicated an age at death of 40 to 44 years. Slight macroporosity was observed around the left and right acetabulum, the proximal and distal epiphyses of both femora, the proximal epiphyses of both tibiae and on all

tarsals. Woven bone formation was observed on the lateral aspects of the proximal third of both humeri. This was accompanied by swelling in the area indicating periostitis. Further new bone formation was observed on the lateral mid third of the right radius, ulna and left radius. Osteophyte development was also observed on lumbar and thoracic vertebrae. This was accompanied by some macroporosity on the anterior, superior and inferior aspects of the vertebral centrum.

The remains from context 6 represented an individual who was 10% complete and in condition grade 3. Assessment of the ventral arc, subpubic concavity, ishiopubic ramus, supraorbital margin and glabella indicated that this individual was probably male. Examination of the right pubic symphysis suggested an age of 25 to 26 years (Todd) or 19 to 34 years (Suchey/Brooks) at death. The presence of a right femur, right pubis and ischium, right humerus and three proximal radius epiphyses in contexts 6 and 7 provided an MNI of 2 for this feature.

G6, F6 (Fig 7)
No human remains were recovered from this feature.

G7, F7 (Fig 7)
No human remains were recovered from this feature.

G8, F8 (Fig 7)
No human remains were recovered from this feature.

G9, F9 (Fig 7)
Remains were recovered from context 15 and represented an individual who was 5% complete and in condition grade 2. The sutures of the skull had commenced fusion and moderate to heavy wear was observed on the dentition indicating that this individual was an adult.

G10, F10 (Fig 7)
Remains were recovered from context 43 and represented an individual who was 15% complete and in condition grade 2. Assessment of the nuchal crest, mastoid process, supraorbital margin and glabella indicated that this individual was probably female. The remains appeared to be of adult size. Periostitis was observed on the postero-lateral aspect of the proximal third of both femora. Increased porosity and osteophyte development was observed on the superior and inferior surfaces of the cervical vertebrae. All three molar sockets on the right side appeared to have been remodelled.

G11, F11 (Fig 9)
No human remains were recovered from this feature.

G12A, F13 (Fig 13)
Remains were recovered from context 21 and represented an individual who was 60% complete and in condition grade 4 (Fig 13, child A). The remains were unfused and examination of the dentition indicated an age at death of 6 to 10 years. The left deciduous second molar crown had a carious lesion on the interproximal surface next to the deciduous first molar. Examination for non-metric traits revealed two zygomatico-facial foramen and additional suture bones located in the right side coronal suture and left side lambdoid suture.

G12B, F13 (Fig 13)
Remains were recovered from context 22 and represent an individual who was 60% complete and in condition grade 4 (Fig 13, child B). The remains were unfused and examination of the vertebra and dentition indicated an age at death of 2 to 5 years. Cribra orbitalia was observed. Examination for non-metric traits revealed additional suture bones in the left and right side lambdoid suture.

G13, F14 (Fig 13)
No human remains were recovered from this feature.

G14, F15 (Fig 8)
Remains were recovered from context 16 and represent an individual who was 70% complete and in condition grade 2. Assessment of the nuchal crest, mastoid process, supraorbital margin, glabella and mental eminence indicated that this individual was probably female. Examination revealed that this individual had full adult dentition with heavy wear, and examination of the cranial sutures suggested an age of either 27 to 51 years (vault sites) or 40 to 55 years (antero-lateral sites) at death. The proximal third of the left femur appeared twisted, swollen and bowed. This appears to be the result of a healed oblique fracture. The upper right first molar socket had been remodelled and the upper left second molar crown had a carious lesion on the interproximal surface next to the third molar. Further interproximal caries were observed on the lower right first molar next to both the second molar and the second premolar. Sub-gingival calculus was observed on the buccal surface of the lower right molars.

G15, F16 (Fig 12)
Remains were recovered from context 9 and represented an individual who was 60% complete and in condition grade 4. Examination revealed that the remains were unfused and the dentition indicated that the individual was aged between birth and 1 year at death.

G16, F23 (Fig 11)
Articulated remains were recovered from context 20 and further remains were recovered from context 18. The remains from context 20 represented an individual who was 30% complete and in condition grade 3. The remains appeared to be of adult size. Macroporosity was observed around the distal femoral epiphyses and the proximal and distal epiphyses of the tibiae.

The remains from context 18 represented two individuals. The first individual was 15% complete and in condition grade 3. Assessment of the mastoid process, supraorbital margin, glabella and mental eminence indicated that this individual was probably male. The remains appeared to be of adult size and the individual had full adult dentition with heavy wear. This individual was recorded by the excavator as representing the upper body remains of the individual from F3.

The second individual was less than 5% complete and in condition grade 3. The remains consist of a left tibia and fibula, both of which are small and unfused, indicating that this individual was a child.

The presence of a left fibula and left tibia in contexts 18 and 20 provides an MNI of 2 (1 adult, 1 juvenile) for this feature.

G17, F24 (Fig 11)
Articulated remains were recovered from contexts 19 and 32 and further remains were recovered from contexts 17 and 40. Remains from contexts 19 and 32 represented an individual who was 25% complete and in condition grade 3. The remains appeared to be of adult size. Macroporosity was observed around the distal epiphyses of the femora and around the proximal epiphyses of the tibiae.

Remains from context 17 represented an adult who was 15% complete and in condition grade 3 and a juvenile who was 5% complete and in condition grade 4. This context contained remains which appeared to be of adult size and remains of a juvenile whose dentition indicated an age of 1 to 3 years.

Remains from context 40 represented an individual who was 5% complete and in condition grade 3. The remains appeared to be of adult size.

The presence of a right femur in contexts 17 and 32, two left first metatarsals and two left third metatarsals in context 17 and two right fourth metatarsals in context 19 gives this feature an MNI of 2. A further individual can be added to this number as the juvenile remains from context 17 will provide an MNI of 3.

G18, F25
Remains were recovered from context 32 and represented an individual who was less than 5% complete and in condition grade 3. Examination of the remains revealed the presence of both adult and juvenile elements providing an MNI of 2 for this feature. The presence of a small, unfused ulna suggested a child. This feature did not contain an articulated skeleton, only backfilled bone.

G19, F26 (Fig 10)
Remains were recovered from context 24 and represented an individual who was less than 5% complete and in condition grade 1. The remains appeared very small and porous and the development of an incisor and molar suggested that this individual was aged less than 1 year at death.

G20, F27
Articulated remains were recovered from context 30 and further remains were recovered from context 28. The remains from context 30 represented an individual who was 65% complete and in condition grade 3. The remains were unfused and assessment of the dentition indicated an age of 2 to 5 years.

The remains from context 28 represented an individual who was less than 5% complete and in condition grade 3. The remains appeared to be of adult size. This feature appears to contain one adult and one child providing an MNI of 2. No pathology was observed.

G21, F34 (Fig 9)
Articulated remains were recovered from context 55 and further remains were recovered from context 51. The remains from context 55 represented an individual who was 40% complete and in condition grade 2. Examination revealed that this individual had full adult dentition with heavy wear. Periostitis was observed on the postero-lateral surface of the proximal third of the right femur. Slight macroporosity was observed around the left and right acetabulum.

Remains from context 51 represented an individual who was less than 5% complete and in condition grade 2.

G22, F35 (Fig 10)
Remains were recovered from context 33 and represented an individual who was less than 5% complete and in condition grade 1.

G23, F36 (Fig 11)
Articulated remains were recovered from context 34 and further remains were recovered from context 41. The remains from context 34 represented an individual who was 25% complete and in condition grade 3. Assessment of the ventral arc, subpubic concavity, ischiopubic ramus and greater sciatic notch indicated that this individual was male. Examination of the right pubic symphysis suggested an age of 30 to 35 years (Todd) or 23 to 57 years (Suchey/Brooks) while the auricular surface indicated an age of 40 to 44 years. The mid third of the left tibia had a swollen, twisted appearance. This appeared to be the result of a well-healed oblique fracture which did not unite correctly. Slight macroporosity was observed around the proximal and distal femoral epiphyses, the proximal epiphyses of the tibiae and around the left and right acetabulum. Macroporosity was also observed on the anterior surface of the vertebral centrum and osteophyte development was observed on the lumbar centrum.

The remains from context 41 represented an individual who was less than 5% complete and in condition grade 3. The remains appeared to be of adult size.

G24, F37 (Fig 7)
Remains were recovered from context 48 and represent an individual who was less than 5% complete and in condition grade 2. Remains from this feature appeared to be of adult size, except for a right and left ilium which were extremely small and unfused. This appeared to indicate that this feature contained an adult and a child giving an MNI of 2.

G25, F38 (Fig 11)
Articulated remains were recovered from context 44 and further remains were recovered from context 45. The remains from context 44 represented an individual who was 50% complete and in condition grade 3. The remains were unfused and examination of the dentition suggested an age of 3 to 5 years.

The remains from context 45 represented an individual who was less than 5% complete and in condition grade 3.

It appeared that this feature contained one child and one adult giving an MNI of 2.

G26, F39 (Fig 10)
Remains were recovered from context 46 and represented an individual who was 20% complete and in condition grade 3. The remains were unfused and had a small appearance, suggesting that this individual was a juvenile.

G27, F40 (Fig 13)
Remains were recovered from context 50 and represented an individual who was 20% complete and in condition grade 3. The remains were unfused and had a very small appearance, suggesting that this individual was a child. Also present were adult left second, third and fourth metatarsals. This indicates that this feature contained one adult and one child giving an MNI of 2.

G28, F41 (Fig 10)
Remains were recovered from context 53 and represented an individual who was 45% complete and in condition grade 3. Assessment of the ventral arc, subpubic concavity, ischiopubic ramus ridge and greater sciatic notch indicated that this individual was probably female. Examination of the auricular surface suggested an age of 35 to 39 years. Slight macroporosity was present around the left and right acetabulum, proximal and distal femoral epiphyses and proximal epiphyses of the tibiae.

G29, F42 (Fig 9)
Articulated remains were recovered from context 54 and further remains were recovered from context 52. The remains from context 54 represented an individual who was 20% complete and in condition grade 2. The remains appeared to be of adult size but examination of the dentition revealed no wear and only one upper M3 had erupted suggesting that this individual was a sub to young adult.

The remains from context 52 represented an individual who was less than 5% complete and in condition grade 1. No pathology was observed.

G30, F43 (Fig 9)
Remains were recovered from context 57 and represent an individual who was 30% complete and in condition grade 2. Assessment of the nuchal crest, mastoid process, supraorbital margin, glabella and mental eminence indicated that this individual was probably female. Examination of the dentition revealed heavy wear but no third molar. This may reflect congenital absence in an adult. Slight macroporosity was observed around the left and right acetabulum, the right distal femoral epiphysis and the right proximal epiphysis of the tibia. The lower left first molar crown had broken away leaving only the root. Dental enamel hypoplasia was observed on the upper and lower left canine.

G31, F44
Articulated remains were recovered from context 54 and further remains were recovered from context 58. The remains from context 54 represented an individual who was 20% complete and in condition grade 2. The remains appeared to be of adult size.

The remains from context 58 represented an individual who was less than 5% complete and in condition grade 2. The remains appeared to be of adult size.

G32, F28 (Fig 13)
Articulated remains were recovered from context 29 and further remains were recovered from context 27. The remains from context 29 represented an individual who was 25% complete and in condition grade 3. Examination revealed that the right femoral epiphyses had recently fused while the left femur was fused proximally but unfused distally indicating an age of 12 to 20 years. Slight macroporosity was observed around the epiphyses of the tibiae.

The remains from context 27 represented an individual who was less than 5% complete and in condition grade 3. The remains were unfused, suggesting a juvenile individual. The additional presence of a small porous left femur, tibia and fibula suggest that an individual in their childhood was additionally represented here.

The presence of a juvenile right tibia proximal third in contexts 27 and 29 provided an MNI of 2 for this feature and the presence of a child's remains indicated an MNI of three, ie two juveniles and one child.

G33, F33 (Fig 13)
Articulated remains were recovered from context 38 and further remains were recovered from contexts 35, 36, 37 and 39. The remains from context 38 represented an individual who was 80% complete and in condition grade 3. Examination revealed that the remains were largely unfused except for the vertebra which had fully fused, apart from the annular rings. Assessment of the dentition suggested an age of 11 to 18 years. As the calcaneum had not yet fused it is suggested that this individual belongs in the early sub adult category. A carious lesion was observed on the upper left first premolar on the interproximal surface next to the canine and dental enamel hypoplasia was observed on the lower incisors, canines and premolars. Cribra orbitalia was evident in both orbits.

The remains from context 39 represented an individual who was less than 5% complete and in condition grade 4. The remains were unfused, indicating a juvenile.

The remains from context 37 represented an individual who was less than 5% complete and in condition grade 3. The remains appeared small and unfused, indicating a juvenile.

The remains from context 35 represented an individual who was less than 5% complete and in condition grade 4. The remains were small and unfused, suggesting that this individual was a child.

The remains from context 36 represented an individual who was 5% complete and in condition grade 3. The remains were small, suggesting that this individual was a child.

This feature contains a sub adult and a child providing an MNI of 2.

G34, F45 (Fig 9)
Remains were recovered from context 56 and represented an individual who was 5% complete and in condition grade 2. Examination revealed full adult dentition with very heavy wear which had almost completely destroyed the lower left first and second molar crowns.

F20
Remains were recovered from context 12 and represented an individual who was less than 5% complete and in condition grade 2. Assessment of the dentition indicated that this individual was aged between 1 and 3 years at the time of death.

U/S
Further unstratified remains were recovered from the site. These represented at least one individual who was 5% complete and in condition grade 3. Further to this, a skull was also recovered. This individual's spheno occipital synchondrosis had fused, indicating that they were an adult. Observation of the supra orbital margin, glabella, nuchal crest, mastoid process and mental eminence suggested that this individual was probably male.

7.3 The medieval pottery

by Howard Brooks

This is a small group of medieval sandy grey ware (Fabric 20: Table 3. This fabric occurs principally in Colchester ceramic phases 3.1-4.1 (AD 1150-1500), although smaller quantities occur in phases 2.4 (AD 1150-1200), and 4.2-5.2 (AD 1450-1700: *CAR* **7**, 15). There are two rims, both rather upright, which may be late types (*CAR* **7**, 94). The group would therefore seem to date to the 13th or 14th centuries rather than the 12th. Several rims are sooted, showing that there was cooking somewhere in the vicinity. Normally, this would mean there is a domestic kitchen nearby.

Table 3: medieval pottery (weights in grammes).

Bag no	Context	Grave	Qt	Wt	Description
11	F3	G3	1	16	Fabric 20: body sherd
14	F15	G14	2	25	Fabric 20: body sherd; heavily sooted body sherd
26	F29		6	51	Fabric 20: rim sherd; four body sherds, two sooted
32	F25	G18	1	34	Fabric 20: slightly sooted body sherd
42	F36	G23	2	46	Fabric 20: base angle sherd; slightly sooted body sherd
47	F10	G10	3	29	Fabric 20: rim sherd; two body sherds

7.4 Other finds

by Howard Brooks

Forty-two items weighing 3.16kg are catalogued below (Table 4). The largest group is residual Roman brick and tile (11 items, 2.58kg). A single Roman potsherd was recovered (17g).

Table 4: other finds (weights in grammes).

Bag no	Context	Grave	Qt	Wt	Description
4	F1	G1	1	23	*Bos* molar
4	F1	G1	1	145	Roman brick fragment
4	F1	G1	1	11	Peg-tile fragment (no peg hole)
6	F5	G5	1	18	Oyster shell fragment
6	F5	G5	1	2	Cockle shell
8	F19		1	40	Peg-tile fragment
11	F3	G3	1	113	Roman tile fragment
11	F3	G3	10	10	Crushed bone fragments
12	F20		1	34	Peg-tile fragment with edge of peg hole
12	F20		1	12	Brick or tile fragment, prob post-medieval
13	F21		1	885	Roman brick fragment
14	F15	G14	1	17	Roman storage jar body sherd
23	F13	G12	1	8	Oyster shell fragment
23	F13	G12	1	4	Cockle shell
23	F13	G12	1	39	Roman flue tile fragment
23	F13	G12	1	42	Roman *imbrex* fragment
23	F13	G12	1	102	Roman brick fragment
23	F13	G12	4	291	Peg-tile fragments, one with square hole
25	F30		1	278	Roman tile fragment
26	F29		1	9	Roman tile fragment
27	F28	G32	1	885	Roman brick fragment
27	F28	G32	1	30	Peg-tile fragment, no hole
27	F28	G32	1	29	Peg-tile fragment
28	F27	G20	1	66	Roman tile fragment
42	F36	G23	1	3	Oyster shell fragment
42	F36	G23	1	1	Charcoal fragment
45	F38	G25	2	10	Oyster shell fragments
47	F10	G10	2	62	Peg-tile fragments
Totals			**42**	**3,169**	

Comment

Apart from the sherds of medieval sandy grey ware (Fabric 20) from five of the graves, dating probably to the 13th or 14th century, the only other dated material from the graves is peg-tile. Whilst peg-tiles are generally of medieval and post-medieval date, the absence of early medieval nibbed tile would rule out a very early medieval date. The presence of a square peg hole may also be an indicator of date because round peg holes (for wooden pegs) are arguably earlier, whereas square peg holes (for iron nails) are arguably later. Admittedly, this is not a conclusive argument, but one which would support a later medieval date (perhaps 15th-16th century) rather than an earlier one (11th-14th century). If this were so, then the pottery would appear to be slightly residual.

The presence of a relatively large amount of Roman material (all residual) is worthy of comment. There are two sources for this material. First, the adjacent now-ruined church which contains Roman brick (EHER no 11725). Second, the Roman villa, the site of which is thought to be very close to the excavation site and is not immediately recognisable '*in the field to the east of gate at Butcher Green*' (Henry Laver, quoted in EHER no 11726). It is tempting to say that the large lumps of Roman brick from G32 and post-hole F21 are most likely to have dropped off the ruined church. However, this is unlikely because the church was largely intact until major alterations in the early 17th century (above section 3.3; EHER no 11728). It seems more likely that the Roman brick and tile is derived from the nearby Roman villa site (EHER no 11726).

8 Discussion and interpretation

This excavation has provided a very limited sample of an Essex medieval graveyard. However, a number of deductions can be made. The location and density of the excavated burials (including those identified at evaluation stage), suggest a fairly full graveyard. There were thirty-four graves in an area of some 25m^2, which is approximately 2% of the available area north of the church. Therefore, an estimate of at least 1,700 burials north of the church is not unreasonable. Rodwell (1981, 134) has suggested a figure of 10,000 burials in a graveyard in use for a millennium or so. By that reckoning, and assuming a higher density of burials south of the church, this graveyard (which was out of use by 1601) may contain approximately 5,000 burials.

It is generally held that burial on the south side of a church was preferred, and that the north side was only used for social undesirables, or when the south side became full. It is not really possible to test this hypothesis here, except to say that the absence of grave goods and the lack of coffins means that the burials are clearly not those of conspicuously wealthy parishioners. The question of whether the burials on the south side of the church are those of wealthier parishioners can only be answered by future investigation.

One point raised by the AS evaluation is the question of domestic settlement on the site. In an area mostly south of the CAT excavation site, AS recorded several pits and ditches, which yielded a considerable amount of medieval pottery. Some of the potsherds were sooted, which indicates that they had been used for cooking. The pits are also suggestive of domestic activity, although there were no signs of domestic buildings. It was expected that more evidence of this domestic activity might be observed during the excavation stage, but, in fact, no pits or medieval pottery were found. The conclusion is that if there was any domestic activity on this site before the spread of the graveyard, then it did not extend as far north as the excavated area. Further, it may be the case that the pottery from the AS evaluation dates the earlier domestic phase, and is residual to the graveyard phase. If so, this would support the idea that the domestic phase dated to the 12th and 13th centuries (based on the AS evaluation results) and the graveyard was a later phase, perhaps starting in the 14th-15th centuries. The church was enlarged in the early 15th century, and so the graveyard should have been in constant use then (EHER no 11728). The final period of use of the graveyard should immediately precede the

year 1601, when the church was considerably altered and reduced in size and became a private chapel for the Swinerton family (EHER no 11728).

Comparisons with other published medieval cemeteries is difficult, because there are actually very few, and none of them are large groups. In Colchester, small medieval burial groups are published from St Mary Magdalen's hospital, 68 burials (Crossan 2003); St John's abbey, 33 burials (*CAR* **1**, 40-46); and St Giles' church, 11 burials (*CAR* **9**, 221-35). The group from the Chelmsford Dominican priory is unpublished. However, St Mary Magdalen's is a group from a hospital, and the St Giles' church and St John's abbey groups are from a monastic site which may not be closely comparable to the burials from the rural parish church of All Saints' church at Great Stanway.

9 Acknowledgements

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The project was managed by Howard Brooks. The watching brief on the topsoil strip was conducted by Jessamy Doman and Laura Pooley. The excavation stage was managed on site by Chris Lister, with Lawrence Driver, Nicky Garland, Brian Hurrell, David Ross, and Emma Sanford. The project was monitored by Martin Winter, Colchester Borough Council Archaeology Officer.

10 References

Archaeological Solutions	2005	Proposed orang-utan enclosure, Colchester Zoo, Stanway, Colchester, Essex: an archaeological evaluation, AS Report 1730
Aufderheide, A C, & Rodriguez-Martin, C R,	1998	*The Cambridge encyclopaedia of human paleopathology*
Benfield, S	1996	A watching brief at Colchester Zoo, Stanway, Colchester, May 1996, unpublished CAT archive report, CAT project code 5/96b
Buikstra, J E, & Ubelaker, D H (eds)	1994	*Standards for data collection from human skeletal remains*
CAR **1**	1981	*Colchester Archaeological Report* **1**: Aspects of Anglo-Saxon and Norman Colchester, by P Crummy
CAR **11**	1994	*Colchester Archaeological Report* **11**: *Camulodunum 2*, by C F C Hawkes & P Crummy
CAR **7**	2000	*Colchester Archaeological Report* **7**: *Post-Roman pottery from excavations in Colchester 1971-1985*, by John Cotter
CAR **9**	1993	*Colchester Archaeological Report* **9**: *Excavations of Roman and later cemeteries, churches and monastic sites in Colchester*, 1971-88, by N Crummy, P Crummy & C Crossan
CAT Report 139		Archaeological monitoring at Wallace's Field, Tarmac Colchester Quarry, Stanway, Colchester, Essex, unpublished CAT archive report, by Howard Brooks, 2001
CM	2002	*Guidelines on standards and practices for archaeological fieldwork in the Borough of Colchester*
CM	2003	*Guidelines on the preparation and transfer of archaeological archives to Colchester Museums*
Cox, M	2000	Ageing Adults from the Skeleton, in *Human osteology: in archaeology and forensic science*, by M Cox and S Mays, 61-81
Crossan, C	2003	'Excavations at St Mary Magdalen's hospital, Brook Street, Colchester', in *Essex Archaeol Hist*, **34**, 91-154
Cunningham, C M	1985	'A typology for post-Roman pottery in Essex', in *Post-medieval sites and their pottery: Moulsham Street, Chelmsford*, by C M Cunningham and P J Drury 1985, Chelmsford Archaeological Trust Report **5** and Council for British Archaeology Research Report **54**, 1-16

EAA **3**	1997	*Research and archaeology: a framework for the Eastern Counties 1. Resource assessment,* East Anglian Archaeology, Occasional Papers, **3**, ed by J Glazebrook
EAA **8**	2000	*Research and archaeology: a framework for the Eastern Counties 2. Research agenda and strategy*, East Anglian Archaeology, Occasional Papers, **8**, ed by N Brown & J Glazebrook
EAA **14**	2003	*Standards for field archaeology in the East of England*, East Anglian Archaeology, Occasional Papers, **14**, ed by D Gurney
Hoppa, R D	2000	Population Variation in Osteological aging criteria: an example from the Pubic Symphysis, *American Journal of Physical Anthropology*, **111**, 185-91
Hull, M R	1958	*Roman Colchester* , Reports of the Research Committee of the Society of Antiquaries of London, no **20**
IFA	1999	*Standard and guidance for archaeological excavation*
IFA	2001	*Standard and guidance for the collection, documentation, conservation and research of archaeological materials*
Key, C A, Aiello, L C, & Molleson, T,	1994	'Cranial suture closure and its implications for age estimation', in *International Journal of Osteoarchaeology*, **4**, 193-207
MAP 2	1991	Management of archaeological projects, 2nd edition (English Heritage)
North, J J	1980	*English Hammered Coinage I* (London)
PAS	2005	http://www.finds.org.uk/medievalcoins/shortcross.php (Portable Antiquities Scheme website)
Rodwell, W, & Rodwell, K	1977	*Historic churches – a wasting asset*, CBA Research Report, **19**
Rodwell, W	1981	*The archaeology of the English church*
White, T D, & Folkens, P A	2000	*Human osteology second edition*

11 Glossary

context	specific location on an archaeological site, especially one where finds are made
EHER	Essex Historic Environment Record
feature	an identifiable thing like a pit, a wall, a drain, a floor; can contain 'contexts'
medieval	post-Norman Conquest, up to *c* AD 1530
MNI	minimum number of individuals
NGR	National Grid Reference
natural	geological deposit undisturbed by human activity
Roman	the period from AD 43 to around AD 430
residual	out of its context, eg a Roman coin in a Victorian pit
U/S	unstratified

12 Archive deposition

The finds, digital and paper archive are held by the Colchester Archaeological Trust at 12 Lexden Road, Colchester, Essex CO3 3NF. It is the intention that the human remains will be reburied on site at some stage during the building works. The remaining part of the archive will be permanently deposited with Colchester Museums, under accession code 2005.104.

13 Site data

Table 6: site context data.

Context	Description	Sealed/cut by	Associated human finds nos	Other finds nos	Context date
F1	G1	L2	4		medieval
F2	G2	L2	31		medieval
F3	G3	L2, F18, F23	10		medieval
F4	G4	L2, F15			medieval
F5	G5	L2	7	6 (disart bone)	medieval
F6	G6	L2			medieval
F7	G7	L2, F6			medieval
F8	G8	L2, F8			medieval
F9	G9	L2, F8	15		medieval
F10	G10	L2	43		medieval
F11	G11	L2			medieval
F12	Tree pull	L2			modern
F13	G12 (double)	L2, F12, F16	21, 22		medieval
F14	G13	L2, F12			medieval
F15	G14	L2, F1	16		medieval
F16	G15	L2	9		medieval
F17	Post-hole	L2			
F18	Post-hole	L2			modern
F19	Post-hole	L2			
F20	Post-hole	L1			
F21	Pit	L2			
F22	Pit	L2			
F23	G16	L2, L19, F24	20		medieval
F24	G17	L2, F20, F25	19		medieval
F25	G18	L2, F19, F27			medieval
F26	G19	L2	24		medieval
F27	G20	L2, F3, F27	30		medieval
F28	G32 [4]	L2, F13, F14	29		medieval
F29	Ditch (inner)	L2, F31			medieval?
F30	Ditch (outer)	L2, F31			medieval?
F31	Foundations	-			modern
F32	Post-hole	L2			modern
F33	G33 [5]	L2	38, 39 (inf)		medieval
F34	G21	L2, F43	55		medieval
F35	G22	L1, L2	33		medieval
F36	G23	F25, F27	34		medieval
F37	G24	L2	48	49 (nail)	medieval
F38	G25	L2, F24	44		medieval
F39	G26	L2	46		medieval
F40	G27	L2	50		medieval
F41	G28	L2, F39	53		medieval
F42	G29	F34, F35, F43	52		medieval
F43	G30	L2	57		medieval
F44	G31	L2, F43	58		medieval
F45	G34	L2	56		medieval
L1	Topsoil	-			modern
L2	Subsoil	L1			-
L3	Natural sand	L2			-
L4	Demolition layer	L2			med/post-med?
L5	Demolition lens	L4			med/post-med?

[4] originally incorrectly numbered G20, renumbered by HB

[5] originally incorrectly numbered G20, renumbered by HB

Distribution list:
Colchester Zoo
Johnson Dennehy Planning Partnership (Mr Peter Johnson)
Martin Winter, Archaeology Officer for Colchester Borough Council
Essex Historic Environment Record, Essex County Council

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email: archaeologists@catuk.org

Checked by: *Philip Crummy*
Date: *29.11.05*

adams c:/reports05/colchester zoo/report346.doc

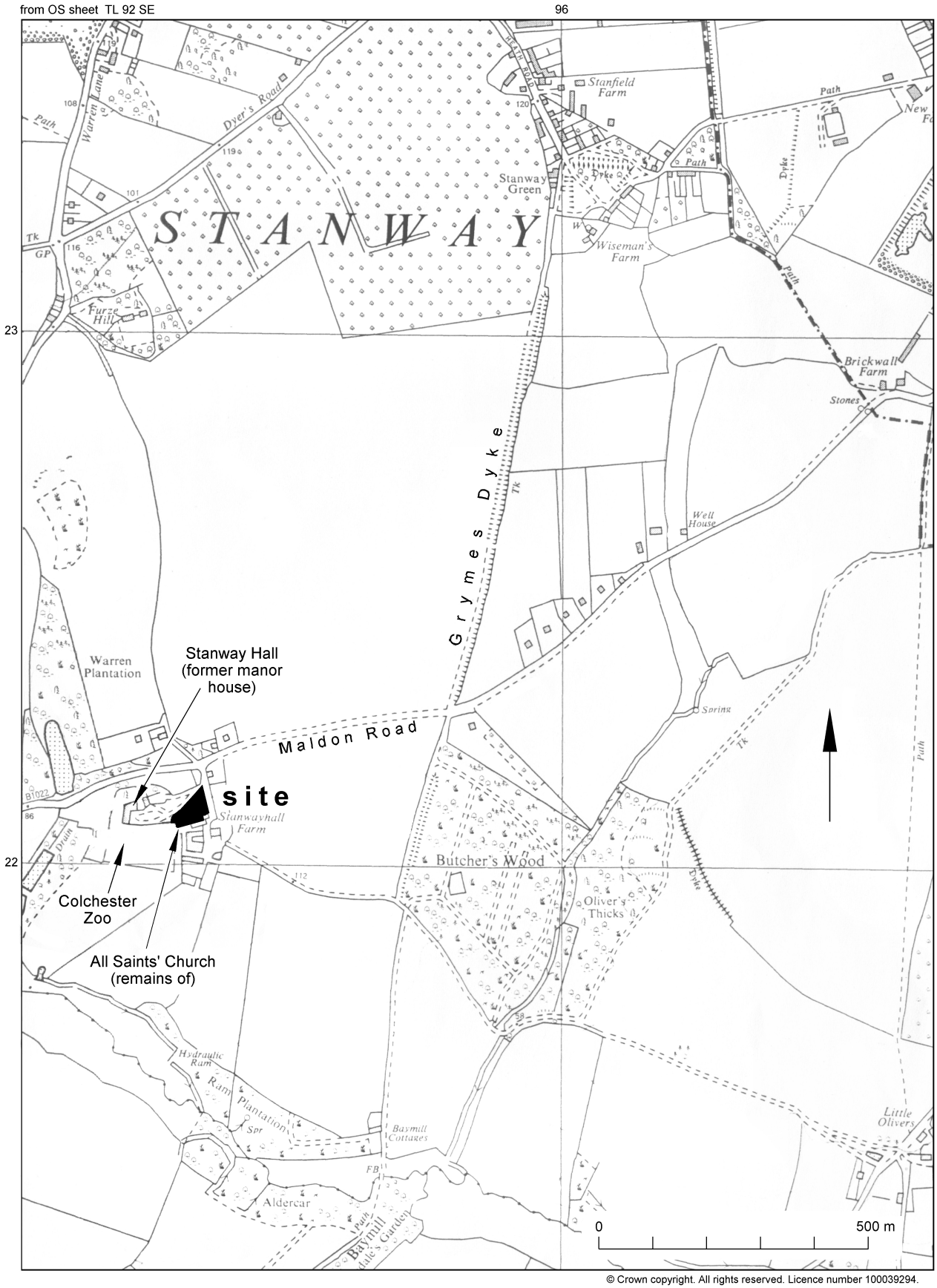

Fig 1 Site location.

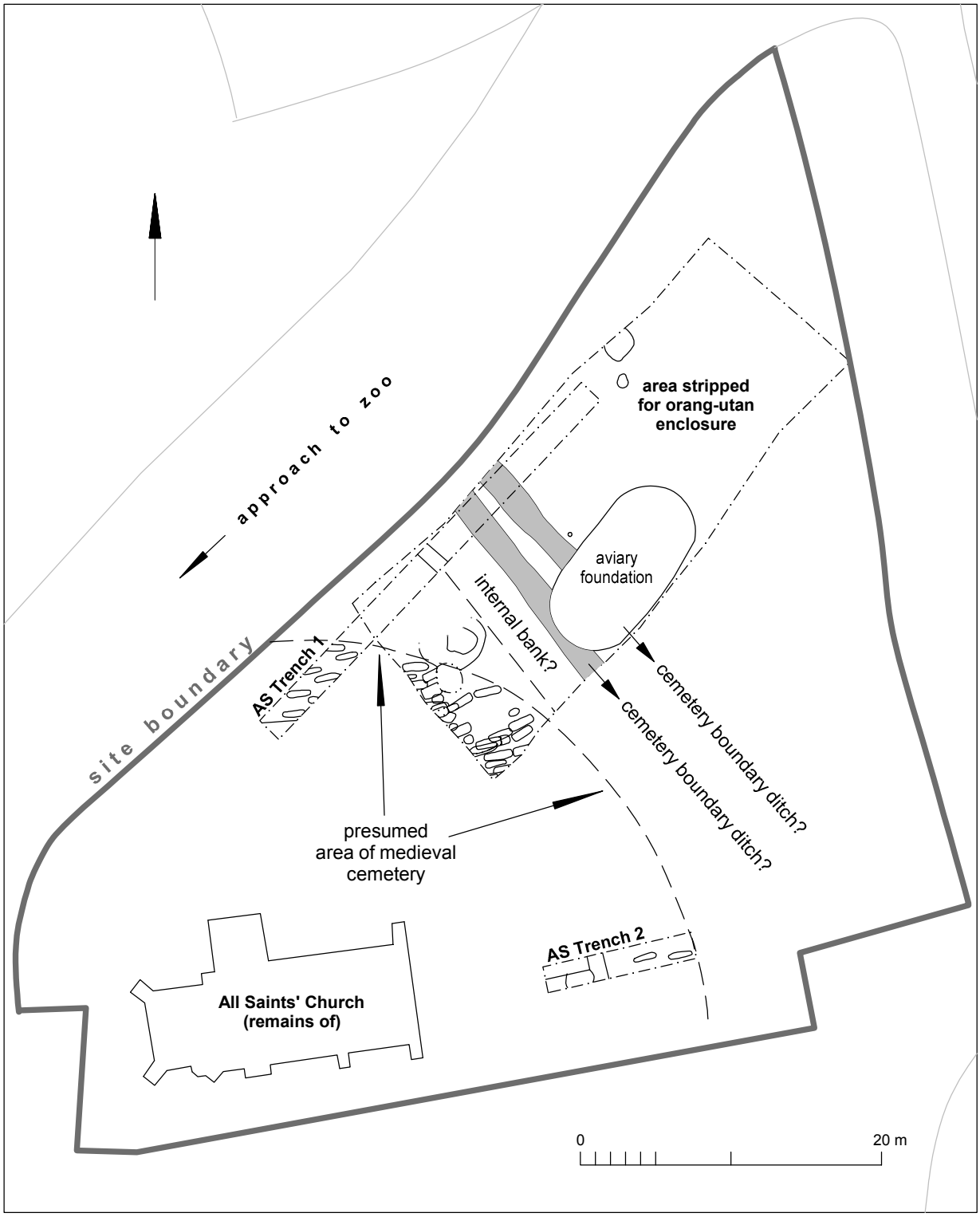

Fig 2 All Saints' Church, with medieval cemetery and boundary ditches, and Archaeological Solutions (AS) evaluation trenches 1 and 2 .

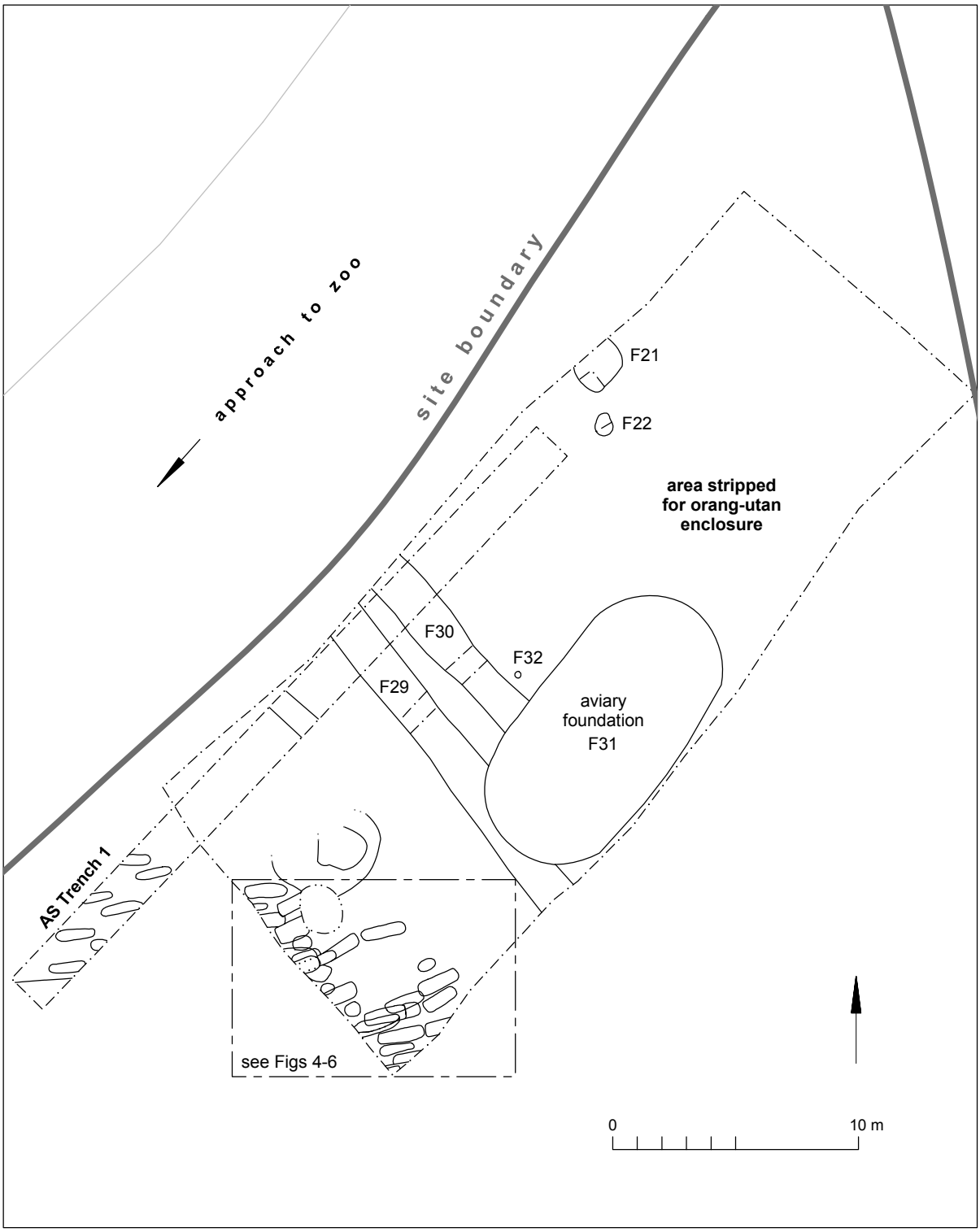

Fig 3 Plan of features.

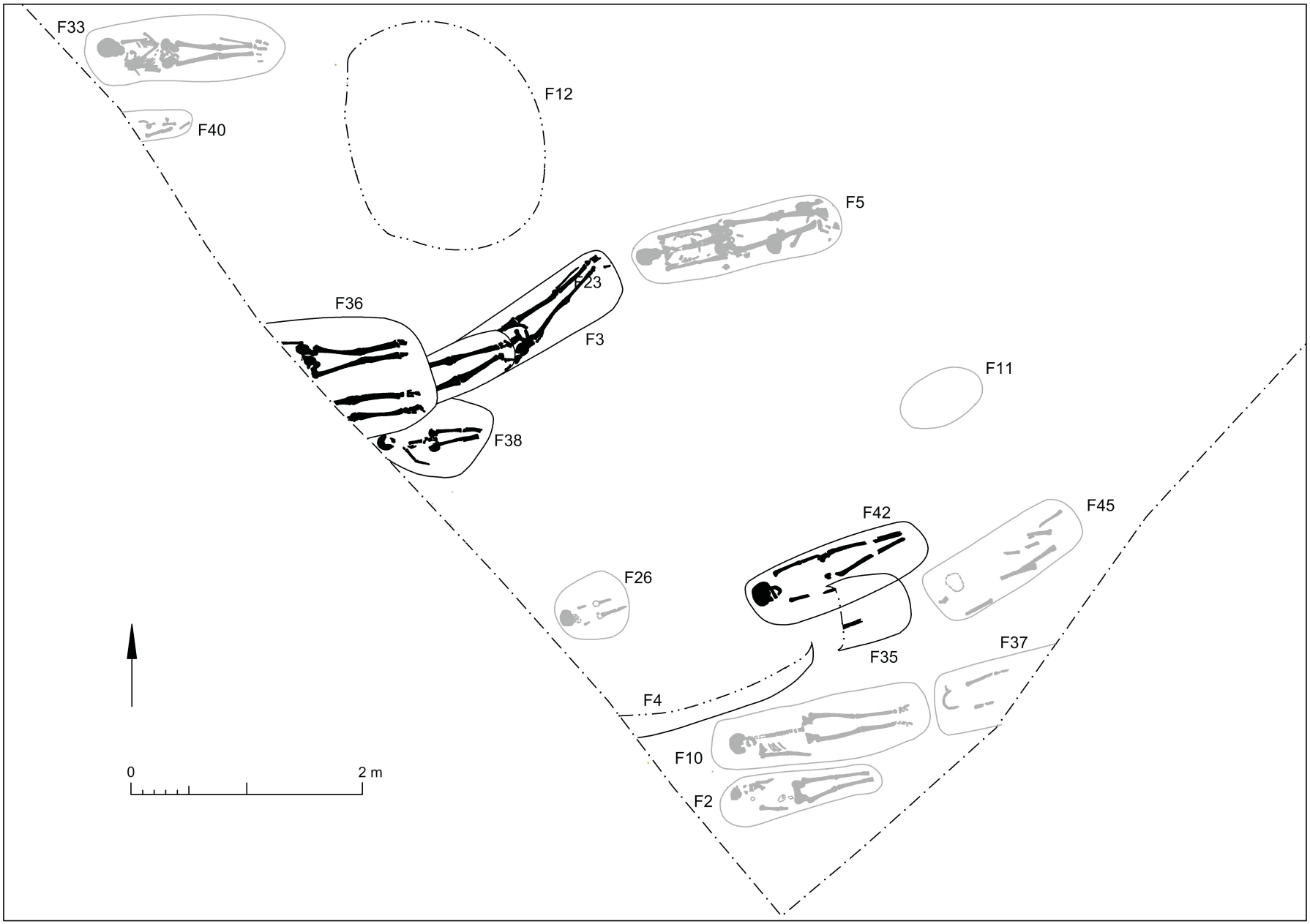

Fig 4 All Saint's medieval cemetery: early phase (and unphased burials - in grey).

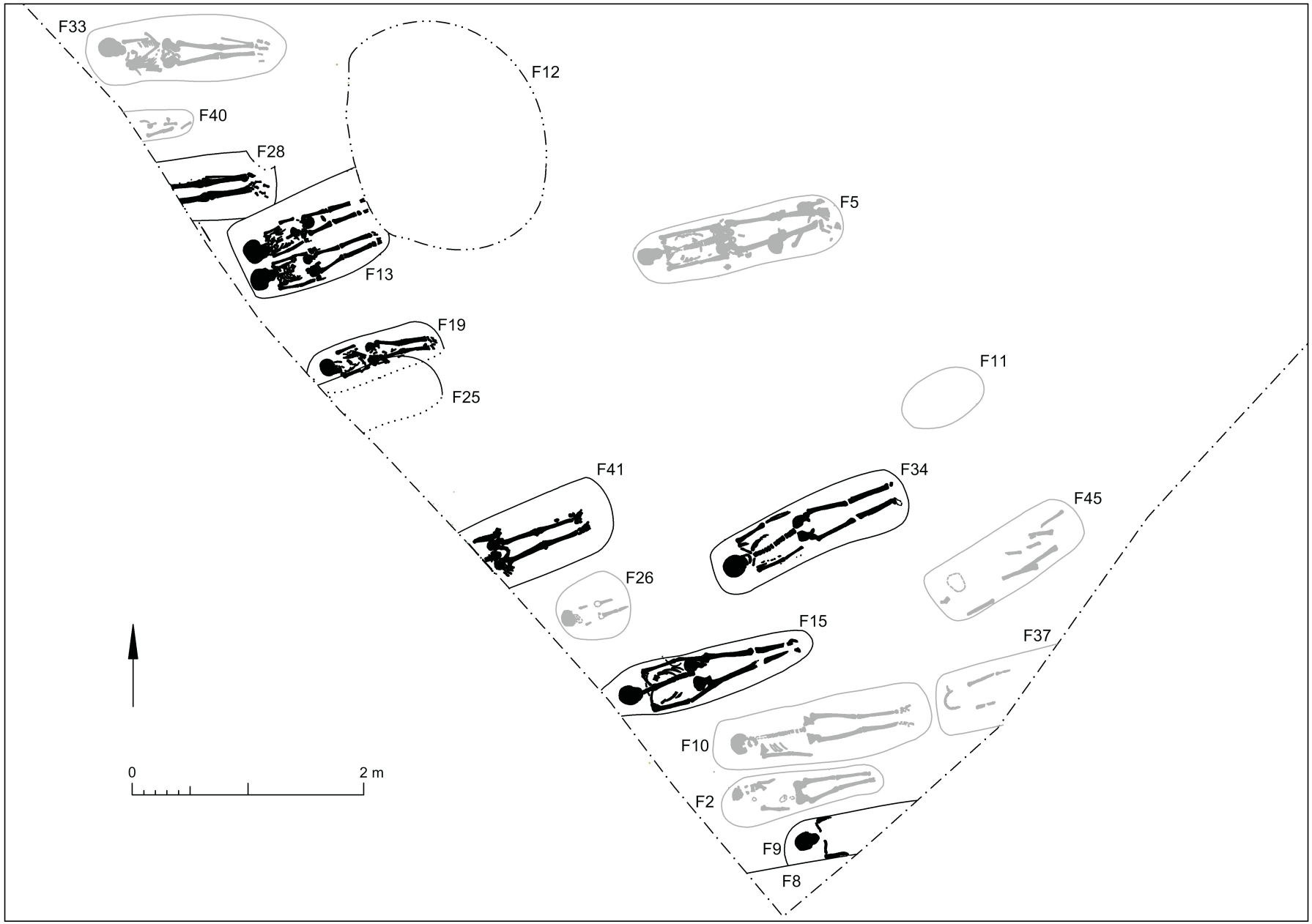

Fig 5 All Saint's medieval cemetery: middle phase (and unphased burials - in grey).

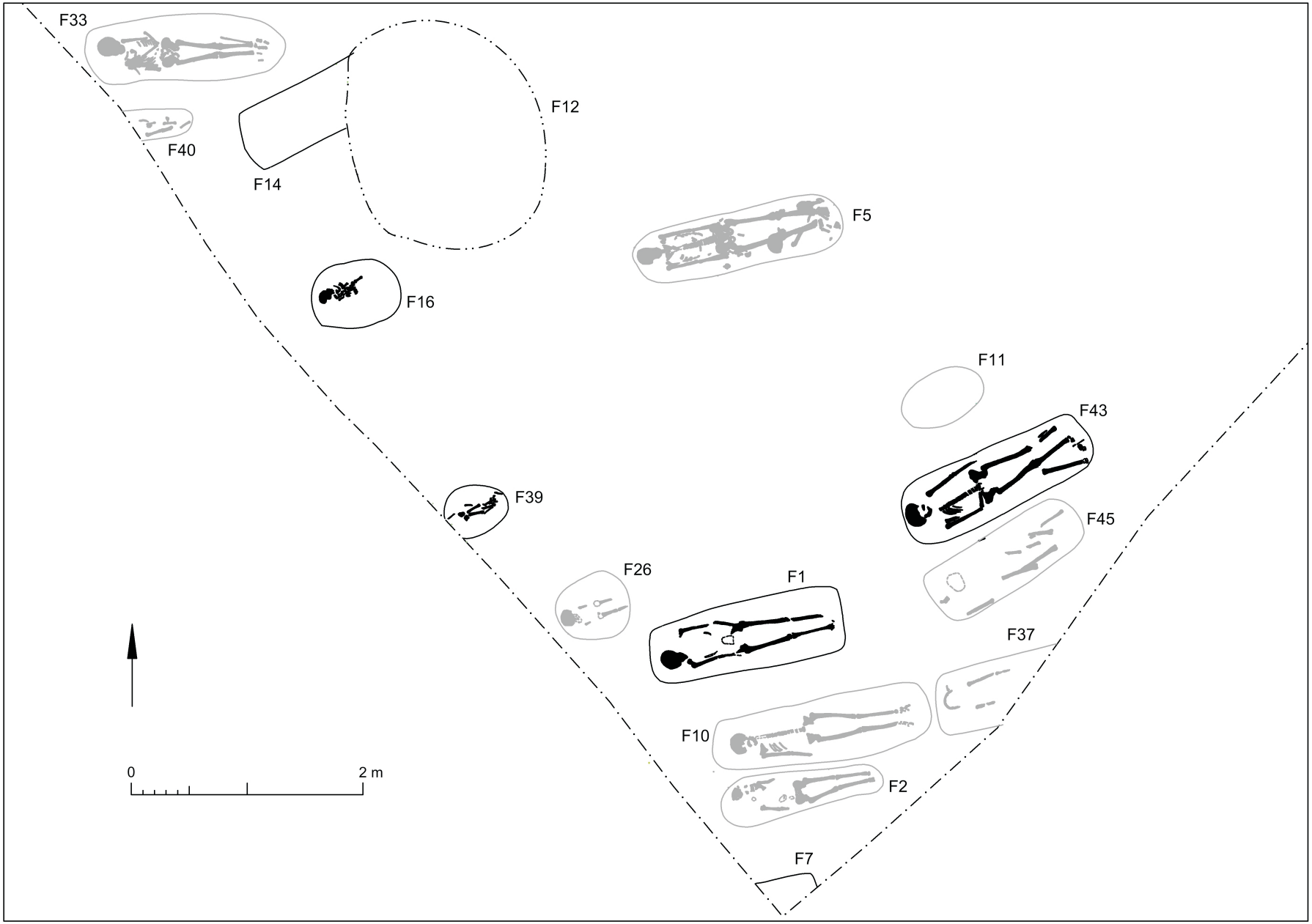

Fig 6 All Saints' medieval cemetery: latest phase (and unphased burials - in grey).

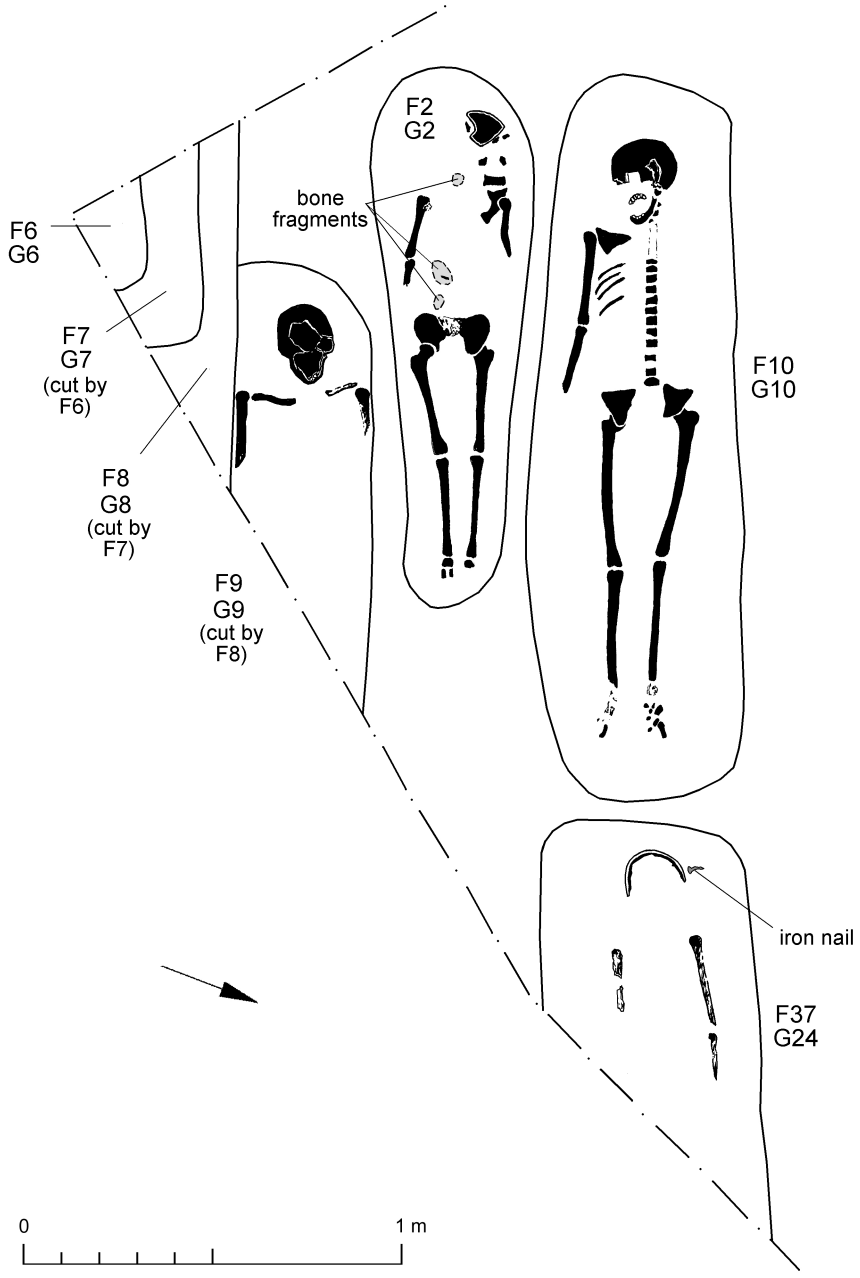

Fig 7 Inhumations F2, F6, F7, F8, F9, F10 and F37.

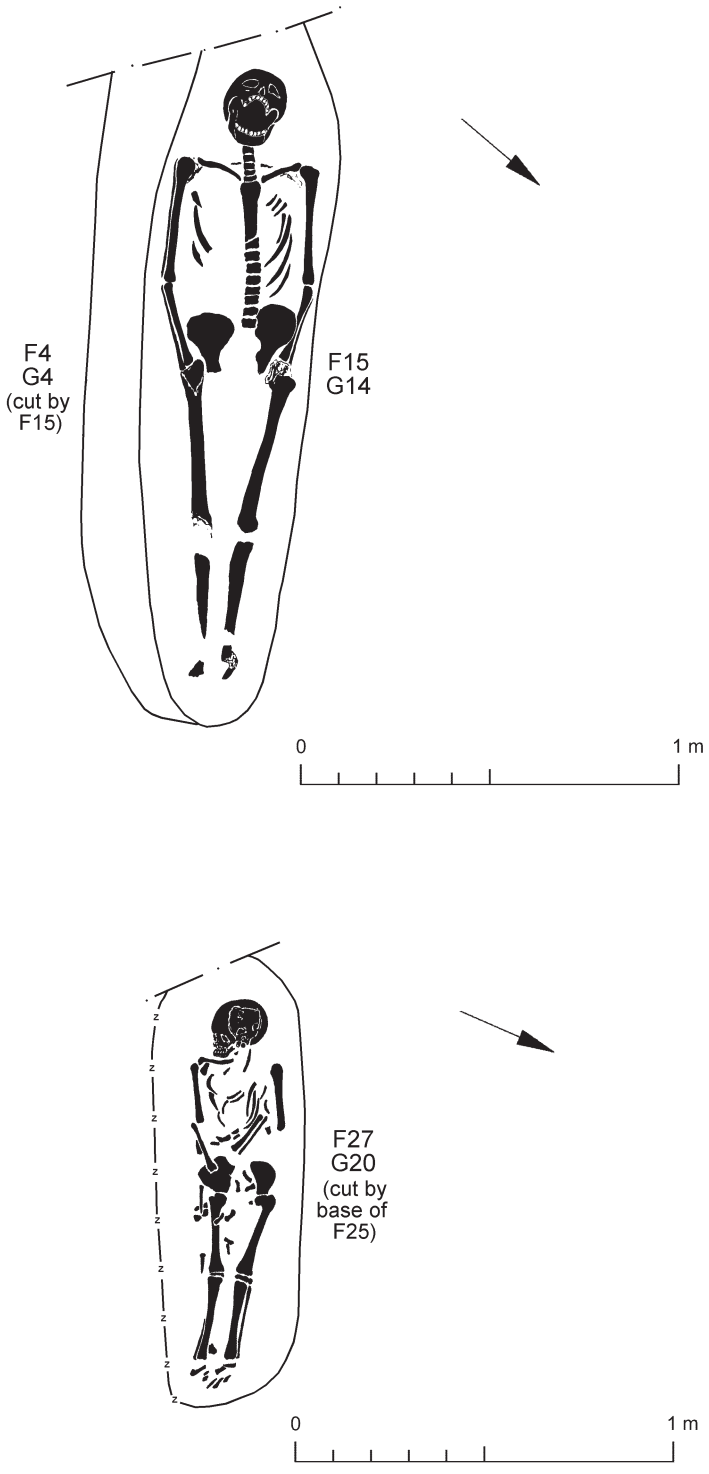

Fig 8 Inhumations F4 and F15.

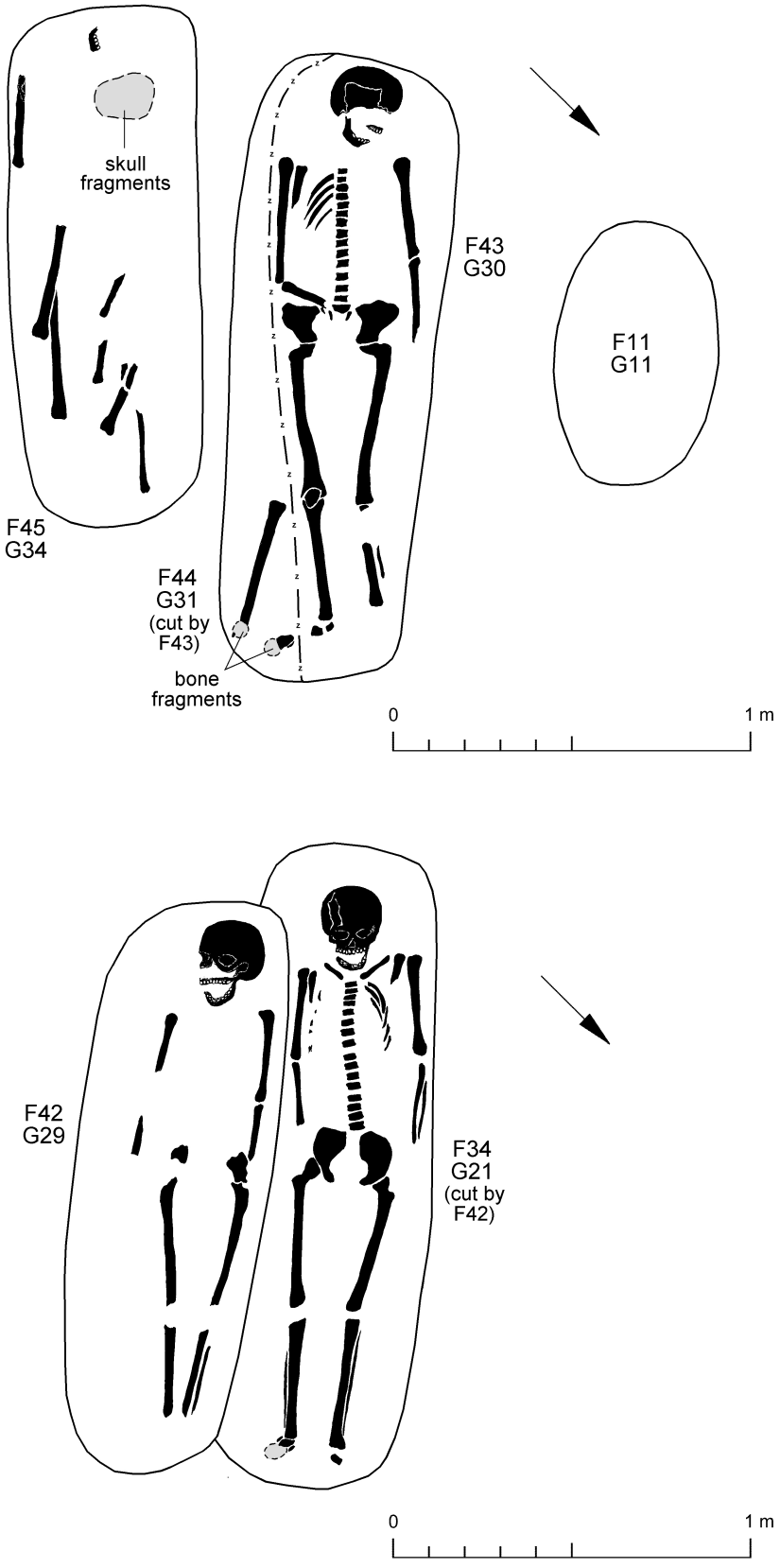

Fig 9 Inhumations F11, F34, F42, F43 and F45.

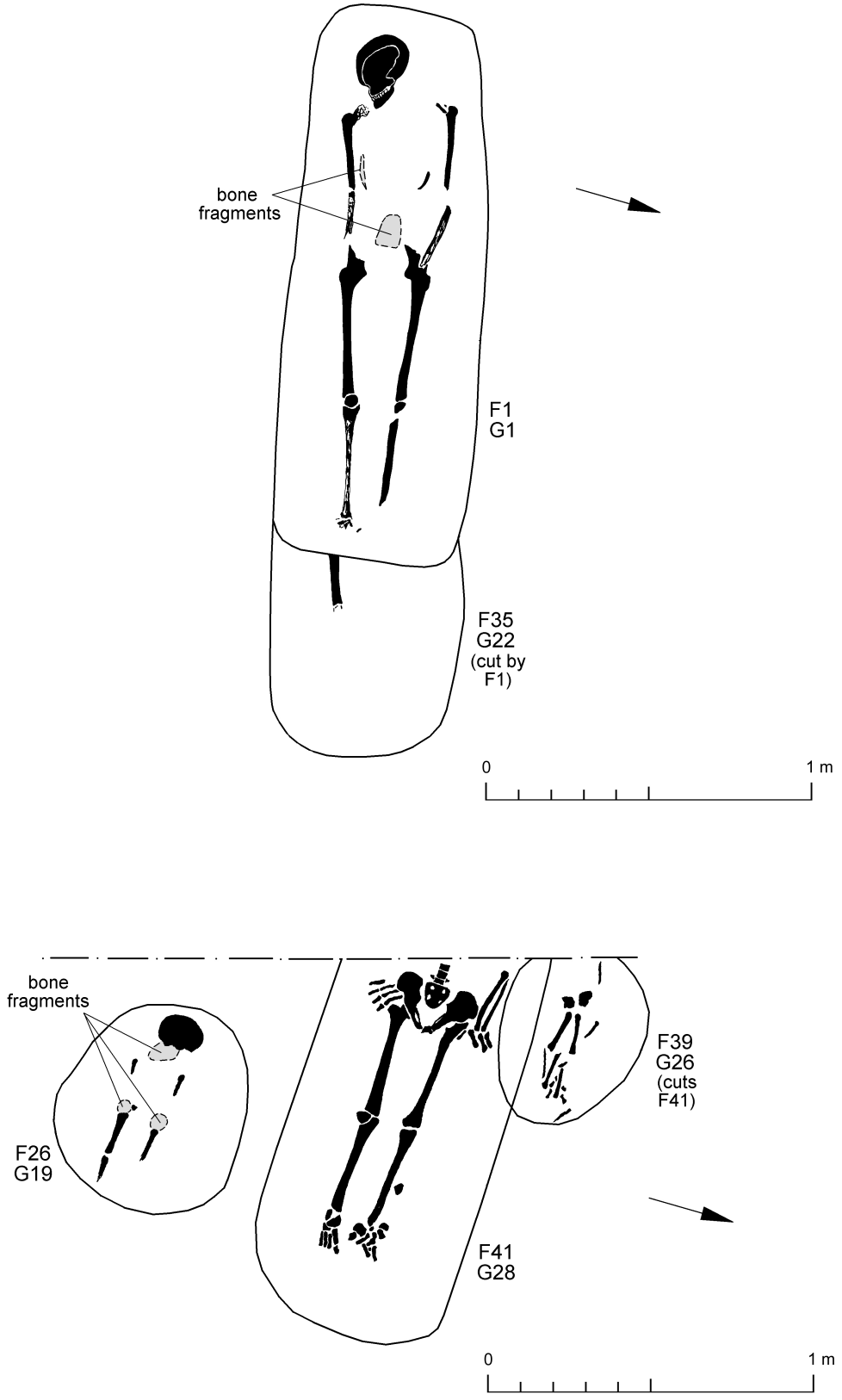

Fig 10 Inhumations F1, F26, F35, F39 and F41.

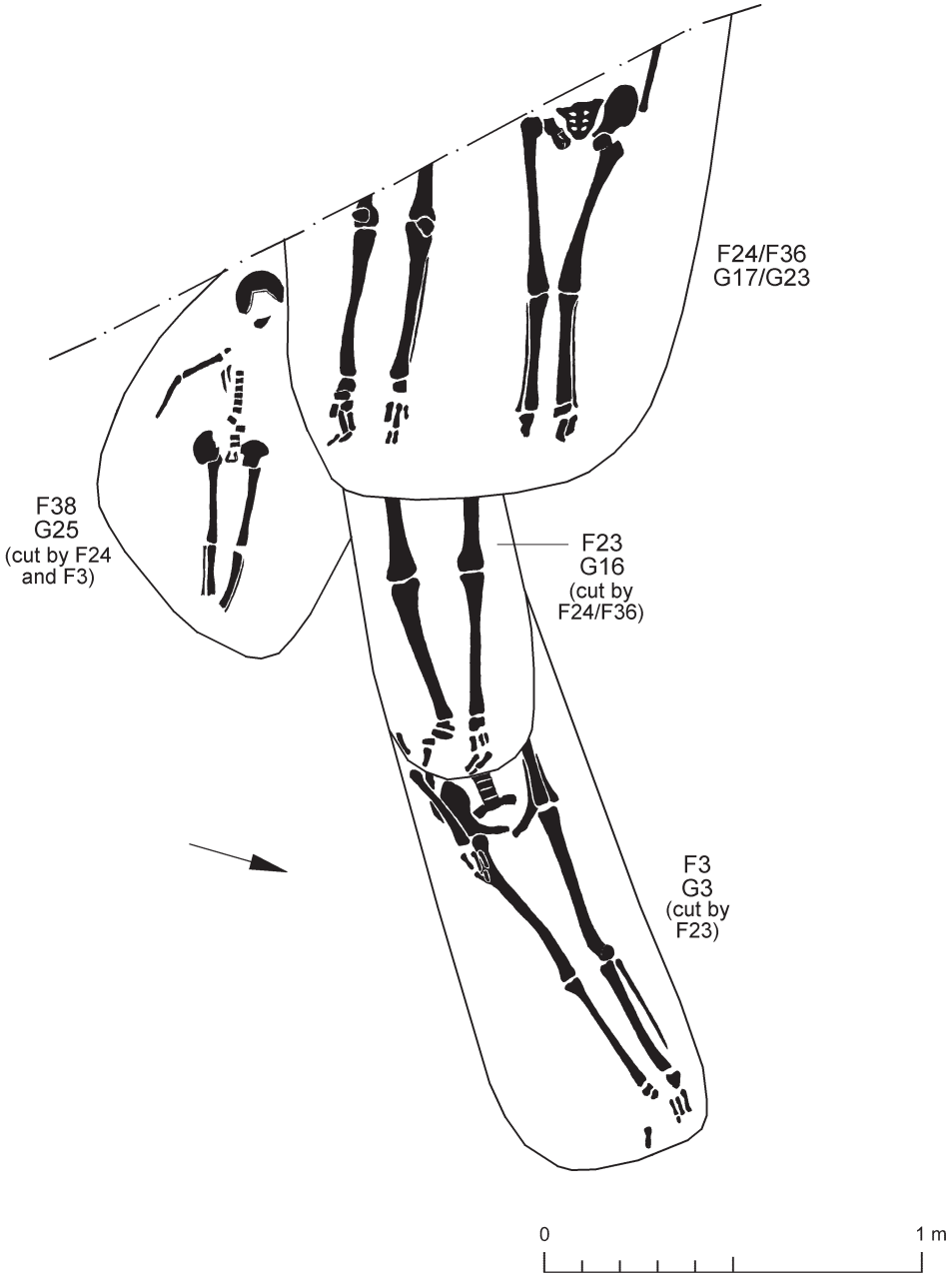

Fig 11 Inhumations F3, F23, F24/F36 (double grave) and F38.

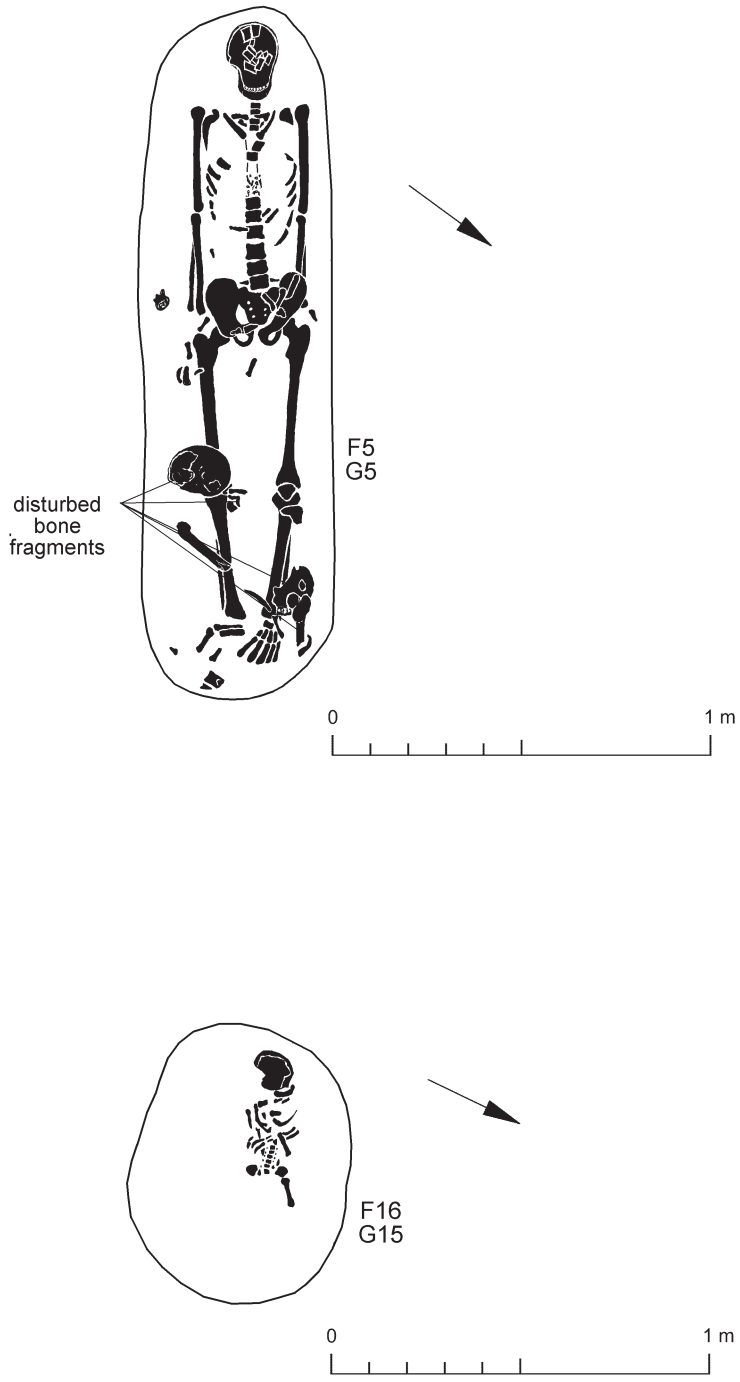

Fig 12 Inhumations F5 and F16.

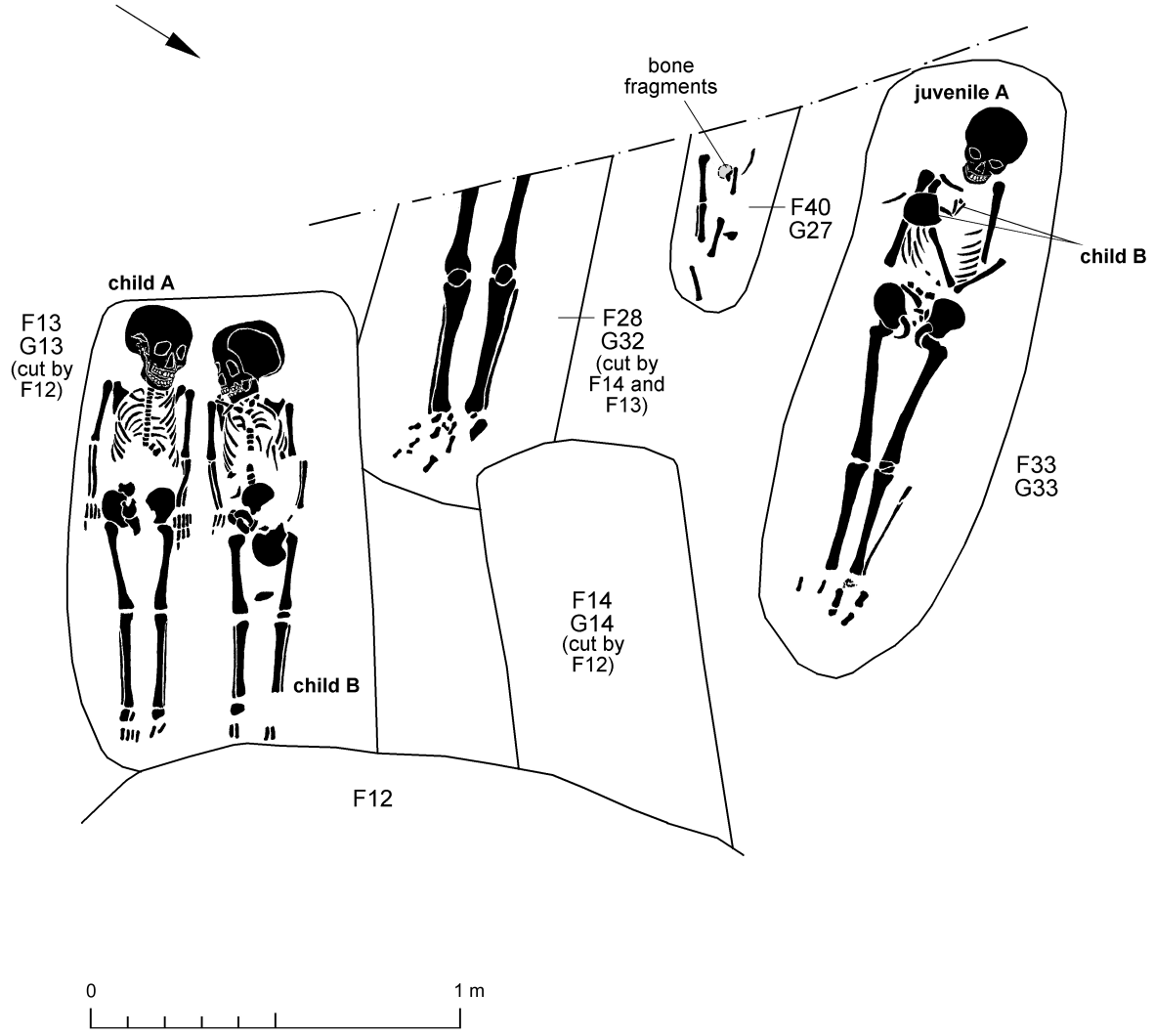

Fig 13 Inhumations F13 (double burial), F14, F28, F33 (double burial) and F40.

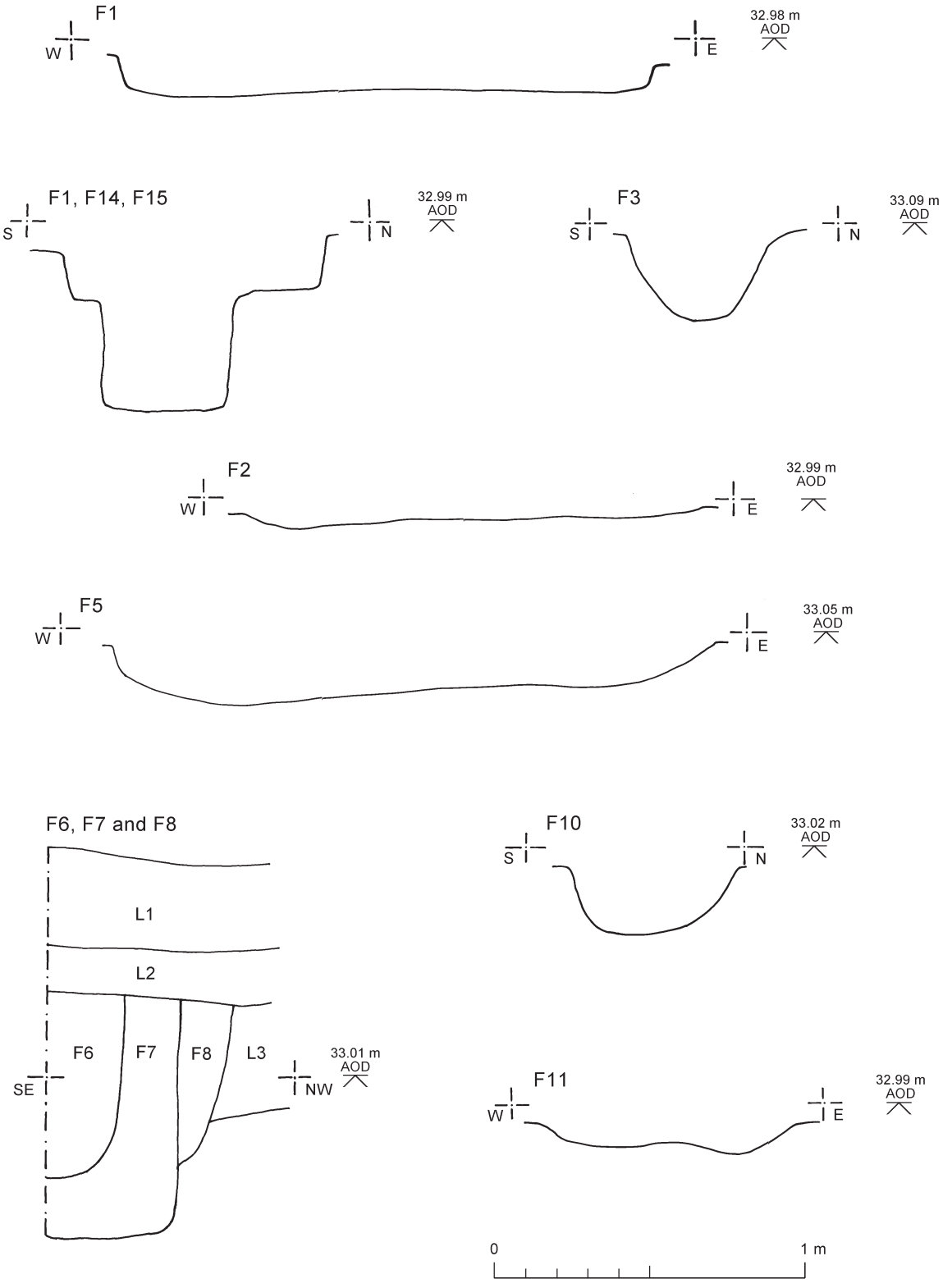

Fig 14 Section sheet 1.

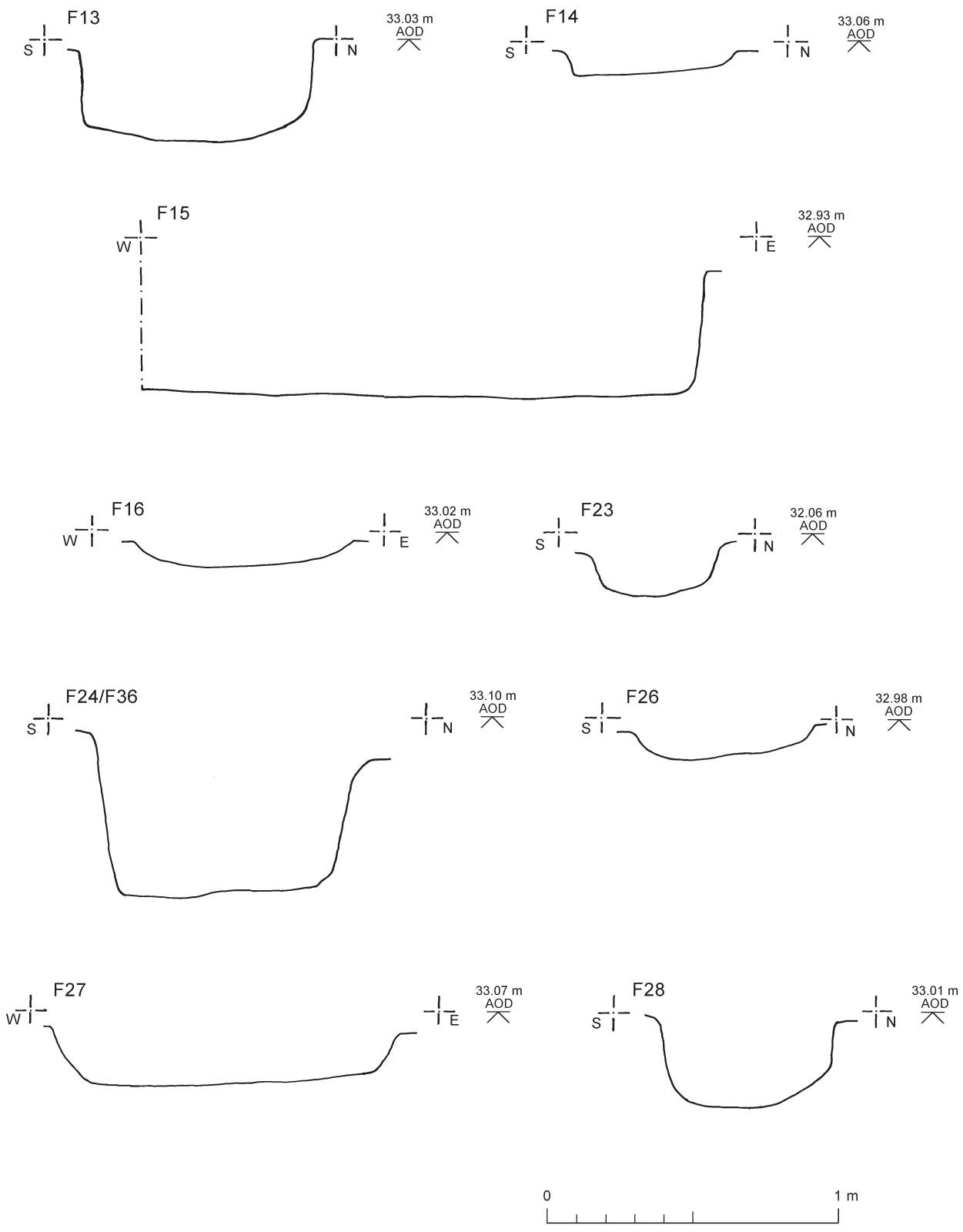

Fig 15 Section sheet 2.

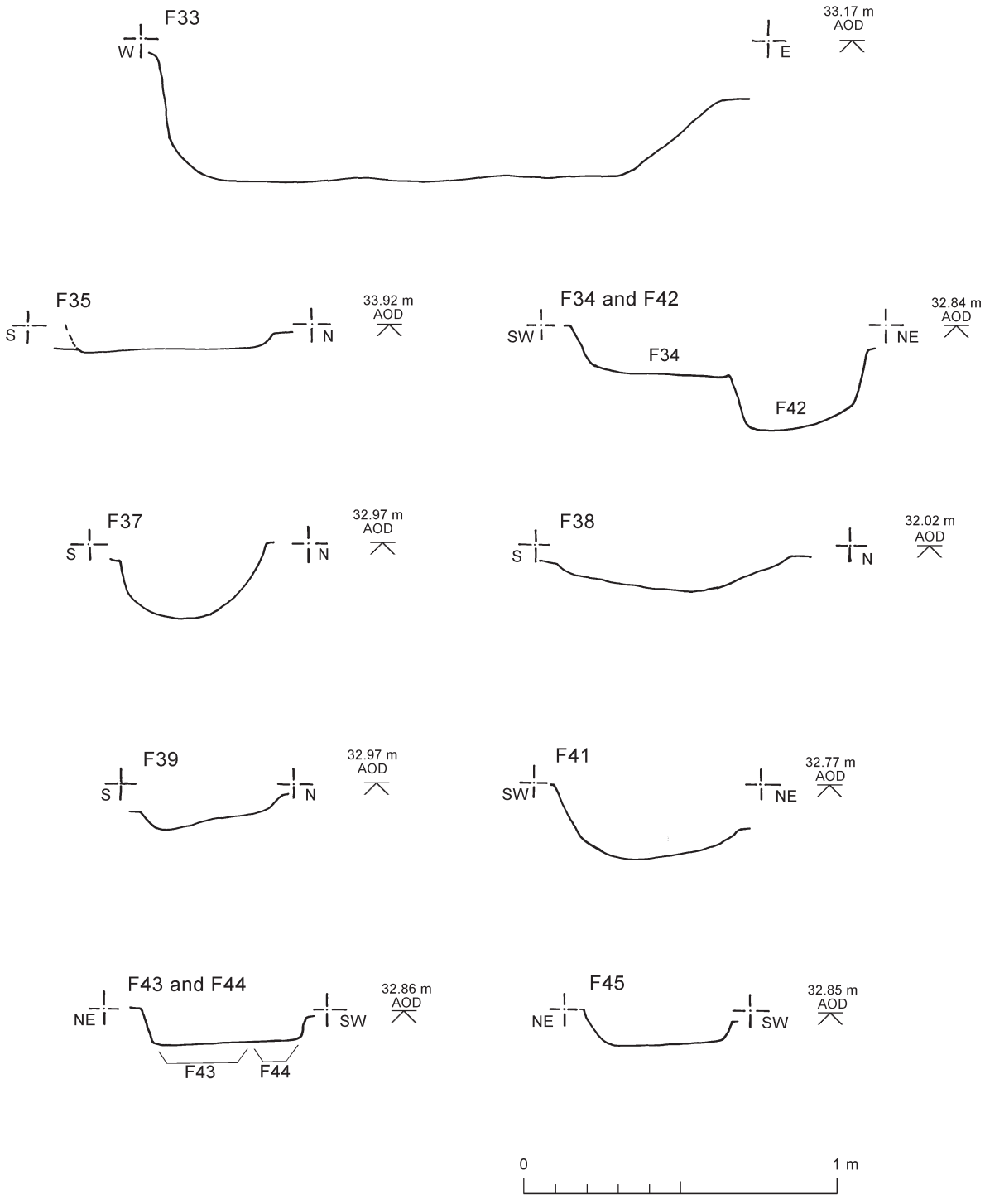

Fig 16 Section sheet 3.

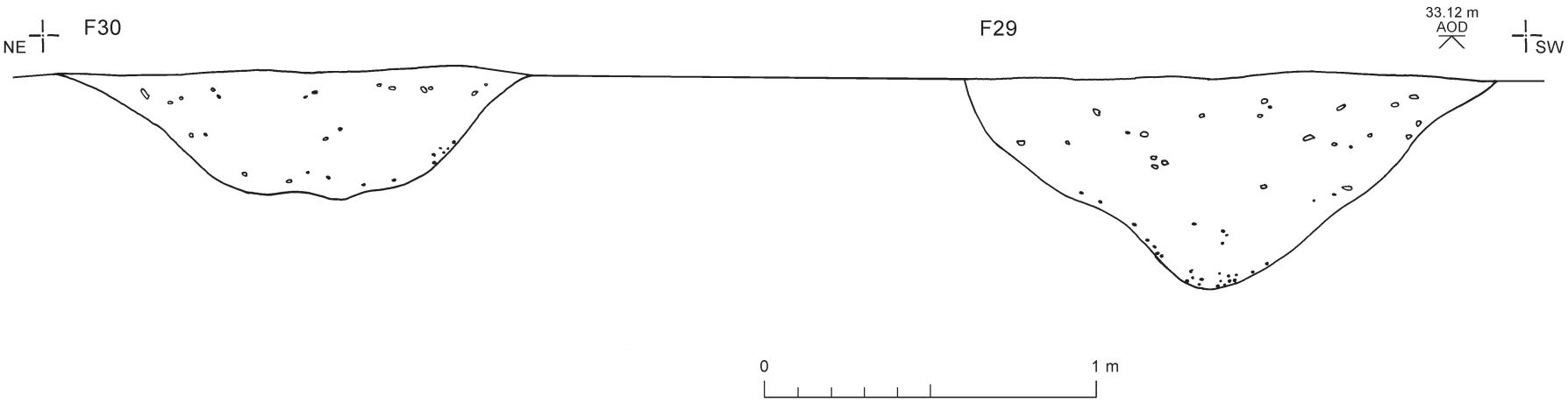

Fig 17 Section sheet 4.

Essex Heritage Conservation Record/
Essex Archaeology and History

Summary sheet

Site address: All Saints' church, Great Stanway, Essex (Colchester Zoo)	
Parish: Stanway	***District:*** Colchester Borough
NGR: TL 95307 22110	***Site code:*** Museum accession code 2005.104
Type of work: Watching brief and excavation	***Site director/group:*** Colchester Archaeological Trust
Date of work: September-October 2005	***Size of area investigated:*** 32 x 16m
Location of finds/curating museum: Colchester Museums	***Funding source:*** Developer
Further seasons anticipated? No	***Related EHER nos:*** 11725-11728, 11730
Final report: CAT Report 346 and summary in *EAH*	
Periods represented: medieval, post-medieval, modern	
Summary of fieldwork results: *The ruins of All Saints' (the former parish church of Great Stanway) stand in the grounds of Colchester Zoo. An evaluation by Archaeological Solutions in January 2005 revealed fourteen medieval inhumation graves. Following a monitored topsoil strip, CAT excavated thirty-four medieval inhumation graves on the site of the proposed new orang-utan enclosure. The graves are probably late medieval, and the absence of coffins indicates a low status. Other features include two ditches, which may have been graveyard boundary ditches. The human remains are to be reburied on site.*	
Previous summaries/reports: None	
Author of summary: Howard Brooks	***Date of summary:*** November 2005