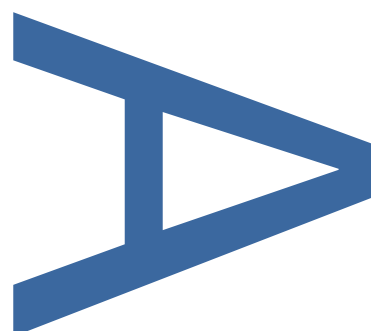
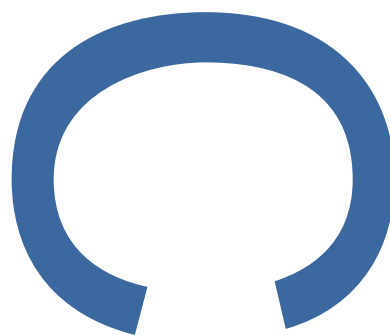


**CHURCH OF ST DENIS, EAST  
HATLEY, CAMBRIDGESHIRE, SG19  
3JA.**

**BUILT HERITAGE RECORDING**

**LOCAL PLANNING AUTHORITY: SOUTH  
CAMBRIDGESHIRE DISTRICT COUNCIL**

**REPORT NO. 13186**



**PRE-CONSTRUCT ARCHAEOLOGY**

**Built Heritage Recording at the Church of St Denis, East Hatley,  
Cambridgeshire, SG19 3JA.**

**Report compiled by:** Adam Garwood ACIFA

**Event Number:** ECB 5364

**Project Manager:** Christiane Meckseper

**Client:** Friends of Friendless Churches

**Central Ordnance Survey National Grid Reference:** TL 28524 50513

**Contractor:**

**Pre-Construct Archaeology Limited**

**The Granary**

**Brewery Road,**

**Pampisford,**

**Cambridgeshire**

**CB22 3EN**

**Tel:** 01223 492272

**Email:** [cmeckseper@pre-construct.com](mailto:cmeckseper@pre-construct.com)

**Web:** [www.pre-construct.com](http://www.pre-construct.com)

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**PCA Report No. 13186**

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## **1 NON-TECHNICAL SUMMARY**

- 1.1 Pre-Construct Archaeology Limited was commissioned by Purcell on behalf of the Friends of Friendless Churches to undertake a programme of built heritage recording prior to and during repairs to the existing floor structures within the Grade II\* Church of St Denis, East Hatley, Cambridgeshire, SG19 3JA.
- 1.2 The small two cell church of St Denis, thought to have origins in the later 13th century, had remained relatively untouched until it was 'restored' in 1873-4 by William Butterfield. The chancel was considerably lengthened and largely rebuilt, the chancel arch was widened and new roofs (the present roofs) were built over the nave and chancel. It is thought that during these works medieval rafters were re-used by Butterfield as floor joists for a new timber floor within the nave. The outcome of the survey supports this contention as the floor joists were clearly re-used and most likely, given their carpentry, medieval in date.

## 2 INTRODUCTION

### 2.1 Background

- 2.1.1 Pre-Construct Archaeology Limited was commissioned by Purcell on behalf of the Friends of Friendless Churches to undertake a programme of built heritage recording targeting the floor structures within Nave of the Grade II\* Church of St Denis, East Hatley, Cambridgeshire and as a response to a planning condition attached to listed building consent (S/1703/17/LB).
- 2.1.2 This historic building survey was undertaken in accordance with a Written Scheme of Investigation (WSI) agreed in advance of works by the local planning authority (South Cambridgeshire District Council) and with guidance published in *Understanding Historic Buildings: A guide to good recording practice* (English Heritage, 2006) and the Chartered Institute for Field Archaeologists (CIFA) Standard Guidance for Standing Building Recording (revised 2014).
- 2.1.3 As the proposals may result in a change to the appearance, character and structure of the existing floor structures and surfaces within the nave, the chancel and the north porch, the aim of this building survey is to exact a detailed record of these floor structures prior to the commencement of and during the proposed repair works. The purpose of the project is to record the floors in their present condition, detailing any architectural features, carpentry marks and evidence of re-use. As this work may also entail the addition of supplementary sleeper walls to support the existing joists, monitoring of invasive works (if necessary) may form part of the site works. The building survey is to be in accordance with that defined by Historic England Guidance notes, specifically a Level 2 survey (Historic England 2016) covering the pre-commencement works and a more detail Level 3 survey, focusing upon the exposed floor structures. The aim is to provide a better understanding of the building's history, to compile a lasting record, to analyse the results and to disseminate these results.

### 2.2 Site Location and Description (Figs. 1 & 2)

- 2.2.1 The medieval parishes of East Hatley and Hatley St George lie in the gently rolling countryside of south west Cambridgeshire. The village of East Hatley is situated on a broad flat-topped ridge of boulder clay some 250 ft. to 260 ft. above OD and consists of a NE to SW aligned street with houses on either side.
- 2.2.2 The Church of St Denis still lies within its own moated enclosure and in a relatively secluded location to the south of Croydon Hill and to the west of the linear settlement of East Hatley. For the most part the former parish church dates to the 13th century (1271) but it was substantially 'restored' in 1874 by the architect William Butterfield who reportedly re-used the original roof timbers as supports for the floor. The floor plan of the two cell church comprises a nave and a large chancel, incorporating a later sanctuary added onto the east end, a small modern vestry (or north porch) built onto the north side of the chancel/sanctuary and a late 17<sup>th</sup> century south porch added to the nave. The elevations are mainly built using fieldstones with clunch and limestone dressings. A small gabled bell-cote, replacing a steeple and a former bellcote, was rebuilt in the 19<sup>th</sup> century.
- 2.2.3 The church (now de-consecrated) was last used for worship in 1959 and, in order to prevent its demolition by the Diocese, ownership was conveyed by the Church Commissioners to South Cambridgeshire District Council (SCDC) in 1985. Due to deterioration of its fabric the church was placed on the Heritage at Risk Register in 2004, although following the successful completion of repairs to damaged stonework, roof timbers and the re-tiling of the roof, completed by January 2006, the church was removed from the register. After many years of uncertainty the Friends of Friendless Churches took possession of St Denis's from SCDC on 30<sup>th</sup> November 2016 and thereafter applied for planning permission to install a new floor and window glazing into the nave, replace the door in the north porch and make minor repairs, paid partly by a

£60,000 dowry (from SCDC) and funds raised by local residents, Hatley Parish Council and Gamlingay and Hatley Parochial Church Council.

2.2.4 The Church of St Denis is a Grade II\* listed Building (listing ref: 1128153). Its (no longer current) citation reads:

2.2.5 *HATLEY EAST, TL 25SE (West side) 4/96 22.11.67 Church of St Denis II\* Former parish church, now redundant. C13 nave and chancel mostly rebuilt 1874 by W Butterfield. Fieldstone with clunch and limestone dressings. Plan of nave and chancel with modern vestry and south porch. Nave, c.1300 with C19 gabled bell-cote at west end. North wall has three windows restored, including two lancets one with a cinque-foiled and the other with a trefoiled head. The third window is of two trefoil lights with a foiled head. North doorway in two centred arch of two chamfered orders. South doorway is mid C14 of two continuous wave moulded orders. The church is now covered in creeper. The above notes are taken from RCHM West Cambs mon (1) p.145 and Pevsner, N. Buildings of England p.334*

### 3 PLANNING BACKGROUND

#### 3.1 Introduction

3.1.1 National legislation and guidance relating to the protection of historic buildings and structures within planning regulations is defined by the provisions of the Town and Country Planning Act 1990. In addition, local planning authorities are responsible for the protection of the historic environment within the planning system and policies for the historic environment are included in relevant regional and local plans.

#### 3.2 Legislation and Planning Guidance

3.2.1 Statutory protection for historically important buildings and structures is derived from the Planning (Listed and Conservation Areas) Act 1990. Guidance on the approach of the planning authorities to development and historic buildings, conservation areas, historic parks and gardens and other elements of the historic environment is provided by the National Planning Policy Framework (NPPF), which was adopted on 27 March 2012 and by the Planning Policy Statements (PPSs).

3.2.2 The requirement for archaeological work is in accordance with NPPF Paragraph 141. The purpose of the work was to complete an appropriate level of historic building recording of the affected structures and their setting. This was to pay specific attention to those elements where demolition/conversion and/or alteration were proposed. The work was to be undertaken to a standard that would allow the future interpretation of the buildings within the context for which they were originally designed as well as later uses. An archive and report was to be created as a result of the survey.

3.2.3 Listed Building Consent (S/1703/17/LB) for replacement windows to nave, replacement door to north porch and internal and external repairs has been approved by local planning authority (South Cambridgeshire District Council) along with a number of pre-commencement conditions.

3.2.4 **Condition 4 reads:** Before any works or repairs to the floors commence, the written methodology for; A: The recording of the floor, B: Storage of materials & C: Reinstatement of the floor, shall be submitted to and agreed in writing by the local planning authority. The works shall be carried out in accordance with the approved details. Reason: To ensure that the methodology is suitable to preserve the special interest of this listed building in accordance with Policy CH/3 of the SCDC LDF Development Control Policies DPD.

3.2.5 **Condition 7 reads:** Before any works commence and during works, written records shall be made of the floor. Within three months of the completion of works, copies of all written records of the floor made shall be submitted to and agreed in writing by the local planning authority, and submitted to the Cambridge Records Office. Reason: To ensure that an appropriate record is made of the listed building in accordance with Policy CH/3 of the SCDC LDF Development Control Policies DPD.

3.2.6 Pre-Construct Archaeology Limited is a Registered Archaeological Organisation with the Chartered Institute for Archaeologists.



## **4 METHODOLOGY**

### **4.1 Aims and Objectives**

4.1.1 The aim of the building recording was to provide a detailed record of the fabric of the building and any archaeological remains encountered, meeting nationally recognised standards as set out by English Heritage, the Charter Institute of Archaeologists and ALGOA. The historic building recording and monitoring was to undertaken to a standard allowing the future understanding and interpretation of the building and its site. An archive and report was to be created as a result of the project.

### **4.2 On-Site Recording**

4.2.1 The building survey was carried out on Tuesday 30<sup>th</sup> January & Tuesday 6<sup>th</sup> February 2018 to record the floor structures prior to and during works. A photographic survey comprising high resolution digital images was maintained throughout the project and a selection of these photographs have been included in this report (Plates 1-38). Figures 2 & 4-7 show the location and direction of the plates.

4.2.2 The historic building recording was undertaken in accordance with English Heritage (2006) *Understanding Historic Buildings: A Guide to Good Recording Practice*. This involved a full photographic record, accompanied by a drawn record and descriptive account.

### **4.3 The Written Account:**

4.3.1 The precise location of the building, by name or street number, civil parish, town, etc, and National Grid reference and details of listing or scheduling.

4.3.2 The date when the record was made, and the name(s) of the recorder(s).

4.3.3 A statement describing the building's plan, form, function, age and development sequence. The names of architects, builders, patrons and owners should be given if known. Its purpose is to describe the building when no fuller record is necessary, to serve as an introduction to the more detailed body of the record that may follow, and to satisfy those users who may need no more than a summary of the findings.

### **4.4 The Photographic Record:**

4.4.1 General view of views of the exterior and interior of the building.

4.4.2 The overall appearance of principal spaces.

4.4.3 Detailed coverage of the building's external appearance. In the case of a building designed by an architect, or intended to be seen from a certain point of view, it is important to have regard to the builder's intentions and to record the effect of the design or of the building's placing.

### **4.5 Drawn Record:**

4.5.1 Measured drawings recording the form or location of other significant structural detail, such as timber or metal framing.

4.5.2 Measured drawings showing the form of any architectural decoration (the moulding profiles of door surrounds, beams, mullions and cornices, for example) or small-scale functional detail not more readily captured by photography. A measured detail drawing is particularly valuable when the feature in question is an aid to dating.

4.5.3 Measured elevations, where these are necessary to an understanding of the building's design, development or function and not more readily obtained by photography.

### **4.6 Project Archive**

4.6.1 A full and ordered archive including written, drawn, survey and photographic records will be completed in accordance with guidelines defined in Brown (2008); Taylor and Brown (2009) and UKIC and ADS guidelines for the preparation of archaeological

archives for long term storage. The archive will be provisionally stored in Pre-Construct Archaeology's Cambridge Office in Pampisford before being transferred to the client.

#### 4.7 **Guidance**

4.7.1 All works were undertaken in accordance with standards set out in:

Association of Local Government Archaeological Officers (1997) *Analysis and Recording for the Conservation and Control of Works to Historic Buildings*

British Archaeologists and Developers Liaison Group (1986) *Code of Practice*

British Standards Institution (1998) *Guide to the Principles of the Conservation of Historic Buildings* (BS 7913)

ClfA (2014) Standards and guidance for the archaeological investigation and recording of standing buildings or structures

ClfA (revised 2014) Standard and guidance for an archaeological watching brief

English Heritage (2006) *Understanding Historic Buildings: A Guide to Good Recording Practice*

English Heritage (2000) *The Presentation of Historic Building Survey in CAD*

English Heritage (Clark K) (2001) *Informed Conservation*

## 5 HISTORIC BACKGROUND

- 5.1.1 The parish of East Hatley was one fragment of the scattered settlement established by the late 10th century and named Hatley, from its position in the woods along the Cambridgeshire–Bedfordshire border. In Domesday (1086) the village is referred to as Hatelaie, the word 'laie' or 'ley' relating to a woodland clearing (Watts, 2004). Domesday refers to 7 ploughlands cultivated with 6½ ploughteams, of which two manors had one each, while two villani had probably 3, but the eight sokemen only 1½ between them, and eleven bordars only one. The eight sokemen who had held 2 hides in 1066 still occupied them in 1086 under Picot the sheriff, who had obtained the land by exchange. His lordship descended to the cadet line of Picots established at Quy, who probably subinfeudated the Hatley fee before 1185. Their overlordship passed with Quy manor after 1220 through two successive heiresses to the Traillys, whose rights over Hatley were still recorded in the 14th century. Until the 15th century East Hatley, so called by 1200, was usually grouped with its southern neighbour Clopton for public administration, although it remained a distinct ecclesiastical and civil parish, until 1957, when it was united with Hatley St. George to form the new civil parish of Hatley (Wright, 1982).
- 5.1.2 From the 14th century the parish proved too poor to keep incumbents long. Between 1340 and 1345 there were five rectors, the last was absent in 1347 in his patron's service. In 1349 a fellow of Michaelhouse, Cambridge, held the cure, one chaplain served in 1378 for the sometimes absentee rector while another rector was licensed in 1384 to be away for 3 years, to study at Cambridge or attend his patroness. Between 1390 and 1398 three more rectors quitted the parish by exchange and another in 1435 left it for a London chantry (ibid).
- 5.1.3 From 1663 to 1796 East Hatley was held with Tadlow vicarage and the living became from 1689 to 1824 virtually hereditary in the Say family. Francis Say, rector 1689–1705, was followed by his elder son, William Cray Say, 1722–51, and he by Francis Say, probably his nephew, 1753–96, who also held Hatley St. George and Whaddon. Lady Downing married him to her niece, and left him her interest in Downing Street. Francis's younger son Henry Morgan Say succeeded to the rectory in 1799 upon coming of age. From the 1770s the Says provided their scanty congregation with one service every Sunday and the sacrament thrice a year. Downing College removed H. M. Say, an unlicensed pluralist, in 1824 for not rebuilding the burnt parsonage and until the 1960s East Hatley continued to be held by the same incumbents, drawn from that college, as Tadlow (ibid).
- 5.1.4 The church, recorded by 1217 probably belonged originally to the Richmond fee. In 1235 the advowson was shared by Walter of Hoo with Giles de Feugeres and Felise daughter of Matthew.
- 5.1.5 The remains of former house sites and of wet ditches round their crofts, set back some distance from the present street, indicate that the village of East hatley formerly consisted of a triangular green with its base towards the north, and its apex between the moats at The Palace and Manor Farm. The green was presumably formed by the convergence of two roads, one from the N.E., which can be traced as a disused track, known as Long Lane or Croydon Old Lane, and one from Longstowe, called Hayley Lane, now only a footpath. To the west of the green are a number of possible house sites, irregular scarps, banks and ridge and furrow. To the N.E. of the church, is an area 400 ft. E. to W. by 250 ft. bounded on the S. by a wet ditch, 30ft. wide and 2½ ft. deep, which joins a stream on the E. A projection N. from this ditch divides the area into two unequal parts. Recent ploughing here has turned up the footings of an 18th-century brick wall and of brick buildings, cobbles and 13th- and 18th-century pottery. To the S.E. of the green are further ditched enclosures, ridge and furrow, and probable further building sites (RCHME, 1968)
- 5.1.6 The old church, dedicated to St. Denis by the 18th century, was built of field stones dressed with clunch. The church was probably built mainly late in the 13th century, although re-consecrated in 1352. The western part of the nave had on each side a

doorway between two foiled lancets. Near the east end two tall two light windows with quatrefoil tracery, resembling the side windows of the chancel with their geometrical tracery, were later inserted. The narrow chancel arch, with ogee-headed niches each side, and the north and south doorways are of the 14th century. Buttresses were built (then) at three of the angles, and also on each side of the lancet in the west wall of the nave to support a bellcot, probably the steeple which needed repair in 1638. It had fallen by 1748 when the single cracked bell, the sole survivor of three recorded in 1552 and 1685, hung in the nave. Sir George Downing rebuilt the south porch in brick in 1673 and by 1685 the north nave door was blocked, and the nave choked with large pews. The font, then consigned to a stable, had been replaced by 1748, when the rood screen still survived; there were no communion rails then or in 1807. The Castell family monuments include an altar tomb to Constance (d. 1610), first wife of Robert Castell (d. 1630). It had only a short chancel and nave with south porch (ibid).

- 5.1.7 The church was restored in 1873–4 to designs by William Butterfield. The chancel was lengthened and largely rebuilt, the arch being widened and new roofs built. The bellcot and south porch were reconstructed, and a new pulpit, font, and stone reredos installed. When the new parish church, a small plain building in concrete, was opened, some Victorian woodwork and part of a 15th-century brass were removed to it. In 1979 the old church was derelict and almost concealed by a thick growth of ivy (ibid).



The Church of St Denis taken in 2003 (taken from Hatley village website)

## **6 BUILDING DESCRIPTIONS**

### **6.1 General Description**

6.1.1 The survey was carried out over two separate phases and to different levels of detail. The initial pre-commencement survey essentially photographed the interior of the nave, chancel and north porch prior to works, concentrating on recording the in-situ, but badly decayed and mainly absent floor boards, within the nave (Plates 3-4 & 6-8). The second phase of works, was more detailed, entailing a detailed drawn, analytical and photographic record of the floor joists within the nave, once the decayed boards had been lifted. The floor structure within the nave could be broadly divided into three main areas, a section to the north side of the central aisle and two sections to the south of the aisle, one either side of the south doorway. For ease of reference the floor structure to the north is identified as floor (1), the floor to west of the south door, as floor (2) and the floor to east, extending as far as the chancel arch, as floor (3). Additionally each individual floor joist is also numbered, floor 1:1-18, floor 2:1-10 & floor 3:1-17. A photographic record of the two floor voids either side of the central aisle in the chancel was also completed (Plates 12 & 36-37).

### **6.2 The Nave (Fig 4; Plates 3-10)**

6.2.1 The nave is symmetrical in its layout with an opposite-set three window range to both the north and south walls and a central window (flanked externally by buttressing for the rebuilt bellcote) within the western end wall. The south nave door and its enclosing porch lie directly opposite its corresponding, northern nave door, reportedly blocked during the late 17<sup>th</sup> century (1685). A cast-iron tortoise stove, connected via a flue to a short chimney stack built into the northern nave wall, lies in the north-eastern quadrant of the floor and adjacent to the pulpit base. The latter, a replacement sub-octagonal stone base, showing evidence of masonry marks. The church font is located within the opposite north-western quarter and both font and pulpit reside in discrete areas of solid flooring covered by six inch quarry tiles, used also for the central aisle and the approach to the south nave door. The floor within the nave is noticeably lower than that in the chancel, which steps up in level at the point of the chancel arch and again further east up to the altar, but correlates with the level of the threshold to the south nave door.

6.2.2 The three floor sections (1-3) comprise timber structures which span floor voids located either side of and lower than the central aisle. These floors structures are built using a similar construction technique and all appear to be contemporary in date. They typically comprise short lengths of floor joist bridging the space between the central aisle and the north or south nave walls respectively. All of the floor joists are set perpendicular to the long walls, on a north-south alignment, between c.400-500mm (16-20 inch) centres, and rest directly upon pairs of timber plates or sills which cross their northern and southern ends. Accordingly the floor structures are independent of their enclosing structures, not set into the flank walls or supported by the structure of the central aisle. The timber sills on which the joists rest are typically built-off simple in-line sleeper walls comprised of roughly coursed field stones bonded using a lime mortar.

### **6.3 Floor Section 1 (Figs. 4 & 5 Plates 13-21)**

6.3.1 Floor section 1 was located to the north of the central aisle and between areas of solid floor to the east and west upon which the church font (E) and boiler (W) were mounted. These areas of solid flooring and the central aisle were 19<sup>th</sup> century in date and covered using hard wearing, red and black, six inch quarry tiles.

6.3.2 The floor structure in this section comprised 18 individual floor joists (numbered west to east, 1-18) laid north-south and predominantly regularly spaced between at 300-450mm centres. All of the joists show evidence of re-use, either by the presence of empty peg holes or from former mortices, the latter as both empty sockets or as mortices still retaining a cut off tenon. The joists were all of oak and of similar scantling typically ranging between 120 x 150mm (4 x 5 inch) although a few slightly lighter joists were also present (see appendix 2 for dimensions). The joists were relatively straight, but were not sawn, many showing marks synonymous with facing-up using an adze or

axe. Some of the joists were also still partly 'in the round' with patches of bark (joists 1:5, 1:8 & 1:9) and sapwood still attached to some joists and others formed from timber of insufficient size to be fully 'squared up'. The joists, re-cut to fit just short of the north nave wall and the central aisle, included an array of peg holes and mortices which in their re-use have lost any evidential relationship with each other. The mortices varied in size and form, with some passing through the full width of the joist (1:17) but most just trenched into one side (e.g. 1:15, 1:6 etc). These mortices also varied in their size the smaller typically c.100-120mm (4-4½ inch) wide, the wider 340-400mm wide (1:5 & 1:12). An interesting feature to joist (1:14) was the presence of a timber, still in situ, which had been lapped over the face of the joist similar to a passing brace. Generally the joists were, given their age, in a fair condition. The northern ends butting up to the north wall were generally more decayed, some showed evidence of dry rot, but almost all of the joists were noticeably weathered across one face.

6.3.3 Most of the joists were simply laid over the sill plates, the deeper joists, such as (1:2 & 1:16) lapped over the plate to maintain a consistent floor level. The northernmost plate was formed from four timbers joined end on using a simple half lap joint and the southern plate from three sections. Apart from the easternmost scarf (east of 1:12) their positions did not correlate, although both rows showed evidence of re-use with redundant mortices in their upper faces. The plates were similar in character and size ranging from 160 x 120mm (N) to 150 x 130mm (S). Both, as already described, were set upon in-line sleeper walls simply built from re-used fieldstones, probably readily available following the Butterfields remodelling works.

#### 6.4 Floor Section 2 (Figs. 4 & 6 Plates 22-26)

6.4.1 Floor section 2 was a smaller stretch of floor located to the west of the south nave door and to the south of the central aisle. It was bordered by areas of solid floor with a quarry tiled surface to the west, north and east.

6.4.2 The floor structure was formed from 10 individual floor joists (numbered west to east 1-10) laid north-south and at 340-440mm centres. The joists closely matched those used in the adjacent floor (1), showing, through the presence of empty peg holes and former mortices, of re-use. The joists were all oak and hand reduced using an axe or adze, some not quite fully 'squared up'. The scantlings were similar averaging about c.140-160mm in dimension and many of the joists (2:3, 2:5 to 2:10) were lapped over the top of the underlying plate or sill. Due to their re-use there was no correlation between the positions and distribution of the peg holes and mortices. As floor (1) these comprised a mix of empty mortices trenched part way into the joist, with smaller mortices measuring c.100-120mm and much larger mortices up to 400-500mm. Floor joist (2:4) included a long diagonal-cut mortice with evidence for three pegs along its western side (possibly once carrying a horizontal timber such as a collar), while joist (2:7) included a series of four small notches cut out of its western edge and (2:6) the extant remains of a timber lapped over the face of the joist, in the manner of a passing brace. Unusually perhaps is that the inner (northern) ends of the joists were in a poorer condition than those that butted up against the external wall. Many, if not all of the joists, showed clear evidence of a weathered face.

6.4.3 The two northern and southern sills/plates were single timbers, the northern finishing just east of joist (2:10), the southern unclear. They were both similar in appearance and dimension, measuring 120-130mm x 100-110mm and laid flat section. These were built off in-line sleeper walls simply built from re-used fieldstones.

#### 6.5 Floor Section 3 (Figs. 4 & 7 Plates 27-32)

6.5.1 Floor section 3 was located to the east of the south nave door and to the south of the central aisle. It was bordered by a solid floor with a quarry tiled surface to the west and north and by the threshold to the chancel arch the east.

6.5.2 This longer section of floor is comprised of 17 north-south orientated floor joists (1-17 numbered east to west) set at c.400-440mm centres. The character of the floor joists matched that already described for floors 1 & 2 and these joists undoubtedly originate from the same structure and were re-used at a contemporary date. Many show

evidence of axe or adze marks and all bear the scars of former use, either peg holes or redundant mortices. The majority of the latter are trenched into one side of the joist and incorporate a peg-hole for a retaining peg. The scantlings are broadly typical measuring 130mm x 140mm and the joists mainly 'in the square'. Many of the joists are badly decayed (as floor 2) along their northern ends and are much worse than the southern ends abutting the external nave wall. They overlay the two tiers of sill/plate, some examples such as (3:14-16 & 3:7) trenched over the plates at both ends and others retained by diagonal nailing through the base of the joist into the plate. The southern plate appears to comprise two lengths of formerly whitewashed timber, laid flat section and measuring 170mm x 120mm. The northern plate, also in two sections, has not fared so well, and is badly decayed at its eastern end in the area of joists (3:1-3:3). The adjoining plate to the west showing evidence of two long redundant mortices still retaining cut off tenons.

## 6.6 South Porch and Approach (Fig. 4; Plates 33-35)

6.6.1 The removal of a section of the floor and quarry tiling just to the north of the south door revealed a deep rectangular sub-floor chamber (for under-floor heating) built using 19<sup>th</sup> century stock bricks and rebuilt along its southern side using modern blockwork. The removal of plaster from the inside of the south porch illustrated that the porch, added in 1673 by Sir George Downing, an event commemorated with a memorial set into the wall above the nave door opening, had clearly been rebuilt re-using fieldstones and clunch dressings along with stock bricks, as part of Butterfields renovations. The brickwork was particularly concentrated towards the top of the walls, below a later limestone cornice and a Victorian roof. The floor surface within the porch matched that within the nave, using red and black quarry tiles.

## 6.6.2 Chancel (Fig. 4; Plates 36-38 & 11-12)

6.6.3 The two floor voids along the north and south sides of the chancel were recorded photographically during the project. Pre-commencement they were used as areas to store fieldstone rubble, timber and other architectural materials such as copings and tiles, on polythene sheets. Following the removal of the materials and sheeting the base of the northern floor void appeared to comprise an earthen floor and the southern void, a similar surface. Three slabs of limestone were situated in the south-eastern corner of the southern void butting up against the 19<sup>th</sup> century brickwork at the base of the south chancel wall and the corresponding brickwork forming the stepped structure of the sanctuary and altar. These large limestone blocks would appear to have been relocated to their present position from elsewhere within the church.

## 7 DISCUSSION

- 7.1 The historic building survey at the Grade II\* Church of St Denis, East Hatley was carried out to record in detail the existing floor structures within Nave during works to consolidate, repair and re-establish floors within the nave and chancel and as part of a wider scheme to ultimately bring the building back into some use.
- 7.2 In recent years the Church of St Denis has had a chequered history. The small medieval two cell church of St Denis, thought to have origins in the later 13<sup>th</sup> century had remained relatively untouched, in a notably poor, rural parish, until it was 'restored' in 1873–4 by the prodigious church architect William Butterfield (financed by Downing College). The chancel was considerably lengthened and largely rebuilt, the chancel arch was widened and new roofs (the present roofs) built over the nave and chancel. The bellcot and south porch were reconstructed, and a new pulpit, font, and stone reredos installed. The church was de-consecrated in 1959 and its ownership was conveyed to South Cambridgeshire District Council, who undertook some restoration works completed by 2006.
- 7.3 The present softwood roofs over the nave and chancel, though clearly belonging to the Butterfield renovations, were both built in an archaic medieval style, with that over the nave built with two crown posts and a collar purlin between, and the roof over the new enlarged chancel, with scissor bracing and a single truss supported on corbels. This softwood roof completely replaced its medieval predecessor, from which the rafters were allegedly re-used as floor joists for a new timber floor within the nave.
- 7.4 The removal of the extant floorboards within the nave revealed the full extent and character of this floor. It was 19<sup>th</sup> century in its construction, cut to respect the 19<sup>th</sup> century internal floor layout, forming the aisle and floors around the font, pulpit and to the south door and independent of the long nave walls. Inspection of the floor joists showed that they were almost entirely re-used timbers, mainly if not totally oak which had been reduced (halved) into 'the square' by cleaving and/or using an axe or adze as none were obviously sawn. On many of the timbers, one side, usually the deeper section was noticeably more weathered than the other three. As it was not unusual for the rafters to be laid flat in medieval roofs (as opposed to deep section) this may account for the weathering, suggesting that the former roof structure had fallen into disrepair and been exposed to the elements for some time. The most notable features seen on most of the joists were the peg holes and mortices of former connections. Due to their re-use no logical correlation between the positions and distribution of the peg holes and mortices could be made, although both small single peg mortices and larger multi-pegged mortices, for heavier scantling components were identified along with two examples of lap joints. It is tempting to suggest that these joints may have once formed part of a passing brace and a style of roof construction, that was certainly in use during the 13<sup>th</sup> century but begun to fade out by the 14<sup>th</sup> century. However, it is difficult to attribute a firm date to these re-used timbers, particularly given the fragmentary nature of their carpentry, but they certainly have the characteristics one would expect to see in medieval joinery and do not exhibit features/carpentry synonymous with later periods. Ultimately a definitive answer to their age and possibly an insight into the origins of this church, may be gained through more scientific methods and by dendro-chronological sampling.



## **8 ACKNOWLEDGEMENTS**

- 8.1 Pre-Construct Archaeology Limited would like to thank Purcell acting on behalf of the Friends for Friendless Churches for commissioning the project. The project was managed for Pre-Construct Archaeology Limited by Charlotte Matthews and the historic building recording, research and report writing were completed by Adam Garwood. The illustrations were prepared by Hayley Baxter.

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## APPENDIX 1: OASIS FORM

OASIS ID: preconst1-309367

### Project details

Project name Built Heritage Recording at the Church of St Denis, East Hatley, Cambridgeshire, SG19 3JA

Short description of the project The historic building survey at the Grade II\* Church of St Denis, East Hatley was carried out to record in detail the existing floor structures within nave during works to consolidate, repair and re-establish floors within the church. The small two cell church of St Denis is thought to have origins in the later 13th century and had remained relatively untouched until it was 'restored' in 1873-4 by William Butterfield. The chancel was considerably lengthened and largely rebuilt, the chancel arch was widened and new roofs (the present roofs) were built over the nave and chancel. It is thought that medieval rafters were re-used by Butterfield as floor joists for a new timber floor within the nave. This appears to be the case as they were clearly re-used and most likely, given their carpentry, medieval in date.

Project dates Start: 30-01-2018 End: 06-02-2018

Previous/future work No / Not known

Any associated project reference codes S/1703/17/LB - Planning Application No.

Type of project Building Recording

Site status Listed Building

Monument type CHURCH Medieval

Methods & techniques "Measured Survey", "Photographic Survey", "Survey/Recording Of Fabric/Structure"

### Project location

Country England

Site location CAMBRIDGESHIRE SOUTH CAMBRIDGESHIRE HATLEY Church of St Denis, East Hatley

Postcode SG19 3JA

Site coordinates TL 28524 50513 52.137520429512 -0.121827482067 52 08 15 N 000 07 18 W Point

### Project creators

Name of Organisation Pre-Construct Archaeology Limited

Project brief originator South Cambridgeshire District Council

Project design originator Adam Garwood

Project director/manager Christiane Meckseper

Project supervisor Adam Garwood

Name of sponsor/funding body Friends of Friendless Churches

### **Project archives**

Physical Archive Exists? No

Digital Media available "Images raster / digital photography", "Text"

Paper Media available "Microfilm"

### **Project bibliography 1**

Publication type Grey literature (unpublished document/manuscript)

Title Built Heritage Recording at the Church of St Denis, East Hatley, Cambridgeshire,  
SG19 3JA

Author(s)/Editor(s) Garwood, A

Date 2018

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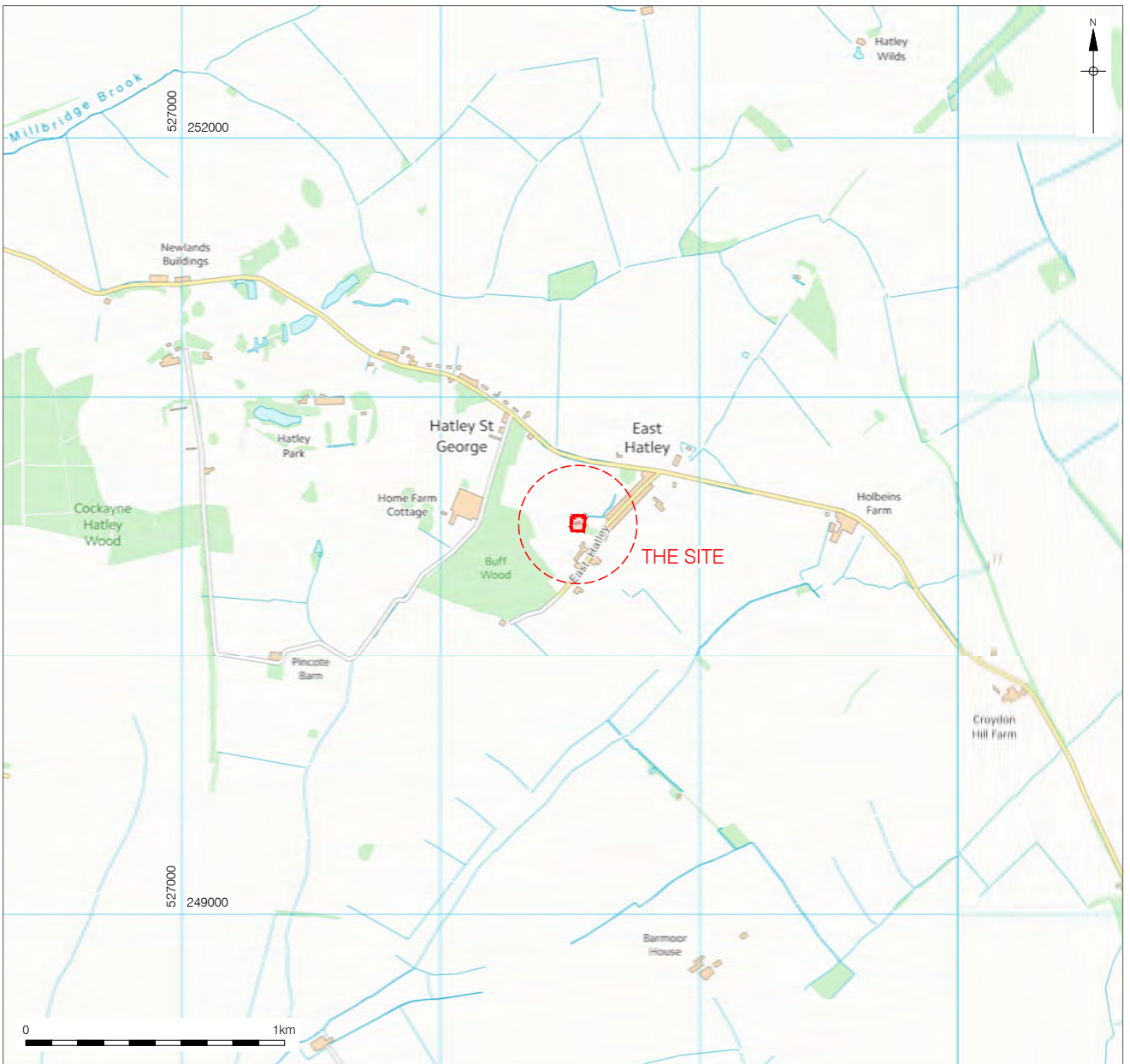
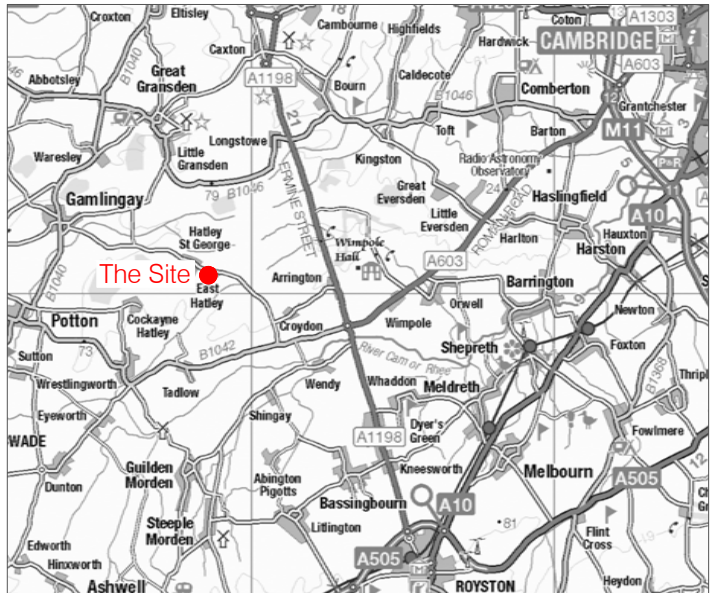
Entered by adam garwood (agarwood@pre-construct.com)

Entered on 15 February 2018

## APPENDIX 2: JOIST DIMENSIONS & DESCRIPTIONS

Joist No.	Broad Dimensions (mm)	Summary Descriptions	Floor Section
1:1	120 x 140	1 peg, 1 mortice	1
1:2	90 x 170	2 pegs	1
1:3	120 x 150	5 pegs, adze marks	1
1:4	120 x 140	2 pegs, adze marks	1
1:5	120 x 140	2 pegs, adze marks, bark attached	1
1:6	140 x 140	4 pegs, adze marks	1
1:7	130 x 150	2 pegs, one large mortice east side, adze marks	1
1:8	120 x 150	3 pegs, adze marks and bark west side	1
1:9	130 x 150	4 pegs, bark attached	1
1:10	110 x 150	1 peg	1
1:11	130 x 140	3 pegs, 2 mortice	1
1:12	130 x 130	3 pegs, 1 large mortice	1
1:13	130 x 140	3 pegs	1
1:14	120 x 100	3 pegs, lap joint, adze marks	1
1:15	120 x 150	2 pegs	1
1:16	110 x 160	6 pegs, large trench south end	1
1:17	100 x 140	3 pegs	1
1: 18	110 x 140	1 peg	1
2:1	100 x 130	1 peg, no longer fixed	2
2:2	120 x 150	2 pegs	2
2:3	120 x 150	7 pegs, lapped over sill plate	2
2:4	140 x 140	4 pegs, large mortice w. side and rebate s. end	2
2:5	120 x 150	2 pegs, lapped over sill plate, notch	2
2:6	100 x 150	3 pegs, diagonal lap joint, lapped over sill plate	2
2:7	130 x 160	3 pegs, 4 notches w. side	2

2:8	110 x 160	2 pegs, narrows to s.	2
2:9	140 x 140	5 pegs, large mortice s. end	2
2:10	120 x 100	2 pegs, lapped over sill plate	2
3:1	120 x 120	4 pegs	3
3:2	120 x 120	2 pegs, large mortice e. side n. end	3
3:3	130 x 130	3 pegs	3
3:4	120 x 140	3 pegs	3
3:5	120 x 130	5 pegs, large mortice s. End	3
3:6	130 x 120	3 pegs, adze marks	3
3:7	120 x 140	3 pegs, lapped over sill plate	3
3:8	120 x 160	2 pegs	3
3:9	130 x 130	4 pegs	3
3:10	130 x 140	1 peg	3
3:11	130 x 140	4 pegs	3
3:12	100 x 140	1 peg, diagonal cut mortice w. side	3
3:13	100 x 140	2 pegs	3
3:14	110 x 140	2 pegs, lapped over sill plate	3
3:15	120 x 140	1 peg, lapped over sill plate, diagonally nailed	3
3:16	120 x 140	4 pegs, lapped over sill plate	3
3:17	120 x 140	No pegs	3



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Figure 1  
 Site Location  
 1:2,000,000; 250,000 & 25,000 at A4

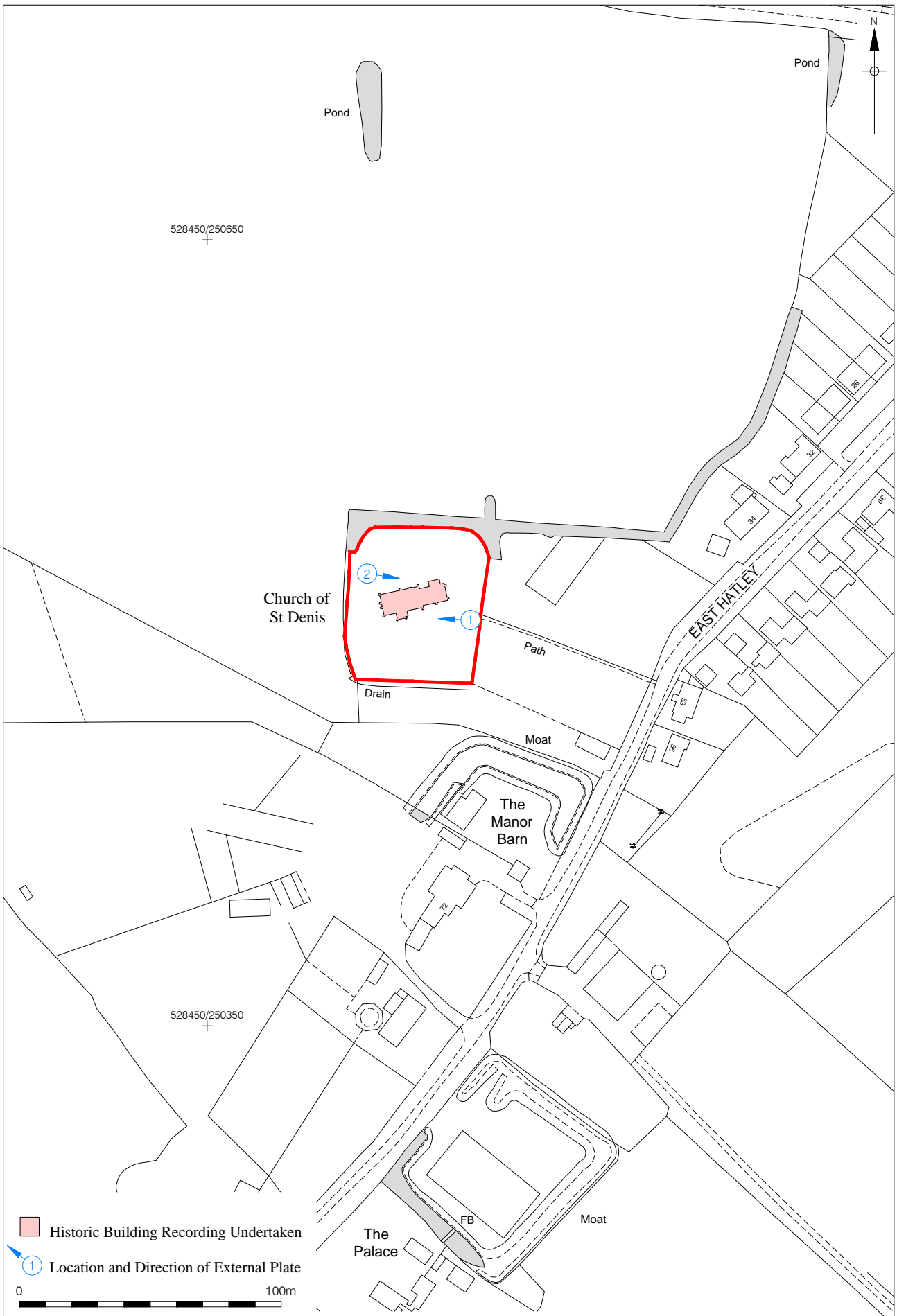
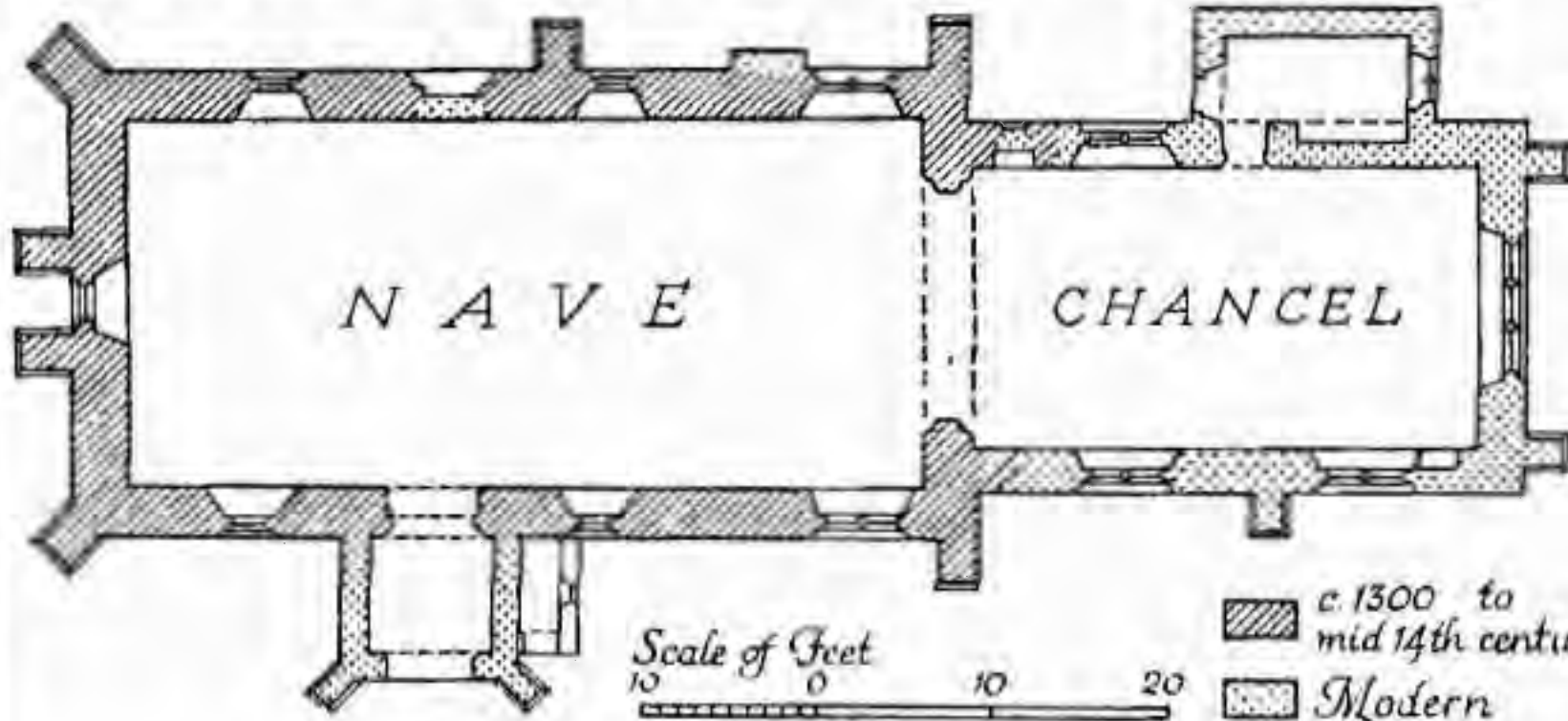




Figure 2  
 Detailed Site Location  
 1:2,000 at A4



# HATLEY *Former Parish Church of St. Denis, East Hatley*



Scale of Feet  
10 0 10 20

 *c. 1300 to mid 14th century*  
 *Modern*

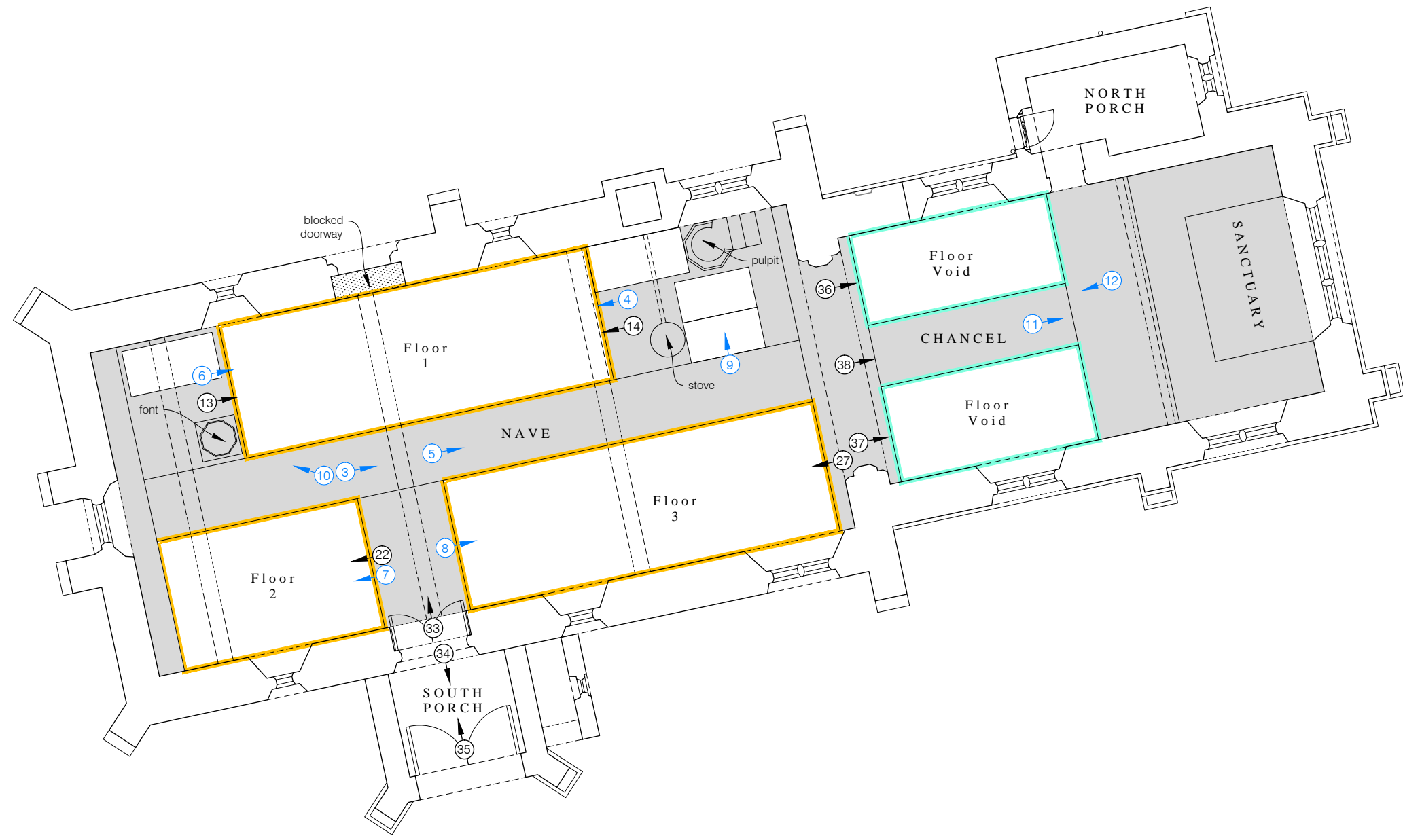
Hatley, Former Parish Church of St. Denis, East Hatley






0 4 12 Feet  
0 2 4 Metres

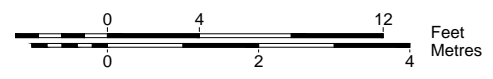
Figure 3  
Historic Plan of Saint Denis Church  
1:125 at A4



2

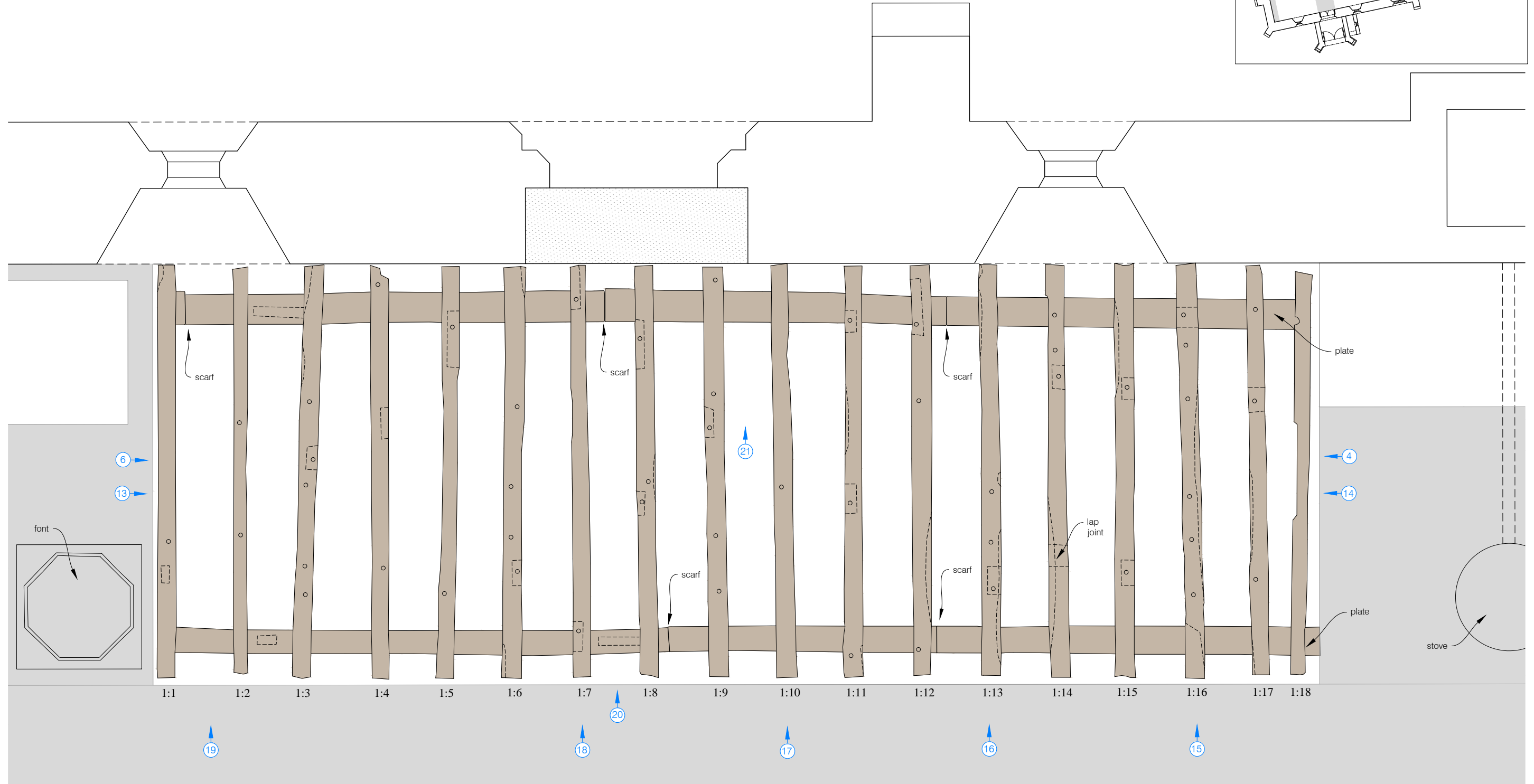
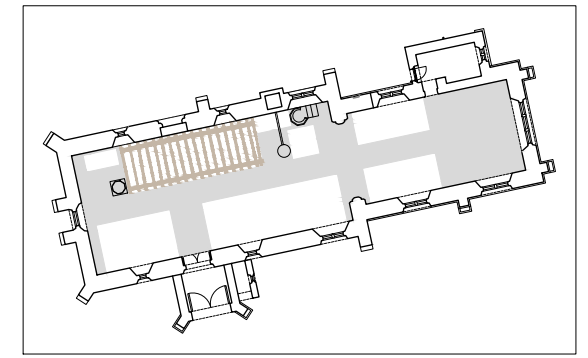


-  Floors 1-3 (Drawn & Photographic Record)
-  Floor Voids (Photographic Record)
-  Quarry Tiles (Photographic Record)
-  ① Location and Direction of Plate (Prior to Repair Works)
-  ① Location and Direction of Plate (During Repair Works)

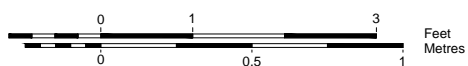


Ground Floor Plan based on drawing 201 supplied by Purcell  
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 26/02/18

Figure 4  
 Existing Ground Floor Plan  
 1:100 at A3

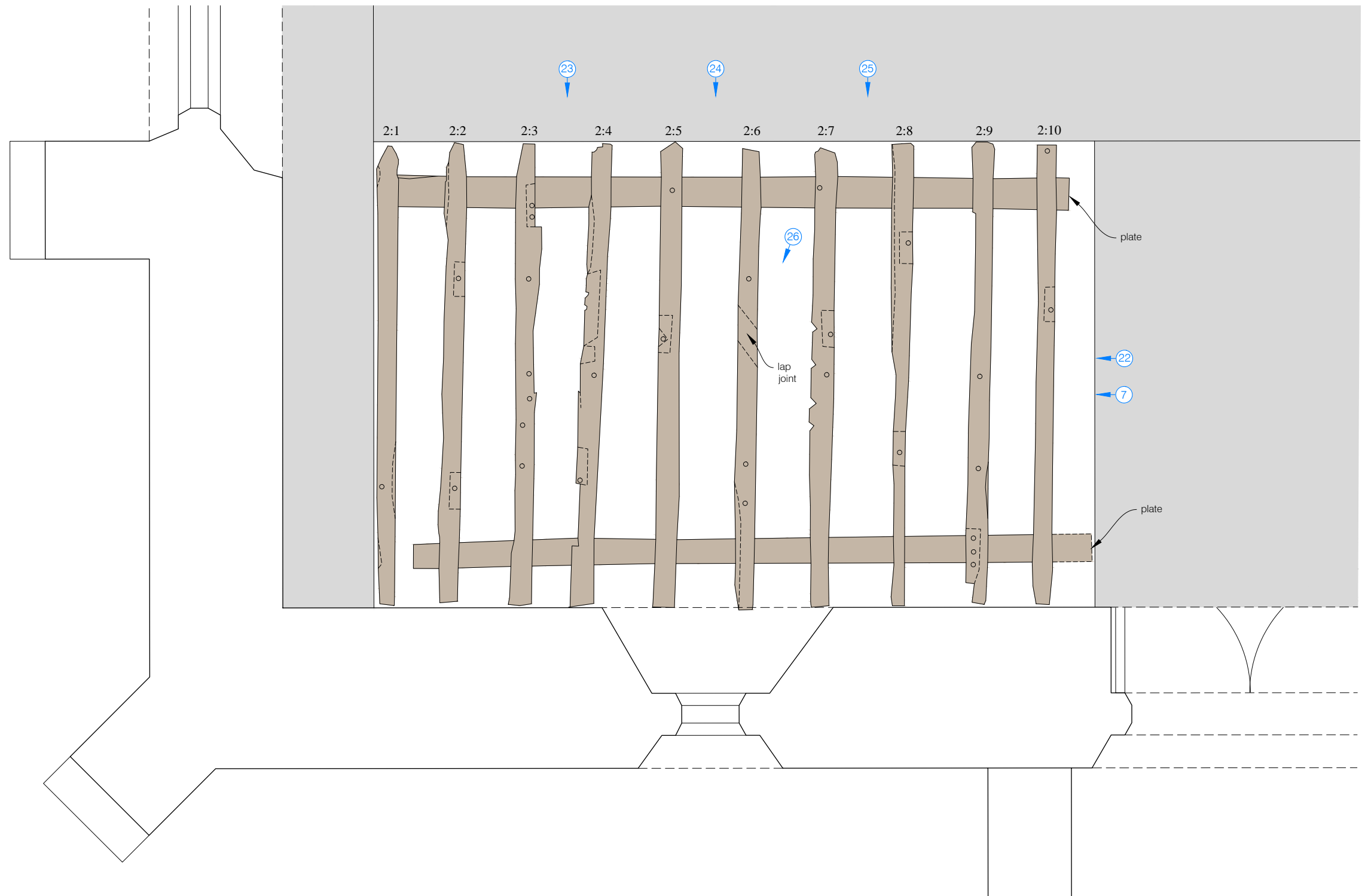
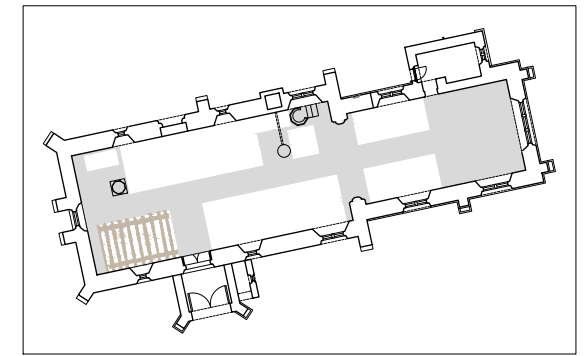


- Peg Hole
- Timber Joists & Plates
- Quarry Tiles
- ① Location and Direction of Photographic Plate



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Figure 5  
Detailed Plan of Floor Section 1  
1:25 at A3

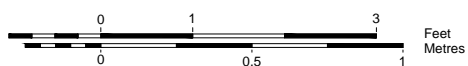


○ Peg Hole

■ Timber Joists & Plates

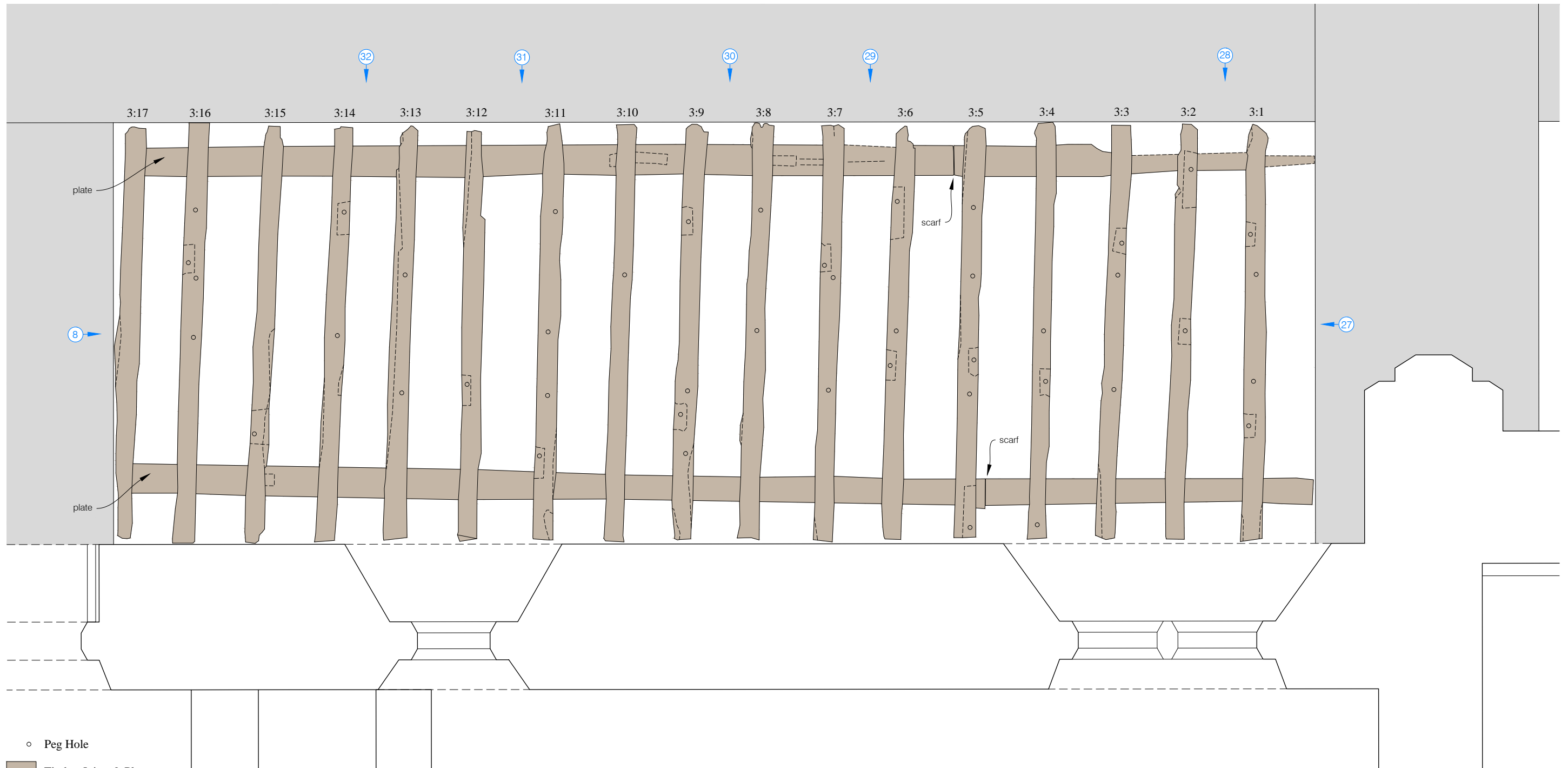
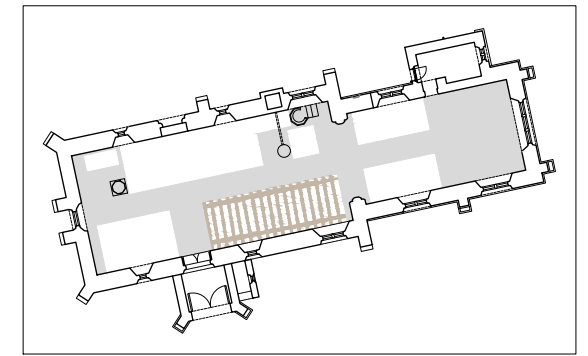
■ Quarry Tiles

① Location and Direction of Photographic Plate

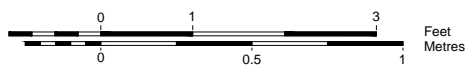


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Figure 6  
Detailed Plan of Floor Section 2  
1:25 at A3



- Peg Hole
- Timber Joists & Plates
- Quarry Tiles
- ① Location and Direction of Photographic Plate



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Figure 7  
Detailed Plan of Floor Section 3  
1:25 at A3



Plate 1 Church of St Denis looking north-west



Plate 2 Northern elevations looking south-east



Plate 3 General view looking east



Plate 4 The nave looking west



Plate 5 Detail of later 19<sup>th</sup> century crown post roof over nave



Plate 6 Extant floorboards to floor section (1), looking east (Pre-commencement)





Plate 7 Extant floorboards to floor section (2), looking west (Pre-commencement)



Plate 8 Extant floorboards to floor section (3), looking east (Pre-commencement)



Plate 9 Quarry tile floor adjacent to pulpit (base)



Plate 10 Quarry tile floor to central aisle and around font



Plate 11 Geometric floor in Sanctuary



Plate 12 Floor voids in chancel used for storing building materials



Plate 13 Nave, floor section (1) after the removal of boards, looking east



Plate 14 Nave, floor section (1) after the removal of boards, looking west



Plate 15 Floor section 1, east end, joists 1:14-1:18



Plate 16 Floor section 1, east end, joists 1:15-1:11



Plate 17 Floor section 1, central, joists 1:9-1:12



Plate 18 Floor section 1, central, joists 1:5-1:10



Plate 19 Floor section 1, west end, joists 1:1- 1:5



Plate 20 Floor section 1, detail of adze marks



Plate 21 Floor section 1, detail of sleeper wall and plate



Plate 22 Floor section 2, looking west





Plate 23 Floor section 2, west end, joists 2:1-2:6



Plate 24 Floor section 2, joists 2:3-2:8



Plate 25 Floor section 2, joists 2:6-2:10



Plate 26 Floor section 2, joist 2:6, lap joint



Plate 27 Floor section 3, looking west



Plate 28 Floor section 3, east end, joists 3:1-3:4



Plate 29 Floor section 3, joists 3:5-3:8



Plate 30 Floor section 3, joists 3:7-3:11



Plate 31 Floor section 3, joists 3:9-3:14



Plate 32 Floor section 3, joists 3:12-3:17



Plate 33 Sub floor chamber adjacent to south nave door



Plate 34 Remains of quarry tiles in south porch



Plate 35 Date plaque and arms (Sir George Downing) over south nave door



Plate 36 Floor void, chancel, north side



Plate 37 Floor void, chancel, south side



Plate 38 Replacement 19th century chancel roof



# PCA

## **PCA CAMBRIDGE**

THE GRANARY, RECTORY FARM  
BREWERY ROAD, PAMPISFORD  
CAMBRIDGESHIRE CB22 3EN  
t: 01223 845 522  
e: [cambridge@pre-construct.com](mailto:cambridge@pre-construct.com)

## **PCA DURHAM**

UNIT 19A, TURSDALE BUSINESS PARK  
TURSDALE  
DURHAM DH6 5PG  
t: 0191 377 1111  
e: [durham@pre-construct.com](mailto:durham@pre-construct.com)

## **PCA LONDON**

UNIT 54, BROCKLEY CROSS BUSINESS CENTRE  
96 ENDWELL ROAD, BROCKLEY  
LONDON SE4 2PD  
t: 020 7732 3925  
e: [london@pre-construct.com](mailto:london@pre-construct.com)

## **PCA NEWARK**

OFFICE 8, ROEWOOD COURTYARD  
WINKBURN, NEWARK  
NOTTINGHAMSHIRE NG22 8PG  
t: 01636 370410  
e: [newark@pre-construct.com](mailto:newark@pre-construct.com)

## **PCA NORWICH**

QUARRY WORKS, DEREHAM ROAD  
HONINGHAM  
NORWICH NR9 5AP  
T: 01223 845522  
e: [cambridge@pre-construct.com](mailto:cambridge@pre-construct.com)

## **PCA WARWICK**

UNIT 9, THE MILL, MILL LANE  
LITTLE SHREWLEY, WARWICK  
WARWICKSHIRE CV35 7HN  
t: 01926 485490  
e: [warwick@pre-construct.com](mailto:warwick@pre-construct.com)

## **PCA WINCHESTER**

5 RED DEER COURT, ELM ROAD  
WINCHESTER  
HAMPSHIRE SO22 5LX  
t: 01962 849 549  
e: [winchester@pre-construct.com](mailto:winchester@pre-construct.com)

