

# Land at Elm Park Primary School, Nicholls Lane, Winterbourne, Bristol

Archaeological Excavation  
South Glos. Planning Ref. P20/08773/R3F

## Written Scheme Of Investigation

December 2020

## Avon Archaeology LTD



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## CONTENTS

### Notes

### Copyright

### Abbreviations

- 1 Introduction**
- 2 National Planning Policy Framework and Local Planning Guidance**
- 3 Site Location, Geology and Topography**
- 4 Historical and Archaeological Background**
- 5 Aims, Objectives & Methodology**
- 6 Finds and Specialist Contributions**
- 7 Special Circumstances**
- 8 Post Excavation Archive and Report Preparation**
- 9 Contingency Arrangements**
- 10 Project Health and Safety**
- 11 References**

### Figures

- Figure 1** Location of the Site
- Figure 2** Site Plan showing evaluation trench locations
- Figure 3** Site Plan showing proposed excavation area and new building footings



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## Abbreviations

AAL	Avon Archaeology Limited
aOD	Above Ordnance Datum
BHER	Bristol Historic Environment Record
NGR	National Grid Reference
OASIS	Online Access to the Index of Archaeological Investigations



## 1 Introduction

**1.1** This Written Scheme of Investigation (WSI) sets out the methodology for a programme of Archaeological Excavation at Elm Park School, Nicholls Lane, Winterbourne, Bristol, as requested by the local authority, which is South Gloucestershire Council. This work follows an Archaeological Desk-Based Assessment (Longman 2019) and an Archaeological Evaluation, which was also carried out by AAL (Ings 2020). All of the archaeological investigations of the site form part of the formal planning submission for the demolition of the present school buildings at the western side of the site and their replacement with what will be in effect a new school with new playing fields on the current car park and open field which lies immediately to the east of the school, and green landscaping and car parking on the site of the present school (**Figures 1 - 3**). The project is proceeding under the local authority's planning reference P20/08773/R3F.

**1.2** The work will be conducted in accordance with the relevant guidelines for Archaeological Excavation projects issued by the Chartered Institute for Archaeology (CIfA 2020a) and the guidelines for archaeological projects set out in MoRPHE (Management of Research Projects in the Historic Environment 2015). The work will also be underpinned by the guidelines set out at national level in the NPPF (National Planning Policy Framework, as revised February 2019).

**1.3** Health and Safety will take priority over all archaeological matters, and fieldwork will be undertaken in accordance with the Health and Safety Policy of Avon Archaeology Limited (produced in collaboration with AAL's health and safety advisors Acorn Health and Safety) and in accordance with CIfA's Health and Safety Policy (CIfA 2018, 4). A project specific Health & Safety risk assessment will be produced by Avon Archaeology Limited prior to the commencement of fieldwork.

**1.4** The local authority Archaeological Officer, Dr Paul Driscoll, will be notified of the project commencement date before work begins on site. The physical archive from both the earlier evaluation project and the current excavation project will be deposited with the local museum, Bristol Museum and Art Gallery, under the accession number 2020.12. An OASIS record will be opened for upload of the excavation project's Final Report onto the local HER upon approval of this WSI. The digital files generated from both the Archaeological Evaluation and Excavation will be uploaded together onto the Archaeological Data Service in due course.



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## 2 National Planning Policy Framework and Local Planning Policy

**2.1** Between March 2010 and March 2012, national planning guidelines as they related specifically to the historic environment were outlined in the document known as PPS (Planning and Policy Statement) 5, Planning for the Historic Environment. However, in March 2012, PPS5, and indeed all the other planning policy guidance and statements which underpinned the operation of the national planning process, was replaced by a single, greatly simplified, overarching and integrated document known as the National Planning Policy Framework (Dept. for Communities and Local Government). A revised edition of this document was published in July 2018 and again in February 2019, wherein matters relating to archaeology and the historic environment generally are dealt with in Section 16 (pages 54-57), Conserving and Enhancing the Historic Environment. A detailed examination of the implications of the new framework for the specific site being reported on here is outside the scope of this document. By far the majority of the document consists of guidance to local authorities on how they should handle matters relating to the historic environment in their own areas, and the essence of the narrative is that, in most cases, decisions relating to the historic environment are devolved down to local authorities in the form of their own Local Plans, Core Strategies, Development Frameworks, Supplementary Planning Documents etc.

**2.2** For South Gloucestershire specifically, the relevant sections of the Local Plan: Core Strategy (adopted 2013) state that:

*Relics of historic settlements and the industrial past (coal mining and manufacturing) texture the landscape. A rich and varied heritage of historic buildings, settlements, parks and gardens and archaeological features make an important contribution to the character of the area. South Gloucestershire also has a rich natural environment and an array of ecological assets, from international designations in the Severn Estuary to species of critical importance for local biodiversity. The Severn Levels is also an area of high archaeological potential.*

**2.3** The policy sets out criteria for the assessment of high quality design in new development. In particular, through Design & Access Statements, development proposals should demonstrate a clear understanding of both the site and locality's historic, archaeological, ecological and landscape context in drawing up development proposals. The policy also sets out key design priorities and a standard against the established national assessment methodology, 'Building for Life' (BfL12), that residential development proposals will be expected to achieve.



**2.4** South Gloucestershire has an important legacy of heritage and cultural assets, including over 2000 listed buildings, approximately 1500 locally listed buildings, 30 conservation areas, 8 registered historic parks and gardens, and 37 scheduled monuments. There are a wide range of undesigned historic buildings, archaeological sites and remains, and historic parks and gardens as well as places, areas and landscapes of historic interest. Information about heritage assets can be found in the South Gloucestershire Historic Environment Register (HER). These assets make a significant contribution to the identity of the locality in which they are set, helping to create a sense of place. Applications for development which affect heritage assets and their settings directly or indirectly will need to describe the nature of the significance of the assets affected, and set out how development will maintain and enhance heritage assets and their settings in a manner appropriate to that significance. New development should seek opportunities to draw on the historic environment in order to maintain and enhance local character and distinctiveness.

### **3 Site Setting, Topography and Geology**

**3.1** The site is currently occupied by the existing school buildings, of 1960s construction. It is bounded by Nicholls Lane to the west, by Park Avenue to the north, by the rear gardens of residential properties on Masons View and Saint Francis Drive to the east and south-east, and by Abbeydale (road) to the south. The site centre lies at OS NGR ST 65433 80950, and it consists essentially of two adjoining, roughly square plots covering in total an area of approximately 1.93 hectares (4.78 acres). The ground is generally level, and its western end, fronting Nicholls Lane, is located at a height of approximately 66.0m aOD.

**3.2** The British Geological Survey on-line mapping depicts the solid geology beneath the site as belonging to the Mangotsfield Member – Sandstone, of the Carboniferous period. BGS describes the physical characteristics of these deposits as:

*Predominantly cross-bedded, lithic arenite, "Pennant" sandstone in the lower part, and an upper part with thick grey fissile mudstone beds, interbedded with sandstone and sparse coal seams. The sandstone weathers to a distinctive red to purple colour (BGS).*

BGS has no record of any geotechnical boreholes near the site, the nearest being located c.1km to the south-west near Sturden Manor on Winterbourne Hill.



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## 4 Archaeological and Historical Background

**4.1** The site has been the subject of a full and recent Desk-Based Assessment (Longman 2019), and so it is considered sufficient for present purposes to quote the summary findings of that work. For more detail, reference can be made to the full report:

*The locality is largely Post-War residential in character with detached, semi-detached and terraced 1960s-built houses on the opposite (north) side of Park Avenue, to the north-east on Masons View, south-east on St Francis Drive and on Abbeydale, and south-west of the site on Nicholls Lane. In addition, there are detached 1930s-built houses on the opposite (west) side of Nicholls Lane. Mature hedges and trees delineate the boundaries of the school playing field. The former Greenfield School (now a community centre known as the Greenfield Centre) is located immediately north of the playing field. There is evidence for Romano-British activity in the vicinity, in the form of two find-spots of Roman coins. There is some evidence for Anglo-Saxon activity with the finding of a gold Saxon ring, and evidence for medieval and post-medieval settlement in the locality, including core medieval and post-medieval settlement activity principally focussed on the settlements of Winterbourne, Watley's End, and Hicks Common. There is evidence for 17th century and later occupation in the near locality of the site principally focussed on Hicks Farm located on Cloisters Road. There is also evidence for post-medieval settlement activity in the near vicinity at Winterbourne Park (house) off Nicholls Lane. The assessment findings suggest that the site has low potential for prehistoric, Romano-British and Anglo-Saxon remains to be present, and low to medium potential for medieval and post-medieval remains to be present on the site (Longman 2019).*

**4.2** The Archaeological Evaluation was carried out by AAL in August 2020, and consisted of 6 trenches totalling an area of 100m<sup>2</sup>, covering both the current school car park and open field to its east. A short summary report was subsequently submitted to the local authority, on the basis of which the current excavation project was requested; this was followed by a Final Report for the evaluation element of the work. A number of linear archaeological features were identified in trenches 4, 5 and 6 ([406], [502], [603], [607] and [612]), which may be temporally related. Unfortunately, no finds or dating evidence were recovered from any of the features or deposits encountered.

The abstract of this Final Report is reproduced below. Trench locations can be seen on **Figure 2**, and those archaeological features likely to be impacted by the proposed development scheme are identified on **Figure 3**.

*The Archaeological Evaluation uncovered a number of probable man-made ditches, which may be prehistoric or Romano-British in date, one probable palaeochannel, one probable*



*geological feature adapted for human use, and two possible post-Roman quarry pits. However, as no finds were uncovered, no definitive conclusion on these theorised dates can be reached without further data being collected. Although the evaluation trenches did not extend far enough to prove any interrelationships, it is postulated on the basis of their comparative alignments that the roughly north-south ditch [502] and roughly east-west ditches [607] and [612] may indicate that together they form the western and southern sides of some kind of enclosure or boundary system. Furthermore, it is tentatively suggested that, given their comparable alignment and closeness to each other, ditches [607], [612], and possibly even [603] are temporally related to each other. It is hoped that the next stage of investigation will elucidate at least some of these interrelationships and yield some dating evidence.*

## **5 Aims, Objectives & Methodology**

**5.1** The following paragraphs outline the major archaeological strategy for the project. Methodology in relation to health and safety will be detailed in a separate Health and Safety Method Statement and Risk Assessment, which will be produced in collaboration with Acorn Health and Safety Ltd.

**5.2** This project is designed to excavate and record all buried archaeological deposits and finds within the areas of the site impacted by the new school building, which will be sited on the current school car park and whose footprint will encompass the significant archaeological features found in evaluation trenches 4, 5 and 6. However, the proposed development scheme allows for some refinement of the exact areas where identified archaeological features are likely to be impacted by the associated ground works, due to comparative depths of the new school's footings and interior concrete slab base and the features themselves.

Email correspondence received from Ross Smith of Atkins Global on the 16<sup>th</sup> November stated:

*The existing levels for the project site look to fall from the building towards the playing field from 65.80m – 65.0m approximately.*

*The proposed slab level is 65.550m so some of the slab will be cut into the slope and some will be on fill following removal of the existing surface finishes back to competent ground. Based on the following build up; 150mm RC slab, 80mm insulation, 150mm well compacted granular material the level underneath the slab generally would be 65.170m, consequently excavation would be up to 630mm for this element.*





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*The lift pit has a level of 64.450m. Based on the following build up; 250mm RC slab, 80mm insulation, 150mm well compacted granular material the level underneath this would be 63.970m, consequently the excavation would be up to 1.83m.*

*Foundations are mass concrete, with 150mm of well compacted material beneath. The anticipated level at the base of these excavations would be 64.250m, therefore the excavation is likely to be been 1.550m and 750mm.*

*Drainage has invert levels between 64.680 and 63.950, and the drainage trench has notionally an invert level of 63.000. The depths of excavations would be between 320mm and 1.85m for the drainage run dependant on location and up to 2.8m for the drainage trench dependant on location of the rock head on site in this location.*

On the basis of the maximum depths of ground works given above, the west – east rock-cut linear [406] and north – south V-shaped linear [502] were identified as being at risk of destruction. These lie at 65.50maOD and 65.60maOD respectively; in comparison, the estimated depth of the new school footings in the area of [402] is 64.25maOD, and the estimated depth of the concrete slab which will overlie [502] is 65.17maOD. The linear features seen within Trench 6, however, were seen at a lower depth than the estimated maximum depth of the concrete slab, lying at between 64.85maOD and 64.95maOD. It is highly likely that the school footings in the area of Trench 6, estimated to reach a maximum depth of 64.25maOD, will remove a very small area of linears [607] and [612] (see **Figure 3**); however, it is believed that monitoring the excavation of the new school footings in their vicinity under Watching Brief conditions would allow for sufficient recording of these features if, indeed, the Local Authority Archaeologist deems their recording to be worthwhile. Therefore, on the basis of the above, the proposed excavation area is focussed solely on the known and conjectured locations of features [406] and [502], and totals an area of 160m<sup>2</sup>.

**5.3** Following completion of the fieldwork, the collected data will be assessed in order to identify and characterise each class of archaeological data recovered from the site. Following this, a Final Report will be produced, outlining the results of the excavation fieldwork and their significance within the wider archaeological landscape.

**5.4** All requirements specified by Dr Paul Driscoll, Archaeological Officer for the local authority, will be followed unless otherwise stated. No omissions are intended.



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**5.5** The designated excavation area will be cleared of modern surfacing and non-archaeological deposits by a floor saw and machine equipped with a toothless bucket, under archaeological supervision. Excavated material will be stored safely and away from the edges of the excavation area, which will be backfilled upon completion of the fieldwork. Heras fencing may be used if instructed by the developer to ensure the health and safety of the general public. No provision is included in the project for specialist consolidation or resurfacing of the excavated area.

**5.6** Excavation by machine will cease at the top of significant archaeological deposits or structures. Thereafter excavation will proceed using hand tools, in order to establish the extent of archaeological deposits and features, and to undertake appropriate excavation and recording. Unstratified and stratified finds will be retained for post excavation processing, identification and assessment where appropriate.

**5.7** All structural and cut soil features will be defined, and an appropriate sample of all types of archaeological deposit will be excavated by hand to ascertain the date, character and function of the activity represented. In all cases the extent of excavation undertaken will be sufficient to enable significant archaeological deposits and features to be characterised and dated, so far as the archaeology present will allow.

**5.8** The intensity and levels of archaeological excavation and sampling will be as follows, subject to any overriding Health and Safety issues:

- Deposits relating to funerary or ritual activity, for example cremations or inhumation burials, will be investigated by means of a 100% sample.
- Deposits relating to domestic or industrial activity, for example earthfast structural features, floor layers and kilns/furnaces, will be investigated by means of a minimum of 25% sample.
- Cut-soil features such as pits will be investigated by means of a minimum 50% sample of the deposits filling each.
- Linear cut-soil features and deposits, for example ditches or pathways, will be investigated by means of a minimum 20% sample of the deposits filling each.

**5.9** All archaeological features and deposits will be located on the Ordnance Survey national grid using a survey grade GPS unit or Digital Total Station. Copies of all data obtained from this survey will be placed within the project archive and the geospatial information will be submitted to the local authority in DWG format if required.



**5.10** All the information regarding archaeological features will be recorded on field documents produced and compiled by Avon Archaeology Limited, in addition to a photographic survey, and technical drawings at scales of 1:10 and 1:20 with OD levels. The methodology may encompass the production of drawings of relevant elevations, sections and plans. The contexts will be characterised individually and numbered in sequential order.

**5.11** As already noted, this project will be archived along with the earlier evaluation project by the accepting museum (Bristol Museum and Art Gallery) under the accession number 2020.12. An OASIS record for the Archaeological Excavation will be opened upon approval of this WSI.

## **6 Finds and Specialist Contributions**

**6.1** Recovered finds, ecofacts and bone will be identified by stratigraphic unit, marked, catalogued and prepared for long term storage following analysis, which may be undertaken in-house, but, where required, provision is included for specialist reporting. The strategy and sampling procedures for the evaluation of environmental and geoarchaeological evidence, if necessary, will be based upon formal advice sought from Hayley McParland, Regional Scientific Advisor for Historic England, and in accordance with the standard requirements of the local authority Archaeological Officer.

**6.2** The following key specialist studies will also be earmarked to the project, and will be available for use if suitable deposits are located:

- Roman pottery and finds – Dr Jane Timby
- Medieval and post medieval ceramics – freelance specialist Dr A Gutierrez.
- Faunal remains – Joss Davis (AAL) and/or Lorrain Higbee of Wessex Archaeology Limited
- Environmental Archaeology - Quest (Reading University)
- Small Finds – Sarah Newns (AAL) and/or Dr Jane Timby
- Coins – Sarah Newns (AAL)
- Prehistoric lithics – Dr Katharine Walker, FSA, Visiting Fellow, University of Bournemouth, and New Forest Centre
- Archaeometallurgy – Dr Tim Young, GeoArch



- Human burials – Dr Heidi Dawson, University of Winchester

## **7 Special Circumstances**

**7.1** Appropriate procedures under the relevant legislation will be followed in the event of the discovery of artefacts covered by the provisions of the Treasure Act 1996 and/or the Burial Act of 1857. All human burials will in the first instance be preserved in-situ subject to the requirements of the local authority Archaeological Officer.

## **8 Post Excavation Archive and Report Preparation**

8.1 On completion of the on-site work, the following sequence of tasks will be undertaken:

- The processing, assessment and reporting of all artefacts and finds;
- The preparation of a comprehensive, indexed and internally consistent project archive;
- Preparation of a detailed and fully illustrated Final Report setting out the results of the evaluation and excavation projects, their context and interpretation;
- Preparation of the project archive for deposition at an appropriate local repository, according to Historic England, CIfA and local repository standards;
- The archive to be deposited in an appropriate local museum, in this case the Bristol Museum and Art Gallery, under the accession number 2020.12;
- Copies of all archaeological reports arising out of the project to be submitted to Dr Paul Driscoll, Archaeologist for South Glos. Council. An entry detailing the project will be placed within the Historic Environments Record (HER);
- Any spatial data generated will be submitted to the HER in a suitable GIS format (e.g. shapefile, mapinfo tab, dxf etc);
- A copy of the final report will be uploaded onto OASIS upon project completion. The results of the evaluation and excavation fieldwork will also be uploaded onto the Archaeological Data Service as one entry. Copies of all digital files generated will be stored on AAL's secure online server.



## 9 Contingency Arrangements

**9.1** A contingency budget has been reserved to the project and may be utilised to undertake specialist tasks arising from the archaeological fieldwork, as outlined in **Section 6**.

**9.2** In the event of the discovery of unexpected and highly significant remains during the archaeological excavation, the local authority Archaeological Officer for South Gloucestershire Council, which is also both the ultimate client and the landowner, will be notified, in order that an assessment of the importance of the remains and any provision for their more detailed recording or other appropriate treatment may be made.

## 10 Project Health and Safety

**10.1** Health and Safety will take priority over all archaeological matters at all times. All archaeological work will be conducted in accordance with the guidelines set out by its own specific Health and Safety Policy (drafted in collaboration with Acorn Health and Safety), and adheres closely to the policy statement on health and safety issued by the Chartered Institute for Archaeologists in August 2018.

**10.2** All staff appointed to the project will have up to date CSCS professionally qualified person level cards.

**10.3** Specific COVID-19 health and safety documents will be provided by AAL in addition to the project RAMS, and will be strictly enforced.

## 11 References

### **Bristol City Council. 2012**

*Bristol Museum & Art Gallery: Conditions of Acceptance of Archaeological Archives*

### **Brown, D. H. 2011**

*Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation.* Institute of Archaeologists

### **CIfA 2018**

*Policy statements.* Chartered Institute for Archaeology



**CIfA 2020a**

*Standard and guidance for an Archaeological Excavation.* Chartered Institute for Archaeology.

**CIfA 2020b**

*Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives.* Chartered Institute for Archaeology.

**Ings, E. 2020**

*Land at Elm Park Primary School, Nicholls Lane, Winterbourne, Bristol. Report on Archaeological Evaluation.* AAL unpublished client report: AAL 2020/21.321

**Longman, T., 2019**

*Elm Park Primary School, Nicholls Lane, Winterbourne, South. Glos: Archaeological Desk-Based Assessment.* Unpublished client report, Longman Archaeology Ltd. Project No. 116/2019.

**MoRPHE 2015**

*Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide.* English Heritage.

**NPPF 2019**

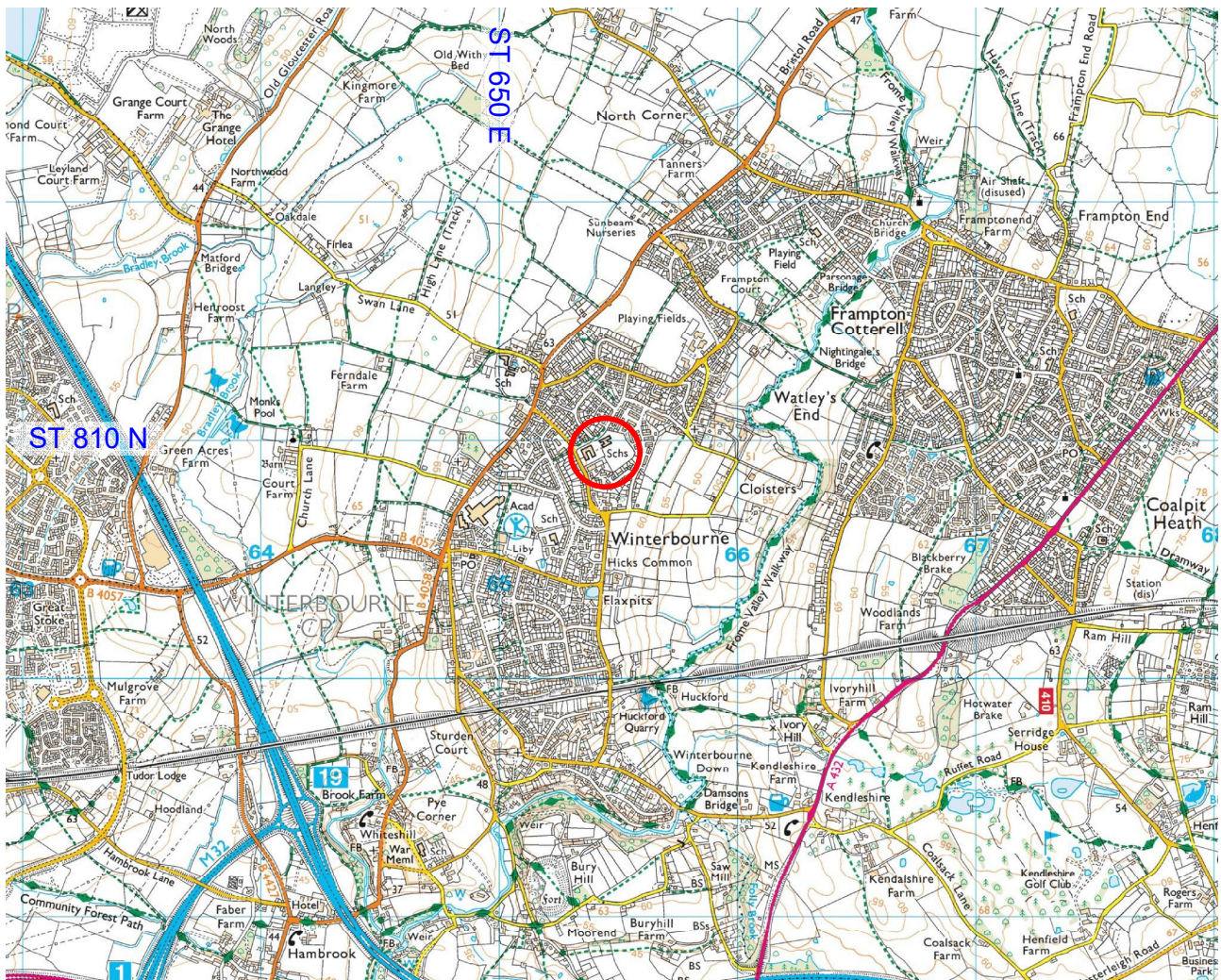
*National Planning Policy Framework.* Dept. for Communities and Local Government.

## Figure 1

### Location of the Site

The Site 

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Grid lines at 1km intervals

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Based on OS Explorer Sheet 155, Bristol and Bath,  
Keynsham and Marshfield. Published scale 1:25000.



# Figure 2

## Site Boundary with evaluation trench locations

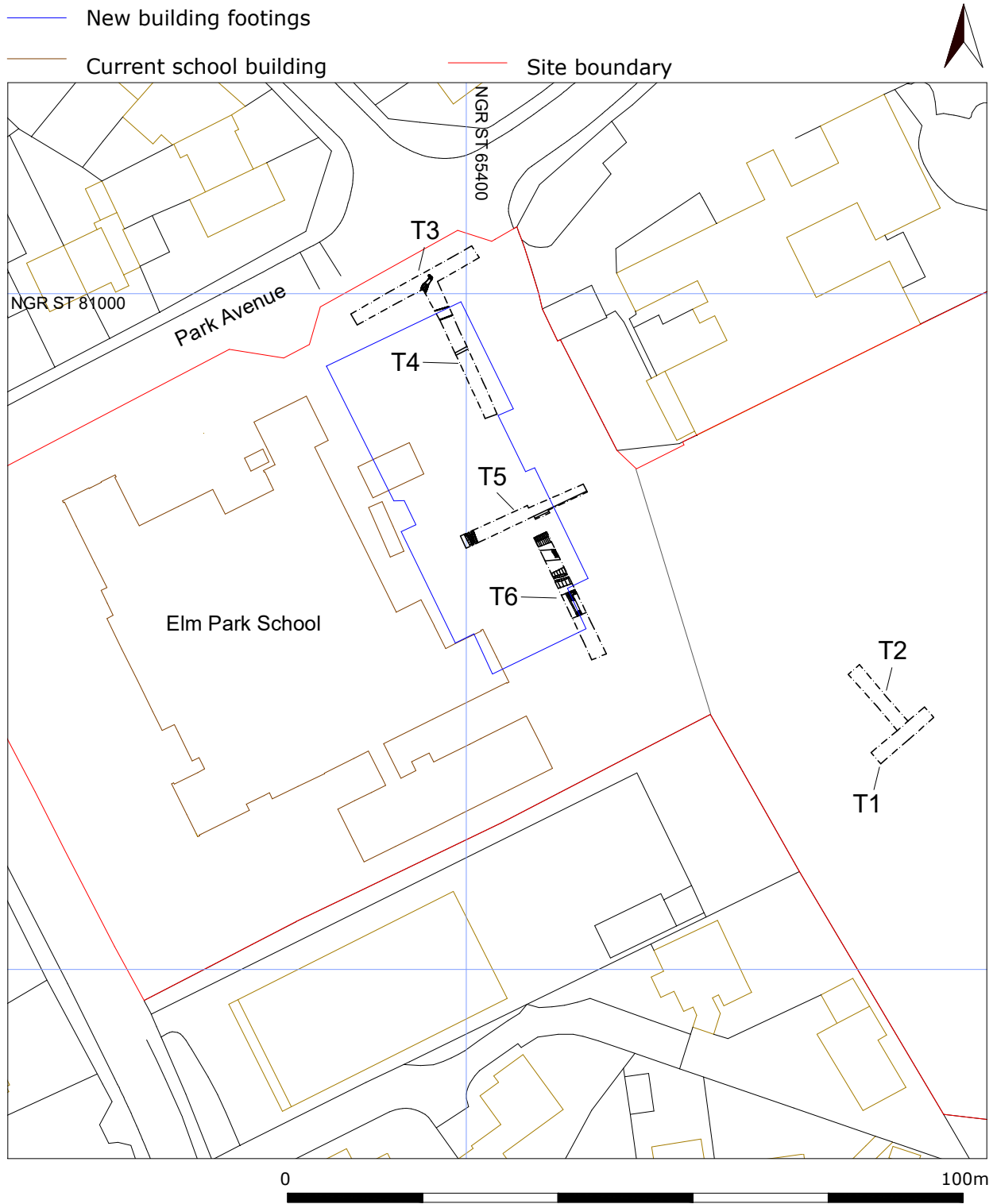
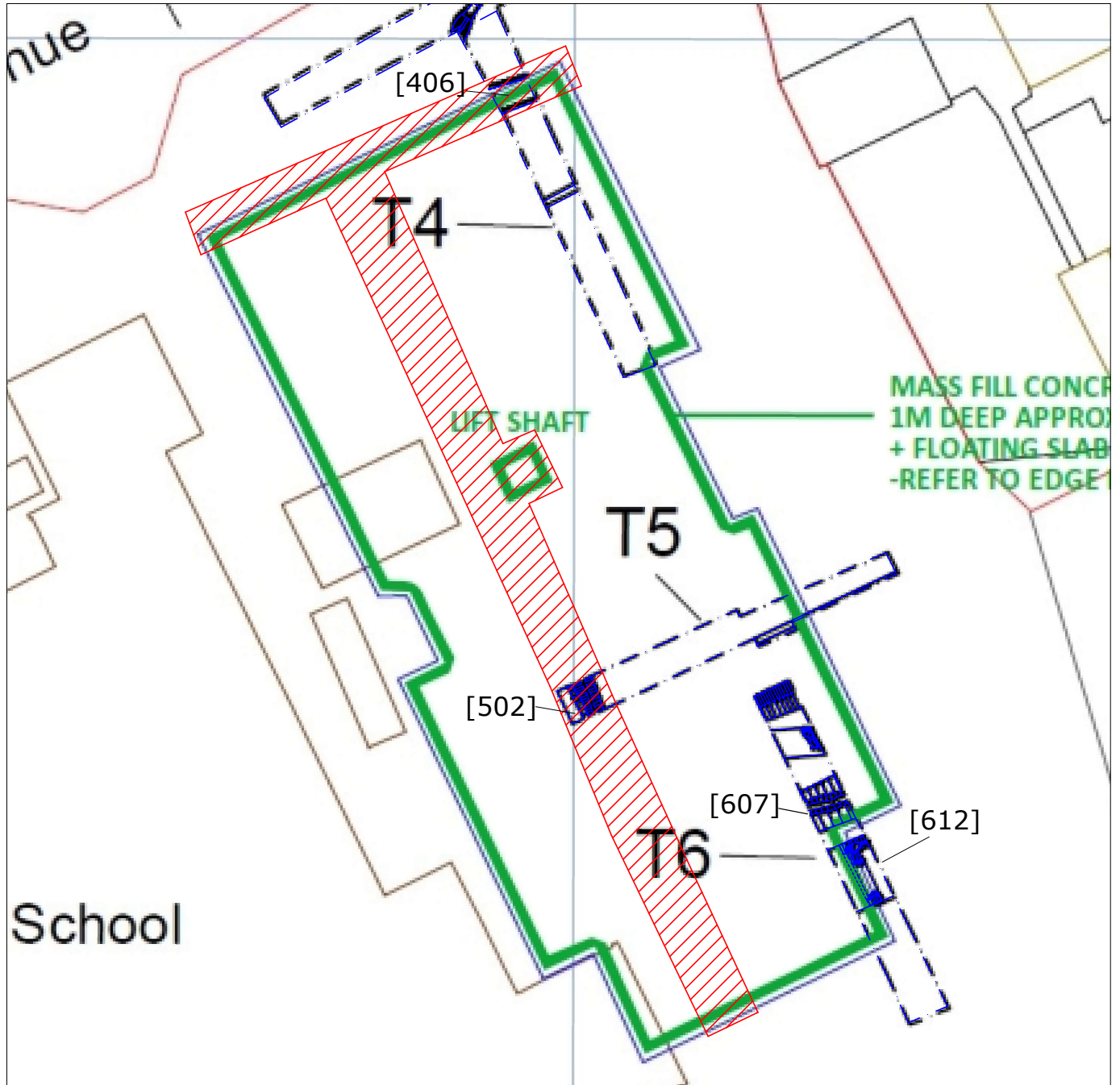




Figure 3

Site Plan showing proposed excavation area and new building footings



Proposed Area of Excavation