PROJECT DESIGN

FOR THE

ARCHAEOLOGICAL EVALUATION

OF

MILK STREET SITE, NORTH WOOLWICH

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2 INTRODUCTION

2.1 Newham Museum Service has been commissioned to undertake an archaeological evaluation of the site at Milk Street/Albert Road, North Woolwich E16, by Family Housing Association. On the basis of the known archaeological potential of the area, the borehole and contamination reports and the nature of the proposed development a specification has been drawn up below and the methodology for its fulfilment set out.

2.2 The site lies in the south-eastern part of the East Ham marsh within an Archaeological Priority Area as defined within the London Borough of Newham UDP. This is an area of deeply stratified Thames alluvial deposits which include sequences of peat layers which further to the north in Beckton and Barking have preserved Bronze Age trackways, revetments and other structures. Also of great importance within these deposits is the known preservation of palaeoenvironmental deposits. This site therefore has the potential to preserved any evidence of anthropogenic activities and environmental data sequences.

2.3 Recent archaeological work in the vicinity of the site at Royal Victoria Gardens through to the site of the in-construction-pumping-station has shown a palaeoenvironmental sequence 5-6m in depth after the striping off of 1-2m of overburden. The sequence showed, in well defined deposits, a process of continuous regression and rise in sea levels producing periods of forested landscapes and drowned landscapes. This process can be traced into the historical period as a long period of bad weather and high sea levels forced the abandonment of the medieval village of North Woolwich by the fourteenth century. A deposit of possible medieval date was recorded in the park which may relate to this settlement.

2.4 The present site is covered with a number of derelict buildings and the remaining open space is covered with tipped material. The development proposal, by Family Housing Association, is for the construction of a number of houses and flats (24 units) with piled foundations.

2.5 This project design will set out the methodology of the evaluation and the potential implications that the discovery of significant archaeological deposits would produce.

3 RESEARCH AIMS

3.1 The aims of the evaluation are:

- To determine the nature of the topography of the buried landscapes that the site lies within.

- To determine, as far as is reasonably possible, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed redevelopment. Attention should be given to sites and remains of all periods (inclusive of past environments).

- To seek to clarify the nature and extent of the existing disturbance and intrusions and hence assess the degree of archaeological survival of buried deposits and surviving structures of archaeological significance.

- To define the archaeological work required to meet the condition, and enable the preparation of a quantified specification.

3.2 Particular attention should be taken with regard to the potential survival of:

- Prehistoric wooden structures.

- Prehistoric landscapes.

- Medieval settlement deposits and structures.

- Palaeoenvironmental sequences.

- Organic and inorganic artefacts.

3.3 The work will follow the recommendations set out in English Heritage (London Division) Guidance Paper 3 and will respect all relevant health and safety legislation, regulations and codes of practice

4 METHODOLOGY

4.1 The evaluation will initially consist of two types of work, a desktop subsurface survey and the archaeological excavation of an evaluation trench. The desktop survey will set the site in its area context while the trench will enable the detailed examination of the deposits.

4.2 The desktop sub-surface survey will consist of the contouring of a series of key deposit interfaces, the top of the peat, the bottom of the peat and the top of the gravel. This work will consist of taking readings from borehole reports of the area surrounding the site and creating contoured plans of the interfaces using SURFER software. Borehole records in the LDDC records and NMS archive will be consulted. This work can be undertaken as soon as the project is confirmed and does not depend on access to the site.

4.3 It is proposed that a single trench be excavated within the footprint of a proposed building block with a basal area of a minimum of 3.0m x 3.0m in plan. Inorder to examine the basal deposits in detail the trench will have to be excavated down to a depth of 5.8-6.0 meters below the present ground surface. This depth of trench will necessitate a safe excavation methodology. Experience by NMS of excavating trenches in this area to such depths has shown that stepped trenches provide a safe, cost-effective method. The trench will be stepped vertically and horizontally in five 1.2m steps from a 12.6m x 12.6m top down to a 3m x 3.0m base.

4.4 At present it is unknown whether the site entrance will be off Albert Road or Woodman Street which is of importance in terms of the L-shaped plan of the site. The ideal location of the evaluation trench would be within the footprint of the housing block along Milk Street. However if we share the site with other contractors this trench and spoilheap may block access or present a health and safety problem. If this is the case an alternative trench location could be made at the Albert Road or Woodman Street ends of the site depending on which was active as the site entrance.

4.5 Because most of the deposits, if not archaeological, will be excavated by machine, one of the trench sides will have to act as a ramp for machine access so as to be able to reach the trench bottom. Because of the poor weight bearing capacity of alluvial deposits the angle (to the horizontal) of the ramp must 15 degrees.

4.6 At the maximum proposed trench depth water inundation can be expected so a provision for pumps will be made. The development site is too small just to pump the water onto the rest of the site and it is also likely that pumps will be required for other works by the contractors. The water will therefore have to be pumped off site and the developers will have to obtain a foul water discharge licence from Thames Water well in advance of the works.

4.7 The excavation will be undertaken using a Hymac mechanical excavator to remove the overburden. Alluvial deposits will be excavated off in 20-30cm spits until the peat horizon or archaeological deposit is revealed. Peat deposits will be removed by machine in 5-10cm spits with hand excavation of each spit to identify any remains present. The Hymac and site accommodation may be provided by the site contractors by arrangement with Family Housing Association as this would represent a saving. However if this is not possible the costs are set out in the contingency section below.

4.8 A dumper truck may be required depending on the location of the trench and the desired location of the spoilheap. A contingency is set out if this cannot be provided by the contractors.

4.9 The whole site will need adequate perimeter security which is the responsibility of the developer. If there are no other contractors on the site then the trench can be sectioned off using bunting. If other contractors are present on site then there may be a need for temporary fencing. If this cannot be provided the costs are set out in the contingency section.

4.10 Archaeological deposits will be cleaned and excavated to determine their nature, date and significance in terms of the evaluation. If non-significant deposits are found they will be totally excavated, recorded and the evaluation of the remaining trench continued. If deposits of significance are uncovered they will be recorded and sampled and the evaluation process will be at an end.

4.11 The trench will be backfilled by replacing the excavated spoil back into the trench. If we are not provided with a machine then a contingency is set out for this. If a detailed backfilling methodology is required this will be an extra cost as appropriate.

4.12 All timbers will be examined, whether natural or worked by man, for evidence of woodland management and practice, the nature of the woodland and type of working. Timbers will be sampled for species identification, for dendrochronology or C14 dating as appropriate. The samples will be assessed for the nature and quality of any information they can give about contemporary human activity, landscapes or themselves.

4.13 All finds will be collected and assessed for their nature, date and significance.

4.14 Environmental samples will be taken of archaeological deposits and a continuous column sample, together with appropriate bulk samples, will be taken for soil, plant, and pollen assessment and dating.

4.15 The recording system used will be the single Context Recording Method with additional sections and photographs being taken as appropriate.

4.16 A report will be written combining the results of the desktop sub-surface survey, archaeology, finds assessment and environmental assessment. The nature, date and significance of these results will be assessed in relation to the proposed development and the threat, if any, that this development will have on the archaeological deposits. If possible the archaeological deposits should be preserved in situ, even if this means changing the nature of configuration of the foundations. However if this is not possible then there may have to be a rescue excavation. The evaluation report would set out the possible mitigation strategies.

4.17 Alternatively if significant archaeological deposits are found and the preferred mitigation strategy is rescue excavation then work could follow straight through from the evaluation so as to save set-up and set-down project costs. There would also not be the need for an evaluation report as the whole site would be written up together. This route would be by agreement by Family Housing Association, English Heritage and Newham Museum Service.

4.18 Following a site visit by the author and NMS Health & Safety Officer it was clear that the site is not presently suitable for evaluation work. All of the site buildings are still standing but in bad condition. They are too small to attempt excavation within them and the danger is compounded by the fact that the roofs are made of asbestos. The open area at the back is overgrown, but more to the point it is also covered with fly-tipped material. The open area is not large enough to excavate a trench and pile the resulting spoil. The evaluation will therefore have to take place after the demolition and clearing of the site. If the site is to be reduced to a formation level this would be the optimum level at which to undertake the evaluation.

4.19 It is anticipated that a maximum of 2 weeks and 2 days will be required to excavate, record and backfill the trench.

4.20 When the actual site methodology has been agreed a risk assessment will be prepared by NMS Health & Safety Officer in which a detailed consideration of the site contamination will be made. There are not expected to be any major problems on this site in terms of contaminents but it is likely that some form of PPE will be worn by NMS staff whilst on site. A contingency for this cost is given.

5 RESOURCES AND COST

All resources, unless otherwise stated, refer to trained archaeologists in terms of person days costed at £128.00 per day in the field and £112.00 per day for indoor work. All costs quoted are net of VAT.

5.1 Desktop Sub-Surface Survey

Consultation of LDDC and NMS records - 2 person days	224.00
Creating SURFER models and report - 2 person days	224.00

5.2 Archaeological Evaluation Of Trench

Supervising the machine excavation of the trench - 5 person days	640.00
Cleaning and excavation of spits and archaeological deposits - 15 person days	1920.00
Sampling, recording and section drawing - 5 person days	640.00
Completion of the archive and writing evaluation report - 10 person days	1120.00
Total	£ 4768.00

5.3 Contingencies

Hymac excavation of trench - 5 days (including delivery and collection)	1856.00
Hymac backfilling of trench -2 days(including delivery and collection if not still on site)	576.00
Supervision of backfilling - 2 person days	256.00
Dumper truck - 5 days	640.00
Accommodation - 12 days (office, toolstore, toilet, including delivery and collection)	553.36
Environmental assessment -To be used if appropriate samples are recovered and on advice	

from English Heritage	2560.00
Finds Assessment	420.00
Fencing -14 days (including delivery and collection)	315.00
Pumps - 2 pumps x 5 days	153.00
Health & Safety - PPE	200.00

6 PAYMENT SCHEDULE

6.1 Newham Museum service is a non-profit making organisation and as such requires a schedule of payments in order to undertake archaeological contracts. The payment points will be defined below and correspond to the major project stages.

6.2 Written confirmation of funding, corresponding to this project design, will be required before the project can be set up.

6.3 An invoice will be issued for one-third of the agreed project cost and should be paid before commencement of the project work.

6.4 A second invoice will be issued at the end of the fieldwork bringing the total amount invoiced up to two-thirds of the required project cost.

6.5 A third invoice will be issued on the receipt of the evaluation report by the client bringing the total amount invoiced up to the agreed project cost.

6.6 In the event of the evaluation continuing into a rescue excavation an invoice will be issued at the end of the evaluation period balancing the total amount spent. A third invoice for the evaluation stage will not be issued as the post-excavation work will be undertaken as part of the rescue work. A further invoice will also be issued for the first third of the agreed rescue budget.