



Archaeological Services & Consultancy Ltd

**ARCHAEOLOGICAL TEST PITTING:  
MEDIEVAL FISHPONDS AT  
GREAT WOOLSTONE  
MILTON KEYNES**

*on behalf of Milton Keynes Parks Trust Ltd.*



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**April 2005**

**ASC: 625/GWM/2**

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## Site Data

<i>ASC project code:</i>	GWM	<i>ASC Project No:</i>	625
<i>Event No:</i>	933	<i>Accession No:</i>	2005.9
<i>District:</i>	Milton Keynes		
<i>Village/Town:</i>	Great Woolstone		
<i>Civil Parish:</i>	Woolstone CP		
<i>NGR):</i>	SP 87633 38574		
<i>Present use:</i>	Parkland/ pasture		
<i>Planning proposal:</i>	Restoration of medieval fishpond		
<i>Date of fieldwork:</i>	18-19 <sup>th</sup> April 2005		
<i>Client:</i>	Milton Keynes Parks Trust Campbell Park Pavillion 1300 Silbury Boulevard Campbell Park Milton Keynes MK9 4AD		
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## Internal Quality Check

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Figure 1: General location (scale 1:25,000)

## Summary

*In April 2005, eight test pits were excavated through the largest of the medieval fishponds at Great Woolstone, Milton Keynes. The aim of the project was to investigate the depth of silting in the base of the pond, to enable a decision to be made regarding the possible reinstatement of the pond as a habitat for displaced amphibians (Great Crested Newts) from other parts of the city. Six pits excavated around the top of the bank, demonstrated that the natural soils were very shallow and no major structural work had been undertaken to form the bank of the pond. The remaining two pits were located in the base of the pond to investigate the depth of silting. Upon excavation of these pits it was discovered that there was less than 350mm of silts. The base of the pond was formed from natural clay rather than a manufactured clay lining.*

## 1 Introduction

1.1 In April 2005 *Archaeological Services and Consultancy Ltd* (ASC) carried out an evaluation comprising of 8 test pit, on the largest of the medieval fishponds at Great Woolstone, Milton Keynes (NGR SP 87633 38574: Fig. 1). The project was commissioned by Milton Keynes Parks Trust Ltd (MKPT), and was carried out according to a project design prepared by ASC (Griffiths 2004), and a brief (Giggins 2004) prepared on behalf of the local planning authority (LPA), *Milton Keynes Council*, by their archaeological advisor (AA), Brian Giggins, the Milton Keynes Council Archaeologist.

### 1.2 *Planning Background*

The fishponds at Great Woolstone are listed by the Department of Culture Media and Sport (DCMS) as a Scheduled Ancient Monument (Monument No. 19004). MKPT intend to reinstate the larger of the ponds as a habitat for amphibians displaced from other parts of the city. As a precursor to this work MKPT decided to undertake a feasibility study on the pond to establish the depth of silting. As this study was intrusive to the fabric of the monument Scheduled Monument Consent was required. This consent was granted by DCMS on the 28<sup>th</sup> July 2004.

### 1.3 *Location*

The site is situated in the south of Woolstone in the east of Milton Keynes. The pond to be restored is located within a complex of earthworks surrounded by open parkland (Fig 2). The River Ouzel runs 40m to the east and the former parish church lies 100m to the northwest. There is standing water within the base of the pond at certain times of the year. The pond to undergo test-pitting is the largest of the ponds, c.60 x 25 m and 1m in depth (Croft & Mynard 1993). Although the ponds remain in reasonably good condition they have allegedly been disturbed by gravel quarrying, backfilling, and natural silting (ibid). Access to the site is off Newport Road.

### 1.5 *Geology & Topography*

The soils of the area are river alluvium belonging to the Fladbury 1 association (Soil Survey 1983 813 b). They are described as *stoneless clayey soils. In places calcareous, variably affected by groundwater. Flat land. Risk of flooding* (ibid). The site lies at c.65 AOD.

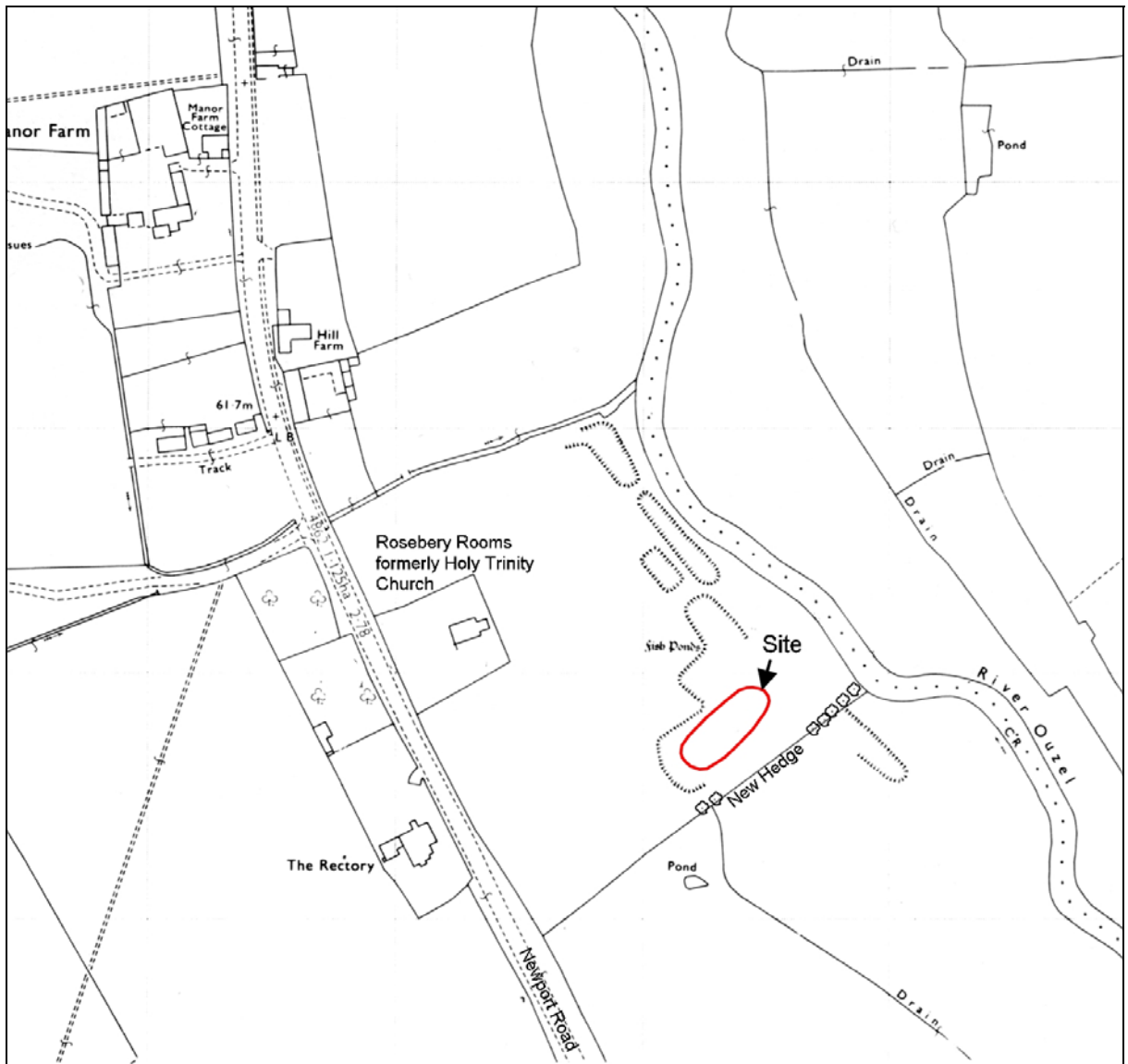
### 1.6 *Archaeological & Historical Background*

The pond is part of a manorial complex of moats and fishponds (MK 656) scheduled as an ancient monument (National Monument no 19004), and was known locally as the 'Jack Pond' (Croft & Mynard 1993).

During the Late Saxon period, the parishes of Great Woolstone and Little Woolstone were united as one land unit (Croft & Mynard 1993). The Domesday Book states that the area had 8 villagers, 1 mill, meadow and woodland with 100 pigs.

The fishery is adjacent to the Holy Trinity Church (later the Rosebery Music Room), built in 1832-3 to replace the medieval church (Pevsner & Williamson 1994). To the north of the fishery and church are a number of crofts containing pits that are the remains of gravel quarrying (ibid).

The site has not been subject to a systematic survey involving excavation, although the fishponds and manorial earthworks have been recorded and discussed in the Woolstones Parish Essay (Croft & Mynard 1993).



**Figure 2:** Site plan (*not to scale*)

## 2 Aims & Methods

### 2.1 Aims

As described in the brief (Section 1), the aims of the evaluation were:

- To ensure that adequate consideration was given to the areas of archaeological interest
- To determine the depth of accumulated silt within the pond to be restored

### 2.2 Standards

The work conformed to the project design, to the relevant sections of the Institute of Archaeologists' *Code of Conduct* (IFA 2000) and *Standard & Guidance Notes* (IFA 2001), and to the relevant sections of ASC's own *Operations Manual*.

### 2.3 Methods

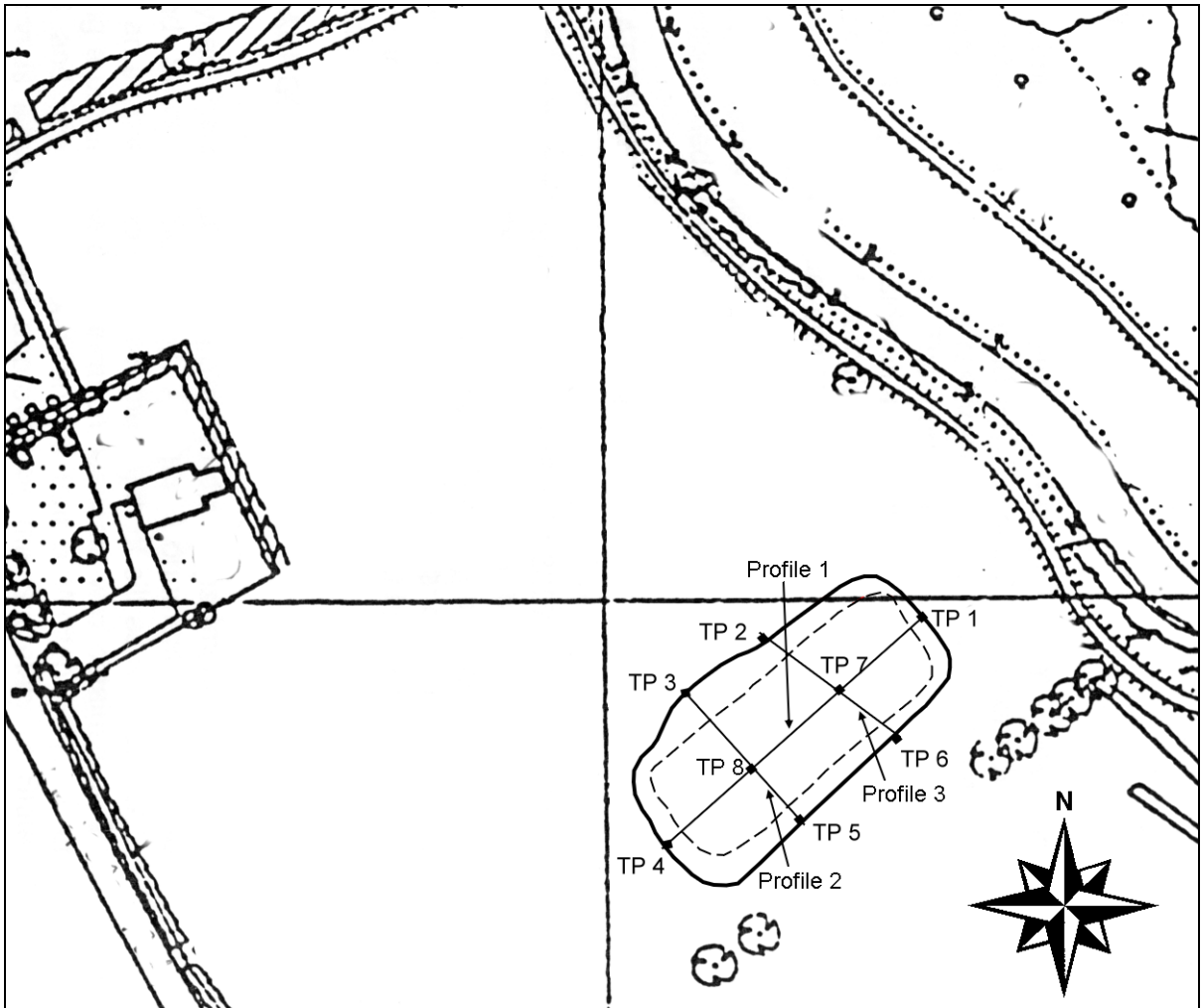
The work was carried out according to the brief (Section 5), which required:

- The excavation of eight 1m square test pits. Six to be on the edges of the filled-in pond and two in the centre, aligned in order that three partial sections through the pond are obtained (Fig.4). The test pits will not be cut any lower than the base of the pond.
- To record any archaeological deposits and artefacts unavoidably affected during development
- To examine the development area for earthworks, hedgerows, boundaries and structures and make appropriate records and assessments of any aspects of historical interest.

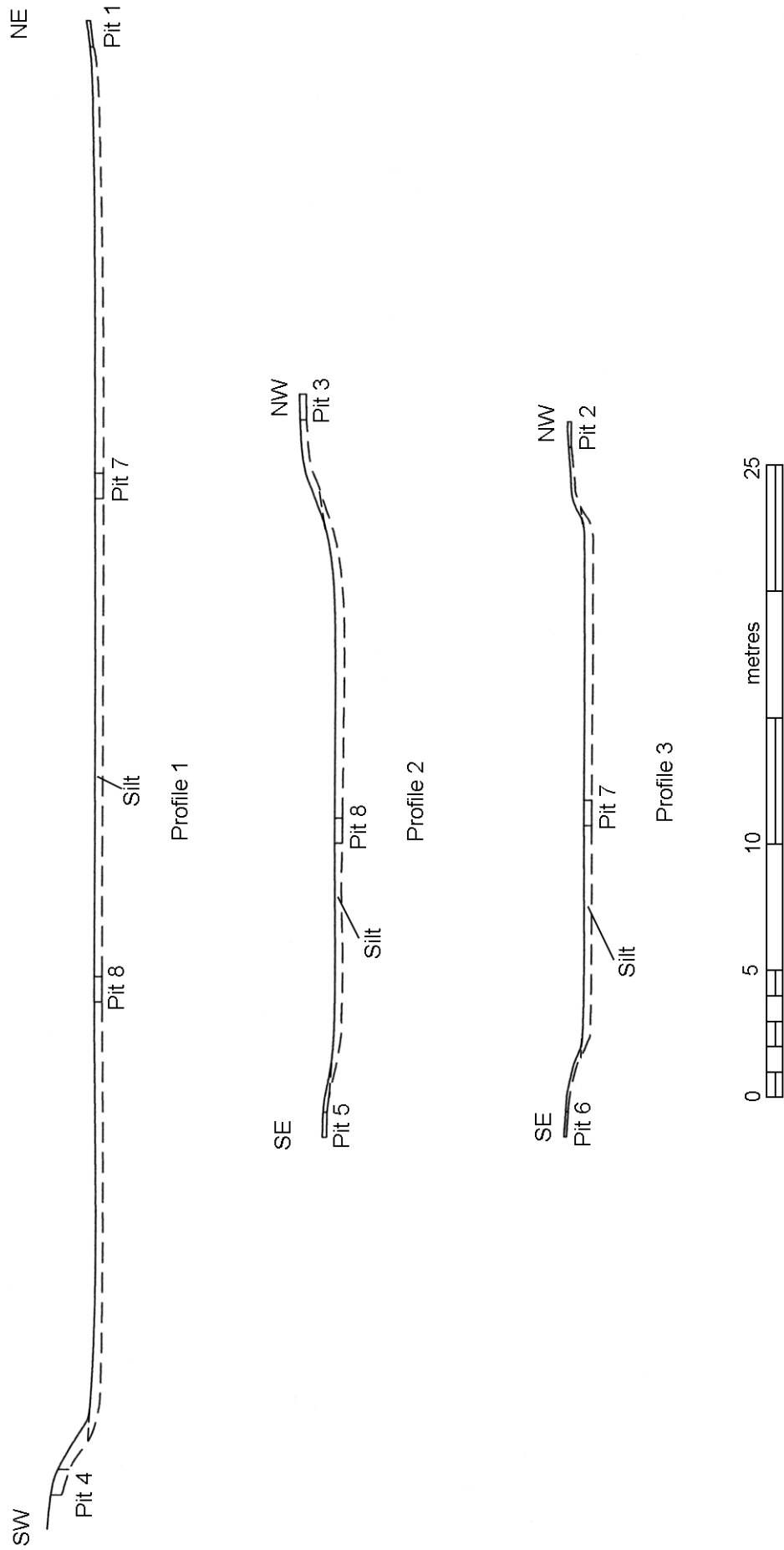


### 3 Results

- 3.1 Each test pit was hand excavated. Prior to the start of the test pitting it was considered possible that the pond might have had a clay lining. If this had been the case excavation would have stopped on reaching the lining. However upon excavation it was found that the base of the pond was cut into the natural subsoil.
- 3.2 The natural subsoils comprised of silty alluvial clays ranging in colour from pale yellowish brown to greyish blue. Within the clay streaks of mineral staining were widespread. Pockets of gravel were also recorded in the natural soils, especially in Pits 7 and 8 at the base of the pond.
- 3.3 Pits 1 to 6 were located around the edge of the pond to examine any possible surviving bank construction evidence, of which there was none. All these pits had a simple profile comprising of about 100 – 150mm of turf and dark yellowish brown silty clay loam, sitting directly above the natural. Two exceptions were noted to this general rule. A thin band of gravel overlay the natural in Pit 3 on the NW side of the pond, and in Pit 4 at the SW end of the pond a load of building debris had been dumped down the side. Evidence for this dumping continued for some way round the SW end of the pond, and possibly masks the true extent of the earthwork.
- 3.4 Pits 7 and 8 in the base of the pond again displayed a simple profile. A 150 - 200mm layer of turf and dark grey/ black silty loam, probably representing decomposed pond/ pond edge vegetation overlay a pale yellowish brown silty clay containing some gravel. It is likely that this layer is actually a dirty natural at the base of the pond rather than a true pond accumulation. The natural comprised a cleaner version of the dirty material above.
- 3.5 The total depth of the earthwork from the top of the bank at the SW end (the highest point) to the base of the black organic deposit recorded in Pits 7 and 8 amounts is *c.*2.0m.



**Figure 3:** Pit location plan (scale 1:1250)



**Figure 4:** Profiles across the pond (scale 1:250)

## 4. Conclusions

- 4.1 During the medieval period fish formed an important element in the diet. Many wealthy landowners established their own fishponds ensuring a ready supply of fresh fish. The holders of Woolstone Manor seem to have constructed an elaborate series of interconnected ponds, the remains of which form the earthworks visible today. The earthworks forming the Scheduled Ancient Monument have been previously surveyed and it was not a requirement of this project to re-survey them. However to understand the water management associated with the fishponds and river during the medieval period consideration must be given to the site as a whole.
- 4.2 For fishponds to have functioned successfully several criteria would need to have been met. They must have been deep enough for them not to freeze solid during the winter, but shallow enough for easy netting of the fish, and cleaning as silts accumulated. It seems likely that the various ponds at Woolstone were interconnected by a series of channels. Sluices would have been utilised to control the water level in the various elements. It is also likely that the individual ponds could be either fully or partially drained for cleaning and maintenance. To enable the ponds to be drained they would need to be above the height of the river Ouzel which flows from SE to NW immediately to the NE of the site. During the medieval period the level of the river would almost certainly have been higher than the present level due to water management downstream associated with mills and fish weirs.
- 4.3 It is likely that the surviving bank at the NE end of the pond have been slightly reduced in height since the pond went out of use. At present the top of the bank at its lowest point is about 0.8m above the base of the pond a perfectly acceptable depth to ensure that it does not freeze solid during the winter.
- 4.4 Assuming that there was a drain from the pond into the river it is likely that when it went out of use the sluice was opened and the pond drained, accounting for the limited depth of silt in the base of the pond.

## 5 Recommendations

- 5.1 Providing care is taken removing the excavated silt from the base of the pond the proposed restoration should not directly affect the physical appearance of the other elements of the site. However it is possible that the re-introduction of water into the main pond may also fill the other ponds unless preventative measures are taken. Likewise, water may try and flow out to the river. Modern demolition material brought in from elsewhere has clearly altered the profile of the bank at the SW end of the pond, and this will need to be removed during the restoration of the pond.
- 5.2 Before work begins on the restoration of the pond it may be advisable for further archaeological evaluation work to be undertaken to enable a detailed restoration proposal to be formulated. The archaeological questions that need to be clarified are:
- construction of the bank
  - original water level
  - how the ponds were linked
  - did a drain exist to the river
  - how the ponds were fed

## **6. Acknowledgements**

The writer is grateful to Nicky Wheeler and Mike Street at Milton Keynes Parks Trust Ltd for commissioning ASC Ltd to undertake the evaluation. We would also like to thank Brian Giggins the Milton Keynes Council Archaeologist for the time he spent monitoring the project on behalf of English Heritage the DCMS's archaeological advisors. The project was managed by Bob Zeepvat BA MIFA and the field work was undertaken by Nigel Wilson, Nick Crank and Calli Rouse.

## **7. Archive**

7.1 The project archive will comprise:

1. Brief
2. Project Design
3. Initial Report
4. Site records
5. Site record drawings
6. List of photographs/slides
7. Colour slides
8. B/W prints & negatives
9. CDROM with copies of all digital files.

7.2 The archive will be deposited with Buckinghamshire County Museum.

## 8. References

### *Standards & Specifications*

EH 1991 *The Management of Archaeological Projects*, 2<sup>nd</sup> edition. English Heritage (London).

Giggins B 2004 *Fishpond at Great Woolstone Moated Site*, Brief for Archaeological Evaluation. (Milton Keynes Council)

Griffiths C 2004 *Fishpond at Gt Woolstone Moated Site Milton Keynes*, Project Design for Archaeological Evaluation (ASC Ltd. ref 625/GWM/01)

IFA 2000a Institute of Field Archaeologists' *Code of Conduct*.

IFA 2001 Institute of Field Archaeologists' *Standard & Guidance documents (Desk-Based Assessments, Watching Briefs, Evaluations, Excavations, Investigation and Recording of Standing Buildings, Finds)*.


### *Secondary Sources*


Croft, R & Mynard D 1993 *The changing Landscape of Milton Keynes* Buckinghamshire Archaeological Society Monograph Series. 5

Soil Survey 1983 *1:250,000 Soil Map of England and Wales, and accompanying legend* (Harpenden).


Pevsner N & Williamson E 1994 *The buildings of England: Buckinghamshire* (2<sup>nd</sup> ed.) Penguin (London)


## Appendix 1: Trench Summary Tables


<b>Pit 1</b>					
		Max Dimensions (m)			
		Width	1	Length	1
		Depth (mm)	100	Level top	
		NGR Co-ordinates (centre)			
		SP 87658		38597	
Orientation					
Reason for Trench					
Context	Type	Description and Interpretation	Max Thickness (mm)	Depth BGL (mm)	
100	Layer	Turf layer, dark yellowish brown silty clay loam.	100	0-100	
101	Layer	Natural yellow clay with some mineral staining		>100	


<b>Pit 2</b>					
		Max Dimensions (m)			
		Width	1	Length	1
		Depth (mm)	150	Level top	
		NGR Co-ordinates (centre)			
		SP 87626		38593	
Orientation					
Reason for Trench					
Context	Type	Description and Interpretation	Max Thickness (mm)	Depth BGL (mm)	
200	Layer	Turf layer, dark yellowish brown silty clay loam	150	0-150	
201	Layer	Natural, yellow clay with some mineral staining		>150	





<b>Pit 3</b>					
		Max Dimensions (m)			
		Width	1	Length	1
		Depth (mm)	250	Level top	
		NGR Co-ordinates (centre)			
		SP 87618		38584	
<b>Orientation</b>					
<b>Reason for Trench</b>					
Context	Type	Description and Interpretation	Max Thickness (mm)	Depth BGL (mm)	
300	Layer	Turf layer, dark yellowish brown silty clay loam	150	0-150	
301	Layer	Yellowish brown band of silty gravel	100	150-250	
302	Layer	Natural, yellowish brown silty clay with some mineral staining		>250	

<b>Pit 4</b>					
		Max Dimensions (m)			
		Width	1	Length	1
		Depth (mm)	350	Level top	
		NGR Co-ordinates (centre)			
		SP 87610		38559	
<b>Orientation</b>					
<b>Reason for Trench</b>					
Context	Type	Description and Interpretation	Max Thickness (mm)	Depth BGL (mm)	
400	Layer	Turf layer, dark yellowish brown silty clay loam	100	0-100	
401	Layer	Dump of demolition rubble (modern)	250	100-350	
402	Layer	Natural dark yellowish brown silty clay		>350	

<b>Pit 5</b>					
		<b>Max Dimensions (m)</b>			
		<b>Width</b>	1	<b>Length</b>	1
		<b>Depth (mm)</b>	250	<b>Level top</b>	
		<b>NGR Co-ordinates (centre)</b>			
		SP 87632	38563		
<b>Orientation</b>					
<b>Reason for Trench</b>					
<b>Context</b>	<b>Type</b>	<b>Description and Interpretation</b>	<b>Max Thickness (mm)</b>	<b>Depth BGL (mm)</b>	
501	Layer	Turf layer, dark yellowish brown silty clay loam	150	0-150	
502	Layer	Yellowish brown silty clay gravel	100	150-250	
503	Layer	Natural greyish blue clay with mineral staining		>250	

<b>Pit 6</b>					
		<b>Max Dimensions (m)</b>			
		<b>Width</b>	1	<b>Length</b>	1
		<b>Depth (mm)</b>	150	<b>Level top</b>	
		<b>NGR Co-ordinates (centre)</b>			
		SP 87648	38577		
<b>Orientation</b>					
<b>Reason for Trench</b>					
<b>Context</b>	<b>Type</b>	<b>Description and Interpretation</b>	<b>Max Thickness (mm)</b>	<b>Depth BGL (mm)</b>	
601	Layer	Turf layer, dark yellowish brown silty clay loam	150	0-150	
602	Layer	Natural greyish blue clay with mineral staining		>150	

<b>Pit 7</b>					
		<b>Max Dimensions (m)</b>			
		<b>Width</b>	1	<b>Length</b>	1
		<b>Depth (mm)</b>	450	<b>Level top</b>	
		<b>NGR Co-ordinates (centre)</b>			
		SP 87659		38585	
<b>Orientation</b>					
<b>Reason for Trench</b>					
<b>Context</b>	<b>Type</b>	<b>Description and Interpretation</b>	<b>Max Thickness (mm)</b>	<b>Depth BGL (mm)</b>	
701	Layer	Turf layer, dark grey/ black silty clay loam	150	0-150	
702	Layer	Pale yellowish brown silty clay with some mineral staining (dirty)	200	150-350	
703	Layer	Natural yellowish brown clay with some gravel and mineral staining		>350	

<b>Pit 8</b>					
		<b>Max Dimensions (m)</b>			
		<b>Width</b>	1	<b>Length</b>	1
		<b>Depth</b>	400	<b>Level top</b>	
		<b>NGR Co-ordinates (centre)</b>			
		SP 87624		38572	
<b>Orientation</b>					
<b>Reason for Trench</b>					
<b>Context</b>	<b>Type</b>	<b>Description and Interpretation</b>	<b>Max Thickness (mm)</b>	<b>Depth BGL (mm)</b>	
801	Layer	Turf layer, dark grey/ black silty clay loam	150	0-150	
802	Layer	Pale yellowish brown silty clay with some mineral staining (dirty)	200	150-350	
803	Layer	Natural yellowish brown clay with some gravel and mineral staining (less gravel than in Pit 7)		>350	