

Newmarket Farm by former resident Bob Phipps.

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1 Project Name

Newmarket Farm Dig.

2 Executive Summary

This is a small archaeological project run by local volunteers, though with the support of experienced and professional archaeologists, at the invitation of Natural England's Senior Reserve Manager for East Sussex. The objective is the excavation of the demolished remains of a remote 19th century farm labourer's cottage, garden, farmyard and barns. Entirely located just inside Castle Hill NNR, this dig will enable a better understanding of the history of this site and of the lives of those who lived and worked there, and would very much enhance the heritage value of a nature reserve of both national and European significance.



Figure 1: Newmarket Farm site, drawn using Google satellite imagery, overlaid by old and new OS mapping.

3 Introduction and Scope

3.1 Site Location and Ownership

The 0.1 Ha Newmarket Farm site is located just inside the NW boundary of Castle Hill National Nature Reserve, just below the summit of Newmarket Hill,

about $100\,\mathrm{m}$ to the SE of the television aerial; centred on grid reference TQ 36355 06992 (to an accuracy of $+/-2\,\mathrm{m}$). It is located in the Parish of Kingston near Lewes. The land is owned by Brighton & Hove City Council, who have delegated responsibility for their farmland portfolio to Smiths Gore. It is managed by Natural England and the surrounding land is farmed by B&HCC tenant, Mr Martin Carr of Balsdean Farm.

3.2 History

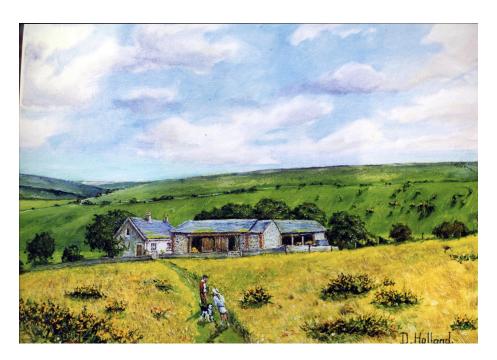


Figure 2: Artist, Douglas Holland's impression of Newmarket Farm based on his early memories, painted about 1999.

Extensive desk-based research¹ has indicated the farm was built in about 1830 based on an Enclosure map of this date (and its absence on earlier maps). Kingston's largest landowner, Thomas Rogers — who owned the Manor of Hyde, was in severe financial difficulties in 1825. He therefore handed over control of his lands and property to a trust, with a duty to sell his estate. To increase its value, in 1830 the other landowners agreed to enclose the Parish, which ended the centuries old 'rights of common' for grazing on the Kingston Down, and transferred its ownership to the three biggest landowners in the parish. This enabled a farm labourer's cottage and barns to be built next to the old dew pond up on Newmarket Hill, the SW slopes of which had started to be ploughed.

The most extreme record of nineteenth century poverty recorded by Cooper² in his socio-economic history of Kingston, was of the Rich family, who were

¹http://southdownhill.wordpress.com/a-history-of-newmarket-farm/

²Cooper, Charles (2006) A Village in Sussex: the History of Kingston-near-Lewes.

recorded as living in Newmarket Farm in the 1861 Census.

In 1868 it was the location of a notorious murder of the Newmarket Farm labourer, David Baldy, by his former lodger, Martin Brown. One newspaper report stated that the cottage was "unusually substantial and comfortably built", another that it was "an ordinary flint built, small windowed four-roomed habitation", and at the trial Baldy's widow stated: "There are three bedrooms in our cottage, and we had a washhouse and a kitchen", and their lodger stated he went out by the back-door.



Figure 3: Newmarket Farm from OS maps and a 1921(?) plan.

Old O.S. maps, and a plan found in papers dated 1921, show a number of structures and alterations. The letter 'P' represents a pump to the rear of the house. A sale document from 1911 described the farm as "comprising Cottage (containing three bedrooms, &c.), Barn (one bay of which is fitted for use as a water tank), open Cattle Lodge, Stable, Hay Room and lean-to Wagon Lodge". The plan drawn on behalf of Oscar Selbach, who bought the farm in 1921, shows an underground water tank, about 6' x 6' x 11', to the south of the house, though it does not include the barn extension built sometime before 1910.

Selbach was an engineer and entrepreneur who bought Balsdean and Norton farms in 1918, and Newmarket Farm in 1921, to enable him to pump water from two wells he bored in the Balsdean Valley, and in Newmarket Bottom (about 300 m to the SE of Newmarket Farm), to a reservoir he built on the top of Bullock Hill (Norton Top), and to another reservoir that he planned to build on Newmarket Hill, to provide a water supply to the housing estates that he hoped to build on the western and southern slopes of these hills, and to the NE of the Downs Hotel crossroads at Woodingdean. His plans were effectively halted when the majority of his farmland was bought by Brighton Corporation in 1925, to protect the Balsdean watershed from any further threats from housing

development. Amongst the equipment, fixtures and fittings, which had to be removed from Newmarket Farm when it was sold, were railway tracks.



Figure 4: Newmarket Farm by Bob Phipps, based on childhood memories, painted about 2010.

It is probably from about this time that, as a young boy, Bob Copper³ was told by his father of the story of the 1868 murder, who was a boy when it happened. He wrote that the cottage was empty, with a broken window pane and wind moaning under the eaves of the slate roof. The Phipps family 'children', who lived there from 1934–1938, and the Latham family after them (1938-1942) have told something of their memories, though they can't entirely be relied on. They have told of an *outside toilet* just inside the front garden gate on the right

Plan of Buildings at Newmarket Farm Kingston. for O. C. Selbach Esq.

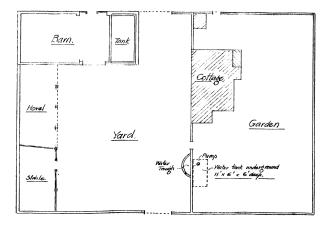


Figure 5: Newmarket Farm plan drawn for Selbach in 1921.

³ "A Song For Every Season", Bob Copper, 1971

(though other memories place it next to the house). There are three memories of a well (relatively shallow - a ladder's depth, possibly between 3 and 6m?) adjacent to the house, outside a window to the north, or on the E side of the house, or under a window to the south of the house! There is no memory of a pump — just a bucket on a rope. The front door is remembered as being to the right of centre of the N gable end and, at this time, opened on to the kitchen. Cooking was done on a paraffin stove. There was a copper for heating water for the laundry. The stairs to the bedrooms faced the front door(?) to the right of the kitchen. Under the stairs may have been a small pantry. Beyond was a door into the parlour on the S end of the house. Here was the only open fire, which was (probably) only lit on special occasions, when coal was normally used as fuel. The bedrooms upstairs, were accessed via two doors, a third bedroom being accessed via a door in the bedroom at the front (N end) of the house. There were no windows on the E side of the house. On the E side of the front gable was a (probable) woodshed. All doors closed using a latch (including the front door).

The farmyard was (probably) cobbled. To the right of the stable(s) in the SW corner of the farmyard was a harness store. Correspondence dating to 1941 between the farmer down in Balsdean and Brighton Corporation indicates there was an area suitable for the housing of pigs in the Newmarket Farmyard with a concrete floor to prevent their effluent contaminating the groundwater. Also in the farmyard, against the farmyard/garden wall, to the S of the house was a water-trough for the stock. Between 1934 and 1938 the farmyard was hardly used other than as a store for equipment that was not being used. At this time all ploughing was with horses but, from 1938 they were replaced by tractors.

No photos have as yet been found, though several are believed to have been taken of the Newmarket Farm by passing tourists (mostly German and Italian) in the 1930's to whom the Phipps family sold cups of tea.

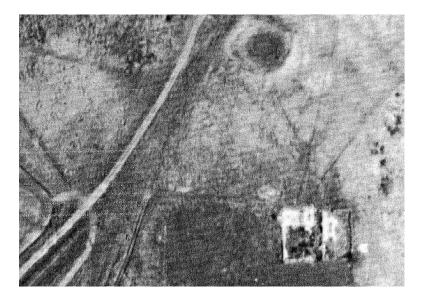


Figure 6: Newmarket Farm, 1945.

Since the Prince Regent bought the Royal Pavilion, military activities — ceremonial and otherwise — have taken place in the vicinity of Newmarket Hill, up until the end of the second World War. The earliest "sham battles" were covered by both local and National press, and involved thousands of troops and tens of thousands of spectators. The largest in 1862 had about 20,000 troops and over 100,000 spectators. Army training camps down in both Kingston and nearby Falmer have been photographed in the early 1900's. Sometime between April and October 1942 Newmarket Farm, along with Balsdean, was requisitioned by the Army for artillery practice by Canadian troops. Aerial photos taken between 1945 and 1950 show Newmarket Farm as a ruined shell. Just about the only standing masonry shown were some boundary walls. Sometime in the early 1950's the site was cleared of unexploded ordinance and the standing remains bulldozed to form a linear pile of rubble, just inside the eastern wall of the garden, and just clear of the site of the house. A secondary pile of rubble may exist in the vicinity of the large barn on the north side of the farmyard. Allegedly, during the war, two boys dropped an unexploded shell down the well — which fortunately did not detonate — and which may still be there today.

3.3 Older Archaeology

Archaeological finds pre-dating the site, found during previous site visits by the author, are a number of Neolithic/Bronze age(?) flint flakes and scrapers. About 200 m to the NW of the site, just over the brow of the hill, the author found a Neolithic broken polished flint axe-head in the 1970's. From crop marks on 2 RAF aerial photographs taken just after the 2nd World War a possible Bronze age barrow, about 200 m to the W of the site, was also identified, with the assistance of Greg Chuter (Assistant County Archaeologist). The trackway immediately to the north of the site, generally known as Juggs Road, was an ancient drove road between Brighton and Lewes, and several authors have speculated as to its use as part of a longer route from Chichester to Lewes (and other places), used in Medieval, Roman, and Prehistoric times.

The hilltop was also crossed by several other drove roads and tracks; an important one drops NE along the spur past Newmarket Plantation and the Newmarket Inn, on its way generally northwards to the Weald; another heads roughly SE down into the old deserted hamlet of Balsdean: yet another passes SW towards the (in)famous smugglers' village of Rottingdean; and NW to Falmer, and again, to the Weald beyond. It is the focus of an 'untidy cobweb' of routes spread out across the Downland turf. There is the possibility that the Newmarket Farm may have been built on the site of one such route from the SW

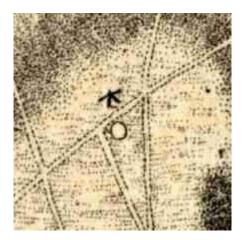


Figure 7: Newmarket Hill, Yeakel & Gardener's late 18th c. map.

as shown on a late 18th century map by Yeakel and Gardener. This map showed a symbol of unknown significance, about a hundred metres to the north of the Newmarket Farm site. It resembled a mill with half its sails missing. Speculation leads the author to consider the possibility of a gibbet for the hanging of smugglers. Alternatively it may have been a signal post in times of war.

The earliest reference to the hill so far found was 'Newe Markett' in 1580. It was unlikely to have been the site of a market or fair, and is not in any of the medieval lists of markets. However, Greg Chuter (pers. comm.) informed the author that the Old English word 'mearc', meaning boundary, was a more likely possibility. Elsewhere, the place name 'Market Street' — at the crossing of Watling Street with the Herts & Beds boundaries — has been proposed to have originated from a combination of 'mearc' and the OE 'geat', (gap, opening, gateway). Therefore, the origin of 'Newmarket Hill' may well have been 'Niwemearc-geat Hill', with the gap or gate being through one of the boundaries on the hill, possibly of that of the Falmer Manorial boundary.⁴

The dew pond about 100 m to the north was the only one shown to be in existence on the Kingston Down in the late 18th century. It was used by a young John Dudeney to water the Kingston flock when he was shepherd there. It was also shown on late 18th and early 19th century estate maps of Kingston. These same maps showed that areas of Newmarket Hill were under the plough at that time. This indicates that at least parts of the hill held soils that were particularly fertile, and may also have been ploughed in Medieval, Roman, and/or Prehistoric times. They largely coincide with a 'clay-with-flints' outcrop that is shown on the 1947 One-Inch Geological Map.

3.4 Site Evaluation

The brambles and nettles that cover the site have recently been cut down by teams of volunteers, under the management of Malcolm Emery of Natural England. This has made both visibility and access very much easier. Vehicle access is not at present possible, but it is hoped to be enabled either before or shortly after work starts.

A preliminary survey of the site has revealed that less than 5% of the major wall-lines survive above ground — to a maximum height of about $30\,\mathrm{cm}$, though the majority of the walls (or their footings) are either under up to, perhaps, $30\,\mathrm{cm}$ of bulldozed soil and demolition rubble, or have been completely removed by the artillery shelling and/or the later demolition.

Whilst the SE corner of the garden boundary wall has been identified, the other three boundary wall corners to the whole site have yet to be located. However, based on existing wall alignments and old maps and plans, their approximate location has recently been estimated, including the SW corner of the house. The approximate location of the probable water-tank to the south of the cottage has been identified from a patch of spearmint growing in a rubble filled depression in the ground. This indicates the possibility of waterlogged sediments.

⁴See A.H. Allcroft (1924) "Downland Pathways" Ch. 9.

During the exploration of the site a number of small finds were collected. A pre-WW1 live blank .303 cartridge has been found, as has a 1942 .303 cartridge fired by a Bren machine gun. Other finds included a range of shards of glass and ceramics, iron, brick, stone and other objects. Amongst the best of the finds were very thin fragments of old window glass, 'Tizer' bottle shards which we know were drunk as a treat every Sunday by the Phipps family children in the 1930's, a whiskey bottle top, a woman's suspender button, and the handle and rim of a porcelain doll's tea cup.

There is a large linear mound of bulldozed rubble, just inside the E boundary wall of the garden, and (probably) just clear of the house site. It has a number of large pieces of masonry, almost certainly from the house, that confirm the memory of a former resident that the walls were approximately two feet thick. They also confirm that it was of flint and (frogless) brick construction. The large scatter of slate indicates a slate roof.

Not far from the site of the barn there is a low mound of demolition rubble, probably from the farmyard buildings. From this a brick has been seen that possessed a shallow frog, as well as some small fragments of asbestos cement sheet. Neither type of building material has been seen elsewhere on the site.

3.5 Project Scope

The project scope is the 19th and 20th century archaeology located within the boundary of the Newmarket Farm site, and any immediately adjacent archaeology directly relating to it, located within the boundary of Castle Hill NNR, and which does not negatively impact on the ecology of this Site of Special Scientific Interest (SSSI) and European Special Area of Conservation (SAC).

The first phase of the project will excavate the demolition and WW2 artillery damage layers, down to the 1942 occupation layer. Human resources, site conditions, skill levels and time taken for the completion of each archaeological context will be evaluated on an ongoing basis, and will be formally considered during the review process at the end of each stage of the dig. This may result in this first phase being extended to include deeper levels of archaeology.

This initial phase will only concern itself with the domestic side of the site; the house, garden and associated features. However, it is hoped that the farmyard and its associated buildings and structures will be part of a later phase of research. A later phase could also investigate Mr Selbach's 1921 well down in Newmarket Bottom and its associated pipework intended to supply water to the housing estate he never managed to build.⁵

Also outside the planned scope of this phase of the dig is an archaeo-environmental study. However, a later phase, or revised first phase, may do — such as an investigation of any waterlogged sediments in the probable $1.8\mathrm{m}$ deep watertank.

⁵Significant archaeological information on this particular target could be obtained using non-destructive techniques; recording above-ground structures, and using geophysics to trace metal pipework.

⁶B.&H.A.S., if interested, will be invited to dig this target.

3.6 Summary of Stages and Products

Stage	Research products	Archive products	Dissemination products
Start up √	Aims & objectives ✓ Research agendas ✓ Strategies & policies ✓ Business case ✓ Project brief.✓		Initial communication with stakeholders ✓ Project Proposal document completed and circulated.✓
Review Point R1:	Objectives clear and releva	ant	٧
Initiation	Project Design document written ✓ Aims & Objectives ✓ Business Case ✓ Stakeholders ✓ Project Execution Stages and their Products ✓ Risk Log ✓ Project Team ✓ Communication methods ✓ Review Points ✓ Site access agreed. ✓	Project Management Archive created Archive repository identified. ✓	Communication with specialists Communication with stakeholders.

Review Point R2: Project Design achievable? \checkmark Is it in line with current advice? Is the proposed methodology appropriate?

Execution stage:	Site infrastructure	Site Archive estab-	Signpost record
Field Investigation	established	lished and updated;	(create & update
(To be conducted as	Storage arrangement	(digital archive es-	OASIS entry)
a series of stages;	for archive agreed	tablished, metadata	Report drafted
(1) Site infrastruc-	Staff briefings con-	for files captured,	Dissemination plan
ture, grid & survey;	ducted;	paper archive es-	drafted
(2) E garden bound-	Field research com-	tablished, artefact	Outreach work com-
ary wall;	pleted;	archive processed for	pleted (blog post,
(3) S garden bound-	Interventions made;	storage).	news coverage -
ary wall & associ-	Data captured		press release).
ated features;	(maps, plans, notes,		Highlight (progress)
(4) W gar-	photos, finds);		Report(s)
den/farmyard wall	Potential of data		Issue Log; Review
to S of house site;	assessed;		Risk Log and plan-
(5) N garden bound-	Checked confor-		ning for unforeseen
ary wall & associ-	mance to standards.		changes.
ated features;	Assessment of the		
(6) House site &	potential of the re-		
associated features;	sults, or products		
(7) Demolition rub-	to achieve the Aims		
ble mound to E of	and Objectives of		
house site.	the project.		

Review Point R3.1: (After each fieldwork stage:) Is an updated Project Design document required?

Execution stage: Update Project Design	Project Design reviewed	Updated Project Design Document	Consulted with Stakeholders and specialists
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Review point R3.2: Is the site archive complete? Does assessment merit full analysis or should the project proceed to Dissemination stage? Is the Updated Project Design appropriate?

Stage	Research products	Archive products	Dissemination products
Execution stage: Desk-based re- search	Existing information sources identified (\checkmark)	Updated NMR & HER records; Completed assessment report.	Signposting record
Execution stage: Analysis	Analysis and understanding completed; (archive accessed, analysis undertaken, report production, images produced/sourced).	Research Archive created; Report on analysis; Updated HER en- tries; Updated NMR en- tries.	Highlight Report circulated; Signposting record (Oasis?) updated to show progress.
sis delivered an enha	a: Analysis complete in lin- nced understanding? Site emination plan approved?	Archive and Research Ar	chive ready
Archive Deposition	Data archive deposited with archive holder; Paper archive deposited; Artefact & ecofact archive deposited with archive holder.	Agreements with archive holder filed.	Signposting record updated to record location of archive.
Review point R3.4 search be made?	e: Ok to close project? Car	n recommendations for fu	uture re-
Closure	All Tasks & Products completed? Aims & Objectives met?	Lessons learned & recommendations for future evaluation, where applicable, documented in Endof-Project Report;	All Stakeholders informed project is ending.

3.7 Interfaces

This project developed from a desk-based research project on the history of Newmarket Farm which started in 2011, between Peggy Cuthbertson, who was born there in April 1942, and her son, David, the author of this report. The historical research project was inspired by a meeting of Peggy with Lucy, Sylvia and Bob Phipps, former occupants of Newmarket cottage, at a 'Woodingdean—Then and Now' project event. Then in May 2012 a site visit was arranged with Malcolm Emery of Natural England, for Bob Phipps, with Peggy and David. At this meeting, in principle permission was given for an excavation of the site, since it would enhance the heritage value of Castle Hill NNR.

Project Documents.

Because archaeological investigation is part of Natural England's management plan for Castle Hill NNR, the dig project has been given formal permission, on the basis of the Project Proposal document in February 2013. Therefore this dig project is directly answerable to Natural England's East Sussex Reserves

Manager, Louise Parkinson, and the Senior Reserves Manager, Malcolm Emery. Permission has also been obtained from Smiths Gore, the farmland agents for the landowner, Brighton & Hove City Council. The Woodingdean Ward Councillor, Dee Simpson, whose responsibilities include Castle Hill Nature Reserve, has offered her help should problems arise.

Woodingdean is the village most closely associated with the later history of Newmarket Farm, and there are a number of groups and individuals with a keen interest in its history. Peggy Cuthbertson, who is on the Woodingdean Tenants and Residents Association Committee, has close family ties with the village. She is aware of a number of local groups and individuals who may be interested in inviting us to give talks or guided walks about what we have found. The site also has historic connections with Brighton, Falmer, Kingston, Lewes and Rottingdean. Connections have already started being made with individuals and groups in Kingston and Rottingdean through our historical research on Newmarket Farm and its former residents. These need to be followed up now the archaeological dig project has formal permission to proceed. This would include writing articles for publication, in the local press, newsletters and community websites; organising guided walks and talks; and the promotion of the project blog: http://southdownhill.wordpress.com.

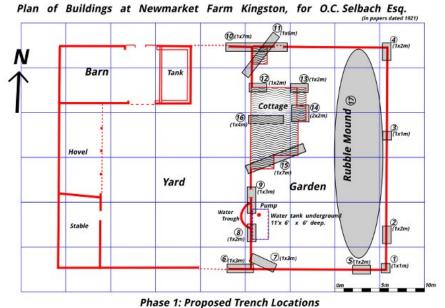
Archaeologically speaking this dig project considers itself answerable to the East Sussex Assistant County Archaeologist, Greg Chuter. It has also received a promise of practical support and advice from Brighton and Hove Archaeological Society's head of fieldwork, John Funnell. Digging tools may also be loaned by the head gardener of a local estate. Volunteers have so far been found to help on the dig by means of personal networking. Fieldwork is now planned to start, every Friday and Sunday, from the beginning of April 2013.

All local museums are full, and thus the physical finds will be stored by Project Manager, David Cuthbertson, and will be made available for study by interested parties by prior arrangement. The paper archive will be held by the Barbican House Museum in Lewes.

4 Research Aims and Objectives

The excavation is currently planned to involve two phases. The first phase primarily aims to excavate just the demolition layer caused by WWII artillery practice dating from October(?) 1942 and its final demolition by bulldozer in the early 1950's, down to the most recent occupation level. This should leave any remaining occupation, construction, and older archaeological layers untouched for subsequent investigation. Only the domestic area of the site - namely the house, garden and associated features within (and including) the boundary wall - will be considered in this first phase.

The farmyard and other features associated with the site may be the object of a second phase. This could also concern itself with a more ambitious plan to excavate the undisturbed occupation and constructions layers of particular targets in or associated with the site as a whole. The probable 1.8m deep water-tank may contain waterlogged sediments which could help an understanding of



rnase i. rroposeu menen Locations

Figure 8: Notional Trench Locations — Phase 1.

both the historical environment of the local site and of its wider context.

The first phase Aims and Objectives are as follows:

- 1. Aim: To understand something of the motivations of those who owned and/or managed Newmarket Farm (what they did, how they did it, and thus, perhaps, better understand the reasons why).
 - 1.1. Objective: To identify, record and communicate information about the location and nature of the boundary wall which enclosed Newmarket Farm, and the house and garden in particular.
 - 1.2. Objective: To identify, record and communicate information about the structures shown in OS maps dated 1873, and again in 1930, in the SW corner of the garden, adjacent to the farmyard (possible toilet and/or store?).
 - 1.3. Objective: To identify, record and communicate information about the probable outside toilet in the NW corner of the garden, between the farmyard and the front garden gate.
 - 1.4. Objective: To identify, record and communicate information about the probable water tank to the south of the house.
 - 1.5. Objective: To identify, record and communicate information about the exterior walls of the house.
 - 1.6. Objective: To identify, record and communicate information about a possible extension to the back (S) of the house.

- 1.7. Objective: To identify, record and communicate information about the room to the back (S) of the house (probable 19th c. kitchen/20th c. parlour).
- 1.8. Objective: To identify, record and communicate information about the room to the front (N) of the house (probable 19th c. washroom/20th c. kitchen).
- 1.9. Objective: To identify, record and communicate information about the staircase.
- 1.10. Objective: To identify, record and communicate information about the pantry.
- 1.11. Objective: To identify, record and communicate information about a structure on the NE side of the house (possible woodstore).
- 1.12. Objective: To identify, record and communicate information about a projecting structure on the E side of the house, to the S of the possible woodstore (possibly a back door).
- 1.13. Objective: To identify, record and communicate information about a possible kitchen/parlour fireplace.
- 1.14. Objective: To identify, record and communicate information about a possible wash-house/kitchen copper 'fireplace'.
- 1.15. Objective: To identify, record and communicate information about a possible well to the N of the house.
- 1.16. Objective: To identify, record and communicate information about a possible well to the E of the house.
- 1.17. Objective: To identify, record and communicate information about a possible well to the S of the house.
- 1.18. Objective: To identify, record and communicate the results of a partial excavation of the bulldozed mound of demolition rubble.
- 1.19. Objective: To interpret, record and communicate the above contexts in conjunction with maps, plans, and other documents and oral history, found during ongoing 'desk-based' research about the site, as well as other literature.
- Aim: To understand and communicate something of the lives of the tied labourers and their families, both through what is found of their belongings and what the archaeological and historical record may indicate about their circumstances.
 - 2.1. Objective: To identify, record and communicate information about the household and personal objects found during excavation.
 - 2.2. Objective: To interpret, record and communicate the possible function and use of the finds.
 - 2.3. Objective: To interpret, record and communicate how these objects may indicate both the historical and the social backgrounds of the individuals who owned and/or used them.

- 3. Aim: To follow the best possible archaeological practice, and to encouraging a wider understanding of archaeology.
 - 3.1. Objective: To learn, record and communicate and, as far as practicable, to follow guidelines on the best archaeological research practice.
 - 3.2. Objective: To identify and obtain expert advice wherever possible.
 - 3.3. Objective: To identify the many stakeholders in this project and actively engage with them to ensure the best quality and usefulness of the project's outcomes.
 - 3.4. Objective: To regularly review project plans, progress and outcomes, and, where appropriate re-plan to ensure the project's aims and objectives are met.
- 4. Aim: To enable a wider understanding of the relationship between the past and the present.
 - 4.1. Objective: To interpret the results of this and related research, publish, and make publicly available, to as wide an audience as possible, by a variety of means (archaeological press, popular press, talks, guided walks, Internet, etc.), the results of this research.
- 5. Aim: To enable a wider understanding of the relationship between the people who lived in Newmarket Farm as well as the people they worked for, and their impact on the natural environment.
 - 5.1. Objective: As above; to interpret the results of this and related research, publish, and make publicly available, to as wide an audience as possible, by a variety of means (archaeological press, popular press, talks, guided walks, Internet, etc.), the results of this research.

5 The Case for this Excavation

5.1 Personal Knowledge

I have a particularly strong connection with, and knowledge of, the site. My mother was born there (just months before its being requisitioned during the war), and my father was born just a twenty minute walk away in Woodingdean, as was I. My mother, Peggy Cuthbertson, and I have been researching the history of the Newmarket Farm for the past two years, and have discovered a considerable amount of material about the lives of the farm labourers who lived there, the farmers who employed them, and the owners to whom they were all answerable. Peggy's family lived in the cottage from 1938 to 1942. We are also in active contact with the Phipps family 'children' who lived there between 1934 and 1938. We have also met and exchanged information with the descendants of James Hodson, who was probably responsible for Newmarket Farm's construction, and who have a considerable number of archives relating to James Hodson's history. We have also made good contact with a number of other individuals with an active interest in the history of the area. Research is ongoing, with the aim of publishing it as a book. Though I have no previous

archaeological experience, my training as a scientist, countryside ranger, gardener, and manager of a number of community based projects, I have a number of transferable skills. For the past few months I have been studying archaeology and have formed links with a number of professional and experienced volunteer archaeologists.

5.2 Enhancement of our National and European Heritage

Castle Hill NNR is both a nationally important SSSI and a SAC. This dig project would help enhance an appreciation of the link between our natural heritage and its historical influences, and thus would be a positive contribution to the value of such an important reserve, as is recognised in the reserve's management plan. Castle Hill NNR is recognised as the core of Brighton & Hove City Council's bid for Urban Biosphere status.

5.3 Public Communication

I am a scientist with a good background in both natural and local history. I am a good communicator, and enjoy, and have demonstrated a talent for, the leading of guided walks and the giving of talks. This is a wonderful opportunity for me to enable the wider public to gain access to the physical echoes of an ongoing story of the past two hundred years of this archetypal part of the South Downs; a story which may better enable an understanding of why (for example) this forgotten site is currently enclosed by barbed wire and covered by nettles and brambles. Both technical and general reports, have been, and are planned to be written. Background to the project, and progress reports are to be found on my blog: http://southdownhill.wordpress.com.

6 Dissemination and Archive

The dissemination of the results is fundamental to the success of this research project; it has been said that a site hasn't been found until it has been published. The OASIS (Online AccesS to the Index of archaeological investigationS) website, http://ads.ahds.ac.uk/project/oasis, which provides a signposting service for all organisations undertaking on-site investigations, will be provided with details of the project as it progresses.

I am not sure if a paper will be written for a peer-reviewed journal article or a full-scale academic monograph, but an on-line resource in the form of a blog has been created to enable people to keep in touch with the project. Existing and new contacts in the local community will be nurtured, and invitations to speak and give guided walks will be encouraged. All documents and images, wherever possible, will be made available to the general public such that further works may be created by others.

The writing of a formal Project Report will be an important means of communicating the project results to professional, academic, or educated readers.

The presentation of the information in a balanced, logical, accessible and structured way is essential for those who may wish to conduct further studies in the future. English Heritage's (2009) 'Management of Research Projects in the Historic Environment: The MoRPHE Project Manager's Guide', and their (2008) 'Project Planning Note: Archaeological Excavation' guidelines will be followed regarding both the production of Project Report(s) as well as the Site Archive as a whole. Guidance will also be taken from the East Sussex County Council (2008) 'Standards for Archaeological Fieldwork, Recording, and Post-Excavation Work in East Sussex', which recommends that copies should be submitted to the District/Borough Planning Authority, the County Council, via the Council's archaeological officers, the County Historic Environment Record, the East Sussex Record Office and the Sussex Archaeological Society library. If at all possible I wish the Project Report, site archive, and anything else produced by myself to be published under a Creative Commons licence. Storage of the Project Archive (documentation only) has been agreed by the Barbican House Museum, Lewes.

7 Methods Statement

In section 4 a list of the Aims and Objectives of this project were given. This section considers how they might be achieved. A site grid will be laid out, from which internal features of the site can be orientated, surveyed, and mapped. Advice will be taken on the location and size of individual trenches, so that the maximum information may be acquired for the minimum amount of work.

Advice is also being sought on the dig strategy for the house itself. All digging is destructive, but an "open area excavation", otherwise known as "strip and record", would enable the plan of the whole house to be seen as well as any surviving internal features, especially if it has been badly damaged by both artillery shelling and subsequent clearance by bulldozer. This method is normally only done when a site is threatened with destruction, or has already been excavated, and thus has already been effectively destroyed. However this 19th century farm labourer's cottage is not considered to be of great archaeological importance, and the proposed scope is to limit excavation to just stripping back the disturbed demolition layer down to the uppermost occupation layer. However, this is likely to be the subject of a formal review nearer the time, which may lead to an updated Project Design.

Unless there is good reason to do otherwise, the MoLAS (1994) 'Archaeological Site Manual' will be followed. Guidance will also be taken from the East Sussex County Council (2008) 'Standards for Archaeological Fieldwork, Recording, and Post-Excavation Work in East Sussex'. Guidance for project management has been taken from English Heritage's (2009) 'Management of Research Projects in the Historic Environment: The MoRPHE Project Manager's Guide', and their (2008) 'Project Planning Note: Archaeological Excavation'. If A's many publications on archaeological standards and guidelines have also been studied. Information on the use of (free) Open Source Software in archaeological projects has been obtained from the Internet. By this means it is believed that the project's Aims and Objectives may be achieved.

8 Resources and Programming

8.1 Project Team

This project was initiated following communications with Natural England's Malcolm Emery, Senior Reserves Warden for East Sussex, Surrey and Oxfordshire, and Louise Parkinson, Reserves Warden for East Sussex. This resulted in the author being invited to conduct an archaeological investigation of the Newmarket Farm site. Therefore the project is directly answerable to Natural England. *Quality Assurance* for the Archaeological aspects of the dig will be by Greg Chuter, Assistant County Archaeologist for East Sussex, and John Funnell of the Brighton and Hove Archaeological Society.

The Project Manager for this dig is myself, David Cuthbertson. This will be the first archaeological dig with which I have been directly involved. Nevertheless, I have many transferable skills, including a keen interest and knowledge of both natural history, local history and, especially, prehistory. I have a science degree and have managed a number of environmental and community based projects. I also have a qualification in the skills of a Countryside Ranger, so am well versed in the issues of Health and Safety, Risk Assessment and Equal Opportunities. During the past few months I have been training myself in English Heritage's MoRPHE Project Management system for historic projects, and have recently completed a familiarisation course. I have also been studying East Sussex County Archaeologists 2008 "Standards and Requirements", the Museum of London's "Archaeological Site Manual", Kent Archaeological Field School's "Archaeology: What it is, where it is, and how to do it" and the RESCUE publication "First Aid for Finds", and a number of other publications on the Internet.

Nevertheless, the advice of experts will be required. John Funnell, head of field-work for the Brighton and Hove Archaeological Society, has agreed to provide practical advice and assistance. Other experts are particularly being sought for their expertise on:

- the various types of finds the excavation is likely uncover
- early nineteenth century farm buildings and vernacular cottages
- palaeo-environmental archaeology

Luke Barber, an expert in post-medieval archaeology from the Sussex Archaeological Society, may be able help with some this.

Volunteer recruitment for diggers has so far found over a dozen people interested in getting involved in the archaeological fieldwork, a few of which have previous dig experience.

8.2 Project Management

David Cuthbertson—the author of this report—is the Project Manager and is therefore responsible for ensuring that the project runs as smoothly as possible.

It is inevitable that things will not always run to plan. Therefore *Project Reviews* are an integral part of English Heritage's *MoRPHE* project management process which this project has chosen to follow. It is the replacement for the MAP2⁷ project management process, recommended by East Sussex County Archaeologists 2008 'Standards and Requirements'. This project's management process started with the *Project Proposal* document, which formed the basis of *Review Point R1*—and the decision to continue on to this *Project Design* document.

Review Point R2 will assess the Project Design as presented in this document. This will result in either:

- a positive outcome, and the furtherance of this project, or
- a negative outcome, and thus either;
 - —a reconsideration of the Project Design, or
 - —the closure of the project.

If the project is continued, the *Execution Stage(s)* of the Project are started, which include each of the stages of the planned excavation process, as well as the desk-based research, analysis, and archive deposition. At the end of each Execution Stage are the *Review Points R3* which are primarily to determine whether the Project's *Aims* and *Objectives* are being met. If not, an *Updated Project Design* may be required, or possibly closure of either just part, or of the project as a whole.

Responsibility for the review process rests with myself, the *Project Manager*, though all those directly involved with the particular project stage will be involved in the decision making process. Therefore site meetings with the diggers at the start of volunteer dig days are of particular importance, and should be minuted.

Volunteer work days are to be every Friday and Sunday, starting from April. Each stage would involve the completion of a particular dig target. Progress will be reviewed on an ongoing basis, and will be written up as stated in Section 3.6.

Any significant variance from the previously agreed *Project Design* would automatically be referred to those responsible for *Project Direction* and *Assurance*, namely representatives of Natural England (Malcolm Emery, Lou Parkinson) and East Sussex Assistant County Archaeologist (Greg Chuter).

Internal communication shall be by email, or other written communication for which a record can be easily kept, wherever possible. However telephone or SMS (text messaging) shall be used when appropriate. The same applies to communications with other Stakeholders. Formal Highlight (progress) Reports shall be sent as a PDF attachment via email, or printed and sent by mail. They shall be circulated before the start of the next stage of the excavation, for they form the basis of the Project Review process. Informal progress reports shall be via the above named blog: http://southdownhill.wordpress.com

⁷Management of Archaeological Projects.

8.3 Equipment and Other Requirements

The use of suitable equipment has been kindly offered by Brighton & Hove Archaeological Society, as well as by the head gardener of a local estate. Other equipment will be bought, or improvised. Project documentation will be produced using Open Source Software on an Ubuntu Linux computer.

8.4 Products, Tasks and Timetable

Section 3.6 summarises in tabular form the products for each of the stages. The tasks required to be done to achieve them will be detailed nearer the time, once further advice has been received from those with practical experience.

I have little or no practical archaeological experience, and have gathered the names of potential volunteers who will form a project team that has no previous track-record. Therefore, I cannot say how many volunteers will turn up on a regular basis, nor how fast those who do turn up will be able to work, so no timescale has yet been estimated. However, there are no time constraints at present — the first phase is to continue until either the aims and objectives have been met, the weather becomes too cold to continue, or circumstances bring the project to a premature end. There are also no time constraints from Natural England.

8.5 Project Risks

Because of the amateur nature of this project the risk of failure may be high, but the consequences are low. Any form of positive outcome is to be considered a bonus. Financial outlay has been minimal.

8.6 Health and Safety

Natural England's Health and Safety policy will be adopted by this project. It is summarised on their website⁸, and their site specific safety advice is given as an appendix in Section 10.

The main hazards for an archaeological dig include:

- Injury from Tools
- Uneven Ground and other tripping hazards
- Exposure to the elements
- Trench collapse & slipping masonry
- Buried Cables & Services

 $^{^8} http://www.naturalengland.org.uk/ourwork/enjoying/linkingpeople/communities/volunteering/volunteersdirectory/default.aspx$

- Contaminated and/or Waterlogged Sites (fragments of asbestos cement sheet have been found within the NW of the farmyard in the vicinity of a small mound of demolition rubble, near the site of the former barn, though nowhere else; the risk of asbestosis is low from this material, and in this type of environment)
- Lacerations (glass shards, metal, sharp flints)
- Physical attacks (especially of lone workers)

Each of the hazards will be assessed and steps taken to minimise the associated risks with the support of Natural England, and, if required, further advice and assistance will be taken from the East Sussex County Archaeologists and Brighton & Hove Archaeological Society. Health and Safety issues will be communicated to all those who visit and/or work on the site. The dig project when on site will be covered by Nature England's Insurance Policy.

This risk assessment identifies aspects of hand excavation for archaeological purposes, which require specific action to minimise danger to staff, volunteers, visitors and the public. It describes the hazards, their associated risks and the methods to avert those risks.

1. Introduction

The proposed works entail the excavation of a site by hand, and the recording of deposits revealed by these works. The archaeological work will be conducted by volunteers, with the support of experienced archaeologists. As manager of this dig I accept I have little or no practical archaeological experience, but I do have relevant experience in the management of practical gardening and conservation tasks.

2. Use of tools

(Working with heavy machinery is not included here as it will not be used for this excavation.)

2.1. Generic

The use of hand tools, particularly mattocks and shovels, exposes individuals and those nearby to some slight risk. There is considered to be minimal risk to visitors or members of the public.

All volunteers will be briefed on good practice on the correct use of tools, including the tidy placement of tools when not in use, and correct carrying practice. Protective eye-wear should be worn where mattocks are used in soils that contain a high percentage of flints.

2.2. Specific to this site

Due to the relative remoteness of the site, extra care must be taken with the placement of tools to prevent tripping and other tool related injuries.

3. Uneven ground and related hazards

3.1. Generic

Uneven ground can be due to natural topography, animal disturbance or by the excavation of a trench, which might be hazardous to those walking in the area. This risk can be greatest to visitors and the public who may not be aware of the trench cutting.

Uneven ground caused by natural topography or animal disturbance may cause twisted ankles or break limbs, especially when carrying tools. All staff and volunteers should be briefed on this danger before entering the site.

Normally trenches are not deep, and therefore present a minor risk. However, barrier mesh fencing or safety tape should be used to enclose deeper trenches when left unattended overnight. The consequences of this hazard are normally reduced by stepping the sides of the trench. Additional precautions in the form of warning notices should also be used where there is public access to the site.

3.2. Specific to this site

Uneven ground is a significant hazard on this site. Related hazards include brambles which are particularly prevalent on site. Their low level runners which root when they touch the ground may cause a significant tripping hazard. The demolition rubble scattered across the site also constitutes a tripping hazard.

Managing the vegetation on site would significantly reduce the risk of injury, for it would increase the visibility of such hazards. Access routes should especially be made a priority.

All staff and volunteers should be briefed on these specific dangers before starting work. Suitable footwear will therefore be encouraged.

Visitors to the site will be briefed before entering the site area. Again, suitable footwear will therefore be encouraged.

There is a possibility of a 2m deep trench being dug to the bottom of an underground water tank. It has been proposed that suitably strong board(s) may be used to cover such a trench when there is no one on-site. This may significantly reduce the hazard from such a deep trench.

It may also be considered appropriate to place ramps inside trenches at the end of each work day to enable any animals that might fall into them to climb back out again.

4. Exposure

4.1. Generic

Exposure to the elements may be both a hazard in itself and increase the risk of harm from a wide range of other hazards. Both excessive heat as well as extreme cold can affect people's judgement.

4.2. Site Specific

The site is near the top of the highest hill in the area and thus will experience more extreme weather than might otherwise be expected. Therefore all volunteers will be informed of this and will be encouraged to wear suitable clothing. Site work will be cancelled in bad conditions.

5. Section and Soil Collapse

5.1. Generic

There is a high risk of collapse and injury within deep unshored trenches. The risk is greatest to those in the trench, but can also apply to people standing on the trench edge.

Trenches deeper than 1.2m pose the greatest hazard, although consideration must also be given to the soil type and weather conditions.

If deep and/or unstable trenches do occur then staff and volunteers will not enter them unless the edges have been shored, stepped or battered.

5.2. Specific to this site

Almost all trenches on this site are likely to be quite shallow. The spoil heaps will be located nearby to enable easy backfilling.

Deep trenches will only be dug with the direct supervision of an experienced field archaeologist. Their advice would be followed to reduce the risk of trench collapse.

6. Buried Cables & Services

6.1. Generic

There is a risk of injury and death to staff and volunteers on a site if services are damaged during work. Responsibility for detected such services should be established before entering a site.

Should unexpected live or potential live services be observed the responsible person should be informed immediately and all work in that area suspended until they have been made safe.

Care should also be taken of overhead services, especially in rural areas.

6.2. Specific to this site

Because of the remoteness of the site, there are no services within the area of the excavation. Therefore a CAT scan is not considered to be a requirement in this case.

7. Contamination & Waterlogged sites

7.1. Generic

Contamination of a site by chemicals, spilt fuels, asbestos or toxic materials can be a potential risk to individuals. In most circumstances no work should be undertaken in these conditions. However, if any of these materials is discovered unexpectedly in the course of the work, it must be drawn to the attention of the site director.

Special care should be taken with unidentified waste, modern refuse, hypodermic needles and syringes that may be unexpectedly encountered on a site. They should be avoided, or collected carefully and disposed of away from the site. Waterlogged and wet conditions can potentially be a hazard, especially with regards to Weil's disease, which is contracted from rat urine. Staff and volunteers should wear protective gloves when excavating in these conditions. Any scratches or open wounds should always be protected from contaminants.

Asbestos cement sheeting is always a possibility with agricultural buildings that were in use during the first half of the 20th century. However, whilst the hazard of contracting asbestosis is present, because the asbestos is embedded in cement, the risk is very small, especially in such a well ventilated area. In this form it is not a notifiable substance.

Protective clothing, gloves and face masks are available and should be worn if it becomes necessary to work in a contaminated area. As always, the number persons working in an area of high risk should be minimised wherever possible. Advice should always be taken before commencing work as to the nature of any hazard.

7.2. Specific to this site

Whilst the majority of the site has no known contamination issues, a small area near the NW corner of the farmyard has been observed to contain some 10 cm fragments of asbestos cement sheeting, probably used for roofing a farmbuilding. Fortunately the risk of asbestosis from this material and in this type of environment is minimal. Nevertheless suitable protective clothing and face masks will be available. Where it is found on site, its extent needs to be assessed, its context recorded, then specialist contractors can be brought in by Natural England to remove the contaminated spoil.

In general the site is not waterlogged. However, the rubble filled water tank may well contain waterlogged sediments. Weils disease is therefore a possibility, though the risk is considered to be very low.

Being a rural site it is visited by many animals, so individuals should be made aware of animal dung and dog litter, and take normal hygiene precautions before eating or drinking.

8. Cuts and Punctures

8.1. Generic

Sharp objects may cause lacerations, and thus blood loss, tissue damage, and can also introduce toxins and infectious agents into the body. To prevent this, the use of protective measures is advised. All staff and volunteers should be advised of the possible hazards and notified of protective measures that it may be advisable to take.

8.1. Site Specific

Because the nature of the site, the risk of cuts and punctures are higher than might normally be expected. Sharp edged metal, glass and flint fragments are likely to be encountered. Brambles and nettles also cover the complete site, though the latter may be much more of a nuisance than a serious hazard. Therefore tough gardening gloves, kneeling pads, and related precautions will be recommended. As has previously been stated, keeping the access to the archaeology clear of tall vegetation is particularly important, for the greatest hazard is from someone tripping and landing on a sharp object.

9. Lone Worker Policy

9.1. Generic

It is generally recognised that lone working increases the risk of being harmed, however, in a project such as this, it may well be necessary. A particular hazard to lone workers are personal attacks. Training in dealing with challenging behaviour and the carrying of a mobile phone are likely to significantly reduce such a risk. A buddy system is also recommended. This entails notifying a responsible individual that a lone site visit will be made, the route to be taken, how they might be contacted in an emergency, when they are due back, and what to do if that person does not return at that time.

9.2. Site Specific

Only named, authorised, individuals are to work on site alone. They will comply

with the above named lone worker procedure.

10. General

Everyone has a basic duty of personal hygiene and care on and around the site, both for themselves and for others.

Care should be taken in carrying loads and moving loaded wheel barrows. Only take as much as you are able. Special care must be taken in wet weather when walkways and ramps will become slippery.

In the event of injury, an individual must report to the site director or appointed first aider who will have the site first aid kit. Details of the injury must be entered into the accident book. The responsible individual must also ensure that a working mobile phone is carried on site at all times.

8.7 Equalities Impact Assessment

I have a lot of experience managing and directing community projects whose members, staff and stakeholders are from a wide range of races, creeds, sexual orientations, religious beliefs, disabilities, genders (including transgender and transsexual), ages, infectious conditions and incomes. Whilst this project has not specifically targeted minority groups, many of the volunteers are from a variety of backgrounds. The only group likely to be discriminated against are those with mobility issues. This is due to the remoteness of the site and the nature of the terrain. If permission for vehicle access is attained by Natural England, and a new gateway into the reserve is built, this issue would be greatly improved. Due to the amateur nature of the project equal opportunities monitoring is not (at present) planned to be put in place. Again, due to the amateur nature of this project, volunteer recruitment has so far been on a word-of-mouth basis. Therefore, minority, vulnerable, or socially excluded groups have not been specifically targeted. However, it is expected that volunteers will include a relatively high proportion of older, retired individuals, as well as those on benefits (disabled or out of work). My own conditions are AD(H)D and Asperger's Syndrome.

8.8 Budget and Resources

This project has been self financed and so a budget has not been considered to be necessary. A number of individuals and groups have offered us the loan of valuable equipment and resources, for which we are extremely grateful.

9 Bibliography

- Cuthbertson, David & Peggy, A History of Newmarket Farm (draft), http://southdownhill.wordpress.com ('Newmarket Hill' blog, including posts about the Newmarket Farm Dig project.)
- East Sussex County Council (2008) Standards for Archaeological Fieldwork, Recording, and Post-Excavation Work in East Sussex.

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- English Heritage (2009) 'Management of Research Projects in the Historic Environment: The MoRPHE Project Manager's Guide'.
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- MoLAS (1994) 'Archaeological Site Manual'.
- RESCUE publication 'First Aid for Finds'.

10 Appendix: East Sussex National Nature Reserves Safety Advice to Natural England Staff, Volunteers and Visitors

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CASTLE HILL — HAZARD/RISK ANALYSIS

The following table summarises the potential hazards and risks associated with Castle Hill NNR. For a more detailed description of the hazards refer to the documented sections. In addition, all the hazards are shown on the location maps in the appendix.

HAZARDS	LOCATION OF HAZARD	RISK (nature, conditions, persons)	MEASURES RE- QUIRED
10.1 Natural haz-		30113)	
ards	G 10.11		
10.1.1 Terrain Steep slope	See map 10.4.1	Cling tring follo	Be aware of risk
Flints	All	Slips, trips, falls Cuts	Be aware of risk
Badger, Rabbit holes	2	Slips, trips, falls	Be aware of risk
10.1.2 Fire risk		Tay Tay	
Dry conditions	All	Fire outbreak	No unauthorised bonfires
Bonfires burning scrub	All	Fire spread	Follow precautions, authorised bonfires only
Discarded cigarettes	All	Fire outbreak	Be aware of risk, ensure extinguished
10.1.3 Parasites/infection			
Sheep	All???	Ticks — Lyme dis- ease	Follow guidelines
Animal dung	All	Infection	Wash hands before eat, drink. Avoid contact of food and floor
10.1.4 Pond Newmarket bottom	9	Day at an a	Manladan
Newmarket bottom	3	Drowning — open to public	Marked on map
		Weils disease	Wash hands before eat, drink, wear gloves when working in pond
10.2 Manmade hazards			
10.2.1 Risks on			
rights of way Bridleways	Marked on map	Collision between user groups — horse riders, walkers, cy-	Be aware
Stiles	4,5	clists Injury	Inspect regularly
10.2.2 Estate	4,0	Injury	Inspect regularly
management			
Ponies	All	Kicks	Be aware, keep dogs under close control
Sheep	All	Butting	Be aware, keep dogs under close control
Machinery	All	Injury to public	Training provided to users, risk assess- ments available for all activities
Authorised vehicles	All	Injury to public	Be aware
Fires (as part of scrub management work)	All	Injury to public	Fire sites made safe at end of task, risk assessments avail- able for all activities
Mains electricity across entrance gate- way	6	Contact/electrocution if holes dug in gate- way	Be aware, use cable detector
Shooting for rabbit control	All	Injury	Natural England certificated person- nel only
10.2.3 Unexploded ordnance			
Unexploded ord- nance left from war training area (Cylin- drical metal objects around 3 inches in diameter, with or without fins.)	All, particularly under scrub	Injury	Do not touch, call Natural England NNR workbase (01323 423962), bomb squad will be alerted

10.1 Natural Hazards

10.1.1 Terrain

- Slopes of varying steepness and aspect, subject to adverse weather conditions.
- Flints, uneven ground and concealed rabbit and badger holes. Flints can be very sharp and cut to the bone. Watch footing.

The Reserve covers 46 ha and comprises slopes of varying steepness and aspect. The **steeper slopes** can be hazardous to negotiate, particularly as the site is exposed and subject to **adverse weather conditions** from time to time. The site has open access and therefore the public, volunteers, contractors, Natural England staff and permit holders do have access to the slopes and must be aware of the risks of slipping or falling on such **uneven terrain**. **Rabbit and badger holes** pose a risk, particularly as they can sometimes be concealed by vegetation.

Many flints come to the surface in this terrain, particularly on the steeper slopes and on the bridleway. **Broken flints** can be extremely sharp; capable of cutting to the bone. The **main access track surface** is largely made of flint and is quite steep as it descends from the Reserve entrance. Particular care is needed therefore when negotiating the descent.

10.1.2 Fire Risk

• Serious fire risk during dry conditions — dead **vegetation** on ground, dry grass, discarded **cigarettes** and **unauthorised bonfires**.

Dry grass on the slopes, rough grass and gorse scrub at the tops of the slopes all pose a risk of fire, even in winter when large quantities of dead plant material are present. No unauthorised lighting of fires is permitted on the Reserve and care is needed not to discard lit cigarettes or matches. Winter conservation tasks do involve bonfires and volunteers and staff ensure that such fires are managed safely during the task and made safe before leaving the site.

In case of fire, do not put yourself at risk by trying to put out anything approaching a large blaze. Call for help if you cannot quickly or easily deal with the situation yourself.

See section 10.4.2. for the location of the nearest public telephone.

10.1.3 Parasites/infection

• Sheep, ponies, cattle — dung transmits infection, ticks transmit Lyme disease.

Animal dung can carry parasites and infections transmittable to humans. Sheep and cattle graze the Reserve. Horse riders and dogs pass through. Exercise care therefore, by not letting food come into contact with the ground.

Lyme disease has been recognised as a risk to humans and is transmitted by deer ticks or sheep ticks. Castle Hill is currently thought to be free from ticks⁹, but it is common sense to take precautions such as avoiding walking through tall vegetation with bare legs and arms. Check for ticks regularly and remove any you find before they can bite. Tell your doctor if you have been bitten by a tick, as symptoms of Lyme disease normally develop up to a year afterwards.

10.1.4 Pond

• One pond — risk of drowning and contracting Weil's disease (*Leptospirosis*)

The location of **new pond in Newmarket Bottom** on the Reserve is marked on the attached map 10.4.1. Any open water poses some possibility of drowning. The pond is not open to public access. The pond reaches a depth of around 1.5 m in the centre when at its fullest, but also has a shallow sloping depth profile so that one cannot fall straight into deep water from the edge¹⁰. Staff or volunteers working on pond clearing tasks should not however work alone, particularly when wearing waders. When wearing chest waders, workers should have a safety line attached to someone at the edge of the pond.

Water bodies such as these also have the potential to carry **Weil's disease**, normally carried by rats and associated with water¹¹. The disease can enter via cuts in the skin, so protective gloves should always be worn when pond clearing and any cuts must be cleaned and dressed properly.

10.2 Man made hazards

10.2.1 Risks on rights of way

• Bridleway marked on map 10.4.1. Particular steep slope, narrow sunken section and rough terrain with flints pose a risk — marked on map.

The steep access track has already been mentioned as rough terrain with flints, requiring care when descending. Horses, mountain bikes, authorised Reserve vehicles and pedestrians use this track so due care and attention is needed, particularly when negotiating the narrow, sunken section where it is difficult for others to 'get out of the way'.

10.2.2 Estate Management

• Authorised vehicles, machinery, bonfires and livestock

 $^{^9\}mathrm{A}$ tick was 'picked up' from either the sheep-grazed hillside opposite, or Balsdean Valley, in 2012.

 $^{^{10}}$ There does remain, however, a risk of drowning for unsupervised small children from both the pond (and the water troughs) on the Reserve.

¹¹The bacteria is more active in the warmer period between June and November.

Contractors, Natural England staff and volunteers periodically use **machinery** or **chemicals** on the Reserve. These personnel are trained in the necessary health and safety procedures for such work. Other staff and visitors should comply with any safety instructions given by such personnel, or otherwise keep well clear of such activities.

The Senior Reserves Manager and Reserves Manager sometimes need to take four-wheel-drive vehicles on to the Reserve. Both are trained and certificated in safe off road driving and are responsible for the safe operation of these vehicles. No one without such training, or the necessary authority from Natural England, is allowed to take vehicles on to the Reserve, particularly the slopes.

The **livestock** on the Reserve are generally docile. There is always the possibility however that a startled horse or cow could kick and injure. Particular care should be taken to avoid adults with young at heel. **The presence of a dog also increases the risk in this respect**.

Shooting — Only certificated personnel with NE permission can shoot on the Reserve. Shooting is carried out to control rabbits. Warning notices are not displayed.

10.2.3 Unexploded ordnance

• Unexploded ordnance may still be present off Rights of Way.

The Reserve was used as a firing range/mortar training area during the war and despite several bomb clearing exercises by the military in recent years, unexploded mortars/bombs are still present off rights of way.

If you find a suspicious rusty metal canister or fins embedded in or lying on the ground, do not touch it or move it. Apart from the risk to oneself, it is illegal to knowingly pick up or move explosive materials without proper authorisation. If necessary, put a marker nearby so that it can be relocated and inform the Senior Reserves Manager, Malcolm Emery either on his mobile (07971 974401) or the Reserves Manager Lou Parkinson, on her mobile (07825 386620) or the Natural England NNR office (01323 423962). A bomb disposal unit will then be contacted to deal with the suspect object.

10.3 First aid and emergency provisions

10.3.1 First Aid

Appropriate field first aid kits are carried in Reserve vehicles and on volunteer tasks. Natural England staff for Sussex and Surrey have basic first aid training and the Field staff are trained in Field First aid.

All Natural England field staff and volunteers should maintain up-to-date **tetanus cover** (Tetanus booster injections provide immunity for 10 years).

10.3.2 Telephones

The valleys represent 'dead zones' for hand portable radios or telephones although some form of booster pack may help to improve this. Reception is satisfactory from the hill tops around the Reserve. Locations of nearest public telephones are marked on the area map 10.4.2.

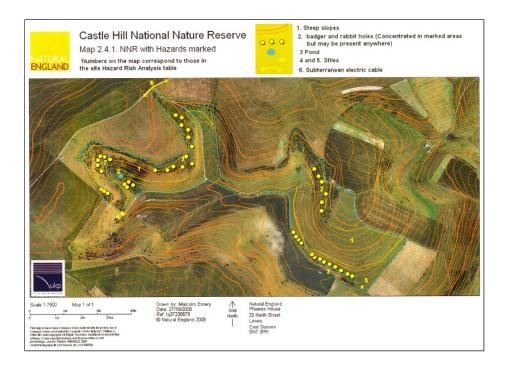
10.3.3 Emergency provisions

Call 999 for fire, ambulance or police. Any casualty with a life threatening injury can be taken off by police helicopter. If an ambulance is called, the attached emergency rendezvous map and instructions 10.4.3 will help in giving instructions over the phone. Copies of this map and instructions are also kept in all field first aid kits.

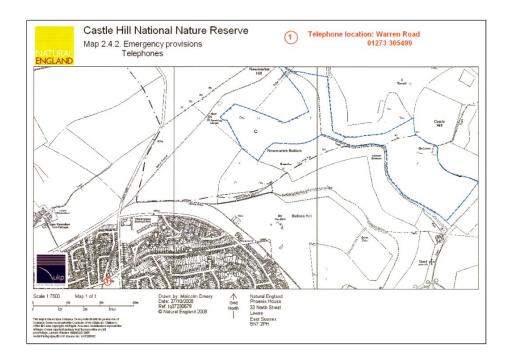
Natural England Sussex and Surrey staff operate a **lone-worker safety system** when visiting sites. Volunteers and other visitors are advised to ensure lone safety also. Leave details with a friend or relative of where you are going and when you expect to return. In the NE system, there is also a network of contacts to ensure that, in the event of someone failing to return, necessary search measures are taken. Other visitors are advised to establish their own systems.

10.4 Maps and Directions for Emergency Services

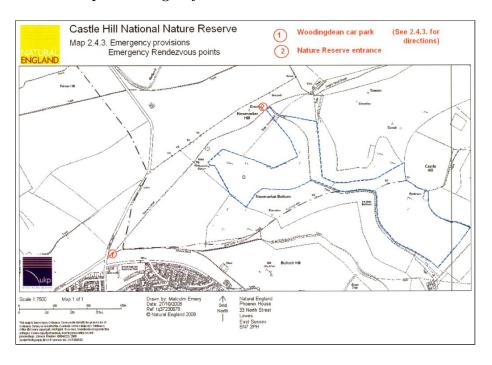
10.4.1 Map — The Nature Reserve with hazards marked



10.4.2 Map — The Nature Reserve and surrounding area (with telephone locations)



10.4.3 Map — Emergency Rendezvous and Instructions



DIRECTIONS TO EMERGENCY RENDEZVOUS POINTS FOR CASTLE HILL

The directions are to help emergency services to find the rendezvous point.

Point 1. — Woodingdean Car Park

Ordnance Survey Reference: TQ 357 064

The entrance to the car park is on the B2123 Falmer Road, on the north side of Woodingdean, on the crest of the hill, just inside the 30 mile per hour restriction zone. If coming from the north, turn left into the car park.

Point 2. — Reserve entrance

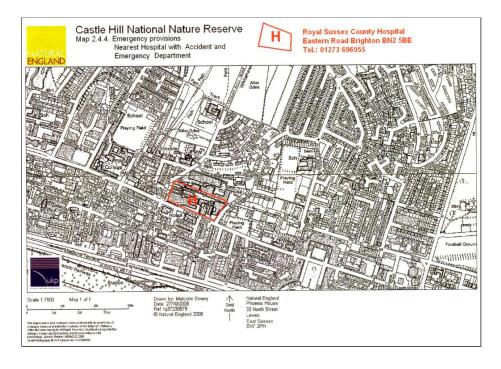
Ordnance Survey Reference: TQ 368 074

From the Woodingdean car park (OS Ref. TQ 357 064), take the left-hand track (Drove Avenue) past the radio mast. The Reserve entrance is approximately 1 mile along the track on the right hand side, with a double field gate and hunt gate. The Reserve sign is visible through the gates. The track is accessible for vehicles, though care is needed to avoid potholes.

The nearest public telephone is located on Warren Road approximately 50 meters from the crossroads

(Tel: 01273 305499)

10.4.4 Map — Nearest Hospital with Accident / Emergency / Outpatients



Nearest Hospital with Accident & Emergency/Outpatients Department:

Royal Sussex County Hospital, Eastern Road, Brighton BN2 5BE Tel: 01273 696955

Health and Safety is everyone's responsibility, so please be aware of the potential for accidents whenever on the Reserve. If you perceive any risks onsite, or wish to discuss safety matters further, please contact:

Senior Reserves Manager,

Malcolm Emery, Natural England, Green Barn, Gayles Farm, Seaford Road, Friston,

East Sussex,

BN20 0BA Mobile: 07971 974401.