Archaeological Building Recording Services

> A Photographic Survey. Nissen Huts Adjacent to No. 7 Nailstone Road Barton in the Beans Leicestershire. (NGR SK 39947 06482)

> > **On Behalf of Cadeby Homes Ltd**



ABRS Report No 2016-NBBL

A Photographic Survey

Nissen Huts

Adjacent to No. 7 Nailstone Road

Barton in the Beans

Leicestershire.

(NGR SK 39947 06482)

On Behalf of Cadeby Homes Ltd

June 2016

Planning Permission No 16/00242/FUL

ABRS Project No 2016-NBBL

Leicestershire Museums & Archaeology Collections Accession No X.A74.2016

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A Photographic Survey of Three Nissen Huts Adj. to No. 7 Nailstone Road, Barton in the Beans, Leicestershire (NGR SK 39947 06482).

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Summary

This document is an archaeological building survey (photographic survey) of three Nissen Huts on land adjacent to No. 7 Nailstone Road, Barton in the Beans, Leicestershire (SK 39947 06482), commissioned from Archaeological Building Recording Services (ABRS) by Cadeby Homes Ltd in advance of the demolition of the buildings and the re-development of the site for residential use.

Nissen Huts are a key feature of 20th century and military architecture, originally devised for a purely military and temporary use the buildings were retained and erected across the country providing cheap, easily and quickly assembled buildings for a multitude of uses. These three huts, although not in an original military site are good examples of the re-use of the Nissen Hut in the early post World War II era.

The photographic survey provided a permanent visual (photographic) record of the buildings in their current state. The archive will be held by Leicestershire County Council Museums Service, under the accession number X.A74.2016.

1. Introduction

Archaeological Building Recording Services (ABRS) were commissioned by Cadeby Homes Ltd to undertake historic building recording (photographic survey) of three Nissen Huts adjacent to No. 7 Nailstone Road, Barton in the Beans, Leicestershire (SK 39947 06482) (*Figures 1 & 2*)). Planning permission has been granted for the demolition of the buildings and the re-development of the site for residential use (Planning Permission No 16/00242/FUL). The buildings are Nissen Huts erected on the site in the early 1960s. The Principal Planning Archaeologist of Leicestershire County Council, as advisor to Hinckley & Bosworth Borough Council, has recommended that an archaeological standing building recording (photographic survey) be carried out prior to any proposed works being carried out. The buildings are not statutorily listed, nor located within a designated Conservation Area.

A photographic survey was to be undertaken following standards as defined in *Understanding Historic Buildings: A guide to good recording practice* (Historic England 2016). The photographic survey addressed the requirements detailed in the letter of advice and followed the *Written Scheme of Investigation for Historic Building Inspection & Recording* (2016-NBBL_WSI).

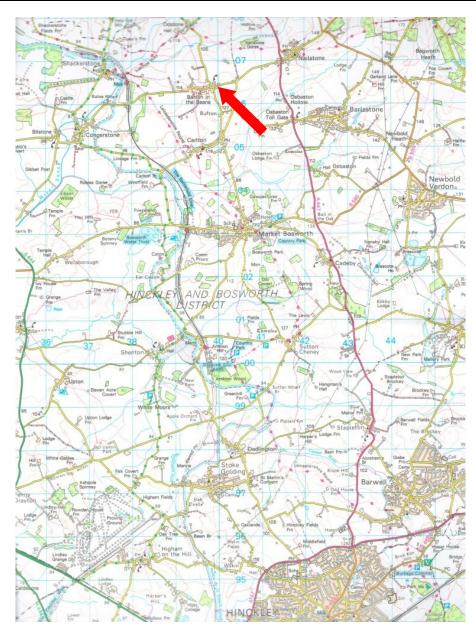


Figure 1 Site Location Reproduced from 1:50000 map by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office. ©Crown Copyright 1990. All rights reserved. Licence number 100053136.

The proposed development area lies to the north of Nailstone Road. The standing buildings consist of three Nissen Huts, which anecdotal evidence indicates were erected on the site in the early 1960s having been purchased as military surplus and used for various storage and light industrial uses and most recently as a builder's yard.

Nissen Huts were invented by Major Peter Norman Nissen, a Canadian serving with the 29th Company, Royal Engineers during the First World War. The most important factors governing the design were cost of materials and portability. The Nissen hut was prefabricated for ease of erection, could be transported in standard military 3 tonne lorries and erected by six men in only 4 hours. Production began in August 1916 with huts arriving on the Western Front in time to house troops during the Somme Offensive. During the First World War approximately 100,000 were produced.

Production decreased after the war, but was revived in 1939 with the beginning of World War II and Nissen Buildings Ltd even waived its patent rights for this wartime production. Exact production figures for World War II are unknown, but following the cessation of hostilities many tens, if not hundreds of thousands of such huts became surplus and auctioned off by Allied Governments, becoming industrial, agricultural or in some cases residential buildings, either in their original locations or dismantled and re-erected elsewhere.

Structurally, the Nissen hut is formed from curved corrugated steel sheets, 10' 6" long by 2' 2" wide (3200mm by 700mm) with a two corrugation overlap and a 6" (150mm) overlap, the cross-section is not precisely semi-circular, as the bottom of the hut curves in slightly. The frame consists of T-shaped steel ribs, measuring $1\frac{3}{4} \times 1\frac{3}{4} \times 1\frac{3}{4} \times 1\frac{3}{8}$ inch (45mm x45mm x 5mm) set at 6' $\frac{1}{2}$ " (1800mm) centres, each rib consists of three sections bolted together using splice plates. There are five 3" x 2" (75mm x 50mm) wooden purlins, the purlins are attached to the ribs using a hook bolt, which hooks through a pre-drilled hole in the rib and is secured into the purlin. The huts came in three internal spans, 16', 24' and 30' (4900mm, 7300mm, & 9200mm), the longitudinal bays were in multiples of 6' (1830mm).

The end walls could be constructed from any number of different materials, including brick, ply-board or even tarred paper. The use of an internal skin, frequently another layer of corrugated sheet laid horizontally, or Swedish Fibreboard or Masonite clearly differentiates the Nissen hut from other similar huts. Windows and doors can be added to the sides by creating a dormer by adding a frame to take the upper piece of corrugated iron and replacing the lower piece with a suitable frame for a door or window. Such modifications were limited to huts with a more domestic use, generally windows and doors were limited to the end walls.

2. Aims and Methodology

The aim of the survey was to provide a permanent photographic record of the building in its current state, prior to alteration or repair, to standards set down by Historic England (2016).

The photographic survey was undertaken by Gerwyn Richards. Photographs, in 35mm monochrome negative and digital format were taken as raw image files and converted to TIFFs (Tagged Image File Format) include items 1-7 of the Historic England specification for photography (2016). The site visit was carried out on June 24th 2016.

Orientation: There are three buildings subject to this recording, all linear in plan, aligned east-north east to west-south west (*Figure 2*). For ease of description this is taken hereafter to be east - west with the principal elevation facing to the east. Where the terms 'left', 'right', 'front' and 'back' etc are used in the report, this is in relation to this principal elevation as viewed from the east. For the purpose of this report a letter prefix has been allocated to each building and a number suffix added for significant partitions where required.

As far as is known, no previous historic building recording has been undertaken of the buildings.

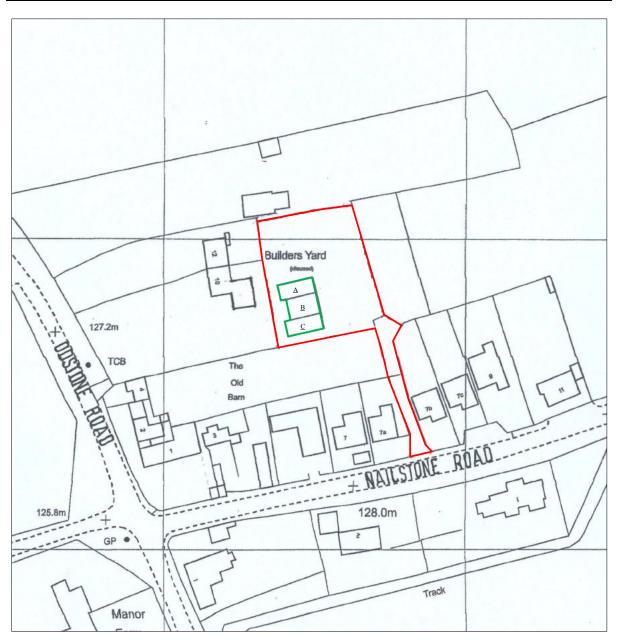


Figure 2 Plan of the Proposed Development Area (in Red), recorded Buildings (in Green). (Provided by client. 1:1250).

3. Description of the Buildings

There are three Nissen Huts within the proposed development area, all located within the south westernmost corner. All are of the standard Nissen design (*Figure 3*), with a 16 ft (4900mm) internal span. There are some small differences between the huts; Hut <u>C</u> has been constructed atop a brick plinth six courses high (*Figure 4*), as a result it is noticeably higher than the two other huts (*Figure 3*). Huts <u>B</u> and <u>C</u> have brick built end walls on the principal (east facing) elevation as well as timber-built lean to canopies (*Figures 5 & 6*). Hut <u>A</u> has a mineral felt clad principal elevation and a smaller central door. All the rear elevations are likewise clad in mineral felt. To the rear of Hut <u>B</u> is a second timber built lean to, largely free standing but with overhanging sheets creating a small covered area between it and Hut <u>B</u>.

There is a single window on the north facing elevation of Hut \underline{A} , it is of standard Nissen design and is likely to be original (*Figure 7*).

Internally the huts are again standard in design, with little of historical significance. Hut <u>B</u> had been clad and underdrawn, significantly reducing the internal space (*Figure 8*), Huts <u>A</u> and <u>C</u> are largely open (*Figures 9 & 10*). The ribs are clearly visible, as are the timber purlins (*Figure 11*).

4. Conclusion

The photographic survey carried out of the Nissen Huts provides a permanent visual (photographic) record of the buildings in their current condition prior to demolition. The buildings were originally manufactured during World War II and erected on the site in the early 1960s, it is unclear whether they were ever used in their original military capacity.

Nissen Huts are a key feature of 20th century and military architecture, originally devised for a purely military and temporary use the buildings were retained and erected across the country providing cheap, easily and quickly assembled buildings for a multitude of uses. The buildings have exceeded their original lifespan by some considerable margin and are rapidly disappearing from the landscape.

The huts at Nailstone Road, although not in an original military site are good examples of the third and final phase of Nissen Hut use in the early post World War II era, when in a time of shortage and economic hardship military surplus was extensively re-used.

5. Archive & Publication

The site archive consists of

1 A3 paper plan, annotated
DVD containing 50 digital images
2 A4 contact sheets
50 Black & White negatives and contact prints
2 A4 photo record sheets
1 Unbound copy of this report

The archive will be held by Leicestershire County Council under the Accession Number X.A74. 2016.

A version of the summary (above) will be submitted to the editor of the local journal *Transactions of Leicestershire Archaeological and Historical Society* for inclusion in the next edition.

5.1 OASIS Record Summary

INFORMATION REQUIRED	UPLOADED AS
OASIS No	archaeol30-255904
Project Name	A Photographic Survey of Three Nissen Huts Adj. to
	No. 7 Nailstone Road, Barton in the Beans,
	Leicestershire.
Site Co-ordinates	SK 39947 06482
Project Type	Standing Building Recording (Photographic Survey)
Project Manager	Gerwyn Richards
Previous/Future Work?	No/No
Current Land Use	In Use As Building
Development Type	Residential
Prompt	NPPF
Archive Recipient	Leicestershire Museums Archaeology Collections

6. Bibliography

Bonser, R. 2001 Aviation in Leicestershire and Rutland

Historic England, 2016 Understanding Historic Buildings: A guide to good recording practice. London: English Heritage.

M^cKay, W.B 1945 Building Craft Series, Brickwork. Longmans, Green & Co.

7. Colour Plates



Figure 3 Principal Elevations, Huts <u>A</u>, <u>B</u>, & <u>C</u>, Right to Left (Looking South West).



Figure 4 Hut <u>C</u>, Brick Plinth.



Figure 5 Timber Lean To, Principal Elevation Hut <u>C</u> (Looking North West).



Figure 6 Timber Lean To, Principal Elevation Hut <u>B</u> (Looking North West).



Figure 7 Original Window on North Facing Elevation of Hut <u>A</u>.



Figure 8 Hut <u>B</u> General View, Internal (Looking West).



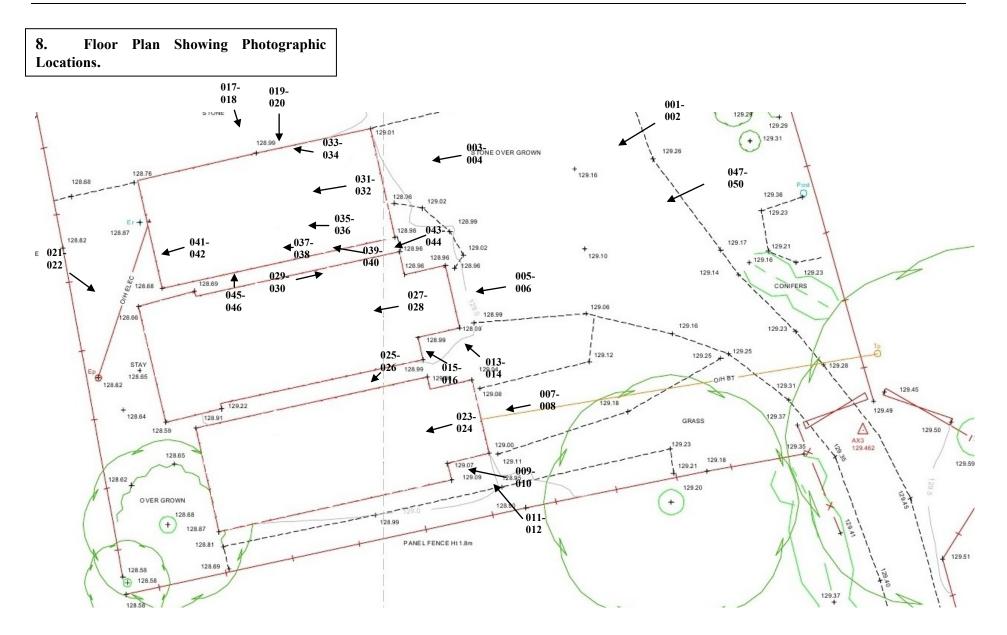
Figure 9 Hut <u>C</u> General View, Internal (Looking West).

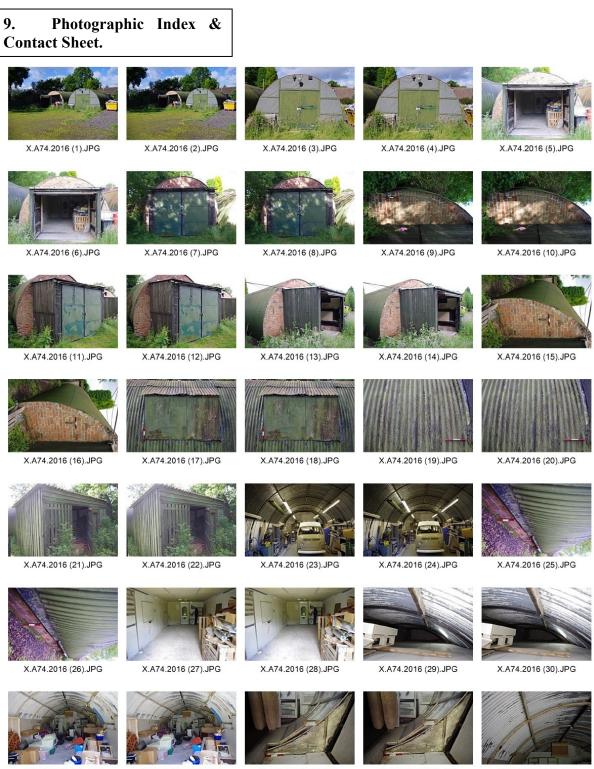


Figure 10 Hut <u>A</u> General View, Internal (Looking West).



Figure 11 Visible Ribs & Purlins, Hut <u>A</u>.





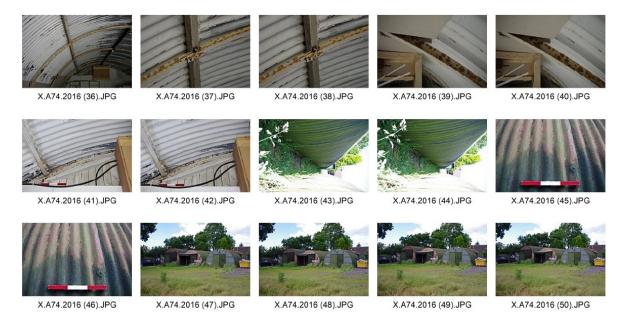
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X.A74.2016 (33).JPG

X.A74.2016 (34).JPG

X.A74.2016 (35).JPG



Digital	B&W	Build ID	Description	Dir
001	001		General View, All Huts.	SW
002	002		General View, All Huts.	SW
003	003	<u>A</u>	Principal Elevation, General View.	W
004	004	$\frac{\overline{A}}{\underline{B}}$	Principal Elevation, General View.	W
005	005	<u>B</u>	Principal Elevation, General View.	W
006	006	<u>B</u> <u>C</u> <u>C</u> <u>C</u> <u>C</u> <u>C</u>	Principal Elevation, General View.	W
007	007	<u>C</u>	Principal Elevation, General View.	W
008	008	<u>C</u>	Principal Elevation, General View.	W
009	009	<u>C</u>	Brickwork Detail on Principal Elevation.	
010	010	<u>C</u>	Brickwork Detail on Principal Elevation.	
011	011	<u>C</u>	Covered Lean To on Principal Elevation.	NW
012	012	<u>C</u>	Covered Lean To on Principal Elevation.	NW
013	013	<u>B</u>	Covered Lean To on Principal Elevation.	NW
014	014	<u>B</u>	Covered Lean To on Principal Elevation.	NW
015	015	<u>B</u>	Brickwork Detail on Principal Elevation.	
016	016	<u>B</u>	Brickwork Detail on Principal Elevation.	
017	017	<u>A</u>	Window Detail, External.	
018	018	<u>A</u>	Window Detail, External.	
019	019	<u>A</u>	Corrugated Detail.	
020	020	<u>A</u>	Corrugated Detail.	
021	021	<u>B</u>	Covered Lean To on Rear Elevation.	SE
022	022		Covered Lean To on Rear Elevation.	SE
023	023	<u>B</u> <u>C</u> <u>C</u> <u>C</u> <u>C</u>	General View, Internal.	W
024	024	<u>C</u>	General View, Internal.	W
025	025	<u>C</u>	Brick Plinth & Inward Curve on Nth Facing Elevation.	
026	026	<u>C</u>	Brick Plinth & Inward Curve on Nth Facing Elevation.	
027	027	<u>B</u>	General View, Internal.	W
028	028	<u>B</u>	General View, Internal.	W
029	029	<u>B</u>	Limited View Behind Panelling.	E
030	030	<u>B</u>	Limited View Behind Panelling.	Е
031	031	<u>A</u>	General View, Internal.	W
032	032		General View, Internal.	W
033	033	$\frac{\underline{A}}{\underline{A}}$	Window Detail, Internal.	
034	034	<u>A</u>	Window Detail, Internal.	

035	035	<u>A</u>	Ribs & Purlins.	
036	036	А	Ribs & Purlins.	
037	037	<u>A</u>	Splice Plate, Detail.	
038	038	<u>A</u>	Splice Plate, Detail.	
039	039	<u>A</u>	Rib, Detail	
040	040	<u>A</u>	Rib, Detail	
041	041	<u>A</u>	Probable Original Rear Wall, Internal.	
042	042	<u>A</u>	Probable Original Rear Wall, Internal.	
043	043	<u>B</u>	Inward Curve on Nth Facing Elevation.	
044	044	<u>B</u>	Inward Curve on Nth Facing Elevation.	
045	045	<u>A</u>	Fastener & Overlap on Sth Facing Elevation.	
046	046	<u>A</u>	Fastener & Overlap on Sth Facing Elevation.	
047	047		General View, All Huts.	SW
048	048		General View, All Huts.	SW
049	049		General View, All Huts.	SW
050	050		General View, All Huts.	SW

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