# Appendix K Cultural Heritage Archival Recordings





### 7. CUST HUT

## 7.1 Description

#### **Historical Context**

The CUST (Cullen Universal Steel Truss) Hut was invented by an engineering officer, Lieutenant Colonel D.R. (Dan) Cullen, during World War II. He had served with the 7<sup>th</sup> Division Engineers in the Middle East where he also designed a series of bridges with rolled steel joists. On his return to Australia in 1942, he was one of the select group of officers handpicked to revamp the courses at SME. After the war, Cullen served in the Occupation Force in Japan where, in collaboration with another engineering officer, he had planned the new city of Hiroshima. He died in July 1971. <sup>1</sup>

With the ending of the Second World War and the demobilisation of Australian forces, SME's role and responsibilities declined to a low level and its staffing numbers concomitantly dropped. By December 1945 there were nine officers and 77 other ranks. A year later, the RAE Training Centre at Kapooka (near Wagga Wagga) was disbanded and an RAE Recruit Training Squadron rose in its stead at Moorebank. Placed under the command of SME, it was later titled the Depot Squadron.<sup>2</sup>

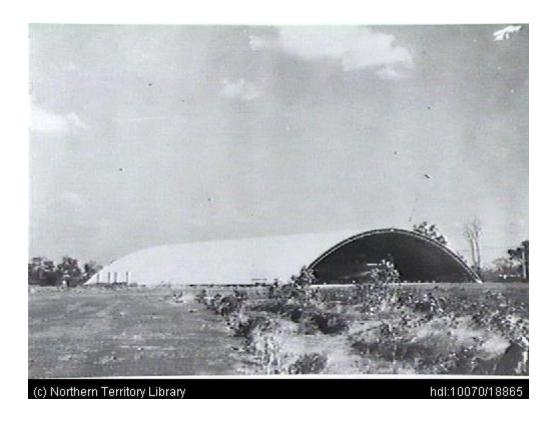


Figure 7.1 1945 photo of a CUST Hut ('Igloo hanger'), at Winnellie, Darwin, constructed in late 1944, (Northern Territory Library http://hdl.handle.net/10070/18865)

-

<sup>&</sup>lt;sup>1</sup> Anon., Royal Australian Engineers: Heritage Precinct Guide, c. 2005, 'No. 8: The CUST Hut'; McNicoll, The Royal Australian Engineers 1919 to 1945, pp. 90, 146; Greville, The Royal Australian Engineers 1945 to 1972, p. 439.

<sup>&</sup>lt;sup>2</sup> Hutcheson, Army Journal, May 1971, pp. 45-6; Greville, The Royal Australian Engineers 1945 to 1972, pp. 189, 190, 191, 192.



It may have been shortly after these developments, and as a result of them, that the CUST Hut was relocated from Kapooka to Moorebank. A site plan dating from November 1956 implies that the building was on site before 1948. Another source, however, states that it was erected 'in approximately 1952' (NOHC 2014c). It is likely that the CUST Hut was fabricated and erected at Kapooka between Lieutenant Colonel Cullen's posting to Kapooka in 1942 and the end of the war in 1945. The original components are therefore approximately 70 years old (Parsons Brinckerhoff 2014).

At the time of the 1956 site plan, the Hut was occupied by the Plant, Roads and Airfield [PRA] Troop, which was part of the school's Military Training Wing. The building at this time was open at both ends and apparently had an earthen floor.<sup>3</sup>

#### Location

The CUST hut faces Ripon Road and is situated in the Heritage Park area of the SME, Steele Barracks.

Map grid references (MGA datum):

 NE corner
 307658.6240785

 NW corner
 307608.6240808

 SE corner
 307638.6240743

 SW corner
 307588.6240766

#### The Structure

The CUST Hut, (Building s135), is a large clear span vaulted roof building. The building has dimensions 47.1 x 56 m, and a height of 10.25 m, (maximum truss height is 9.1m). The roof is clad in white Colorbond custom orb. Along the long axis of the building, the roof carries through to ground level where large concrete open drains collect rainwater. The eastern and western end of the building has been filled in (originally open) with face red brick to approximately three metres above ground, then Colorbond clad to the roof level.

Powder coated aluminium framed windows have been installed in the end walls above the brick work. Doorways are limited to personnel access doors and roller doors in the gable ends.

The finishes in the end walls and roof are consistent with the 1990s period. The replacement of roofing is confirmed by the presence of safety mesh under the roof sheeting. This practice was only introduced in the past two decades.

The underside of the cladding has the following identifier text:

BHP STEEL COLOURBOND (R) XRW 29/12/96 NO3 PAINT LINE C/C 066

Captain Brian Collings, a retired RAE Supplementary Reserve officer with many years involvement with the RAE Museum, negotiated a government funding package for refurbishment of the CUST Hut. Collings confirms that refurbishment was undertaken by a contractor and the work included new roof purlins and cladding. This work substantially modified the original open ended design by the addition of brick end walls, new steel frames supporting the end trusses, windows and roller shutter doors at each end (quoted in Parsons Brinckerhoff 2014).

The interior of the building is a very large, column free space with unlined vaulted roof over. The solid roof sheeting is interspersed with bands of translucent sheeting. The truss frame of the roof and all roof and wall framing is exposed. Large modern Hi-bay type lights are suspended from the roof. The

-

<sup>&</sup>lt;sup>3</sup> 'Layout of Engineer Barracks Casula', attached to 'Development of Engineer Barracks Casula', Appendix G to E-in-C's Liaison Letter, No. 29, 1 December 1956; Greville, The Royal Australian Engineers 1945 to 1972, p. 206.



building is presently used to store, maintain and repair the RAE Museum's collection of historic military plant and equipment.

The building has a concrete floor slab throughout. A close inspection of the floor suggests that the concrete surface was constructed in three separate stages. Each stage characterised by different techniques and standards. The first stage involved a wide corridor of thick square slabs (9 m wide) along the long axis of the building, prior to the enclosing of the hut ends. A second phase involved thinner slabs installed in rectangular strips extending 15.2 m to either side of the central axis slab, to close to the truss anchor points. The last phase involved infilling the remaining interior periphery, including around (and covering) the truss anchor points, and around the end walls. This work is characterised by the use of expansion joints and may have been contemporaneous with the 1990s refurbishment.

#### Comparative analysis

The following comparative analysis is taken from the 2004 Heritage Assessment by Graham Brookes and Associates. An example of a CUST hut in private ownership exists on Moorebank Avenue (owned by the Manheim Car Group, Australian Map Grid reference: 308344.6242832) and has been sighted from street frontage in the preparation of the current study.

The CUST hut is a 'Clearspan' arched building, generally 204 x150 feet in area, which is constructed of a series of 12 foot long arched segments, connected together by splice plates, and at either end by pin joints to concrete abutments end (refer Figure 9.2 for cross-section of a 'Clearspan').

The CUST hut located within the SME at Moorebank would appear to be the only one of its kind still in Defence ownership in NSW. Historic photographs show a similar arched building at the former Penrith Engineer Stores Depot, however this building was demolished in the early 1990s. A similar arched building may have also been located at Ingleburn Defence site (Former Engineering Workshop), demolished in the late 1990s.

It is difficult to determine whether there are other such buildings remaining in private ownership and occupation in Sydney. There appears to be two 'Clearspan' arched structures located at the Heffron Park sports complex at Randwick, originally constructed as Naval Stores, and later used as the Bunnerong Migrant Hostel. These buildings have not been inspected, and are in private ownership and use.



(Specification and drawing types of prefabricated buildings and houses, Department of Works Melbourne)

Figure 7.2 A cross section through a 'Clearspan' prefabricated arched building



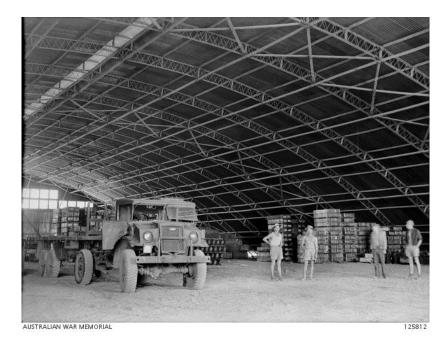


Figure 7.3 1946 photo of CUST hut at No.2 Engineering Stores Depot, Penrith, NSW (Photographer Bruce Reddaway, Australian War Memorial 125812)



Figure 7.4 1946 photo of CUST hut at No.2 Engineering Stores Depot, Penrith, NSW. Note curved margin to the roof edge, similar to the Moorebank hut (Photographer Bruce Reddaway Australian War Memorial 125813)

#### **Detailed structural description**

The following structural description of the hanger comes from the 2014 structural assessment by Parsons Brinckerhoff (Parsons Brinkerhoff 2014).

The structural arrangement comprises 14 internal arched open web steel CUST trusses spanning the clear width. The two end trusses are supported by intermediate steel columns which provide lateral support to the brick end walls and support the roller shutter doors and frames. The trusses are spaced at approximately 3.67m centres. Each truss is embedded into the concrete at floor level. No holding down bolts or baseplates are visible at the truss



supports. The CUST Hut is therefore not considered to be "re-deployable" in its current configuration.

New coated corrugated metal cladding was installed during the refurbishment in the mid 1990's. The cladding includes translucent sheets above each CUST Truss that transmit natural light into the interior. The roof cladding is supported by galvanised steel Z section purlins spanning between trusses. Thin galvanised wire safety mesh is installed above the purlins under the cladding.

The end wall cladding is supported on Z section girts. The purlins and girts were also installed during the refurbishment program.

Roof bracing is provided by timber diagonals at every third or fourth bay connected to the bottom chords of the truss. Timber struts run between braced bays the entire length of the building and tie into panel points of the roof bracing.

A ridge ventilator runs the entire length of the roof. Each end of the building has a roller shutter door with brick end walls, cladding and aluminium windows. Each end has a similar structural arrangement with girt posts.

A drainage trench runs down each side of the building externally with falls to one end to drain rainwater runoff from the roof. A concrete slab surrounds the perimeter with an apron slab at the west end.

It is apparent that flooding is a problem for the site and this may have influenced the decision to construct a floor slab inside the building to raise the floor level above the top of the truss bases. A gravel bund was sighted outside the north western door and RAE Museum staff confirmed its function as a flood mitigating device.

The internal concrete floor slab appears to have been cast after the building was constructed but before the end walls were added. It was not possible to determine the age of the floor slab or assess its foundation detail.

The 14 internal roof trusses comprise a 2 pinned laced arch spanning the entire width, cast into the floor slab. The two end trusses are of similar design with intermediate support from the end wall steel columns added during the refurbishment. The top and bottom chords are comprised of flat plate with the diagonals of double laced solid bar. Where required the chords are strengthened with angles sections stitch welded to the flat plate.



# 7.1.1 Key to Plans and Drawings

## **KEY**

V	Door
	Roller door
	Vertical 'l' column and footing
	Foundation for vertical 'I' column and footing
-	Ground contact with truss
	Truss span
	Truss foundation
	Brick wall
	Colourbond roof
<u> </u>	Open drainage trench and drop inlet
	Concrete floor slab joins – stage one: central axis
	Concrete floor slab joins – stage two: either side of axis
	Concrete floor slab joins – stage three: periphery
$\times$	Diagonal roof bracing
	Timber struts
	Roof purlins
0	Roof light



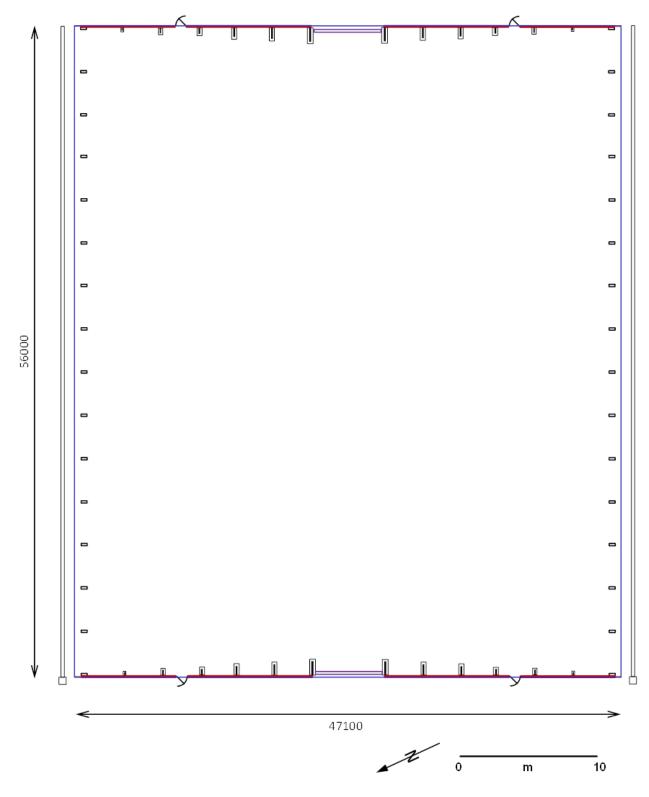


Figure 7.5 Plan of CUST Hut, showing external drains, wall and roof supports



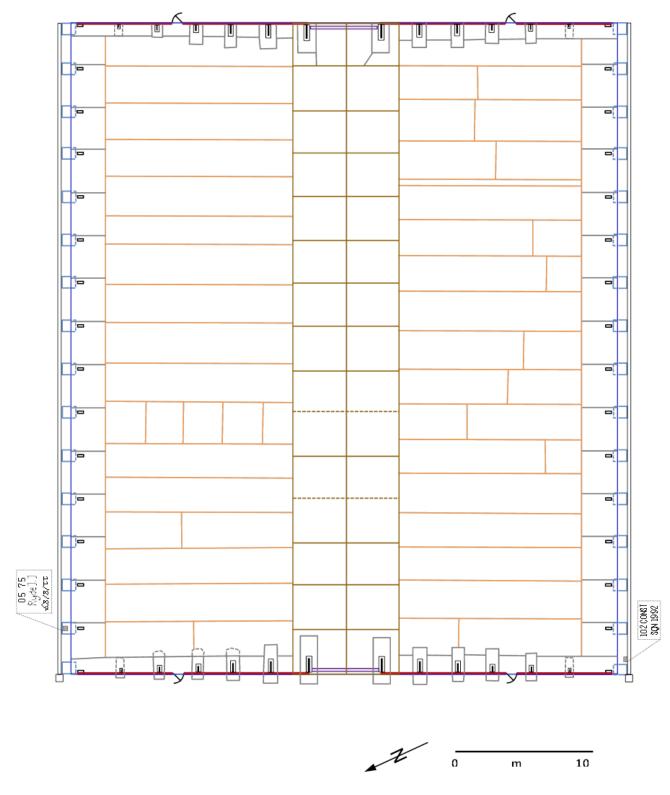


Figure 7.6 Plan of CUST Hut, showing ground features including evident footings, and concrete slab joins



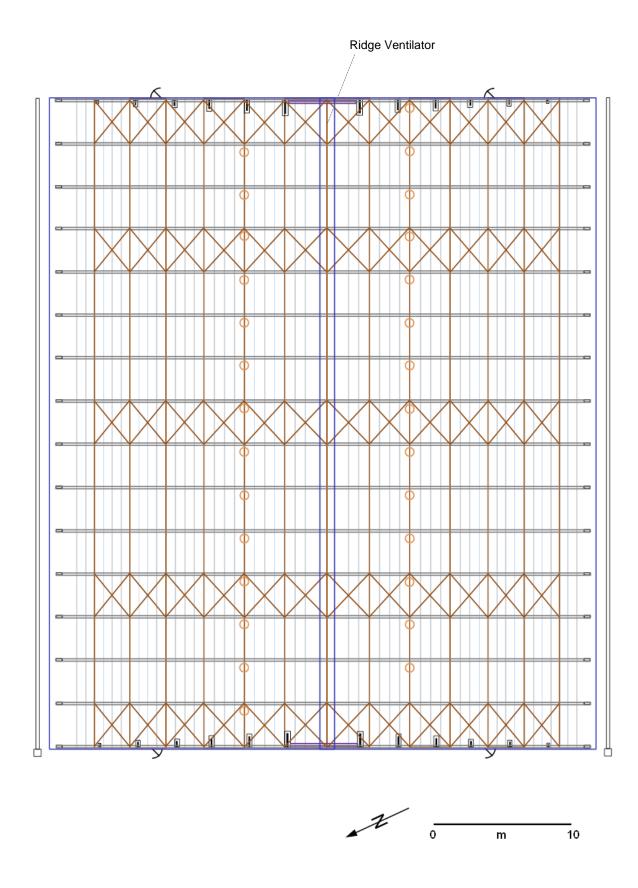


Figure 7.7 Plan of CUST Hut, showing trusses and roof elements



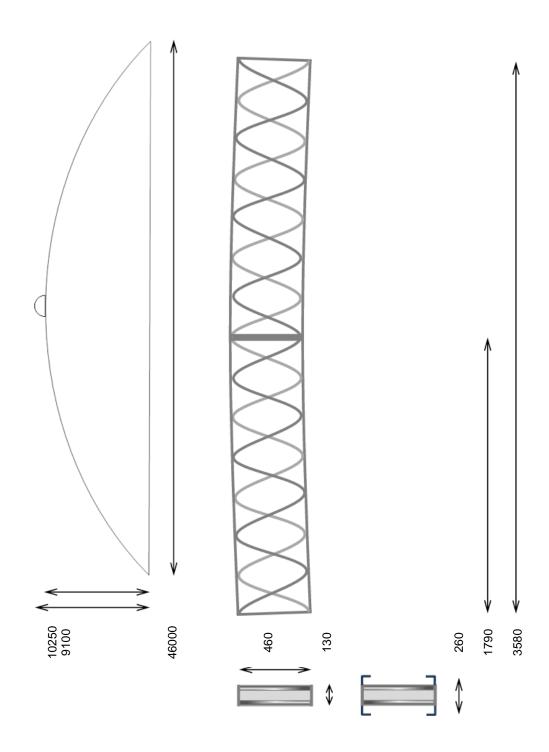


Figure 7.8 Drawings and dimensions (mm) of truss elements and overall building dimensions



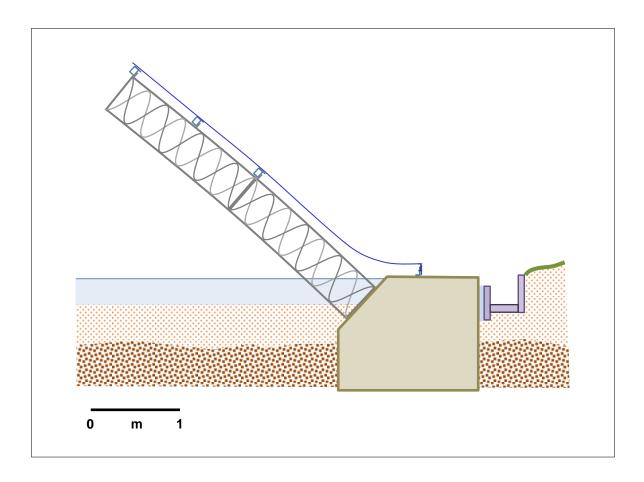
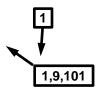


Figure 7.9 Interpretation of truss footing and attachment, based on surface evidence only. (All detail below ground is conjecture).



# 7.2 Plans of Photograph Locations

## **KEY**



Square denotes location where photo taken Arrow denotes direction photo taken Numeral identifies cumulative image number

Non-consecutive photo numbers



No arrow indicates photo direction is directly up or down

Consecutive image numbers 36 to 38 inclusive



Multiple photos taken in different directions from the same location





Figure 7.10 Aerial photo of CUST Hut area, showing location of most exterior photo locations. All numbers have a 'CUST' prefix. (Base image from Google Earth Pro 2014, image date: 1/1/2009).



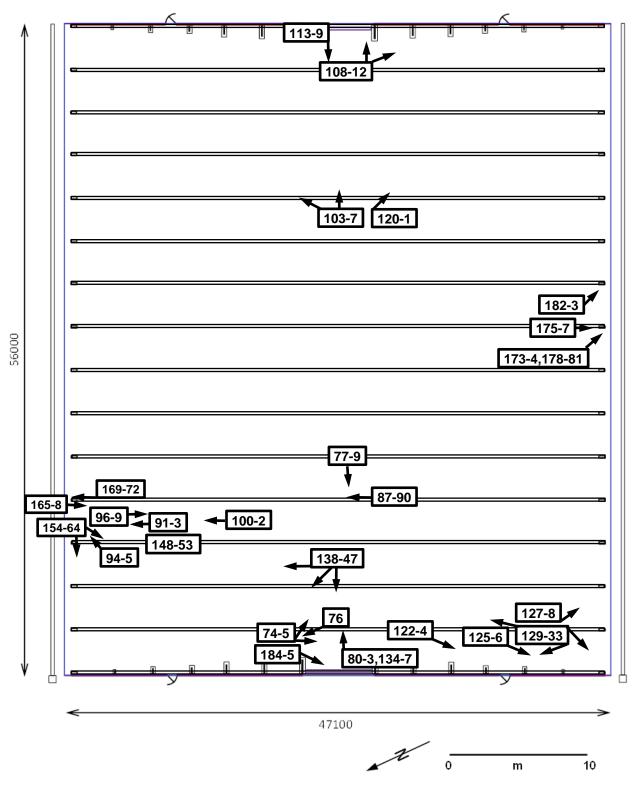


Figure 7.11 Plan of CUST Hut photo locations. All numbers have a 'CUST' prefix.



# 7.3 Digital Image Catalogue

Image ID		Date	Subject	Direction	Exp.	Flash	Lens focal
Archive no. (prefix: CUST)	Field no.			looking	variant	lighting	length
0000	000	00-00-00	XXXXXXX	XXX	+/-	1	000
0001	1	10-7-14	From southwest looking at whole hut	NE			10
0002	2	10-7-14	From southwest looking at whole hut	NE	+		20
0003	3	10-7-14	From southwest looking at whole hut	NE			20
0004	4	10-7-14	From southwest looking at whole hut	NE	-		20
0005	5	10-7-14	From southwest corner looking at southwest corner	NE	+		10
0006	6	10-7-14	From southwest corner looking at southwest corner	NE			10
0007	7	10-7-14	From southwest corner looking at southwest corner	NE	-		10
8000	8	10-7-14	Looking from driveway towards east face	Е			10
0009	9	10-7-14	Looking from driveway towards east face	E	-		10
0010	10	10-7-14	Near northwest corner looking across front (west face) of hut	SW			10
0011	11	10-7-14	Looking at front of hut and north side	SW	+		15
0012	12	10-7-14	Looking at front of hut and north side	SW			15
0013	13	10-7-14	Near northwest corner looking along front (east face) and north side	S			15
0014	14	10-7-14	Near northwest corner looking along front (east face) and north side	S	+		15
0015	15	10-7-14	Looking along north side of hut with drain in line with photo. Vertical format	E			15
0016	16	10-7-14	Looking along north side of hut with drain in line with photo. Horizontal format	E			15
0017	17	10-7-14	Detail of wall foundation showing several phases of concrete and large foundation block. Angled down	S	+		15
0018	18	10-7-14	Detail of wall foundation showing several phases of concrete and large foundation block. Angled down	S			15
0019	19	10-7-14	Context of inscription on foundation slab of truss. Angled down	S			10
0020	20	10-7-14	Looking straight down on inscription on foundation slab				28
0021	21	10-7-14	Looking straight down on inscription on foundation slab				35
0022	22	10-7-14	Looking straight down on inscription on foundation slab		-		35
0023	23	10-7-14	Looking straight down on inscription on foundation slab, no scale				35
0024	24	10-7-14	Looking straight down on inscription on foundation slab, no scale		-		35
0025	25	10-7-14	Looking at northeast corner	SSW			10
0026	26	10-7-14	Same position, looking at west end of building	S			10



Image ID		Date	Subject	Direction looking	Exp.	Flash	Lens focal
Archive no. (prefix: CUST)	Field no.			looking	variant	lighting	length
0027	27	10-7-14	Near northeast corner, looking along drain. Angled downwards	W			10
0028	28	10-7-14	Same position looking at northeast corner of building	SW	-		10
0029	29	10-7-14	Same position looking at northeast corner of building	SW	+		10
0030	30	10-7-14	Looking at eastern face	W	+		10
0031	31	10-7-14	Looking at eastern face	W			10
0032	32	10-7-14	East face of building	W	+		10
0033	33	10-7-14	East face of building	W			10
0034	34	10-7-14	Looking at whole building towards southeast corner	NW			12
0035	35	10-7-14	Looking at whole building towards southeast corner	NW	+		12
0036	36	10-7-14	Looking at whole building towards southeast corner	NW			12
0037	37	10-7-14	Looking along drain on south side. Vertical format	NW			14
0038	38	10-7-14	Looking along drain on south side. Horizontal format	NW	+		12
0039	39	10-7-14	Looking along drain on south side. Horizontal format	NW			12
0040	40	10-7-14	Looking along base of rood at south side, showing foundation blocks protruding from surrounding cement	W	-		19
0041	41	10-7-14	Looking along base of roof at south side, showing foundation blocks protruding from surrounding cement	W			19
0042	42	10-7-14	Looking at whole south side of building	NE			10
0043	43	10-7-14	Looking at southern portion of southern side of building	NE			20
0044	44	10-7-14	Looking at southern portion of southern side of building	NE	+		20
0045	45	10-7-14	Looking along south face, showing drainage trench	SE			17
0046	46	10-7-14	Looking along south face, showing drainage trench	SE		1	17
0047	1	11-07-14	Looking at southwest corner. Wide angle (8:30am)	NE			14
0048	2	11-07-14	Looking at north face from top of driveway	Е	+		10
0049	3	11-07-14	Looking at north face from top of driveway	Е			10
0050	4	11-07-14	Looking at north face	SE	+		10
0051	5	11-07-14	Looking at north face. Exposure corrected	SE			10
0052	6	11-07-14	Looking at northwest corner	SE			10
0053	7	11-07-14	Looking at northwest corner	SE	+		10
0054	8	11-07-14	Looking at northwest corner	SE			10



Image ID		Date	Subject	Direction looking	Exp.	Flash	Lens focal
Archive no. (prefix: CUST)	Field no.			looking	variant	lighting	length
0055	9	11-07-14	Looking at northwest corner	SE			20
0056	10	11-07-14	Looking along eastern part of north side of building	SE			20
0057	11	11-07-14	Looking along eastern part of north side of building	SE	-		20
0058	12	11-07-14	Looking along drain on south side	W			15
0059	13	11-07-14	Looking along drain on south side. Angled down	Е	+		16
0060	14	11-07-14	Looking along drain on south side. Angled down	Е			16
0061	15	11-07-14	Looking horizontally along drain	Е			16
0062	16	11-07-14	Detail of west end of drain on south side of hut. Angled down.	Е			28
0063	17	11-07-14	As above, lower elevation looking along drain	Е			28
0064	18	11-07-14	Looking along west face showing wall and windows	NE	-		28
0065	19	11-07-14	Looking along west face showing wall and windows	NE			28
0066	20	11-07-14	Looking along south drain-foundation blocks. Angled down	W			28
0067	21	11-07-14	Looking at foundation block, showing broken cement layer along south edge of block. Angled down	N			28
0068	22	11-07-14	Looking at foundation block, showing broken cement layer along south edge of block. Angled down. Exposure corrected	N	+		28
0069	23	11-07-14	Looking at translucent strip in roofing. Lichen growth on colourbond and transparent material.  Presumed to be same age				28
0070	24	11-07-14	Looking at foundation block, showing broken cement layer along south edge of block. Angled down		-		28
0071	25	11-07-14	Looking at foundation block, showing broken cement layer along south edge of block. Angled down		+		28
0072	26	11-07-14	As above, showing edge of roof. Angled down				28
0073	27	11-07-14	As above, showing edge of roof. Angled down		-		28
0074	28	11-07-14	Looking at roof from west end of hut. Entire Y2 of truss span. Angled up	SE			10
0075	29	11-07-14	Same position, looking along west wall	S			10
0076	30	11-07-14	Looking along north half of west wall, showing foundation and wall supports of wall base	N			10
0077	31	11-07-14	Looking at west wall from mid-way down hut	W			10
0078	32	11-07-14	As above, looking at wall and roof. Angled up	W			10
0079	33	11-07-14	Same position looking straight up at roof				10
0080	34	11-07-14	Looking from centre west end of shed	Е			11
0081	35	11-07-14	As above, looking at floor showing concrete slabs in central section of floor. Angled down				11
0082	36	11-07-14	As above, looking at roof. Angled up		-		11
0083	37	11-07-14	As above, looking at roof. Angled up				11



Image ID		Date	Subject	Direction	Exp.	Flash	Lens
Archive no. (prefix: CUST)	Field no.			looking	variant	lighting	focal length
0084	38	11-07-14	Floor showing join between central concrete slabs and with side slabs. Angled down	WSW			10
0085	39	11-07-14	Floor showing join between central concrete slabs and with side slabs. Angled down	WSW			20
0086	40	11-07-14	As above, Looking toward southeast corner, showing floor and roof	WSW			20
0087	41	11-07-14	Looking from centre of shed to north edge, showing entire half of floor and cross-braced section of roof	N	-		10
8800	42	11-07-14	Looking from centre of shed to north edge, showing entire half of floor and cross-braced section of roof	N	-		10
0089	43	11-07-14	Looking from centre of shed to north edge, showing entire half of floor and cross-braced section of roof	N			10
0090	44	11-07-14	Looking from centre of shed to north edge, showing entire half of floor and cross-braced section of roof	N			20
0091	45	11-07-14	Looking at north edge of roof. Representative shot of the roof truss bases	N	-		10
0092	46	11-07-14	Looking at north edge of roof. Representative shot of the roof truss bases, with scale	N			10
0093	47	11-07-14	Looking at north edge of roof. Representative shot of the roof truss bases, angled downward				10
0094	48	11-07-14	Looking at base and lower section of truss	NE	-		10
0095	49	11-07-14	Looking at base and lower section of truss	NE			10
0096	50	11-07-14	Looking along entire length of roof truss, angled upward	S			10
0097	51	11-07-14	Looking along entire length of roof truss, angled upward	S	-		10
0098	52	11-07-14	Same position, looking oblique across roof, angled upward	SE	+		20
0099	53	11-07-14	Same position, looking oblique across roof, angled upward	SE			20
0100	54	11-07-14	Looking at cross-bracing between trusses, angled upward	N	-		20
0101	55	11-07-14	Looking at cross-bracing between trusses, angled upward	N			20
0102	56	11-07-14	Looking at cross-bracing between trusses, angled upward	N		1	20
0103	57	11-07-14	Looking at northeast corner of building	ENE	-		20
0104	58	11-07-14	Looking at northeast corner of building	ENE			20
0105	59	11-07-14	Same position, looking at east wall	Е			20
0106	60	11-07-14	Same position, looking at roof and east wall, angled upward	Е	-		20
0107	61	11-07-14	Same position, looking at roof and east wall, angled upward	Е			20
0108	62	11-07-14	Showing east wall and cross-bracing between trusses	SSE	-		20
0109	63	11-07-14	Showing east wall and cross-bracing between trusses	SSE			20
0110	64	11-07-14	Showing east wall and cross-bracing between trusses	SSE			20



Image ID		Date	Subject	Direction looking	Exp.	Flash lighting	Lens focal
Archive no. (prefix: CUST)	Field no.		looking	variant	ngnung	length	
0111	65	11-07-14	As above, showing top of roll door and roof, angled upward	SSE			20
0112	66	11-07-14	As above, showing top of roll door and roof, angled upward	SSE		1	20
0113	67	11-07-14	Looking along length of building	W			20
0114	68	11-07-14	Looking along length of building	W			10
0115	69	11-07-14	Looking along length of building	W	-		10
0116	70	11-07-14	Looking along length of building	W			10
0117	71	11-07-14	Looking along length of building	W	-		10
0118	72	11-07-14	As above, angled up at roof	W			20
0119	73	11-07-14	As above, angled up at roof	W		1	20
0120	74	11-07-14	Looking at floor feature, possibly former wall, angled downward	SE			20
0121	75	11-07-14	Looking at floor feature, possibly former wall, angled downward	SE		1	20
0122	76	11-07-14	Looking at floor and west wall support and foundations	SW			10
0123	77	11-07-14	Looking at floor and west wall support and foundations	SW	-		10
0124	78	11-07-14	Looking at floor and west wall support and foundations	SW		1	10
0125	79	11-07-14	Looking at join between west wall and roof	SSW			10
0126	80	11-07-14	Looking at join between west wall and roof	SSW		1	10
0127	81	11-07-14	Looking at base of trusses on south edge of hut	SE			10
0128	82	11-07-14	Looking at base of trusses on south edge of hut	SE		1	10
0129	83	11-07-14	Looking at southwest corner, showing interface wall and truss. Truss has plate cladding over it	SW		1	10
0130	84	11-07-14	Looking at southwest corner, showing interface wall and truss. Truss has plate cladding over it	SW		1	20
0131	85	11-07-14	Same position, looking at west wall	N			16
0132	86	11-07-14	Same position, looking at truss section in roof, angled upward	NE			15
0133	87	11-07-14	Same position, looking at truss section in roof, angled upward	NE		1	15
0134	88	11-07-14	Looking along building central axis	ESE			35
0135	89	11-07-14	As above, angled up at roof	ESE	-		35
0136	90	11-07-14	As above, angled up at roof	ESE	-		35
0137	91	11-07-14	As above, angled up at roof	ESE		1	35
0138	92	11-07-14	Looking at top of roller door and surrounding wall	w		1	35
0139	93	11-07-14	Looking at top of roller door and surrounding wall	W			35
0140	94	11-07-14	Same position, looking at detail of raised roof air vent at top of roof, angled up	E			105



Image ID		Date	Subject	Direction	Exp.	Flash	Lens
Archive no. (prefix: CUST)	Field no.			looking	variant	lighting	focal length
0141	95	11-07-14	Same position, looking at detail of raised roof air vent at top of roof, angled up	Е		1	105
0142	96	11-07-14	As above, detail of cross bracing between trusses				105
0143	97	11-07-14	As above, detail of cross bracing between trusses			1	105
0144	98	11-07-14	Same position, detail of cross-bracing between trusses	N			40
0145	99	11-07-14	Same position, detail of cross-bracing between trusses	N		1	40
0146	100	11-07-14	As above, detail of rood light fixture	N			135
0147	101	11-07-14	As above, detail of rood light fixture	N		1	135
0148	102	11-07-14	Looking at detail of plate join between truss sections. With cross bracing attached	E			92
0149	103	11-07-14	Looking at detail of plate join between truss sections. With cross bracing attached	E		1	92
0150	104	11-07-14	Same position, looking at detail of join between truss sections	NNE			92
0151	105	11-07-14	Same position, looking at detail of join between truss sections	NNE		1	92
0152	106	11-07-14	Same position, looking at another join between truss sections	N			92
0153	107	11-07-14	Same position, looking at another join between truss sections	N		1	92
0154	108	11-07-14	Looking at join between truss sections, angled upwards	NW			34
0155	109	11-07-14	Looking at join between truss sections, angled upwards	NW		1	34
0156	110	11-07-14	Similar position looking at join between truss sections, viewed edge on	N			35
0157	111	11-07-14	Similar position looking at join between truss sections, viewed edge on	N		1	35
0158	112	11-07-14	Same position as (Field Number 108), looking along trusses along north edge of hut	N			36
0159	113	11-07-14	As above, join between truss, roof cladding, and roof stringers				75
0160	114	11-07-14	As above, join between truss, roof cladding, and roof stringers			1	75
0161	115	11-07-14	Same position looking at trusses and roof, oblique view, angled upward	SW			50
0162	116	11-07-14	Same position looking at trusses and roof, oblique view, angled upward	SW		1	50
0163	117	11-07-14	Same position, looking along truss toward top of roof, angled upward	S			48
0164	118	11-07-14	Same position, looking along truss toward top of roof, angled upward	S		1	48
0165	119	11-07-14	Looking along truss, showing detail of truss construction and inner surface of joint between truss sections. Also shows L-section reinforcing	S			28
0166	120	11-07-14	Looking along truss, showing detail of truss construction and inner surface of joint between truss sections. Also shows L-section reinforcing	S		1	28
0167	121	11-07-14	Looking along truss, showing detail of truss construction and inner surface of joint between truss sections. Also shows L-section reinforcing. With scale	S		1	28



Image ID		Date	Subject	Direction looking	Exp.	Flash	Lens focal
Archive no. (prefix: CUST)	Field no.			looking	variant	lighting	length
0168	122	11-07-14	Looking along truss, showing detail of truss construction and inner surface of joint between truss sections. Also shows L-section reinforcing. With scale	S			28
0169	123	11-07-14	Detail of underside of truss showing L-section reinforcements welded to edges of truss	N			28
0170	124	11-07-14	Detail of underside of truss showing L-section reinforcements welded to edges of truss	N		1	28
0171	125	11-07-14	As above, underside of truss and joining plate at intersection of truss sections. Viewed from underneath join				28
0172	126	11-07-14	As above, underside of truss and joining plate at intersection of truss sections. Viewed from underneath join			1	28
0173	127	11-07-14	Context shot of welded plate attached to underside of truss, not associated with any join, presumed to be a strengthening repair	SE			11
0174	128	11-07-14	Context shot of welded plate attached to underside of truss, not associated with any join, presumed to be a strengthening repair	SE		1	11
0175	129	11-07-14	Looking at repair plate on underside of truss	SE	-		28
0176	130	11-07-14	Looking at repair plate on underside of truss	SE			28
0177	131	11-07-14	Looking at repair plate on underside of truss	SE		1	28
0178	132	11-07-14	From position (Field number 127), detail of truss footing including well-defined square around extent of original concrete foundation, now obscured by more recent concrete paving in other areas of the hut				28
0179	133	11-07-14	As for photo CUST 0178, with flash			1	28
0180	134	11-07-14	As for photo CUST 0178, with horizontal scale				28
0181			As for photo CUST 0178, with flash, with horizontal scale			1	28
0182	135	11-07-14	Looking at footing of truss. Foundation block protrudes above cement paving	SE			28
0183	136	11-07-14	Looking at footing of truss. Foundation block protrudes above cement paving	SE		1	28
0184	137	11-07-14	Looking at inside of roller door frame and footing. Showing infilled trench at base of door	SSW			11
0185	138	11-07-14	Looking at inside of roller door frame and footing. Showing infilled trench at base of door	SSW			20
0186	1	09-07-14	Context picture showing location of footing with by-hand inscription, NW corner of building	ESE	-		35
0187	2	09-07-14	Context picture showing location of footing with by-hand inscription, NW corner of building, vertical format	ESE			35
0188	3	09-07-14	Oblique view of footing with by-hand inscription	ESE			35
0189	4	09-07-14	By-hand inscription		-		35
0190	5	09-07-14	Detail of by-hand inscription				35
0191	6	09-07-14	Detail of by-hand inscription		-		35



Image ID		Date	Subject	Direction looking	Exp.	Flash lighting	Lens focal
Archive no. (prefix: CUST)	Field no.			looking	variant	ngnung	length
0192	7	09-07-14	Context photo of location of formal inscription near SW corner of building	ESE			35
0193	8	09-07-14	Formal inscription (oblique natural light)				35
0194	9	09-07-14	Detail of formal inscription (oblique natural light)				35
0195	10	09-07-14	Detail of formal inscription (oblique natural light)		-		35



# 7.4 Photographic Thumbnail Compendium



