

IONAD HIORT

THE ST. KILDA CENTRE

VOLUME 3: APPENDICES
APPENDIX VI: ARCHAEOLOGICAL SURVEY

ENVIRONMENTAL IMPACT ASSESSMENT REPORT
FEBRUARY 2024



Highland Archaeology Services Ltd

Bringing the Past and Future Together

Ionad Hiort – St Kilda Visitor Centre Archaeological Survey



Data Structure Report and Recommendations

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Ionad Hiort – St Kilda Visitor Centre Archaeological Survey Data Structure Report

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Summary

An Archaeological Assessment comprising a Desk Based Assessment and Walkover Survey has been commissioned by Dualchas Architects Ltd ahead of the construction of a new visitor's centre near Mangurstadh on the west coast of Lewis.

The Desk Based Assessment identified 8 sites within the vicinity of the proposed development, including a small scattering of post medieval shielings surrounding the site as well as evidence of rig and furrow field systems in the wider landscape. The proposed development overlies the Druim Grunavat Chain Home radar station. The station had some features and buildings located and identified but there was an identified potential for further features related to the wartime remains and previous activity to survive in or close to the site.

The Walkover survey was undertaken between the 13th and 14th November 2023 and aimed to identify these remains, and provide sufficient record of the features within the area for future research purposes. Forty five features were identified and recorded in the vicinity of the proposed development. Most of these related to the wartime remains but a handful are likely to be earlier features.

Sevnteen features would be directly impacted by the proposed development. However, as these have now been recorded no further work is recommended to mitigate this. A programme of marking off during construction works and a plan to manage access during the use of the site is proposed to prevent possible direct impacts to other nearby features. Should F19 be utilised as a septic tank or destroyed then further basic recording for this feature would be recommended.

Changes to drainage and waterflow have the potential to indirectly affect six features in the vicinity of the proposed carpark area, so management of water flow should be considered. The layout the Radar station makes a contribution to our ability to understand these features as a group, so interpretation which allows the original layout of structures to be understood would be beneficial.

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Legislation and Policy

The common principles underlying international conventions, national legislation and local authority planning policies are that cultural heritage assets should be identified in advance of development and safeguarded where practicable; if disturbance is unavoidable appropriate recording of features and recovery of portable artefacts should take place. These have been set out in international agreements, UK and Scottish legislation, as well as national and local planning policies¹. Professional standards maintained throughout the present project adhered to the Codes of Conduct and Approved Practice and Standards of the Chartered Institute for Archaeologists².

Acknowledgements

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Glossary

- BGS - British Geological Survey
- DBA – Desk Based Assessment
- DES – Discovery and Excavation Scotland
- CifA – Chartered Institute for Archaeologists
- CnES - Comhairle nan Eilean Siar (Western Isles Council)
- HER – Historic Environment Record
- HES – Historic Environment Scotland
- NCAP - National Collection of Aerial Photography
- NLS – National Library of Scotland
- NMRS – National Monuments and Records Service
- RCAHMS – Royal Commission for Ancient and Historic Monuments of Scotland

¹ A summary of relevant international, EU, UK and Scottish legislation and policies is available from the HAS office on request.

² Chartered Institute for Archaeology (CifA) Standards and Guidelines for Archaeological Field Evaluation.

Location

The proposed development site is located on the west coast of the Isle of Lewis, six miles south of Uig. The development proposed to be on top of the Mangursthadh cliffs at Geodha Sgoilt. The development is located on the site of a former World War 2 radar station.

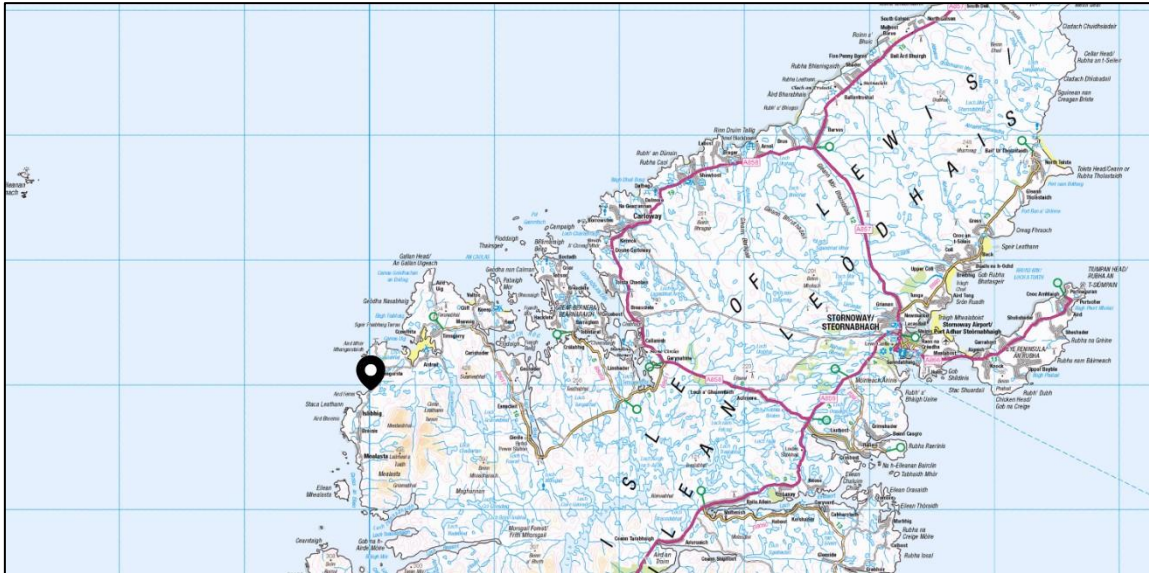


Figure 1: Site location of the development area
From OS mapping, reproduced under Licence. Not to original scale

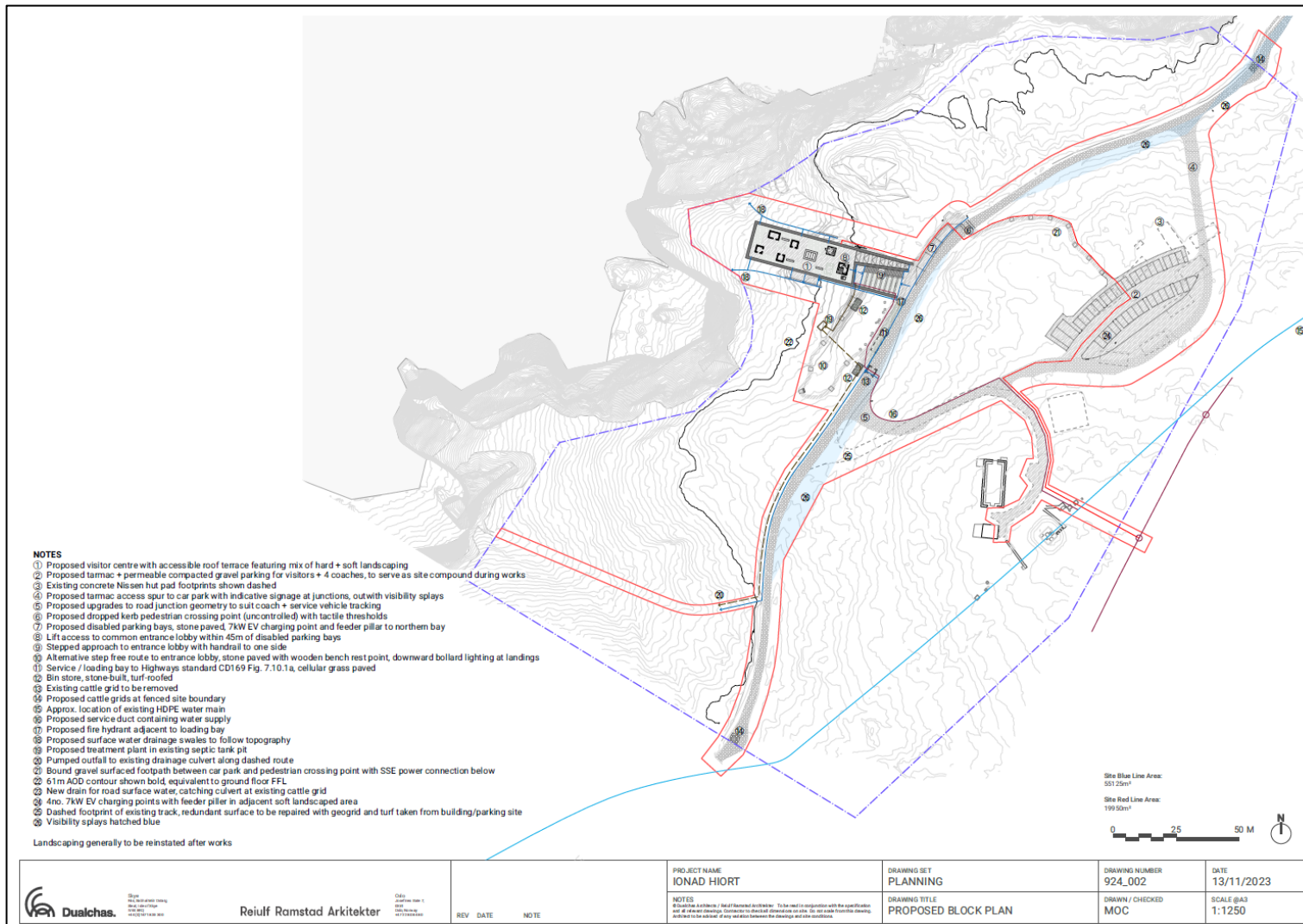


Figure 2: site plan (as supplied by client)

Introduction

An Archaeological Walkover Survey was commissioned by Dualchas Architects ahead of the construction of a new Ionad Hiort/ St Kilda Visitor Centre, approximately 6 miles south of Uig on the west coast of the Isle of Lewis. An Archaeological Desk Based Assessment has been undertaken in which an area of roughly 1km has been researched around the proposed development site for records of archaeological and historical remains. This seeks to establish the archaeological and historical potential within the studied area.

A Walkover survey was requested due to the potential for the proposed developments to affect remains relating to the Chain Home Radar Station and its proximity to a variety of archaeological and historical features. The Walkover Survey sought to investigate and record the presence of any visible upstanding archaeological remains within the proposed development area.

The walkover survey was undertaken on 13th and 14th November 2023. The weather was cold and overcast but with good visibility. The site was found to comprise rough, uneven moorland with heather, reeds and patches of grass with peat and rocks. Many areas showed signs of water erosion with stoney or gravelly channels. The area of the former radar station was reasonably flat but the areas closer to the coast were more irregular and undulating.

Desk Based Assessment

A Desk Based Assessment has been undertaken in order to establish the heritage baseline of the proposed development area, as well as its archaeological potential. This has included study of the Western Isles Historic Environment Record (HHER), Canmore's national historic record database (via Pastmap), publicly available historic mapping through the National Library of Scotland's online facility, the Ordnance Survey Namebook records and the Old and New Statistical Accounts of Scotland

The Western Isles Council unfortunately suffered a cyber attack on 7th November 2023, and this has prevented access to the HER after that date.

Geology (from BGS Geology Viewer)

The bedrock underlying the proposed development site is Uig Hills Harris complex granite and porphyritic granite formed between 2500 and 1600 million years ago. There are no recorded superficial deposits, however there are areas of peat further inland.

Historic Environment Record

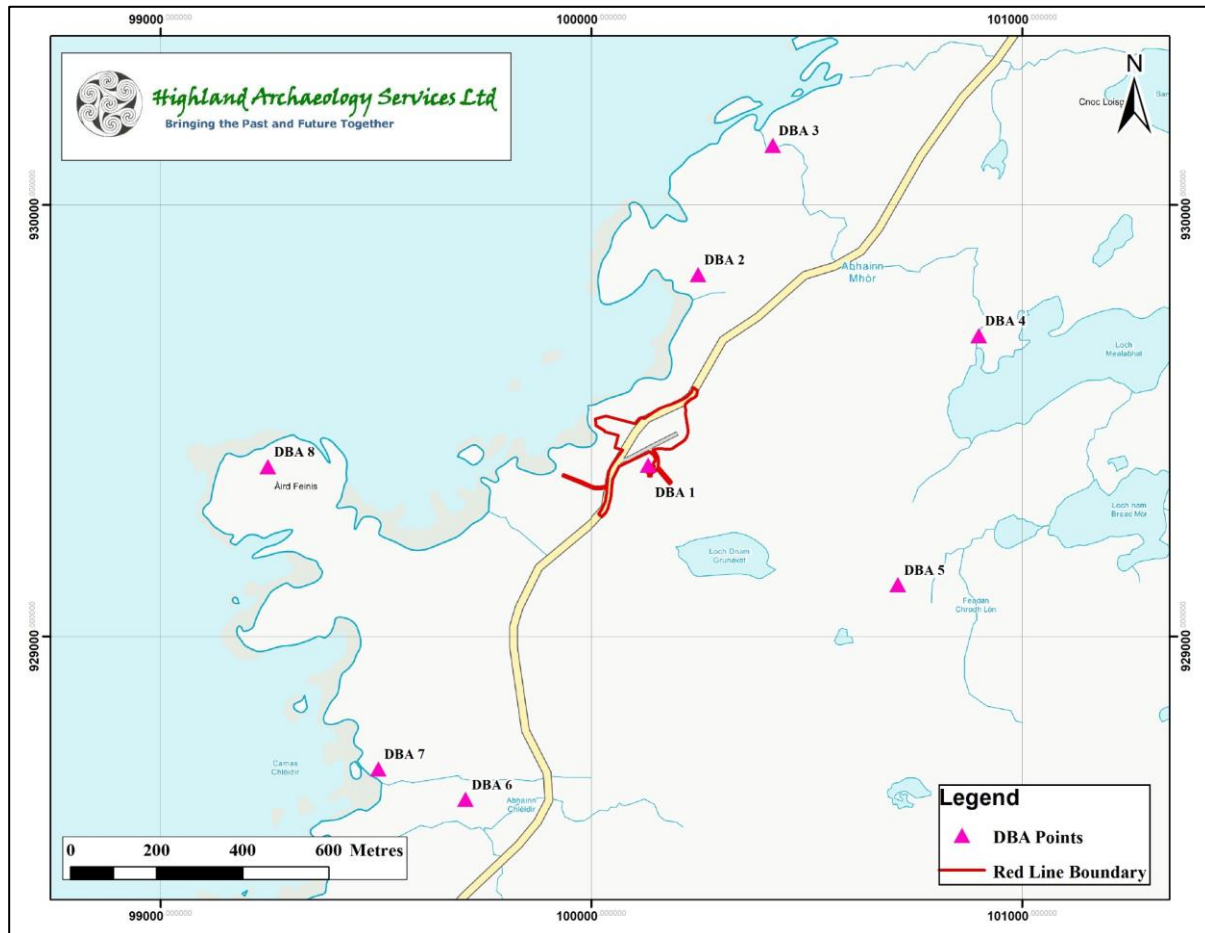


Figure 3: DBA Points

An area of 1km has been researched around the proposed development area. The majority of the recorded archaeological and historical character of the area surrounding the proposed development site is post medieval and modern (20th Century). The wider landscape around the proposed development sits is populated with a scattering of post medieval shielings and farmland as detailed below. Within the development area are the remains of the Chain Home radar station. The nearest Scheduled Monument is Stac Dhomnuill Chaim a Fortified Promontory which is 2.3km to the north of the proposed development (SM5327).

Prehistoric

In the wider area there are a number of Promontory Forts just out-with the study area. There is a record of the remains of one of the ramparts for a fort to the south west of the site (DBA 7). The record does not state a particular date however it is likely to be prehistoric or early medieval.

Post Medieval

Scattered around the proposed development site are a number of shielings. To the north is a cluster of cellular buildings and a settlement mound (DBA 2), as well as this there are the remains of a shieling (DBA 3) with rig and furrow field system close by. To the east there are two sets of shielings, one along Loch Melavat (DBA 4) and the other at Grupag pond (DBA 5) Finally to the south west there is a cluster of 9 shielings and associated lazy beds (DBA 6). To the west of this is the remains of a turfed enclosure wall thought to be used to keep livestock away from the cliffs.

Druim Grunavat Chain Home Radar Station (DBA 1)

Within the redline boundary of the proposed development site is the remains of the Druim Grunavat Chain Home radar station, also known as Islivig. The Chain Home group of radar stations were part of the early warning system during the Second World War in which low flying aircraft could be detected.

The records suggest a substantial number of remains at the site. A visit in 2002 by J Guy of the NMRS noted “The engine room, radio building with a mast base and many hut bases are still extant. The blast walls which enclosed the radar hut and scanner tower base were also visible on the date of visit. In addition a standby-set house, Identification Friend-and-Foe (IFF) building with mast base, air-raid shelters and a light anti-aircraft emplacement...”³

An additional visit in 2005 by a representative from RCAHMS recorded “blast walls surrounding the concrete base for the transmitter/receiver block (NB 00132 29376). The building measures about 19m by 8m overall and the blast walls are constructed of random rubble topped with concrete. The interior has a concrete floor with cable channels set into to it. About 11m to the S is the standby set-house/generator block (NB 00131 29376) measuring about 6m by 5m overall, also built of stone with a concrete roof. This building is now in use as an animal shelter. To the E and SE are several structures including the Identification Friend and Foe (IFF) building, built of brick and concrete with a concrete roof. A group of hut bases is centred at NB 0014 2946 with what may be a light anti-aircraft gun position, still with the lower part of the mounting at c.NB 0009 2943. One air-raid shelter was also noted, but some structures to the E were not examined on the date of visit.”⁴ However, some of the co-ordinates given do not appear to be accurate.

It is clear that there are further remains of the station that have not yet been recorded.

Aerial photographs showing the site were apparently taken as part of a sortie flown on 9 October 1946. However, these images do not appear to be available through NCAP or elsewhere online.

An article in Uig news from 2002 describes the wartime memories of a gentlemen from Islivig, who describe the Home chain stations and appear to refer to this one as ‘Geodha Sgoillte’, in which is described ‘a radar scanner inside blast proof walls’.⁵

Historic Mapping

Available early maps were analysed to check for possible buildings and/or archaeological features on the site. The earliest map available of the area is the 1st edition Ordnance Survey map which was surveyed in 1852. The proposed development site sits across two map sheets, **Figure 4** shows these georeferenced with the red-line boundary overlaid. There are no active settlements however it does show the names of various features in the landscape. The 1st edition map shows that the majority of the ground surrounding the site is rough pasture with steep cliffs to the west. There are a number of ruins present on the 1st edition map, which are very likely to be remains of **DBAs 3, 4 and 5**. There are no changes between the first and second edition map.

³ Canmore 139435

⁴ *Ibid*

⁵ Macdonald & Roberts, 2002

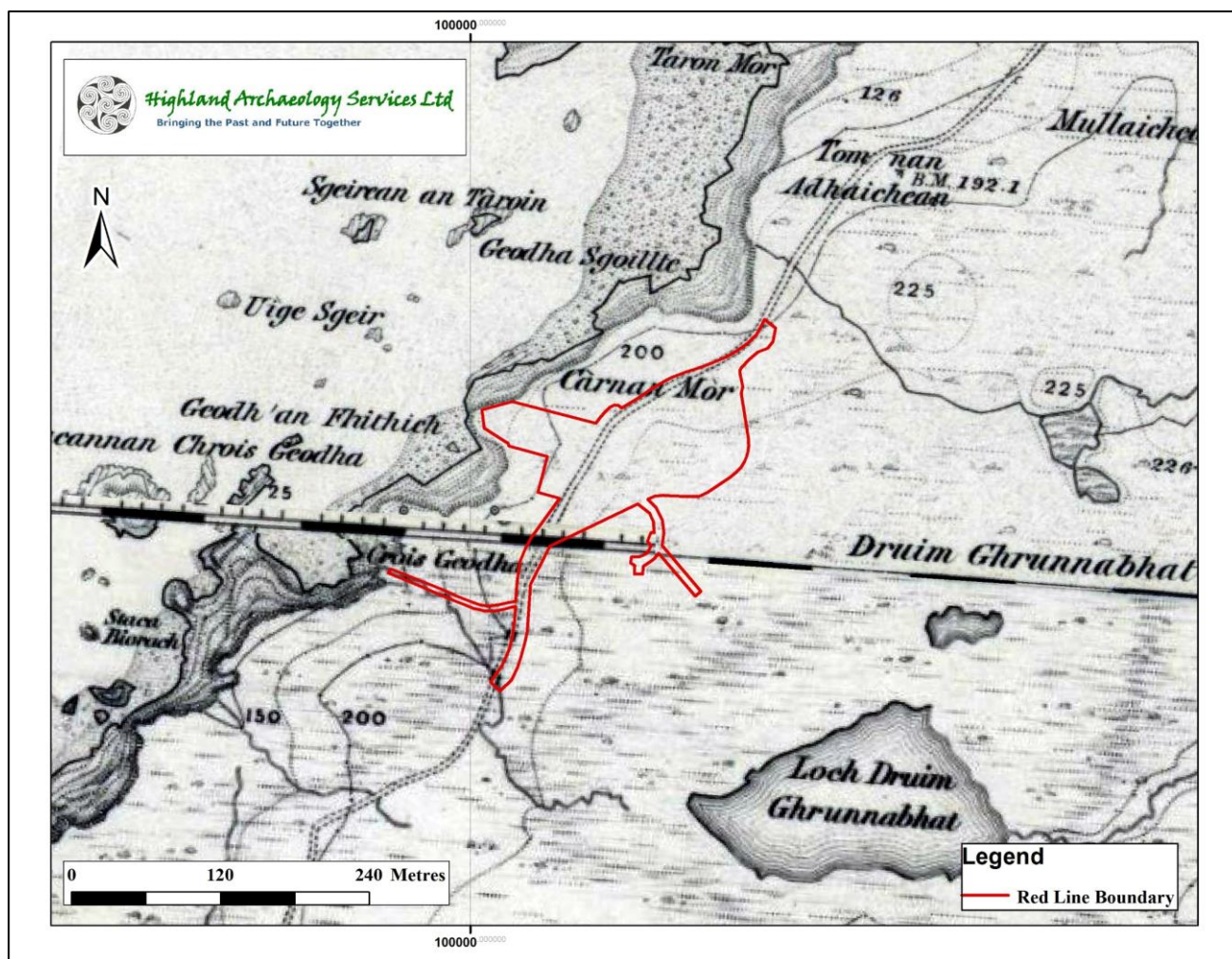


Figure 4: 1st edition Ordnance Survey Map, 6", surveyed 1852, Ross-shire (Island of Lewis), Sheet 23 and Sheet 29

OS Namebook

The Ordnance Survey Name Books were created by surveyors as they mapped Britain in the 1800's. The books record the names of the settlements and natural features that they encountered, and descriptions of the places themselves. As the proposed development is in a very rural area, the OS Namebook only appears to describe Loch Druim Ghrunnabhat. Describing it as a fresh water loch which contains "...little water. It is about 12 chains (240m long) and about 7 chains (140m) broad with a small stream flowing out of it into Loch Mealabhat⁶.

Other entries describe only the landscape and coastal geological features as they appeared to the surveyor.

Statistical Accounts

The Statistical Accounts of Scotland are collections of accounts, often written by Ministers, giving information about a parish. They detail many aspects of daily life as well as give descriptions of agriculture, industry and the people living there. The proposed development site is located in the parish of Uig.

⁶ OS1/27/57/176

The Old Statistical Account

The Old Statistical Account was written by the Reverend Hugo Monro in 1797, a short time later than other entries within the collection. Monro writes that the parish was 10 miles long and 9 miles broad with a population of 1,898. The parish had around 387 families in 1792 living throughout the area. His account gives the impression that this was a fairly industrious parish with a particularly robust fishing industry. 73 fishing boats were local to the parish, catching Herring, Dogfish, Ling and Colefish. As well as this, molluscs such as oysters, cockles, and clams were a key component of people's diets. Apart from fishing, the parish particularly struggled with raising crops, however, Black Oats and Barley were consistently sown 'during the season'. Monro writes that there was a period of time where he attempted to show the residents a better way of growing potatoes however this appeared to be initially met with distrust and Monro's new system took a while to implement. Aside from crops, the Flannel Islands were often used for sheep and cattle grazing. Around 5,044 sheep were scattered throughout the parish however mainly concentrated on the Flannel Islands. The Minister notes that many people live for a long time, however there appeared to be a significant issue regarding infant mortality rates due to 'epilepsy'.

The New Statistical Account

The New Statistical Account was written in 1833 by the Reverend Alexander MacLeod. This account was significantly shorter than both the previous and other contemporary Statistical Accounts. Here, MacLeod writes that the parish had significantly expanded to be 24 miles by 10 miles wide over the last 40 years and that 4 of the previously uninhabited Flannel Islands are now inhabited. In such a short space of time the Herring fishing around the parish has failed and been replaced by an abundance of Cod and Ling. MacLeod writes that there was an increase of fishing boats arriving from mainland Scotland and England who were occupied by catching lobsters, oysters and other shell fish. The writer appeared to have a significant distain for these fishermen as they would not benefit the local economy and instead took their catches to sell elsewhere. The account briefly mentions the discovery of the Lewis Chessmen found on Uig Bay and mentions Carloway Broch.

There was a significant drop in the population of Uig. Over the course of 40 years, the number of families dropped from 387 to only between 40 and 50 families. MacLeod does not give an official number regarding the population. Since this sharp drop occurs around the same time as the introduction of Cheviot Sheep this strongly suggests that this was the result of clearances by the land owners in order to use the land for mass sheep farms. The clearances of Lewis continued for the majority of the 19th century resulting in large land raids across the island in which tenants protested the displacement and the resulting lack of food by occupying land that had been cleared. The last recorded raids date to the 1900's following the return of men from WWI. There has been a collection of modern memorials to the land raids constructed around Lewis, the nearest to the proposed development is An Suileachan, at Reef in Uig⁷.

Previous Archaeological Work

There is no record of any archaeological works conducted in the area prior to the current work, although the Home Chain radar stations have been visited and photographed by Mr M. Briscoe, who has added this information to the Canmore database⁸.

⁷ Visit Outer Hebrides Website

⁸ Canmore 139435

Desk Based Assessment Conclusions

The proposed development is located on the remote west coast of Lewis. There is a small scattering of post medieval shielings surrounding the site as well as evidence of rig and furrow field systems in the wider landscape. It could be possible that there may be other post medieval remains on the west side of the proposed development.

The proposed development will have a direct impact on the Druim Grunavat Chain Home radar station. As well as the visible remains on the surface, there is the possibility of ephemeral remains of the station within the development area that have not yet been accounted for. As well as potential structures there is the possibility of finds relating to the base.

Overall, the proposed development area is highly likely to contain modern 20th century features. There is also the possibility of post medieval features and finds surviving in the wider area.

The Survey

Aims and Objectives

The aims of the survey were to:

- Assess the proposed development site in terms of its archaeological and historic environment potential.
- Consider the potential impacts of construction and operation of the proposed development on the cultural heritage resource.
- Propose measures (where appropriate) to mitigate any predicted adverse impacts.

Methodology

The survey was undertaken on 13th and 14th November 2023. The red-line boundary at that point covered a slightly smaller area than that in the present report, but the author has a reasonable degree of confidence that all features within the area were noted and recorded. The survey started within the radar base area with all visible concrete bases and connecting features. Other features around the edges of this were recorded as they were seen. Finally, the proposed development areas to the west and east of the existing road were inspected for signs of upstanding archaeological or historic features.

All features were recorded by survey-grade GPS, photography (using a digital SLR with scales), and written description. Over 200 photographs were taken, and these will be provided to the HER to add to the public record.

Description of Recorded Archaeology

A total of 45 features were recorded within or close to the proposed development area (see Figure 5 and Figure 11). Many of these features related directly to the radar station but there were a few features which are likely to pre-date this.

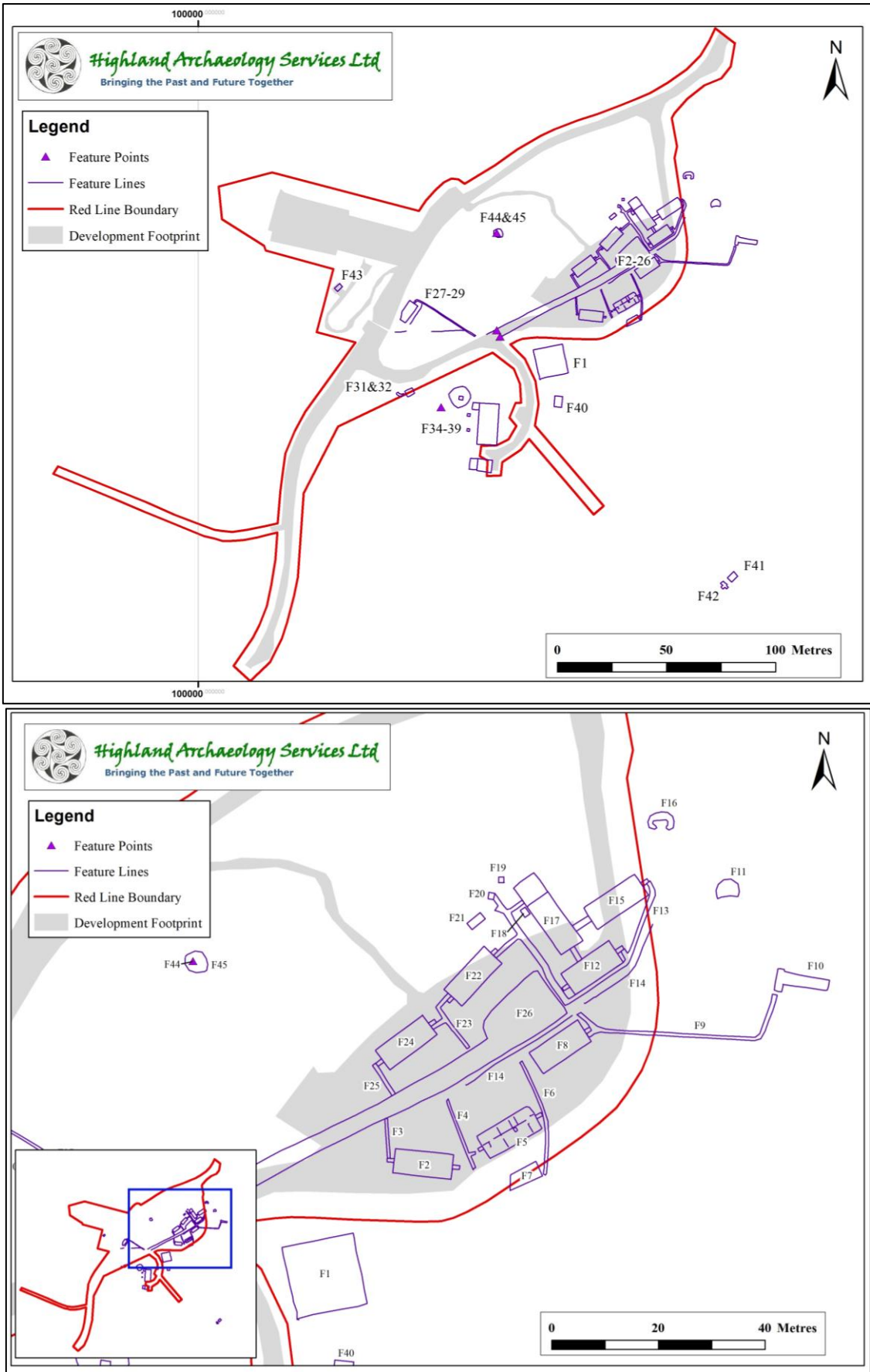


Figure 5: Walkover survey features overview (above) and detail (below)

Nissan Huts

Features 2, 5, 8, 12, 15, 17, 22, 24 and 28 are all concrete building bases that were likely to have been Nissan huts. These structures are all 11m long and 4.5-5m wide (with the exception of F28, which is partially covered by debris and turf). These structures shared many common features, including concrete entrance platforms on one or both short sides of the structure, and a 10-20cm wide recess around the outside edge of the concrete platform, often with corroded iron bolts still present which originally fixed the metal sheeting that formed the walls and roof (see Figure 7).

The concrete bases had been constructed with local boulders used at the base and poured concrete with gravel aggregate over the top. Timber shuttering had been used to contain the concrete in the correct shape and shutter marks are visible on the sides of several of these Features.

Feature 5 had an additional layer of poured concrete over the base and there was evidence of brick partitions portioning off the interior of the structure and concrete channels around the edge which may have been for drainage (see Figure 6). Some bricks were stamped ‘GAROW??’ possibly signifying Garrowhill, Glasgow⁹. This hut and features 12 and 22 had central concrete bases or markings that could suggest the presence of a stove.



Figure 6: Feature 5 with internal partitions

Features 12, 15 and 17 were interconnected with short poured concrete ‘passages’ (which met the long side of F12 and 17). These ‘passages’ were designed from the paths due to their sharp sides although they were slightly wider than the longer paths. There was a great deal of brick and concrete debris in this area. In some places toughened glass was also present.

The condition of most of these structures was reasonably good, some were partially eroded underneath corners or edges and many have cracks which plants were beginning to exploit. F28 beside the existing road had a significant portion broken off, presumably during road upgrades. This

⁹ <https://www.scottishbrickhistory.co.uk/garrowhill-3/>

feature also had an associated revetment (F30) where the slope has been levelled to accommodate the structure.

Only the floor and foundation layers of these structures survived with no sign of upstanding walls or internal features. Having said that, there are surviving details which gave clues to the construction and use of the buildings, which have been noted and photographed where possible.



Figure 7: F2 Nissan hut with entrance platform and construction recess.

Paths

Another common feature within the site was concrete paths interlinking the buildings, these were features 3, 4, 6, 9, 13, 23, 25 and 27. Typically, the paths were around 0.5m wide and were constructed of poured concrete with coarse aggregate over large natural stones which had been laid as a foundation where the path needed to cross wet ground or be raised up. Feature 9 (the path to the bunker) was unusual in that only part of the path had concrete on the top, and most of its length was formed only of stone (see Figure 8). The character of the stonework was very like to dry-stone wall construction with large stones on each side and smaller stone infill. This suggested to the author that the person(s) constructing this path was familiar with dry-stone walling.

The condition of most of the paths was variable, with areas that were still strong and clear but others that had cracked or shattered with vegetation present in the cracks. In some areas the paths were no longer visible at all.

Path F27 preserved footprints along almost its entire length which ran downhill towards F28 and must have been formed when the concrete was still wet. At the top of the path the prints were relatively shallow but near the bottom they become deeper as the concrete was presumably more loose. The prints were similar in size to the author's size 6 modern boot.



Figure 8: Feature 9 concrete and stone path leading to bunker

Concrete pads

There were concrete pads of various sizes around the station. Some were associated with structures (F17 & F39) but most stand alone. The largest was F1, a large square measuring 13.5m square formed of poured concrete that was cast in three sections. There were a collection of concrete pads in the north part of the station (F18, 20 & 21) close to the buildings and serviced with paths. There was also a concrete-lined tank of unknown depth in that area (F19).

There was a lone concrete pad on the north side of the road (F43) which was thought to be a septic tank perhaps associated with F28, but this was not confirmed.

A small, isolated concrete pad with indistinct edges was noted near the road (F44). It sat within a turf and stone ring (F45) which may be an earlier feature. During the survey a metal base of some kind was noted sitting on (but not attached to) this pad (see Figure 9).



Figure 9: F44 small concrete pad with metal object

Other Wartime Structures

Bunker

A bunker constructed of poured concrete, externally shuttered with corrugated iron was located to the north-east of the station (F10, see Figure 10). Some corrugated iron was still embedded within the structure. During construction, the corrugated iron had given way in places, causing a slumped appearance. It was found to be 10m long by 4m wide, with a metre high entrance opening directly onto steps leading down into the shelter. It was filled to the brim with water and no internal features could be recorded. There was a hatch on the east end and regular ventilation holes in the roof.

A water main and electricity services were noted close to this feature. The bunker appeared to be in decent condition from external appearances.



Figure 10: Feature 10, bunker or blast shelter

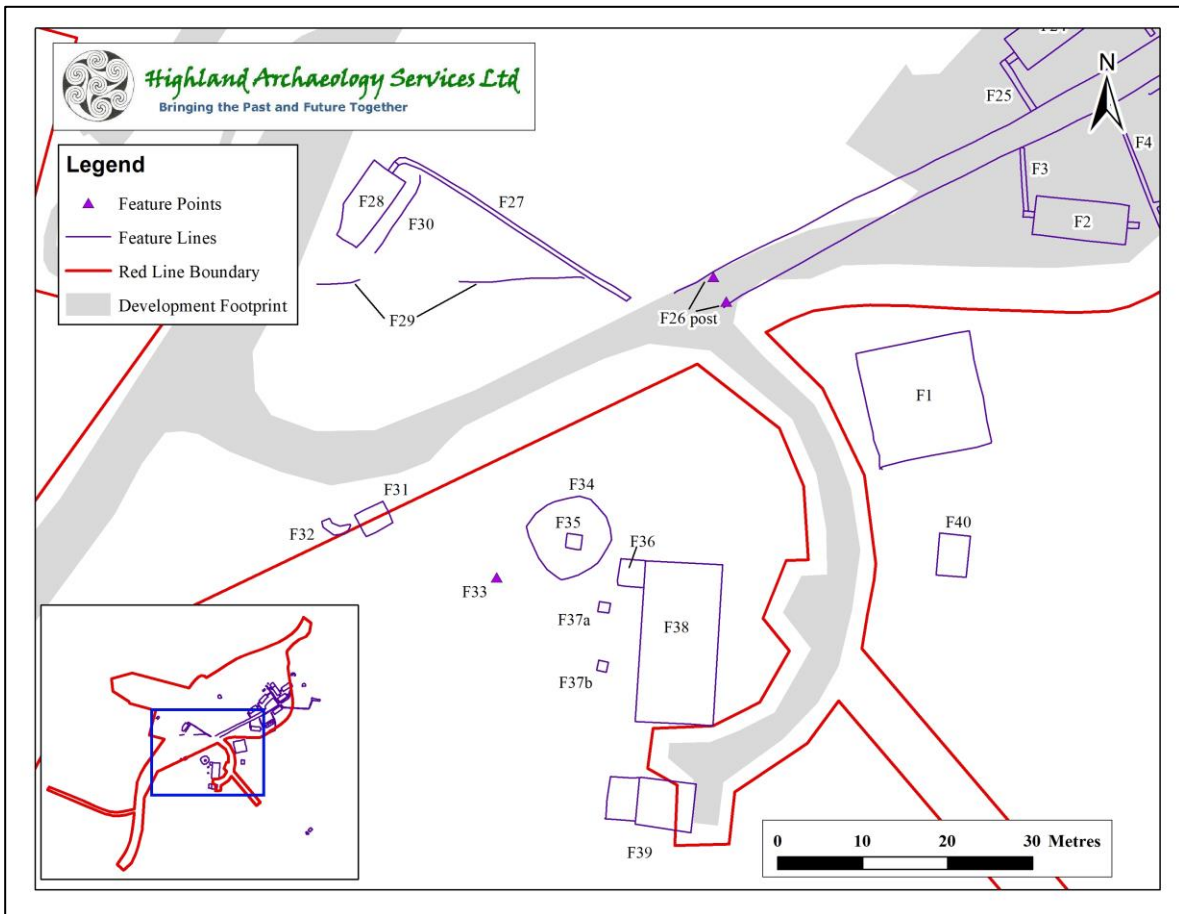


Figure 11: Features in mast-base area

Mast base

Two large concrete plinths with the remains of wooden beams set into them (F37 A and B) were found to form part of the base of the radar mast (see Figure 12), located directly to the west of the transmitter building Blast Walls. The plinths were not completely aligned, but were clearly set with timbers of the same type. A similar timber also emerged from the outside of the blast wall (F38), almost certainly. It is assumed this timber would also have supporting the mast. A little to the north was a concrete block with iron tether (F33) which is likely to have secured a stay wire for the mast. The area was searched but no other tether points were located. There were, however, other small blocks of concrete in the vicinity of the mast base which were likely to have been associated with it. A photograph of the mast gantry and aerial array from 1946 can be seen in Banks 2022 on page 151.

These features were in reasonably good condition, with timbers and the metal tether still visible at the time of survey and little damage to the concrete plinths and blocks.



Figure 12: Feature 37, mast bases

Blast Walls

Some of the most distinctive and imposing remains on the site were those of the blast walls that surrounded the transmitter/receiver block beside the mast (F38, see Figure 13). The walls were of stone construction with concrete mortar and later rudimentary cement pointing, and were capped with concrete slabs. It was 19m long by 9m wide, and survived to its full height of 2.5m, although occasional capping slabs were missing. There were large entranceways on the north and south, which were the shorter sides of the structure. There was also part of an external entrance ramp on the north side with grip-lines incised in to the concrete. The south entrance was found to be slightly wider and level with the modern ground surface. There was damage to parts of the west external wall with internal timber visible.

Inside the blast walls was a concrete base with channels which had been used for cables, which had been filled with loose rubble. The recess around the edge was visible with bolts (since folded over) for attaching the walls. There was a gap of over half a metre from the blast walls to the internal structure.



Figure 13: Feature 38, blast walls and transmitter building

Generator Block

To the immediate south of the Blast Walls was a stone and concrete structure described as a Generator Block (or Standby Set House) F39. The walls were constructed of rough stone with concrete mortar and concrete block quoins and lintels (see Figure 14). The roof was made of cast concrete (with evidence of wooden shuttering on the underside) that had been sealed with bitumen or similar tar-like substance. There was a 2m wide by 2m high entrance on the north side and a window, now partially blocked in. There were two further windows on the south elevation which had been almost entirely blocked. There were concrete slabs inside the structure and various recesses and setting marks in the internal walls. There were three metal bolts in a vertical line on the external east wall which may have secured a gate or timber structure. There was also a concrete pad to the immediate west of the structure. This structure was similar to other examples in the radar stations along this coast.



Figure 14: Feature 39, generator block

‘Friend or foe’ building and mast base

To the far south-east of the site was a concrete foundation in the shape of a ‘+’ or Maltese cross with one arm missing and another damaged (F42). There were various metal fixings and bolts still set into the concrete and some stain marks from where something was mounted upon it. This is distinctive of the ‘Friend or Foe’ type mast, which sent interrogating signals to aircraft and monitored for a response.¹⁰

There was also a small structure associated with this feature, to its immediate north-east – again, typical of this building type constructed of brick and skimmed with cement, with a concrete roof sealed with bitumen (F41, see Figure 15) and an L shaped wall projecting from the building entrance. It was presently used as a store for the nearby Bothy accommodation. There was no longer an identifiable path out to this building, although there was a ditch leading straight to it from the radar base which may have once had a path to one side.

¹⁰ Brown 2022, p.49



Figure 15: Feature 41 Friend or Foe building, with small mast base Feature 42 to west

Guard room (or Picket Post)

A concrete pad (F31) near the road and station access track had a slight raised area and a reasonable amount of debris, suggesting that it was a structure of some kind. Its location near the entrance to the main part of the camp may be consistent with it being a Guard room or ‘Picket Post’ type building for identity checks.

A nearby curved line of stones (F32) may have been a path foundation, although there was no associated concrete. This feature appears to be cut by or abut the track. There are large stones which may have been displaced by the track.

Toilet block

Attached to the external blast wall (F38) and to its west was the foundation and floor of a small toilet block which undoubtedly serviced the transmitter/receiver building. There were mortar lines suggesting brickwork which outlined three cubicles. Two of these were toilet cubicles which are identifiable by earthenware waste-pipes and the visible outlines of the toilet feet with four metal fixings each. The third may have been a shower cubicle with a concrete moulded drainage channel and square tile drain all within a slightly raised plinth. The doorway was visible in the south corner nearest the blast wall.



Figure 16: Feature 36, toilet block

Artillery base?

A small concrete feature reasonably close to the main radar mast (F40, see Figure 17) appears to have been a foundation base for a piece of equipment or machinery. It was a hollow square measuring 5m by 3.5m, which may have had external brickwork, containing two mirror image concrete platforms inside with various slots and metal fixings. It was located upon a small natural knoll to the east of the transmitter building on the far side of the track. This may have been the ‘Light Anti-aircraft emplacement’ noted by Guy in his 2002 visit, or possibly a base for a searchlight used to guide lost aircraft to safety.¹¹

¹¹ Broiwn 2022, p151
Highland Archaeology Services Ltd
November 2023



Figure 17: Feature 40, possible artillery or searchlight base

Road

The main access road for the radar station comprised mixed gravel with some edging stones (F26). Some of this was still in use and provided access to the Mains Water building but the part of the track running to the Nissen huts is original. There was a fair amount of vegetation encroachment upon the track, but it was reasonably visible in most areas. At the south-west end the track was around 3m wide, and it widened into parking and manoeuvring areas in the area between the main group of 8 huts. At the south-west end of the track where it was crossed by the modern fence there were old wooden gateposts and the remnants of a metal gate with decorative metalwork, misshapen and lying on the ground at the time of survey.

Ditch

A drainage ditch (F14) had been cut through the Nissen hut area, running in a north west direction and then veering north to follow the edge of path F13. The ditch was around 47m long, 1m wide with its edges defined by the edging stones placed along its banks, even where it had become infilled.

Other Features

There were a handful of features in close proximity to the site that are likely to pre-date the wartime remains.

F11

A possible feature comprising a small, turf-covered mound around 4m across with loose stones on the west side. There was an upright metal bar set into the top of the feature on its east side, so this may relate to the wartime remains or be a modified earlier feature.

F16 - Bothy

The remains of a small dry-stone structure with tumbled stonework on north, east and west sides was recorded (see Figure 18). It was sub-rectangular or possibly oval in shape, measuring 5m by 3m at its maximum extent. This was likely to be temporary shelter or ‘bothy’ pre-dating the wartime remains.



Figure 18: Feature 16, small bothy structure

F29 - Dyke

The possible foundation layer of a dry-stone wall, or boundary dyke was noted. This consisted of only a single stone width surviving and visible in short sections along a total length of 31m. This was close to the existing fence boundary but on a slightly different alignment.

F34 &35

A roughly circular level area with cobble-sized rounded stones, laid neatly in rows on the south side but more erratically on other sides (F34, see Figure 19). Larger kerb stones on the north and western edge had been used to ensure a level platform. This was approximately 9m diameter. In the centre of the cobbled circle a square recess of around 1.2m was formed with angular stones on all four sides (F35). There is no concrete or cement apparent within the construction of the feature, although there are some surface fragments of concrete likely deposited following the destruction of the nearby radar station buildings.

These two features could be prehistoric or medieval, although their function is not certain. It is possible that it represents a robbed-out burial cist with surrounding cairn, however the lines of cobbles suggest a deliberate surface rather than a cairn mound. They were in close proximity to the toilet block and the possibility of this being a rudimentary septic tank with surrounding soakaway has been considered. However wartime remains would usually have concrete utilised in its construction, and the carefully laid cobbles and levelling are again problematic to this interpretation.



Figure 19: Feature 34 and 35

F45 – Hut Circle?

To the east side of the road, on a natural knoll, were the footings of a dry-stone circular structure approximately 5m in diameter, with a possible entrance on the east side (see Figure 20). The stones on the south side of the feature were large and loosely set whereas the stones on the north side were smaller and reasonably dense. There was also a small concrete pad with a metal bracket (F44) likely to relate to the wartime remains in this area, and therefore it is possible that the circle of stones had been built to surround this in the 20th century. However, it is also possible that an existing, much older (possibly prehistoric) feature had been utilised as an existing flat area in an otherwise rocky and uneven area.



Figure 20: Feature 45, possible hut circle

Discussion & Conclusions

The walkover survey has identified a number of features within and close to the proposed development area. The majority of these features relate to the Druim Grunavat (or Islivig) Chain Home radar station. Many of these features had been previously identified and photographed, including the blast walls, standby set building and the Friend or Foe building. This survey has provided an opportunity to more thoroughly survey the site, so that additional features such as paths and concrete pads have been recorded. It has also allowed for photography of details such as construction evidence. The conditions of most of these features has been found to be reasonably good, with some specific areas of damage as well as general degradation caused by disuse over time.

There are also a handful of potentially earlier features at the fringes of the site. This includes a bothy to the northeast and an interesting cobbled feature to the west of the Blast Walls. These features are in reasonably good condition and are not currently at threat.

The features recorded are all considered to be of local or regional significance that make a contribution to the understanding of the heritage of this area. The radar station in particular is a good example of the Chain Home Group which contributed to the national wartime effort, and has associated stories and memories.

Recommendations

The features within and near to the proposed development site are all un-designated assets of regional or local significance. They are in reasonable condition and are expected to degenerate steadily over time. This is especially true of the concrete structures which are especially vulnerable to damage by foliage, frost and undermining by water erosion which was apparent in some areas.

In the current plans for the proposed development, many of the distinctive buildings and structures will be on the periphery of the site and will not be directly affected by the installation or use of the building, car parks, footpaths or services. There are no identified features in the location of the proposed visitor centre building. However, the main group of Nissen hut bases (F2, F5, F8, F12, F15, F17, F22 and F24), their associated paths (F3, F4, F6, F9, F13, F23 and F25), the drain F14 and the remaining track F26 will all be directly impacted by the development, as the car park and access road are directly overlaying these features. This is understandable, as the site occupies the flattest and most solid area of the landscape, avoiding peatland and environmentally sensitive moorland. As these are principally surface features and there are not anticipated to be any associated buried remains, excavation of these features is unlikely to provide further information of benefit to our understanding of them. As a detailed survey has now been undertaken, no further recording is recommended for these features.

Some of the other prominent features, including the Blast Walls (F38), Standby Set House (F39), artillery/searchlight footing (F40) and Bunker (F10) are likely to benefit from increased access and footfall to the site. This presents an opportunity to provide interpretation and manage access to these structures. They are reasonably substantial and are unlikely to be sensitive to erosion caused by increased footfall, although this should be **monitored** and prevented by good **access arrangements**. The bothy (F16) and cobbled area (F34&5) as dry-stone structures may be more sensitive to footfall erosion. They are also reasonably subtle features vulnerable to accidental damage by uncontrolled machinery movement, and therefore a programme of **Marking Off** would be beneficial to protect these and other nearby sites.

F19 is shown on the plan as a septic tank which could be utilised by the proposed development. This interpretation could not be confirmed by the survey. If it is, then further study into the suitability and potential impact upon this feature should be explored, and ways to utilise it carefully considered. Preservation in situ is always the preferred approach but if that site must be used and the feature is likely to be damaged or destroyed then basic **further recording** should take place in order to understand its character below the surface. If the feature can be avoided then no further action should be required.

Changes to **drainage** and waterflow have the potential to indirectly affect some of the nearby features if not properly managed. This particularly applies to features close to the car park including F7, F14, F16 and F19-21.

The setting of the radar station has some significance to its understanding. Principally this encompasses its relationship to the coast, appreciating its elevation, and the internal relationship of the buildings that make up the site. The proposed development will not have an impact upon the views to the sea or the elevation of the site. Visitors should benefit from increased awareness and appreciation of the location of this site and its significance for wartime history. At present, the area of the Nissen huts is experienced as a relatively level area with visible concrete pads which allow the layout of the buildings to be noted. Locating a car park here is unlikely to have a significant detrimental effect to the setting of upstanding buildings across the site. However, it would be preferable for there to be a way of continuing to appreciate and understand the layout of Nissen hut bases that will be destroyed partially or totally by the formation of access and a car park at this site. This may be achieved through **interpretation lines** set into the car park surface, or similar.

Archive

A copy of this report and associated photographs will be deposited with the Western Isles Council for inclusion in the Historic Environment Record and with OASIS under report number highland4-521619. A summary report will be generated for DES and the project archive will be submitted to HES following completion. The site archive comprises entirely digital records including

photographs, registers and GIS files. These will be processed and submitted to HES following completion of the project in accordance with their published guidance.

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Appendices

Table 1: Feature Register

Feature	Dimensions	Description	Interpretation
1	13.5m by 13.5m	large concrete pad cast in 3 sections, now used as parking for shieling. some concrete fragments around some with slots visible. erosion on north corner shows construction details including large stones at base	Concrete pad
2	11m by 4.5m	concrete footings of long rectangular structure. recessed edge approx. 10-20cm thick around edge with upright nails now bent over for fixing upper structure. evidence near north corner of drainage channel. entrance on west side with concrete path, possible entrance on east side also.	Nissan hut
3	7.5m by 0.5m	concrete path from west side of F2 to track. some stones visible under end near building. abuts building entrance.	Path
4	13.5m by 0.5m	concrete path possibly from east side of F2. very broken up. definitely moves towards F5 but large parts of path no longer visible	Path
5	11m by 5m	concrete pad for building with internal divisions marked by single course brickwork, likely to have been higher but only surviving one course high. skin of concrete on floor overlying main concrete base. concrete guttering visible in places around outer edge. lots of broken bricks on surface. rectangular basin or plinth near centre with chamfered corners. brick-lined plinth in eastern end of building with large earthenware drain in corner. some window glass sherds, thin and clear.	Nissan Hut
6	22m by 0.5m	broken concrete path, route clear in many places but less clear in patches. leads to structure 7.	Path
7	6.5m by 3m	heap of concrete slabs overlying remains of building. footing remains only visible on north side. lots of tar or bitumen substance on upper side of concrete slabs and some on the edges, too. unclear what function or form this building had but blackened concrete likely to have been roof which has collapsed.	Building (wartime)
8	11m by 4.5m	concrete foundation for Nissan hut. recessed edge for attachment of upper structure with iron nails, some nails with square heads still attached showing depth of fixing. entrance on east side. some reinforced glass sherds near this structure.	Nissan hut
9	44m by 0.5m	path leading to bunker - stones laid like a doubleskin wall with gravel in the middle, and concrete overlying at the west end but not for most of the path. the path crosses a small burn and has large stone slabs here, but no concrete.	Path
10	10m by 4m	cast concrete bunker made with corrugated iron as shuttering, which is still present in places but just evident as an imprint in others. the iron has slumped in places during construction causing quite an organic-feeling structure. there is an entrance and staircase on the west side of the structure, but the inside of the structure is flooded. there are ventilation holes in the roof of the structure as well as a square chute on the east end of the roof. the chute has imprints of wooden shuttering on the inside.	Bunker
11	4m by 3m	possible feature comprising raised area with loose stones on west side, some possible surrounding stones on north and east sides. metal fixing on top at east side. metal fixing raises approx. 1 foot and forms a right-angle and there a holes for fixing something.	?
12	11m by 5m	concrete base of structure, with entrances on each end. recessed edges with nails for fixing upper structure. In centre of structure is an approximately oval area with gouges in concrete.	Nissan hut

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Feature	Dimensions	Description	Interpretation
13	54m by 0.5m	concrete path, in some areas in good solid condition but in some areas very broken up and fragmentary. where it meets f15 it ramps up and sits over stones which have been used to raise the level.	Path
14	47m by 1m	Drainage ditch on south side of structures 12 and 15. Ditch mostly filled but edges apparent by line of stones on each bank, 2 courses high on south side with large stones. ditch clearly respects layout of buildings and is likely to post-date structure	Ditch
15	11.5m by 4.5m	concrete base of structure, shuttering is visible on northeast corner where the ground is much lower. some later concrete appears to have been applied as repairs. There are recesses at the edges, but appears to be some difference in the west edge where the recess does not reach the narrow end of the structure. lots of brick fragments at west end and fragments of corrugated concrete which could contain asbestos. connecting concrete corridor between this and structure 17	Nissan hut
16	5m by 3m	drystone structure with tumbled stonework on north, east and west sides. Sub rectangular or possibly oval. Likely to be temporary shelter predating wartime remains	Bothy
17	11m by 4.5m (concrete pad 4.5m by 4.5m)	concrete base of structure with recessed edge with nails, some slots also apparent in recessed which are at a different angle to the recess itself. also possible drainage channel and internal division visible on west side. small concrete cistern or drain near channel. concrete pad on north end. lots of brick rubble across structure. appears to have connecting corridor to f12	Nissan hut
18	1.5m by 1m	small square concrete base outside f17 with two wooden slats inset and iron fixings	Concrete pad
19	1m by 1m	small square recess or cistern to the north west of f17. filled in so depth unknown.	
20	1m by 1m	rectangular concrete pad at end of path f13	Concrete pad
21	3m by 1.5m	f21 rectangular concrete pad, west corner becoming undermined by erosion. there is a hole in the concrete near the centre of the pad which looks like casting fault or erosion. no recess around edge of structure.	Concrete pad
22	11m by 4.5m	concrete base of structure with recessed edge and remains of nails. entrances at each end if structure with connecting paths. concrete pad in centre of structure with gouges around the edge similar to f12	Nissan hut
23	13m by 0.5m	concrete path between f22, f24 and track. mostly extant but does become broken up in areas near the track	Path
24	11m by 4.5m	concrete base of structure with recess around edge, entrance at each end.	Nissan hut
25	7m by 0.5m	concrete path between f24 and track f26	Path
26	83m by 10m	main entrance track for Nissan hut area. track approx. 3m wide with edging stones in some areas, gravel surface. gateway at west end with large wooden gateposts and metal gate now collapsed	Track
27	32m by 0.5m	concrete path from radar track to f28. footprints are visible along pretty much the entire length of the path where it has been walked on before the concrete was completely set	Path

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Feature	Dimensions	Description	Interpretation
28	9.5m by 4.5m	concrete base by road at end of path f27. entrance on north end, also 'bite' out of concrete and drainage hole with earthenware pipe. damage to southwest corner of structure caused by ditch and layby of modern road for gateway next to cattle grid. some gravel, stone and concrete overlying southeast corner of structure.	Nissan hut
29	31m	possible former stone wall or dyke, appears to be single stone width but is close to modern fence line. possibly represents former boundary. Only short sections visible.	Wall
30	10m	basic revetment constructed of local stone on southeast side of f28, only a single course high, respects structure	Revetment
31	3.5m by 3m	concrete base of structure, square with slightly raised portion in central south area	Structure
32	3m by 1m	semi-circle of stones, possibly disturbed by track. large outer stones with concentric circles of smaller inner stones.	?
33	0.5m by 0.5m	iron tether for stay wire set into concrete on north side of radar station	Tether
34	9m by 9m	cobbled area with some areas of neatly set beach cobbles, built up on east side with large stones at the base to make level area. roughly circular. f35 in the centre. no concrete apparent in construction although some fragments of concrete on surface. possibly earlier feature. proximity to toilet block may suggest soakaway with stones to aid drainage, but this doesn't explain the apparently neat area of cobbles on west side	?
35	1.7m by 1.8m	square stone-edged recess making cistern or tank. filled in with soil so depth not established. no concrete used in construction.	?
	3m by 3m	toilet block on west side of radar station. bases where toilets were fixed and waste pipes visible. also concrete drainage channel and metal drain.	Toilet block
37	1m by 1m	a pair of plinths, not totally aligned, with wooden beams set into top of them. more wood surviving in north plinth (37a)	Mast plinths
38	19m by 9m	radar station structure, stone construction, only roughly dressed with hasty concrete mortar/pointing. some cornering quoins are concrete block. walls are capped with concrete. Wooden beam (now cut) comes out of west side of external wall at an angle. on two areas internal wooden and iron parts of superstructure are visible within the wall. sand appears to have eroded out of the inside of the wall in these areas. there is a wide entrance on the south side, and a narrower entrance with high step on the north side but also partial remains of a concrete ramp slatted in order to provide grip. there is a foundation of a possible screening wall on the south side but this is now at ground level. internal concrete area with deep channel around the outside, the concrete area is chamfered at the edge. there are deep channels in the concrete floor, which have been infilled with loose stones probably to prevent injury.	Blast walls and transmitter/receiver block
39	5.5m by 6.5m (concrete pad 5m by 3.5m)	building with stone walls, concrete mortar/pointing, concrete block quoins, concrete slab ceiling/roof with shuttering marks on underside, bitumen or tar visible on sides of roof (waterproofing). wide entrance on north side, as well as half-blocked window. Walls on the inside show some slots for fixings. Two windows on south wall have been filled in. Two large concrete blocks on inside of structures. Some iron bolts on east wall. concrete pad outside west of structure.	Standby set house (generator block)
40	5m by 3.5m	concrete platforms with slots and metal fixings. surrounding concrete wall with imprints of blockwork or brickwork.	Light anti-aircraft base?
41	4m by 2.5m	concrete building with concrete roof and screening wall around entrance. evidence of shuttering on underside of roof. rudimentary drystone walling has been constructed abutting the east side of the building.	Friend-or-foe building
42	3.5m by 2.5m	concrete footings with metal fixings, possibly footings for artillery of some kind.	Light anti-aircraft base?
43	3m by 2m	rectangular concrete base with recessed slots going across base	Concrete pad

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Feature	Dimensions	Description	Interpretation
44	0.5m y 0.5m	small concrete pad with encroaching grass covering edges. some metalwork on and around this, including triangular base with metal tube and other tubular fittings	Concrete pad
45	4.5m by 4m	low footings of roughly circular drystone structure. stones on south side are larger and more loose. possible entrance on east side.	Hut circle?

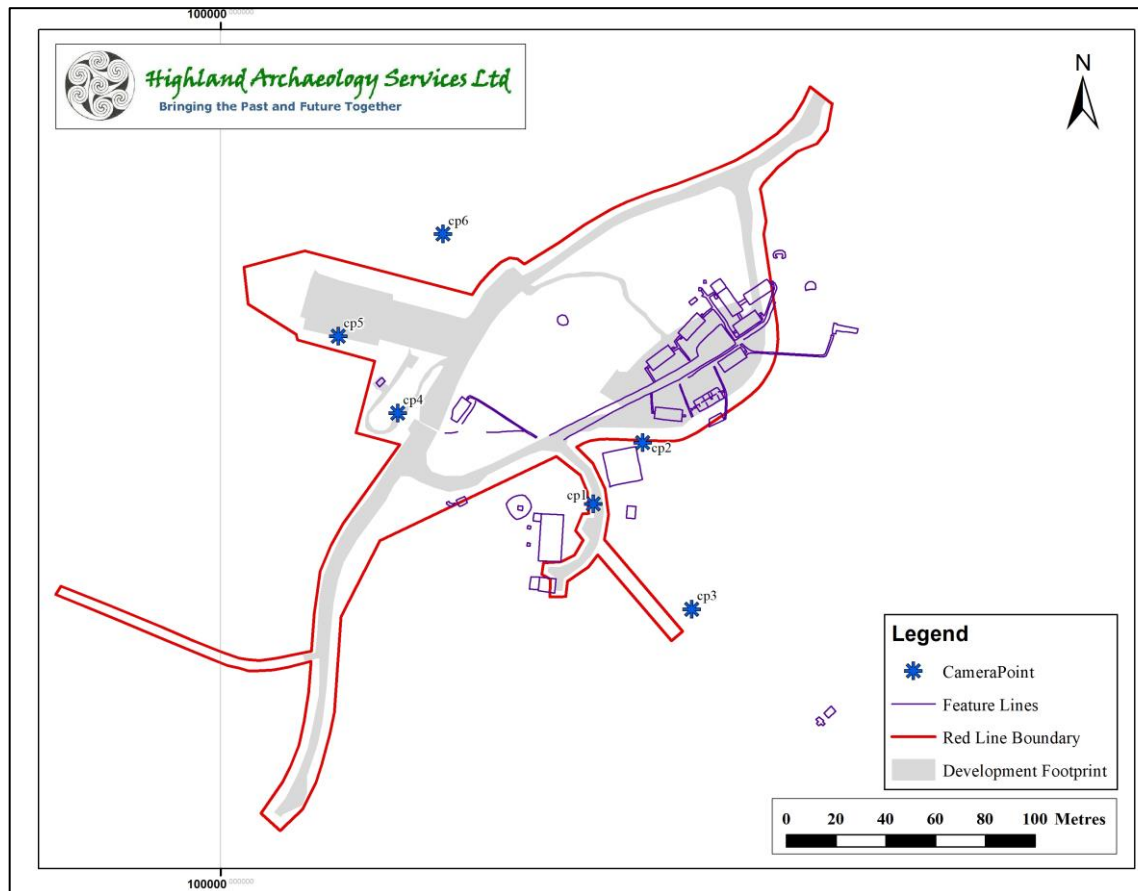


Figure 21: Camera Point Plan

Table 2: Photo register

Photo No.	Camera Point	Facing	Description
6467	1	NE	gateway from track to large square concrete pad
6468	1	NW	view towards road
6469	1	SW	radar station
6470	1	S	car park area
6471	1	SE	view across moor to other building
6472		NNW	large concrete pad, F1
6473	2	SW	corner of f1
6474	2	W	corner of f1
6475	2	W	fragment of concrete with slot imprint
6476	2	W	fragment of concrete with slot imprint
6477		NE	f2 concrete pad
6478		E	F2 detail of corner showing recess and nail
6479		E	detail of nail
6480		E	western entrance and drainage channel
6481		S	detail if construction evidence in north side, shutter marks and metal wire
6482		W	eastern entrance of f2
6483		N	eastern entrance f2 with concrete path?
6484		S	f3 concrete path leading to f2 partially broken
6485		E	construction detail f3 at south end of f3 near building
6486		SE	f4 broken concrete path on east side of f2
6487		SE	f4 broken concrete path on east side of f2
6488		SE	f4 broken concrete path on east side of f2
6489		NW	f5 concrete base of building with internal brick divisions
6490		NW	f5 concrete base of building with internal brick divisions
6491		N	f5 concrete base of building with internal brick divisions
6492		N	f5 concrete base of building with internal brick divisions
6493		NW	f5 concrete base of building with internal brick divisions
6494		NE	concrete guttering at outside edge of f5
6495		NW	internal brick division
6496		SE	overlying concrete on base of f5
6497		SE	edge of f5 with brickwork divisions and square fitting slots
6498		NE	recess around north edge
6499		NW	sub rectangular recess or plinth – for central stove?

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Photo No.	Camera Point	Facing	Description
6500		NW	brick inscription
6501		NE	brick inscription
6502		NE	brick edged plinth at eastern end of f5 with lots of broken bricks
6503		NW	earthenware drainage hole in corner of structure f5
6504		SE	f6 path from f5
6505		SW	f7 concrete slabs
6506		S	f7 underlying edge of structure beneath slabs
6507		N	tar on top of slab
6508		N	texture of tar
6509		NW	tar on top and edge of slab.
6510		NE	f8 concrete base of structure.
6511		NE	recess around edge of structure
6512		NE	recess around edge of structure
6513		NE	nail with square head
6514		SW	entrance at east side of structure f8
6515		E	path f9 leading towards bunker. concrete in foreground, stone further along
6516		E	path f9 leading towards bunker. concrete in foreground, stone further along
6517		NW	reinforced glass at edge of f8
6518		NW	reinforced glass at edge of f8
6519		SW	path f9 with stone base
6520		SW	path f9 with stone base
6521		S	stone bridge over burn
6522		E	stone bridge over burn
6523		N	concrete bunker f10
6524		NE	imprint of corrugated iron
6525		N	entrance of bunker
6526		W	east side of f10 bunker
6527		SW	east side of f10 bunker
6528		S	chute in top of bunker
6529		N	ventilation hole in top of bunker
6530		E	services to east of bunker
6531		NE	feature 11 piled stones and metal fixing
6532		E	feature 11 piled stones and metal fixing
6533		W	feature 11 piled stones and metal fixing
6534		N	metal fixing on f11
6535		N	f12 concrete base
6536		NE	f12 concrete base
6537		SW	oval markings near centre of f12 (stove?)
6538		NNE	f13 concrete path between f12 and f15

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Photo No.	Camera Point	Facing	Description
6539		NW	section of f13 with broken sections
6540		NE	f14 drainage ditch
6541		SE	f14 drainage ditch with courses of large stones on south bank
6542		SW	ramp where f13 path meets f15 eastern side
6543		NW	f15 concrete base of structure
6544		W	f15 concrete base of structure
6545		S	north corner of f15
6546		S	north corner of f15
6547		N	f16 small stone shieling
6548		NE	f16 small stone shieling
6549		SE	f16 small stone shieling
6550		SW	f16 small stone shieling
6551		NW	f15 west end with brick debris
6552		NW	f15 west end with brick debris
6553		SE	connecting passage between f15 and f17
6554		NE	connecting passage between f15 and f17
6555		S	f17 concrete base of structure
6556		SE	f17 concrete pad on north side of structure
6557		NE	f17 possible drainage channel with possible external cistern
6558		NE	evidence of internal division in f17
6559		N	debris across south end of f17
6560		NE	slots within recessed edge of f17
6561		NE	f18 concrete base with wooden slats
6562		SE	f18 concrete base with wooden slats
6563		N	small rectangular recess or cistern f19
6564		W	small rectangular recess or cistern f19
6565		W	rectangular concrete pad f20
6566		S	rectangular concrete pad f20
6567		SW	f21 rectangular concrete pad with hole – casting flaw
6568		S	f21 rectangular concrete pad
6569		NE	erosion at edge of f21
6570		S	f22 concrete base of structure
6571		SW	concrete pad at centre of f22 (stove?)
6572		SW	concrete pad at centre of f22 (stove?)
6573		N	detail of gouges around pad in centre of f22
6574		SW	entrance of f22 at west end with f23 connecting path
6575		S	entrance of f22 at west end with f23 connecting path
6576		S	f24 concrete base of structure
6577		SW	f24 concrete base of structure

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Photo No.	Camera Point	Facing	Description
6578		SW	f26 access track for nissan hut area
6579		S	edging stones on north side of f26
6580		NE	access track f26
6581		NE	drainage ditch f14 on south side of access track
6582		NE	drainage ditch f14 on south side of access track
6583		SW	entrance gateway at west end of access track f26
6584		SW	collapsed metal gate at entrance
6585		S	gateway with collapsed gate
6586		S	detail originally at top of gate
6587		SE	east end of path f27
6588		SE	footprints at east end of path
6589		NW	path f27
6590		NW	footprints on path
6591		NW	footprints on path
6592		NW	footprints on path
6593		-	footprint compared to boot (size 6)
6594		NW	footprints at west end of path
6595		SE	path f27
6596		SW	f28 concrete base of structure
6597		SW	revetment wall f30
6598		W	f28 concrete base of structure
6599		E	damage to concrete pad f28 by ditch and layby
6600		E	damage to concrete pad f28 by ditch and layby
6601		SW	material at south end of f28
6602		SE	material at south end of f28
6603		NE	material at south end of f28
6604		SE	'bite' out of concrete at north end of structure
6605		SW	drainage hole at north end of f28
6606		SW	debris outside f28
6607		SW	debris outside f28
6608		W	f29 section of dry stone wall or dyke
6609		SW	concrete base of structure f31
6610		S	concrete base of structure f31
6611		SW	detail of edge of raised area f31
6612		NE	f32 semi-circle of stones
6613		NW	f32 semi-circle of stones
6614		SW	metal tether for stay set into concrete f33
6615		NE	stone cobbling with neat lines of stones f34

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Photo No.	Camera Point	Facing	Description
6616		WNW	approximately circular area of cobbling f34
6617		SW	approximately circular area of cobbling f34
6618		W	f35 square stone recess or tank in centre of f34
6619		S	toilet block on north side of radar station
6620		SE	toilet block on north side of radar station
6621		N	drains and concrete channel in toilet block
6622		SE	concrete plinths f37
6623		S	concrete plinths and settings for wooden posts (mast)
6624		S	setting for wooden posts (mast)
6625		E	west external wall of radar station with wooden beam, drainage pipe and iron and wooden superstructure inside wall
6626		SE	wooden beam sticking out of wall
6627		E	wood and iron superstructure within wall of radar station
6628		S	beam-slot for wood set within plinth f37b
6629		S	north elevation of radar station f38
6630		SW	north entrance of f38 with concrete quoins
6631		SE	section of external wall in north entrance f38, steep step
6632		SW	concrete ramp leading to north entrance with grip slats
6633		NW	east and south elevations of f38
6634		W	south end of east elevation of f38, lower stonework has less concrete pointing
6635		N	south elevation of f38 with wider entrance
6636		E	section of wall at south entrance
6637		N	north west internal corner of f38
6638		N	internal raised concrete with chamfered edge and recessed channels
6639		N	internal concrete area in north end of f38
6640		N	detail of recessed channels within concrete
6641		N	deep recessed channel in northeast corner, now filled in with stone
6642		S	recessed channel in south end of f38
6643		W	drainage pipe and beam-slot in west wall f38
6644		SW	north elevation of f39
6645		S	north elevation of f39
6646		S	north elevation of f39
6647		S	entrance of f39
6648		SW	inside west wall of f39 with slots in wall

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Photo No.	Camera Point	Facing	Description
6649		SW	internal wooden structure
6650		S	inside south wall of f39 with blocked up windows
6651		SE	inside east wall
6652		SE	inside east wall
6653		S	concrete shuttering marks on ceiling of f39
6654		W	east elevation of f39
6655		W	metal bolt in east external wall
6656		N	south elevation of f39
6657		N	detail of blocked in window with concrete quoins
6658		E	west elevation of f39 with concrete pad
6659		N	f40
6660		N	imprints of block/brickwork in concrete of f40
6661		W	concrete overlying bedrock f40
6662		S	f40
6663		S	slots within concrete blocks at centre of f40
6664		S	slots and metal fixings within central blocks
6665	3	SE	view towards f41
6666		SE	f41 west elevation
6667		S	f41
6668		SW	concrete shuttering marks on ceiling f41
6669		S	internal corner f41
6670		SE	doorway of f41
6671		NW	east elevation of f41 with drystone walling abutting structure
6672		NW	f42 concrete footings of structure
6673		NW	metal fixings on arm of f42
6674		NW	metal fixings and marks from structure once attached to footings f42
6675	4	NNE	general view of development site
6676	4	NW	general view of development site
6677	4	W	general view of development site
6678		NW	f43 concrete base
6679		NE	f43 west side of concrete base
6680	5	N	general view across part of development site
6681	5	W	general view to west of development site
6682	5	E	general view across part of development site
6683	6	E	general view of development site
6684	6	SE	general view of development site
6685	6	S	general view of development site

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Photo No.	Camera Point	Facing	Description
6686	6	SSW	general view of development site
6687	6	SW	general view of development site
6688		SW	f44 concrete pad with metal objects
6689		SW	f44 within f45
6690		SW	f45 subcircular feature
6691		WSW	f45 with possible entrance on east
6692		S	f45
6693		N	larger loose stones on south side f45