

Ross and Cromarty Archaeological Services

West Coast Archaeological Services

Tiree Capital Maintenance - Water Main Rehabilitation, Schemes 1, 2 & 4

ARCHAEOLOGICAL MONITORING



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Summary

Ross and Cromarty Archaeological Services and West Coast Archaeological Services conducted an archaeological monitoring during the rehabilitation of the water main on the Isle of Tiree, located off the west coast of Scotland. The monitoring was recommended as a result of consultations between Scottish Water and West of Scotland Archaeology Service. 132 individual features were recorded during the monitoring; they include Post-Medieval structures, quarry pits, middens, a relict track, standing stones and WWII structural remains. Few artefacts were recovered from the pipeline trench; these included Post-Medieval pottery, glass and metalwork together with a stone tool and a pottery sherd, which could date from the prehistoric period.

1.0 Introduction

A programme of archaeological monitoring was conducted between 13th November 2012 and 2nd February 2013 during the digging of a new trench to facilitate the water mains rehabilitation on the Isle of Tiree. The monitoring requirement arose as a result of pre-development consultation between Scottish Water and West of Scotland Archaeology Service. The Isle of Tiree, the western-most island of the Inner Hebrides, has a significant number of prehistoric and Post-Medieval archaeological sites, many of which lie in close proximity to the route of the water main.

2.0 Aims and objectives

The general aim of the archaeological monitoring was to identify and record any features or objects of archaeological importance uncovered by this development, in order to minimise any delays or disruption to the project and to propose appropriate mitigation in the event that significant features of interest were uncovered¹. The *Scottish Planning Policy 2010* and PAN 2/2011 describe how archaeology should be managed when considering planning decisions and determining conditions for developments that have an impact on the historic environment².

The end result of the fieldwork is to make available the records of any archaeological remains found on a site.

The specific objectives were:

- To establish the presence or absence of archaeological remains within the development area
- To remove by hand any overburden in order to expose the archaeological deposits
- To record and excavate all features and recover any artefacts prior to their destruction
- To sample deposits for post-excavation work, including environmental analysis and dating
- To make recommendations for post-excavation work, when required

3.0 Site Location

The Isle of Tiree is located off the west coast of Scotland, approximately 48 miles northeast of Oban and 17m west of the Isle of Mull. The neighbouring island of Coll is located northeast of Tiree. Three areas on the island situated around 10-20m OD underwent development work to rehabilitate the existing water main line (Figure 1).

¹ Highland Council 2012 and Institute for Archaeologists (IfA) 2008

² The Scottish Government 2010 and 2011



Figure 1: Map³ of Tiree showing the location of the proposed pipeline works based on information supplied by Scottish Water

³ Contains Ordnance Survey data. Crown copyright and database rights 2013.

The first section of water main (**Scheme 04-Balephuill**) is located near the B8067 road between Balephuill and West Hynish in the southwest corner of the island. The south half of this line is located along the rocky coastline while the north half turns inland, running northeastward over machair land through Balephuill.

The second section (**Scheme 02-Crossapol**) is located near the B8065 road in Crossapol close to the central south coast of the island, on the southwest side of the Tiree Airport. This section of the route crosses through both cultivated fields and undulating machair land.

The third section is located in the northeast corner of Tiree. The west end of this line (**Scheme 01-Silversands& Caolas**) is situated on the north side of Gott Bay on the south coast of the island and runs through grassy machair land. The east end of the line (**Scheme 02 – Silversands & Caolas**) runs from the settlement at Brock eastward across poorly drained ground with areas of rock outcrop to the base of Dun Mor a' Chaolais broch. The last section runs northward across poorly drained fields to Caolas House.

4.0 Archaeological and Historical Background⁴

Tiree, one of the Inner Hebrides, measures about ten miles long with forty-six miles of coastline comprising rocky shores and white sandy beaches. The island is characterised by an outer ring of grass-covered sandy machair land, a middle section of rich soil, and a central wet, peaty ground known as *sliabh*. The fertile island is divided into thirty-one crofting townships consisting of 286 crofts, most having a section of each type of ground. The remains of numerous prehistoric sites, Post Medieval settlements and world war era sites are scattered throughout the island.

There are over twenty Iron Age duns situated on the coastal crags of Tiree and two brochs are located in northeast Tiree. *Dùn Mòr Bhalla* ('the big fort of Vaul') broch, on the north side of the island, was excavated by MacKie between 1962-4. To the southeast of Vaul, *Dùn Mòr a' Chaolais* (the big fort of Caolas) broch stands on the hill above Milton harbour.

In the 6th century, St. Columba established a monastery on Tiree (WoSAS Pin59), the location of which may have been either the burial ground at Soroby or Kirkapol. Both sites contain early Christian and Medieval cross-slabs. The island would also have been occupied during the Viking period and there are two probable Viking grave sites on the island, one of which contained a tortoise-shell brooch and bronze pin recovered in the 19th century. The native Gaelic-speaking population survived alongside the Norse resulting in the *Gall-Gaedhil* culture in the Hebrides. In the subsequent centuries, the Hebrides became an unsettled battleground between the Kings of Norway, the Isle of Man, local warlords and later the Scottish Crown.

In the Post Medieval period, the population of Tiree peaked at close to 4,500 in the 1830s as a result of more effective agricultural practices and the kelp industry. Kelp, which yielded soda and potash for soap, glass and bleach, was the second most important industry on the island. Kelp was dried on rubble stone walls along the shoreline and from June to August it was burnt in U-shaped pits. Remains of the kelp pits and walls can be seen at the west end of Balevullin beach at *Tràigh Bhì* by Ceann a' Bharra.

Between 1848 and 1852, the island saw a significant amount of emigration. In 1863, the North British Chemical Company built a factory in Middleton on Tiree, known as the 'Glassary', for the purpose of

⁴ Sources: <http://www.isleoftiree.com> and *West of Scotland Archaeology Service SMR*

extracting iodine from kelp. The charcoal residue was sold for fertiliser and deodorants for earth toilets and the gas waste was used to light the buildings. Evidence taken by the Napier Commission in 1883 from Donald MacLean, a 65 year old cottar from Kilmoluaig, recorded the conditions of the workers: *"they [the kelp workers] are badly treated in many a way. They very often have to get up at midnight [for the low spring tides] and go away and pick up tangle out of the surf when the sea is washing over them, and take it up out of the reach of the tide on their backs over rough ground."* In 1901, the factory closed down and the majority of it was demolished for use during the Second World War.

A considerable number of ruinous Post Medieval settlements are found on Tiree and twelve thatched buildings survive. The traditional house was built of partly dressed stones laid with a layer of sand between a double-skinned wall, measuring up to six feet wide with deep inset windows and one doorway. Roof trusses were set onto the inside wall allowing water to run off the roof between the two layers of stone. Muran (grass) thatch was held down with ropes connected to stone weights. Most of these houses went out of use on Tiree by the 1950s.

In 1926, a meteorological station was set up in Cornaig schoolyard with the headmaster reporting weather observations three times a day. An enclosure built around the equipment in 1935 is located to the northwest of the school. There was a considerable military presence on Tiree during the war years and the RAF took over and moved the weather station to Crossapol. Other war-time ruins can be found dotted across the island.

5.0 Methodology

5.1 Desk-based Assessment

The purpose of the desk-based assessment (DBA) was to gain information about the known archaeology or potential for archaeology within the development site (including the presence or absence, character and extent, date, integrity, state of preservation and relative quality of the potential archaeological resource), in order to make an assessment of its merit to assist in the formulation of a strategy for work⁵. This information serves to inform the archaeologist of the potential nature of archaeological features to be uncovered during fieldwork.

A check of all available historical and archaeological records, aerial photographs and historical maps was conducted using the West of Scotland Archaeology Service Sites and Monuments Record, the National Monuments Record of Scotland (NMRS), Historic Scotland's databases, the National Library of Scotland and any other available records or online resources about the site.

5.2 Watching Brief

The archaeological monitoring of sections of the water main trench excavation was conducted through watching brief under close archaeological supervision of a mechanical excavator or trencher. It was not deemed necessary for the entire length of the new water mains trench to be subjected to a watching brief. Decisions as to the lengths to be watched were made based on the excavation method employed by the ground crew, ground conditions and the archaeology, and potential therefor, in the immediate vicinity (Figure 2).

⁵ Institute for Archaeologists 2012(a)



Figure 2: Map⁶ showing the location of the pipeline monitored during the archaeological watching brief.

⁶ Contains Ordnance Survey data. Crown copyright and database rights 2013.

All potential features of archaeological interest were cleaned back, half-sectioned and excavated by hand. Feature sections were drawn at a scale of 1:10 or 1:20. Any significant archaeological features were sampled and all archaeological finds were recovered and retained for post-excavation analysis and reporting.

All fieldwork was conducted in accordance with *Institute for Archaeologists' (IfA) Code of Conduct*⁷. All on-site recording was carried out according to standard IfA procedures, using written records and drawn plans.

5.3 Photography and recording

The development site was recorded using high resolution digital photography prior to the start of works and throughout the watching brief in order to record the evaluation as well as any features or finds of interest.

The areas monitored were plotted using a Trimble Geo-XR Rover capable of centimetre accuracy and a Garmin eTrex H handheld GPS Navigator.

6.0 Results

6.1 Desk-based Assessment

A desk-based search was carried out in advance of the fieldwork.

6.1.1 Cartographic Sources

The site location and surrounding landscape were examined on mapping held at the National Library of Scotland on-line⁸:

Blaeu's Atlas of Scotland, 1654 *Western Isles of Scotland*

There is no detail on this map apart from three place-names: *Keand dauar*, *Kilchainie* and *Kirkabol*.

Herman Moll, 1745: *A Map of the North West part of the Western Islands*

There is no detail on this map. *Keandavar*, *Kilkainie* and *Kirkabol* are still depicted along with *Soroby*.

John Thomson's Atlas of Scotland, 1824: *Northern Part of Argyll Shire. Southern Part*

Again there is no detail on this map other than place-names.

First Edition OS 6-inch-to-the-mile maps:

***Argyllshire*, Sheet LXV – Surveyed 1878, published 1882**

Silversands - Caolas

Starting at the Silversands end of the pipeline route, there is a roofed building shown situated on rough ground above the high water mark where a dwelling exists today. Two roofed buildings are shown at Brock. Following the pipeline route from Brock through Ruaig, there are several roofed buildings

⁷ Institute for Archaeologists 2012(b)

⁸ NLS 2013

situated on improved land. At *Laighnis* is an enclosure with an unroofed structure within it. Also depicted is the broch *Dun Mor a Chaolais*. A well is marked in the vicinity of site 49f.

Argyllshire, Sheer LXXVIII – Surveyed 1878, published 1882

Helypol – Crossapol

There are some roofed dwellings marked along the pipeline route.

Balephuill – West Hynish

There is a dense concentration of roofed buildings depicted at Balephuill. However, the buildings depicted at West Hynish are unroofed.

Second Edition OS 6-inch-to-the-mile maps

Argyll and Bute Sheet LXV and LXXIX – Revised 1898, published 1901

Silversands – Caolas

The only change from the 1st edition map is at the settlement of Brock, which has expanded to eleven roofed buildings.

Argyll and Bute Sheet LXXVIII

Helypol – Crossapol

There is no change from the 1st edition map.

Balephuill – West Hynish

There is little change here, although some of the buildings at Balephuill have gone out of use and are no longer roofed.

6.1.2 Site Records

The following NMRS and WoSAS site records have been identified in close proximity to or within the general area around the sections of water main pipeline to be affected by the project:

Silversands – Caolas

WoSAS Pin 60029

**NM 05893 47575
to NM 05517 47514**

Silversands / Kirkapol, mounds

Survey in 2001 recorded a series of mounds within enclosed fields to the N side of the public road. They measure between 5m and 8m in diameter and stand up to 1m high and were interpreted as possible clearance cairns covered over with blown sand or as natural sandy mounds.

WoSAS Pin 60028

NM 05893 47575

Kirkapol, mound

A grassy, amorphous mound was recorded in 2001 within an enclosed field to the landward side of the public road to the W of an old drainage channel. The mound, which is hollowed at the top and appears to have been disturbed, measures 5m in diameter and stands up to 1m high.

WoSAS Pin 82

NM 0655 4777

**Ruaig, settlement, pottery, flints,
hammerstone, scraper**

NMRS No. NM04NE 12

Reported by Beveridge in 1903, pottery, some decorated, and iron implements were recovered from the

dunes at Ruaigh at a depth of 8ft. Beveridge had also found a flint, a hammerstone and pottery in the same area. In 1958, two flints, one of them a thumb scraper, were also found and in 1972, the OS survey recorded a scatter of undecorated pottery in the dunes.

WoSAS Pin 60060

NM 0705 4715

Ruaig, mound

A mound located on rough ground in an enclosed field was recorded in 2001. Subcircular in shape, it measured 10m in diameter and up to 1.2m high.

HB No.17867

NM 0668 4746

Ruaig 5A, B, C, D, E Brock

Five traditional dwellings are classified as Category B listed buildings by Historic Scotland. Buildings 5A and 5C – Two 19th century traditional, single-storey 3 bay rubble white-washed cottages. Building 5D – A pair of adjoining 19th century traditional single storey 3 bay cottages with mortared, white-washed rubble. Buildings 5B and 5E – Two earlier 20th century single storey 3 bay (with extension) cottages with white-washed rubble.

WoSAS Pin 87

NM 0697 4784

Ruaig, crofts and farmstead

NMRS No. NM04NE 17

Part of a croft, a linear group of hip-roofed buildings measure 36m in length overall. A ruinous thatched dwelling-house, the remains of a small byre, a barn, a small thatched store and a felt-roofed cart-shed are located in the same area and probably date to the early 19th century when the crofting divisions at Ruaig were first formed. The croft-house is an example of the later chimneyed version of the thick-walled Hebridean house.

WoSAS Pin 93

NM 0769 4709

Rubha Sgibinis, dun

NMRS No. NM04NE 7

Decorated pottery and hammerstones were recorded here by Beveridge in 1903. He also notes a possible hearth as a paved area between the dun wall and the outer wall. In 1980, the OS recorded that the dun is situated at the SE extremity of a low rocky promontory overlooking the shore at the W end of Poll a' Chrosain. Only the NW half of the dun survived, but it may have originally enclosed an oval area of about 12m from N to S by 10m. The wall, spread up to 2.6m wide, appeared as a low stony mound where sections of the outer face were still visible. The position of the entrance is uncertain, but it probably lay on the NNE. There were no visible internal features, except for a recent enclosure on the W side, and the entrance is interpreted as lying on the NNE side. An outwork was visible on the landward side of the dun, where a robber trench revealed the line of the inner face of the wall. Sections of the outer face of this outer wall were visible, comprising some large boulders. The entrance may have been located on the WNW side, the slight remains of a sub-rectangular enclosure of unknown date was recorded between the dun and the outwork.

In 2001, the site was described as located on the level tip of a low green promontory. The outer wall comprised an earthen bank built between rock outcrop running to the coast edge on the landward side of the promontory. On the promontory, a 0.5m high wall built of large upright boulders extends for some 12m and has a possible entrance at the centre. The probable dun wall was located close to the tip of the promontory and comprises a curvilinear, stone-faced revetment wall measuring 13m long and 0.75m wide and standing up to 0.6m high. It enclosed a relatively level area, measuring some 16m by 16m and traces of structural footings were visible within the interior.

WoSAS Pin 60059

NM 0791 4751

Poll a Chrostain, wall/enclosure

A boundary wall and possible enclosure were recorded in 2001. The very degraded drystone wall comprising intermittent, grass-covered large boulders runs inland from the coast edge, visible for over

50m. One the W side of the wall is a setting of earthfast stone which may have been a curvilinear enclosure.

WoSAS Pin 60058 NM 0812 4725 Milton, agricultural boundary

A degraded, grass-covered wall runs inland for over 100m from the coast edge and measures 0.5m wide and up to 0.4m high. There is a second, similar wall located some 75m to the SE. There are possible cultivation remains in the area, indicating that these boundaries mark out an area of strip cultivation. Several smaller walls run off these main boundaries and appear to define a field system, possibly of later date.

WoSAS Pin 86 NM 0827 4766 Dun Mor a' Chaolais, cup-markings
NMRS No. NM04NE 16

Located about 27m to the W of the broch, on the edge of a low rock outcrop, there are at least seven plain cup-markings, forming an irregular pattern, the largest being about 80mm in diameter and 25mm deep.

WoSAS Pin 79 NM 0832 4767 Dun Mor a' Chaolais, broch
NMRS No. NM04NE 1

Located at 39m OD on Dun Mor a' Chaolais, a low rocky hill (39m O D) which dominates the NE end of Tiree, is the remains of a broch and outworkings. Beveridge reportedly recovered pottery and ceramic spindle whorls on the site.

The broch measures approximately 12m in internal diameter with an outer wall originally about 3.7m wide but later increased up to 5.8m wide, although it has been significantly robbed, particularly to the NE. On the SW, the wall survives as a grass-covered stony bank about 1.5m high, with some sections of inner and outer faces still visible. There is a possible intramural chamber visible on the ESE and SSE sides. On the SW side, there are traces of a well-built intramural gallery which measures about 0.8m wide. On the W side, a ruinous Post Medieval rectangular building conceals a possible intramural feature (guard cell) to the S of the entrance.

An external revetment 2.1m wide has been built against the outer face of the broch on all sides, presumably to give added stability to the drystone wall, but possibly also to allow it to be increased in height. It is best preserved on the SW half of the perimeter. The outwork appears from the W side of the broch, although partially disturbed by construction of a later subrectangular enclosure. The SW half is best-preserved visible as a grass-grown stony scarp standing up to 1.6m in height with sections outer facing stones visible. There is an entrance 2.1m wide on the S, and there may have been another entrance in the N. An Ordnance Survey triangulation station has been constructed on top of the broch wall on the N, and a modern marker-cairn overlies the line of the inner face on the W.

WoSAS Pin 44711 NM 0849 4769 Caolas, corn mill and fanning house
NMRS No. NM04NE 25

A mill and associated structure is depicted on the 1st and 2nd editions of the O.S. 6-inch maps (Argyllshire), 1882, 1898, sheet lxxv, NE.

Crossapol

WoSAS Pin 60085 NL 99560 42895 Crossapol, military building, kelp working sites, cultivation remains

Recorded in 2001 near the shoreline on the S side of the road, the sites are described as:

- 1) Two oval-shaped hollows with a slight enclosing bank measuring 3m in diameter by 1m deep are set into sloping ground inside an enclosed field.
- 2) A breeze block WWII structure is located in the same field as 1) and may be associated.
- 3) The remains of two kelp drying walls, built of beach stone, are located in a field adjacent to 1) and 2) and there are also traces of old cultivations in this area.

WoSAS Pin 60084

NL 9954 4299

Crossapol, mound

A grass-covered mound located within an enclosure near the shoreline on the S side of the road was recorded during survey in 2001. The subcircular mound is conical, with a flat top in profile and measures 14m in diameter and stands up to 1.5m high. Large stones are visible on the W side where the site has been disturbed. The size of the mound suggests that it may be a prehistoric burial mound.

WoSAS Pin 46

NL 997 433

Crossapol, mound

NMRS No. NL94SE11

In 1903, Beveridge recorded a distinct artificial mound with ‘a small erection of only about 3 feet interior diameter upon the centre’ between the road and the beach at Crossapol. However, in 2001 there was no sign of the mound and the ruins of a Post Medieval house located 20m from the shoreline were recorded. The building, almost roofless, was built from quarried stone with granite door and window sills and chimneys in both gable ends.

WoSAS Pin 60080

NL 99942 43643

Crossapol, military camp

The remains of a WWII army camp and refuse dumps were recorded in 2001 on a grassy strip of land between the shore and the road. The site comprises the footings of numerous brick and concrete rectangular buildings with concrete roofs, some of which are still in use as stores. Refuse dumps associated with the building are eroding from the sand dunes along the shore and contain broken up building materials, glass, metal, utensils and batteries.

WoSAS Pin 47

NL 9940 4355

Island House, Tiree

NMRS No. NL94SE 12

In 1922, a large boulder was identified as having six small circular cups and two vesica-shaped cavities. The boulder was located in the meadow half a mile E of Island House and approximately 250m W of the road

Balephuill – West Hynish

NMRS No. NL93NE 7

NGR unknown

Ben Hynish, findspot

Reported by Beveridge in 1903, an oval stone axe 3 ¼” long with a ½” central perforation was found on Ben Hynish, Tiree

WoSAS Pin 60124

NL 62180 38965

Ben Hynish, possible house

The foundations of a rectangular building are sited on low lying grassland below sloping rocky ground and to the E of a small pebble beach. The building measures 11m by 5m in plan and has walls 1m wide. It is built from large quarried blocks. There is an internal dividing wall. A field wall runs off from the NE corner of the building.

WoSAS Pin 43995

NL 9600 3940

West Hynish, township

NMRS No. NL93NE 15

A township comprising eleven unroofed buildings, three of which are long buildings, is depicted on the 1st edition of the OS 6-inch map (Argyllshire, Island of Tiree etc. 1882, sheet lxxviii). Two unroofed, five roofed buildings, four enclosures and a sheepfold are shown on the current edition of the OS 1:10000 map (1976). In 2001, the township was recorded as the ruinous remains of several Post Medieval structures, which extends 100m from the coast edge.

WoSAS Pin 43994

NL 9640 3990

West Hynish, building & field system

NMRS No. NL93NE14

One unroofed building (NL 9619 3998) attached to a wall, a field-system and a head-dyke are depicted on the 1st edition of the OS 6-inch map (Argyllshire, Island of Tiree etc. 1882, sheet lxxviii) and on the current edition of the OS 1:10000 map (1976).

WoSAS Pin 60044

NL 9568 4011

Balephuill Bay, township

Recorded in 2001, the site is described as a group of blackhouses set close to the coast edge. Some of the houses are in ruins, others have been renovated.

WoSAS Pin 44

NL 9559 4014

Dunan Nighean, dun

NMRS No. NL94SE1

From the 1974 RCAHMS survey, the site is described as the severely denuded remains of a dun occupying the NE corner of a large rocky stack situated on the shore immediately W of Balephuill village. Roughly oval in shape, it measured approximately 17m from NE to SW by 12m internally within a grass-covered stone wall, which has been reduced to a band of stony rubble spread up to 4m thick. Only one portion of the outer wall face was visible on the N side and the entrance was probably located to the NE. The interior has been extensively disturbed, probably due to robbing. There appeared to be an outer wall on the landward side, which appears as rubble spread with one stretch of outer face still visible between outcrops. There may have been the remains of a causeway on the E side of the dun-possibly suggesting that in a secondary phase of use the dun served a domestic use. Artefacts found in the middens next to the dun (by E Beveridge and C M Piggott 1954) are sherds of coarse native pottery similar to that found in brochs and wheel-houses, stone and bone tools, the upper stone of a rotary quern, spindle whorls and a deposit of clay probably intended for the manufacture of pottery.

A visit in 2002 described the site as a rocky outcrop surrounded by the sea on three sides with a few relatively level areas close to the summit. There were no clear traces of structural remains surviving although groups of stones may indicate ruined walling and small areas of erosion have exposed organic soil deposits contain fragments of bone and shell. A natural fault running across the outcrop, separates it from the land and at the northern end of the gully a crossing place comprising a cobble surface was constructed. Shell, bone and crumbs of pottery of probable prehistoric date were visible below the cobbles.

WoSAS Pin 54

NL 9565 4035

Balephuill, findspot

NMRS No. NL94SE19

A quernstone was found in Balephuill.

WoSAS Pin 43993

NL 9640 4090

Balephuill, crofting township

NMRS No. NL94SE32

A crofting township comprising four unroofed buildings, one of which is a long building, four partially roofed buildings, two of which are long buildings, twenty-seven roofed buildings, ten of which are long buildings, and eighteen enclosures is depicted on the 1st edition of the OS 6-inch map (Argyllshire,

Island of Tiree 1882, sheet lxxviii). Eleven unroofed, five partially roofed, sixteen roofed buildings and several enclosures are shown on the current edition of the OS 1:10000 map (1976).

6.2 Fieldwork

6.2.1 Watching brief

6.2.1.1 The fieldwork took place between 13 November 2012 and 2 February 2013. The weather was variable with a mix of dry spells, wind, rain and sleet.

Open trenching was used throughout rather than the planned use of access pits shown in Figure 1. The stretches of pipeline depicted in Figure 2 were excavated under archaeological supervision using either a flat-edged bucket or a trenching machine and do not represent the full extent of the pipeline. The pipeline trench was generally about 0.25 – 0.30m wide and up to 1.2m deep.

A total of 132 individual sites were recorded during the archaeological monitoring; most were not under threat of impact by the pipeline, but were surveyed for the completeness of the archaeological record during periods of trench back-filling, which did not require an archaeologist's presence. A full list of the sites is provided in the Gazetteer of Sites (Appendix 1).

6.2.1.2 Silversands – Brock (Scheme 01 – Silversands & Caolas)

The pipeline route from Silver Sands to Brock (Figure 3) ran through mostly sterile, deep sand although possible buried turf lines were evident in some areas at variable depths. At the eastern end, Site 1, a small arc of stone lining a hollow, was recorded. Site 2 was recorded in the trench profile (Trench 1); this was a very thin, discontinuous lens of charcoal or clinker, which is most likely quite late in date. Close to the settlement of Brock, a thin midden (Site 3) was recorded in section in several animal rubs prior to being cut by the pipeline. This contained a mix of limpets and periwinkles, charcoal and some possible white-glazed pottery. A second midden (Site 4) was recorded about 60m to the north-northeast of the pipeline route, which contained fire-cracked stone, pottery (prehistoric or later) and a possible flint flake.

Approaching Brock, a layer of coal could be seen in the trench section (Trench 2), which became thicker closer to the settlement. Being made up of coal and ash deposits separated by sand deposits; this was interpreted as an earlier track surface or surfaces. The lenses of coal and ash continued towards the settlement. Adjacent to one of the houses in Brock, a cut was seen in the north-facing side of the pipe trench (Site 12a; Feature 1; Trench 3), which had layers containing lumps of quick-lime. This was interpreted as a quick-lime preparation pit (Figure 4; Plate 1). The final site of interest in this stretch of pipeline was another midden (Site 13; Trench 4). The midden extended for approximately 3-4m and was up to 0.9m in depth. The upper deposits contained coal, ash, pottery and glass. The midden became more organic in nature with depth and the deposits included large fish bone, animal bone, shellfish, charcoal, ceramics and glass. Three clay pipe stem fragments were recovered. The contents of the midden suggest that it is no older than 150 -250 years.

A series of degraded Post-Medieval structures in the vicinity of the pipeline were recorded at Brock (Sites 5, 8-10), which undoubtedly relate to the middens and trackway revealed by the trench excavation.

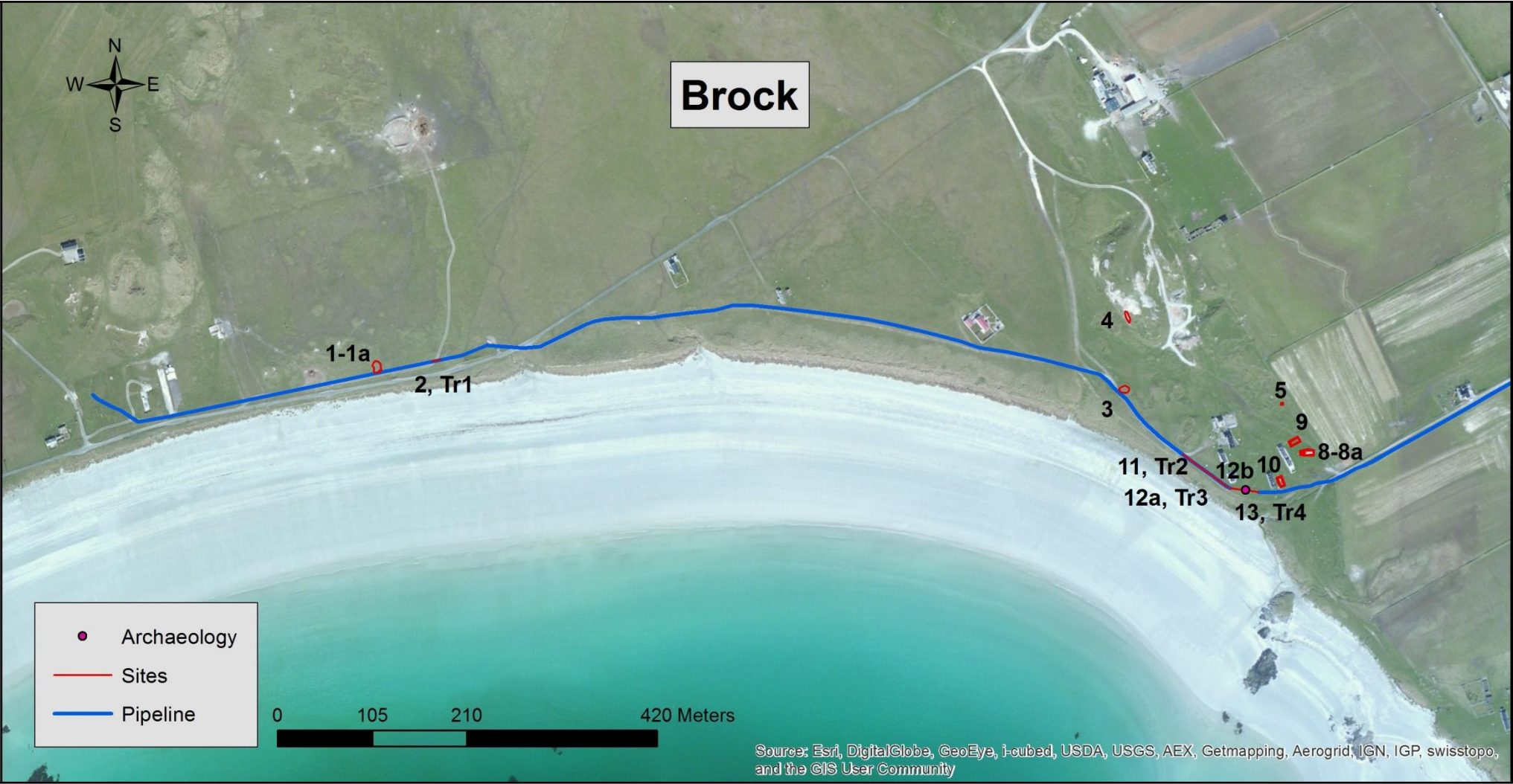


Figure 3: Plan showing the pipeline monitoring from Silversands (west) to the small settlement at Brock (east).

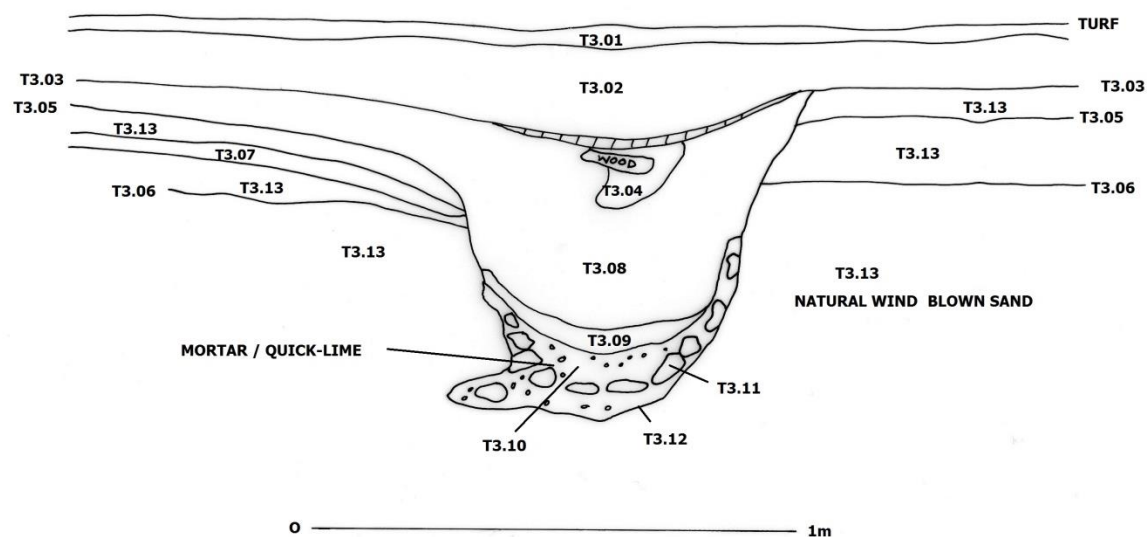


Figure 4: Drawing of the northeast-facing section of the quick-lime preparation pit (Site **12a**) as seen in the trench profile.



Plate 1: Site 12a in the trench profile.

6.2.1.2 Brock – Ruaig – Milton (Scheme 02 – Silversands & Caolas) (Figure 5)

The pipeline route as it left Brock did not reveal any further archaeological deposits. Trench 5 was dug along an old earth roadway and then passed through a stone dyke, which had no footings or foundations, and ran along the edge of the field. Several topsoil finds were made: these included metal objects, ceramics of a fairly modern nature and glass. Trench 6 was dug along an existing track up to a gate where the bedrock made excavation impossible.

Trench 7 was therefore taken from Trench 6 across an old cultivated field under a wall (Site 63), which again had no footings or foundations. Trench 8 was dug through exceedingly wet ground, generally parallel with the existing track, with no archaeological deposits or finds revealed. It passed close by two standing stones (Sites 19 and 20), which were not compromised. The antiquity of Site 19 is doubtful; local knowledge suggests that it was erected by a machine-operator. This appears to be borne out by the stone seeming to sit on the ground surface. Site 20, however, appears well-set into the ground and has been interpreted as a genuine standing stone of some antiquity. Trench 8 terminated at the southwest side of a stone-lined channel (Site 22a-b; Plate 2). Trench 9 commenced on the northeast side of the channel and ran through an area of raised beach, which contained a series of much degraded pits (Sites 42a-i) and which have been interpreted as quarry pits. This area showed much evidence of anthropogenic activity with shielings and cairns (Sites 33, 35-38), turf and stone dykes (Sites 21, 23-25 and 31) and a sheep pen (Site 40; Plate 3). Only the sheep pen is depicted on the 1st and 2nd edition OS maps.



Plate 2: The stone-lined drain (Site 22).



Plate 3: The sheep-pen (Site 40).

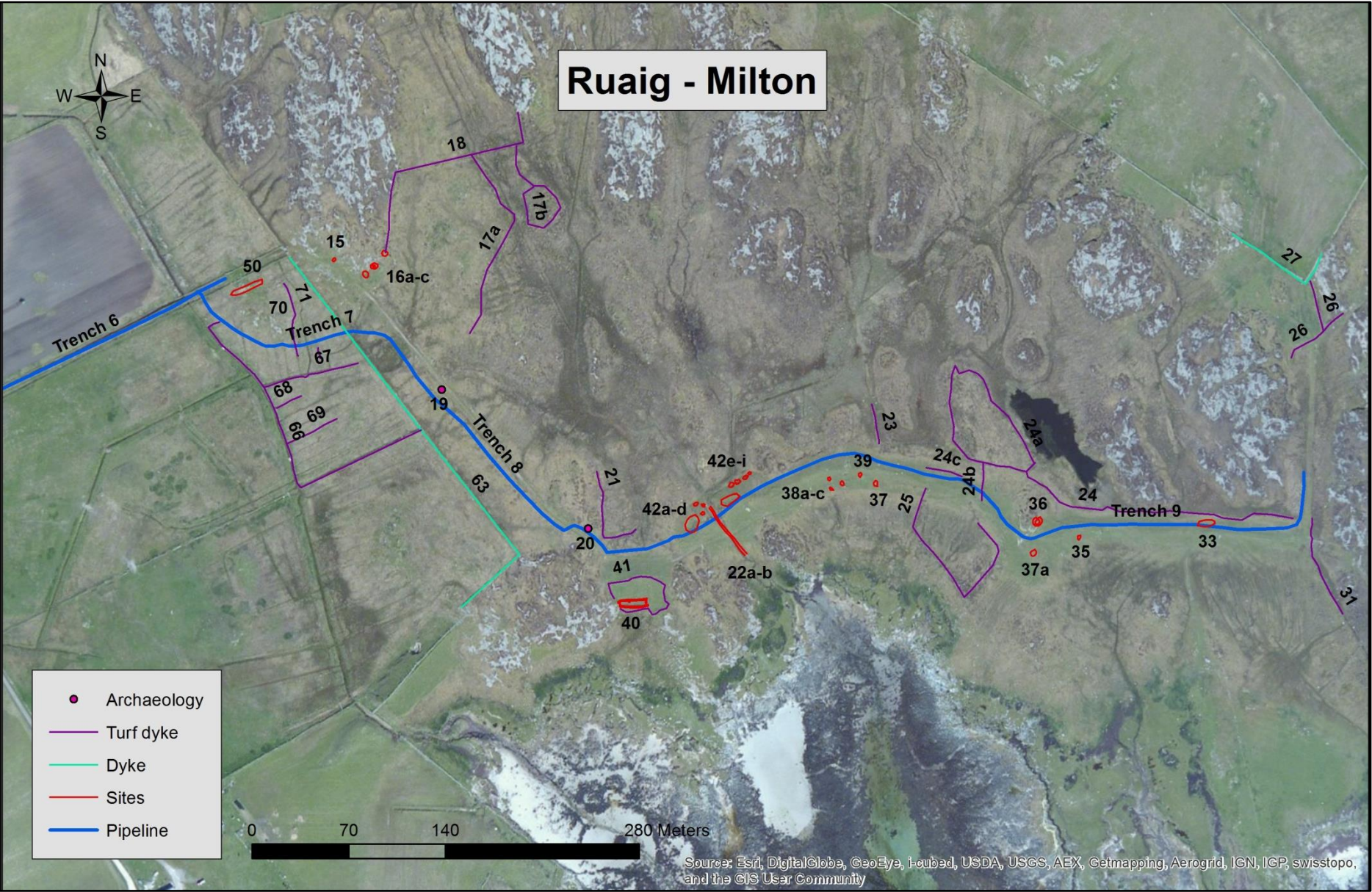


Figure 5: Map of the pipeline route monitored from Ruaig to Milton and the archaeological sites recorded.

6.2.1.3 Milton – Caolas (Scheme 02 – Silversands & Caolas)

Very little of the route of the pipeline from Milton to Caolas was monitored due to the waterlogged condition of the ground through which the pipe was routed. The stretch monitored (Figure 6) did not reveal any archaeological features or finds.

6.2.1.4 Crossapol (Scheme 02 – Crossapol)

Monitoring of Trench 10 commenced to the rear of the community centre (An Talla) (Figure 7) and ceased after the trench breached the stone dyke (Site 65; Plate 4). At the west end of the trench the ground was made up of turf and topsoil, followed by silty sand overlying clean wind-blown sand, which appeared to continue beyond the limit of the excavation. At a depth of approximately 0.7m, large angular stones were revealed, which showed evidence of shot-blasting. Estate records from the mid-1790s state that enclosure dykes and house-building had used all the available suitable stone and that blasting would be required to quarry further supplies⁹. This suggests that the dyke from which these stones appeared to come from post-dates the mid-1790s. The possible dyke also provides evidence as to the depth and time-scale of the wind-blown sand prior to the dunes stabilising.

At the north-eastern of the turf and stone dyke (Site 72) the wind-blown sand was no longer visible in the trench, being replaced by stones of variable sizes. This was an area of raised rocky beach, which had been covered by a shallow layer of silty sand and turf. As the trench moved northwards the wind-blown sand reappeared. However, in this area it appeared to briefly overlie an old ground surface situated at a depth of approximately 1.2m. A NAAFI dessertspoon (SF 13) was found towards the northern end of the trench.

Trench 11 did not reveal any archaeological deposits or finds. The upper 0.5m of the trench was disturbed in parts due to previous services work, but the lower part was clean, white sand. The trench was dug to a depth of 0.9m and the sand appeared to continue in depth.



Plate 4: The pipeline (Trench 10) breaching the stone-dyke (Site 65).

⁹ Creegan 1964

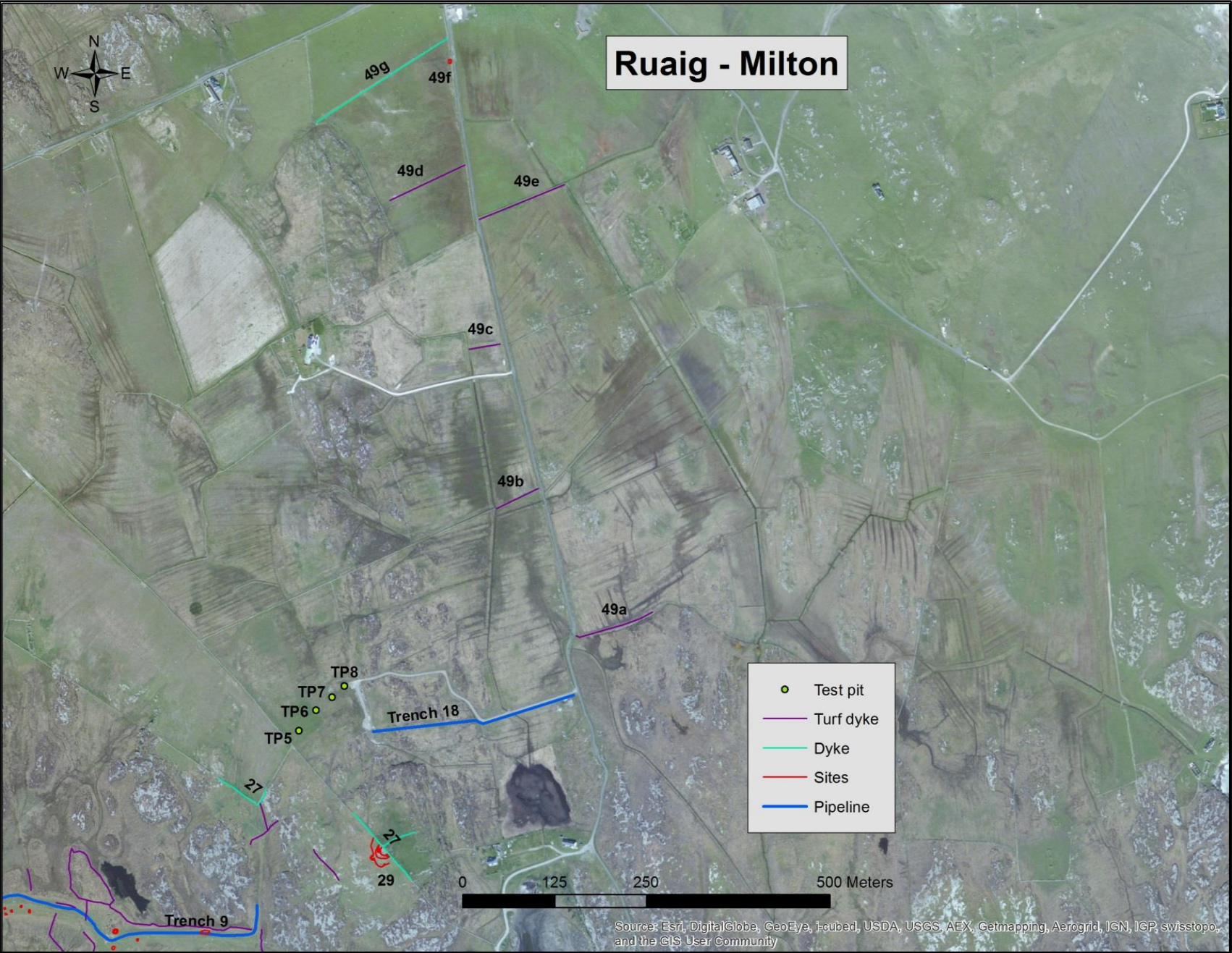


Figure 6: Map showing the route of the pipeline monitored at Milton (Trench 18).

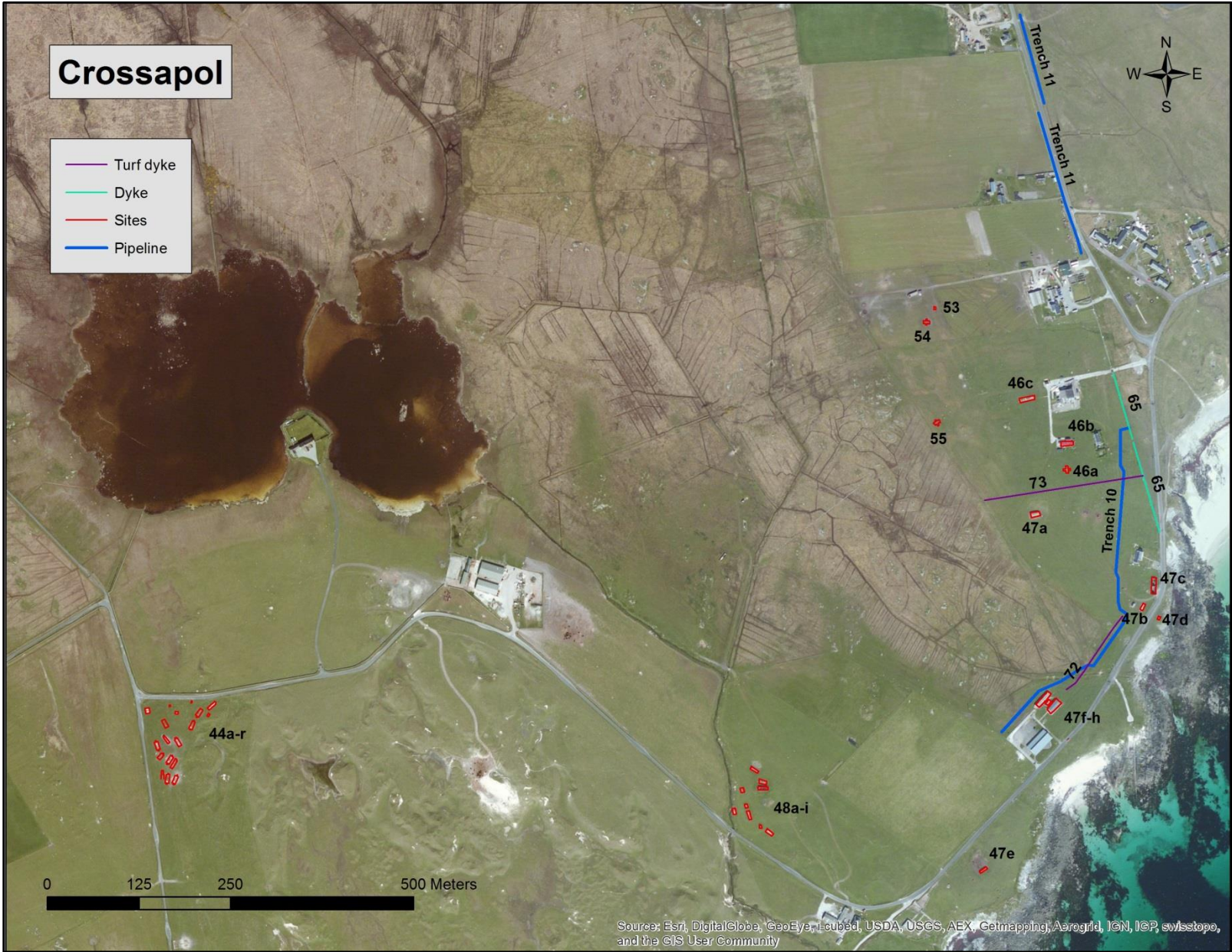


Figure 7: Map of the pipeline route monitored at Crossapol (Trenches 10 and 11) showing the archaeological sites recorded in this area.

6.2.1.5 Helypol – Crossapol (Scheme 02 – Crossapol)

This section of the pipeline was not monitored. The decision not to do so was taken based on the deposits noted in Trench **10** and the fact that the original pipeline route was to be moved to avoid the WWII remains at Helypol (Sites **44a-r** and **48a-i**; Figure 7).

6.2.1.6 Balephuill – West Hynish (Scheme 04 – Balephuill)

The route of pipeline at Trench **12** (Figure 8) varied from the original drawings supplied by Scottish Water. The intention had been to route the pipe along the east side of the road, but was altered to run along the shoreward side of the road. The ground here was undisturbed, although the old water main was located approximately 1m to the west of the new pipeline. At the southern end of the trench the thin topsoil overlay thick, dark, peaty clay, which in turn overlay bedrock. Once beyond the bedrock outcrop, the trench ran through a mix of beach cobbles and fine, sandy silt with wind-blown sand becoming evident at the northern end of the trench. A stone tool (SF **14**) was found at the base of the trench at approximately NGR NL 95821 39920. This appears to be a multi-functional tool, which may have been used as a whetstone, polisher and for grinding pigment; there is a small patch of red staining on one end. It can be best described as prehistoric or later in date¹⁰.

Trench **13** (Figure 8) begins at the southern end of Trench **12** and runs west-east. Again, this stretch of pipeline deviated from the original plan, which was to run along the southern verge of the road. Instead it ran through the field. There was thin topsoil over peaty clay, which in turn was overlain by very heavy, sandy clay as the field sloped uphill to the east. There were no archaeological features or finds revealed in this trench.

Trench **14** (Figure 8 and 9) ran through fields and along the road verge. In the course of its excavation two dykes were breached under archaeological supervision. Both had no footings or foundations and were re-instated. The trench essentially contained a thin layer of topsoil overlying clean, wind-blown sand. There were no archaeological features or finds revealed.

Trench **15** (Figure 8) ran in a southerly direction to West Hynish along an existing ditch through thick clay. As it reached the bottom of the hill the clay was replaced by beach cobbles, which continued to the end of the trench. A possible stone tool (SF **15**) was found in the trench, but this has since been dismissed as a natural stone¹¹.

Trench **16** (Figure 9) continued from where Trench **14** had stopped. Although it was an open-cut trench, it was situated hard to the edge of the road and as a consequence the deposits within the trench were very disturbed. Limited monitoring was carried out. No archaeological finds or features were recorded.

¹⁰ Hunter (pers. comm.) 2013

¹¹ Hunter (pers. comm.) 2013



Plate 5: Site 43a at Balephuill



Plate 6: Cutting through the enclosure wall (Site 43c)

Trench 17 (Figure 9) ran perpendicular to Trench 14 through a nexus of post-medieval structures (Sites 43a (Plate 5) – 43d). The pipeline route was chosen in conjunction with the archaeologist present to minimise damage to the structures. The route taken ran through the enclosure (Site 43c) avoiding Site 43d and cut the enclosure wall at a ninety degree angle at a point where there was little visible stonework (Plate 6). The bank proved to have a single course of stones on its inner face, but was otherwise composed of a mound of silty sand over an old ground surface, which overlay clean wind-blown sand. The bank appeared to have been formed from cutting a ditch on its south-side. Within the enclosure, the stratigraphy included a 0.63m deep mid-brown, sandy silt layer representing a spade-dug cultivation soil. It is presumed that the enclosure was used for vegetable cultivation before falling out of use. Two fragments of an earthenware vessel were found (SF 16).

6.2.2 Test Pits (Table 1)

Whilst not part of the original remit, test-pitting was monitored by the archaeologist on site in two locations. Test pits 1-4 were located to the north-northeast of Carnan Mor (Figure 8) and test pits 5-8 were located to the northwest of the western end of Trench 18 (Figure 5). No archaeological features or finds were recorded.

Table 1: Test Pits

Test Pit Number	Description
1	Depth 1.2m to bedrock - 0.1m of waterlogged topsoil over 1.1m of sodden sandy clay
2	Depth 1.2m to gravel – 0.1m of waterlogged topsoil over 0.9m sandy clay over 0.1m gravel
3	Depth 0.85m to stones – 0.1m topsoil over 0.4m firm clay over 0.35m sandy clay
4	Depth 0.6m to firm clay – 0.1m topsoil over firm, sticky clay
5	Depth 0.6m consisting of sandy loam with beach cobbles
6	Depth 0.5m consisting of organic sandy loam to bedrock at 0.5m
7	Depth 0.75m consisting of organic sandy clay
8	Depth 0.8m to bedrock – 0.2m greasy loam over 0.2m compact loam over sand and silt with stones

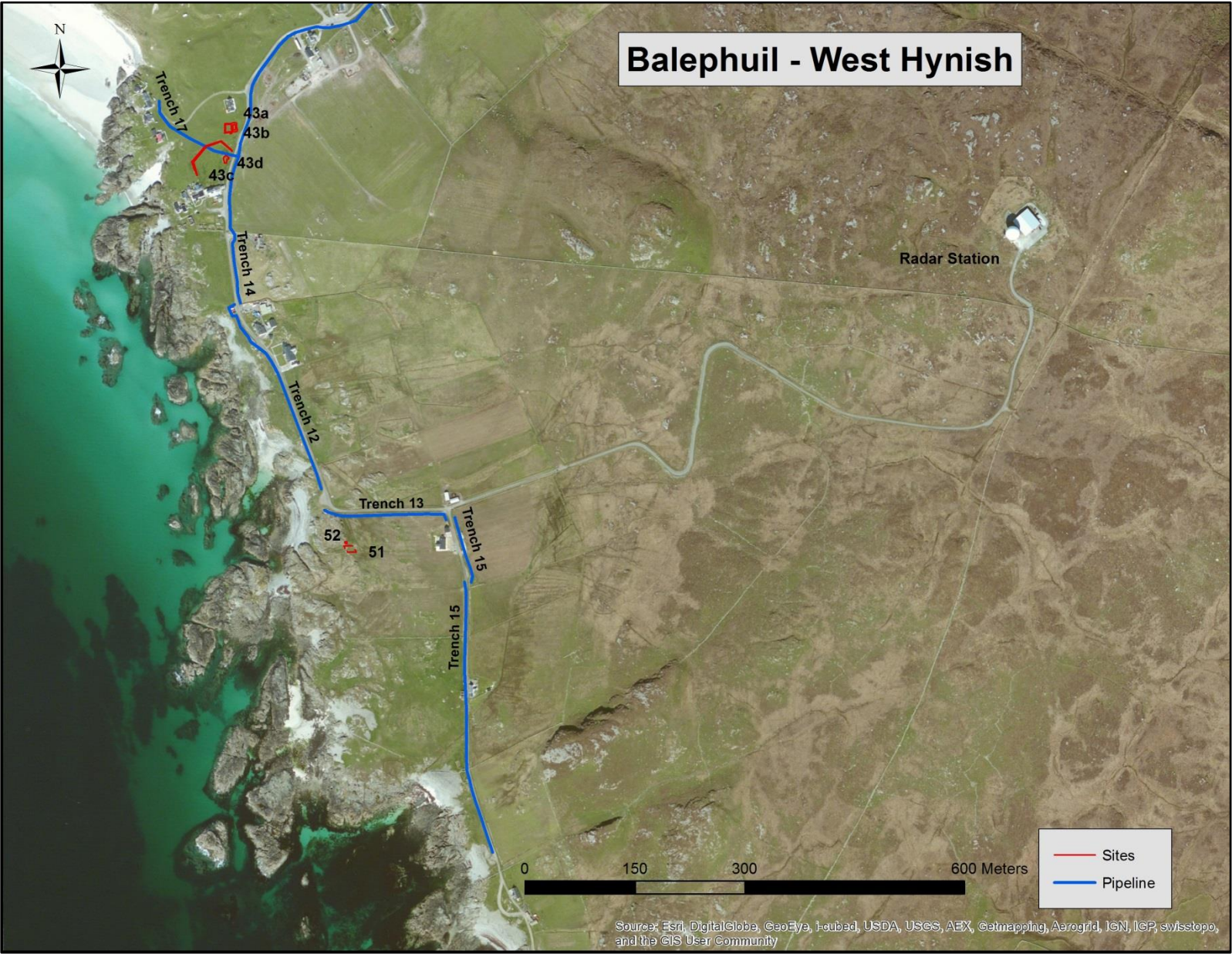


Figure 8: Map of the pipeline route from Balephuill to West Hynish (Trenches 12, 13, 14 and 17) and the archaeological sites recorded.

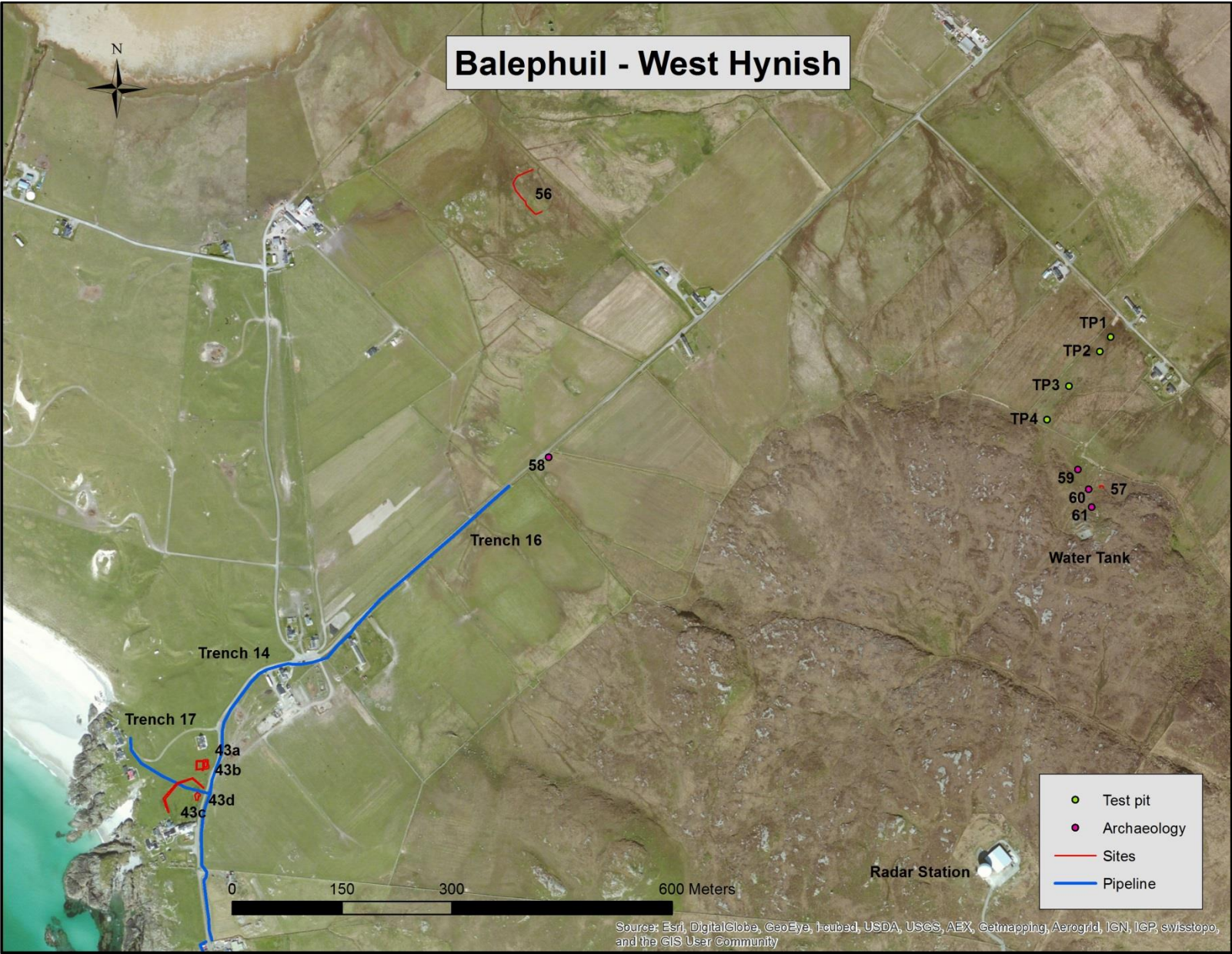


Figure 9: Map of the pipeline route at Balephuill (Trenches 14, 16 and 17) showing the archaeological sites recorded and test pits 1-4.

7.0 Discussion

Due to the length of the pipeline monitored and the locations through which it ran, the upstanding archaeology recorded in its vicinity was multi-period in nature attesting to the varied anthropological use of the island through the ages. Most predominant were post-medieval and WWII remains.

Archaeological deposits within the pipeline trench were only found in the stretch between Silversands and Brock. These consisted of midden deposits, a relict roadway and a quick-lime pit, all of which have been interpreted as dating to the post-medieval period; settlement in the area pre-dates 1878 when it was first surveyed by Ordnance Survey.

Very few archaeological finds were recovered from the pipeline route. Those recovered are generally post-medieval or WWII in date. The exceptions are a piece of pottery recovered from a midden (Site 4) to the northeast of the pipeline route at Brock and a stone tool recovered from Balephuill. Both these items could date from the prehistoric period and attest to Tiree's ancient history.

8.0 Conclusions

There are no recommendations for further work on the site.

9.0 References

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APPENDIX 1: Gazetteer of sites

Site number	Site Type	Site Name	Description	Period	Easting	Northing
1	Mound	Silversands	Mound or dune	Unknown	105719	747572
1a	Cut	Silversands	Well-preserved stone-lined cut aligned E-W.	Unknown	105726	747563
2, Tr1	Midden	Silversands	Midden	Unknown	105788	747574
3	Midden	Brock	Well-preserved shellfish and charcoal midden in a sheep rub or erosion area.	Unknown	106555	747542
4	Midden	Brock	Well-preserved shellfish and fired-stone midden.	Unknown	106556	747616
5	Sheep dip	Brock	Degraded sheep dip or tank constructed of concrete and pebbles.	Post-medieval	106724	747525
6	Dyke	Brock	Degraded stone and turf dyke spread up to 1m and standing 0.6m high.	Post-medieval	106765	747484
7	Dyke	Brock	Stone and turf dyke.	Post-medieval	106800	747453
8a	Structure	Brock	Very degraded stone and turf building with walls spread to 1m wide and standing to 0.4m high.	Post-medieval	106750	747468
8b	Structure	Brock	Very degraded stone and turf footings lying on an N-S alignment	Post-medieval	106747	747471
9	Structure	Brock	Very degraded stone and turf footings.	Post-medieval	106734	747485
10	Structure	Brock	Very degraded stone and turf footings.	Post-medieval	106728	747435
10	Structure	Brock	Very degraded stone and turf footings.	Post-medieval	106727	747436
11	Relict track	Brock	Coal and ash layers separated by sand deposits.	Post-medieval	106640	747451
12a, Tr3	Pit	Brock	Quick-lime pit	Post-medieval	106677	747431
12b	Drain	Brock	Modern plastic pipe aligned N-S.	Modern	106665	747433

Site number	Site Type	Site Name	Description	Period	Easting	Northing
13, Tr4	Midden	Brock	Well-preserved mixed midden.	Post-medieval	106692	747429
14	Not used					
15	Cairn	Ruaig	Ruinous low stone cairn.	Post-medieval	107452	747760
16a	Shieling	Ruaig	Very degraded turf-built shieling.	Post-medieval	107474	747749
16b	Shieling	Ruaig	Very degraded turf-built shieling.	Post-medieval	107482	747759
16c	Shieling	Ruaig	Very degraded turf-built shieling.	Post-medieval	107487	747764
17a	Dyke	Ruaig	Degraded boulder and turf dyke.	Post-medieval	107575	747776
17b	Dyke	Ruaig	Degraded boulder and turf dyke.	Post-medieval	107616	747799
18	Dyke	Ruaig	Degraded boulder and turf dyke.	Post-medieval	107525	747831
19	Standing Stone	Ruaig	Well-preserved upright stone. Local knowledge suggested it had been erected by a local workman.	Unknown	107530	747667
20	Standing Stone	Ruaig	Well-preserved upright stone.	Unknown	107636	747566
21	Turf dyke	Ruaig	Very degraded turf and stone dyke.	Post-medieval	107646	747572
22a	Drain	Milton	Well-preserved stone-lined drain.	Post-medieval	107737	747565
22b	Drain	Milton	Well-preserved stone-lined drain.	Post-medieval	107735	747564
23	Turf dyke	Milton	Very degraded turf and stone dyke spread to 1.5m and standing to 0.4m high.	Post-medieval	107844	747642

Site number	Site Type	Site Name	Description	Period	Easting	Northing
24	Turf dyke	Milton	Very degraded turf and stone dyke.	Post-medieval	108045	747578
24a	Turf dyke	Milton	Very degraded turf and stone dyke spread to 1.5m and standing to 0.4m high.	Post-medieval	107899	747672
24b	Turf dyke	Milton	Very degraded turf and stone dyke spread to 1.5m and standing to 0.4m high.	Post-medieval	107922	747601
24c	Turf dyke	Milton	Very degraded turf and stone dyke spread to 1.5m and standing to 0.4m high.	Post-medieval	107894	747608
25	Turf dyke	Milton	Very degraded turf and stone dyke spread to 1.5m and standing to 0.4m high.	Post-medieval	107902	747528
26	Turf dyke	Milton	Very degraded turf and stone dyke.	Post-medieval	108164	747705
27	Dyke	Milton	Very degraded stone dyke.	Post-medieval	108139	747755
28	Not used					
29	Broch	Dun Mor a Chaolais	Broch complex	Prehistoric	108310	747669
30	Turf dyke	Milton	Very degraded turf and stone dyke.	Post-medieval	108248	747663
31	Turf dyke	Milton	Degraded turf and stone dyke.	Post-medieval	108165	747538
32	Not used					
33	Quarry pit	Milton	Very degraded quarry pit.	Post-medieval	108089	747572
34	Not used					
35	Stone setting	Milton	Very degraded stone setting	Unknown	107992	747559
36	Shieling	Milton	Very degraded stone and turf shieling.	Unknown	107958	747571
37	Clearance cairn	Milton	Very degraded stone clearance cairn.	Unknown	107844	747597
37a	Cairn	Milton	Very degraded stone cairn.	Unknown	107957	747547
38a	Clearance cairn	Milton	Very degraded stone clearance cairn.	Unknown	107820	747598
38b	Clearance cairn	Milton	Very degraded stone clearance cairn.	Unknown	107813	747594

Site number	Site Type	Site Name	Description	Period	Easting	Northing
38c	Clearance cairn	Milton	Very degraded stone clearance cairn.	Unknown	107810	747601
39	Possible shieling	Milton	Very degraded stone setting or shieling.	Unknown	107833	747604
40	Sheep pen	Ruaig	Ruinous stone-built sheep pen and dip.	Post-medieval	107657	747513
41	Turf dyke	Ruaig	Very degraded turf dyke surrounding sheep pen.	Post-medieval	107691	747525
42a	Quarry pit	Milton	Degraded quarry pit.	Post-medieval	107709	747564
42b	Quarry pit	Milton	Degraded quarry pit.	Post-medieval	107718	747576
42c	Quarry pit	Milton	Degraded quarry pit.	Post-medieval	107720	747583
42d	Quarry pit	Milton	Degraded quarry pit.	Post-medieval	107715	747585
42e	Quarry pit	Milton	Degraded quarry pit.	Post-medieval	107735	747583
42f	Quarry pit	Milton	Degraded quarry pit.	Post-medieval	107738	747597
42g	Quarry pit	Milton	Degraded quarry pit.	Post-medieval	107746	747601
42h	Quarry pit	Milton	Degraded quarry pit.	Post-medieval	107749	747602
42i	Quarry pit	Milton	Degraded quarry pit.	Post-medieval	107753	747607
43a	Structure	Balephuill	Degraded house footings.	Post-medieval	95754	740273
43b	Structure	Balephuill	Degraded kaleyard.	Post-medieval	95749	740271
43c	Enclosure	Balephuill	Degraded enclosure with walls spread to 1m.	Post-medieval	95702	740213

Site number	Site Type	Site Name	Description	Period	Easting	Northing
43d	Mound	Balephuill	Degraded stone mound 1m high.	Post-medieval	95742	740230
44a	Structure	Helypol	Well-preserved concrete base.	WWII	98413	743062
44b	Structure	Helypol	Degraded building foundations.	WWII	98408	743080
44c	Structure	Helypol	Well-preserved building foundations.	WWII	98421	743083
44d	Structure	Helypol	Well-preserved building foundations.	WWII	98414	743088
44e	Structure	Helypol	Well-preserved building foundations.	WWII	98404	743096
44f	Structure	Helypol	Well-preserved building foundations.	WWII	98402	743107
44g	Structure	Helypol	Well-preserved building.	WWII	98417	743119
44h	Structure	Helypol	Well-preserved concrete foundation.	WWII	98390	743159
44i	Structure	Helypol	Well-preserved concrete foundation.	WWII	98415	743141
44j	Structure	Helypol	Degraded concrete foundation.	WWII	98418	743168
44k	Structure	Helypol	Well-preserved concrete foundation.	WWII	98428	743158
44l	Structure	Helypol	Well-preserved concrete foundation.	WWII	98447	743173
44m	Structure	Helypol	Well-preserved concrete foundation.	WWII	98432	743114
44n	Structure	Helypol	Well-preserved concrete foundation.	WWII	98448	743136
44o	Structure	Helypol	Well-preserved concrete foundation.	WWII	98455	743154
44p	Structure	Helypol	Well-preserved concrete foundation.	WWII	98470	743154
44q	Structure	Helypol	Well-preserved concrete foundation.	WWII	98471	743163
44r	Structure	Helypol	Well-preserved concrete footings.	WWII	98424	743062
45	Not used					
46a	Structure	Crossapol	Denuded remnants of a blast shelter with all earth banks and upper courses of structure removed.	WWII	99646	743487
46b	House	Crossapol	Red-roofed dwelling house is a former barracks block.	WWII/Modern	99651	743525
46c	Structure	Crossapol	Rectangular concrete platform with steps surviving to the south	WWII	99599	743587
47a	Structure	Crossapol	Largely intact former barracks block in use as barn.	WWII	99607	743429

Site number	Site Type	Site Name	Description	Period	Easting	Northing
47b	Structure	Crossapol	Largely intact latrine block - internal divisions of standard 6 stalls with 3 entrances.	WWII	99747	743299
47c	Structure	Crossapol	Concrete rectangular platform. (Hospital unit per local knowledge)	WWII	99764	743321
47d	Structure	Crossapol	Rectangular structure on a concrete platform with sides collapsing.	WWII	99770	743286
47e	Structure	Crossapol	Rectangular barrack block largely intact, but modified by blocking the windows.	WWII	99525	742940
47f	Structure	Crossapol	Cookhouse for the NAAFI (per local knowledge)	WWII	99622	743159
47g	Structure	Crossapol	Intact barrack block re-used as a store.	WWII	99607	743168
47h	Structure	Crossapol	Part of the cookhouse (per local knowledge)	WWII	99617	743169
48a	Structure	Crossapol	Barrack block partially collapsed and rebuilt in breeze blocks.	WWII	99220	743077
48b	Structure	Crossapol	Rectangular concrete platform currently used for storage.	WWII	99232	743061
48c	Structure	Crossapol	Barrack block substantially rebuilt in breeze blocks.	WWII	99234	743054
48d	Structure	Crossapol	Concrete platform now turfed on the east end. Steps on the west end.	WWII	99203	743051
48e	Structure	Crossapol	Largely intact latrine block.	WWII	99207	743030
48f	Structure	Crossapol	Concrete platform with porch on the east side.	WWII	99212	743014
48g	Structure	Crossapol	Largely intact latrine block.	WWII	99226	743002
48h	Structure	Crossapol	Concrete platform with porch on the east side.	WWII	99240	742991
48i	Structure	Crossapol	Concrete platform with the northwest corner eroded into Crossapol burn.	WWII	99191	743021
49a	Turf dyke	Caolas	Stone and turf field boundary 0.5m high.	Post-medieval	108642	747987
49b	Turf dyke	Caolas	Field boundary 0.5m wide.	Post-medieval	108509	748162

Site number	Site Type	Site Name	Description	Period	Easting	Northing
49c	Turf dyke	Caolas	Stone and turf field boundary 0.5m wide and 1m high.	Post-medieval	108464	748369
49d	Turf dyke	Caolas	Remains of a double dyke and trackway	Post-medieval	108386	748593
49e	Turf dyke	Caolas	Boundary dyke of stone and turf standing to a height of 0.75m.	Post-medieval	108515	748567
49f	Possible sheep dip	Caolas	Stone structure on the W side of the road. Parallel stone walls, one end wall and some old boilers present. Possibly a double sheep dip.	Post-medieval	108418	748756
49g	Dyke	Caolas	Dyke made up of large stones.	Post-medieval	108324	748733
50	Mound	Ruaig	A large mound spread up to 2m and standing up to 0.75m high. Made up of large boulders and other stones.	Unknown	107377	747736
51	Balephuill	Balephuill	Rectangular drystone structure roughly built from shotblasted stones.	Post-medieval	95914	739699
52	Structure	Balephuill	The remains of a small, well-built rectangular structure aligned E-W. Walls built from angular stones stand to two courses high. Measures 3.1mx2m internally. Entrance in eastern wall.	Post-medieval	95906	739713
53	Structure	Crossapol	Blast shelter	WWII	99463	743710
54	Structure	Crossapol	Blast shelter	WWII	99452	743689
55	Structure	Crossapol	Blast shelter	WWII	99464	743552
56	Enclosure	Balephuill	Low, stone enclosure measuring approx. 33m x 45m, which has been robbed out on the east side.	Unknown	96178	741059
57	Platform	Carnan Mor	A flat-topped drystone platform extending from the hillside. Interpreted as a grain-drying platform.	Unknown	96975	740659
58	Standing Stone	Balephuill	Large, upright stone standing to about 1.6m high.	Unknown	96221	740698
59	Cultivation strip	Carnan Mor	An area of cultivation strips.	Post-medieval	96943	740681

Site number	Site Type	Site Name	Description	Period	Easting	Northing
60	Cairn	Carnan Mor	A bee-hive shaped cairn standing to approx. 0.75m high and constructed of angular stones.	Unknown	96958	740654
61	Cairn	Carnan Mor	A bee-hive shaped cairn standing to approx. 0.75m high and constructed of angular stones.	Unknown	96962	740630
62	Dyke	Milton	Very degraded stone dyke.	Post-medieval	108346	747699
63	Dyke	Ruaig	Stone and turf dyke with post and wire fence on the top. Stands about 1m high.	Post-medieval	107519	747632
64	Dyke	Brock	Stone dyke	Post-medieval	106789	747451
65	Dyke	Crossapol	Stone dyke	Post-medieval	99720	743578
66	Turf dyke	Ruaig	A stone and turf dyke about 0.75m wide and standing up to 1m high.	Post-medieval	107420	747620
67	Dyke	Ruaig	Degraded stone and turf dyke spread up to 1m and standing to approx. 0.3m high.	Post-medieval	107435	747678
68	Dyke	Ruaig	Degraded stone and turf dyke spread up to 1m and standing to approx. 0.3m high.	Post-medieval	107419	747658
69	Dyke	Ruaig	Degraded stone and turf dyke spread up to 1m and standing to approx. 0.3m high.	Post-medieval	107436	747636
70	Turf dyke	Ruaig	Degraded stone and turf dyke spread up to 1m and standing to approx. 0.3m high.	Post-medieval	107440	747693
71	Dyke	Ruaig	Degraded stone and turf dyke spread up to 1m and standing to approx. 0.3m high.	Post-medieval	107422	747718
72	Dyke	Crossapol	Turf dyke	Post-medieval	99683	743239
73	Turf dyke	Crossapol	Turf dyke	Post-medieval	99639	743466

APPENDIX 2: Index of Photographs

No.	Direction Facing	Feature No.	Description	Taken By	Date
1	SE		Start of the pipeline route - Vault junction	SB	14/11/2012
2	SE		Start of the pipeline route - Vault junction	SB	14/11/2012
3	E		Trencher in operation at start of pipeline route	SB	14/11/2012
4	E		Trencher in operation at start of pipeline route	SB	14/11/2012
5	NW	Site 1	Image of site 1 showing stone lining in low dune	SB	14/11/2012
6	NW	Site 1	Image of site 1 showing stone lining in low dune	SB	14/11/2012
7	E		Cut pipe trench and spoil	SB	14/11/2012
8	W		Cut pipe trench and spoil	SB	14/11/2012
9	W		Pipeline route and cut trench	SB	14/11/2012
10	S	Site 2	N-facing section showing thin charcoal lens (or clinker) and track	SB	14/11/2012
11	S	Site 2	N-facing section showing thin charcoal lens (or clinker) and track	SB	14/11/2012
12	ESE		Showing pipe route	SB	14/11/2012
13	ESE		Showing pipe route	SB	14/11/2012
14	W		Showing pipeline route	SB	14/11/2012
15			General shots of trenching machine on site	SB	14/11/2012
16			General shots of trenching machine on site	SB	14/11/2012
17	W		Pipe trench cut	SB	14/11/2012
18	E		Pipe trench cut	SB	14/11/2012
19	WNW		Settlement at Brock	SB	14/11/2012
20	E		Settlement at Brock	SB	14/11/2012
21	E		Settlement at Brock	SB	14/11/2012
22	NE	Site 3	Midden in section - eroding	SB	14/11/2012
23	E	Site 3	Midden in section - eroding	SB	14/11/2012
24	NNE	Site 4	Showing midden in section/erosion	SB	14/11/2012
25	NNE	Site 6	Stone and turf field dyke	SB	14/11/2012

No.	Direction Facing	Feature No.	Description	Taken By	Date
26	W	Site 8	Footings of house and byre	SB	14/11/2012
27	SW	Site 9	House footings at Brock	SB	14/11/2012
28	N	Site 10	House footings at Brock	SB	14/11/2012
29	SW		General shot of site	SB	15/11/2012
30	SSW	Site 11	S-facing section in pipe trench showing coal layer/track surface	SB	15/11/2012
31	SSW	Site 11	S-facing section in pipe trench showing coal layer/track surface	SB	15/11/2012
32	WNW		Location shot for section on coal-surfaced track	SB	15/11/2012
33	W		Laying pipe in pipe trench	SB	15/11/2012
34	ESE		Trenching machine sinking into sand	SB	15/11/2012
35	NE	Site 12a Feature 1	NE-facing section through F1 - quick-lime pit	SB	15/11/2012
36	NE	Site 12a Feature 1	NE-facing section through F1 - quick-lime pit	SB	15/11/2012
37	S		N-facing section through midden	SB	15/11/2012
38	S	Site 13	After cleaning site 13	SB	15/11/2012
39	NNW	Site 14	Stone and turf field dyke	SB	16/11/2012
40	N	Site 15a	Green made-up track	SB	16/11/2012
41	E	Site 15b	Stone-built cairn	SB	16/11/2012
42	N	Site 17	Boulder dyke and field system	SB	16/11/2012
43	SE	Site 16b	Shieling	SB	16/11/2012
44	SE	Sites 19 and 15a	Standing stone (19) and track (15a)	SB	16/11/2012
45	SE	Site 20	Standing stone	SB	16/11/2012
46	NW	Site 22	Stone-lined drain	SB	16/11/2012
47	NW	Sites 24 and 25	Twinning pen (25) and dyke (24)	SB	16/11/2012
48	SE	Site 36	Twin cell sheiling	SB	16/11/2012
49	S	Site 37	Stone cairn/mound	SB	16/11/2012
50	E	Site 39	Oval stone setting	SB	16/11/2012
51	N	Site 41	Creep entrance in sheep pen	SB	16/11/2012
52	E	Site 41	Sheep dip and pen	SB	16/11/2012
53	W	Site 41	View of sheep pen complex	SB	16/11/2012
54	SW	Site 43a	Stone and turf house	SB	17/11/2012
55	W	Site 43a	Stone and turf house	SB	17/11/2012
56	SE	Site 43b	Stone and turf kale-yard	SB	17/11/2012
57	N	Site 44a	Concrete building base	SB	17/11/2012

No.	Direction Facing	Feature No.	Description	Taken By	Date
58	NNE	Site 44b	Concrete/wooden footings	SB	17/11/2012
59	NE	Site 44c	Concrete building foundation	SB	17/11/2012
60	E	Site 44d	Building foundation	SB	17/11/2012
61	E	Site 44e	Building foundation	SB	17/11/2012
62	NE	Site 44f	Stove footings in structure	DA	17/11/2012
63		Site 44g	Wall-mounted wrench/vice	DA	17/11/2012
64		Site 44g	Internal partitions in building	DA	17/11/2012
65		Site 44g	Wooden frames for sliding shutters	DA	17/11/2012
66	NE	Site 44g	Standing building	DA	17/11/2012
67	SE	Site 44h	Possible toilet block	DA	17/11/2012
68	ESE	Site 44h	Toilet stall foundations	DA	17/11/2012
69	N	Site 44i	Concrete building foundation	DA	17/11/2012
70	E	Site 44j	Concrete runner foundations	DA	17/11/2012
71	E	Site 44j	Concrete runner foundations	DA	17/11/2012
72	E	Site 44k	Concrete foundation, partly grassed	DA	17/11/2012
73	W	Site 44l	L-shaped concrete pad	DA	17/11/2012
74	NE	Site 44m	Concrete platform with porch	DA	17/11/2012
75	E	Site 44o	Concrete platform with porch	DA	17/11/2012
76	ENE	Site 44n	Building platform	DA	17/11/2012
77	E	Site 44p	Small concrete platform	DA	17/11/2012
78	NE	Site 44q	Long concrete structure foundation	DA	17/11/2012
79	-	-	Landscape shot at West Hynish	SB	17/11/2012
80	-	-	Landscape shot at West Hynish	SB	17/11/2012
81	W	Site 65	Drystone dyke	DA	18/11/2012
82	W	Site 65	As height increases	DA	18/11/2012
83	W	Site 65	At full height	DA	18/11/2012
84	W	Site 65	Dyke reduced in height at S pillar gate to garage	DA	18/11/2012
85	S	Site 46a	Remnants of blast shelter	DA	18/11/2012
86	SE	Site 46b	Former barracks block now a domestic dwelling	DA	18/11/2012
87	NW	Site 46c	Rectangular concrete platform	DA	18/11/2012
88	N	Site 47a	Former barracks block re-used as a barn	DA	18/11/2012
89	E	Site 47b	Largely intact former latrine block	DA	18/11/2012
90	NE	Site 47c	Rectangular concrete platform	DA	18/11/2012
91	NE	Site 47d	Collapsing rectangular structure	DA	18/11/2012

No.	Direction Facing	Feature No.	Description	Taken By	Date
92	NNE	Site 47e	Former barracks block modified by blocking windows	DA	18/11/2012
93	NW	Site 47f	Barracks block recycled as workshop/accommodation	DA	18/11/2012
94	N	Site 47g	Intact barracks block re-used as store	DA	18/11/2012
95	E	Site 48a	Rectangular structure (?barracks) in process of collapse	DA	18/11/2012
96	E	Site 48b	Rectangular concrete platform in use as store	DA	18/11/2012
97	NE	Site 48c	Substantially rebuilt barracks block	DA	19/11/2012
98	NE	Site 48d	Concrete platform, now turfed at E, administration block	DA	19/11/2012
99	NE	Site 48e	Latrine block, largely intact	DA	19/11/2012
100	ENE	Site 48f	Concrete platform	DA	19/11/2012
101	NE	Site 48g	Latrine block, largely intact	DA	19/11/2012
102	NE	Site 48h	Concrete platform	DA	19/11/2012
103	N	Site 48i	Concrete platform, one corner eroded out	DA	19/11/2012
104	N	Site 49	Possible cultivation terrace north of Milton	DA	20/11/2012
105	ENE	Site 49	Field boundary to east of road	DA	20/11/2012
106	W	Site 49	Field boundary to west of road	DA	20/11/2012
107	NE	Site 49	Field boundary to east of road	DA	20/11/2012
108	E	Site 49	Field boundary to east of road	DA	20/11/2012
109	W	Site 49	Disused double dyke and trackway to west of road	DA	20/11/2012
110	E	Site 49	Field boundary to east of road	DA	20/11/2012
111	NE		Triangular structure, probably modern and well to east of road	DA	20/11/2012
112	W	Site 49	Stone structure to west of road and old boilers	DA	20/11/2012
113	NW	Site 49	Stone structure to west of road and old boilers	DA	20/11/2012
114	W	Site 49	Boundary dyke, large stones to west of road	DA	20/11/2012
115	SE	-	Pipe trench on old track, Ruaig to Milton, showing sandy layer	DA	21/11/2012
116	SW	-	Pipe trench on old track, Ruaig to Milton, showing sandy layer	DA	21/11/2012

No.	Direction Facing	Feature No.	Description	Taken By	Date
117	SW	-	Line of pipe trench, Brock to Ruaig, from Ruaig	DA	22/11/2012
118	E	-	Depth of trench cut into windblown sand	DA	22/11/2012
119	E	-	Depth of trench cut into windblown sand	DA	22/11/2012
120	S	-	Shows no footings for the truncated dyke	DA	22/11/2012
121	SSW	-	Stitch of panorama of site from Ruaig	LF	25/11/2012
122	N	Site 20	Standing stone	LF	25/11/2012
123	W	Site 20	Standing stone with stone revetment of track in background	LF	25/11/2012
124	W	Site 20	Standing stone with stone revetment of track in background	LF	25/11/2012
125	W	-	Trench profile	LF	25/11/2012
126	SE	-	Degraded dyke cut through by trench	LF	25/11/2012
127	SSE	-	Degraded dyke cut through by trench	LF	25/11/2012
128	NNE	-	Mound with large boulders and stone clearance	LF	25/11/2012
129	SE	-	Dyke running alongside stream/drainage channel	LF	25/11/2012
130	ESE	-	Wall to be crossed by trench	LF	25/11/2012
131	S	-	Trench with dykes in the background	LF	25/11/2012
132	ENE	-	Trench heading towards boundary dyke	LF	25/11/2012
133	NNE	-	Trench heading towards boundary dyke	LF	25/11/2012
134	NNE	-	Trench heading towards boundary dyke	LF	25/11/2012
135	NNE	-	Profile of trench 9	LF	26/11/2012
136	W	-	Profile of trench 8	LF	26/11/2012
137	S	-	Profile of trench 8	LF	26/11/2012
138	N	-	Dyke to be crossed by trench 9	LF	27/11/2012
139	N	-	Dyke with trencher about to cross trench 9	LF	27/11/2012

No.	Direction Facing	Feature No.	Description	Taken By	Date
140	NNW	-	Dyke with trencher about to cross trench 9	LF	27/11/2012
141	NNW	-	Trench 9 with dyke in the background	LF	27/11/2012
142	NNW	-	Stones in trench section - associated with dyke? - trench 9	LF	27/11/2012
143	NNW	-	Stones in trench section - associated with dyke? - trench 9	LF	27/11/2012
144	-	-	Panorama of part of trench 9 - abandoned due to trench flooding	LF	27/11/2012
145	-	-	Working shot showing waterlogged trench	LF	27/11/2012
146	NE	-	Dyke cut through by trench 9	LF	27/11/2012
147	NE	-	Close-up of dyke cut through by trench 9	LF	27/11/2012
148	NW	-	Working shot of trench 8	LF	27/11/2012
149	WSW - W	-	Stitch of pipe route	LF	28/11/2012
150	WNW	-	Trench 8 crossing the track next to standing stone (site 20)	LF	28/11/2012
151	NE	-	Working shot of trench 8 crossing the track	LF	28/11/2012
152	NW	-	Working shot of trench 8 crossing the track	LF	28/11/2012
153	NW	-	Working shot of trench 8 crossing the track	LF	28/11/2012
154	SSE	-	Tape and pipe in trench 8	LF	28/11/2012
155	W	-	Section in trench 8 almost directly opposite standing stone (site 20)	LF	28/11/2012
156	NE	-	Section of trench near to the bend left towards the water channel	LF	28/11/2012
157	W	-	Working shot of trench 9	LF	28/11/2012
158	N	-	Working shot of trench 9	LF	28/11/2012
159	NW	-	Section of trench 10	DA	04/12/2012
160	NE	-	Stone from dyke buried by windblow showing shot blasting	DA	04/12/2012
161	ENE	-	Trench 10 showing SW-NE dyke and E-W drainage ditch	DA	04/12/2012

No.	Direction Facing	Feature No.	Description	Taken By	Date
162	SSE	-	Trench 11 airport to Crossapol showing W of trench and base towards junction	DA	08/12/2012
163	-	-	Turnbull's 1768 pre-enclosure plan of Tiree taken at museum, Scarinish	DA	08/12/2012
164	-	-	Turnbull's 1768 pre-enclosure plan of Tiree taken at museum, Scarinish	DA	08/12/2012
165	-	-	Traced map based on Turnbull showing pre-enclosure farm divisions	DA	09/12/2012
166	-	-	Traced map based on Turnbull showing pre-enclosure farm divisions	DA	09/12/2012
167	-	-	Traced map based on Turnbull showing pre-enclosure farm divisions	DA	09/12/2012
168	WSW	-	Trench 10, seaward side of dyke showing cut of trench	DA	10/12/2012
169	WNW	-	Bedrock near Crossapol - evidence of shot blasting for quarrying	DA	10/12/2012
170	WNW	Site 53	Blast shelter - Crossapol area	DA	10/12/2012
171	NW	Site 54	Blast shelter - Crossapol area	DA	10/12/2012
172	NW	-	WWII structure - Crossapol area	DA	10/12/2012
173	NE	-	Trench 10 - pipe being inserted under dyke	DA	10/12/2012
174	NW	-	Trench 12 showing route of trench, spoil (context 004) and old water main	DA	10/01/2013
175	NW	-	Trench 12 before backfilling, showing route and distance from road/verge	DA	11/01/2013
176	E	-	Trench 13 - working shot to show trench in relation to the road	DA	11/01/2013

No.	Direction Facing	Feature No.	Description	Taken By	Date
177	E	-	Trench 13 - working shot to show trench in relation to the road	DA	11/01/2013
178	SW	Site 51	Structure 1 in field containing trench 13	DA	12/01/2013
179	W	Sites 51 - 52	Shows relationship between structures 1 and 2 in field for trench 13	DA	12/01/2013
180	WSW	Site 52	Structure 2 in field containing trench 13	DA	12/01/2013
181	WNW	Site 56	Enclosure feature at NL 96204 41056	DA	13/01/2013
182	WNW	Site 56	Enclosure feature at NL 96204 41056	DA	13/01/2013
183	N	-	Trench 15 - working shot showing closeness to road and cobble matrix context (002)	DA	18/01/2013
184	S	-	Trench 15 - working shot showing closeness to road and cobble matrix context (002)	DA	18/01/2013
185	WSW	Site 58	Standing stone at NL 96227 40691	DA	19/01/2013
186	NNE	Site 58	Standing stone at NL 96227 40691	DA	19/01/2013
187	WSW-NE	-	Stitch of panoramic view across the island from Carnan Mor at the south end of the island	DA	20/01/2013
188	NNW	Site 59	Cultivation strips and in left foreground Cairn 'A'	DA	20/01/2013
189	ESE	Site 57	Cairn 'B' and grain drying platform	DA	20/01/2013
190	SSE	Site 57	Grain drying platform	DA	20/01/2013
191	SSE	-	West end of trench 17 at NL95650 40315	DA	22/01/2013
192	S	Site 43c	Trench 17 - point selected for cut in the enclosure bank (pre-ex)	DA	22/01/2013
193	N	Site 43c	Trench 17 - point selected for cut in the enclosure bank (pre-ex)	DA	22/01/2013
194	N	Site 43c	Trench 17 general view of N wall (internal) enclosure	DA	22/01/2013

No.	Direction Facing	Feature No.	Description	Taken By	Date
195	E	Site 43c	Trench 17 west facing section	DA	22/01/2013
196	NE	Site 43c	Trench 17 west facing section	DA	22/01/2013
197	W	Site 43c	Trench 17 east facing section	DA	22/01/2013
198	NW	Site 43c	Trench 17 east facing section	DA	22/01/2013
199	N	Site 43c	Trench 17 stones removed from cut	DA	22/01/2013
200	WNW	-	Trench 17 terminal at NL 95753 46240	DA	23/01/2013
201	WNW	-	Trench 17 terminal and route through enclosure	DA	23/01/2013
202	WNW	-	Trench 17 terminal and route through enclosure	DA	23/01/2013
203	WNW	-	Trench 17 terminal and route through enclosure	DA	23/01/2013
204	N	-	Trench 17, point selected for cut, post-ex	DA	23/01/2013
205	S	-	Trench 17, point selected for cut, post-ex	DA	23/01/2013
206	E	-	Trench 17, enclosure post-ex after re-instatement	DA	23/01/2013
207	SSE	-	Trench 18 breaching dyke	DA	31/01/2013
208	NNW	-	Spurious standing stone at NM 08315 47775	DA	02/02/2013
209	NE	-	Trench 18 (route from tank)	DA	02/02/2013
210	ENE	-	Trench 18 route (utilising old break in the dyke)	DA	02/02/2013
211	W	-	Trench 18 route from tank	DA	02/02/2013
212	NNW	-	Trench 18 route towards Caolas	DA	02/02/2013
213	S	-	Trench 18 route from Milton	DA	02/02/2013
214	NNW	-	Trench 18 towards Caolas	DA	02/02/2013
215	SSE	-	Trench 18 route from Caolas	DA	02/02/2013
216	NNW	-	Trench 18 to Caolas (including old main indicator)	DA	02/02/2013
217	S	-	Trench 18 route from Milton	DA	02/02/2013
218	NNW	-	Trench 18 route to Caolas	DA	02/02/2013
219	S	-	Trench 18 route from Milton	DA	02/02/2013
220	NNE	-	Trench 18 towards Caolas trench end	DA	02/02/2013

APPENDIX 3: Index of Contexts

No.	Type	Description	Fill of	Filled by	Under	Over	Trench/Feature	Finds	Samples	Plans-Sections	Interpretation
T1.01	Deposit	Turf and mid-brown loam/topsoil	-	-	-	T1.02, T1.03	Tr. 1	-	-	S1	Turf/topsoil
T1.02	Deposit/fill	Loose to compact spread of beach pebbles forming a rough track surface	-	-	T1.01	T1.01	Tr. 1	-	-	S1	Track surface
T1.03	Deposit	Wind-blown sand deposit, light brown, some roots	-	-	T1.01	T1.04, T1.05	Tr. 1	-	-	S1	Wind-blown sand
T1.04	Deposit	Thin, black lens of charcoal or clinker is discontinuous and function unknown	-	-	T1.03	T1.05	Tr. 1	-	-	S1	Charcoal lens of anthropogenic origin
T1.05	Deposit	Wind-blown/accumulated sand deposits - pale brown/buff	-	-	T1.03, T1.04	-	Tr. 1	-	-	S1	Wind-blown sand
T2.01	Deposit	Coal deposit in surface of dip in track	-	-	-	T2.02, T2.03	Tr.2	-	-	S4	Re-deposited coal/clinker
T2.02	Deposit	Turf and mid-brown soil	-	-	T2.01	T2.03	Tr.2	-	-	S4	Turf/topsoil
T2.03	Deposit	Light brown sand with intermittent lenses of coal/charcoal	-	-	T2.02, T2.01	T2.04	Tr.2	-	-	S4	Middened topsoil (coal/ash)
T2.04	Deposit	Black lens of coal/clinker forming earlier track surface	-	-	T2.03	T2.05	Tr.2	-	-	S4	Coal/ash/clinker compacted track surface
T2.05	Deposit	Pale buff wind-blown sand	-	-	T2.04	-	Tr.2	-	-	S4	Natural wind-blown sand
T3.01	Deposit	Turf/root mat with mid-brown loam	-	-	-	T3.02	Tr.3	-	-	S2	Turf/topsoil

No.	Type	Description	Fill of	Filled by	Under	Over	Trench/ Feature	Finds	Samples	Plans- Sections	Interpretation
T3.02	Deposit	Light brown to buff sand, which is quite clean	-	-	T3.01	T3.03	Tr.3	-	-	S2	Wind-blown sand
T3.03	Deposit	Dark to mid-brown silty sand with silting increase above F1	-	-	T3.02	T3.04, T3.13, T3.08	Tr.3	-	-	S2	Silting
T3.04	Fill	Mid to dark-brown fill in the top of F1 containing a piece of charred wood and charcoal	T3.12	-	T3.03	T3.08	F1, Tr.3	Wood	-	S2	Deposit in the top of a sand-filled pit
T3.05	Deposit	Black coal/ash deposit within wind-blown sand	-	-	T3.08, T3.13	T3.13	Tr.3	-	-	S2	Re-deposited coal/ash in sand
T3.06	Deposit	Black coal/ash deposit within wind-blown sand	-	-	T3.13	T3.13	Tr.3	-	-	S2	Re-deposited coal/ash in sand
T3.07	Deposit	Buff layer of quick-lime lumps (from use of F1	-	-	Tr3.13	Tr3.13	Tr.3	-	-	S2	Deposit of quick-lime lumps
T3.08	Fill	Generally clean-blown sand filling pit F1. One lens within fill from silting	T3.12	-	T3.03, T3.04	T3.09, T3.12	Tr.3, F1	-	-	S2	Wind-blown sand filling pit
T3.09	Fill	Dark brown sand/silt with some shellfish remains	T3.12	-	T3.08	T3.10, T3.11, T3.12	Tr.3, F1	Shellfish	-	S2	Secondary fill in base of pit F1
T3.10	Fill	Mid-brown sand with some shellfish and lumps of quick-lime forming lining in base	T3.12	T3.11	T3.09	T3.12	Tr.3, F1	Shellfish	-	S2	Primary fill/lining in base of pit F1
T3.11	Fill	Lumps of lining of quick-lime in base of pit F1	T3.10, T3.12	-	T3.09	T3.12	Tr.3, F1	-	-	S2	Quick-lime lining base of pit

No.	Type	Description	Fill of	Filled by	Under	Over	Trench/Feature	Finds	Samples	Plans-Sections	Interpretation
T3.12	Cut	Cut of pit forming quick-lime production feature	-	T3.04, T3.08, T3.09, T3.10, T3.11	T3.09, T3.10	T3.13	Tr.3, F1	-	-	S2	Cut Of quick-lime pit
T3.13	Deposit	Natural wind-blown sand	-	-	-	-	-	-	-	S2	Natural wind-blown sand
T4.01	Deposit	Turf with root mat and mid-brown topsoil	-	-	-	T3.03	Site 13	-	-	S3	Turf/topsoil
T4.02	Deposit	Intermittent dark brown lenses of coal/charcoal and some shellfish	-	-	T4.03	T4.03	Site 13	-	-	S3	Midden/soil improvement deposit
T4.03	Deposit	Pale buff sand - possibly wind-blown	-	-	T4.01, T4.02	T4.04	Site 13	-	-	S3	Wind-blown sand and soil horizon
T4.04	Deposit	Pale brown sand with charcoal and ash	-	-	T4.03	T4.05	Site 13	Ceramics	-	S3	Midden layer
T4.05	Deposit	Black ash and charcoal midden deposit	-	-	T4.04	T4.06	Site 13	-	-	S3	Midden layer
T4.06	Deposit	Pale buff sand with charcoal flecks	-	-	T4.05	T4.07	Site 13	-	-	S3	Midden layer
T4.07	Deposit	Thick and complex series of fine ash and midden lenses	-	-	T4.06	T4.08	Site 13	Ceramics, clay pipe, glass, bone, shellfish	-	S3	Midden layers
T4.08	Deposit	Natural, clean wind-blown sand	-	-	T4.07	-	-	-	-	S3	Natural wind-blown sand

No.	Type	Description	Fill of	Filled by	Under	Over	Trench/Feature	Finds	Samples	Plans-Sections	Interpretation
T5.01	Deposit	Thick black humic deposit with many plant remains. Re-deposits of soil excavated from ditches either side of track to consolidate it	-	-	-	T5.02	Tr.5	-	-	-	Re-deposited ditch fill
T5.02	Deposit	Sandy lenses up to 50mm thick, occurring at irregular intervals along track/trench - white hell-based sand	-	-	T5.01	T5.03	Tr.5	-	-	-	May be wind-blown sand or deliberate dumps to stabilise or consolidate track
T5.03	Deposit	Dark brown humic deposit varying in depth over length of trench from 700mm (lower part) to 50mm (as track heads onto bedrock towards gate)	-	-	T5.02	T5.05	Tr.5	5	-	-	In deeper layer old ploughsoil from before track was made up; as shallowed to ENE onto bedrock disturbs topsoil
T5.04	Deposit	Orangey marine gravel	-	-	T5.03	-	Tr.5	-	-	-	Marine gravel - former beach. Stained by leaching from upper deposits

No.	Type	Description	Fill of	Filled by	Under	Over	Trench/Feature	Finds	Samples	Plans-Sections	Interpretation
T5.05	Deposit	Clay lenses around 30mm thick	-	-	within and under T5.03	T5.04	Tr.5	-	-	-	Clay deposits probably the result of ponding on T5.03 as it became waterlogged
T6.01	Deposit	Sandy loam 0.5m deep. Mid-brown good quality soil	-	-	-	T6.02	Tr.6	6, 7	-	-	Ploughsoil currently in pasture
T6.02	Deposit	Clean sand 0.4m thick to limit of excavation	-	-	T6.01, T6.03, T6.04	-	Tr.6	-	-	-	Wind-blown sand
T6.03	Deposit	Perturbed and compacted mix of sandy loam, shell and gravel 0.4m deep	-	-	-	T6.02	Tr.6	8, 9, 10, 11, 12	-	-	Steading working surface
T6.04	Deposit	Dark brown sandy loam up to 0.8m deep	-	-	-	T6.02	Tr.6	-	-	-	Spade dug cultivation soil (currently in pasture)
T7.01	Deposit	Turf and dark brown loam/topsoil approx. 0.20m deep	-	-	-	T7.02	Tr.7	-	-	-	Turf/topsoil
T7.02	Deposit	Mixed brown/dark yellow/grey loamy sand	-	-	T7.01	Bed rock	Tr.7	-	-	-	Disturbed/cultivated soil
T8.01	Deposit	Turf and dark brown humic layer @0.20m deep with large stones/boulders	-	-	-	T8.02	Tr.8	-	-	-	Turf/topsoil

No.	Type	Description	Fill of	Filled by	Under	Over	Trench/Feature	Finds	Samples	Plans-Sections	Interpretation
T8.02	Deposit	Grey (gleyed) gravel with patches of orange sand/gravel - contains large stones/boulders	-	-	T8.01	-	Tr.8	-	-	-	Natural, weathered bedrock and/or marine gravel
T9.01	Deposit	Turf/topsoil layer of minimal brown loam and >90% sub-rounded and rounded beach cobbles (0.5-0.8m deep)	-	-	-	T9.02	Tr.9	-	-	-	Scant topsoil filling a former beach
T9.02	Deposit	Orangey marine gravel	-	-	T9.01	-	Tr.9	-	-	-	Marine gravel - former beach
T10.01	Deposit	Dark brown sandy soil/turf of maximum thickness of 0.1m	-	-	-	T10.02	Tr.10	13	-	-	Turf/topsoil
T10.02	Deposit	Mid-brown silty sand 0.2-0.3m thick	-	-	T10.01	T10.03	Tr.10	-	-	-	Possible lightly cultivated soil
T10.03	Deposit	Clean sand up to 0.9m thick to limit of excavation	-	-	T10.02	T10.04	Tr.10	-	-	-	Wind-blown sand
T10.04	Deposit (structural)	Angular stone, Lewisian Gneiss, up to 0.5-0.75m in size with evidence of shot blasting	-	-	T10.03	-	Tr.10	-	-	-	Top of buried post-medieval enclosure dyke hit by excavation
T10.05	Deposit (natural)	Rounded stones from fist-sized up to boulders	-	-	T10.03, T10.04	-	Tr.10	-	-	-	Natural - ridge of raised beach
T10.06	Deposit	Clean white shell-sand up to 1m thick	-	-	T10.02	T10.07	Tr.10	-	1	-	Windblown sand - probably same as T10.03

No.	Type	Description	Fill of	Filled by	Under	Over	Trench/Feature	Finds	Samples	Plans-Sections	Interpretation
T10.07	Deposit	Mid-brown sandy loam (containing small seashells) up to 1.15m thick to limit of excavations	-	-	T10.06	-	Tr.10	-	1	-	Old cultivated soil
T10.08	Deposit (natural)	Rounded stones from fist-sized up to boulders	-	-	T10.06, T10.07	-	Tr.10	-	-	-	Natural - ridge of raised beach
T10.09	Deposit	Clean white shell-sand up to 0.5m thick	-	-	T10.02	T10.10	Tr.10	-	-	-	Wind-blown sand
T10.10	Deposit	Narrow (0.1m) band mid-brown sandy loam	-	-	T10.09	T10.11	Tr.10	-	-	-	Old turf/topsoil buried by T10.09
T10.11	Deposit	Pale brown silty sand to limit of excavation - 0.4 to 0.9m thick in level field	-	-	T10.10	-	Tr.10	-	-	-	Older stabilised wind-blown sand
T11.01	Deposit	A mixture of soil, sand and gravel, very perturbed, up to 0.5m thick	-	-	-	T11.02	Tr.11	-	-	-	Topsoil disturbed by previous services work
T11.02	Deposit	Clean white shell sand extending 0.5m to limit of excavation	-	-	T11.01	-	Tr.11	-	-	-	Wind-blown sand
T12.01	Deposit	Sandy loam 0.05m thick	-	-	-	T12.02, T12.05	Tr.12	-	-	-	Topsoil
T12.02	Deposit	Dark peaty clay	-	-	T12.01	T12.03	Tr.12	-	-	-	Peaty clay deposit at base of hill due to permanent wet conditions
T12.03	Natural	Bedrock - Lewisian Gneiss	-	-	T12.04, T12.02	-	Tr.12	-	-	-	Bedrock

No.	Type	Description	Fill of	Filled by	Under	Over	Trench/Feature	Finds	Samples	Plans-Sections	Interpretation
T12.04	Deposit	Matrix of beach cobbles and fine sandy silt	-	-	T12.05	T12.03	Tr.12	14	-	-	Beach cobbles admixed with sand and organic material
T12.05	Deposit	Clean sand	-	-	T12.01	T12.04	Tr.12	-	-	-	Wind-blown sand over cobble matrix, stabilised topsoil T12.01
T13.01	Deposit	Sandy loam 0.05m thick	-	-	-	T13.03	Tr.13	-	-	-	Topsoil
T13.02	Deposito	Dark peaty clay	-	-	T13.03	-	Tr.13	-	-	-	Peaty clay deposit at base of hill extending to limit of excavation. Same as T12.02
T13.03	Deposit	Heavy sandy clay	-	-	T13.01	T13.02	Tr.13	-	-	-	Clay deposits formed by wet hillwash - not ploughed
T14.01	Deposit	Sandy loam 0.02-0.03m thick	-	-	-	T14.02	Tr.14	-	-	-	Topsoil - never ploughed
T14.02	Deposit	Clean sand, not bottomed, up to 1.6m thick	-	-	T14.01	-	Tr.14	-	-	-	Wind-blown sand stabilised by topsoil

No.	Type	Description	Fill of	Filled by	Under	Over	Trench/Feature	Finds	Samples	Plans-Sections	Interpretation
T15.01	Deposit	Heavy sandy clay	-	-	-	T15.02	Tr.15	-	-	-	Clay deposits formed by wet hillwash. Not overlain by topsoil as represents deepening of existing ditch. Same as T13.03.
T15.02	Deposit	Matrix of beach cobbles and sandy silt. Underlay T15.01 at base of slope but no overburden once ground levelled	-	-	T15.01	-	Tr.15	15	-	-	Beach cobbles admixed with sand and organic material
T17.01	Deposit	Sandy loam 0.05m thick	-	-	-	T17.06, T17.03, T17.05	Tr.17	-	-	S5	Topsoil - light pasture
T17.02	Deposit	Clean sand - not bottomed	-	-	T17.04	Bed rock	Tr.17	-	-	S5	Wind-blown sand
T17.03	Deposit	Pale brown silty sand forming bank of enclosure	-	-	T17.01	T17.04	Tr.17	-	-	S5	Enclosure bank, mix of T17.04 and T17.02? Abutted by T17.05
T17.04	Deposit	Mid-brown silty sand 0.25m thick	-	-	T17.03, T17.05	T17.02	Tr.17	-	-	S5	Old ground surface under bank
T17.05	Deposit	Stones, various sizes, single course	-	-	T17.01	T17.04	Tr.17	-	-	-	Inner face of enclosure bank. Abuts T17.03

No.	Type	Description	Fill of	Filled by	Under	Over	Trench/Feature	Finds	Samples	Plans-Sections	Interpretation
T17.06	Deposit	Pale silty sand 0.17m thick, in enclosure	-	-	T17.01	T17.07	Tr.17	-	-	-	Wind-blown sand accumulating after T17.07
T17.07	Deposit	Mid-brown silty sand 0.63m thick	-	-	T17.06	T17.04	Tr.17	-	-	S5	Spade dug cultivation soil

APPENDIX 4: Index of Features

Feature	Contexts	Finds	Plans	Description and Notes	Initials	Date
1	T3.01-T3.12	Quick-lime, mortar, wood	S2	Pit cutting through earlier midden lenses. Quick-lime making pit. Steep sides, hollowed base.	SB	15/11/2012

APPENDIX 5: Index of Samples

Sample Number	Context Number	Feature Number	Volume - litres / grams	Sample Justification	Initials	Date
1	T10.07	-	2l	Sample of old ground surface/soil surface below wind-blow (T10.06) for potential analysis	DA	04/12/2012

APPENDIX 6: Index of Finds

Find Number	Context Number	Material	Feature Number	Description and Notes	Approx. Dating	Initials	Date
1	-	Ceramics	Site 3	2 sherds of prehistoric pottery collected from sheep rub erosion at site	Prehistoric	SB	14/11/2012
2	-	Ceramics, glass, bone, shell	Site 13	Mixed collection of material from deep, well-stratified midden. Ceramics recovered from full depth of midden. Clay pipe fragments from base	Post-medieval	SB	15/11/2012
3	-	Clay pipe stem fragment	Site 43a	Collected from exposed sand core of house wall - along with fish bone, shellfish and charcoal	Post-medieval	SB	17/11/2012
4	-	Metallic discs	Site 44	Collected from SW service grid at SW en of WWII settlement	Post-medieval	DA	17/11/2012
5	T5.05	Iron	Trench 5	Pony shoe found in a shallow deposit - disturbed turf/topsoil. Location NM 07379 47738 on track as verged on bedrock near gate	Post-medieval	DA	21/11/2012
6	T6.01	Cu Alloy	Trench 6	Hollowed D section ?brass strip from spoil at NM 06413 47496	Post-medieval	DA	22/11/2012
7	T6.01	Fe	Trench 6	Iron band with rivet/screw holes at NM 06922 47503	Post-medieval	DA	22/11/2012
8	T6.03	Ceramic	Trench 6	Base and 1 side fragment - possible cream jar at NM 07014 47553	Post-medieval	DA	23/11/2012
9	T6.03	Ceramic	Trench 6	Side and shoulder fragments - possible cream jar at NM 07046 47578	Post-medieval	DA	23/11/2012
10	Tr6.03	Cu Alloy	Trench 6	Brass name plate 'Dr McKinnon' at NM 07059 47578	Post-medieval	DA	23/11/2012

Find Number	Context Number	Material	Feature Number	Description and Notes	Approx. Dating	Initials	Date
11	Tr6.03	Glass	Trench 6	Intact bottle - medicine? At NM 07059 47578	Post-medieval	DA	23/11/2012
12	Tr6.03	Ceramic	Trench 6	Pot sherd with logo at NM 07059 47578	Post-medieval	DA	23/11/2012
13	Tr10.01	Metal	Trench 10	Dessert spoon from NAAFI ivo NL 99725 43542	Post-medieval	DA	07/12/2012
14	Tr12.04	Stone	Trench 12	Stone 'multi-tool'. Evidence of use as a whetstone, polisher and as a hammerstone. Assigned BA/IA in view of use as whetstone.	Prehistoric	DA	10/01/2013
15	Tr15.02	Stone	Trench 15	Possible stone tool 175 x 90 x 35mm. Both ends and one ?cut face show signs of wear - from deposit of beach cobbles.	Unknown	DA	18/01/2013
16	T17.07	Ceramic	Trench 17	Two fragments	Post-medieval	DA	22/01/2013
17	Unstratified	Ceramic	Trench 17	3 fragments from at least 2 vessels. From spoil.	Post-medieval	DA	22/01/2013

APPENDIX 7: Index of Plans

Plan Number	Section Number	Feature Number	Contexts	Date	Initials	Scale	Direction (facing)	Comments
-	S1	Site 2	T1.01, T1.02, T1.03, T1.04, T1.05	14/11/2012	SB	1:20	N	Showing discontinuous charcoal or clinker lens within wind-blown sand
-	S2	Site 12a, F1	T3.01 - T3.13	15/11/2012	SB	1:10	NE	Section through quick-lime manufacturing pit and associated contexts
-	S3	Site 13	T4.01 - T4.08	15/11/2012	SB	1:10	N	Section through Post-Medieval midden at settlement of Brock
-	S4	Site 11	T2.01 - T2.05	15/11/2012	SB	1:20	N	Section showing track surfaces at Brock - coal horizons and clinker
-	S5	Trench 17	T17.01 - T17.04, T17.07	23/01/2013	DA	1:10	E	Section through outer bank of enclosure