



Scottish Coastal Archaeology and the Problem of Erosion



A rapid condition survey of RAF Wig Bay

NX 03487 66405

27-29th March 2015



Carried out by The SCAPE Trust
as part of the Scotland's Coastal Heritage at Risk Project



Background

Run by The SCAPE Trust, the Scotland's Coastal Heritage at Risk Project (SCHARP) aims to record and update records of threatened archaeological sites around the Scottish coast in partnership with members of the local community (ShoreUPDATE). Follow-up projects are being carried out at selected sites nominated by the local communities (ShoreDIG).

The intertidal and foreshore elements of RAF Wig Bay on Loch Ryan (NX 03487 66405, Figure 1) were visited during a ShoreUPDATE training session for SCHARP volunteers in February 2013, and the potential for a ShoreDIG project at the base was discussed.

During 2014 and 2015, discussion about the site carried on with local archaeologist John Pickin and the Solway Firth Partnership and the potential of a project at RAF Wig Bay was raised in the context of the Loch Ryan Management Plan. The project was developed in tandem with the improvement and interpretation works at Wig Bay which are being carried out as part of the implementation of the Management Plan.

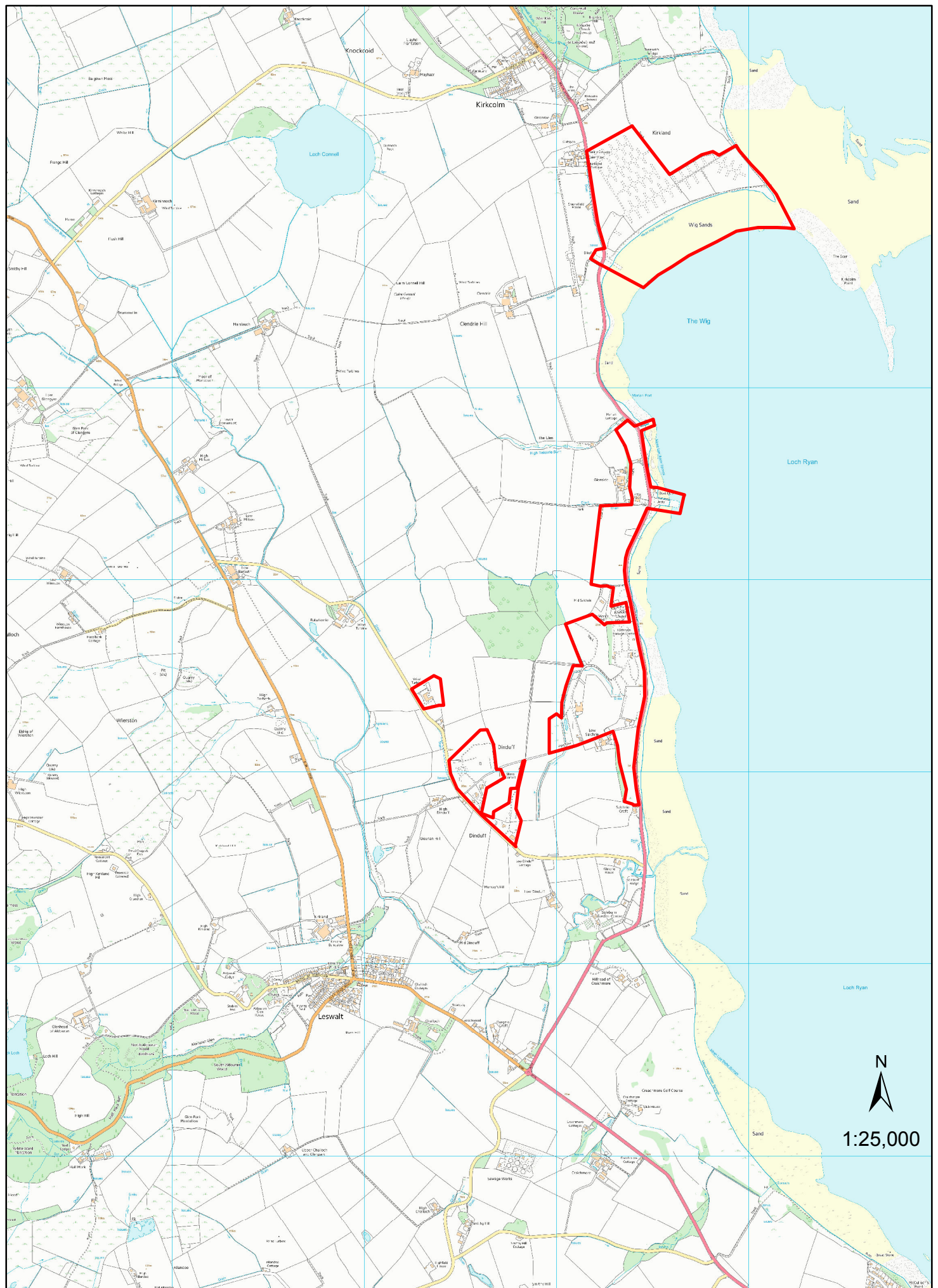
History

The base at RAF Wig Bay was established during the Second World War in 1942, as a servicing and maintenance base for the flying boats, operating as Coastal Command's major flying boat maintenance base in the UK throughout the war. The technical site consisting of maintenance pens, hangers, piers, slipways and workshops was located on the shores of the Loch. Associated infrastructure including accommodation, welfare facilities and offices was built in the immediate hinterland, while associated RAF installations at Stranraer and Corsewall primarily operated as training facilities; these three RAF Coastal Command sites on the Loch made Loch Ryan an important part of the network of flying boat bases across Scotland.

After the end of the war, RAF Wig Bay continued in use as a servicing, maintenance and test flight facility. Its primary function in the immediate post-war years was the storage and disposal of flying boats; some retained for the RAF, some sold to foreign forces and many scrapped. RAF control of the base ceased in 1951 when it was handed over to civilian contractors Short & Harland, the company which produced the Sunderland flying boat, though an RAF presence was maintained in the form of the Flying Boat Test Unit until the base closed in 1957.

After the closure of the RAF base, much of the land reverted to agricultural use, with many of the buildings either demolished, or used as farm sheds. A large part of the technical site has now been developed into a holiday park which utilises the concrete base of a hangar, while the large slipway on the western shore of the Loch is actively maintained and currently used by the Loch Ryan sailing club.

Figure 1 Location map



VectorMap Local Raster [TIFF geospatial data], Scale 1:10000, Tiles: nx06sw,nx06nw,
Updated: 22 September 2014, Ordnance Survey (GB), Using: EDINA Digimap Ordnance Survey Service,
<<http://digimap.edina.ac.uk>>, Downloaded: Wed Jan 14 18:24:32 GMT 2015

Aims

The aims of the project were:

- To produce a record of the surviving remains of the base to enhance the regional HER and the records of coastal heritage sites maintained by the SCAPE Trust;
- To involve the local community in the recording and research of the base;
- To increase local awareness of the base and of the Second World War history of the area.

During the project, it was realised that the wealth of local information and material held by the community would be an excellent resource for sharing the history of the base more widely. As a result, an additional activity was developed in which SCAPE worked with local young people through Apex Stranraer to create a series of films telling the story of RAF Wig Bay through the memories of local people who remember the base in use, using some of the contemporary photos of the base and its flying boats. This had the dual purpose of directly engaging disadvantaged young people with their local heritage, and of raising awareness of the area's Second World War heritage in the wider community. The videos produced by this project are available on [SCAPE's YouTube channel](#).

Methodology

The regional Historic Environment Record and the National Monuments Record of Scotland were consulted to establish the baseline information available. A total of 36 sites were recorded in the study area in the HER, of which 25 were related to the RAF base and 14 were records of aircraft or flying boats sunk within the Loch.

An Air Ministry plan of the base held by the HER and dating to 1945 with revisions in 1957 was consulted and formed the basis of the condition survey. The plan depicts individually numbered features accompanied by a list of the buildings shown along with their name and function. These were entered into a spreadsheet as sites to be visited during the condition survey (Figure 2). A further plan of the north part of the base was found online, though this was of limited use as the majority of features and buildings depicted do not appear to have been built; instead a simple grid of concrete hardstanding was laid in this area.

This information was supplemented by aerial photos of the base dating to 1953 and held by the Welsh Government at the Central Register for Aerial Photography in Wales (Figure 3). These showed the site in use during its post-war incarnation as a servicing and test-flight base, and included a number of features not shown on the plan; these were given sequential numbers and added to the list of survey targets compiled from the Air Ministry plan.

This list of features was refined by reference to modern OS mapping and modern Google and Bing satellite imagery. Features shown on the Air Ministry plan or the 1953 aerial photos were traced through these modern records and a basic judgement was made on their likely survival and condition. The spreadsheet of survey targets was annotated with the features' condition and where the original wartime/1950s buildings had clearly been destroyed or obscured by later development, they were removed from the list of sites to be surveyed. Reference to modern maps and imagery also added features of potential relevance to the RAF base; these were added to the list of sites to be surveyed.

The list of survey targets was cross-referenced against the HER and NMRS records, and the relevant HER/Canmore ID was entered against each feature for concordance.

The refined list of survey targets was then divided into areas to be targeted during the fieldwork, with features on the shores of the Loch prioritised for survey. A series of maps was produced for each area, including details from the Air Ministry plan, the 1953 aerial photographs, modern 1:25,000 OS mapping and modern satellite imagery, all showing the locations of the features to be surveyed. See Appendix 3 for an example of a survey targets map.

A pro-forma recording form (Appendix 1) was designed in consultation with the Dumfries and Galloway archaeologist, with fields created for ease of entry into the HER. Broad feature types were taken from the building list which accompanied the Air Ministry plan and a free-text field was added to supplement this with more specific information.

A form was printed for each survey target, with some fields pre-populated with the information from the 1945/57 Air Ministry plan of the base, with the rest blank for completion on site.

To inform the condition survey of the base, local history research was carried out in December 2014, via two drop-in events run jointly with the Solway Firth Partnership for members of the local community to share their knowledge and memories of the base. This produced a number of old photos of the base in use, which contributed to our understanding of the original form of the buildings, while the local knowledge of the functions of different buildings informed our understanding of the surviving features. This information was included in the survey forms for the individual features.

Figure 2 Annotated and labelled Air Ministry plan

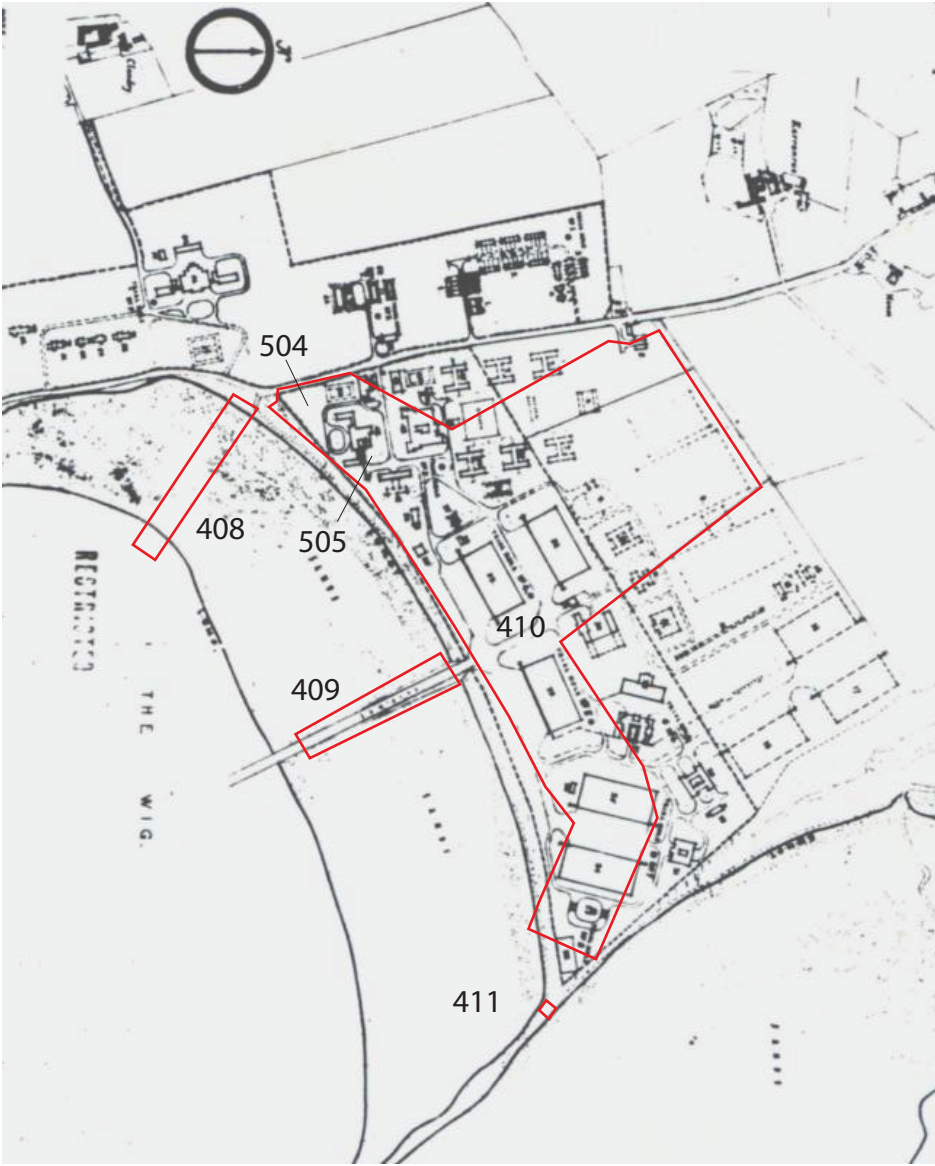
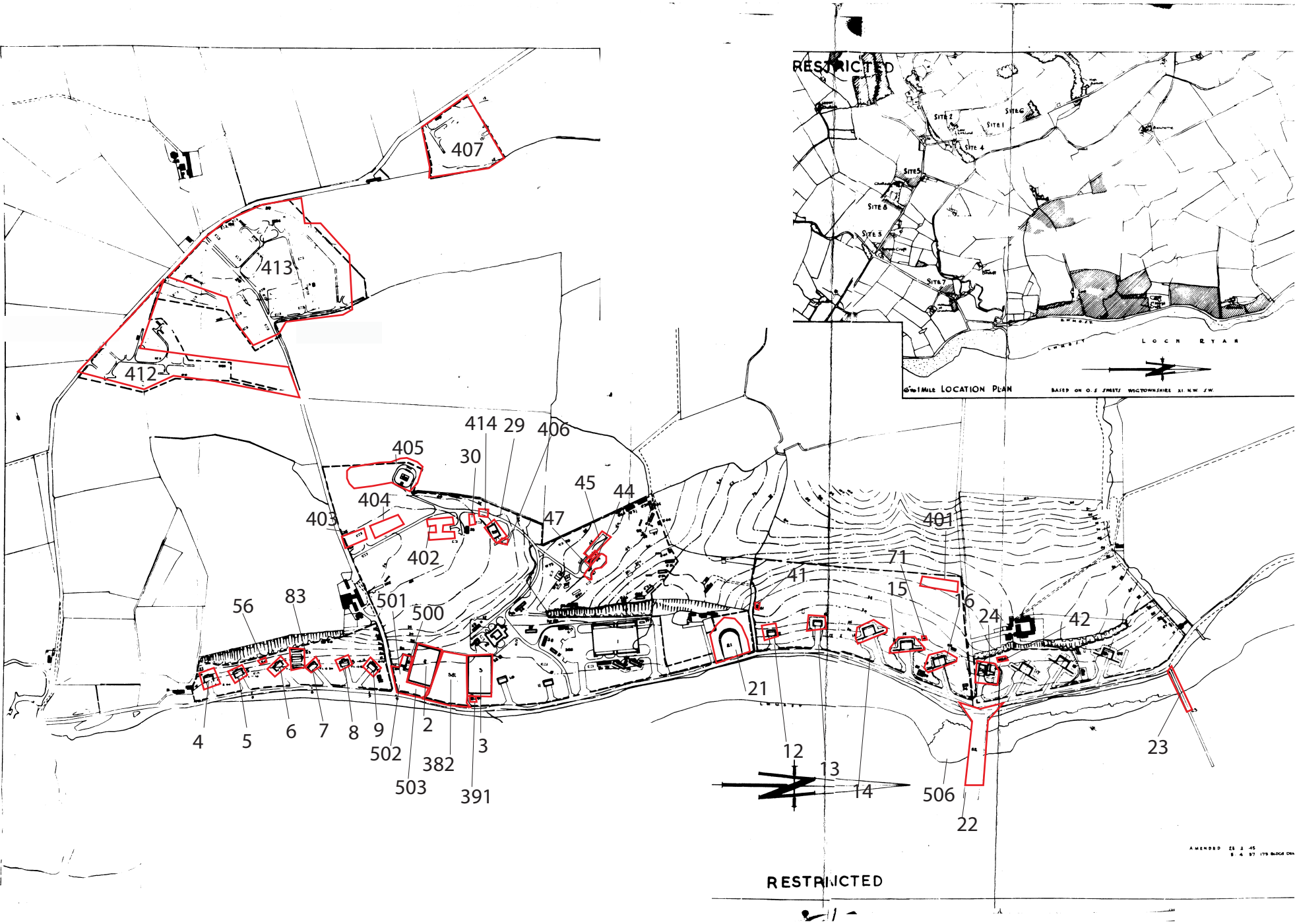


Figure 3 1953 aerial photograph of RAF Wig Bay flying boat base



Courtesy of the Welsh Government

Fieldwork

A reconnaissance visit was undertaken in December 2014 to ascertain the degree of survival of different areas and the viability of the planned survey work. During this visit, some of the hinterland areas were photographed from the road but not accessed. These records have been included with this survey, but further more detailed information survey work may be undertaken by volunteers subject to landowner permission.

The fieldwork was carried out over the weekend of 27th-29th March 2015. These dates were chosen to coincide with low tides to allow access to intertidal features, and to avoid both the heavy vegetation growth later in the year and clashes with the agricultural calendar which would have prohibited access to some of the areas of interest.

Access to some areas was prohibited for safety reasons where buildings were judged by the owner to be unsafe or land had been recently sprayed with fertiliser; however these were not areas of high priority for the purposes of this survey.

Participants were recruited through existing SCHARP networks established by previous work in the area, through local societies, the Solway Firth Partnership's networks and articles in the local newspaper (the Stranraer and Wigtownshire Free Press).

A short meeting for survey participants was held on the morning of Friday 27th in order to introduce the project, its aims and methodology. A total of 9 volunteers (listed in Appendix 2) participated in the fieldwork. Some volunteers had personal connections with the base, including several individuals who had contributed to the oral history research in December 2014. Other participants were members of local history and archaeology societies. Some were members of the local community with no prior knowledge of the site.

Several new features of interest were suggested by the volunteers, including the site of a wrecked Sunderland flying boat which is visible only at extremely low tides. These features were added to the list of targets. Tides were not low enough during the survey period to allow access to the wreck site, however two volunteers returned the following month during an exceptionally low tide to photograph and record it.

The survey fieldwork involved the completion of a pro-forma recording form for each survey target, a sketch where appropriate and digital photos of any surviving elements. Where there were no visible remains, photos were taken of the recorded location of the site according to the 1940/50s maps and photos.

The intertidal features and the remains of the technical site along the shores of the loch were prioritised for fieldwork, and these features were all visited over the course of the weekend, with the exception of the wreck site as it was not accessible during normal low tides.

The records have been digitised in an Access database. Two features were sketched on site, these sheets were scanned and labelled with the feature ID number.

The digital photos were downloaded and labelled with the prefix WBS-2015_ followed by the feature ID number and the image number. These were catalogued in an Excel spreadsheet with separate sheets for each camera; the different sheets correspond to the sub-folders containing the photos.

Some hinterland features were not visited, some for the safety reasons noted and some due to lack of time. Several of the participants expressed an interest in completing the survey; the relevant maps and recording forms were left with them for future work. Although no records have yet been returned for the hinterland sites, two of the survey participants took advantage of the exceptionally low tide of 0m on 18th April 2015 to visit the recorded site of the wrecked Sunderland. A submerged metal feature was recorded and photographed, and experts at the Sunderland Trust, Pembroke Dock have examined the photos but are uncertain as to whether the remains are those of a wrecked flying boat.

Results

The fieldwork recorded 34 features in detail, including a description, photos and condition notes. These can be linked to the existing HER/NMRS records to enhance and add to the records. All the surviving intertidal and coast-edge features of the base have been recorded, though the areas further inland have not yet been surveyed. Maps and site lists have been left with local volunteers who expressed an interest in completing the survey of the base, though several of these areas are inaccessible for much of the year due to the agricultural use of the land.

Archiving

The results of the survey including the digitised survey records and photos will be deposited with the Dumfries and Galloway Archaeology Service for incorporation into the Historic Environment Record.

Acknowledgements

The assistance of all participants and volunteers is gratefully acknowledged, especially Archie Bell, Donnie Nelson and Bill Sandiford. The Central Register of Aerial Photography for Wales, part of the Welsh Government, provided high-quality copies of the 1953 aerial photographs and the Pembroke Dock Sunderland Trust provided invaluable information, guidance and assistance with the research. Dumfries and Galloway Archaeologist Andrew Nicholson provided HER data, copies of the Air Ministry plan and assistance with planning the survey and designing the survey form. Thanks are due to John Pickin and the Solway Firth Partnership who helped in developing and planning the project.

Enclosed


Survey photos

Photo catalogue Excel spreadsheet (sheets correspond to subfolders containing survey photos)

Access database

Excel spreadsheet of survey targets annotated with condition notes

Appendix 1 survey proforma

| RAF Wig Bay condition survey | | | | |  | |
|--|---|----------------|------------|------------|---|--|
| ID number | Site name | Grid reference | HER number | Canmore ID | On RAF plan? <input checked="" type="checkbox"/> | |
| Your name | | | | Date | | |
| Feature type (as listed on RAF plan) | | | | | | |
| Survives (circle one) | <div>yes</div> <div>no</div> <div>partial</div> | | | | | |
| Visibility | <div>clearly visible</div> <div>partially visible</div> <div>not visible</div> | | | | | |
| Condition (circle one) | <div>Intact</div> <div>destroyed</div> <div>damaged</div> <div>restored</div> <div>near destroyed</div> | | | | | |
| Current use | | | | | | |
| Description - form - construction materials - describe what survives - vegetation - condition details | | | | | | |
| Do you have any additional information about this feature? | | | | | | |

Take your photos and record them on the back of this page

Photo record

| Image number | Description | Direction of view |
|--------------|-------------|-------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sketch - Indicate north and include dimensions where possible

+ + + + —

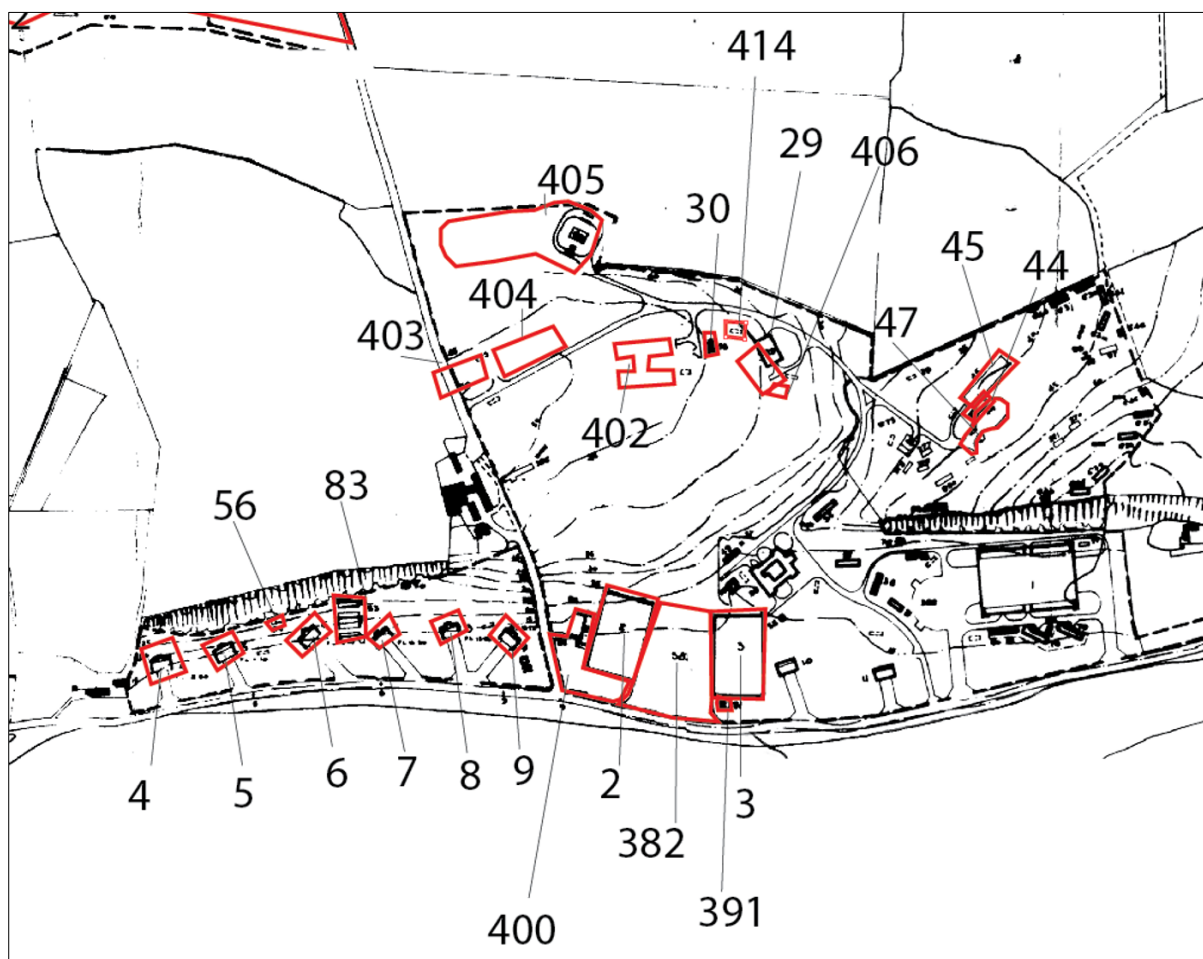
+ + + + —

+ + + + —

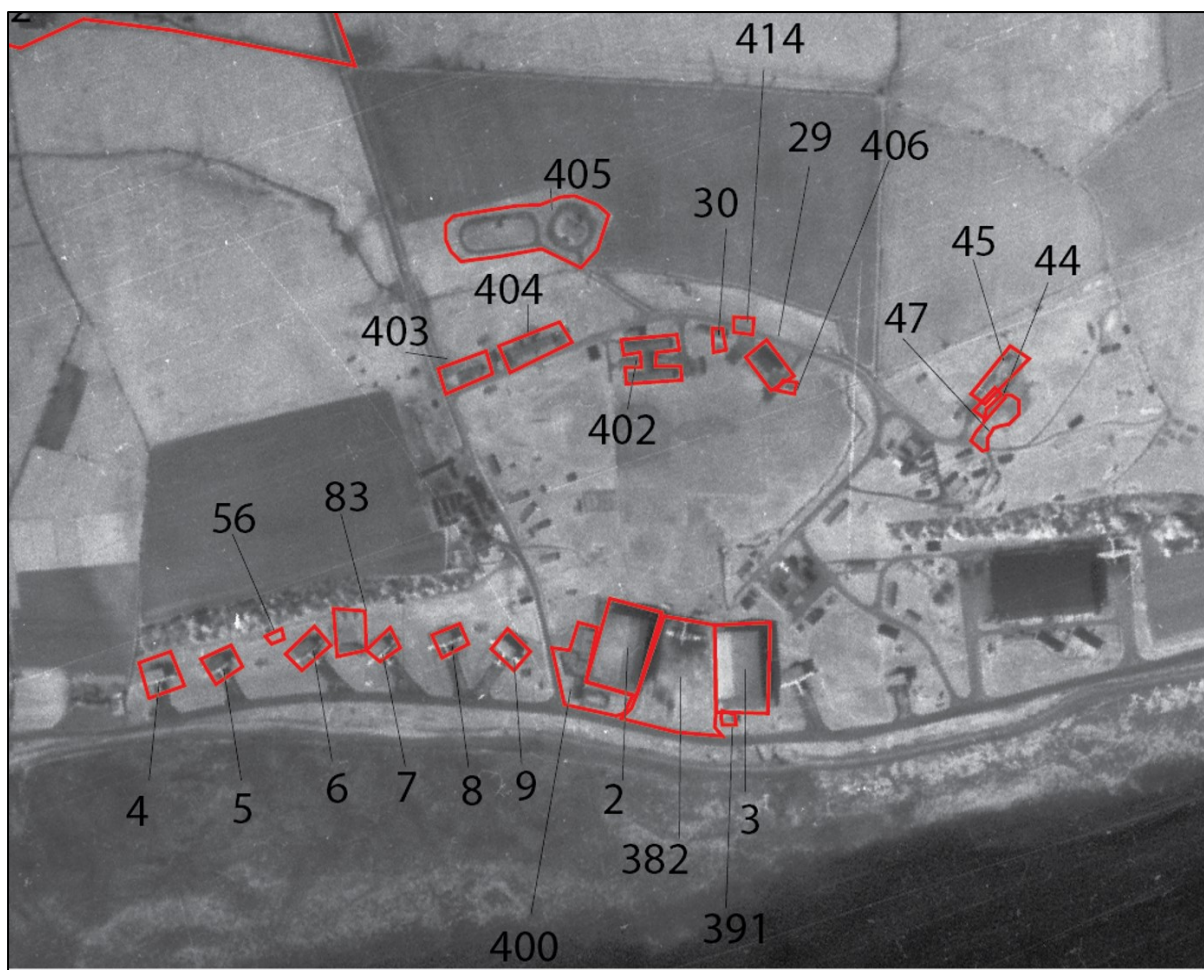
Appendix 2 survey participants

| Name | Fri 27th March | Sat 28th March |
|------------------------|---------------------------|---------------------------|
| Matt Halliday | | ✓ |
| Ian A. MacPheat | ✓ | ✓ |
| Steve Brown | ✓ | |
| Colin Casey | ✓ | |
| Walter Walker | ✓ | ✓ |
| Bill Sandiford | ✓ | |
| Steve Stringer | | ✓ |
| John Pickin | ✓ | ✓ |
| Archie Bell | ✓ | |

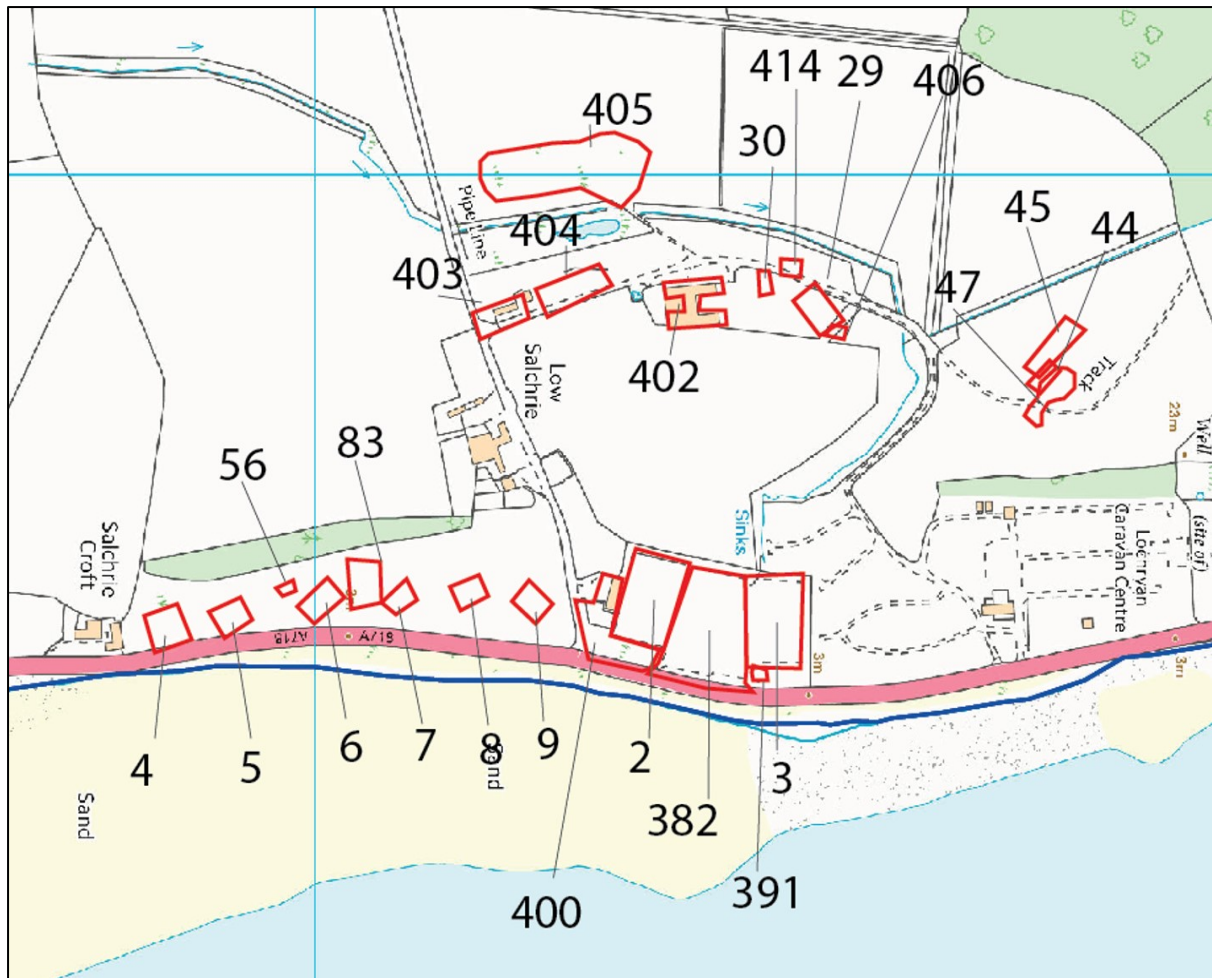
Appendix 3 example survey map for south part of RAF Wig Bay



South part of survey area. Labelled features on Air Ministry plan



South part of survey area. Labelled features on 1953 aerial photo



South part of survey area. Labelled features on modern OS 1:10,000 map

