

**Interim report for archaeological recording at
Jenny Brown's Point
Silverdale
Lancashire**

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Report on a CITiZAN site survey

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Summary

This report presents the results of a survey and training session carried out by CITIZAN, the Coastal and Intertidal Zone Archaeological Network, at Jenny Brown's Point in Silverdale, Lancashire. Jenny Brown's Point is suggested to be the site of a late 18th century copperworks, and a standing chimney on the site, designated as a Grade II Listed building (Listed Building number 181949), is thought to form part of the works. Jenny Brown's Point is also the location of an ambitious late 19th century land reclamation scheme which involved building a substantial seawall into Morecambe Bay, known as Walduck's Wall (PRN 11302). This project was abandoned by 1885 when the scheme ran out of money.

The site was first visited by CITIZAN on a tour of vulnerable coastal archaeology organised by Headlands to Headspace (H2H; the Morecambe Bay Partnership's cultural heritage project), to see whether there was potential for the projects to work in partnership to record heritage assets threatened by coastal erosion and tidal scour. This visit was conducted on the 27th April and it was subsequently agreed that H2H and CITIZAN would conduct a joint training workshop on the site in June. A short length of the leading edge of the salt marsh was recorded in section during the filming of CITIZAN's promotional video at Jenny Brown's Point on the 9th June 2015. A pair of one day training workshops were held at the site on the 19th and 20th June, during which volunteers recorded three stone-built features eroding out of the edge of the salt marsh. A total of nineteen members of the public were trained across the two days.

On the 19th June low tide was at 09:45 with a tidal height of 1.1m, high tide was at 15:10 with a tidal height of 8.8m. On the 20th June low tide was at 10:25 with a tidal height of 1.4m, high tide was at 15:50 with a tidal height of 8.5m.

Acknowledgements

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CITiZAN North would also like to thank Ken Davies (Planning Officer (HER) Lancashire County Council), Peter Iles (Specialist Advisor (Archaeology) Lancashire County Council), Sue Stallibrass (Historic England Science Advisor, North West England) and Simon Williams for their help during the project and knowledge of the archaeology of Jenny Brown's Point.

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1 Introduction

1.1 Site background

An archaeological survey on the enigmatic industrial remains at Jenny Brown's Point was conducted by CITiZAN and Headlands to Headspace (the Morecambe Bay Partnership's cultural heritage project) on the 19th and 20th June 2015. The industrial remains at Jenny Brown's Point are clustered around an extant Grade II Listed chimney (Listed Building number 181949) at NGR SD 46628 73522. While little is known about the history of the chimney or its use, it is currently thought to have formed part of a copperworks. The salt marsh at Jenny Brown's Point is actively eroding following a long period of accretion, revealing as it does so the remains of buildings and features likely associated with the chimney.

The following work is an interim report on the archaeological recording conducted by CITiZAN and Headlands to Headspace at Jenny Brown's Point. Headlands to Headspace are conducting an ongoing programme of community-based work recording the coastal erosion of the salt marsh, alongside an archaeological survey of the heritage assets located along the coastline at Jenny Brown's Point. A full report on the archaeological recording and coastal erosion will be compiled by Headlands to Headspace on the completion of their programme of works.

CITiZAN were initially taken on a tour of the foreshore archaeology at Jenny Brown's Point by Louise Martin (Cultural Heritage Officer for Headlands to Headspace) on the 27th April 2015 in the company of David Iles (Lancashire County Council's advisor (archaeology)), Sue Stallibrass (Historic England Science Advisor, North West England) and Simon Williams (local historian).

A method statement was subsequently prepared by Headlands to Headspace taking into account health and safety issues, tidal windows, staffing and methodologies. A two day training workshop was conducted by CITiZAN and Headlands to Headspace on the 19th and 20th June 2015 recording features eroding from the salt marsh. A total of nineteen people were trained across the two days, twelve on the 19th June and seven of the 20th June.

On the 19th June low tide was at 09:45 with a tidal height of 1.1m, high tide was at 15:10 with a tidal height of 8.8m. On the 20th June low tide was at 10:25 with a tidal height of 1.4m, high tide was at 15:50 with a tidal height of 8.5m.

A Rapid Coastal Zone Assessment (RCZA) was prepared by Archaeological Research Services Ltd (ARS) for the North West of England; Jenny Brown's Point was surveyed by ARS for the Phase 2 assessment of the coastline (Eadie 2012). This document should be referred to for information on the natural geology, archaeological and historical background of the site (and the initial assessment of its archaeological potential). The remains of the copperworks at Jenny Brown's Point was highlighted during the first phase of the RCZA (Johnson 2011) and following site visits to the area was added to the fieldwork for the second phase of the RCZA (Eadie 2012) and surveyed accordingly.

The foreshore at Jenny Brown's Point is a Ramsar site, a Special Area of Conservation (SAC) and a Site of Special Scientific Interest (SSSI). Arnsdale and Silverdale are also registered as an Area of Outstanding Natural Beauty. The foreshore is owned by a local landowner, Mr Wilson and the surrounding marsh and mud flats are owned by the RSPB.

1.2 Research frameworks

The archaeological recording conducted by CITiZAN and Headlands to Headspace at Jenny Brown's Point falls under the research initiatives established in 2007 within the Archaeological Research Framework for North West England for Coastal and Marine Exploitation. In this instance initiative 7.16:

“Record the remains of maritime exploitation exposed in the intertidal zone. Use documentary and oral sources to provide an interpretative context” (Newman and McNeil 2007, 142).

CITiZAN's work at Jenny Brown's Point also falls within the regional research priorities established in English Heritage's review of progress in coastal heritage (Murphy 2014). The current work falls under the twelfth priority established for the Northwest:

“For the modern and industrial periods, survey is needed of ... intertidal structures in Morecambe Bay” (Murphy 2014, 156).

Furthermore the survey was carried out within the terms of several of the CITiZAN themes and research priorities developed for the project:

- Coastal erosion
- Coastal industry

1.3 Aims and objectives

Prior to the fieldwork being conducted at Jenny Brown's Point a series of research questions were discussed between CITiZAN and Headlands to Headspace with three archaeological priorities being identified:

- Establish a permanent base-line at Jenny Brown's point from which future erosion monitoring could be conducted
- Establish the contemporary edge of the salt marsh
- Begin the recording of archaeological features eroding from the salt marsh

A two day training workshop was conducted on the 19th and 20th June 2015 with Headlands to Headspace. Headlands to Headspace are planning on conducting further archaeological recording at the site throughout 2016 and 2017.

1.4 Scope of the survey

A CITiZAN survey is not the same as full excavation. It is designed to locate and identify significant archaeological features currently exposed on the coast or foreshore and highlights those that are under threat from erosive forces. These surveys provide a baseline dataset so that their condition can be effectively monitored in the future.

1.5 Related outreach events

A public footpath runs to the rear of the salt marsh at Jenny Brown's Point and two members of the public were engaged with on the 9th of June during the filming of CITiZAN's promotional video. A further six members of the public were engaged with during the training workshop.

CITiZAN and Headlands to Headspace's work at Jenny Brown's Point was discussed as part of the North team's round up at the CITiZAN conference in Bridlington on the 10th October 2015.

2 Background research

A detailed description of the geology, archaeology and history of the site was provided in the earlier RCZA reports, especially Johnson 2009 and Eadie 2012. The following is a summary of the topographic, historical and archaeological data for foreshore at Jenny Brown's Point.

2.1 Topography

The bedrock geology of Jenny Brown's Point is formed by Carboniferous limestone from the Great Limestone group. Overlying the bedrock the superficial geology is formed by alluvial clay, silt sand and gravel (British Geological Survey). The intertidal zone at Silverdale is composed of extensive sand flats known as Warton Sands, with Warton marsh, a large area of salt marsh deposit forming the shoreline around the Listed chimney (181949/4821) (Farwell 2007).

The mean spring tidal range in the northeastern corner of Morecambe Bay is 8.40m and due to its orientation, it is more exposed to southwesterly storm waves than the southern section of the bay (Halcrow 2011).

2.2 Archaeology and documentary evidence

Prehistoric

Excavations at Storrs Moss (approximately 1 mile northeast of Jenny Brown's Point) by Liverpool University in the mid-1960s identified a small microlith scatter and several potential worked timbers. Radiocarbon dating of these timbers suggested that they dated to approximately 4200BC. Palaeobotanical analysis indicated that the area was heavily wooded with species including alder and willow at the water's edge and oak and Scots pine at higher altitude (Denwood 2014; Powell, Oldfield and Corcoran 1971).

During the 1930s and 40s a farmer recovered a leaf-shaped arrowhead and four polished axe-heads dating to the Neolithic during ploughing at Yealand Storrs (approximately 2.5 miles northeast of Jenny Brown's Point). In 1941 the farmer also recovered a perforated, polished stone disk, 3 inches (7.62cm) in diameter. This artefact was examined by local archaeologist Oliver North who identified it as a Neolithic net sinker (Denwood 2014, 8-9).

Early medieval

Several early medieval hoards have been recovered from the Morecambe Bay area including those known as the Barrow-in-Furness Hoard (found in 2011 and dating to the late 10th century) and the Tewitfield Hoard (found in 1997 and dating to the early 10th century). A third known as the Silverdale Hoard was discovered a short distance from Jenny Brown's Point. This consisted of silver arm-rings, brooch fragments, ingots and coins all found (bar one coin) in, or underneath, a lead container. Among the artefacts in the hoard was an unknown coin type, one side of which read *DNS (Dominus) REX*, with the letters arranged in a cross-shape; on the other side, the inscription read *AIRDECONUT* which appeared to be the misspelling of the Scandinavian name Harthacnut, a ruler not previously known (White 1999; Richardson 2011).

Medieval

In the mid-13th century the Warton village charter prepared for Walter de Lindsay referred to a sea-dyke when describing areas of the manor to which the charter does not pertain. The boundary of one of the excluded areas is described as:

“The pasture of Southou, from Southou by the sea-dyke up to Quytsandpole and to Quitsandpole from the side up to Lindeth” (Booth 1976).

“This suggests medieval sea defences ran from Southou – possibly Cragfoot at the southwest end of the moss – across the mouth of the inlet to Quytsandpole, the modern Quicksand Pool – and to the shore of Lindeth: probably somewhere near where Jenny Brown’s Point is today” (Denwood 2014, 21).

Post medieval

The 16th-18th century iron industry of the Lancaster to Kendal area was located because of the local availability of charcoal, but it did not have a local supply of iron ore. Most of the manufacturing sites were close to the coast and the documentary record indicates they were being supplied with ore from Furness via coastal shipping around Morecambe Bay (Newman 2003). Other heavy raw materials are likely to have been moved around the coast in a similar manner (McNeil and Newman 2006a, 148). The same is likely to be true for works at Jenny Brown’s Point, possibly supplemented by local copper mining. Copper mining was conducted in the Silverdale area from the 16th century onwards around Coniston and to a less extent at Warton Crag and Heald Brow (Lancashire SMR: PRN 4821).

A copperworks is said to have been active on the site of Jenny Brown’s Point between 1780 and 1820 (Bolton and Fogg 1978), although little documentary evidence has been found to confirm this. By the time of the first edition (1848) Ordnance Survey mapping the site is marked as ‘ruins’ (Lancashire SMR: PRN 4821). The only extant building on the site is a narrow, tapering chimney with a height of 10m, constructed from small, well-faced limestone blocks (UID 181949; PRN 4821). The function of the chimney is uncertain and theories on its purpose include use as a navigation marker and warning beacon, however the commonly accepted theory is that it forms part of the copperworks mentioned by Bolton and Fogg.

The foundations of several buildings or structures appear to survive intact below the salt marsh and reference is made to the transportation of copper ore and machinery to Jenny Brown’s Point via the large stone quay associated with Walduck’s Wall (PRN 11302, see below). However, some contention exists as to whether this refers to materials for Walduck’s land reclamation scheme or for use at the copperworks (Lancashire SMR: PRN 4821; Bolton 1995).

In 1995 a small stone quay or jetty (PRN 520) was uncovered by coastal erosion, which is thought to be associated with the copperworks. This structure is aligned southeast-northwest and is constructed from large, roughly square cut limestone blocks. The structure stands to a surviving height of 1.2m and survives to a length of 17.5m (Eadie 2012, 156). There is evidence of a wooden jetty of early 19th century date (Ashmore 1969). A further short, stone jetty was exposed by erosion in 1997 at NGR SD 4659 7349. The jetty measured approximately 5m in length and was constructed from large blocks with a rubble core. A large baulk of timber was visible in the core on initial exposure. This jetty was consolidated by Lancashire County Council with a concrete slab (Lancashire HER PRNs 37067 and 4821).

In 1873 Henry Walduck proposed an ambitious scheme to construct a seawall across Morecambe Bay, in order to reclaim a substantial quantity of land. In May 1874 objections from local residents were heard in Parliamentary Committee that stated that foreshore grazing rights confirmed by the Enclosure Award of 1817 would be affected by the scheme. Walduck altered his plans to avoid these complications, with his modified reclamation scheme now enclosing land between Jenny Brown’s Point and Hest Bank (Lancashire SMR: PRN 11302). The reclamation scheme consisted of a large limestone seawall (PRN 4821) constructed from material extracted from a quarry (PRN 12271) at Jenny Brown’s Point. Running along the top of the seawall from the quarry face was a narrow gauge rail line (*pers comm* Simon Williams). By 1885 the works were abandoned due to a lack of funds (Eadie 2012, 158) with less than half the seawall constructed.

Located between the potential copperworks chimney and Walduck's Wall at NGR SD 46499 73484 are two Grade II Listed buildings known as Brown's Houses 1 and 2 (UID 181950). These houses were built in the mid-18th century and used as accommodation for the workers building Walduck's Wall (*pers comm* Simon Williams).

Modern

During the Second World War the salt marsh on the eastern side of Quicksand Pool was used as a bombing practice range and several targeting markers are extant across the area (*pers comm* Louise Martin). The foundations of a destroyed Second World War pillbox can be seen just to the north of the quay associated with Walduck's Wall (*pers comm* Louise Martin).

A steel and concrete bridge located at NGR SD 46589 73496 allowed access to salt march on the eastern side of Quicksand Pool for grazing. The bridge was approached by a raised causeway formed of demolition material. The structure was in use during the late 20th century but abandoned by 2000 and by 2003 the structure had collapsed (Lancashire HER PRN 37067).

3 Survey methodology

3.1 Training methodology

The industrial landscape revealed by the erosion of the salt marsh was recorded as part of a one day training workshop run in association with Headlands to Headspace.

A full CITiZAN training session consists of a half-day classroom session that includes briefings on site background and archaeological methodology alongside foreshore health and safety in conjunction with a day's fieldwork. One-day training workshops consist of a shorter classroom session concentrating on a narrower field of interest, followed by a half-day of on-site practical work.

On completion of a full training session volunteers qualify for a CITiZAN Archaeology Skills Passport in which to record learnt skills.

All volunteers must adhere to Health and Safety assessments (CITiZAN 2015c) and the CITiZAN code of conduct (CITiZAN 2015a).

3.2 Recovery and ownership of finds

CITiZAN is focused on recording and monitoring structures, landscapes and archaeological features and will not systematically collect finds. However in certain circumstances finds of specific and unique intrinsic interest may be recovered. These finds will in general fall under the terms of the Treasure Act 1996.

In the event of 'Treasure' being recovered during a CITiZAN training or outreach event the artefacts in question will be reported to the local coroner and surrendered to the regional Portable Antiquities Scheme Finds Liaison Officer.

3.3 Field methodology

The training workshop was carried out in accordance with a Method Statement prepared by Headlands to Headspace (Headlands to Headspace 2015).

Intrusive archaeological methods will not be used during CITiZAN training and outreach events, with the exception of surface cleaning to reveal obscured archaeological detail (to a maximum depth of 80mm). Wooden features will not be cleaned with metal tools, where necessary they will be cleaned with soft brushes, sponges or the direct application of low pressure water as appropriate.

Targeted environmental sampling will occasionally be conducted during CITiZAN training and outreach events. Where environmental sampling is to be used a detailed methodology will be included in.

Areas/features were cleaned by hand and surveyed by the CITiZAN volunteer team, supervised by a member of CITiZAN staff.

All features were located using a hand held Garmin eTrex 10 with an accuracy of plus or minus 3m.

3.4 Recording methodology

A written and drawn record of appropriate features was carried out using CITiZAN proformas and the CITiZAN app. Hand written notes were taken in the field to record the findings of on-site analysis of features during monitoring visits, workshops and training seasons as necessary. These were notes on

the fabric, form, function and evidence of past changes to features. All hand written notes will be included in the material to be archived.

All appropriate features were photographed using suitable high end digital, medium and large format cameras. The photographic record illustrates all significant phases, structures, important stratigraphic and structural relationships, and individual items of interest. All site photographs, except 'working shots', will include a photographic scale of appropriate size.

All photographs are taken using digital cameras; MOLA does not use colour or black and white film.

Appropriate features were planned at a scale of 1:20 or 1:10 as applicable, sections were drawn at a scale of 1:10 were necessary.

The drawn site records, the completed CAD drawings presented in the report and the use of existing survey drawings will conform to the conventions and procedures laid out in Museum of London Archaeology's *Archaeological Site Manual* (MOLAS 1994).

Other digital illustration programs, beside CAD, may be used were appropriate in the production of report drawings. All drawings used to illustrate the report will conform to the conventions and procedures laid out in Museum of London Archaeology's *Archaeological Site Manual* (MOLAS 1994).

Where appropriate, features will be recorded using the CITiZAN app. Sites recorded using the app will be moderated by CITiZAN staff and uploaded to CITiZAN's webhosted interactive map.

4 Results

Due to the CITiZAN projects non-intrusive methods no sections were straightened or cut-back, as a result several of the measurements below are only approximate.

For area and feature locations see Figs 1 and 2. For feature plans see Figs 3-6. No finds were recovered during the current works.

4.1 Area 1: Stone structures

Eroding out of the south facing edge of the salt marsh are two probable stone-built features (100 and 101) (see Fig 2; 3 and 4).

The lower stone feature (101) has an exposed length of 1.00m and an exposed width of 0.20m; the feature appeared to be aligned northeast-southwest. Stone feature 101 was formed from roughly faced sub-rectangular limestone blocks varying in size between 0.58m by 0.38m and 0.22m by 0.40m. Feature 101 appeared to consist of a single course of stonework; a single sub-rectangular stone possibly formed the remains of a second course of construction at the features southwestern end. However, it was uncertain whether this stone block was *in situ*.

Partially overlying the northeastern end of feature 101 was a second stone-built feature (100). Feature 100 had an exposed length of 1.75m and an exposed width of 1.32m. The structure was built from large, squared, well-faced limestone blocks the largest of which measured 0.68m by 0.64m in size. Feature 100 was constructed of three courses and appeared to have two distinct faces, one orientated north northwest-south southeast, the other orientated northeast-southwest. Neither structure 100 or 101 appeared to be bonded; however it is entirely possible that the bonding material has been washed out by coastal erosion.

Overlying both features was the deposit of 'turf and topsoil' (201) that formed the salt marsh.

A short distance to the north of features 100 and 101 a small section of walling (102) had been exposed in an erosion scar located towards the centre of the salt marsh. Only a small area of this structure was revealed; the total exposed length of the structure was 1.30m and the total exposed width was 0.74m. Feature 102 was constructed from sub-rectangular limestone blocks with a maximum size of 0.73m by 0.30m and sub-rounded cobbles that measured up to 0.226m by 0.32m. The feature was bonded with light grey coloured lime mortar that contained occasional small fragments of coal.

4.2 Area 2: Industrial landsurface

A post medieval landsurface was identified eroding out of the edge of salt march approximately 6m east of the chimney (181949/4821) at NGR SD 46650 73524 (see Figs 2; 6 and 7). This section was identified on CITiZAN's initial visit to the Jenny Brown's Point on 27th April and was recorded on 9th June 2015.

The basal deposit exposed in the edge of the salt marsh was a limestone bedrock (203) with an exposed depth of 0.19m. Overlying the bedrock was a blackish brown silty clay (202) that contained occasional quantities of sub-angular, heat effected stone that varied in length between 40mm and 90mm with a maximum depth of 70mm. Context 202 also contained occasional small lumps of coal up to 20mm in length and isolated, small fragments of probable copper slag. The context had an approximate depth of 0.11m. Overlying the silty clay 202 was a deposit of turf and topsoil (201) formed by a dark brown silty sandy clay. Context 201 contained isolated small sub-rounded and sub-

angular stones up to 20mm in length and isolated flecks of coal. The deposit had an approximate depth of 0.26m.

4.3 Area 3: The edge of the salt marsh

The contemporary edge of the salt marsh was recorded by off-set survey for a short distance along the edge of the foreshore (see Fig 3). This shoreline is rapidly eroding (see Fig 9) and Headlands to Headspace are conducting a long term programme of monitoring to record this erosion.

A drone survey was conducted of the foreshore at Jenny Brown's Point on 19th June by Oxford Archaeology North in order to produce a model of the wider industrial landscape and a contour survey of the foreshore. The results of this work will be published in the full report produced by Headlands to Headspace on the completion of their recording and monitoring programme.

4.4 Training results

Comprehensive evaluation of all CITIZAN training and outreach events is being conducted by an external evaluator as a condition of the project's Heritage Lottery Grant. A copy of the relevant report outlining the results of these evaluations can be supplied on request.

In summary the CITIZAN training session at Jenny Brown's Point included instruction and practice in the following archaeological skills:

- Health and safety on the foreshore
- Identification of foreshore archaeological features
- Scale drawing
- Archaeological photography
- Use of handheld GPS units

A total of nineteen people attended the CITIZAN and Headlands to Headspace's training session at Jenny Brown's Point; twelve on 19th June and seven on 20 June.

5 Conclusions and recommendations

5.1 General discussion of the survey

A total of three stone-built features (100 – 102) were identified during the fieldwork at Jenny Brown's Point. Due to the non-intrusive nature of the project it was only possible to inspect the areas of each feature which had been exposed by erosion, making it extremely difficult to draw any definitive conclusions about their function. The presence of a thin but extensive deposit of silty clay contaminated with heat affected stones, coal fragments and copper slag across the site might indicate that these features are associated with the extant chimney and presumed associated copperworks.

The apparent lack of survival of bonding material in features 100 and 101 makes establishing a chronology for the site difficult. However, the apparent stratigraphic relationship between features 100 and 101 (feature 100 appeared to overlie feature 101) and the apparent differences in the construction material (feature 100 was constructed from larger, better prepared limestone blocks than features 101 and 102), could suggest that at least two phases of construction are present on the site.

What is apparent from the fieldwork is that an extensive landscape survives below the level of the salt marsh and that further investigation of this would be worthwhile. It seems likely that a more intrusive methodology, perhaps exploring areas of the salt marsh already eroding, could produce answers as to the function and age of the site.

5.2 Answering original research aims

Prior to the start of fieldwork three research aims were proposed:

- Establish a permanent base-line at Jenny Brown's point from which future erosion monitoring could be conducted
- Establish the contemporary edge of the salt marsh
- Begin the recording of archaeological features eroding from the salt marsh

The current fieldwork has successfully completed these aims. A permanent base line was established with the assistance of Oxford Archaeology North, who also produced an accurate model of the foreshore and salt marsh surrounding the site. A section of the edge of the salt marsh was also recorded by CITIZAN volunteers using an off-set survey from a baseline.

Across the two days of the training workshop volunteers archaeologically recorded the remains of three stone-built features that had been exposed by tidal erosion. The training workshop also established a group of volunteers with an understanding of archaeological recording techniques who can be co-ordinated by Headlands to Headspace in further recording of tidal erosion at the site.

5.3 New research aims

In addition to the continuing erosion monitoring being conducted by Headlands to Headspace and the archaeological recording of the ensuing exposed features, it is suggested that a scheme of discreet archaeological excavations is conducted in order to further examine the date and function of the archaeological features identified during the current work.

6 Dissemination

The results of the survey will be made publicly available on the CITIZAN website: <http://www.citizen.org.uk/>. The feature data will be uploaded to the CITIZAN interactive database, to allow ease of future long-term monitoring of the site via the CITIZAN online interactive map and smart phone app and to permit inclusion of the data in any future academic researches into coastal and intertidal archaeology. This can be found at <http://www.citizen.org.uk/interactive-coastal-map/>.

Records created by this survey will be deposited with the Archaeology Data Service (ADS) where it will make up a part of the archive of all data and materials created by CITIZAN. It will be deposited with appropriate local repositories via the ADS.

A short note on the results of the survey will be submitted to the appropriate journals to be included in annual county and period fieldwork round-ups.

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Fig 1: Site location.

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Fig 2: Locations of areas of interest.

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Fig 3: Survey of salt marsh edge.

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Fig 4: Plan of feature (100)

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Fig 5: Plan of feature (101)

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Fig 6: Southwest facing sketch section of salt marsh edge.

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Figure 7: Walduck's Wall (PRN 11302). View to the southwest.



Figure 8: The foreshore at Jenny Brown's Point, showing the collapsed bridge (foreground), the small stone quay (PRN 520; middle ground) and chimney (UID 181949/PRN 4821; background). View to the northeast.



Figure 9: Erosion of the salt marsh edge. View to the north.



Figure 10: Recording the edge of the salt marsh.



Figure 11: Headlands to Headspace's Cultural Heritage Officer teaching archaeological surveying to volunteers. View to the east.



Figure 12: Volunteers planning the edge of the salt marsh. View to the west.



Figure 13: Preparing for the drone survey of the foreshore. View to the southwest.



Figure 14: Filming at the base of the chimney. View to the east.

8 Appendix 1: Context index

Context	Description	Approximate depth below current ground surface
100	Stone feature eroding out for the salt marsh edge	N/A
101	Stone feature eroding out for the salt marsh edge	N/A
102	Stone feature eroding from erosion scar in centre of salt marsh	N/A
201	Turf and top (Dark brown silty sandy clay)	0 – 0.26m
202	Blackish brown silty clay	0.26m – 0.37m
203	Limestone bedrock	0.37m – 0.56m

Table 1: Index of context numbers

9 OASIS form

OASIS ID: molas1-247772

Project details

Project name Interim report for the archaeological recoding at Jenny Brown's Point

Short description of the project A total of three stone structures were identified eroding out of the salt marsh edge at Jenny Brown's Point. These structures are thought to be associated with the potential late 18th century copper works on the site. A joint training season was held by Headlands to Headspace and CITIZAN to provide volunteers with the skills to record these features.

Project dates Start: 09-06-2015 End: 20-06-2015

Previous/future work Not known / Yes

Type of project Research project

Site status Site of Special Scientific Importance (SSSI)

Current Land use Coastland 3 - Above high water

Monument type STRUCTURE Post medieval

Significant Finds NONE None

Investigation type "Field observation", "Part Survey"

Prompt Research

Project location

Country England

Site location LANCASHIRE LANCASTER SILVERDALE Jenny Brown's Point

Study area 50 Square metres

Site coordinates SD 47130 78316 54.197702947117 -2.810497106166 54 11 51 N 002 48 37 W Point

Project creators

Name of Organisation	CITiZAN
Project brief originator	CITiZAN
Project design originator	Headlands to Headspace
Project director/manager	Louise Martin
Project director/manager	Stephanie Ostrich
Project supervisor	Andy Sherman
Project supervisor	Megan Clement
Type of sponsor/funding body	Heritage Lottery Funding
Name of sponsor/funding body	Heritage Lottery Fund
Project archives	
Physical Archive Exists?	No
Digital Archive recipient	ADS
Digital Media available	"Images raster / digital photography", "Spreadsheets", "Text"
Paper Archive recipient	To be designated
Paper Media available	"Plan", "Section", "Notebook - Excavation", 'Research', 'General Notes"
Project bibliography	
1	
Publication type	Grey literature (unpublished document/manuscript)

Title	Interim report for archaeological recording at Jenny Brown's Point, Report on a CITIZAN site survey
Author(s)/Editor(s)	Sherman A
Date	2016
Issuer or publisher	MOLA
Place of issue or publication	York
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