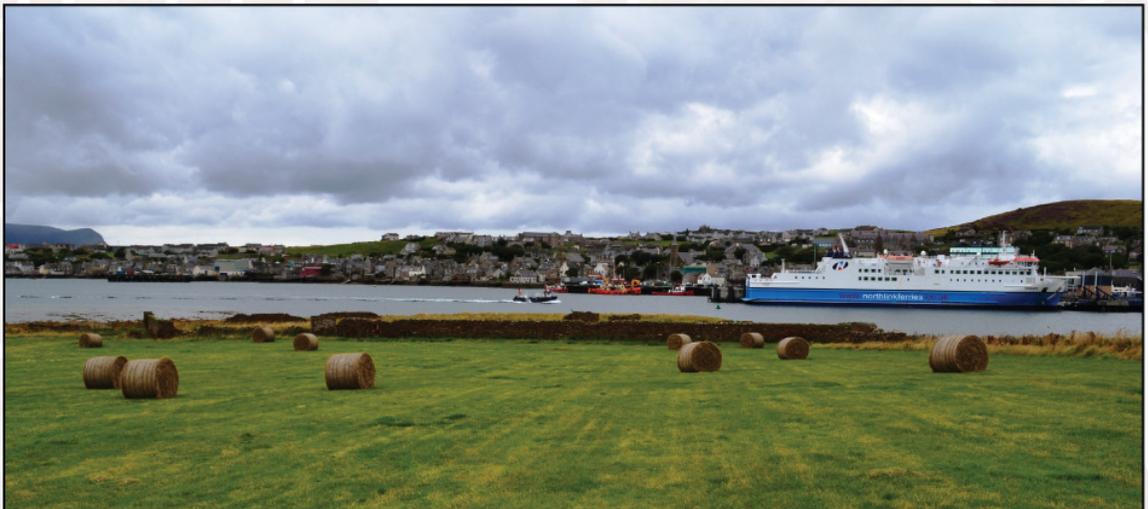




## **Copland's Dock, Stromness, Orkney**



### **Onshore Desk-based Assessment and Walkover Survey**

September 2011



# Copland's Dock, Stromness, Orkney.

## Baseline Onshore Desk-based and Walkover Survey:

### Report

**Project No: 286**

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**September 2011**

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## Executive Summary

*The Orkney Research Centre for Archaeology (ORCA) was commissioned by Aquatera Ltd. to provide a baseline assessment of the onshore and inter-tidal zone historic environment assets in and around the area of Copland's Dock, Garson, Stromness, that may be affected by a proposed new pier development and associated access road. This assessment identifies any sites of cultural heritage significance along the route of the access road and inter-tidal zone that might be affected by the proposed development and makes some initial suggestions for managing any identified issues and impacts concerning the cultural heritage resource. While the study area included a 500 m stretch of the inter-tidal zone either side of the proposed pier development, the onshore area examined during a walkover survey was limited to only the footprint of the proposed access road. As such it did not assess the wider area which may be affected by the development, such as a buffer zone either side of the access road, nor did it examine the location of possible laydown/storage areas.*

*Although there were no Scheduled Ancient Monuments, Listed Buildings or other statutorily designated assets within the requested survey area, there is such sites close by.*

*A total of 33 sites were identified in the combined study area of the inter-tidal zone and access road, of which one was of moderate significance, two uncertain and the rest of low or negligible significance.*

*The site of moderate significance was Copland's Dock, a late 19<sup>th</sup>-century boatyard. This site was assigned to a group of 17 elements which were identified as separate 'sites' in the desk-based assessment and/or the walkover survey as being an integral part of, or directly associated with the boatyard. Although as individually identified features these 17 sites were assigned low or uncertain significance, as a group they were deemed to be of moderate significance. The boatyard is a well known local landmark, a relic of the herring industry's boom years, playing an important role in the growth and development of Stromness. This level of significance suggests the need for at least a detailed photographic and topographic survey of the upstanding remains and the closer examination of the slipway, trolleys, winch and other associated features, and further documentary research into the history of the boatyard.*

*Also within the boatyard's perimeter wall is the site of Whitehouse, believed to be the home of Pirate Gow in his early life, although the construction of the boatyard most likely destroyed any significant in situ remains of the house. An early Ordnance Survey map shows what was most likely the wall surrounding the Whitehouse, and the alignment of that curtilage is respected by some of the buildings and perimeter walls of Copland's Dock, suggesting that parts of the structures standing today may contain elements of those possibly early 18<sup>th</sup>-century walls.*

*Further evaluation of the area is recommended; including geophysical survey and/or intrusive excavation to establish whether significant remains exist within the areas affected and thus identify any risks. The results could lead on to further management strategies, such as excavation or watching briefs, or may indicate that there are no further issues.*

*In summary, there is a need for more detailed and extensive survey, although it does not seem likely that the development will be prevented from going ahead nor have to be altered significantly, provided appropriate mitigation is put in place.*

## **1.0 Introduction**

The Orkney Research Centre for Archaeology (ORCA) was commissioned by Aquatera Ltd. to provide a baseline assessment of the onshore and inter-tidal zone historic environment assets in and around the area of Copland's Dock, Garson, Stromness, which may be affected by a proposed new pier development and associated access road. This assessment identifies any sites of cultural heritage significance that might be affected by the proposed development and suggests mitigation for managing identified issues and impacts concerning the cultural heritage resource.

The report includes:

- A review of existing data sources to identify known sites in the survey area and the potential for unidentified cultural heritage sites and areas;
- A review of the cultural heritage sites identified during the walkover survey;
- A preliminary indication of possible issues or sensitivities and suggestions for possible further pre-planning assessment work or management strategies;
- A table showing a list of sites with location, level of significance assigned, and a brief description, also supplied as Microsoft Excel Spreadsheet file (*286\_Coplunds\_Dock\_DBA\_WO\_Final\_16\_09\_11.xls, dated 16.9.2011*).

## **2.0 Context and Aims of the Report**

### **2.1 Details of the Proposed Development**

For the purposes of this assessment a plan showing the location and layout of the proposed pier and access road was supplied by Aquatera Ltd. (Copland's Dock Option 5 Layout with Access, see Fig. 1). Although this plan showed possible laydown/storage areas to the southeast of the proposed access road, only the route of the access road and the nearby inter-tidal zone was assessed.

The proposed access road runs from Copland's Drive at the southwest corner of the recent housing development at Hamnavoe, Garson, running

south for approximately 300 m alongside existing field boundaries before turning west and heading towards the remains of Copland's Dock, at the southwest corner of the study area, a further c 250 m.

The proposed pier itself extends from the shoreline for some 200 m to the southwest before turning south and continuing for a further 100 m.

## **2.2 Aims and Objectives of the Assessment**

The baseline assessment report will be used to identify any potential historic environment issues or constraints likely to be affected along the access road and inter-tidal zone; to comment upon the sensitivity of the proposed development area.

More specifically, ORCA was to:

- Review existing databases for the study area for information on the historic environment, including cultural heritage sites and landscapes, to identify known sites in the study area and the potential for unidentified sites and landscapes;
- Conduct a walkover survey along the route of the proposed access road and inter-tidal zone within 500 m of the proposed pier's landfall to identify any previously unknown sites and assess the condition of any identified by the desk-based survey;
- Categorise sites in terms of local, regional, national or international importance;
- Identify any known or likely sensitive sites or areas and the potential for unknown remains in the study area; and
- Recommend further work, and make initial suggestions for further assessment work, mitigation or management strategies.

## **3.0 Assessment Methodology**

### **3.1 Desk Based Assessment**

The desk-based assessment was executed in accordance with the Institute

for Archaeologists (IfA) *Standard and Guidance for archaeological desk-based assessment* (revised 2008, accessed 31 August 2011, [www.archaeologists.net](http://www.archaeologists.net)) and the relevant parts of The Highland Council's *Guidance for Archaeological Contractors* (available at [www.highland.gov.uk](http://www.highland.gov.uk)).

The desk-based assessment covered the study area as requested by Aquatera Ltd. as shown in Fig. 1 (dated 12/7/2011) and was intended to identify any sites that might be affected along the route of the access road and in the inter-tidal zone within 500 m of the development.

The desk-based assessment reviewed the following sources:

- The National Monuments Record of Scotland, using the Canmore and Pastmap database websites; <http://www.rcahms.gov.uk/> ;
- The local Sites and Monuments Record held at Orkney College;
- Ordnance Survey maps including County Series 1:2500 (25" to 1 mile) 1<sup>st</sup> Edition 1882, Orkney & Shetland; County Series 1:2500 (25" to 1 mile) 2<sup>nd</sup> Edition 1902.
- Statutory lists, registers and designated areas, including List of Scheduled Ancient Monuments, Listed Buildings, Inventories of Gardens & Designed Landscapes and Historic Battlefields, and local authority Conservation Areas;

Each cultural heritage site, monument, area and building identified within the assessment area was assigned an individual site number. All sites identified by the desk-based assessment and the importance and significance of each individual site, are presented in the Microsoft Excel spreadsheet accompanying this report.

(286\_Coplands\_Dock\_DBA\_WO\_Final\_16\_09\_11.xls, dated 16.9.2011).

### **3.2 Walkover Survey**

The walkover survey was executed in accordance with the relevant sections of the Institute for Archaeologists (IfA) *Standard and Guidance for Archaeological Field Evaluation* (revised 2008, at [www.archaeologists.net](http://www.archaeologists.net))

The area of walkover survey was divided into two areas. The first was restricted to the footprint of the proposed access road as shown on the

drawing supplied by the client, although the corridor of the study area was widened at its southwest limit to include a brief examination of the extent and condition of the remains of Copland's Dock. The second area comprised the inter-tidal zone within 500 m of the point at which the proposed pier and access road meet the shoreline (Fig. 1).

The walkover survey was undertaken in two sessions. The first consisted of an examination of the route of the access road, while the second was a walkover of the inter-tidal zone. The latter was timed to coincide with low tide, with the area nearer the high water mark examined first, and followed by the area towards the low water mark, which was examined as close as was possible to the predicted time of low tide. The survey was carried out on 1 September 2011 to coincide with a spring tide to allow the maximum area of shoreline and seabed to be exposed.

Any features or sites identified were assigned an individual site number, briefly recorded by notes, sketches, photographs and handheld GPS and evaluated.

All sites identified by the walkover survey, and the importance and significance of each individual site, are presented a list of sites (see 7.0 below) and in the Microsoft Excel spreadsheet accompanying this report (286\_Coplunds\_Dock\_DBA\_WO\_Final\_16\_09\_11.xls, dated 16.9.2011).

Any sites identified by the desk-based assessment within the study area were also visited to evaluate their nature, condition and potential impacts of the proposed works. The locations of these sites are shown on Fig. 1.

### **3.3 Significance criteria**

#### **3.3.1 Criteria for Importance, Significance and Sensitivity**

The importance and significance attributed to each identified area, site or feature will be determined using the criteria in Table 1, incorporating general guidelines used by statutory agencies such as Historic Scotland, outlined in *Scottish Historic Environment Policy* (SHEP) 2009, *Scottish Planning Policy* (February 2010), with the companion Planning Advice Note (PAN 2/2011): *Planning and Archaeology* and Historic Scotland's *Managing Change in the Historic Environment Guidance Notes*. It should be noted that a site that has not been statutorily designated can still be of national importance. Features

that would require considerable further work to interpret them will be recorded as of uncertain importance and significance.

The level of significance usually correlates directly to a site's importance, as in Table 1 below, and relates to its intrinsic, contextual and associative characteristics<sup>1</sup>. However, some professional judgement may be needed when a site has more (or even less) significance than its importance would suggest. Factors such as:

- “the relative rarity of the archaeological feature concerned;
- the completeness of the feature / whether it is a particularly good example of its type;
- the historical or cultural associations of the feature;
- the value given to the feature by the local community;
- the potential value of the feature as an *in situ* educational or research resource; and
- the potential value of retaining the feature for tourism or place-making”

may require consideration in assessing the significance of a site<sup>2</sup>.

For example, a traditional croft house may be of only local importance as a structure, but may be associated with a person of high significance (even if of high local rather than national significance), such as a champion of crofter's rights or an author, and thus the croft would be of higher significance than the structure on its own would merit. Where the significance of a site does not directly correlate with its importance, an explanation will be given if it is not clear why.

It should be noted that although Listed Buildings have a hierarchy of relative importance, in law all listed buildings receive equal legal protection, and protection applies equally to the interior and exterior of all listed buildings regardless of category<sup>3</sup>.

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<sup>1</sup> See SHEP 2009 Annexes 1-5 for detailed explanations of such criteria.

<sup>2</sup> Planning Advice Note (PAN 2/2011): *Planning and Archaeology* 2011, para 6.

<sup>3</sup> <http://www.historic-scotland.gov.uk/index/heritage/historicandlistedbuildings/listing.htm>

Level of asset significance	Importance Criteria <sup>4</sup>
Very High	Archaeological and historical sites or areas of international importance, such as World Heritage Sites, and may also include some Category A Listed Buildings, Scheduled Ancient Monuments, Designed Gardens & Landscapes and Historic Battlefields that are not only of national but of international importance
High	Archaeological and historical sites or areas of national importance, Scheduled Ancient Monuments, Category A and some Category B Listed Buildings, Inventoried Designed Gardens & Landscapes, Inventoried Historic Battlefields
Medium	Sites and areas of regional importance, Some Category B Listed Buildings and Category C(s) Listed Buildings
Low	Locally important archaeological sites or areas and unlisted buildings/structures which feature on the Orkney Local List
Negligible	Features that have been recorded but assessed as of no or negligible archaeological or historical importance, such as modern clearance cairns, 18 <sup>th</sup> to 20 <sup>th</sup> -century dykes and buildings that have been demolished or have been so altered or ruined that they no longer have any features of any historic merit
Uncertain	Features or sites that cannot be identified without further or detailed work, but potentially may be of some interest; findspots, which may represent an isolated find, or could represent the location of a hitherto unknown site. An estimate may be given of maximum likely potential significance, depending on field survey evidence.

**Table 1: Definitions of importance and significance of cultural heritage assets**

### 3.4 Assessment Limitations

The desk based assessment was intended as a baseline survey and was not exhaustive, thus there remains the possibility that there may be sites or features of archaeological or historical significance that have not been identified by the desk-based assessment.

Since the requested study area along the access road was confined to the footprint of the road itself, it did not take into account the full width of the

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<sup>4</sup>For definitions see Scottish Planning Policy paragraphs 110-124, <http://www.scotland.gov.uk/Publications/2010/02/03132605/0> and <http://www.historic-scotland.gov.uk/index/heritage/historicandlistedbuildings/listing.htm>

area which is likely to be affected by the development. Neither did it consider the impact of possible laydown/storage areas.

## **4.0 Cultural Heritage Baseline**

Each site identified as of cultural heritage interest, both by the desk-based assessment and by the walkover survey, was assigned an individual site number. The detailed results of the identified sites are presented in the Microsoft Excel spreadsheet accompanying this report, including an assessment of the importance and significance of each site. The locations of these sites are illustrated on Fig. 1.

A short summary of the sites, monuments and buildings considered to be of cultural heritage significance will be given for each area together with an assessment of archaeological potential.

### **4.1 Proposed Route of Access Road**

#### **4.1.1 Identified Cultural Heritage Assets**

Within the footprint of the proposed access road, 27 cultural heritage sites have been identified by the desk-based assessment and walkover survey. Of these, one site has been classed as having a moderate significance (site 33, which is a grouping of 17 separately numbered elements) while two sites are of an uncertain significance (sites 29& 32). Fifteen sites are thought to have low significance (sites 1, 2, 9, 12-21 inc., 30& 31) and nine are of negligible significance (sites 3-8 inc., 10, 11& 25).

The site assigned with moderate significance was Copland's Dock, site 33. This site number was assigned to a group of 17 elements which were identified as separate 'sites' as being an integral part of, or directly associated with the boatyard. Although as individually identified features these 17 sites were assigned low or uncertain significance, as a group they were deemed to be of moderate significance.



**Plate 1: Site 13, looking northeast.**



**Plate 2: Sites 15 & 16, gate piers, with mound, site 29 beyond, looking northwest.**

Copland's Dock is not shown on the 1<sup>st</sup> Edition Ordnance Survey map but on the 2<sup>nd</sup> Edition map it is depicted as an enclosed area with seven roofed buildings within of varied size, and three smaller structures nearby outwith

the perimeter. Therefore the dock must have been constructed between the survey dates 1880 and 1900. It was set up by G & P Copland after the death of John Stanger, who had built a shipyard at Ness on the other side of the harbour in 1836, the running of which was taken over by the Copland's when Stanger was no longer able to do so. The boom in the herring fishing industry in the late 19<sup>th</sup> century provided plentiful work for boatyards in Stromness. Stanger's son returned to reopen the Ness yard in 1882. Although Stanger's yard at Ness continued to operate until 1928, Copland's Dock had closed down before the start of World War I, with the decline of both the herring industry and the need for construction and repair of wooden hulled boats (Troup and Eunson, 20). Copland's Dock is a well known local landmark, a relic of the herring industry's boom years, and played an important role in the growth and development of Stromness.

Also within the boatyard's perimeter wall is the site of Whitehouse, believed to be the home of Pirate Gow in his early life, although the construction of the boatyard most likely destroyed any significant *in situ* remains of the house. The 1<sup>st</sup> Edition Ordnance Survey map shows what was most likely the wall surrounding the Whitehouse, and the alignment of that curtilage is respected by some of the buildings and perimeter walls of Copland's Dock, suggesting that parts of the structures standing today may contain elements of those possibly early 18<sup>th</sup>-century walls.

Outwith Copland's Dock (site 33), there is little of great interest in terms of sites of cultural heritage significance along the route of the proposed access track. The sites identified are mostly of negligible significance and in general are unremarkable and typical of the stone dyke field boundaries and gateways seen throughout Orkney. There are traces of a metalled track which was probably laid to provide access to Copland's Dock.

However, a few of the sites seen were assigned low rather than negligible significance since they were deemed to be part of the designed landscape associated with Garson House and the adjacent farm, which have Listed Building Category B status and are therefore of regional importance. Sites 1 & 2, the well-built, substantial and mostly well-preserved stone dykes either side of the track running west to east up from the shoreline are very likely part of the original 19<sup>th</sup>-century layout of that designed landscape and the earliest editions of the Ordnance Survey indicate that this track was the main

access route to Garson from Stromness. Site 9, most likely a former gate pier in the original alignment of the field boundaries and gateways of the same designed landscape, is a 2.0 m high, up to 1.0 m diameter circular pillar with a rounded top constructed mostly from flagstone with a few freestone and granite blocks. There are traces of lime mortar bonding, and possibly render, and there is the possibility that it served as a navigational marker or 'day beacon', although it is not immediately obvious what exact navigational purpose it would have had in such a position.



***Plate 3: Sites 1-4 inc., looking west.***



**Plate 4: Site 9, looking east.**

#### **4.1.2 Cultural Heritage Potential**

By themselves, the sites identified along the access road do not suggest any great potential for further sites of cultural heritage significance, but there is evidence for prehistoric settlement and activity nearby, and sites worthy of note in the general area, include:

- The site of a broch and earlier souterrain near Navershaw, fully excavated and removed in 1978 (NMRS No. HY20NE 11; HY 26967 09348);
- The multi-phase site at Bu of Cairston including a broch, chapel and burial ground (HY20NE 71 etc; c HY 272 096);
- A possibly neolithic settlement, of which structural remains and finds were found in the eroding cliff face (HY20NE 24; HY 268 092);
- At Quoyelsh, a settlement with Iron Age pottery and stone finds (HY20NE 73; HY 265 089).

The latter site, at Quoyelsh, is the nearest of these sites, and lies only c 100 m beyond the east limit of the inter-tidal zone assessed in the study area.

There is no direct evidence to indicate the presence of any significant prehistoric remains in or near the enclosed area of Copland's Dock and its predecessor, Whitehouse, but these more recent structures and developments may mask any *in situ* features or structures.

## 4.2 Inter-tidal zone

### 4.2.1 Identified Cultural Heritage Assets

There were six cultural heritage sites identified by the desk-based assessment and walkover survey in the inter-tidal zone. Of these, four sites were classed as having low significance (sites 22, 24, 26, 27 & 28) and two are of negligible significance (site 23).

Site 22 is a possible slipway or channel cleared to approach the pier marked on the 2<sup>nd</sup> Edition Ordnance Survey (site 26). This may just be gap between natural bedrock outcrops, but this natural feature may have been cleared of stone, with the resulting pile of stone left on the south side of the gap. If a natural feature, this gap may have guided the location of site 26.



**Plate 5: South part of Site 22, looking southwest.**

Site 27 is a continuation of site 20, the slipway comprising a pair of parallel

concrete channels seen inside the perimeter of Copland's Dock, running up to the winch. The nearby ayre to the south southwest has clearly grown and moved northwards since the dock's operational period, since the portion of the slipway nearest the dock's west side has been buried under rounded beach cobbles. A line of stones runs along each side to form a channel with an overall width of c 9.6 m. Only a few large blocks line the west side, but on the east is a more substantial remnant of a stone wall, up to c 1.5 m and 500 mm high, although this apparent width may have been increased by collapse.



***Plate 6: Site 27, foreground, with the west walls of site 33, Copland's Dock, background, looking east.***

Site 28 is another slipway, c 10 m north of where the stone dykes, sites 1 & 2, and track, site 3, reach the shore. An east-west aligned c 4 m wide gap lies between two roughly built stone walls, both sides c 1.5 m wide, comprising at least two courses of angular granite blocks. In the steep but low cliff to the east of this feature there is an iron bolt visible amongst the undergrowth which may be part of, or be the site of, a winch.

In the inter-tidal zone to the east of Copland's there was another slipway, c site 24. This may have been a natural gap in the bedrock cleared and enhanced, with stone seen on both sides of a c 10 m wide channel, which may have been placed to form the sides of the slipway.

#### **4.2.2 Cultural Heritage Potential**

There is little cultural heritage potential in the inter-tidal zone. However, the proposed works may include the removal of all or part of the ayre concealing some significant features associated with Copland's Dock, including part of the slipway, sites 20& 27.

Furthermore, it is worth noting that this side of the harbour is believed to have been developed earlier than the west side, with documented commercial development in the late 16<sup>th</sup> century in the form of an inn (Troop and Eunson, 2). The presence of an inn seems to suggest the start of significant activity on the east side of the harbour at this time, and the slipway sites 24& 28 could conceivably be associated with that period. There is also the possibility that these slipways may be of an even earlier date.

Although it is unlikely that the development itself will reveal any previously unknown sites outwith the immediate area of Copland's Dock, the local historical significance of the area should be considered, as should the potential effects of the changed erosion patterns on the shoreline to either side of the proposed pier.

## **5.0 Preliminary Recommendations**

Ideally, it is best to manage the presence of cultural heritage sites by locating building footprints and other infrastructure involving intrusive work to avoid them. However, where this is not possible various strategies can be put in place. In general terms, the summarised management and mitigation measures suggested below will result in the avoidance, reduction, remedying and offsetting of any impacts on cultural heritage by the proposed development:

*Strategy 1: Avoidance.* This strategy would be recommended either if it is easy to avoid the site, with no or little impact on the works, or if the site is of major importance. An alternative mitigation strategy can be suggested where possible if avoidance is not feasible within the proposed development scheme.

*Strategy 2: Walkover, surface collection or geophysical survey.* A walkover

survey would be recommended if it has not been possible to conduct such a survey during the period when the study was undertaken (for example if access was denied, or vegetation cover prevented a walkover). A gridded surface collection of artefacts may be recommended if there is a dense, contained scatter of material on the ground surface, which may indicate the presence of an archaeological site below. A geophysical survey is recommended if no sites are visible, but there is thought to be a possibility that sites may exist in the area. The results of these surveys may lead to the implementation of any of the other mitigation strategies.

*Strategy 3: General survey.* A detailed photographic record will be undertaken prior to intrusive works. A detailed topographic survey (such as earthwork or contour surveys) may be required. Completion of these and interpretation of the results may lead to implementation of Strategies 5 and 8. All photographic and other records from this mitigation strategy and those outlined below will be lodged with the local SMR and the NMRS.

*Strategy 4: Detailed standing building or shore wreck survey.* Plans/elevations at a scale of 1:10-1:200 will be made with a full photographic record prior to destruction. Wrecks would be recorded in an appropriate manner by specialists in marine archaeology. In addition, Strategies 5 and 8 will be implemented.

*Strategy 5: Watching brief or intrusive archaeological assessment.* This response will be recommended for all sites and shore wrecks with high archaeological potential and where there will be intrusive works. An intrusive assessment would groundtruth geophysical survey results and assess the nature, extent and preservation of archaeological remains. A watching brief may be conducted while ground-breaking construction works are happening if there is a potential for but no conclusive proof of archaeological remains. The works will allow opportunity for salvage excavation. The findings of the intrusive assessment or watching brief or may require the upgrading of fieldwork to Strategy 7.

*Strategy 6: Detailed standing building or shore wreck survey and salvage.* Full survey to RCAHMS standards detailing internal and external features and fittings including any which come to light during demolition or destruction, which will require monitoring. Attempts will be made to retrieve and conserve representative examples of maritime, architectural and/or

other decorative elements of the fabric. Once the site has been levelled, mitigation Strategy 5 will be adopted in the event of further destructive works, with the possibility of escalation to Strategy 7.

*Strategy 7: Full archaeological excavation.* This level of mitigation may be deemed necessary as a result of evidence gathered by other levels, particularly Strategies 5 and 6. Provision should be made for the examination and possible conservation of any artefacts recovered. Specialist samples will be taken from key deposits exposed in section faces and routine/control samples from any features that may be excavated in plan. Plans/elevations at a scale 1:10 and/or 1:20 with a full photographic record. Provision should be made for post-excavation work bringing the results together in a report of publication standard in accordance with Historic Scotland guidelines.

*Strategy 8: Further documentary research and archiving.* This response includes further detailed examination of unusual archival sources that would not routinely be consulted. It also allows for copying of documents considered relevant, which then may be archived with bodies such as the RCAHMS, the local SMR, the NMRS and the Scottish Record Office (SRO).

*Strategy 9: Other recommendations.* These could include recommendations for surveys by structural engineers, landscaping and screening to offset setting impact, for palaeoenvironmental sampling, for finds/site reporting protocols and so on. The particular type of suggested strategy will be detailed where the recommendation is made.

## **5.1 Proposed Access road**

In terms of the requested survey area, that is the footprint of the proposed access road, the exact impact on the sites identified as having local significance would need to be determined before any mitigation could be recommended in detail, and it may be that the preferable strategy of avoidance of these sites is possible.

However, it seems unlikely that the access road will necessitate the removal of any significant proportion of sites 1, 2& 3, the dykes and track which appear to be part of the designed landscape associated with Garson House. Since it appears that these features have already been truncated at their

east end, no further mitigation would be required. The detail of recording during the walkover survey, which included a brief description and photographs, would seem sufficient, *if* it is ascertained that no significant proportion is to be demolished.

Some mitigation should be considered for site 9, the stone pillar, also probably associated with the designed landscape of Garson House. If avoidance is not possible, it would be recommended that a general survey of this feature be carried out, perhaps including no more than a more detailed photographic record and description to supplement the already recorded detail.

The area of greater concern is Copland's Dock (site 33), including the site of Whitehouse (site 32) and the mound within the perimeter wall (site 29). The construction of the access road and pier will probably necessitate the demolition of most if not all of the remains of the dock and the clearing of the mound. As a site of moderate significance, due to its local historical importance, it is worthy of at least a general survey, to include detailed photographic survey. A topographical survey should be carried out, and the location and any remaining artefacts associated with the dock, such as the trolleys and winch, should be recorded, as should the artefacts and surviving features themselves.

An intrusive evaluation ought to be carried out on the mound towards the south side of the dock's enclosed area, in order to characterise the nature of any deposits or features. The mound may consist of material moved from the indicated site of Whitehouse, just to the north on the line of the slipway. The remote possibility also exists that part of this mound may pre-date the Whitehouse and therefore conceal prehistoric remains, and a small trench excavated across the mound should quickly resolve this.

Further mitigation may be deemed necessary if a wider buffer zone along the access road and the assessment of the impact of possible laydown/storage areas are considered. This could conceivably include further desk-based assessment, examination of aerial photographs and geophysical survey, any of which may lead to higher levels of mitigation strategy.

## 5.2 Inter-tidal Zone

Unless there will be significant increased erosion or other impact on the inter-tidal zone, no further mitigation is required outwith the area of direct impact near Copland's Dock.

However, the recommended survey at Copland's Dock outlined in 5.1 above should be extended to include the associated features in the inter-tidal zone, namely the pier and possible slipway (sites 22& 26) and slipway (site 27).

Since site 27 is partially buried under the beach cobbles of the ayre, it would be preferable to allow the recording of the complete feature (slipway sites 20& 27) if the proposed development includes the removal of the ayre. To facilitate this, it would be necessary to have an archaeologist on site when this area was to be uncovered, and to allow time to make a basic photographic and descriptive record of the slipway and any other newly revealed features.

Slipway sites 24& 28 are not expected to suffer direct impact from the development, but the effect of any changes to currents along the inter-tidal zone at these sites should be taken into consideration. If there is likely to be any significant impact on these sites then a general survey, including at least a detailed photographic survey, should be carried out. This might involve the clearing of seaweed to allow a proper examination, and a small intrusive evaluation to determine the extent of both sites below the sand.

## 6.0 Conclusions

This assessment has identified 33 sites of cultural heritage significance in the combined study area of the inter-tidal zone and access road, of which one was of moderate significance, two uncertain and the rest of low or negligible significance. Although there were no Scheduled Ancient Monuments, Listed Buildings or other statutorily designated assets within the requested survey area, there are such sites close by.

While the study area included a 500 m stretch of the inter-tidal zone either side of the proposed pier development, the onshore area examined during a walkover survey was limited to the footprint of the proposed access road. As

such it did not assess the wider area which may be affected by the development, such as a buffer zone either side of the access road, nor did it examine the location of possible laydown/storage areas.

Copland's Dock, a late 19<sup>th</sup>-century boatyard, is a well known local landmark, a relic of the herring industry's boom years, playing an important role in the growth and development of Stromness. There is the need for at least a detailed photographic and topographic survey of the upstanding remains and a closer examination of the slipway, trolleys, winch and other associated features, and perhaps further documentary research into the history of the boatyard.

Also within the boatyard's perimeter wall is the site of the Whitehouse, believed to be the home of Pirate Gow in his early life, although the construction of the boatyard most likely destroyed any significant *in situ* remains of the house. An early Ordnance Survey map shows what was most likely the wall surrounding the Whitehouse and the alignment of that curtilage is respected by some of the buildings and perimeter walls of Copland's Dock, suggesting that parts of the structures standing today may contain elements of those possibly early 18<sup>th</sup>-century walls. An intrusive evaluation of the mound just to the south of the documented site of Whitehouse is recommended to characterise the nature of any deposits or features.

Further evaluation of the area of proposed development is recommended, and once the full extent of the area of potential impact is known, it may be necessary to recommend geophysical survey and/or intrusive evaluation to establish whether significant remains exist within the areas affected and thus identify any risks. Also, the effect on the setting of nearby sites of significant cultural heritage importance has yet to be considered.

The results could lead on to further management strategies, such as full excavation or watching briefs, or may indicate that there are no further issues.

In summary, there is a need for more detailed and extensive survey, although it does not seem likely that the development will need to be altered significantly, provided appropriate mitigation is put in place. At this stage, no cultural heritage asset has been identified that would prevent the proposed

development from going ahead.

## 7.0 List of sites

Site no.	NMRS No.	Site Name and Type	Description	NGR E	NGR N	Significance
1		Stone dyke	Substantial, well built stone dyke running W-E from start of proposed access track. Main fabric constructed with roughly coursed flagstone, larger slabs forming full width of wall for top course, on top of which are vertically stacked stones. Up to 600 mm wide at base, 450 mm at top. Height 1.10 m. South side of c 6.40 m wide track and ditch 003/004. Probably associated with the Category B Listed Garson House. (Source: walkover survey)	326103	1009413	Low
2		Stone dyke	Substantial, well built stone dyke running W-E from start of proposed access track. Main fabric constructed with roughly coursed flagstone, larger slabs forming full width of wall for top course, on top of which are vertically stacked stones. Up to 600 mm wide at base, 450 mm at top. Height 1.10 m. North side of c 6.40 m wide track and ditch 003/004. Probably associated with the Category B Listed Garson House. (Source: walkover survey)	326091	1009419	Low
3		Track	Metalled track, with occasional patches of compacted stones visible through vegetation covering most of track. Average 4.5 m wide. Probably associated with the Category B Listed Garson House. (Source: walkover survey)	326103	1009416	Negligible

Site no.	NMRS No.	Site Name and Type	Description	NGR E	NGR N	Significance
4		Ditch	Ditch running along south side of track 003. Average 2.00 m wide, 0.75 m deep. Probably associated with the Category B Listed Garson House. (Source: walkover survey)	326102	1009415	Negligible
5		Stone dyke	Stone dyke of similar build to 001/002, with ditch running along east side. Probably associated with the Category B Listed Garson House. In poorer condition than 001/002, with areas of collapse. (Source: walkover survey)	326105	1009402	Negligible
6		Track	Metalled track running from start of proposed access track at SW corner of new housing development, running N-S until 326106, 1009394, at which point the stone appears to have been cleared out. Beyond this point only a scar is visible but in some places further along towards Copland's Dock, there are areas of stony ground suggesting that the track is still at least partly <i>in situ</i> , now concealed by vegetation along the side of the cultivated fields. Average width 2.5 m. (Source: walkover survey)	326106	1009394	Negligible
7		Gateway	Gateway leading from track to NW corner of field to E. 3.0 m wide opening. Gateposts are large sandstone slabs up to 1.56 m high. Stone in dyke 005 just to N appears to be pivot stone for gate. N post has iron hanger for a gate. (Source: walkover survey)	326106	1009247	Negligible

Site no.	NMRS No.	Site Name and Type	Description	NGR E	NGR N	Significance
8		Concrete base	Concrete foundations and single course of breeze blocks. 2.10 m E-W x 2.60 N-S, max. Height 360 mm. Nearby dyke contains breeze blocks and has been re-aligned to meet E side of concrete base. (Source: walkover survey)	326100	1009114	Negligible
9		Gate pier	Possible gate pier. Circular column with rough coursing although uppermost c 0.5 m is less well constructed and may be repair and/or rebuild. Mostly flagstone slabs, but a few freestone blocks are incorporated into the fabric. Single, round slab as capstone c 0.5 m diameter, base of pillar up to 1.0 m wide, maximum height 2.0. Stone walls abut this structure on both sides. May be south pier of gateway in earlier alignment of field dykes and gateways associated with Garson House. Traces of shelly, sandy lime mortar bonding and possibly render.  Another possibility may be that this is a navigational marker associated with the approaches to Copland's Dock.  Not marked on the 1st Edition OS map but an unnamed dot is marked just east of the field dyke on the 2nd Edition OS close to the location.(Source: DBA, walkover survey)	326103	1009113	Low
10		Gateway	Gateway leading from corner of track to SW corner of field to E. Modern gate with large sandstone slabs as gateposts. Gateposts up to 1.50 m high. Stone in dyke 005 just to N appears to be pivot stone for gate. S post has iron hanger for a gate. N post has two bolt holes, one deeply eroded. (Source: walkover survey)	326103	1009113	Negligible

Site no.	NMRS No.	Site Name and Type	Description	NGR E	NGR N	Significance
11		Stone dyke	Low denuded stone dyke. Average height c 0.5 m, width 0.5 m. Of similar style to 001/002. May have been robbed down to this height, perhaps as source of stone for walls around Copland's Dock. (Source: walkover survey)	326094	1009118	Negligible
12		Wall	N-S aligned wall forming east boundary of the enclosed area around Copland's Dock. Some traces of shelly, sandy lime mortar bonding. Randomly coursed flagstone with occasional freestone and pink granite blocks. Uppermost course is of larger slabs, on top of which are vertically laid angular flagstones. (Source: walkover survey)	325892	1009090	Low
13		Structure	Possible kiln or furnace. Rectangular structure at south end of wall 012 and north end of wall 014, and abutted by both walls. Rectangular in plan, 1.63 m NE-SW, 2.18 m NW-SE, upper parts collapsed, max. height 2.00 m. Not on same alignment as main east walls 012/014. Mostly constructed with flagstone but SW wall aperture is lined with firebricks, as is central, circular flue. Raised hearth interior perhaps for heating pitch, caulking irons etc.  The 2nd Edition OS map shows a larger structure here, c 5 x 10 m, of which this structure would have formed the SE corner. (Source: walkover survey)	325890	1009058	Low

Site no.	NMRS No.	Site Name and Type	Description	NGR E	NGR N	Significance
14		Wall	SW-NE aligned wall forming east boundary of the enclosed area around Copland's Dock. Some traces of shelly, sandy lime mortar bonding. Randomly coursed flagstone with occasional freestone and pink granite blocks. Uppermost course is of larger slabs, on top of which are vertically laid angular flagstones. Roughly halfway along this wall is a blocked aperture in line with slipway 020/027 and winch 018. Large wooden lintel, aperture blocked with flagstone, similar build to wall. Terminated at SW end with gate pier 015.	325892	1009041	Low
15		Gate pier	Gate pier at SW end of 014, NE side of gateway, probably main entrance to Copland's Dock. 1.0 x 0.9 m, 2.0 m high. (Source: walkover survey)	325880	1009033	Low
16		Gate pier	Gate pier at SW end of 014, SW side of gateway, probably main entrance to Copland's Dock. 0.9 x 0.9 m, 2.0 m high. (Source: walkover survey)	325878	1009032	Low
17		Wall	E-W aligned wall forming north boundary of the enclosed area around Copland's Dock. Some traces of shelly, sandy lime mortar bonding. Randomly coursed flagstone with occasional freestone and pink granite blocks. Uppermost course is of larger slabs, on top of which are vertically laid angular flagstones. Turns at W end to SW, terminating with a gate pier on the north side of a narrow gap. The far east end turns south for a short distance, overlapping/passing to the west of the north end of 012. (Source: walkover survey)	325891	1009106	Low

Site no.	NMRS No.	Site Name and Type	Description	NGR E	NGR N	Significance
18		Winch	Iron winch. Drive wheel on side. Most likely in original position, at top of and in line with slip. 0.8 m high, 1.25 m wide (along drum axis), 0.9 m deep. The 2nd edition OS map shows a NW-SE aligned building on this spot, c 4 x 8 m. (Source: DBA and walkover survey)	325869	1009051	Low
19		Trolley	Iron-framed trolley, partially visible through vegetation. (Source: walkover survey)	325866	1009055	Low
20		Slipway	Slipway. Pair of parallel concrete channels running from winch 018 down to water. Mostly hidden by vegetation and movement of stone/ayre. See also 027. (Source: walkover survey)	325856	1009071	Low
21		Trolley	Wooden trolley with iron wheels, mostly hidden by vegetation, c 2.7 m x 2.7 m. Width between wheels matches distance between grooves in concrete on slipway. (Source: walkover survey)	325848	1009083	Low
22		Slipway	Possible slipway or channel cleared to approach pier marked on 2nd edition OS map (site 026). May just be gap between natural bedrock outcrops, but this natural feature may have been cleared of stone, with the resulting pile of stone left on the south side of the gap. (Source: walkover survey)	325799	1009011	Low

Site no.	NMRS No.	Site Name and Type	Description	NGR E	NGR N	Significance
23		Ford/ track	Track leading from south side of Copland's Dock to house on Inner Holm. Only passable at low tide. Created by repeated use by vehicles accessing house. (Source: walkover survey)	325852	1008883	Negligible
24		Slipway	Possibly a gap in bedrock forming a natural channel, or may have been enhanced to create a slipway. Alignments of stone on both sides of a c 10 m wide E-W, c 20 m N-S. (Source: walkover survey)	326032	1008919	Low
25		Track	Area of heavily eroded cliff in which was seen what appear to be the remains of a stone track way around the shoreline. Possibly associated with Copland's Dock. A small roofed structure is shown near here on the 2nd edition OS map (at c 325907 1009005). A mix of rounded and angular sandstone slabs, with a few larger angular granite boulders, with a maximum depth of 400 mm, lying under 150 mm of turf. (Source: walkover survey)	325909	1009000	Negligible

Site no.	NMRS No.	Site Name and Type	Description	NGR E	NGR N	Significance
26		Pier	Remains of pier, visible on 2nd Edition OS map, but not on 1st Edition. Presumably associated with Copland's dock. Only the north and west walls of this pier survive to any visible extent. Constructed from angular pink granite boulders. The west (seaward) wall lies along the break of slope between the more steeply sloping pebble/cobble beach to the east and the level, seaweed covered inter-tidal zone to the west. It still comprises two courses of stone over a length of c 8 m, although its south end is collapsed and scattered. The north wall is visible over a length of c 10 m, the east end of which starts c 4.5 m below the high water mark. (Source: DBA, walkover survey).	325837	1009011	Low
27		Slipway	Continuation of slipway 020. Pair of concrete channels 2.00 m apart. Just below low water mark. A line of stones runs along each side to form a channel with an overall width of c 9.6 m. Only a few large blocks line the west side, but on the east is a more substantial remnant of a stone wall, up to 1.5 m and 500 mm high, although this width may have been increased by collapse. (Source: walkover survey)	325828	1009109	Low
28		Slipway	Slipway, c 10 m north of where track/ditch/walls 001/002/003/004 reach the shore. An E-W aligned 4 m wide gap lies between two roughly built stone walls, both sides c 1.5 m wide, two courses of angular granite blocks. In the steep but low cliff to the east of this feature there is an iron bolt visible amongst the undergrowth which may be part of, or be the site of, a winch.	325913	1009418	Low

Site no.	NMRS No.	Site Name and Type	Description	NGR E	NGR N	Significance
29		Mound	A roughly N-S aligned mound, c 17 m N-S, 8 m E-W and 0.7 to 1.0 m high, higher toward the south end. Rubble seen in places but mostly obscured by vegetation. Stone seen may be worked blocks of building stone. May contain remains of Whitehouse, the site of which is marked on both the 1st and 2nd Edition OS maps (see 032). (Source: DBA, walkover survey)	325862	1009044	Uncertain
30		Wall	Short N-S aligned wall forming part of west boundary of the enclosed area around Copland's Dock. Some traces of shelly, sandy lime mortar bonding. Randomly coursed flagstone with occasional freestone and pink granite blocks. Uppermost course is of larger slabs, on top of which are vertically laid angular flagstones. Terminates with a gate pier at north and south ends. South end is north side of aperture for slipway 020/027. (Source: walkover survey)	325854	1009096	Low
31		Wall	Short N-S aligned wall forming part of west boundary of the enclosed area around Copland's Dock. Some traces of shelly, sandy lime mortar bonding. Randomly coursed flagstone with occasional freestone and pink granite blocks. Uppermost course is of larger slabs, on top of which are vertically laid angular flagstones. Terminates with a gate pier at north and south ends. North end is south side of aperture for slipway 020/027. (Source: walkover survey)	325839	1009081	Low

Site no.	NMRS No.	Site Name and Type	Description	NGR E	NGR N	Significance
32	HY20NE 8	Whitehouse; House	<p>The site of an ancient dwelling house... remarkable for its having ben the property and birth- place of Gow the pirate.'</p> <p>Name Book 1880. (Source RCAHMS)</p> <p>'George Stewart, the 'Torquil' of Byron's 'Island'...was the son of Stewart of Massetter, and lived in the White House, on the earliest mortar built houses in Stromness; and Gow or Smith, the hero of Scott's 'Pirate', was born in a house where now is the boat building yard of Messrs. Copland'. He was executed in 1725.</p> <p>F H Groome, Ordnance Gazetteer of Scotland 1901. (Source RCAHMS)</p> <p>The exact original location of Whitehouse is uncertain, but is marked on both 1st and 2nd Editions of the OS map as 'Site of Whitehouse' at 325862,1009069, which is on the line of the slipway identified as sites 020&amp; 027 during the walkover survey and marked on the 2nd edition OS map. A mound seen within the walls of Copland's Dock during the walkover survey (site 029) may contain remnants of the Whitehouse, perhaps cleared away to the south from its original location.</p> <p>The 1st Edition OS shows the site of Whitehouse in the centre of a rectangular enclosure c 35 m NW-SE by 25 m SW-NE. This may be the 'garden' mentioned in more than one account as still being visible. (Source: DBA)</p>	325862	1009070	Uncertain

Site no.	NMRS No.	Site Name and Type	Description	NGR E	NGR N	Significance
33	HY20NE 126	Copland's Dock; Dock	<p>Copland's Dock. Group of features, site nos. 12-21 inc., 25, 29, 30&amp; 31, as described in individual site entries. These individual features by themselves have each been assigned only low significance, but as a group should be considered to have moderate significance due to the local historical significance of the boatyard. Copland's Dock is not shown on the 1st Edition OS map but on the 2nd Edition OS map it is depicted as an enclosed area with seven roofed buildings of varied size inside, and three smaller structures nearby. Built in the last twenty years of the 19th Century after the death of John Stanger. Stanger had built a shipyard at Ness on the other side of the harbour in 1836, the running of which was taken over by G. and P. Copland when Stanger 'became feeble' (Troup and Eunson, 20). The boom in the herring fishing industry in the late 19th century provided plentiful work for boatyards in Stromness. Stanger's son returned to reopen the Ness yard in 1882. Although Stanger's yard at Ness continued to be employed, Copland's Dock had closed down before the start of World War I, with the decline of both the herring industry and the need for construction and repair of wooden hulled boats.</p>	325869	1009038	Moderate

## 8.0 References

Ordnance Survey (25" to 1 mile) 1<sup>st</sup> Edition surveyed 1880, published 1882 Orkney & Shetland (Orkney), sheet CVI.7

Ordnance Survey (25" to 1 mile) 2<sup>nd</sup> Edition (revised 1900), Orkney & Shetland (Orkney), sheet CVI.7

Ordnance Survey OS Explorer Map, 1: 25 000 (4 cm to 1 km, 2½ inches to 1 mile), 2003 edition, Orkney – West Mainland, sheet 463.

Marwick, H. (1952) Orkney Farm-Names, Kirkwall.

Thomson, J. (1820) 'Orkney Islands' in *The Atlas of Scotland*, Edinburgh: J. Thomson & Co., <http://maps.nls.uk/atlas/thomson/476.html>.

Troop, J.A. and Eunson, F. (1967) *Stromness, 150 Years a Burgh 1817 – 1967*, Stromness

## 9.0 Photographic register

#	Description	Direction	Date
1	Inner Holm , general view	SW	1/9/2011
2	Sites 14,15,16	NW	1/9/2011
3	Site 1	SSW	1/9/2011
4	Site 1	WNW	1/9/2011
5	Site 3	WNW	1/9/2011
6	Site 3	WNW	1/9/2011
7	Site 5	E	1/9/2011
8	Site 5	E	1/9/2011
9	Site 6	S	1/9/2011
10	Site 7	SE	1/9/2011
11	Site 7	SE	1/9/2011

#	Description	Direction	Date
12	Site 7	S	1/9/2011
13	Site 7	E	1/9/2011
14	Site 7	E	1/9/2011
15	Site 7	SE	1/9/2011
16	Site 8	NE	1/9/2011
17	Site 9	E	1/9/2011
18	Site 9	SE	1/9/2011
19	Site 10	N	1/9/2011
20	Site 10	NE	1/9/2011
21	Site 11	N	1/9/2011
22	Site 11	W	1/9/2011
23	Site 12	SW	1/9/2011
24	Site 12	SW	1/9/2011
25	Site 12	SW	1/9/2011
26	Site 12	SW	1/9/2011
27	Site 12	SW	1/9/2011
28	Site 12	W	1/9/2011
29	Site 13	W	1/9/2011
30	Site 14	NW	1/9/2011
31	Site 13	NE	1/9/2011
32	Site 13	SE	1/9/2011
33	Site 13	SE	1/9/2011

#	Description	Direction	Date
34	Site 13	NE	1/9/2011
35	Site 22	NW	1/9/2011
36	Site 22	W	1/9/2011
37	Site 22	SW	1/9/2011
38	Site 22	N	1/9/2011
39	Site 23	NW	1/9/2011
40	Site 23	NW	1/9/2011
41	Site 24	E	1/9/2011
42	Site 24	N	1/9/2011
43	Site 24	N	1/9/2011
44	Site 24	N	1/9/2011
45	Site 24	S	1/9/2011
46	Site 25	N	1/9/2011
47	Site 25	N	1/9/2011
48	Site 26	SW	1/9/2011
49	Site 26	SSW	1/9/2011
50	Site 26	SE	1/9/2011
51	Site 26	ENE	1/9/2011
52	Site 22	SW	1/9/2011
53	Site 27	NW	1/9/2011
54	Site 27	SE	1/9/2011
55	Site 28	W	1/9/2011

#	Description	Direction	Date
56	Sites 15& 16	NW	5/9/2011
57	Sites 15& 16	NW	5/9/2011
58	Site 18	SE	5/9/2011
59	Site 19	NW	5/9/2011
60	Sites 18& 19	SE	5/9/2011
61	Sites 18& 19	SE	5/9/2011
62	Sites 18& 19	SE	5/9/2011
63	Site 20	S	5/9/2011
64	Site 21	NW	5/9/2011
65	Site 21	NW	5/9/2011
66	Site 21	NW	5/9/2011
67	Site 30	NW	5/9/2011
68	Site 30	NW	5/9/2011
69	Site 30	NW	5/9/2011
70	Site 31	NW	5/9/2011
71	Site 31	NW	5/9/2011