



Scottish Water Solutions:

Scourie Replacement Water Treatment Works

Archaeological Desk-Based Assessment and walk over survey

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Figure 1 - Archaeological Sites

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1 Introduction

1.1 General

- 1.1.1 Jacobs has been commissioned by Scottish Water Solutions to carry out a desk-based assessment and walk over survey of the Cultural Heritage resource which may potentially be affected by the upgrade of the water treatment works near Scourie, Highland Region.
- 1.1.2 This report describes the results of a desk based assessment and walkover survey conducted to assess the potential impacts upon Archaeology and Cultural Heritage resulting from the proposed construction of the new treatment plant and the proposed upgrading of pipework to and from the old treatment works (NGR: NC16042 43510 to NC16175 45521 centred). It is possible that the proposed works may impact directly upon any unknown buried archaeological features if present.
- 1.1.3 Jacobs conforms to the standards of professional conduct outlined in the Institute of Field Archaeologists Code of conduct, and relevant Standards and Guidance documents. Jacobs is a Registered Archaeological Organisation (RAO) with the Institute of Field Archaeologists (IFA). This status ensures that there is regular monitoring and approval by external peers of our internal systems, standards and skills development.

1.2 Terms of reference

- 1.2.1 This Desk Based Assessment considers the effects of the proposed construction works on the entire historic environment including archaeological sites and monuments, historic buildings and their environs, historic gardens and designed landscapes.
- 1.2.2 For the purposes of this study, all readily available sources of information held by the relevant heritage bodies, were consulted, as well as secondary documentary sources, some manuscript sources, historic maps and aerial photographs. Data on the historic environment was acquired from the following sources:
 - The Highland Council Sites and Monuments Record for archaeological sites and monuments (SMR);
 - Historic Scotland for Ancient Monuments, Listed Buildings, Designed Landscapes, Parks and Gardens and Historic Battlefields;
 - National Monuments Record of Scotland (NMRS)
 - Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS);
 - Vertical and Oblique Aerial Photographs held by the RCHAMS;
 - Early Maps held in the National Map Library of Scotland.

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- 1.2.3 The historic environment is protected by a number of statutory and nonstatutory designations which include the following:
 - Scheduled Ancient Monuments;
 - Identified archaeological sites;
 - Conservation Areas;
 - Listed historic buildings and structures;
 - Locally listed historic buildings and structures;
 - Historic Gardens;
 - Designed Landscapes.

2 Planning and Legislative Background

2.1 Main Legislation

- 2.1.1 This Desk Based Assessment has been carried out within the framework of the following legislation and planning policy:
 - Ancient Monuments and Archaeological Areas Act 1979 (hereafter 1979 act);
 - Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 (1997 Act);
 - National Planning Policy Guideline 5, Archaeology and Planning (NPPG 5);
 - National Planning Policy Guideline 18, Planning and the Historic Environment (NPPG 18);
 - Planning Advice Note 42, Archaeology (PAN 42); and
 - Ross and Cromarty Local Plan, 2007.

2.2 Scheduled Ancient Monuments

- 2.2.1 Scheduled ancient monuments are of national importance and it is particularly important that they are preserved in situ and within an appropriate setting. Developments, which would have an adverse effect on scheduled monuments or the integrity of their settings, should not be permitted unless there are exceptional circumstances. Scheduled monument consent (SMC) is required from the Scottish Ministers through Historic Scotland for any development affecting a scheduled ancient monument, and notification to Historic Scotland of any planning application affecting the site of such a monument is required under article 15 (1) of the Town and Country Planning (General Development Procedure) (Scotland) Order 1992.
- 2.2.2 Under the 1979 Act the Scottish Ministers are required to compile and maintain a Schedule of monuments considered to be of national importance. The statutory consent of the Scottish Ministers is required before any works are carried out which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering up a Scheduled Ancient Monument (SAM).
- 2.2.3 A formal process of application to conduct such works known as Scheduled Monument Consent (SMC) is administered on behalf of the Scottish Ministers by Historic Scotland. Effects of proposed development works upon the setting of a SAM form an important consideration in the granting or

refusal of consent to conduct development works. Further information on development control procedures relating to SAMS is provided in NPPG 5 and PAN 42.

2.2.4 There are currently approximately 7500 Scheduled Monuments in Scotland. Approximately 260 of these are located in Highland Region. In addition, it is estimated that there may be more than twice this number which meet the necessary requirements for designation.

2.3 Listed Buildings

- 2.3.1 Under the 1997 Act, the Scottish Ministers are required to compile a list of buildings of special architectural or historic interest. These buildings are classified into Categories A, B and C (S), in decreasing order of importance. This statutory protection covers not only the building itself, but also other features within its curtilage (e.g. stables and garden walls).
- 2.3.2 There is a presumption against development that will adversely affect the character of a listed building or its setting, and planning authorities are required to have a special regard for the desirability of preserving listed buildings and their settings. Further policy information on listed buildings is published in NPPG 18. Additional guidance is published in the Memorandum of Guidance on Listed Buildings and Conservation Areas 1998 (hereafter 'memorandum'; Historic Scotland 1998).

2.4 Other archaeological sites and monuments

2.4.1 Archaeological sites and monuments without statutory protection are curated by the local planning authority. NPPG 5 and PAN 42 provide national planning policy guidance and advice on the treatment of this resource. PAN 42 indicates that the principle that should underlie all planning decisionmaking is preservation of cultural resources, in situ where possible, and by record if destruction cannot be avoided. It is recognized in that document that preservation may not always be possible, and where damage is unavoidable various mitigation measures may be proposed.

2.5 Planning considerations

2.5.1 Andrew Puls of the Highland Council Archaeology Unit is the archaeological advisor to the local planning authority and has been consulted by Jacobs on archaeological matters pertaining to the proposed construction proposals and development of a mitigation strategy. Andrew Puls of Highland Council supplied a brief detailing the required works that included this desk based assessment. This document is supplied as an appendix within this report (appendix F).

3 Methodology

3.1 General

- 3.1.1 This desk-based assessment and walk over survey has been designed to identify and assess the archaeological sites and monuments present on, or close to, the construction works in order to assess the likely impact of the proposed works and to propose mitigation measures.
- 3.1.2 In undertaking this desk-based assessment, data was sought and obtained for all sites, monuments and buildings with potential Cultural Heritage interest of both statutory and non-statutory designation within a 100m corridor of the proposed construction area. Data was also obtained for all sites, monuments and buildings of statutory designation for sites within 1km from the proposed development area. Each archaeological or historical site, monument or building referred to in the text is listed in the gazetteer in Appendix D. Site numbers allocated to sites and monuments and mentioned within the text will be in bold and parentheses.
- 3.1.3 Each archaeological or historical site, monument or building referred to in the text is plotted on the location maps (Figure 1) at the end of this report, using the assigned site numbers.

3.2 Aims and Objectives

3.2.1 The main objective of this study is to study, assess and identify the archaeological resource of the study area. The evidence presented, and the conclusions reached, aim to offer a comprehensive basis for further decisions regarding the future of the sites and for the formulation of a mitigation strategy in consultation with Andrew Puls of Highland Region Archaeology Service, should this be required.

3.3 Desk Based Study

- 3.3.1 Data gathering and assessment was undertaken in accordance with the Institute of Field Archaeologists Standard and Guidance on Archaeological Desk-Based Assessments (1999). Other policy documents taken into account included the Scottish Office documents NPPG 5, NPPG 18 and PAN 42 and the Sutherland Local Plan 2006.
- 3.3.2 Information on sites both with and without statutory designation that lie within a 100m corridor of the Proposed Development Area was sought from the following sources:
 - *Historic Scotland (PASTMAP website);*
 - National Monuments Record of Scotland (NMRS) ;
 - Highland Council (Am Baile) Sites and Monuments Record (SMR);
 - National Library of Scotland (including Map Library);
 - Published archaeological and historic literature
 - Royal Commission on Historic and Ancient Monuments Scotland (RCHAMS);
 - Aerial Photographs held by RCHAMS;

3.4 Walkover Survey

- 3.4.1 A visit was made to the study area on the 18th-19th of October 2007 in order to assess the presence; absence and condition of any archaeological sites identified during the desk-based study and to locate and record any previously unrecorded sites.
- 3.4.2 All sites of statutory designation within 1km of the Proposed Development Area identified during the desk-based survey were visited. This was carried out to assess any potential impacts on their setting caused by the development construction.

3.5 Assessment of Cultural Heritage Importance

3.5.1 Sites were assigned a level of importance on a scale of 'Less than Local' to 'International', as shown in Table 1. This was established on the basis of statutory designation and/or assessed cultural heritage importance.

Importance	Site Type	
International	World Heritage Sites.	
National	Scheduled Ancient Monuments (SAMs).	
	Category A Listed Buildings.	
	Designed Landscapes.	
	Some undesignated sites assessed as being of National importance using the methodology given in Paragraph 3.5.4	
Regional	Category B Listed Buildings.	
	Conservation Areas.	
	Some undesignated sites assessed as being of Regional importance using the methodology given in Paragraph 3.5.4	
Local	Category C(s) Listed Buildings.	
	Some undesignated sites assessed as being of Local importance using the methodology given in Paragraph 3.5.4	
Less than Local	Sites either already badly damaged destroyed or whose historic value is too slight for inclusion in a higher class.	

Table 1: Cultural Heritage Importance

3.5.2 World Heritage Sites are afforded international protection under the UNESCO World Heritage Convention, with Scheduled Ancient Monuments (SAMs) nationally protected under the 'Ancient Monuments and Archaeological Areas Act 1979'. The 'Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997' provides for the designation of Category, A, B and C(s) Listed Buildings which are considered to be of national, regional and local importance respectively.

- 3.5.3 Conservation Areas are assessed as being of regional importance and following discussion with Historic Scotland on previous projects; Designed Landscapes are assessed as being of national importance.
- 3.5.4 Many sites of cultural heritage importance are not currently afforded any statutory protection through designation. For the purposes of assessment, these undesignated sites were assigned a level of importance using professional judgement supported by review of the following guidance:
 - criteria used in Scottish Historic Environment Policy 2 for the designation of SAMs; and
 - non-statutory criteria used in their designation of Listed Building categories (Memorandum of Guidance on Listed Buildings and Conservation Areas, Historic Scotland 1998).

3.6 Assessment of potential impacts

- 3.6.1 Direct impacts from the proposed development include potential damage to any unknown archaeological features that may be present along the mains pipeline corridor. The main possible impacts from construction works are considered to be as follows:
 - direct loss of site, or damage to part of the site through construction or earthworks;
 - indirect damage through burial, compression, alteration of drainage, vibration or subsidence;
 - severance of linked features.
- 3.6.3 Where sites or monuments identified are directly or indirectly affected by the proposed development, a suitable mitigation has been proposed.

3.7 **Predicted Impacts (direct)**

3.7.1 The significance of predicted direct impacts (i.e. physical disturbance) was determined taking into account the importance of the archaeological resource affected (Table 1), and the magnitude of the impact.

3.7.2 Magnitude

The criteria used to outline the magnitude of impact are outlined in Table 2 below:

Magnitude	Criteria
Very Severe	Disturbance to over 75% of the known or estimated area of the site
Severe	Disturbance to between 50% and 75% of the known or estimated area of the site
Medium	Disturbance to between 25% and 50% of the known or estimated area of the site
Negligible	Disturbance of up to 25% of the known or estimated area of the site

Table 2: Magnitude of Direct Impacts on Cultural Heritage

3.7.3 Significance

The significance of direct impacts was then determined in accordance with a matrix of importance and magnitude, as shown in Table 3.

Table 3: Significance of Direct Impacts on Cultural Heritage

Magnitude of Impact Importance	Very Severe	Severe	Medium	Negligible
National	Substantial	Substantial	Moderate	Slight
Regional	Substantial	Moderate	Slight	Negligible
Local	Moderate	Slight	Slight	Negligible

3.7.4 The assessment of impact significance of the potential impact was then adjusted as appropriate to take into account the relative importance of the specific parts of the site that would be affected. For instance, an impact which is of 'very severe' magnitude in terms of the area of the site affected may nevertheless only affect peripheral features, while a 'medium' magnitude impact may affect the core of a site. Other qualitative factors taken into account include potential severance of linked features, nature of the severed linkage, the amount of stratigraphy which would be disrupted, and the overall effect on the historic integrity of the site.

4 Archaeological and Historic background

4.1 General

- 4.1.1 The earliest monuments in Scotland comprise of very slight traces of temporary settlements left behind by hunter gatherers, while some of the most recent comprise the remains of recently deserted farmhouses or WWII defensive structures.
- 4.1.2 The four main categories of archaeological remains that may be encountered are:
 - **upstanding remains:** built structures such as buildings, field boundaries, and features such as standing stones and stone circles;
 - **earthworks:** soil-covered remains that can be seen as surface undulations at ground level. These can include ruined buildings or their foundations, banks, mounds, ramparts, ditches, gullies and hollows;
 - **buried features:** soil-covered remains which have no visible trace at ground level (possibly revealed by aerial photography); and
 - **artefact scatters:** scatters of potsherds, flint, tools, metal objects, animal bones, worked stone, mortar or human remains.

4.1.3 Palaeoenvironmental evidence may also be found in association with archaeological remains. Specialised analysis of palaeoenvironmental data can provide useful dating evidence and an indication of past land-use.

4.2 Prehistoric Period (10,000BC – AD 43)

- 4.2.1 Human occupation of Scotland began with the arrival of Mesolithic Hunter-gatherer groups around 7,000 BC. Mesolithic occupation of the Highlands is indicated by the presence of shell middens and flint scatters along coastlines and rivers. Although no direct evidence for Mesolithic activity has been discovered in the area around Scourie, a recent excavation at Sand saw the discovery of a rock shelter and associated midden site.
- 4.2.2 With the introduction of agriculture in the Neolithic period, around 3500 BC, communities became more settled and land was cleared for farming. Peat accumulation on the West Highland Atlantic seaboard has obscured most Neolithic settlement sites, so the majority of evidence for the Neolithic occupation of the islands comes from ritual monuments and communal burial mounds. Stone circles and standing stones began to be erected by about 2500 BC, towards the end of the Neolithic period, possibly for ritual activities associated with the lunar, stellar and solar cycles.
- 4.2.3 The archaeological landscape of the subsequent Bronze Age (c. 2,000 BC to 700 BC) witnessed a more settled culture. People began to live a more settled life as farming and the domestication of animals required a more permanent presence. This resulted in the construction of what is known as hut circles (roundhouses). Excavations of these types of dwellings revealed that they were constructed mainly of timber with a ring of stones forming the external base and have been known to measure up to 9m in diameter. An internal ring of post holes indicate that the roof timbers were supported on an internal ring of posts, forming a conical shaped roof, fixed to a central post. The roof covering would have been formed from readily available material such as turf, heather, thatch or even animal skins. Cooking was done on an open hearth within the centre of the dwelling. There is also evidence for external hearths and threshing areas associated with agricultural activities. As indicated these sites are often associated with prehistoric field systems and often the surrounding area is littered with clearance cairns. Such a landscape can be found at site 2 where the upstanding circular base of a roundhouse can clearly be seen. Scattered within the immediate area are several clearance cairns measuring up to 4m in diameter.
- 4.2.4 There is prolific evidence for prehistoric activity in the landscape around the village of Scourie. To the south east of sites **1** and **2** there is another hut circle Bhadaidh Daraich (NC 1630 4530) and close to the shore there is another at Torr Mor (NC 160 447). To the south of the village, the uplands are littered with hut circles, associated field systems, burnt mounds and a chambered cairn. This evidence creates a picture of a prosperous community utilizing the land to support a somewhat scattered community.
- 4.2.5 In contrast to earlier periods, the archaeological record of the Iron Age is dominated by settlement evidence. In Atlantic Scotland the early Iron Age is characterised by Atlantic roundhouses (brochs, duns etc). These structures vary considerably in architectural complexity; while this may be partly a

chronological development, it could also derive from variations in the wealth or status of the occupants. While they may appear initially to be defensive structures, they were all probably primarily farmhouses. By around the start of the 1st millennium AD, a new type of house appears. These 'wheelhouses' are characterised by semi-subterranean construction with a circular outer wall and radial internal divisions. These were themselves superseded by cellular buildings. There was considerable overlap in the occupation of these types, and they often occupied the same sites, with no apparent break in occupation.

4.3 The Roman Period (AD 43 – 410)

4.3.1 There are no known archaeological remains dating to the Roman Period in or close to the assessment area.

4.4 The Medieval Period (AD 410 - 1700)

- 4.4.1 Like many areas of Scotland, the north western coast of Scotland was subject to settlement by Norse invaders/settlers from the late 8th century onwards. The Vikings arrived from Norway by way of Shetland and Orkney, and they soon began to settle many coastal areas. Caithness, the coastal areas of Sutherland and Wester Ross, and the Hebrides all came under Norse control and is primarily evident though toponymy (place-name evidence) which maintain a distinct combination of Scandinavian and Celtic origin. Place names such as Thorsdale, named after the Norse god of thunder, Thor. To the south west of Loch Ewe, Gairloch was a Norse settlement, which was frequently visited by passing Viking ships who sought shelter in the loch from the stormy seas.
- 4.4.2 In the 9th century Norsemen raided this area taking it completely under Norse rule as it was formally handed over to Magnus III of Norway. Norse rule continued until 1266, when the kingdom was ceded to Alexander III of Scotland after King Haakon was defeated at the Battle of Largs in 1263.
- 4.4.3 The Medieval period in the West Sutherland was a time of social and economic change. After the demise of Norse rule the following centuries witnessed various attempts by the kings of Scotland to establish power over the highlands, the Earldom of Orkney and the Lordship of the Isles in the west. In an attempt to undermine the political status, chief was set against chief, encouraging the growth and establishment of the clan system. This is most evident through the construction of castles which even today dominate Scotland's cultural heritage. Towns such as Inverness were established as strategic centres of trade and royal power.

4.5 The Post Medieval Period (AD 1700-1900)

4.5.1 The 18th and 19th centuries marked a period of agricultural improvement over land throughout Scotland. Landowners found the traditional crofting economy to be unprofitable, and there was a growing tendency towards 'improvement' of agriculture. This took various forms, including the establishment of larger farms and the spread of sheep farming. In areas such

as the Sutherland, farmers were pushed towards the less fertile coastal areas.

4.5.2 As is the case throughout many areas in Scotland, cultivation earthworks ('rig and furrow' and lazy-beds) are visible in many areas not considered suitable for arable farming today; such cultivation of poor land is a feature of subsistence farming and overpopulation.

4.6 The 20th Century

4.6.1 The mid 19th century saw the growth of a romantic Highland image encourage by the likes of Sir Walter Scott. After the Napoleonic War, there was a rapid decline in the price of sheep and the combination of these factors encouraged the development of Victorian shooting and fishing estates throughout the highlands. Few of these large estates survive today as many succumbed to new forms of land management.

4.6 **Previous Work**

4.6.1 Previous work has been carried out in this area (NC 162 455) in 2006 by Alba Archaeology. The desk based assessment and walkover survey, identified a hut circle (1), an area of rig and furrow (19) and a sheepfold to the east of the hut circles.

5 Results

5.1 Sites within the study area

- 5.1.1 A total of twenty sites were identified within the study area by the desk-based assessment and walk over survey. A list of those sites identified is presented in Appendix D and illustrated in Figure 1.
- 5.1.2 An assessment of importance following the methodology described in Section 3, above was carried out and each site has been assigned an archaeological significance. Detailed site descriptions are provided in Appendix D.
- 5.1.3 There are no Scheduled Monuments within the study area.
- 5.1.4 There are six B Listed Buildings (**7**, **8**, **9**, **10**, **17** and **18**), sites **7-10** are all contained within the grounds of Scourie House and are sited within 1km of the study area.
- 5.1.5 Three C(s) Listed buildings (5, 6, and 16) lie within 1km of the study area with sites 5 and 6 also forming part of the Scourie House Estate.
- 5.1.6 There are five non-designated site within the 100m study corridor (1, 2, 3, 4, and 19). Site 2 is out with the 100m corridor but is included in this assessment due to its association with site (1).

- 5.1.7 There are no designed landscapes present within or close to the study area. No Conservation Areas are present within or surrounding the study area.
- 5.1.9 The walkover survey of the proposed development did not uncover any new sites. Out of the twenty sites, fifteen were visited. Scourie House (7) and the associated lodge (9) and Granny flat (10) could not be visited due to them being on private ground. The results are included in Appendix D.

5.2 Sites within the Proposed Development Area.

- 5.2.1 No Scheduled Ancient Monuments or Listed Buildings are directly affected by the proposed works.
- 5.2.2 Thirteen non-designated and six designated sites lie within 1Km of the study area. The majority of these sites occur out with the immediate development area, are 18th-19th century in date.
- 5.2.3 In regards to the development area five non-designated sites lie within 100m of the study area (1, 2, 3, 4 and 19) forming an archaeologically sensitive area. The occurrence of hut circles and clearance cairns (1 and 2) clearly indicate prehistoric activity within the immediate area of the development. Indication of the continued exploitation of this area can be seen in the groups of shielings to the south-east and the area of rig and furrow (19). Further evidence can be seen in the sheepfolds with associated enclosures to the east and the small settlement (20), indicated by the remains of four small bothy style houses, field walls and banks. Due to the proximity of these sites to the development area it is highly likely that undiscovered buried archaeological remains may be present. These remains have the potential to be of National, Regional and Local importance. Therefore the archaeological potential of the development area is high.

6 Assessment of Importance and Sensitivity

6.1 General

6.1.1 An assessment of importance following the methodology described in Section 3, above was assigned to each known site in order to assess the archaeological significance of the known sites that may be affected by the proposed development. Detailed site descriptions are provided in Appendix D.

6.2 Importance of known sites within the development corridor

- 6.2.1 Six sites of Regional importance (7-10 and 17-18) sit within the study area.
- 6.2.2 Eleven sites of Local importance sit within the study area.
- 6.2.3 Three sites of Less than Local importance sit within the study area.

6.3 Impact magnitude and significance on known sites

- 6.3.1 An assessment of the potential impact magnitude and the significance upon each known site has been undertaken using the assessment matrix outlined in Tables 2 and 3 in Chapter 3, above.
- 6.3.2 Twenty known sites lie within the study area and may potentially be directly impacted upon by the proposed development.
- 6.3.3 It is assumed in this assessment that all of the identified sites will be avoided during groundbreaking works.

Table 4: Summary of identified sites of Cultural Heritage interest.

Site No	Site type	Importance	Magnitude	Significance
1	Hut circle	Local	Negligible	Negligible
2	Cairn field; Hut Circle	Local	Negligible	Negligible
3	Gravel Pit	Less than local	Negligible	Negligible
4	Former mill, Mill lade	Local	Negligible	Negligible
5	Steading	Local	Negligible	Negligible
6	Former Farm	Local	Negligible	Negligible
7	Fishing Stores & Walled Garden	Regional	Negligible	Negligible
8	Storehouse	Regional	Negligible	Negligible
9	Lodge House	Regional	Negligible	Negligible

10	Former store/residence	Regional	Negligible	Negligible
11	Farmstead	Local	Negligible	Negligible
12	Structure	Local	Negligible	Negligible
13	Corn Mill	Local	Negligible	Negligible
14	Clapper Bridge	Local	Negligible	Negligible
15	Structure	Local	Negligible	Negligible
16	Residential Property	Local	Negligible	Negligible
17	Residential Property	Regional	Negligible	Negligible
18	Residential Property	Regional	Negligible	Negligible
19	Cultivation	Less than local	Negligible	Negligible
20	Settlement/cultivation	Less than local	Negligible	Negligible

6.4 Results

- 6.4.1 The results derived from the assessment of impacts on known sites within the proposed development corridor using the Matrix outlined in Table 3 are as follows;
- The proposed development will have negligible impact none of the sites within the study area.
- Due to the nature of the works, it is perceived that any groundbreaking will avoid known sites identified within this report and it is therefore considered that the overall impact on the situated within the proposed development corridor will be negligible.

6.5 Unknown archaeological potential within the proposed development corridor

6.5.1 The presence of numerous sites close to the development area would appear to suggest that there is potential for buried archaeological remains to occur within this archaeologically sensitive area. With the exception of sites 1 and 2, Hut circles and clearance cairns, the remaining sites within the study area are Post Medieval in date. This suggests that the potential for unknown and buried archaeology of a prehistoric date within the development area is high. As a result Highland Council Archaeology Unit has issued a programme of archaeological works in relation to the proposed development, see appendix F.

7 Summary and Conclusions

7.1 General

7.1.1 The assessment has to date identified a total of twenty sites within 1Km of the proposed development. The most common sites recognised are Post Medieval structures. To mitigate against any potential damage to any of these sites Highland Council Archaeology Unit have mitigated that the hut circle (1) is fenced off with a minimum of 20m buffer to prevent accidental damage. The mill lade (4) is also to be fenced off to prevent damage from passing machinery during construction and upgrading of the adjacent trackway. In addition archaeological monitoring is required on all areas of ground breaking work associated with the laying of the pipeline, the construction of the membrane plant building and all trackways.

7.2 Discussion and recommendations

7.2.1 Archaeological potential of the study area.

Agricultural land-use is the principal factor shaping the landscape of the study area and influencing the potential for the survival of other archaeological remains not detected by this study.

7.2.2 The assessment has to date identified a total of six designated sites within 1km of the proposed development area and a further five non-designated sites within 100m corridor of the proposed development area. Several of these sites are situated close to the proposed development area; in particular hut circles (1 and 2) and the mill lade (4).

The presence of numerous archaeological sites close to the study area underlines the potential for archaeological remains to occur ranging from the prehistoric period to the post medieval period. The archaeological potential of the study area is therefore very high.

7.2.2 Archaeological Proposals

The proposed route of the water pipeline, membrane building and access track, all lie within an area with high archaeological potential. There is potential for the presence of further occupation evidence relating to the hut circles. For this reason Highland Archaeology Unit have proposed a rigorous programme of mitigation in the form of buffer zones around known archaeology supplemented by close monitoring of all excavation work in relation to the development.

7.3 Acknowledgements

Jacobs wish to thank the NMRS, Kevin Maclaren of RCAHMS and Highland Archaeology Unit for their assistance in data gathering for this assessment.

Scourie Water Treatment Works, Desk-based Assessment and Walk over survey

8 Bibliography and References

Bibliographic References

Ashmore, P.J	1996	Historic Scotland: Neolithic and Bronze Age Scotland. B.T. Batsford, London.
Falconer, A. Rev.	1791-99	The Old Statistical Account of Scotland, Vol. 6: Edderachillis, County of Sutherland, 278-305.
Tulloch, G. Rev.	1834-45	The New Statistical Account of Scotland, Vol 15: Edderachillis, County of Sutherland, 118- 133.

Cartographic References

1875	1 st Edition Ordnance Survey	Sutherland, Sheet XXXIX.2, 1:10560
1905	2 nd Edition Ordnance Survey	Sutherland, Sheet XXXIX.2, 1:10560 5

Vertical Aerial Photographs

Sortie	Frames	Date	Scale	Lib
CPE/Scot/UK 181	4148 - 4147	08/10/46	1:10000	B52
OS/79/158	016 - 015	21/10/79	1:12400	-
OS/82/122	005-004	14/05/82	1:10400	-
63788	096 - 095	10/10/88	1:24000	C256

Appendix A - Gazetteer		
Site No:	1	
Name:	Bealach an Eilein	
Type of remains:	Hut Circle	
NGR:	NC1613 4515	
NMRS No:	NC14 NE 3	
Local SMR No:	NC14 NE 0003	
HB No:	N/A	
Status/Source:	Local: SMR/NMRS/AP's	
Description:	The remains of a circular structure are visible on Aerial Photographs of the area, Sortie OS/79/158 taken in 1979 and Sortie OS/82/122, taken in 1982. The NMRS records the remains of a hut circle at this location, measuring approx 11.5m in diameter, in poor condition with walls generally reduced to fragmetary spread. No entrance evident. Possible associated land use as surrounding ground has been cleared of stone. During the walkover it was noted that the site is currently overgrown with bracken which allows us to locate it. The site sits on a small plateau which is sheltered by the hill behind it. Overgrown stones mark the site. Area in general is extensively eroded.	
Site No:	2	
Name:	Bealach an Eilein	
Type of remains:	Cairn field; Hut Circle	
NGR:	NC1591 4544	
NMRS No:	NC14NE 2	
Local SMR No:	NC14 NE 0002	
HB No:	N/A	
Status/Source:	Local: SMR/NMRS/AP's	
Description:	The remains of a circular structure are visible on Aerial Photographs Sortie OS/79/158 taken in 1979 and Sortie OS/82/122, taken in 1982. The NMRS records the remains of a hut circle at this location, measuring 8.5m to 9m in diameter, no entrance evident. The walls to the south are overgrown and in a ruinous condition, to the north the wall is well defined. Minor field system with stone clearance in close proximity, no plots evident. During the walkover it was noted that the site is currently overgrown with bracken which allows us to locate it. Compared to site 1 this hut circle has a significant number of stones forming a large circular feature/mound. The site sites on a small plateau which is sheltered by the hill behind it.	
Site No:	3	
Name:	Scourie House	
Type of remains:	Gravel Pit	
NGR:	NC16024 45297	
NMRS No:	N/A	
Local SMR No:	N/A	
HB No:	N/A	
Status/Source:	Less than Local: Cartographic	

HB No:

452

freatment frente, Bet	
Description:	The first and second edition Ordnance Survey maps (1875, 1905, Sutherland, Sheet XXXIX.2) depict a gravel pit at this location.
Site No: Name: Type of remains: NGR: NMRS No: Local SMR No: HB No: Status/Source:	4 Scourie House, former mill Agricultural/Mill/Lade NC15982 45293 - NC15801 45111 NC 14 NE 6.01 NC 14 NE 0010 452 Local: Cartographic
Description:	The first edition Ordnance Survey map (1875, Sutherland, Sheet XXXIX.2) illustrates the mill lade extending from NC 15982 45293, passing along the eastern side of the corn mill, with divert to mill wheel. The mill-lade then extends in a south west direction, flowing out into Loch na Cruaidhlinn NC15801 45111. By the second edition map (1905, Sutherland, Sheet XXXIX.2) an extension has been added to the western side of the mill, the 'mill lade' is annotated and by the mill an 'aqueduct' is noted. During the walkover it was noted that in the section of the mill lade to the north of the mill, only the southernmost section was stone lined, with the remaining length of the lade overgrown and appearing as an open ditch. Possibly this section of the stone lined mill lade has been lost through attempt to drain the field to the northwest. This field is divided by several open ditches which empty into the mill lade.
Site No: Name: Type of remains: NGR: NMRS No: Local SMR No: HB No: Status/Source:	5 Scourie House Former mill Agricultural/Mill/Buildings NC1577 4506 NC 14 NE 6.01 NC 14 NE 0010 452 Local: Cartographic/AP's/NMRS/SMR/HS
Description:	"Cornmill" comprising of four roofed buildings and two enclosures is depicted on the first edition Ordnance Survey (1875, Sutherland, Sheet XXXIX.2). On the second edition map (1905, Sutherland, Sheet XXXIX.2) six roofed buildings, an aqueduct and an enclosure are depicted. The NMRS records that the Mill building has been incorporated into farm outbuildings so that they form the eastern side of the Steading court. Small section of mill lade survives (1980). During the walkover it was noted that the cornmill is of neat stone build. It has been built into the embankment is two storeys high. The roof is slate, with crowstep gable ends. The stone banked mill lade adjacent to the mill is still intact and the wheel pit can be seen as well as the aperture for the wheel mechanisms.
Site No: Name: Type of remains: NGR: NMRS No: Local SMR No:	6 Scourie House & Steading former farm NC1575 4504 NC 14 NE 6.01 NC 14 NE 6

Status/Source:	Local: NMRS/HS
Description:	Circa 1830; single storey; 7-bay steading with wide, advanced crow stepped outer bays; harl painted rubble with tooled rubble dressing. W bay with segmental headed entrance with loft door above; similar but blind openings in E bay; stables between with narrow rectangular vents at wallhead, court to rear (John Hume, The Industrial Archaeology of Scotland, ii, 1977, p.315). During the walkover it was noted that the steading is a neat stone build with crowstep gable ends, slate roof and is roughly harled. The main building forms a court yard with the mill (5). The buildings are somewhat run down and appear to be used as storage for bales of hay and farm machinery.
Site No: Name: Type of remains: NGR: NMRS No: Local SMR No: HB No: Status/Source:	7 Scourie House Buildings/Fishing stores/Walled Garden NC1568 4501 NC 14 NE 7.2 N/A 451 Regional B-listed: Cartographic/NMRS/HS
Description:	The first edition Ordnance Survey map (1875, Sutherland, Sheet XXXIX.2) shows a walled garden at NC15689 45012 forming part of the Scourie House estate. The walled garden is illustrated to the east of the house, formally planted with a path linking to the house and steading. By the second Ordnance Survey map (1905, Sutherland, Sheet XXXIX.2) the only detail given is that of a possible greenhouse along the northern wall. During the walkover it was noted that the gardens are open to the public. The walled garden has a formal area as well as kitchen garden with greenhouse and shed along the northern wall.
Site No: Name: Type of remains: NGR: NMRS No: Local SMR No: HB No: Status/Source:	8 Scourie House Boathouse & Outbuilding NC 1554 4497 NC 14 NE 46 N/A 451 Local: Cartographic/NMRS/HS
Description:	The first edition Ordnance Survey map (1875, Sutherland, Sheet XXXIX.2) shows two roofed structures at this location, one of which is annotated 'boathouse'. On the second edition Ordnance Survey map (1905, Sutherland, Sheet XXXIX.2) three roofed structures are shown, a different one is now annotated 'boathouse'. During the walkover it was noted that only two buildings occupy the site, with the structure that sat parallel to the shore now demolished. The larger of the remaining buildings (closest to the shore) has a corrugated roof, fairly neat stone built with crow step gable ends. The western gable end has a collapsed set of stairs with a blocked up doorway into the upper floor. The building measures $12m \times 5m$. The other smaller building ($6m \times 3.5m$) has a local stone tile roof, stone built and is still in use as a store.

r Treatment Works, De	sk-based Assessment and Walk over survey
Site No:	9
Name:	Scourie House
Type of remains:	Lodge
NGR:	NC1559 4501
NMRS No:	NC 14 NE 7
Local SMR No:	N/A
HB No:	451
Status/Source:	Local: NMRS/HS
Description:	The NMRS records that the house dates from c.1830. It's a 2
Description.	storey, 3-bay double pile house with later 2 storey, 2-bay wing to the rear and a further mid-later 19th century wing to the NW. The building is white harled with contrasting painted margins. Centre rear entrance, now in re-entrant angle formed by later wing and masked by late 19th century semi-circular porch with semi conical slate roof. Later entrances in the W gable and in NW wing; multi-pane glazing; crowsteps; corniced lozenge shaped stacks in pairs on rectangular bases; slate roofs. Stores: Large crowstepped store with segmental headed opening in S gable close to house (site 10). Further pair stores by entrance gates, both rubble; one with crowsteps, wide entrance, end stack and corrugated iron roof; the 2nd with low pitched roof of local stone slate (site 8). Walled garden to E of house; coped rubble walls. During the walkover it was noted that Scourie House is currently a Bed and Breakfast with the gardens open to the public. The house is as described above it appears to have been re-furbished to a high standard, it well maintained and in excellent condition.
Site No:	10
Name:	Scourie House
Type of remains:	Store/residential
NGR:	NC1557 4500
NMRS No:	NC 14 NE 7.01
Local SMR No:	N/A
HB No:	451
Status/Source:	Regional, B-Listed: NMRS/HS
Description:	Noted on the first and second edition Ordnance Survey maps (1875, 1905, Sutherland, Sheet XXXIX.2) to the west of the main house. Formally a large store. During the walkover it was noted that the building is currently harled, white washed with contrast painted margins to match the décor of the main house (9). The gable ends have crow steps, slate roof and large segmental headed opening in the southern gable wall (painted black). Now used as a residence.
Site No:	11
Name:	Scourie Farm
Type of remains:	Farmstead
NGR:	NC15678 44889

Name:	Scourie Farm
Type of remains:	Farmstead
NGR:	NC15678 44889
NMRS No:	N/A
Local SMR No:	N/A
HB No:	N/A
Status/Source:	Local: Cartographic

Description: On the first and second edition Ordnance Survey maps (1875, 1905, Sutherland, Sheet XXXIX.2) a large 'T' shaped building (farmhouse), two smaller roofed outbuildings and one small partial roofed outbuilding are depicted at this location. During the walkover it was

noted that the house is single storey, slate roof, modern replacement windows, T-shaped in plan, harled, white washed, crow steps and gable end stacks at either end of the NE-SW portion of the house. Porch on the NE side. The outbuildings follow the NE-SW line of the main building. The closest has a slate roof, the other a corrugated roof. Both are white washed and in good condition.

Site No:	12
Name:	Scourie Farm
Type of remains:	Structure
NGR:	NC15678 44889
NMRS No:	N/A
Local SMR No:	N/A
HB No:	N/A
Status/Source:	Local: Cartographic

Description:

One roofed building and an enclosure is depicted at this location on the second edition Ordnance Survey map (1905, Sutherland, Sheet XXXIX.2). During the walkover it was noted that the house is a single storey with extension into the roof, end stack at either gable, porch in middle of front of house. The house is of neat stone build with slate roof, ashlar margins, single pane modern replacement windows. Modern extension to the rear with flat roof and pebble dashed.

Site No:	13
Name:	Scourie
Type of remains:	Agricultural/Cornmill
NGR:	NC1572 4481
NMRS No:	NC 14 SE 22.1
Local SMR No:	NC 14 SE 0017
HB No:	N/A
Status/Source:	Local: Cartographic/NMRS/SMR

Description: A cornmill is depicted on the first edition Ordnance Survey map (1875, Sutherland, Sheet XXXIX.2). The NMRS records that no conclusive remains were found at this location when surveyed in 1980. Located at NC1572 4481 is a pile of roughly dressed stones and building rubble that may represent the remains of the building. It does not appear on the second edition Ordnance Survey (1905, Sutherland, Sheet XXXIX.2).

Site No:	14
Name:	Scourie
Type of remains:	Clapper Bridge
NGR:	NC1577 4480
NMRS No:	NC14 SE 0.36
Local SMR No:	NC 14 SE 0041
HB No:	N/A
Status/Source:	Local: NMRS/SMR

Description: The NMRS records a clapper style bridge at this location, however no details about condition, etc are given in the NMRS or SMR. During the walkover it was noted that the bridge is modern, constructed out of three large sections of concrete pipes allowing the water to pass through. The current road passes over the bridge.

Site No:	15
Name:	Scourie
Type of remains:	Structure
NGR:	NC15760 44740
NMRS No:	N/A
Local SMR No:	N/A
HB No:	N/A
Status/Source:	Local: Cartographic
Description:	Two roofed buildings are shown within a square enclosure on the second edition Ordnance Survey map (1905, Sutherland, Sheet XXXIX.2). During the walkover it was noted that the house is a one and a half storey house, 3 bays, central door masked by a porch. End gable stacks, harled, painted cream with red painted details. Extension to the rear forms a T-shaped plan. The smaller of the two buildings on the 1st edition OS has gone.
Site No:	16
Name:	Scourie
Type of remains:	Building/Residential
NGR:	NC1572 4459
NMRS No:	NC14SE31
Local SMR No:	NC14SE0025
HB No:	454
Status/Source:	Local C-Listed: NMRS/SMR/HS
Description:	The NMRS describes building as an early 19th century, single storey attic house with 3-bays and central door, masked by gabled porch, and additional bay at south eastern end. The building is harled with ashlar margins. Base-course; small windows with long and short detailing to jambs; 4-pane glazing; 2 modern flat roofed dormers; long and short detailing to angles; centre door (now blocked as window) and centre loft in door in SE gable; end and ridge stacks; crowsteps; slate roof. Noted on the first and second edition Ordnance Survey maps (1875, 1905, Sutherland, Sheet XXXIX.2) as a large rectangular building with extensions added by the second edition. During the walkover it was noted that this house appears to have been recently renovated to a high standard. One and a half storey house, central porch with extension to the rear forming a L- shaped plan, slate roof, crow steps. Building is not harled with exposed stonework of neat build. Dormer windows have pitched roofs. Within the SE gable end it looks like these two windows were former doors.
Site No:	17
Name:	Scourie
Type of remains:	Residential
NGR:	NC1574 4457
NMRS No:	NC14 SE 30
Local SMR No:	NC14 SE 0029
HB No:	453
Status/Source:	Regional B-Listed: NMRS/SMR/HS
Description:	The NMRS records the building as a well preserved early 19th century traditional dwelling house, functioning as a local hardware shop in the 1830s. It is an L-plan house and shop with principle

elevation to the SW made up of 7 irregular bays. Dwelling house to left, with 4-bays and former shop to right with 3-bays, single storey wing built to SE to accommodate expansion of business as a General Store in mid/later 19th century. Annotated on the first edition Ordnance Survey map (1875, Sutherland, Sheet XXXIX.2) as 'Post Office'. By the 2nd edition Ordnance Survey map (1905, Sutherland, Sheet XXXIX.2) extensions to the south can be seen. This single storey wing would originally have stood proud of the house/shop and sometime later this passageway between the two has been filled in. Located to the rear of the house is a single storey outshot. The house and shop sit well within their original setting with an associated stone outbuilding and garden bounded by a stone dyke wall located across the road to the SW. During the walkover it was noted that the building is somewhat rundown, although some of the windows are boarded up the house is occupied. House was found as described above, crow step gables, harled and white washed though paint is patchy. Extension to rear which forms the Lshape has crow step gable. The chimney within the former shop sites off centre, looking at the external wall it appears that the shop was originally separate and the gap then filled in. The 2nd edition OS map (1905, Sutherland, Sheet XXXIX.2) indicated this as well with a break in build annotated.

Site No: Name: Type of remains: NGR: NMRS No: Local SMR No: HB No: Status/Source:	18 Scourie Residential NC1573 4445 NC14 SE 0.32 NC14 SE 27 455 Regional B-Listed: NMRS/SMR/HS
Description:	Historic Scotland records a mid 19th century, single storey attic, 3 symmetrical bays. White washed rubble. Centre door, piended dormers break wallhead in outer bays; varied glazing. Crowsteps; end stacks; slate roof. During the walkover the site was noted as one and a half storey, roughly harled, with frequent stones picked out. central doorway, dormer windows, end stacks at either gable end, slate roof, crow steps.
Site No: Name: Type of remains: NGR: NMRS No: Local SMR No: HB No: Status/Source:	19 Scourie Agricultural/Cultivation NC161 453 N/A N/A N/A Less than local: walkover 2006
Description:	Identified during a previous phase of work in 2006 by Alba Archaeology in this area (NC 162 455). The desk based assessment and walkover survey identified this area of rig and furrow as well as the hut circle at site 1 and a sheep fold to the east of site 2 .
Site No:	20

Site No:	20
Name:	Pairc A' Chladaich
Type of remains:	Buildings and Cultivation Remains

NGR:	NC 158 453
NMRS No:	NC14NE 8
Local SMR No:	NC 14 NE 0009
HB No:	N/A
Status/Source:	Less than local: SMR/NMRS
Description:	Rough terraces of ruinous field walls and banks associated with the foundations of four bothy style buildings measuring from 5m by 2.5m to 7m by 3.5m with tenuous traces of other buildings with similar foundations nearby.

Appendix B – Photographic Plates



Plate 1: Mill Lade, site 4: from SW



Plate 2: Corn Mill site 5: from NE



Plate 3: Site 6, Scourie House Steading: from S



Plate 4: Site 16, Scourie village: from S

Appendix C – Programme of Archaeological Works



Brief for archaeological work at:

SCOURIE WTW

(SU-07-319 & UT418)

PROGRAMME FOR ARCHAEOLOGICAL WORK

HIGHLAND COUNCIL PLANNING AND DEVELOPMENT SERVICE

Archaeology Unit

1) Background

This area is considered to be archaeologically-sensitive: it lies within an area where there are significant recorded archaeological remains including a number of prehistoric roundhouses ('hut circles'). The continued importance of this area for human habitation is represented by the remains of later settlement in the form of a group of shielings and later sheepfolds, enclosures and field boundaries. Post medieval enterprise and industrial activity is also represented close to the development by a Grade C Listed mill and a Grade C Listed farm building, both of which were built c.1830 and would have served Scourie House. An associated mill lade (considered to be within the curtilage of the Grade C Listed mill and therefore subject to the same legal protection), recorded on the Highland Council Sites and Monuments Record (SMR) as NC14NE0010 may also be impacted by the development.

As such, this project could impact on valuable features of archaeological importance. Arrangements should therefore be made to avoid such features wherever possible. Where this is not practicable, they should be recorded before they are damaged or destroyed. This will need to be done by a professional archaeologist.

In this case five phases of work are required to fully militate against the proposed development. Full details of all requirements are given in Chapter 4 of this brief.

- Desk based assessment
- The roundhouse ('hut circle') located at c.216128 945457 will need to be identified, buffered and fenced off to so as avoid any unnecessary or accidental impact.
- The mill lade (running along the north side of the existing track from the mill and farm buildings at 215776 945066 to the proposed site of the new membrane plant) is considered to be within the curtilage of the Grade C Listed mill. As such, it is required to be fenced off so as avoid any unnecessary or accidental impact during the upgrading of the adjacent track.
- The archaeologist, in conjunction with the applicant, will need to establish and mark out the route taken by plant machinery and motorised vehicles.
- An archaeological watching brief is required on all areas of ground breaking associated with the laying of the pipeline and the construction of the membrane plant building (including access road).

An archaeological watching brief is needed at this site because there is a potential for finds or features of interest to be discovered during site works. A watching brief enables any discoveries to be recorded quickly and efficiently as they appear with minimum delay or disruption to the development.

This brief sets out in detail who is responsible for what, as well as the terms of reference, objectives, method, monitoring and reporting arrangements.

This brief specifies what is considered to be the minimum acceptable standard of work; proposals that present a higher standard may be offered and accepted. It is assumed that this will form the basis of an agreed approach unless changes are agreed with Highland Council Archaeology Unit in writing before the start of any site works.

This brief has been produced for **Scottish Water Solutions**, who will be responsible for the work, including any tendering and contractual arrangements. The area to be covered by this assessment is detailed in Chapter 4 – Method.

The work should be carried out by, or under the immediate direction of, a member of the Institute of Field Archaeologists – or archaeologist of equivalent experience - to ensure that work is carried out to professional standards. The Archaeology Unit may refuse to accept work from, or otherwise take action against, archaeologists who fail to carry out work to these standards. Before site works start, the proposed arrangements, including a timetable for the work should be agreed with the Highland Council Archaeology Unit in writing.

The brief has been produced specifically for this scheme based on documents supplied at the time it was issued. It is valid for one year from the date of issue.

3) Objectives

To identify and record any features or objects of archaeological importance that could be damaged or destroyed by this development, while minimising any delays or disruption to the development project.

4) Method

a) Desk-based Assessment

A check of all relevant archaeological / historical records, maps and aerial photographs should be undertaken. The following sources are recommended as a minimum:

- The Highland Council Sites and Monuments Record (SMR). Please note the online SMR 'Am Baile' is not designed for use in development control or for constructing management policy of sites. In order to source the full SMR information required for such studies all consultants should approach the Highland Council Archaeology Unit directly.
- The National Monuments Record of Scotland (NMRS)
- Vertical stereo aerial photographic coverage held by RCAHMS and the Highland Council Archaeology Unit.
- Ordnance Survey map coverage from 1850 onwards, and any other readily available early cartographic sources held at the National Library of Scotland Map Library.
- Bibliographic references and early parish accounts.

b) Fencing Off

Two sites are required to be marked out prior to start of site works. If the archaeologist identifies additional archaeological sites that may also be at risk from the development or development related activity, these too should be marked out with sufficient buffers.

- Prior to site works the archaeologist will be required to mark out and fence off the existing hut circle (c.216128 945457) so as to avoid any unnecessary disturbance or accidental impact. A 20 metre buffer in which development will not encroach is recommended as a minimum although ideally a 25-30 metre buffer should be established.
- The mill lade that runs along the north side of the existing track from the Grade C Listed mill and farm buildings at 215776 945066 to the site of the sheepfold (215988 945271) will need to be marked out and fenced off so as to avoid any unnecessary or accidental impact. The mill lade is considered by both the Archaeology Unit and the Highland Council Conservation Architect to be included within the curtilage of the listed mill. If the track upgrades require the track to be widened, it will need to be widened to the south (i.e. away from the mill lade) and *not* to the north.

c) Marking Out

• Prior to site works the archaeological contractor will be required to liaise with the applicant to establish the best possible route for vehicular and plant machinery access to the water treatment works. The route should be clearly marked and should be as non-intrusive to the archaeological resource as possible.

d) Watching Brief

The works subject to the Archaeological Watching Brief will be:

- The entire length of the pipeline from the existing water treatment works to the site of the membrane plant building.
- The construction the membrane plant building, and associated works (including access and services) Note that planning consent was required for this phase of work, planning reference 07/00319/FULSU.

The Archaeological Contractor will endeavour wherever possible to work with the main site contractor to ensure that any recording required is done with minimum delay to the site works. Those carrying out site clearance and excavation works will need to work closely with the archaeologist and provide all necessary access and other arrangements. Appropriate means of communication must be in place to ensure the smooth progress of the watching brief. The site contractor may need to use differing work practices on site than usual to enable the archaeologist to complete the work. For example:

- Where excavating machinery is used, a straight-edged bucket must be used on a backacting machine. Care will need to be taken to avoid over excavation, and the advice of the archaeologist on-site should be adhered to on this.
- Because the archaeologist must be able to record any archaeological remains encountered during the work to professional standards, site clearance works may take slightly longer than normal. This should be allowed for in the development project timetable.

Each excavating machine needs to be watched by at least one archaeologist at all times (1:1 ratio). Work must not begin on site until this cover has been set up.

If isolated archaeological features of artefacts are identified during the watching brief, then the developer or his agents will be required to secure reasonable time and facilities for the archaeological contractor to record the features according to professional watching brief methodology.

Occasionally, more extensive excavation may be needed since there will be limited opportunities to preserve features *in situ*. If significant archaeological deposits are encountered during the watching brief, further operations must be halted and no further ground disturbance in that area may occur until a strategy has been agreed for appropriate further excavation or recording. In this event the Archaeological Contractor must immediately inform the developer, the main contractor and HCAU in order to agree an approach to a further phase of archaeological work.

Human remains must be immediately reported to the local police and to the Highland Council Archaeology Unit and should not be excavated as part of a watching brief.

Once areas have been cleared, and any archaeology present recorded, there should be no need for further archaeological work in these areas.

5) Report

A report must be produced which sets out the results of the work and makes recommendations for any required further work.

The Council will assume author's copyright unless advised otherwise. However, HCAU reserves

the right to make the report available for reference and research purposes, either on paper, or

electronically. The completed report will be made available for immediate public consultation for

research purposes at the Highland Council Sites and Monuments Record, and through the public

library service. The Archaeology Unit will acknowledge copyright in all cases.

a) Content

The report must include as a minimum:

- Location plan (bound into the report) showing the project area; area of excavation; and relevant historic sites and features in the vicinity. The location plan must also show the position of features identified during the work.
- A detailed site background, including reference to previous work conducted in the wider area on similar developments and the results of such work.
- The circumstances and objectives of this work.
- An analysis of the project results drawing in comparative data; a statement regarding the potential for, and survival of, buried prehistoric sites in this area; and a statement of the significance of the results (as per the Burra Charter).
- A detailed site plan and scale plans, sections and photographs of all significant features noted.
- A full index to any records or other material generated by the project including the archive location.
- A list of finds, as appropriate, set out in the required format for Treasure Trove reporting.
- Details of the sampling and finds retention policies and their justification.
- Weather and other conditions affecting fieldwork.
- Proposals for presenting the results of the work to the local community where appropriate.

b) Dissemination & Publication

The archaeologist appointed is responsible for making sure copies of the report have been received by the recipients listed below. The archaeologist appointed should allow for all costs when estimating for the work. We require archaeologists to submit satisfactory reports within the agreed deadline.

Apart from any copies required by the client, at least **four** copies of the project report must be produced by the archaeologist. These must be submitted to all of the following **within 4 weeks** of the completion of the field work.

- One paper copy for the Council's Area Planning and Building Standards Manager, District Council Offices, The Meadows, Dornoch, IV25 3SG. Please note that only the report for the Watching Brief carried out for the membrane plant building and associated access road need be submitted to the local planning office.
- One paper copy to be deposited with the Council's Senior Librarian Information Coordinator, Libraries Support Unit, 31a Harbour Road, Inverness IV1 1OY. This will be available for public consultation through the public library service.

- One paper copy to be deposited with the Council's Assistant Curator (Archaeology), Museum & Art Gallery, Castle Wynd, Inverness IV2 3EB (*This copy will only be required if* there are finds).
- One digital copy for the Archaeology Unit, Planning and Development Service, Council Offices, Glenurquhart Road, Inverness IV3 5NX : The report should be in Adobe PDF format (preferred) or Microsoft Word format and rendered uneditable. If the report or associated documents are of an appropriate size for delivery by e-mail (i.e. under 2MB) they may be sent directly to <u>archaeology@highland.gov.uk</u> with an appropriate project identifier in the subject line. If the report is deposited with the HER on a CD or DVD, the disc must be clearly marked using a CD marker pen with the project identifier, project name and name of the archaeological contractor. Please do not use stickers to label the disk.

In addition to depositing the report of completed works with the HER, all reports (including bound paper copies) should be deposited in the National Monuments Record for Scotland, along with the project archive. The project archive should contain all relevant details in connection with the planning and execution of the project, including any terms of reference received by the archaeological contractor.

A brief summary of the results of the archaeological work must be prepared and submitted for publication in the Council for Scottish Archaeology's annual journal 'Discovery and Excavation in Scotland' at the appropriate time.

6) Monitoring

The archaeologist appointed is responsible for agreeing arrangements for monitoring with Archaeology Unit staff. We will monitor projects as necessary to ensure that minimum standards are met.

Prior notice of fieldwork starting dates - with contact names, telephone numbers and arrangements for access - must be given to the HC Archaeology Unit by the archaeological contractor.

Any unexpectedly significant or complex discoveries, or other unexpected occurrences which might significantly affect the archaeological work and /or the development must be notified by the archaeologist immediately to the applicant and the Senior Archaeologist. The finds or features must be left *in situ* until arrangements have been agreed for safeguarding or recording them. In the meantime work may continue on other areas of the site.

7) Finds

Chance finds can be made during any archaeological fieldwork. Archaeologists should note that advice and facilities for emergency conservation and temporary storage can be offered by Inverness Museum. All finds should be notified for Treasure Trove.

8) General

The archaeologist agrees by undertaking this work to the terms of this brief, including the following:

The archaeologist appointed must:

- Carry out the work according to the Code of Conduct, standards and guidance of the Institute of Field Archaeologists.
- > Agree a timetable for the work with the client and the HC Archaeology Unit.
- Not comment to the press or other media without prior approval from the applicant and HC Archaeology Unit.

This brief has been produced by the Highland Council Archaeology Unit, to whom any enquiries should be addressed. No one else has authority to vary its terms.

Highland Council Archaeology Unit

Monday, 3 December 2007