

July 2001

BRAYSTONES, BECKERMET CUMBRIA

Assessment Report

Commissioned by:

United Utilities Plc

Braystones, Beckermet Cumbria

Archaeological Assessment Report

Report no 2000-2001/081/AUA 8135

Checked by Project Manager.	
	Date
Passed for submission to client	t.
	Date

© Lancaster University Archaeological Unit Storey Institute Meeting House Lane Lancaster LA1 1TF

July 2001

1

CONTENTS

Su	JMMARY	••••••	•••••	••••••	3
A	CKNOWLEDGEMENTS		••••••		4
1.	INTRODUCTION				5
	1.1 Circumstances	of Project			5
		5			
2.	METHODOLOGY	•••••	•••••	•••••	6
	2.1 Project Design				6
	2.2 Desk-Based Stud	y			6
	2.3 Gazetteer of Site	5			7
	2.4 Archive				7
	-				0
3.	BACKGROUND	т ,•	•••••	•••••	8
	3.1 Topography and	Location		•••••	8
	3.2 Geology				8
	3.5 Archaeological a	nd Historical	Background		9
4.			DESK-BASED	,	Study
3	•••••••••••••••••••••••••••••••••••••••	• • • • • • • • • • • • • • • • • • • •	••••••	• • • • • • • • • • • • • • • • • • • •	····· 1
•	4.1 Introduction				
	13				
	4.2 Prehistoric				Period
	13				
	4.3 Romano-British 14	and	Early	Medieval	Periods
	4.4 Medieval	and	Post-M	ledieval	Periods
	14				
5.	DISCUSSION				
	5 1 West	Cumbrian	Cor	etal	Landscane
	16	Cumorian	000	istar	Landscape
	10				
6.		IMPACT	AND	RECOM	MENDATIONS
••••	•••••	•••••	••••••	•••••	1
8					T (
	6.1 Archaeological				Impact
	18 6 2 Recommondation				
	0.2 Recommendation	15			
	10				
7.				BI	BLIOGRAPHY ?
 0	•••••••	••••••	•••••	•••••	<i>L</i>

	7.1 Primary sources
	7.2 Secondary 20 Sources
APPE	NDIX 1 2
4	Project Design
APPE	NDIX 2
8	Gazetteer of Sites
ILLUS	TRATIONS
3	
FIGUI	RE 1: LOCATION MAP
	Figure 2: Hodgkinson and Donald map of 1770-1
	Figure 3: Dorton and Dix map of 1816
	Figure 4: Greenwood map of 1823
	Figure 5: Ordnance Survey map 1 inch to 1 mile (1859)
	Figure 6: Ordnance Survey map 25' to 1 mile (1860)
	Figure 7: Location of sites in Gazetteer

SUMMARY

An archaeological assessment was undertaken in May 2001 of an area to the south of Braystones, near Beckermet, Cumbria (NGR NY 0066 0605) by Lancaster University Archaeological Unit (LUAU), on behalf of United Utilities plc in advance of the construction of a proposed waste water treatment works and an associated outfall pipe. The assessment comprised a desk-based assessment of an area within a 500m corridor between Lantern Moss Tarn and the coast.

The desk-based study involved a search of records held by the Cumbria Sites and Monuments Record, and the Cumbria County Record Office in Whitehaven, and examined both published and unpublished records. Access was not available because of the risk of the spread of foot and mouth disease, and consequently no site visit was undertaken.

The desk-based study recorded 17 sites either within or immediately around the study area. Many of the sites are prehistoric lithic finds recovered by survey of the fields around Braystones, and one of these from within the study area comprised 25 working flakes. The site is adjacent to a small fresh water tarn, Lantern Moss Tarn, which has peat deposits surrounding it and may be closely comparable to Ehenside Tarn, about 1.5km to the north, which is one of the most important Neolithic settlement sites in northern England. On the basis of the identified resource in and around the study area and potential parallels with nearby Ehenside Tarn, it is considered that the site has a high archaeological potential.

It is recommended that a programme of fieldwalking be carried out in the areas of development impact which have been ploughed or where the ground is bare; and shovel testing of the topsoil should be undertaken in areas of pasture. This should be followed by a programme of trial trenching. It is also recommended that a programme of palaeoenvironmental coring be undertaken if suitable deposits are located.

ACKNOWLEDGEMENTS

Lancaster University Archaeological Unit (LUAU) would like to thank Gail Quartly-Bishop of United Utilities plc for commissioning the project and for her assistance during its course. We would also like to thank Helena Smith, Assistant Archaeologist for Cumbria County Council, for advice in the setting up of the project. LUAU would also like to thank Bette Hopkins of Cumbria County Council for the Sites and Monuments Record (SMR) details, and also to the staff of the Cumbria Record Office in Whitehaven for their considerable help.

The documentary research was undertaken by Andrea Scott, the report being written by Andrea Scott and Elizabeth Huckerby, and it was edited by Jamie Quartermaine and Rachel Newman. The project was managed by Jamie Quartermaine.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 An archaeological assessment has been undertaken of the area immediately surrounding a proposed water treatment works and associated outfall pipe situated to the south-east of Braystones Tarn, Cumbria (NGR NY 0066 0605; Fig 1), and immediately west of Lantern Moss Tarn, by Lancaster University Archaeological Unit (LUAU), on behalf of United Utilities plc. The assessment was undertaken during May 2001.
- 1.1.2 The work was intended to appraise rapidly the likely archaeological value of the study area, and to locate and record potentially interesting or important features in the landscape, whether or not they were visible as surface remains. To this end, available documentary and map sources were examined. The work was undertaken in accordance with a project design (*Appendix 1*) which was prepared by LUAU, in response to a verbal brief from Helena Smith, Assistant Archaeologist of Cumbria County Council. The work did not entail a site examination as the area had restricted access because of the risk of foot and mouth disease.
- 1.1.3 The desk-based study consisted of a search of both published and unpublished records held by the Cumbria Sites and Monuments Record (SMR) in Kendal, the Cumbria County Record Offices in Whitehaven (CRO (W)) and the library at LUAU.
- 1.1.4 This report sets out the results of the work in the form of a short document which outlines the findings, followed by a statement of the archaeological potential of the area, an assessment of the impact of the proposed development, and recommendations for further work. This is complemented by a gazetteer of sites (*Appendix 2*), both new to the record and formerly known, and a bibliography.

2. METHODOLOGY

2.1 **PROJECT DESIGN**

- 2.1.1 A project design (*Appendix 1*) was submitted in April 2001 by LUAU in response to a request from United Utilities plc, for an archaeological assessment in accordance with a verbal brief from by Helena Smith of Cumbria County Council, in order to provide an accurate archaeological association of the study area. The project design was approved by Helena Smith prior to submission to the client.
- 2.1.2 The project design provided for an archaeological assessment involving a desk-based study and a written report, which would interpret the data discovered during the project in advance of the proposed construction of a waste water treatment works and outfall pipe. The assessment has been carried out in accordance with the project design. The work programme did not entail any site investigation as access was not available because of foot and mouth restrictions.

2.2 DESK-BASED STUDY

- 2.2.1 Existing archaeological information was obtained from the Sites and Monuments Record (SMR) (Cumbria County Council Offices in Kendal). Manuscript maps and selected other documents were studied in the Cumbria County Record Office in Whitehaven (CRO (W)). The quantity of manuscript maps in the CRO(W) was very small, and although there were tithe maps for the environs, none of these pertained to the site of the proposed development. Available maps and plans included Hodgkinson and Donald's map of 1770-1 (Fig 2), the Cary map of 1793, the Mutlow map of 1815, the Dorton and Dix map of 1816 (Fig 3), the Archer map of 1835, the Greenwood map of 1823 (Fig 4), the Ordnance Survey 6 inch to one mile first edition maps of 1859 (Sheet 99NE; Fig 5), and the 25" to 1 mile maps of 1860 (Sheets 77.3 and 77.4; Fig 6). A list of the documents which were consulted is given in the bibliography.
- 2.2.2 The archive and library at LUAU were examined as they contained pertinent primary and secondary sources and palaeoenvironmental data that was acquired in the course of the English Heritage-funded North West Wetlands Survey, which investigated wetland areas in the locale of the study area (Hodgkinson *et al* 2000).
- 2.2.3 *Aerial Photographic Study:* RAF vertical photographs were located and studied in the Cumbria County Council Offices in Kendal. Although these provided little information with regard to archaeological potential, some information on recent land-use could be ascertained. Laser prints were not requested, since the coverage already seen indicated that the aerial photographic coverage contributed little to this particular site. No oblique photography was available for the area in the Cumbria County Council records.
- 2.2.4 A search was requested from the National Monuments Record (NMR), although the results of that search have yet to be received from them.

2.3 GAZETTEER OF SITES

- 2.3.1 All of the information concerning archaeological sites in the vicinity of the development site has been collated into a gazetteer (*Appendix 2*), which provides details of their location, origin, and character. Locations are given as eight-figure National Grid References where possible. A summary description of each site is provided in conjunction with a reference to the source of the information (SMR, cartographic and documentary) with references as appropriate, and an assessment has been given of the interpretation and archaeological potential of the site. The sites have been marked onto a digital map (Fig 7).
- 2.3.2 Other sites beyond the extent of the study area, which were considered to be of background relevance, are mentioned in the text with appropriate SMR references.

2.4 ARCHIVE

2.4.1 A full archive of the desk-based study has been produced to a professional standard in accordance with current English Heritage guidelines (English Heritage 1991). The archive will be deposited in the Cumbria Record Office, with a copy to the Cumbria Sites and Monuments Record, and a copy will be available for deposition to the National Monuments Record.

3. BACKGROUND

3.1 TOPOGRAPHY AND LOCATION

- 3.1.1 *General Topography:* the study area lies on the West Cumbrian coastal plain, an area that extends from the Duddon Estuary in the south, to St Bees Head in the north and is at no point more than *c*7km wide. The plain is bisected at Ravenglass by the Rivers Irt, Mite, and Esk which form a small estuary fringed by sand dunes. Further north the Rivers Calder and Ehen reach the sea near Sellafield. A series of raised beaches close to the present shoreline results from mid-Holocene sea-level changes (Hodgkinson *et al* 2000). The majority of the coast is low-lying, with shingle beaches and low boulder-clay cliffs, but at St Bees Head New Red Sandstone (Permian) outcrops overlie Carboniferous limestones to form sea-cliffs. Extending northwards from Braystones to St Bees is a natural depression, parallel to the coastline and edged to the west by a narrow linear shingle ridge, which separates this linear hollow from the coast.
- 3.1.2 *Location:* the study area encompasses an area of 500m around the proposed waste water treatment works and associated outfall pipe (Fig 7), to the south-west of the village of Braystones. It is in an area of former wetland between Lantern Moss Tarn to the west, the River Ehen to the south-east and the coastline to the south-west. The West Cumbrian railway line separates the study area from the shore to the west. A small beck extends from a small mire within the study area and drains into the Ehen.
- 3.1.3 The site lies within the Lowside Quarter of the historic parish of St Bees, forming a narrow southern projection that is bordered to the east by the parishes of St John Beckermet and St Bridgets (Brides). To the north the parish widens considerably taking in much of the western fells 'from the coast as far inland as Ennerdale, Loweswater, Wasdale, and Eskdale, covering well over 200 sq miles' (Widdup 1981, 52).

3.2 Geology

- 3.2.1 *Solid Geology:* the geology of Cumbria as a whole is decidedly complex. The Central Massif comprises older Ordovician and Silurian rocks whilst on the coastal plain the geology was formed in the younger Carboniferous, Permian and Triassic ages (Hodgkinson *et al* 2000, 5). The West Cumbrian coastal plain extends from Ravenglass to St Bees Head and is characterised by the Triassic Sherwood sandstone group, with Upper Permian St Bees shales capping the northern extent of the region around St Bees Head (Arthurton *et al* 1978, 189).
- 3.2.2 **Drift Geology:** the geology from St Bees to Ravenglass is characterised by deep, welldrained coarse loamy brown earths, intermixed with gleyed brown earths and brown sands (Wick 1 Association): these derive from fluvio-glacial deposits and drift of variable stoniness (Jarvis *et al* 1984, 302). The lower reaches of the River Ehen and areas north-east of Beckermet and east of Seascale are distinguished by extensive areas of freely drained, medium (occasionally coarse) sandy soils (Newport 1 Association). On the dunes of the Esk Estuary, deep, well-drained sandy soils of the Sandwich Association predominate; south of the estuary extensive areas of seasonally waterlogged loams of the Clifton Association have developed on till deposits (Hodgkinson *et al* 2000, 61).

3.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.3.1 As a result of fieldwalking surveys by the Cherrys (1984), and the North West Wetlands Survey (NWWS) (Hodgkinson *et al* 2000, 65), and palynological analysis, there is considerable evidence of prehistoric activity from the Mesolithic onwards extending across the fertile West Cumbrian coastal plain.
- 3.3.2 *Mesolithic:* Mesolithic activity was affected by a coastal influx between *c*5970 BC and *c*5480 BC when a relative sea-level rise of over 2m OD produced a perimarine fringe 1-1.5km further inland than the present coast. In areas, such as Eskmeals, a series of shingle ridges was deposited, forming natural coastal barriers which isolated inland basins from marine influences, resulting in lagoon and estuarine environments (*op cit*, 66); a notable example of this is the shingle ridge to the west of the study area separating it from the shore.
- 3.3.3 The Mesolithic population had a hunter-gatherer economy, the settlement tending to be transient as the population followed herds of wild animals and exploited different vegetation regimes. The population had relatively little impact upon both the landscape and the vegetation, and the principal evidence for their activity is from lithic tools and associated waste which are found in a narrow range of habitats, particularly on the coastline, or close to shores of inland water and rivers (Hodgkinson *et al* 2000, 69).
- 3.3.4 Mesolithic settlements have not been identified in the environs of the site, but scatters of microliths have been recovered from several parts of this coast, for instance St Bees Head (Fell 1972, 13), and these demonstrate considerable activity during the Mesolithic period. Most of the artefacts found between St Bees and Braystones lay at the seaward edge of the shingle ridge that edges the shoreline, and to the west of the railway (Cherry and Cherry 1984, 1).
- 3.3.5 *Neolithic:* the first definitive evidence of established settlement in West Cumbria was during the Neolithic period, following the development of farming practices, which led to the coastal plain being cultivated. This process can be seen in pollen diagrams, such as that from Barfield Tarn (Pennington 1970, 1975), in the southern part of the coastal plain, and also from Ehenside Tarn (Walker 1966, 93-95), a short distance to the north of the study area (NY 0030 0710) in a similar topographical location, which have both produced evidence of Neolithic cereal cultivation; the earliest cereal pollen from Ehenside Tarn is recorded at about 2900 cal BC (Walker forthcoming). The earliest forest clearance at Ehenside Tarn began around 3870 cal BC, including a decline in elm, and continued episodically, although intensifying until about 2900 cal BC, making it one of the earliest dated sequences in the country where this has been recognised (Bell and Walker 1992, 165). A similar early primary elm decline was recorded at Eskmeals on the West Cumbrian coast to the south of Ehenside Tarn (Tipping 1994, 116-9). The intensity of forest clearance indicates significant early farming activity.
- 3.3.6 Ehenside Tarn is one of the more important Neolithic settlement sites in the country as a whole and was discovered during the partial draining, for agricultural purposes, of Ehenside Tarn in 1869; it was subsequently excavated and recorded by RD Darbishire (1873). The excavation revealed between three and six hearths and a 'forest bed' made of leaves, branches and trunks of oak/beech (Darbishire 1873); subsequent excavation work in 1957 reinterpreted this latter feature as an artificial platform (Walker 1966, 91). The site revealed extensive amounts of Neolithic finds both from the excavations, but also in fieldwalking in the environs (Hodgkinson *et al* 2000). The finds from the excavation included a considerable flint assemblage and stone axes that derived from the major Neolithic Langdale axe factories on the Central Fells (Fair 1932, 57). The axes came in both polished and rough-out forms and were associated with sandstone 'rubbers' which

were used to polish the axes; this was evidently a polishing site for the Langdale axes, and is the only confirmed example associated with the Langdale industry (J Quartermaine pers comm).

- 3.3.7 Field walking in its environs revealed a substantial scatter of Neolithic lithics in a wide scatter extending in the direction of nearby Silver Tarn (Cherry and Cherry 1984, 5; Hodgkinson *et al* 2000). Mesolithic material was also identified within the area, suggesting that the Neolithic activity reflected the continued use of a preferred location. Roman material, including a fragment of Crambeckware, was identified from the tarn excavations (Darbishire 1873) and demonstrates subsequent activity at the site.
- 3.3.8 Following the ploughing of the field to the west of the tarn site, the old shoreline of the tarn was identified where the ground slopes steeply down towards the east (Cherry *et al* 1984, 5).
- 3.3.9 **Bronze Age:** there is evidence of an expansion out from the coastal plain onto the marginal uplands during the Bronze Age, with the establishment of initially transhumant occupation, but this increasingly became permanent, with field systems being developed (Quartermaine and Leech forthcoming). At the same time the coastal plain continued to be occupied and exploited, as demonstrated by the considerable presence of Bronze Age lithics (Cherry and Cherry 1984) found along the coastal plain, by such sites as the Bronze Age hearth or burnt mound at Drigg, near the Irt / Esk estuary (LUAU 2001, 32), and also by stone circles such as that at Grey Croft, near Seascale (Fletcher 1957), to the south of the study area, at least some of which were used for burial.
- 3.3.10 *Iron Age:* archaeological evidence for the Iron Age in Cumbria is generally scanty, and only Eskmeals, in the southern part of the coastal plain, has produced artefacts of potential Iron Age date, comprising blue beads in association with a flint scatter (Cherry 1963, 50). A bog body was discovered in Seascale Moss, to the south of Sellafield, in the earlier part of the nineteenth century, and, although undated, such remains tend to be attributable to the Iron Age, or early Roman period (Turner 1989, 21). Few Iron Age settlements have been identified on the western coastal plain, although a larger number has been identified on the Solway Plain (Bewley 1994).
- 3.3.11 The only palynological data potentially from this period derives from the undated upper sections of Ehenside Tarn, and these provide evidence of significant hemp production from about 760 cal BC, attaining its greatest abundance 350 years later. Forest reduction continued into and beyond the Roman period, reaching a maximum about cal AD 850 (Walker forthcoming).
- 3.3.12 *Roman:* evidence for Roman activity on the coastal plain comprises mainly military sites and scattered finds. The general dearth of identified rural settlement continues from the Iron Age, although there is a well-preserved Romano-British settlement at Barnscar on the western edge of the south-western fells adjacent to the coastal plain (Quartermaine and Leech forthcoming). Roman military activity was centred on the forts at Moresby, to the north of the study area, and Ravenglass, to the south, which were linked by a Roman road that extended along the west coast, although its exact location near Braystones is unknown. The fort at Ravenglass, exploiting a natural anchorage, was established during the early Hadrianic period, but was soon remodelled into a larger fort during the mid-Hadrianic period (Shotter 1993, 36). The fort served as a port and potentially also the terminus for a coastal defence system (Potter 1979), which extended down from the western extent of Hadrian's Wall.

- 3.3.13 There have been several finds of coins from the area, including a hoard of *denarii* from Braystones ((Site 07); Shotter 1990, 188), and a fourth century *solidus* from Muncaster, near Ravenglass (SMR 4006).
- 3.3.14 *Early Medieval:* there are few settlement remains from the early medieval period in the coastal plain, but pollen evidence suggests considerable activity during this period. A recent reassessment (Walker forthcoming) and dating of an earlier pollen diagram from Ehenside Tarn (Walker 1966, 199) indicates that there was intensive forest clearance during this period. Forest clearance activity indicates an expansion of agricultural lands and may suggest new or expanded settlement.
- 3.3.15 Most of the evidence for settlement in the early medieval period on the West Cumbrian coastal plain is in the form of ecclesiastical sites. The plain has produced a remarkable collection of pre-Conquest stone crosses from a large number of sites (Bailey and Cramp 1988, figs 2 and 3), which attest to the presence of early churches, and perhaps monastic settlements, throughout the region. Crosses which can be dated to the eighth to ninth centuries, with Northumbrian attributes, have been identified at Beckermet St Bridget (which is near to the study area (Site 14), Irton, and Waberthwaite, and of these the cross at Irton is regarded as one of the finest examples of ninth century sculpture in the country (*op cit*).
- 3.3.16 There is also evidence of settlement associated with Scandinavian influence, largely based on placenames, particularly in the uplands, with such endings as beck, fell, holm, tarn, thwaite and ness (Collinson 1940, 16). The Norse influence in the area can be seen in the names of Braystones and Beckermet. Beckermet is an Old Norse name derived from 'bekkjar' and 'mot' meaning the 'meeting of two streams'. The settlement around the Church of St John lies at the junction of two streams, although an alternative meaning stems from 'hermit's stream' when, from c1291, it was seen in such forms as 'Beckermeth' (Lee 1998, 8). Braystones similarly originates from the Old English 'brad stan', a derivative of the Old Norse 'breior steinn', meaning 'broadstones' (op cit, 14).
- 3.3.17 The number of sites producing sculpture with Scandinavian motifs of tenth and eleventh century date is much greater than those with Northumbrian attributes, with pieces not only from Irton, Waberthwaite and St Bridget Beckermet, but also Beckermet St John, Muncaster, Haile and St Bees; this perhaps indicates an expansion of church sites to service Christian communities (Bailey and Cramp 1988). The greatest assemblage has been recovered from Gosforth, however, where the finest example of Scandinavian sculpture, the Gosforth Cross, still stands in its original position in the churchyard. This masterpiece clearly demonstrates the attempt to link Scandinavian myths to the Christian creed, a theme continued on other sculpture from the site, including a number of hogback tombstones (*op cit*).
- 3.3.18 The main settlement in the parish of St Bees (of which Braystones is part) was thought to have been established around a monastic site at St Bees by the Irish saint Bega during the mid seventh century, and is mentioned by Bede in his writings (Colgrave and Mynors 1940) (a priory was later founded here in AD 1125, dedicated to St Bega). The site was traditionally destroyed by the Danes, who, under the leadership of Halfdan, landed at Tynemouth in AD 876 before fanning out throughout the kingdom of Northumbria (which at that time included Cumbria) (Whellan 1860). Another suggestion for the origin of the St Bees placename is that it derived from, '*Sancta Bega*' meaning 'holy ring', as the church located there until the thirteenth century contained a Norse silver arm ring that was used for oath swearing (Lee 1998, 79).

- 3.3.19 *Medieval*: in the parish of St John Beckermet, to the east of Braystones, the manor of 'little' Beckermet belonged to the Flemings of Rydal in Westmorland, who as mesne lords between the baron of Egremont and the possessors and land tenants of Rottington, Frizington, Arlecdon and Weddicar, held them as fees of Beckermet, and itself as demesne of the Baron of Egremont (Whellan 1860, 29). The other manor of 'great' St Bridget Beckermet belonged to Calder Abbey from its foundation in 1134, and was known by 1535 as Calder Lordship. The division of Beckermet into two communities, St Bridget and St John, occurred at some date prior to 1294, and was probably pre-Conquest as both churches contain pre-Norman sculptural remains (Winchester 1987, 154). Matching the division of the parishes are two Norman defensive sites (*Section 4.4.1*), with the motte and bailey of Caernarvon Castle (NY 022 073), to the east of Beckermet (Perriam and Robinson 1998, 99; Parker 1903), and a comparable motte at Wodobank (NY 010 081) on the western side of Beckermet (St Johns), adjacent to the River Ehen (Perriam and Robinson, 108); both of these sites survive as very degraded earthworks.
- 3.3.20 During the wars between England and Scotland, in the late thirteenth and fourteenth centuries, this part of Cumberland was subject to frequent incursions. In 1315, the priory of St Bees and the nearby manor houses of Cleator and Stainburn were "visited" by the Scots under the leadership of James Douglas, and this led to the destruction and pillaging of these sites (Whellan 1860, 427).
- 3.3.21 *Post-Medieval:* study of the cartographic evidence for the area revealed little in the way of developing settlements in and around Beckermet, with much of the later activity centred around the industrial towns such as Whitehaven, leaving the outlying rural elements of the county to provide the majority of agricultural support.

4.1 INTRODUCTION

4.1.1 There were 17 known archaeological sites in the vicinity of the proposed development site recorded during this assessment, which are listed in detail in the site gazetteer (*Appendix* 2); of these, nine appear on the Cumbria SMR records. The majority of sites were artefact finds, typically of Neolithic/Bronze Age date (Sites 1-6, 8, 11-3 and 15), of which one was from within the study area. There was also a hoard of Roman coins (Sites 07), which was found just outside the study area and included a coin of Commodus's reign (AD 180-192). A large amount of early medieval sculpture has been recorded from the church of Beckermet St Bridget (Site 14) and Beckermet St John, of which the material from Beckermet St Bridget is unique in Cumbria. A putative medieval motte and bailey (Site 10) and two post-medieval farmsteads (Sites 16-7) were also identified in the vicinity. There are no listed buildings recorded within the assessment area.

4.2 **PREHISTORIC PERIOD**

- 4.2.1 Neolithic and Mesolithic lakeside settlement is well documented from such sites as Ehenside Tarn (Walker 1966) and Barfield Tarn (Pennington 1970) and hence the study area has considerable potential for the discovery of prehistoric remains, by virtue of its association with Lantern Moss Tarn. The potential is confirmed by the discovery of a significant number of lithic finds from the area (*Appendix 2*), which are either isolated pieces found casually (Sites 08 and 13) or have been discovered by systematic field walking surveys (Sites 01-06, 12 and 15).
- 4.2.2 *Surveys by the Cherrys:* extensive fieldwalking has been undertaken by Jim Cherry and his family along the West Cumbria coastal plain, including areas around Ehenside Tarn and the fields around Lantern Moss Tarn, including those within the development site. Fieldwalking adjacent to Ehenside Tarn, to the west of the Braystones to Egremont road, has recovered substantial numbers of finds, which demonstrate extensive Neolithic activity in the area (Cherry and Cherry 1987, 252). Similar evidence of Neolithic activity was recovered within the development area, to the north of Warborough Nook and adjacent to Lantern Moss Tarn (Site 15 and Fig 7), where a concentration of more than 25 flints was found scattered on a rectangular area of bare ground (Cherry and Cherry 1984, 6). Among the most significant finds were three cores, several long blades, a small pointed flake possibly intended as a borer and a fragment of *petit tranchet* arrowhead. Also reported from this site was a stone axe (Parker and Collingwood 1926), which is of uncertain provenance but is also described under Site 15.
- 4.2.3 *North West Wetlands Survey:* an extensive programme of fieldwalking in 1997 around the West Cumbrian Coastline, including the Braystones area, was undertaken by LUAU as part of the English Heritage-funded North West Wetlands Survey. This aimed to identify archaeological sites within areas of lowland wetlands and examined the study area because of the proximity of Lantern Moss Tarn. In the event, all the fields were under pasture at the time of survey and therefore could not be fieldwalked for artefacts (Hodgkinson *et al* 2000). However, the survey did identify the presence of organic soil deposits in the field to the south-east of Lantern Moss Tarn (Fig 7); these soils have the potential to preserve organic remains. On the basis of the earlier artefact studies (Cherry and Cherry 1984), the proximity of the site to the small tarn, and the survival of organic deposits the survey established that the site had considerable archaeological potential and that there was a need

for further field examination when ground conditions were more suitable for fieldwalking (Hodgkinson *et al* 2000).

4.3 ROMANO-BRITISH AND EARLY MEDIEVAL PERIODS

- 4.3.1 *Romano-British:* the Ehenside Tarn pollen diagram (Walker 1966; Walker forthcoming) demonstrates an increase in forest clearance during the Romano-British period. This seems to indicate an expansion of cleared land within the catchment of the pollen diagram, despite the absence of known settlement sites of the period from the area. Despite the apparent lack of demonstrable settlement sites during the Romano-British period, this would suggest that the catchment area of the pollen diagram, which includes the study area, was exploited during this period. The presence of a Roman hoard (Site 07) within the Braystones area provides further evidence of contemporary local activity.
- 4.3.2 *Early Medieval:* the Cumbrian coastal plain has a particularly large number of pre-Conquest crosses, which attest to the presence of early churches within the region (Bailey and Cramp 1988, figs 2 and 3). One of these is an important ninth century cross from within a kilometre of the study area at St Bridget Beckermet (Site 14) and there are also Scandinavian (tenth century) crosses from St Bridget Beckermet and St John Beckermet, further to the north. The presence of such an assemblage of crosses, coupled with the palaeobotanic evidence from Ehenside Tarn (Walker 1966; Walker forthcoming), suggests that there was a significant amount of activity, and probably settlement, during the early medieval period in the vicinity of the study area.

4.4 MEDIEVAL AND POST-MEDIEVAL PERIODS

- 4.4.1 *St Bees Parish:* the assessment area lies within the modern civil parish of St Bees, which is the largest parish within the medieval county of Cumberland. It is very irregular in form and extends 10 miles along the coast, between Braystones and Whitehaven, and inland in a south-easterly direction to Eskdale, some 18 miles away (Whellan 1860, 425). Its western portion lies between the River Ehen and the Irish Sea, whilst the eastern part comprises a long range of mountains and valleys containing the lakes of Ennerdale, Wastwater and Burnmoor Tarn (*ibid*). The parish was within the Barony of Copeland and its size reflects the strength of baronial overlordship, as the division of the Lake District into its parishes closely mirrors its apportionment between the baronies (Winchester 1987, 26).
- 4.4.2 The parish contains five chapelries, of Ennerdale, Eskdale, Hensingham, Nether Wasdale and Wasdale Head, and is further divided into thirteen townships, which include St Bees, Lowside Quarter (which contains Braystones) and Rottington. The area known as the Lowside Quarter extends 2666 acres from Egremont to Braystones. The parish was abundant in coal, freestone and limestone, with iron ore being mined at Eskdale and lead ore at Kinniside from the medieval period onwards (*ibid*). Although the majority of the parish is mostly upland, the coastal region contains the most fertile soils, which were exploited for arable crops as well as pastoral use since records began (Winchester 1987).
- 4.4.3 *Landscape Development:* examination of the cartographic sources show that the landscape of the area has changed little since the earliest maps (Hodgkinson and Donald 1770), as the area was, and still is, subject predominantly to agricultural activity. The majority of roads linked the major coastal settlements, such as Ravenglass and Moresby, with few subsidiary roads. No real settlement expansion has occurred to villages, such as Beckermet, the bulk of the economy for this part of the county relying on the provision of agricultural support

4.4.4 There have been some limited changes in the landscape of the study area when comparisons between the OS first edition map (1860; Fig 6) and the current OS 1:10,000 sheet (Fig 7) are made. An area to the north of Warborough Nook has seen the creation of a large field from four fields (565, 566, 568 and 569) as shown on the earlier map (Fig 6) with the removal of field boundaries and a stock enclosure. Similarly, a large field, to the west of Lantern Moss Tarn, has been created from two smaller fields (560 and 561 (Fig 6)). These old boundaries may still be visible on the surface, and will be examined as part of any future field survey.

5. DISCUSSION

5.1 WEST CUMBRIAN COASTAL LANDSCAPE

- 5.1.1 The study area has an archaeological character and topographic context that is comparable to the important prehistoric resource identified elsewhere along the West Cumbrian coast. Early settlement in Cumbria seems to have been concentrated on the lowland fringes, with the majority of Mesolithic sites being situated near to the modern estuarine confluences of rivers such as the Esk, an area rich in marine and terrestrial resources (Bonsall 1981; Bonsall *et al* 1991; Bonsall *et al* 1994). The location of settlement activity has varied with the changing coastline, and the earlier sites, such as one at Eskmeals from the mid-sixth millennium cal BC, related to a shoreline that was one and a half kilometres inland of the present coast (Bonsall *et al* 1991). The distribution of Neolithic and Bronze Age assemblages, identified by fieldwalking, are generally found closer to the present shore, with those of the Bronze Age being the closest (J Cherry pers comm, cited in LUAU 1996a); as such this reflects a generally broad but erratic westwards migration of the coast.
- 5.1.2 At Drigg, a band of peat and charcoal was noted in a cliff face and was initially interpreted as a hearth; pollen analysis, by Pennington (1965), provided dates of 2900-2507 cal BC (4135+-55 BP; UB 906) and 2456-2039 cal BC (3780+-55 BP; Pearson 1979). This indicates that the feature was likely to be of late Neolithic or early Bronze Age date, and this chronology was supported by numerous flint finds from weathered mineral soil exposures in the surrounding dunes. Excavations by LUAU (2001) have shown that the structure was probably a Bronze Age burnt mound and was associated with a small hollow which may have held a fresh water basin or tarn which, at the time of its construction, was not on the shoreline. Subsequently marine incursion has resulted in the inundation of the site with dunes and the site is now being directly affected by coastal erosion (*ibid*).
- 5.1.3 Ehenside Tarn: perhaps the most pertinent comparator for the Lantern Moss site, however, is that of Ehenside Tarn, which is both of similar character and location. The palynological work by Walker on deposits identified during the re-excavation of Ehenside Tarn in 1957, and his subsequent reinterpretation of that data with the application of absolute dates, provides an invaluable record of the vegetation and activity from the early Holocene up to about cal AD 1450 (Walker 1966, 85-118; Walker forthcoming). The pollen diagram indicates that, after the retreat of the ice from the last glaciation, the landscape was colonised firstly by an open birch scrub, which in turn was replaced by hazel woodland and deciduous forest. The pollen diagram then displayed a series of vegetational changes attributable to human activity from about 3870 cal BC onwards. Initially, this was episodic with some recovery in the woodland, but there was a major intensification of the clearance about 2900 cal BC, including clear evidence of cereal agriculture. Approximately 760 -410 cal BC hemp became an important crop and the tarn may have been used for retting the fibres. Agricultural activity in the vicinity continued through the Roman period and arguably reached a maximum about cal AD 850. The pollen record ended about cal AD 1450.
- 5.1.4 The pollen data from Ehenside Tarn probably provides a picture of both local and regional vegetational change, but, because the tarn was relatively small, the pollen rain is probably more characterised by the influx of local, rather than regional pollen, and hence the activities affecting the vegetation are likely to be within the locale of the site. The excavations by Darbishire (1873) have demonstrated considerable occupational activity

around the tarn and the presence of axe rough-outs, polished axes, and grinding stones indicate that this was a 'finishing site' for the manufacture of Langdale axes.

5.1.5 *Archaeological Potential of the Study Area:* the study has highlighted the discovery of lithic finds, both from within the development area (Site 15) and also the environs which, coupled with the substantial excavation and artefactual evidence from comparable sites, such as Ehenside Tarn and others along the Cumbrian coast, has demonstrated the potential for significant archaeological deposits to be recovered from around Lantern Moss Tarn which would further our understanding of this period of prehistory in Lowland Cumbria.

6. IMPACT AND RECOMMENDATIONS

6.1 ARCHAEOLOGICAL IMPACT

The present study is limited in that it has not been possible to undertake a detailed site 6.1.1 inspection, given the present restrictions imposed as a result of foot and mouth disease; however, this initial documentary study would suggest that the site has some considerable archaeological potential. Topographically, it is within the environs of a coastal tarn (Lantern Moss Tarn), that is comparable in form, and is in the close environs, of the important Neolithic site of Ehenside Tarn. There is also, within the site, an area of extant wetland which has the potential to preserve important organic deposits, which give an extra value to archaeological sites. While the North West Wetlands Survey examination of the fields within the study area has revealed relatively little new artefactual material (Hodgkinson et al 2000), this reflects, in the main, the pastoral condition of the fields at the time of their study; earlier investigations by Cherry (Cherry and Cherry 1984, 6) have recovered a significant assemblage of Neolithic lithics at Warborough Nook, within the study area (Site 15) and there have been further lithic finds immediately adjacent to Lantern Moss Tarn (Site 13). The potential for Roman remains is also significant given the discovery of a small Roman hoard just to the north of the study area (Site 07). In addition the large assemblage of early medieval crosses at both Beckermet St Bridget and Beckermet St John to the north-east is also important in that they attest to a settled community in the vicinity.

6.2 **Recommendations**

- 6.2.1 *Artefact Survey:* by virtue of the identified potential of the site, particularly for prehistoric remains, it is recommended that a surface inspection be undertaken to examine the site for upstanding features of archaeological significance in conjunction with an artefact survey. The latter survey would ideally be undertaken following the ploughing of the site, by which means the artefactual material is exposed on the surface; if any of the fields have been, or will in the near future, be ploughed, then it is recommended that they be subject to field walking. Where fields are under pasture and are not likely to be subject to ploughing, then it is recommended that a shovel pit survey be undertaken. This will involve the excavation of small holes (*c*150mm x 150mm) with a shovel into the topsoil on an approximate 3m grid across the areas of development impact. The resultant spoil will be bagged, recorded and their locations mapped in order to provide a distribution map of the material across the site.
- 6.2.2 *Palaeoenvironmental Sampling:* the site has considerable potential for the preservation of organic deposits within the areas of peat within the study area, in the pasture land overlying peat to the east of Lantern Tarn and around the Tarn itself (which is immediately beyond the study area). It is recommended that the deposits in these areas be investigated by palaeoenvironmental coring and that the deposits be subject to palynological assessment. This will examine the survival of pollen within the organic deposits, and will also establish the potential for further analysis which may allow the reconstruction of the vegetational history of the site through the prehistoric and later periods. Subject to the results of such an assessment, there may be a recommendation for further analysis and dating of the deposits by radiocarbon assay.

- 6.2.3 *Evaluation:* a programme of evaluation trenching is recommended to follow on from the artefact survey, which would examine the sub-surface archaeological potential of the site. This should be concentrated on those areas with the greatest impact from the proposed development, and also areas of archaeological potential as identified by the artefact survey.
- 6.2.4 Subject to the results of this evaluation element, there may be recommendations made for further mitigation recording or a watching brief during the construction works.

7. BIBLIOGRAPHY

7.1 **PRIMARY SOURCES**

7.1.1 Cumbria Record Office, Whitehaven (CRO(W))

Archer, J, 1835 Map of Cumberland, in T Dugdale Curiosities of Great Britain and Ireland

Cary, J, 1793 Map of Cumberland: CRO(W)/DH/339/6

Dorton, W, and Dix, T, 1816 New Map of the County of Cumberland CRO(W)/DH/339/6

Greenwood, C, 1823 Map of Cumberland

Hartley, JB, and Oliver, RR, 1991 Old Series Ordnance Survey Maps of England and Wales, 8, Kent

Hodgkinson, J, and Donald, T, 1770-1 Map of Cumberland CRO(W)/DH/339/6

Ordnance Survey, 1859-60 6": 1 mile map, *Sheet 99NE*, 1st edn

Ordnance Survey, 1860 25": 1 mile map, *Sheet 77.3*, 1st edn

Ordnance Survey, 1860 25": 1 mile map, *Sheet* 77.4, 1st edn

Ordnance Survey, 1899 25": 1 mile map, *Sheet 77.3*, 2nd edn

Ordnance Survey, 1899 25": 1 mile map, *Sheet* 77.4, 2nd edn

Mutlow (Caddell and Davies) 1815 Map of Cumberland in Lyson's Magna Britannia CRO(W)/DH/339/9

Tithe Map of St Bees (YPR 42/136/2 1838)

Tithe Award of St Bees (YPR 42/136/1 1838)

7.2 SECONDARY SOURCES

Akhurst, MC, Cadwick, RA, Holliday, DW, McCormack, A, McMillan, AA, Millward, D, and Young, B, 1997 *Geology of the West Cumbria District*, Brit Geol Surv Nat Environ Res Counc, Nottingham

Arthurton, RS, Burgess, IC, and Holliday, DW, 1978 Permian and Triassic, in F Moseley (ed), *The geology of the Lake District*, Leeds

Bailey, RN, and Cramp, RJ, 1988 Corpus of Anglo-Saxon stone sculpture, 2: Cumberland, Westmorland and Lancashire North-of-the-Sands, Oxford

Bell, M, and Walker, MJC, 1992 Late quaternary environmental change: physical and human perspectives, Harlow

Bewley, RH, 1994 Prehistoric and Romano-British settlement in the Solway Plain, Oxbow Monog, 36, Oxford

Bonsall, C, 1981 The coastal factor in the Mesolithic Settlement of North-West England, in B Gramsch (ed), *Mesolithikum in Europa*. *Veroffentlichungen des Museum fur Ur- und Fruhgeschichte*, 451-72, Potsdam

Bonsall, C, Sutherland, DG, Tipping, RM, and Cherry, J, 1991 The Eskmeals project: late Mesolithic settlement and environment in north-west England, in C Bonsall (ed), *The Mesolithic in Europe*, 175-205, Edinburgh

Bonsall, C, Sutherland, DG, and Payton, RW, 1994 The Eskmeals coastal foreland: archaeology and shoreline development, in J Boardman and J Walden (eds), *Cumbria Field Guide*, Quat Res Assoc, 90-103, Oxford

Cathcart King, DJ, 1984 Castellarium Anglicanum, New York

Cherry, J, 1963 Eskmeals sand-dunes occupation sites, Phase I, flint workings, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **63**, 31-52

Cherry, J, 1965 Flint chipping sites at Drigg, Trans Cumberland Westmorland Antiq Archaeol Soc, n ser, 65, 67-85

Cherry, J, and Cherry, PJ, 1984 Prehistoric Habitation Sites in West Cumbria: Part II, The Nethertown and Seascale Areas, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **84**, 1-16

Cherry, J, and Cherry, P, 1987 Evidence for Prehistoric Habitation in Fields Adjacent to the Northern Edge of the Tarn at Ehenside, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **87**, 251-9

Colgrave, B, and Mynors, RAB (eds), 1940 Bede's ecclesiastical history of the English people, Oxford

Collinson, C, 1940 Ye Boke of Ye Busie Bee, Millom

Collingwood, WG, 1923 An inventory of the ancient monuments of Cumberland, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **23**, 206-76

Curwen, JF, 1913 Castles and towers of Cumberland, Westmorland and Lancashire North of the Sands, Cumberland Westmorland Antiq Archaeol Soc extra ser, 13, Kendal

Darbishire, R, 1873 Notes on discoveries at Ehenside Tarn, Cumberland, Archaeologia, 44, 273-292

Doubleday, HA, 1901 The Victoria History of the County of Cumberland, 1, London

English Heritage, 1991 Management of Archaeological Projects, 2nd edn, London

Fair, MC, 1932 A reconsideration of the lakeside site at Ehenside Tarn, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **32**, 57-62

Fell, C, 1972 Early Settlement in the Lake Counties, Kendal

Ferguson, RS, 1970 A History of Cumberland, London

Fletcher, W, 1957 Grey Croft stone circle, Seascale, Cumberland, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **57**, 11-17

Geological Survey of Great Britain, 1978 Geology of Northern England, 1:250,000, Lancaster University

Higham, N, 1986 The Northern Counties to AD 1000, London

Hodgkinson, D, Huckerby, E, Middleton, R and Wells, C, 2000 The Lowland Wetlands of Cumbria, Lancaster Imprints, 8, Lancaster

Jarvis, RA, Bendelow, VC, Bradley, RI, Carroll, DM, Furness, RR, Kilgour, INL, and King, S J, 1984 *Soils and their use in northern England*, Harpenden

Lee, J, 1998 The Placenames of Cumbria, Carlisle

LUAU, 1996 Drigg characterisation boreholes, Cumbria: Archaeological Assessment, unpubl rep

LUAU, 2001 Drigg, Cumbria: Assessment of Archaeological Evaluation, unpubl rep

Parker, CA, 1903 Caernarvon Castle, A Forgotten Stronghold, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **3**, 214-22

Parker, CA, and Collingwood, WG, 1926 *The Gosforth District*, Cumberland Westmorland Antiq Archaeol Soc, extra ser, **15**, Kendal

Pearson, GW, 1979 Belfast radiocarbon dates IX, Radiocarbon, 21, 279

Pennington, W, 1965 Appendix, in Cherry 1965, 82-5

Pennington, W, 1970, Vegetational history in North West England, in *Studies in the vegetational history of the British Isles* in D Walker and RG West (eds), 41-80, Cambridge

Perriam, DR, and Robinson, J, 1998 *The medieval fortified buildings of Cumbria*, Cumberland Westmorland Antiq Archaeol Soc, extra ser, **24**, Kendal

Pevsner, N, 1967 Buildings of England: Cumberland and Westmorland, London

Potter, TW, 1979 Romans in North-West England, Cumberland Westmorland Antiq Archaeol Soc Res ser, 1, Kendal

Quartermaine, J, and Leech, R, forthcoming *The later prehistory of the Lake District, the results of recent surveys*

Shotter, DA, 1979 Roman Coins Hoards from Cumbria, *Trans Cumberland Westmorland Antiq* Archaeol Soc, n ser, **79**, 5-17

Shotter, DA, 1990 Roman coins from North-West England, Lancaster

Shotter, DA, 1993 Roman and Britons in North-West England, Lancaster

Thompson, WN, 1903 South and (Part of) South-West Cumberland in the Chartulary of St Bees, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **3**, 78-93

Tipping, R, 1994 Williamson's Moss: Palynological evidence for the Mesolithic-Neolithic Transition, in J Boardman and J Walden (eds), *Cumbria field guide*, Quat Res Assoc, Oxford, 104-27

Turner, RC, 1989 Another Cumbrian bog body, found in Seascale Moss in 1834, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **89**, 21-3

Walker, D, 1966 The Late Quaternary History of Cumberland Lowland, *Phil Trans Royal Soc*, B, **251**, 82-118

Walker, D, forthcoming The dates of human impacts on the environment at Ehenside Tarn, Cumbria, *Trans Cumberland Westmorland Antiq Archaeol Soc*

Watson, WH, 1903 Stone implements at Braystones, Cumberland, with remarks on probable Neolithic settlements in the neighbourhood, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **3**, 91-3

Whellan, W, 1860 The History and Topography of the Counties of Cumberland and Westmorland, Pontefract

Widdup, HL, 1981 *The Story of Christianity in Cumbria*, Kendal Winchester, AJL, 1987 *Landscape and Society in Medieval Cumbria*, Edinburgh

APPENDIX 1 PROJECT DESIGN

April 2001

Lancaster University Archaeological Unit

BRAYSTONES BECKERMET

CUMBRIA

ARCHAEOLOGICAL ASSESSMENT

Proposals

The following project design is offered in response to a request from United Utilities for an archaeological assessment at Braystones, near Beckermet, Cumbria.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Lancaster University Archaeological Unit (LUAU) has been invited by United Utilities to submit a project design and costs for an archaeological assessment at Braystones, near Beckermet (NY 0066 0605) in advance of the construction of a proposed waste water treatment works, and an associated outfall pipe. The project design has been prepared in accordance with a brief prepared by the Assistant Archaeologist, Cumbria County Council. The brief requires the implementation of evaluatory trenching and a desk-based study; however, as there is uncertainty as to the extent of the development and as there is presently restricted access onto the site because of foot and mouth, only the desk-based study is being undertaken at present. A refined programme of trenching will be formulated in the light of the desk-based results and detailed proposals for the water treatment works.
- 1.1.2 Archaeological Background: the study area is adjacent to Lantern Moss Tarn to the south of Braystones. Investigations of tarns in this area, notably that at Ehenside Tarn, 1km to the north, have revealed a considerable wealth of organic deposits associated with settlement remains (Darbishire 1873). Lantern Moss Tarn is comparable in form to that at Ehenside and there have been recovered considerable numbers of prehistoric lithics, including Neolithic axes, from the area around this tarn (Hodgkinson *et al* 2000). Consequently there is a potential that there was also prehistoric settlement activity centred on Lantern Moss Tarn . As the site has considerable archaeological potential the Assistant Archaeologist of Cumbria County Council has recommended that a programme of archaeological evaluation and assessment be undertaken to investigate this potential.

1.2 LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

1.2.1 LUAU has considerable experience of the evaluation and assessment of sites of all periods, having undertaken a great number of small and large scale projects during the past 18 years. Evaluations and assessments have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. LUAU has undertaken a major archaeological study of the Wetlands of Cumbria, which included a detailed study of the area around Ehenside Tarn, and encompassed the present study area (Hodgkinson *et al* 2000). LUAU has the professional expertise and resource to undertake the project detailed below to a high level of quality and efficiency. LUAU and all its members of staff operate subject to the Institute of Field Archaeologists (IFA) Code of Conduct, and LUAU is a registered organisation with the IFA (No 27).

2. **OBJECTIVES**

2.1 The following programme has been designed in accordance with a brief by Helena Smith of Cumbria County Council to provide an accurate archaeological assessment and evaluation of the designated area, within its broader context. However, at this stage only the desk-based element is being undertaken because of the need to refine the location of the proposed water treatment works and because of foot and mouth access restrictions on the land. The principal purpose of the assessment is to collate information about the archaeology of the site and its environs. This will enable an assessment of the significance of the identified archaeological resource. The required stages to achieve these ends are as follows:

2.2 Desk Top Survey

To accrue an organised body of data to inform the assessment report and the subsequent evaluatory trenching.

2.3 Assessment Report

A written assessment report will assess the significance of the data generated by this programme within a local and regional context in order to inform the management of the landscape. It will advise on the impact of the proposed development.

3. METHODS STATEMENT

3.1 The following work programme is submitted in line with the stages and objectives of the archaeological work summarised above.

3.2 DESK-BASED STUDY

- 3.2.1 The following will be undertaken as appropriate, depending on the availability of source material. The level of such work will be dictated by the timescale of the project.
- 3.2.2 **Documentary and cartographic material:** this work will rapidly address the full range of potential sources of information. It will include an appraisal of the Cumbria Sites and Monuments Record, as well as appropriate sections of County histories, early maps, and such primary documentation (tithe and estate plans etc.) as may be reasonably available. Particular emphasis will be upon the early cartographic evidence which has the potential to inform post-medieval occupation and land-use of the area. Any photographic material lodged in either the County Sites and Monuments Record or the County Record Offices will also be studied. Published documentary sources will also be examined and assessed. The work will examine the archival records of the North West Wetlands Programme which has examined the study area (Hodgkinson *et al* 2000). This work will involve visits and or correspondence searches of the following repository Cumbria Sites and Monuments Record, the Cumbria Record Office and Local Studies Library in Whitehaven (01946 852920).
- 3.2.3 The study will examine place and field name evidence for the site and its environs. Any engineering or bore-hole data made available by the client will be examined.
- 3.2.4 *Aerial photography:* a brief survey of the extant air photographic cover will be undertaken. This would provide an indication of recent land-use, but is not likely to significantly inform the archaeological potential of the site. The Cumbria Sites and Monuments Record has a valuable aerial photographic collection. Aerial photographic work will also entail liaison with the Royal Commission on the Historical Monuments (England) (NMR), although, within the timescale available, it is unlikely that prints will be forthcoming from this body for inclusion in this report.
- 3.2.4 **Physical environment:** a rapid desk-based compilation of geological (both solid and drift), pedological, topographical and palaeoenvironmental information will be undertaken. It will be based on published geological mapping and any local geological surveys in the possession of the county council or the client. This will not only set the archaeological features in context but also serves to provide predictive data, that will increase the efficiency of the field inspection.

3.3 ASSESSMENT REPORT

- 3.3.1 *Archive:* the results of Stage 3.2 will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects, 2nd edition, 1991*). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct.
- 3.3.2 This archive can be provided in the English Heritage Central Archaeology Service format, both as a printed document and on computer disks as ASCii files (as appropriate), and a synthesis (in the form of the index to the archive and the report) will be deposited with the National Monuments Record (RCHM(E)), as appropriate. LUAU practice is to deposit the original record archive of projects (paper, magnetic, and plastic media) with the Cumbria Record Office.
- 3.3.3 **Collation of data:** the data generated by 3.2 (above) will be collated and analysed in order to provide an assessment of the nature and significance of the known surface and subsurface remains within the designated area. It will also serve as a guide to the archaeological potential of the area to be investigated, and the basis for the formulation of any detailed field programme and associated sampling strategy, should these be required in the future.
- 3.3.4 *Assessment Report:* one bound and one unbound copy of the report will be submitted to the Client, and a further copy submitted to the Cumbria Sites and Monuments Record. The report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and will include a full index of archaeological features identified in the course of the project, together with appropriate illustrations, including maps and gazetteers of known or suspected sites identified within or immediately adjacent to the study area. It will also include a complete bibliography of sources from which the data has been derived, and a list of further sources identified during the programme of work, but not examined in detail. It will include a copy of the brief and project design. It will provide an assessment of past and present land use.
- 3.3.5 The report will identify areas of defined archaeology, an assessment and statement of the actual and potential archaeological significance of any features within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, which can be

tailored to the specific requests of the client (eg particular scales etc.), subject to discussion. The report will be in the same basic format as this project design; a copy of the report can be provided on 3.5" disk (IBM compatible format).

- 3.3.6 *Proposals:* the report will make a clear statement of the impact of the proposed development upon the identified archaeological resource. It will make recommendations for the proposed trenching programme.
- 3.3.7 **Confidentiality:** the assessment report is designed as a document for the specific use of the client, for the particular purpose as defined in the project brief and this project design, and should be treated as such; they are not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

4. WORK TIMETABLE

4.1 It is envisaged that the various stages of the project outlined above would follow on consecutively, where appropriate. The phases of work would comprise:

i Desk-Based Assessment

3 days (on site)

ii Assessment Report 5 days (desk-based).

- 4.2 LUAU can execute projects at very short notice once an agreement has been signed with the client. The desk-based study is scheduled for completion within three weeks from the completion of the field work.
- 4.3 The project will be under the project management of **Jamie Quartermaine**, **BA Surv Dip MIFA** (LUAU Project Manager) to whom all correspondence should be addressed. All Unit staff are experienced, qualified archaeologists, each with several years professional expertise.

APPENDIX 2 GAZETTEER OF SITES

Site number	01
Site name	Bogholes
NGR	NY 3010 5049
SMR No	-
Site type	Find
Period	Neolithic
Source	Watson 1903, 92
Description	,

Description

A rough-out Langdale-type axe recovered from the area of Bogholes to the south of the study area. The site is imprecisely located as being 0.75 miles to the south of Braystones. Within the same locale there was reported the finding of a quern stone adjacent to the railway cutting.

Assessment

The site lies to the south of the assessment area.

Site number	02
Site name	Silver Tarn
NGR	NY 2997 5069
SMR No	-
Site type	Find
Period	Neolithic
Source	Cherry and Cherry 1984, 5
D	5 5 7

Description

A flint scatter discovered during fieldwalking by Jim Cherry in the field adjacent to the road at the northern end of Silver Tarn, on the edge of a well-defined kettlehole. Only one tool was identified, this being a large scraper with some retouching. A polished stone axe was also found at the site (Cherry and Cherry 1984, 5).

Assessment

The site lies to the north-west of the assessment area.

Site number	03
Site name	Braystones
NGR	NY 3002 5065
SMR No	6442
Site type	Find
Period	Neolithic
Source	SMR; Cherry and Cherry 1984, 6
Description	
A small steeply wor	ked scraper found at the bottom of a hedge bank by the roadside.
Assessment	1 6 5
The site lies to the r	orth-west of the assessment area

Site number	04
Site name	Tarn Bank
NGR	NY 3002 5064
SMR No	6437
Site type	Find
Period	Neolithic
Source	SMR; Cherry and Cherry 1984, 6
Description	
A small scatter of l	ightly patinated flints, including a core and a long blade-like flake, that were recovered during
fieldwalking.	
Assessment	

The site lies to the north-west of the assessment area.

Site number	05
Site name	Tarn Bank
NGR	NY 3002 5062
SMR No	6440
Site type	Find
Period	Neolithic
Source	SMR; Cherry and Cherry 1984
Description	, , ,

Description

A small scatter of flints, including a core and a knife made from a large core rejuvenation flake, were recovered 200m north-north-east of Braystones Station.

Assessment

The site lies to the north-west of the assessment area.

Site number	06
Site name	Braystones Station
NGR	NY 3001 5062
SMR No	6439
Site type	Find
Period	Neolithic
Source	SMR; Cherry and Cherry 1984, 6
Description	
A bifacially worked	tool made from a thick flake from a platformed core, which was found in a hollow during
fieldwalking.	
Assessment	
The site lies to the no	rth-west of the assessment area.

Site number	07
Site name	Braystones Coin Hoard
NGR	NY 3007 5059
SMR No	1261
Site type	Find
Period	Roman
Source	SMR; Shotter 1979, 10
Description	

A Roman coin hoard, including one coin of Commodus, which was found in the late nineteenth century whilst sinking a well at Braystones. The main interest is the location of the find in relation to those at Starling Castle and St Bridget Beckermet (Shotter 1979). The coordinates are incorrectly shown on the SMR.

Assessment

The site lies to the north of the assessment area.

Site number	08
Site name	Braystones Tarn
NGR	NY 30041 50609
SMR No	1260
Site type	Find
Period	Neolithic
Source	SMR
Description	
A stone 'slicker' for p	elt rubbing.

Assessment

The site lies to the north of the assessment area.

Site number	09
Site name	Braystones
NGR	NY 3007 5060
SMR No	-
Site type	Footbridge
Period	Post-Medieval
Source	OS first edition map (1860)
Description	- ~ /
A footbridge crossing	the River Ehen identified on the OS first edition map.
Assessment	
The site lies to the nor	th of the assessment area.

Site number	10
Site name	Braystones Tower
NGR	NY 3008 5060
SMR No	5644
Site type	Motte
Period	Medieval
Source	SMR; Curwen 1913, 39; Cathcart King, 1984
Description	

The site of a putative motte on Brough Hill. It is thought to have belonged to the de Braithstones, although the Jubilee Tower (Braystones Tower) now stands upon it. However, it has been interpreted by Cathcart King (1984) as a natural, glacial feature rather than a motte.

Assessment

The site lies to the north of the assessment area.

Site number	11
Site name	St John Beckermet
NGR	NY 3010 5060
SMR No	6438
Site type	Find
Period	Neolithic
Source	SMR
Description	
A large polished stone axe	from Boghder; it is imprecisely located.
Assessment	
The site lies to the north-east of the assessment area.	

Site number	12
Site name	Lantern Moss Tarn
NGR	NY 3005 5057
SMR No	-
Site type	Find
Period	Bronze Age
Source	Cherry and Cherry 1984, 5
Description	

Description

A small concentration of flints including four struck cores, a utilised flake and a broken blade. The cores appear to have used a natural hollow in the surface of the pebble flint as a striking platform – a technique common in West Cumbria during the Bronze Age.

Assessment

The site lies to the north-west of the assessment area.

Site number	13
Site name	Lantern Moss Tarn
NGR	NY 3005 5055
SMR No	1298

Site type	Find
Period	Bronze Age
Source	SMR
Description	
A small flint scatter t	found in 1938.
Assessment	
The site lies to the w	est of the assessment area

Site number	14
Site name	St Bridget Beckermet Farm
NGR	NY 30150 50604
SMR No	1259
Site type	Crosses
Period	Early Medieval
Source	SMR; Bailey and Cramp 1988
Description	

Description

The remains of two crosses in the churchyard of St Bridget Beckermet; only the shafts survive. The first is constructed of yellow sandstone with a squarish cross section. The upper part of the shaft has a vine scroll with berries and a pair of leaves, the narrow north face has a vine scroll and the south face has a split stemmed plant trail. It is dated to the second quarter of the ninth century. It is considered to be comparable in importance to the Gosforth cross (Bailey and Cramp 1988). The other cross is of red sandstone, has a rounded base and a rectangular upper part. It is decorated with vertical rows of interlace carving and is considered to be of later date (cAD 1000?).

Assessment

The site lies to the north-east of the assessment area.

Site number	15
Site name	Warborough Nook
NGR	NY 3008 5052
SMR No	-
Site type	Find
Period	Neolithic
Source	Cherry and Cherry 1984, 6
Description	5 5 7

Description

More that 25 flints were scattered on a rectangular area of bare ground, 9m x 4.5m, towards the top of Warborough Nook. The finds included three cores, long blades, and a small pointed flake which was possibly intended as a borer, and a fragment of *petit tranchet* arrowhead. Previous finds on the site include a stone axe.

Assessment

The site lies within the assessment area.

Sita numbar	16	
Site number	10	
Site name	Home Farm	
NGR	NY 30091 50582	
SMR No	-	
Site type	Building	
Period	Post-Medieval	
Source	OS first edition 6" to 1 mile map (1859-60); Hodgkinson and Donald Map	(1770)
Description		

The site of a farm complex, first depicted on Hodgkinson and Donald's Map (1770). On this it has a courtyard similar to that on the current OS map.

Assessment

The site lies to the north-east of the assessment area.

Site number	17
Site name	Middlebank Farm
NGR	NY 30133 50581

The site lies to the north-east of the assessment area.

Assessment

© LUAU: July 2001

- Figure 1: Braystones Location Map
- Figure 2: Hodgkinson and Donald map of 1770-1
- Figure 3: Dorton and Dix map of 1816
- Figure 4: Greenwood map of 1823
- Figure 5: Ordnance Survey map 1 inch to 1 mile (1859)
- Figure 6: Ordnance Survey map 25' to 1 mile (1860)
- Figure 7: Location of sites in Gazetteer



Figure 1: Braystones: Location Map



Figure 2: Hodgkinson and Donald Map of 1770-1



Figure 3: Dorton Map of 1816



Figure 4: Archer Map of 1835



Figure 5: Ordnance Survey 1st Edition Map of 1859 (6" to 1 mile)



Figure 6: Ordnance Survey Map 25' to 1 mile (1860)



.

Figure 7: Location of Sites in Gazetteer