Non-Invasive Archaeological Investigations for the Aberdeen Western Peripheral Route (AWPR Package)

Project code: AWPR-002

Employer: AWPR Managing Agent

Consultant: Jacobs UK Ltd

















A90 BALMEDIE TO TIPPERTY SCHEME Topographic and Photographic Surveys:

Snarleshow (Dambrae) Possible Lade (Site 42), Kirkhill Upright Stone (Site 51), Overhill Cattle Rubbing Stones (Site 57) and Mill of Foveran Lade (Site 72)



Report Authors: Jürgen van Wessel Report Reference No: AWPR-A90-005

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Aberdeenshire A











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Employer AWPR Managing Agent

Consultant Jacobs UK Ltd

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Schedule

Fieldwork 26th July to 17th October 2012

Report 31st October 2012

Summary

Headland Archaeology undertook a topographic and photographic survey on four sites as part of a programme of archaeological non-invasive investigations to facilitate the construction of the Aberdeen Western Peripheral Route and associated schemes.

Snarleshow (Dambrae) Possible Lade (Site 42) is depicted on historic maps as a channel leading towards Snarleshow (now Dambrae) farm. Near the farm, two sluices are marked, although no indication of their purpose is given. The topographic survey traced the channel as an overgrown but functioning open drain. No sign of the sluices was found. It is possible that this part of the channel has been remodelled at some point in the 20th century, perhaps at the same time as the reconstruction of the farm. An L-shaped revetment wall has been added to support higher banks in this area. The function of the channel remains unclear.

The topographic survey of the Kirkhill Upright Stone (Site 51) recorded a small stone of up to 0.9m in height, set into the embankment of a local road probably dating to the mid 19th century. Although the stone appears to have been intentionally erected, its function and exact date remains unclear.

The Overhill Cattle rubbing stones (Site 57) are not visible on 19th century maps and are likely to relate to 20th century changes to the field layout in this area. The topographic survey identified that two of the three stones fell outwith the proposed road corridor. The remaining stone is located in an arable field, and stands on a small mound of earth and loose stone. Despite standing to only 1.5m, the stone is quite prominent in the landscape.

Mill of Foveran Lade (Site 72) is clearly marked on historic mapping, and serves a corn mill dated to 1609 (the mill itself lies just outwith the survey area). The topographic survey found the lade to be in poor condition with some parts being heavily overgrown. Elsewhere, it is likely that sections of stone revetment/lining have been removed, allowing the banks to slump into the base of the channel. Historic mapping shows a crossing constructed across the lade to allow access to the mill complex; the present structure appears relatively recent. It is not clear when the mill and by implication the lade went out of use.

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1 Introduction

1.1 General

- 1.1.1 This document is submitted as the report on the topographic and photographic survey of four sites along the proposed route of the A90 Balmedie to Tipperty Scheme. The topographic and photographic survey is part of a programme of archaeological non-invasive investigations to facilitate the construction of the Aberdeen Western Peripheral Route and associated schemes (AWPR package). The work was undertaken in accordance with a specification prepared by Jacobs Engineering UK Ltd within the Invitation to Tender (ITT) (Aberdeen City Council 2012).
- 1.1.2 The **A90 Balmedie to Tipperty Scheme** (Illus 1) comprises a 9km section of new dual carriageway, with two lanes in each direction, three grade separated junctions to allow access on and off the new road at the following locations: to the south of Balmedie; at Rashierieve; and south of Tipperty. The scheme also includes for the upgrading of 3km of existing dual carriageway immediately to the south of Balmedie.
- 1.1.3 The Employer is the AWPR Managing Agent, administrator of the Commission on behalf of Aberdeen City Council (ACC) and its funding partners. The Consultant is Adam Brossler of Jacobs UK Ltd. The Engineer for the A90 Balmedie to Tipperty Scheme is Grontmij who also facilitated access to the survey areas. The Contractor is Headland Archaeology (UK) Ltd, the archaeological organisation appointed by the AWPR Managing Agent to carry out the work reported here. Historic Scotland provides advice, supervision and oversight of the content, conduct and quality of archaeological aspects of the Contract, acting in support of Transport Scotland.
- 1.1.4 Between July and October 2012 Headland Archaeology undertook topographic and photographic survey of four sites on the A90 Balmedie to Tipperty Scheme (Table 1 below). The project was managed by Russel Coleman (Contract Manager) and Sorina Spanou (Project Manager). Fieldwork was undertaken by Jurgen van Wessel, Alison Cameron and Magnar Dalland. Reporting was undertaken by Jurgen van Wessel.

1.2 Background to the Project – A90 Balmedie to Tipperty Scheme

1.2.1 Desk-based assessment undertaken in support of the cultural heritage chapter of the Environmental Statement (ES) identified a total of 90 sites of cultural heritage significance along or close to the route (Kirkdale Archaeology in Natural Capital 2007). Chapter 12 (Cultural Heritage) of the ES for the scheme recommends measures to be undertaken to evaluate or mitigate potential impacts of the scheme on the cultural

heritage resource. These recommendations include both invasive and non-invasive archaeological survey.

- 1.2.2 Based on the requirements of the ES and the results of subsequent dialogue with Historic Scotland, the following non-invasive archaeological investigations are required:
 - topographic and photographic survey and
 - geophysical survey.
- 1.2.3 The present report deals with the topographic and photographic survey of the following sites:

Table 1. Sites for Non-Invasive Archaeological Investigations (Balmedie to Tipperty Scheme)

Site No.	Name	Importance	NGR	Archaeological Works required
42	Snarleshow (Dambrae) Lade	Local	NJ 9667 2070	Topographic and photographic survey
51	Kirkhill Upright Stone	Local	NJ 96723 22440	Topographic and photographic survey
57	Overhill Cattle Rubbing Stones	Local	NJ 9676 2322, NJ 9678 2284 and NJ 9646 2332	Topographic and photographic survey
72	Mill of Foveran Lade	Local	NJ 9745 2395	Topographic and photographic survey

1.3 Aims and Objectives

- 1.3.1 The general aim of the archaeological non-invasive investigations is to identify the extent and character of known and unknown archaeological remains in order to enable a programme of mitigation to be designed. More specific aims and objectives are as follows:
- 1.3.2 To identify, investigate and record any such archaeological remains to the extent possible by the methods put forward in the ITT Specification (ACC 2012); in this case, to provide a record of the four sites listed in Table 1.

- 1.3.3 To disseminate the results through deposition of an ordered archive and a detailed report at the National Monument Records of Scotland (NMRS), and publication at a level of detail appropriate to the significance of the results.
- 1.3.4 The results of the non-invasive investigations will enable a more accurate assessment of the potential impact of the scheme on archaeological remains and the design of any further evaluation works and an appropriate programme of mitigation works (if necessary). Such works will form part of a separate contract.

1.4 Site Locations and Descriptions

- 1.4.1 The four sites discussed in this text are distributed along a 3.5km section of the proposed road corridor between Hill of Menie and Foveran (Illus 1). A detailed description of the location of each site can be found below. The survey area in each case is the area required to topographically describe the whole or part of the site within the proposed road corridor (that which will be impacted on directly by the construction of the proposed road).
- 1.4.2 Snarleshow (Dambrae) Possible Lade (Site 42) is an artificial channel associated with the farm at Dambrae (formerly Snarleshow). It runs from west to east immediately north of the Westfield to Menie Lodge local road, in the parish of Belhelvie. While its full extent is not presently clear, it can be confidently traced for 900m between Greenhaven and Menie Lodge. It was not possible to determine the historical purpose of the channel as a lade or otherwise (see discussion, section 4.1); for clarity it will be referred to as a channel throughout this report. The proposed road corridor directly impacts a 510m long section of the channel between NGR NJ 96758 20689 (north of Seven Acres farm) and NJ 96252 20720 (east of Dambrae farm). The channel is bounded by the local road to the south and a mixture of pasture, young forestry and landscaped water features to the north. The survey area covers c. 1740m².
- 1.4.3 Kirkhill Upright Stone (Site 51) is a small isolated stone set next to the local road to Overhill farm. It is located within the proposed road corridor 190m east of Kirkhill Farm, at NGR NJ 96723 22446. The stone is situated in a tall grass verge bounded by the local road to the east and an arable field to the west. The survey area covers around 200m2.
- 1.4.4 The three Overhill Cattle Rubbing Stones (Site 57) are substantial, isolated upstanding stones located in arable fields east of Overhill farm; the first (57a) at NGR NJ 96451 23322, the second (57b) at NJ 96758 23219 and the third (57c) at NJ 96782 22845. Only the third stone (Site 57c) lies within the proposed road corridor the survey area for this stone covers around 1060m². Stones 57a and 57b will not be directly impacted by the proposed road and have therefore not been surveyed.

1.4.5 The Mill of Foveran Lade (Site 72) is an artificial channel located to the north of the village of Foveran, running for some 800m from west to east between two points on the Foveran Burn. It is associated with the Foveran corn mill (Category B Listed), which lies just to the east of the survey area and outwith the proposed road corridor. The proposed road corridor directly impacts a 270m long section of the lade between NGR NJ 97323 23947 (north-east of Pitgersie Bridge) and NH 97588 23998 (on the north side of Mill of Foveran). Most of this section is situated in tall grass in the southern embankment of the road from Foveran School to Mill of Foveran, with a field of rough pasture to the south. The easternmost end lies within the yards at Mill of Foveran and is more clearly visible. The survey area covers around 1500m².

1.5 Survey Limitations and Constraints

1.5.1 Snarleshow (Dambrae) Possible Lade (Site 42)

The section of the channel within the survey area was largely overgrown at the time of the survey. The eastern 170m of the survey area was obscured by trees growing in the banks, and for the remainder the channel was only accessible at points due to dense undergrowth. The construction of some associated structures could not be fully assessed due to being partly sunken or otherwise covered by soil or other dumped material.

1.5.2 Kirkhill Upright Stone (Site 51)

No limitations were encountered during the survey of this site.

1.5.3 Overhill Cattle Rubbing Stones (Site 57)

Only one (57c) of the three stones was found to lie within the proposed road corridor. The others were visited and located by DGPS but not surveyed or photographed in detail.

1.5.4 Mill of Foveran Lade (Site 72)

Within the survey area, the western part of the lade, where it is cut into a steep road embankment, was largely obscured by vegetation at the time of the survey. The banks of the channel were no longer clearly defined and an assessment of construction and dimensions at this point could not be made, although its alignment could still be recorded. More details on these limitations are given in the results below.

1.6 Historical background

- 1.6.1 All four sites discussed in this report can be related to post-medieval agricultural activity. A considerable change in attitudes toward farming was underway during the 18th century (Smith 1962, 14). The continued expansion of Aberdeen and its urban population relied increasingly on the provision of adequate supplies of food from the surrounding areas. This substantial market helped provide the incentive for landowners and, later, tenant farmers to seek means of improving the agricultural productivity of their holdings. Farming was no longer just a means of subsistence, but a potential source of profit (RCAHMS 2008, 218).
- 1.6.2 The speed of changes to the farming landscape increased dramatically in the 19th century (*ibid* 220). Improvements in road communications (especially the transition from the statute labour system to privately financed turnpike roads) allowed much easier access to market. Rationalisation and enclosure of fields was required to adapt to new systems of crop rotation and tenancy; this can be seen in the fields around Overhill, and may have given the impetus for the erecting of cattle rubbing stones there (Site 57). The 19th century also saw increased use of stone boundary markers along unenclosed land divisions (*ibid* 236); a possible example of which is seen at Kirkhill (Site 51). The continued increase in demand for produce may have made rural mills more viable during this time; the early 17th century corn mill at Foveran (Site 72) may have been reconstructed in the mid 19th century to meet this demand.

2 Survey Procedure and methodology

2.1 Topographic Survey

- 2.1.1 The topographic surveys were undertaken to English Heritage Level 2 (2007, 23), and consist of a written description and metrically accurate interpretative site plans (Illus 2-4) supplemented by a photographic record (Appendix 1). The topographic surveys are intended to provide as complete as possible record and interpretation of the upstanding and other surviving features.
- 2.1.2 The survey was carried out using a combination of DGPS and hand tapes as appropriate. Fixed survey control was not required due to the use of DGPS which provides an accuracy of sub 0.02m. The presence of trees and dense undergrowth at Site 42 meant that a complete survey by DGPS was not possible and prohibited the use of a Total Station EDM. The southern edge of the channel was most easily accessible and was surveyed in full by DGPS; the northern edge has been extrapolated from taped measurements from this line. Similarly, it was not possible to gain basal levels in the channel by DGPS due to difficulty in access; these were also measured by tape from

known points along the upper edge of the channel. Dense undergrowth at Site 72 also prohibited a detailed survey of parts of the mill lade.

- 2.1.3 Detail survey recorded the inner and outer edges and entrance positions of any visible wall, building or structure, and the top, bottom and break of slope for all earthwork features. Additional detail (for example fences and modern roads) was surveyed in places to provide a check on Ordnance Survey mapping. Data from the survey was downloaded from the data-logger into a separate computer at least daily, to ensure security of the data.
- 2.1.4 A written descriptive and interpretative account of the remains, accompanied by a sketch plan was recorded on pro-forma recording sheets during the survey.
- 2.1.5 The field record consisted of:
 - The type (classification) of the archaeological field monument being investigated, and its period including:
 - The location of the site:
 - The name of the compiler, the date of the investigation and reason(s) for the survey, with details of site ownership and present land use;
 - A summary of the salient features;
 - A concise description of the site, including information on plan, form, dimensions and area, function, age, developmental sequence and past land use, and
 - Consideration of the topographical setting of the monument and its relationship to other sites and landscapes, and to historic buildings in the immediate vicinity.
- 2.1.6 A photographic record was made of the site and its surroundings to illustrate its broader context and its place in the landscape. Photographs were taken using digital photography and care was taken to ensure that they were well exposed in good natural light and where possible, that advantage is taken of variations in light conditions that may enhance the definition of the site against its surroundings. A record was kept of the subject, orientation, the date taken and any other relevant information. Photographs included landscape setting as well as detailed images of individual features.

2.2 Photographic Survey

2.2.1 The photographic survey was prepared in accordance with the guidance provided by English Heritage (2006, 14).

- 2.2.2 Photographic recording was undertaken in order to record those parts of the sites which will be disturbed by the construction works.
- 2.2.3 A full photographic record was made of the sites using a 35mm Single Lens Reflex camera for the production of black-and-white photographs, and a high resolution digital camera for the production of colour images. The resultant negatives and prints from the film-type camera provide a longer lasting and a more stable photographic output for archival purposes.
- 2.2.4 The photographic record included:
 - General views of the site in its setting;
 - The external appearance of the site, including oblique and parallel shots and
 - Any structure or decorative detail relevant to the site's design, development or use which does not adequately show up on general photographs.

2.3 Archive

2.3.1 All field records and other products of the work shall be archived with the NMRS at the Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS), following and adhering to its standards and guidance for project archiving (RCAHMS 1996a and b).

3 Results

3.1 Snarleshow (Dambrae) Possible Lade (Site 42)

3.1.1 The Snarleshow (Dambrae) Possible Lade (Illus 2) is visible within the survey area as an open and functioning water channel following the northern edge of the Westfield to Menie Lodge road. The channel kinks in two places, following the line of the road and possibly to help achieve a suitable gradient. It runs from west to east, falling by some 11m between the western edge of the proposed road corridor (basal level 69.39m OD) and Dambrae Farm (basal level 58.38m OD), a fall of approximately 1 in 36. At the western side of the survey area, the land to the north of the channel rises gradually towards Stoneyards Farm as a mixture of conifer plantation and rough pasture. To the east, around Dambrae Farm the land is low-lying and wet; the present owners of the Farm have created a number of water features to help drain the area for new woodland. The eastern end of the channel runs towards Dambrae Farm, at which point the channel

is transitioned into a culvert (see 3.1.4 below), which continues for 60m before resurfacing east of the farm. The channel begins and ends well outside the survey area.

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- 3.1.2 The form of the channel is broadly consistent throughout the survey area (see inset a in Illus 2). It is approximately 0.66m wide and varies between 0.2m and 0.35m deep. The channel is heavily overgrown (Plate 1), and almost completely obscured by trees for 170m west of Dambrae farm (Plate 2). It was not possible to record in detail the general structure of the channel; where it could be reached the base felt stony, and the sides generally vertical (Plate 3). It is likely that the channel base is lined with stone; the sides do not appear to be revetted but have held their shape very well. The channel lies at the base of a broader cutting, some 0.5m to 0.6m deep and varying in width from 2m to 5m.
- 3.1.3 At the eastern end of the channel, immediately prior to the transition into culvert (see 3.1.4 below), the banks are more built up and have been retained by an L-shaped dry stone dyke (see detail inset b in Illus 2). This dyke flanks the channel to the south for 17m, then turns to the north for 8.6m, with a small 0.66m break for the channel to pass through. The eastern leg of the wall (Plate 4) stands to approximately 0.6m high and between 0.3 and 0.7m thick (due to dense tree cover and vegetation it was not possible to tell if this variance is by design, or due to collapse/repair). The southern face is of loosely coursed, somewhat squared dry stone; it is unclear if the northern side is faced. The northern leg of the wall (Plate 5) is of similar construction, although in a poorer condition. There is also a mound of earth piled up against the eastern face. It is unclear from the survey whether this dyke was constructed at the same time as the channel; however it appears to be contemporary with the transition slope (below).
- 3.1.4 At the break in the retaining dyke, the flow of water is transitioned from open channel to buried culvert, in order to allow free access to the farm from the road. This is achieved by way of a sunken stone lined slope (Plate 6), which drops the level of the channel by some 0.3m over a distance of 1.3m into a ceramic pipe (Plate 7). The base of this slope is lined with large, flat stones. The walls are of a combination of mortared rubble and uncoursed dry stone, with a flat lintel over the pipe. The walls are part-buried and so their thickness could not be determined.
- 3.1.5 The channel is crossed at three points, allowing access from the road to the fields and landscaped ground to the north. The crossings are somewhat overgrown (Plate 8) and their structure obscured; however no abutments or more substantial support are visible, and so it must be assumed that they are simple timber or stone spans resting directly on the channel banks. Two long timbers spanning the channel lie adjacent to the westernmost crossing, lending weight to this hypothesis.

3.2 Kirkhill Upright Stone (Site 51)

3.2.1 The Kirkhill Upright Stone is situated in the western verge of a local road (Illus 3, Plate 9) some 190m west of Kirkhill Farm, at a height of 65.80m OD. The verge forms a small (c.

0.3m high) embankment to support the road; to the west lies a relatively flat arable field. The stone itself (possibly granite) (inset b, Illus 3; Plate 10) is somewhat obscured by the tall grass of the verge. Although a narrow strip along the road has been cut short, no special attention has been given to the area around stone itself.

3.2.2 The stone is aligned north-north-west to south-south-east, measuring 1m by 0.4-0.5m, and standing between 0.2m and 0.9m high. It is triangular in profile (Plate 11), sloping down to the north-north-west. It appears to be supported to the south-east by a small earthen mound up to 0.3m high. No markings or signs of working are visible.

3.3 Overhill Cattle Rubbing Stones (Site 57)

- 3.3.1 The Overhill Cattle Rubbing Stones are located in gently rolling arable fields to the north and east of Overhill Farm (Illus 3). The two northernmost stones (57a and 57b) were located by DGPS but found to be well outside the proposed road corridor; the description below therefore relates only to the southernmost stone (57c).
- 3.3.2 The stone (inset a in Illus 3) stands on the northern slope of a gentle hill some 410m south-east of Overhill Farm, at a level of 58.94m OD. It is visible from a considerable distance, standing out clearly against the horizon (Plate 12), especially from the north and east. A grassy clearing of approximately 8.5m by 5.5m has been left in the crop. The stone (Plate 13) stands on a small mound 4.6m by 2.8m and 0.3m high, consisting of earth and a number of loose angular stones of up to 0.7m in diameter.
- 3.3.4 The stone is aligned north-north-east to south-south-west, measuring 1.05m by up to 0.6m, and standing 1.5m tall. The south-south-eastern and western faces are broadly flat (Plate 14); the north-north-eastern side has a pronounced overhang, giving the stone a distinctive profile. No markings or signs of working are visible.

3.4 Mill of Foveran Lade (Site 72)

3.4.1 The Mill of Foveran Lade runs broadly from west to east for some 800m between two points on the Foveran Burn. Within the proposed road corridor it is visible as an open channel cut into the curving southern embankment of a local road connecting Foveran School with Mill of Foveran (Illus 4). At the eastern edge of the study area it turns southeast to pass through the mill itself (the mill is beyond the CPO boundary). The channel falls by just 1.47m (1 in 188) within the study area, reaching the approach to the mill at a basal level of 25.31m OD. The channel did not carry water at the time of the survey.

- 3.4.2 The lade is most clearly visible towards the east of the study area, where it has been channelled between an outbuilding and the road. At this point it survives as little more than a rough ditch (inset a, Illus 4; Plate 15), 0.3-0.5m deep and between 0.4m and 1m wide at its base, revetted with stone in places (principally on the southern bank) (Plate 16). The revetment at this point does not appear to be carefully constructed; rather some rounded and sub-angular stones of various sizes have been pushed against the side and the gaps filled with earth. The northern side appears to have slumped (perhaps with the removal of any revetting stone see discussion), obscuring the base of the channel. The lade is crossed by the access track to the western part of the mill complex (see detail inset b in Illus 4) the crossing comprises a large, course concrete slab, several long stones and two timbers, filled in with gravel to make a level crossing (Plate 14).
- 3.4.3 The western part of the lade is cut into the steep road embankment (Plates 17 and 18), and is substantially overgrown. It can be followed, but it was not possible to assess in any detail the construction or dimensions of the channel at the time of the survey. The base felt stony in parts but it is unclear whether this is a built lining or as a result of material collecting from further upslope.
- 3.4.4 Just beyond the eastern limit of the study area, the channel is partly lined with concrete, and split into two with a small sluice gate (Plate 19), with one branch falling some 3m to power the (no longer in-situ) mill wheel, and the other as a diversion past it. Beyond the mill, the channel meets a field drain that subsequently runs back into the Foveran Burn.

4 Discussion

4.1 Snarleshow (Dambrae) Possible Lade (Site 42)

- 4.1.1 Snarleshow was an earlier name for the present Dambrae Farm (as depicted on the Ordnance Surveys of 1870 and 1900, Illus 5 and 6). The name Dambrae has been taken from a farm some 450m to the east, depicted on the 1870 Ordnance Survey but removed by the Ordnance Survey of 1900. Snarleshow has been entirely rebuilt during the 20th century, although a well at the south-east side of the farm has remained in-situ. Seven Acres farm does not appear on either map, and Stoneyards farm has been rebuilt further west during the 20th century.
- 4.1.2 The 1870 Ordnance Survey shows the channel running on its present course between a point 720m west of Snarleshow, and finishing just west of the farm at the site of the current transition to culvert. The map does not mark the function of the channel; however it shows the channel widening towards Snarleshow, and depicts two sluices at this point. There is no sign of the channel east of the farm, nor any indication of its source to the west. The two easternmost crossings are shown on the map.

- 4.1.3 The 1900 Ordnance Survey shows the channel connecting further upstream to a drain 1km west-north-west of Snarleshow. A pump is also marked near this location. All three surveyed crossings are visible; the western of the two sluices is also now marked as a crossing. Again there is no indication of any continuation of the channel to the east of Snarleshow.
- 4.1.4 The widened section of the channel and the sluices were located in the area presently overgrown by trees. No sign of either feature could be identified during the survey. While it may be that these are simply obscured by vegetation, it is also possible that some remodelling has occurred in this area during the 20th century. It is in this area that the banks are now higher and have been revetted with the L-shaped stone dyke; which is not explicitly shown on either Ordnance Survey.
- 4.1.5 No reference to the purpose of the channel was recorded in any of the documentation consulted. Whether it is an enhancement of an earlier watercourse or entirely artificial is also unclear. The channel appears too well-constructed and controlled to have served only as a drain, as it does presently. The possibility that it is a lade of some sort cannot therefore be discounted. There are three mills recorded in the NMRS within 5km of Snarleshow; Mill of Ardo lies 2.5km to the north-west, Mill of Menie 1.7km to the east-south-east and Mill of Blairton 1.5km south-south-east. It is not possible on map evidence alone to chart a connecting watercourse from the surveyed channel to any of these mills; however the possibility that such a link has existed in some form remains. Presently, the channel can be followed east on the ground until at least Menie Lodge.
- 4.1.6 A further possibility is that there has been a mill at (or near) Snarleshow. A mill is marked in this vicinity on Roy's map of 1747-52; however the location is vague and may well represent one of the mills mentioned above. Furthermore, 'Snarleshow' has been translated to 'Burn of the sheiling at the cattle-fold' (Milne 1912, 338), which also does not aid this hypothesis.
- 4.1.7 It is not presently possible to determine the historical purpose of the channel as a lade or otherwise. It is likely, however that the use of both the channel and Snarleshow farm changed at some point during the 20th century. Both were remodelled, and the latter renamed, to suit their new purpose.

4.2 Kirkhill Upright Stone (Site 51)

4.2.1 The stone is listed in the ES (Kirkdale Archaeology in Natural Capital 2007, 269) as a possible boundary stone. There is no sign of this stone on the Ordnance Surveys of 1870 or 1900, despite other such stones being marked in the area. The stone does look intentionally positioned, and is supported somewhat by the low earthen mound – whether this is original or as a response to the stone losing stability cannot be

ascertained from current evidence. The road adjacent is present on both maps, although it does not appear on Thomson's atlas of 1832. As the stone rests on the embankment for this road, this suggests an earliest possible date of around the mid 19th century.

4.2.2 It is not presently possible to determine from either survey or published sources whether this stone is indeed a boundary stone.

4.3 Overhill Cattle Rubbing Stones (Site 57)

- 4.3.1 The Cattle Rubbing Stone which lies within the survey area (57c) does not appear on the Ordnance Surveys of 1870 or 1900, although it is depicted on modern Ordnance Survey mapping. The arrangement of the fields in this area did change between these two dates, and have been changed again subsequently.
- 4.3.2 Given the size and prominence of the stone, it is unlikely that it would have been omitted on the 25" sheets, and so it must be assumed to be of 20th century date.

4.4 Mill of Foveran Lade (Site 72)

- 4.4.1 Thomson's Atlas of 1832 (Illus 7) depicts the mill lade and the mill, although it is certain that the alignment is identical to the present day a subsequent modification in the road layout and the construction of the school at Foveran may have affected the precise route of the lade.
- 4.4.2 The Ordnance Survey of 1870 (Illus 8) clearly shows the channel on its present alignment Within the study area. A lack of clear distinction between small watercourses and walls on this map edition make tracing the path of the channel further upstream a little difficult. A line does continue westwards towards a bend in the Foveran Burn with a symbol possibly depicting an inlet of some sort at this point. This may suggest that water was extracted from the stream in culvert, only utilising open channel east of School of Foveran. The crossing within the mill complex can be clearly identified. The corn mill itself is clearly marked just east of the study area.
- 4.4.3 The Ordnance Survey of 1900 (Illus 9) depicts a dam, sluice and weir at the western end of the lade (which is now labelled as such); it is uncertain whether these had been added since 1870 or are simply more clearly marked on the later map.
- 4.4.4 The mill building is dated to 1609; it is probable that the lade is contemporary. The mill itself was remodelled in the mid 19th century; it is unclear when it came out of use. It is

has been Category B-Listed since 1971. Other than the possibility of a slight realignment in the mid 19th century there is presently no concrete evidence that the lade has been altered within the survey area.

- 4.4.5 There has been a crossing over the lade adjacent to the mill's outbuildings since at least 1870; the present crossing of concrete, stone and timber appears much more recent.
- 4.4.6 The condition of the lade today is relatively poor; it is likely that some lining stone has been removed in the area immediately west of the mill, causing the northern bank to slump into the channel base. The structural condition of the western end of the lade could not be assessed during the survey.

5 References

5.1 Bibliographic Sources

Aberdeen City Council 2012: *Invitation to Tender for the non-Invasive Archaeological Investigations for the Aberdeen Western Peripheral Route (AWPR Package)*

English Heritage 2006 Understanding Historic Buildings: A guide to good recording practice

English Heritage 2007 Understanding the Archaeology of Landscape: A guide to good recording practice

Milne, J 1912 Celtic Place-Names in Aberdeenshire, Aberdeen

Natural Capital Ltd 2007 A90 Dualling - Balmedie to Tipperty - Environmental Statement

RCAHMS 1996a Publication and Archiving of Archaeological Projects

RCAHMS 1996b Guidelines for Archiving Archaeological Projects

RCAHMS 2008 In the Shadow of Bennachie, Edinburgh

5.2 Digital Sources

Historic Scotland Historic Scotland Data Website - Listed Buildings: MILL OF FOVERAN, FARMHOUSE, accessed 24th October, 2012

http://data.historic-scotland.gov.uk/pls/htmldb/f?p=2200:15:0::::BUILDING:9169

National Library of Scotland *Ordnance Survey Abbreviations*, accessed 24th October 2012

http://maps.nls.uk/os/abbrev/index.html

RCAHMS Site Record for Mill of Foveran, accessed 24th October 2012

http://canmore.rcahms.gov.uk/en/site/20386/details/mill+of+foveran/

5.3 Cartographic Sources

Ordnance Survey 1870 Aberdeen, LVI.4, 25" to 1 mile.

Ordnance Survey 1870 Aberdeen, LVI.8, 25" to 1 mile.

Ordnance Survey 1870 Aberdeen, XLVII.16, 25" to 1 mile.

Ordnance Survey 1900 Aberdeenshire, 047.16, 25" to 1 mile.

Ordnance Survey 1900 Aberdeenshire, 056.04, 25" to 1 mile.

Ordnance Survey 1900 Aberdeenshire, 056.08, 25" to 1 mile.

Roy, W 1747-52 Military Survey of Scotland.

Thomson, J 1832 Northern Part of Aberdeen & Banff Shires.

6 Appendices

6.1 Appendix 1: Photographic Survey

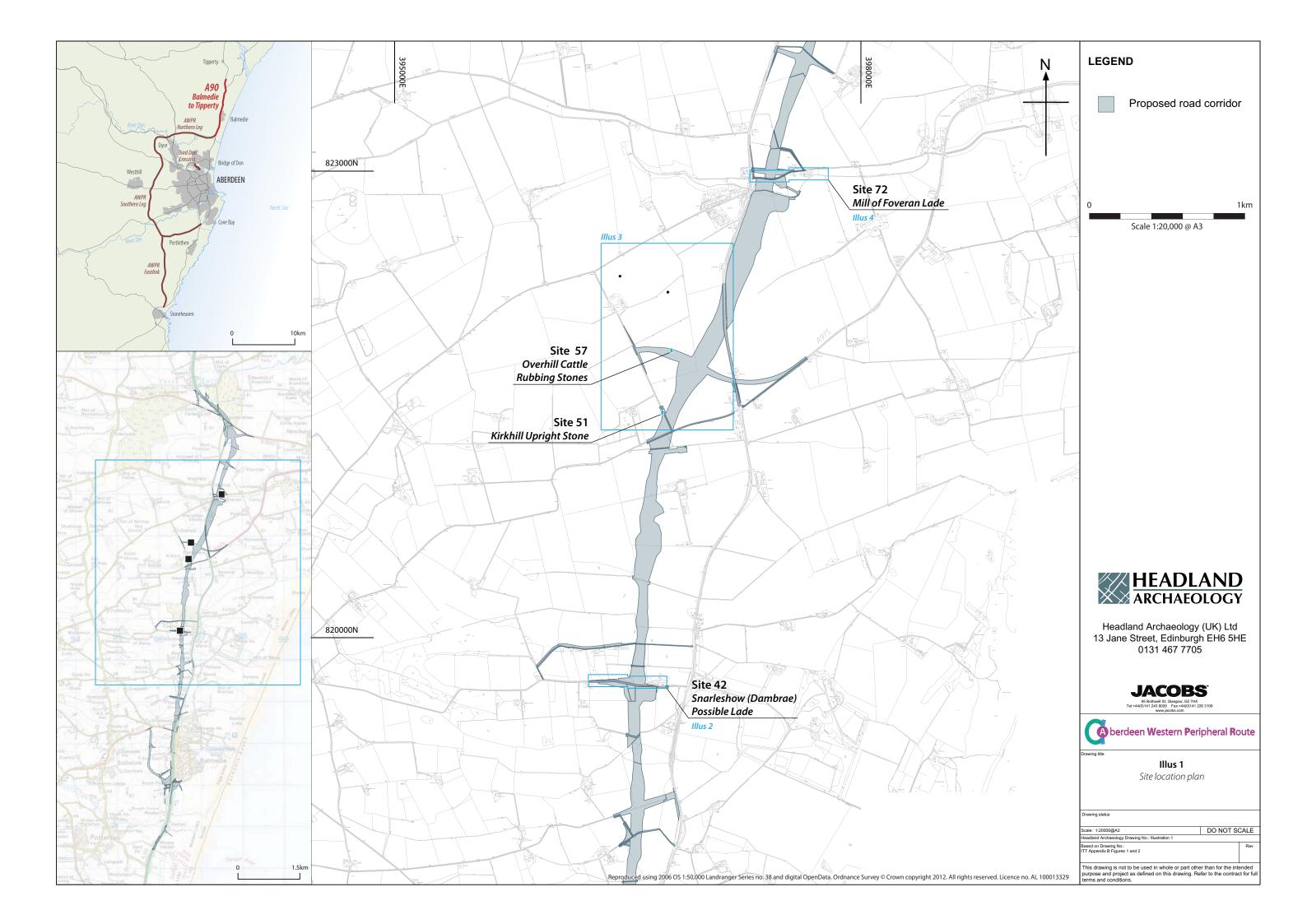
See Illus 10-12 for photo locations.

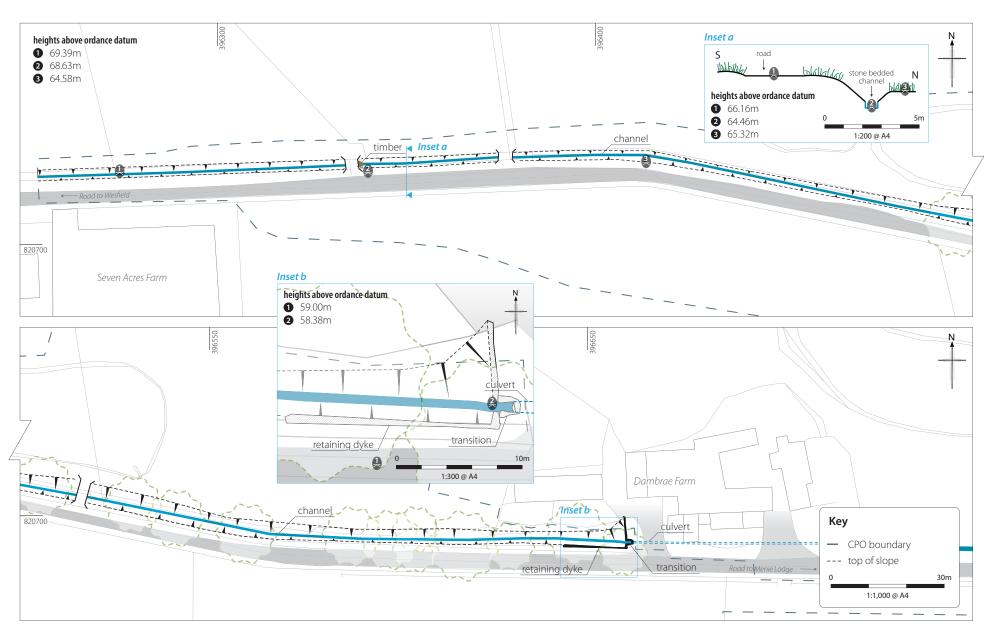
Photo Number	Direction Facing	Description
Site 42		
001	west	Detail of stonework at Dambrae farm transition
002	west	General view of stonework at Dambrae farm transition
003	west	Detail of stonework at Dambrae farm transition, showing slope into pipe
004	west	General view of stonework and north-south wall at Dambrae farm transition
005	north-west	General view at Dambrae farm transition, showing level of overgrowth
006	north	General view at Dambrae farm transition, showing east-west parallel dyke
007	west	View inside channel
800	south-west	General view from dump just west of Dambrae farm
009	west-north-west	General view from road
010	east-north-east	W end of parallel dyke
011	east-north-east	General view
012	north	Eastern crossing point with broken gate
013	east	Channel from eastern crossing point
014	east-north-east	General view of channel (point of scale bar on channel bed)
015	east-north-east	General view
016	west	General view
017	north	Middle crossing point
018	north	Western crossing point
019	west	Channel from western crossing point

020	south-south-east	View from north of eastern crossing point
021	south-east	Dumping along north bank adjacent to Dambrae farm
022	south-east	Dumping along north bank adjacent to Dambrae farm
023	south-south-east	View inside channel just west of Dambrae farm
024	west-north-west	General context view of stonework at Dambrae farm
Site 51		
001	west-south-west	General view of stone in road embankment
002	west-south-west	Detail of stone showing earthen mound
003	east-north-east	West-south-west face of stone
004	-	Aerial view of stone (top of photo is the west-south-west face)
005	south-south-east	north-north-west face of stone
006	north-north-west	south-south-east face of stone
007	north-west	General view of stone in road embankment
008	south-west	General view of stone in road embankment
Site 57c		
001	south-west	North-east face of stone
002	south-west	North-east face of stone
003	north-north-west	South-south-east face of stone
004	north-north-west	South-south-east face of stone
005	north-east	South-west face of stone
006	north-east	South-west face of stone
007	south-south-west	North-north-east face of stone
008	south-west	General view of stone
009	north-north-west	General view of stone
010	north-north-west	Stone in landscape context
011	north-north-west	Stone in landscape context
012	north-west	Stone with Overhill farm in background
013	north	Stone in landscape context
Site 72		
•	•	

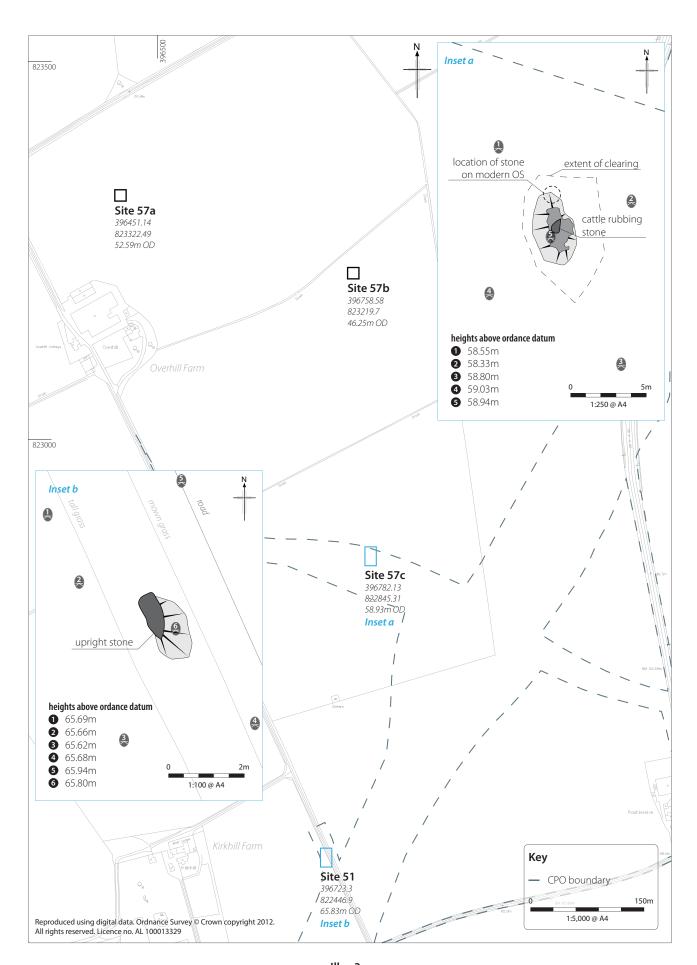
001	south-south-east	View of drain to east of mill; the lade joins this at its south end
002	north-east	Detail of stonework where lade joins drain, south-east of mill
003	south-south-east	View of connection between lade and drain, south-east of mill
004	north-west	General view of lade immediately south-east of the mill
005	north-west	General view of lade immediately south-east of the mill
006	south-east	South-west wall of mill showing axle and lade drop
007	west-north-west	General view of lade on approach to the mill
800	south	General view of sluice and mill by-pass
009	north-east	View of rubble supporting wall immediately south-west of lade drop
010	east	General view of lade from crossing, mill in background
011	west-south-west	View of crossing and out-building
012	east-north-east	General view of lade adjacent to outbuilding
013	south-west	General view of lade to west of mill complex
014	east-south-east	General view of lade, crossing and mill
015	west	General view of lade in road embankment

6.2 Appendix 2: Illustrations

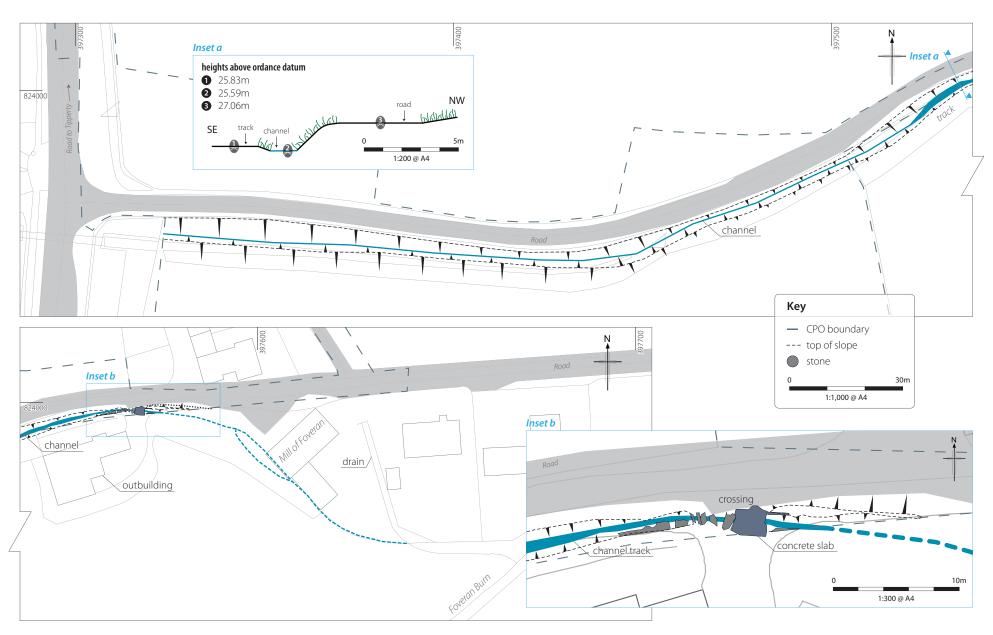




Illus 2Plans and profile of Snarleshow (Dambrae) Possible Lade (Site 42)



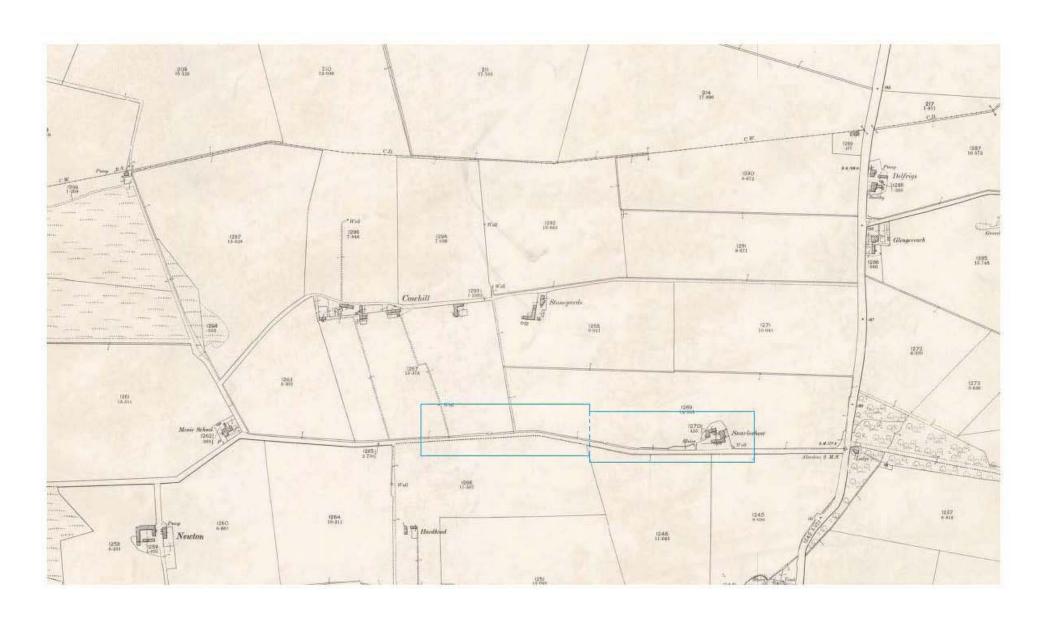
Illus 3Plans of Kirkhill Upright Stone (Site 51) and Overhill Cattle Rubbing Stones (Site 57)



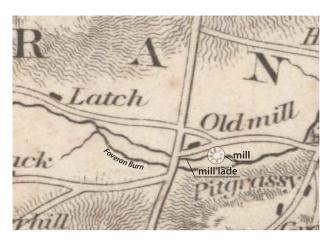
Illus 4Plans and profile of Mill of Foveran Lade (Site 72)



Illus 5 1870 1st Edition Ordnance Survey 25 inch – Aberdeen, Sheet LVI.8



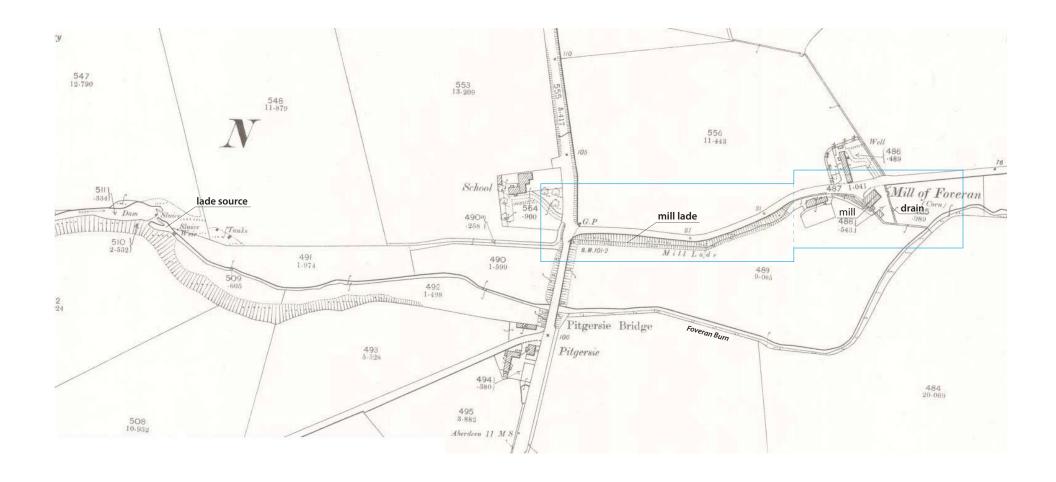
Illus 6 1900 2nd Edition Ordnance Survey 25 inch – Aberdeenshire, Sheet 056.08



Illus 7 1832 Thompson – Northern Part of Aberdeen & Banff Shires



Illus 8 1870 1st Edition Ordnance Survey 25 inch – Aberdeen, Sheet XLVII.16



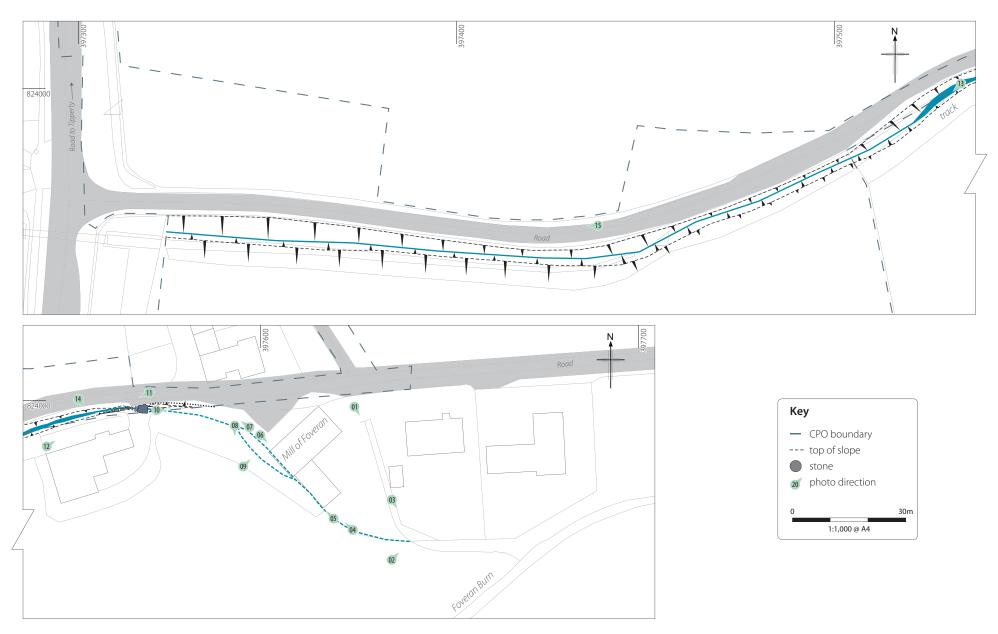
Illus 9 1900 2nd Edition Ordnance Survey 25 inch – Aberdeenshire, Sheet 047.16



Illus 10Photo directions of Snarleshow (Dambrae) Possible Lade (Site 42)



Illus 11Photo directions of Kirkhill Upright Stone (Site 51) and Overhill Cattle Rubbing Stones (Site 57)



Illus 12Photo directions of Mill of Foveran Lade (Site 72)



Plate 1

East-facing view of Snarleshow (Dambrae) Possible Lade (Site 42) from eastern crossing. The banks are heavily overgrown; the ranging rod is resting on the base of the channel



Plate 2

West-north-west facing view of tree-covered section of Snarleshow (Dambrae) Possible Lade (Site 42). The lade runs parallel to the road under the trees



Plate 3
West-facing view near eastern end of Snarleshow (Dambrae) Possible Lade (Site 42) from beneath the undergrowth. The banks are not revetted at this point; the base is not visible beneath moss and leaf matter.



Plate 4North facing view of overgrown eastern end of L-shaped retaining dyke



Plate 5West-facing view of north-south section of L-shaped retaining dyke, showing break for channel to left side of image



West facing view of sloping stone transition – the ceramic pipe runs underground out of the bottom of the image



Plate 7

East facing view of sloping stone transition – the ceramic pipe runs is visible, with mortared rubble, stone lintel and drystone forming the structure above.



Plate 8North-north-west facing view of western crossing. The lade runs from left to right across the middle of the image



Plate 9South facing general view of Kirkhill Upright Stone (Site 51)



Plate 10West-south-west facing view of Kirkhill Upright Stone (Site 51), showing earthen mound (in front and to the left of stone)



Plate 11
East-north-east facing view of Kirkhill Upright Stone (Site 51)



Plate 12North-east facing view of Overhill Cattle Rubbing Stone (Site 57c)



Plate 13
West-south-west facing view of Overhill Cattle Rubbing Stone (Site 57c)



Plate 14North-north-west facing view of Overhill Cattle Rubbing Stone (Site 57c)



Plate 15

East facing view of Mill of Foveran Lade (Site 72) as it approaches the Mill (just out of view). The crossing is visible at the top of the track



Plate 16South-west facing view of crossing over Mill of Foveran Lade (Site 72)



Plate 17
West facing view of Mill of Foveran Lade (Site 72) as it emerges from the overgrown road embankment.



Plate 18

West facing view of an overgrown Mill of Foveran Lade (Site 72). The lade follows the denser line of bushes running from bottom left to top right. Pitgersie Bridge can be seen to the left of the image



Plate 19

South facing view of remains of sluice at Mill of Foveran Lade (Site 72). The branch of the lade to the left of the image runs to the wheel pit for the mill itself; the other branch is the bypass.. This part of the site is immediately outside the proposed road corridor.



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