
Excavations on the Roman temporary camp at Longforgan, near Dundee, 1994

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with a contribution by Ciara Clarke

Introduction

This report presents the results of excavations carried out by the Centre for Field Archaeology (CFA) on a Roman temporary camp near Longforgan, City of Dundee (NGR: NO 298 304 centre; Illus 1 and 2). The work formed part of an archaeological evaluation, conducted between May and August 1994, in advance of the upgrading of the Longforgan junction of the old A90 (NGR: NO 295 299 to 312 302).

The temporary camp at Longforgan lies in arable land on an east to west ridge some 1.5km north of the Carse of Gowrie at approximately 100m OD. The soils around this area are fluvio-glacial sands and gravels derived mainly from Upper Old Red Sandstone sediments of the Eckford / Innerwick series. The parent geology is Old Red Sandstone of Upper Devonian date.

The camp at Longforgan was discovered by St Joseph (1969, 111) through aerial reconnaissance. At that time, half of the north-eastern and much of the north-western sides, which occupy the steep northern side of the ridge, were visible from the air as crop marks, but the greater part of the camp which lies on the gentle southern slopes was hidden beneath a raspberry plantation. More recent aerial photographic coverage, held by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS), National Monuments Record of Scotland (NMRS), (RCAHMS refs: PT/14404–14405, PT/14786, A64787 and B79823), has revealed the south-eastern edge and the eastern corner of the camp. The western corner was concealed under a small belt of trees when these photographs were taken in 1983.

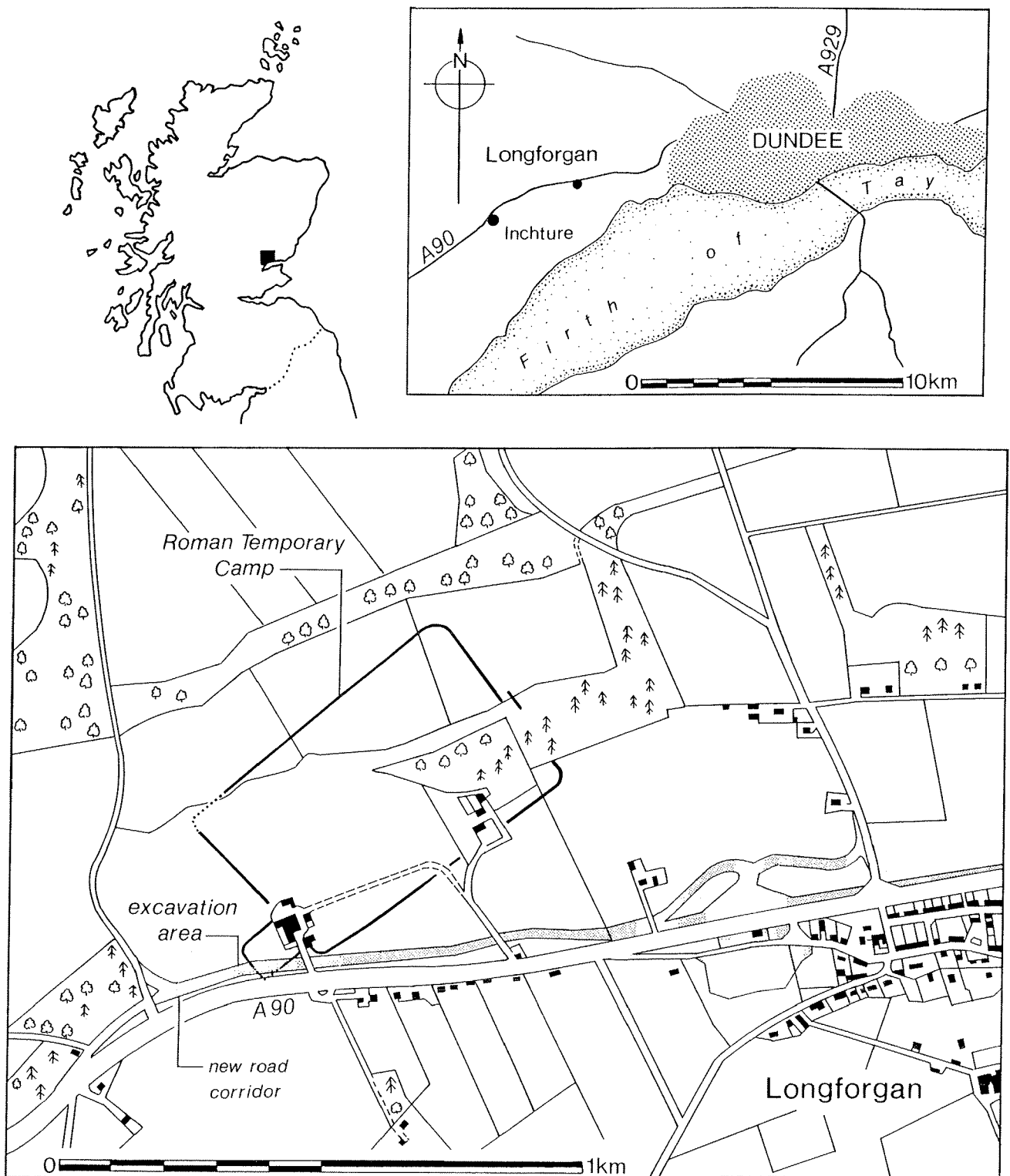
Excavation work was carried out on the main camp by St Joseph, with a team of local volunteers, over three seasons between 1967 and 1969 (St Joseph, unpublished field notebooks). The excavations comprised a considerable number of narrow

trenches placed over the line of the ditch, which served to establish the north-western, north-eastern and south-eastern sides and the eastern angle of the camp. The ditch was apparently V-shaped with a basal drainage channel, and measured 1.35m (4½ft) deep by 3m (10ft) wide where best preserved (St Joseph 1970, 38).

The positions and dimensions of two gateways were demonstrated, one in the centre of the north-eastern side and one a third of the way along the north-western side, from the western corner. That on the north-eastern side was c 16m (53ft) wide with a *titulum* placed c 12.75m (42½ft) from the main line of the ditch. The width of the gate on the north-western side and the exact position of the *titulum* ditch were not established. The width of the north-eastern gateway is of a comparable size to those of other camps of the 63-acre series. For example, Craigarnhall has a 15.6m (52ft) wide gate with *titulum* on the northern side (St Joseph 1974, 51) and O G S Crawford (1949, 99–100) records the widths of south-eastern and south-western *titula* gateways at Kirkbuddo as 14.4m (48ft) and 14m (47ft) respectively.

The partial remains of a small enclosure were identified as a crop mark by pilots from Perth aerodrome to the south-west of The Snabs farmhouse (King 1992, 74; illus 1). Its size, position and orientation suggest that it is an annexe to the main camp. Traces of the south-eastern and south-western ditches comprising the southern part of the annexe disappear about 10m to the north of the artificial cutting to the north of the old A90. However, if the annexe was even approximately rectilinear, its southern corner must have been beyond the cutting (see Illus 1).

Close examination of the aerial photographs revealed a series of roughly parallel, linear features (not illustrated) to the west of the annexe. These

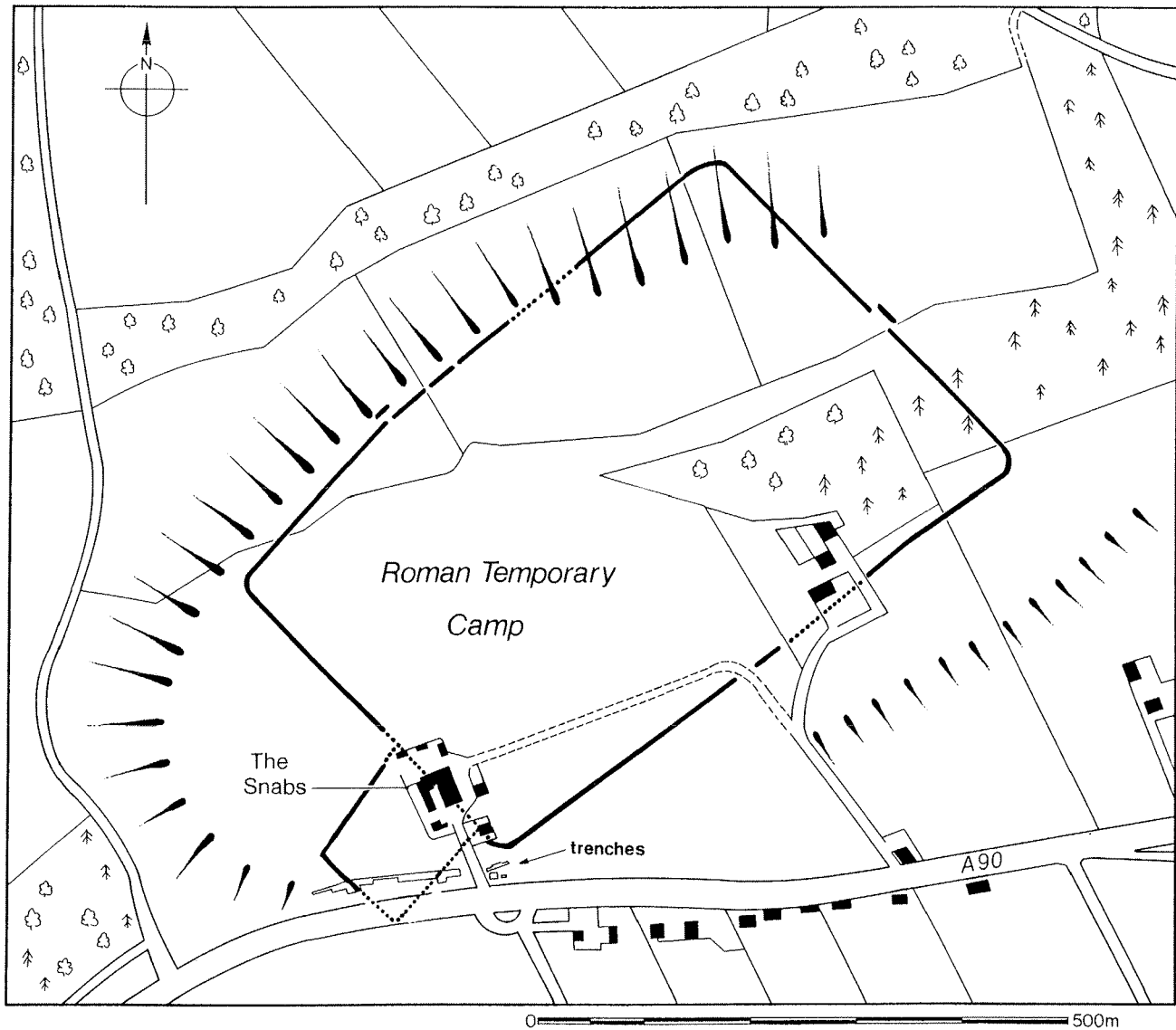


Illus 1. Longforgan: location map, showing temporary camp and area affected by the upgrade to the A90 (based on the Ordnance Survey map, Crown Copyright).

features were on a similar line to the south-western ditch of the annexe, and were confined by a rectangular area, approximately 20m by 40m, with one of the long sides formed by the top of the cutting above the old A90.

Rectification of the available aerial photographic coverage and information derived from both the excavations of St Joseph and those that

form the substance of the present paper were used to produce an accurate plan of the camp and the partial remains of the annexe (Illus 2). The hypothetical positions of unrecorded lengths of ditch, based on extrapolation from known ditches, have been presented as dotted lines. The main camp is almost a typical playing card shape, but skewed somewhat to the south-east. It measures c 620m



Illus 2. Longforgan: trench positions and plan of temporary camp, based upon aerial photographs, the 1967–69 excavations of St Joseph and the 1994 excavations of the annexe (based on the Ordnance Survey map, Crown Copyright).

north-east to south-west by c 420m transversely. The enclosed area of the camp is thus around 26 hectares (64 acres). The area of the annexe would have been around 1 hectare (2.4 acres), assuming that the annexe was rectilinear.

The size of the camp, coupled with the attached remains of the annexe on the south-western side of the main camp and its position to the north of the Tay, suggest that it is an example of the so-called 63-acre series of marching camps, generally attributed to the Severan campaigns of the early 3rd century AD. Their distribution has been examined and mapped elsewhere (St Joseph 1976, 24; Maxwell 1989, 64).

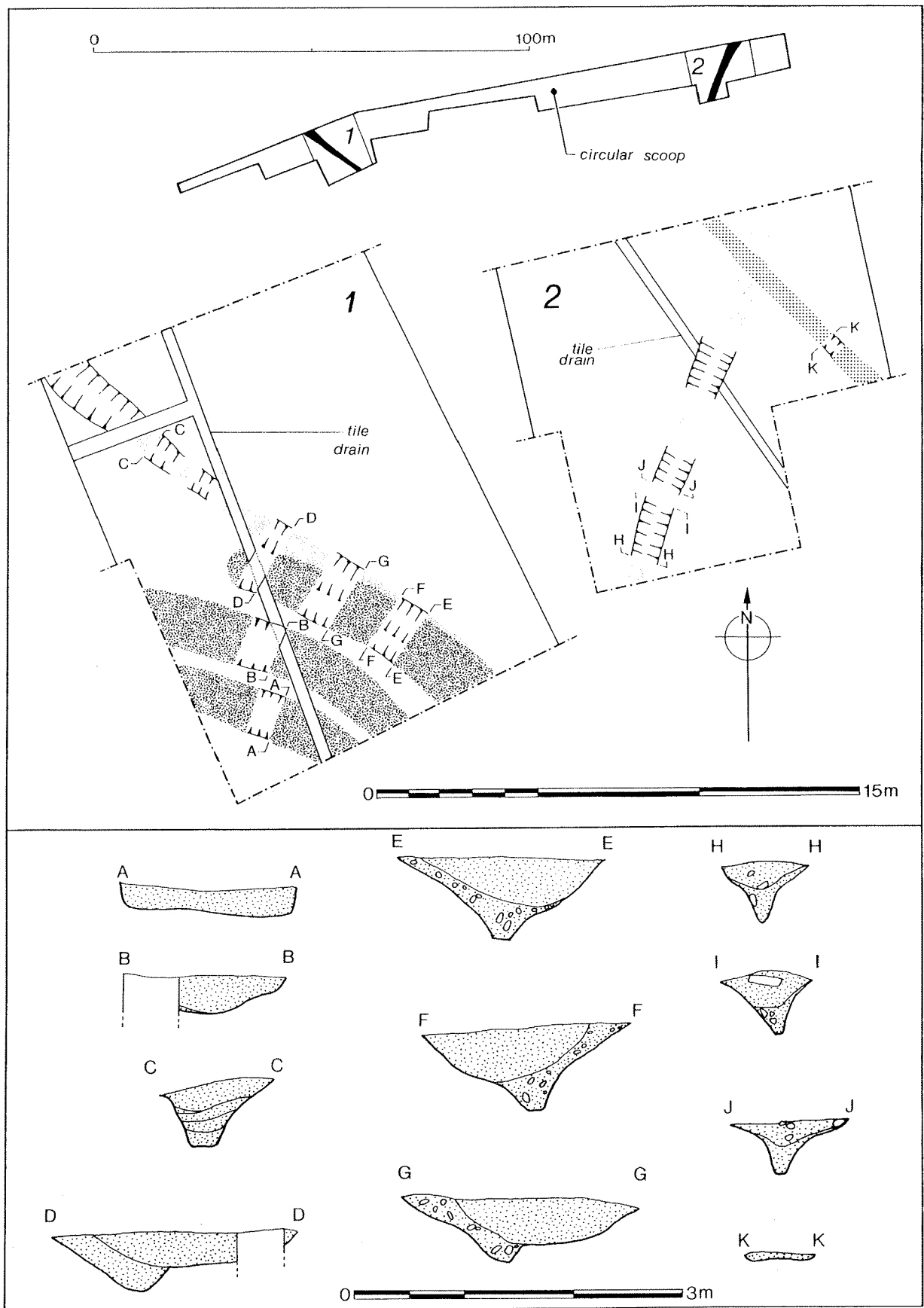
Working methods

The aims of the excavation were fourfold: to confirm that the annexe was present in the appar-

ently barren strip directly above and north of the old cutting; to test for the presence of a gateway to the annexe; to examine the annexe interior and exterior for features; and to check that the proposed road alignment avoided the south corner of the main camp.

The sizes and locations of the excavated areas (Illus 2) were determined by the position of the land take for the upgrading of the road (Illus 1). Resistivity surveys were conducted prior to excavation, in an attempt to locate the perimeter ditches of the annexe and southern corner of the main camp, but the results of these exercises were inconclusive (Neighbour 1994, 16).

Removal of ploughsoil was conducted by earth-moving machinery under archaeological supervision. Three test trenches, varying in size between 3m² and 50m², were excavated within the road alignment near the south corner of the main camp



Illus 3. Plans and sections of excavated features.

(Illus 2). The positions of other test trenches, excavated as part of the evaluation for the proposed realignment, have not been shown. A trench 150m long and up to 15m wide was excavated across the southern portion of the annexe and was later extended sufficiently to ascertain whether associated features, such as a *titulum*, lay outside. Where the ditches survived, the trench was enlarged to cover the evaluation area from its northern limit to the steep southern cutting above the old A90 (Illus 2). The whole affected length of perimeter ditch and the interior of the camp was exposed by mechanical excavation then cleaned by hand. Around 40% of the ditch was emptied and a large proportion of the fills were sieved for artefacts. A palaeoenvironmental assessment of soil samples was undertaken.

Field-work results

Two lengths of ditch were discovered that conformed to the same line as the annexe crop mark (Illus 3). Although similar in their V-shaped profiles, they had remarkably different fills. The western ditch, heavily truncated by more modern features, had very hard packed fills, very similar in colour to the red sandy subsoil. The eastern ditch fills were much less compact and more uniform. The upper fill in the latter was a grey brown, gritty, sand. Its lower fill was redeposited red sandy subsoil. None of the fills contained any finds or demonstrated any palaeoenvironmental potential. Both ditches were clearly heavily truncated, surviving to a maximum depth of 0.60m as compared to the maximum depth of 1.35m recorded by St Joseph in his excavations on the main camp.

An isolated, near-circular scoop (Illus 3), c 0.25m in diameter and 0.10m deep was discovered within the annexe. Its fill was of redeposited sand and was artefact-free. It is impossible to assign a function or date to this feature.

The only other features discovered within the annexe were tile and rubble drains which ran, generally, north to south in a dense network across the trench. These features were initially identified in plan during site cleaning and their nature assessed by the excavation of a narrow machine slot running east to west along the north trench edge. They are omitted from the illustrations, except where they intersected with the annexe ditches.

A series of parallel, c 1m wide, 0.3m to 0.4m deep, linear features, initially noticed on the aerial photographic evidence, ran in roughly the same direction as the Roman ditch at the western end of the trench (Illus 3). One of these cut the earlier ditch and had very nearly obliterated it. The reddish brown sand fills of the features had been tamped down extremely vigorously, making hand

excavation difficult. Quantities of modern pottery, glass and wood were found within the fills. No function could be ascribed to the features, but it was considered likely that they were contemporaneous and of a fairly recent origin, perhaps to do with the creation of the cutting to the north of the old A90.

No pre-modern features were discovered in any of the test trenches excavated near the south corner of the main camp.

Particle-size analysis

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Two sets of soil samples, collected contiguously from sections through the western and eastern exposed lengths of the annexe ditch (Illus 3, sections C-C and J-J), were used to investigate the character of its fills. Particle-size analysis was used to describe and classify the deposits (Tables 1 and 2), in an attempt to establish the processes involved in the back-filling of the ditch.

From the results (Tables 1 and 2) it can be seen that both lengths of the annexe ditch yielded comparable deposits, suggesting that both fills were derived from the same matrix. The nature of the ditch fills was similar to the subsoil: extremely sandy, with sand constituting over 90% in every sample, regardless of depth. Coarse sand (1mm–500µm) and medium sand (500–250µm) fractions were most common. The consistency of the deposits did not vary with depth, which may reflect a reasonably rapid infilling of the ditch, although whether this was as a result of deliberate back-filling, or evolved through rapid weathering was impossible to determine.

Discussion

Although no dating evidence was recovered and the truncation of the ditch rapidly dispelled the hopes of the recovery of any but the most major of internal features, a number of points of interest arise from the field-work conducted at Longforgan. The results of particle-size analysis suggest that all of the deposits within the ditch would have accumulated fairly rapidly, although whether by deliberate back-filling or through rapid weathering is impossible to determine. However, it seems likely that the lowest fills of the excavated lengths of ditch, as revealed in the sections (Illus 3), were the result of collapse. The ditch of the main camp, as excavated by St Joseph, had suffered considerably less truncation than those of the excavated portion of the annexe. His drawn sections indicated a similar level of deposits in the bottom of the ditches, but the upper fills were homogenised, making any hypothesis about the method of back-filling untestable (St Joseph, unpublished field notebooks).

Table 1. Particle size analysis: western ditch fills (Illus 3, section C-C). 0mm at base of section; 440mm at top of section.

Depth	Percentage of sample at given particle size					
	>1mm	>500µm	>250µm	>125µm	>63µm	<63µm
360-440mm	33	20	18	14	10	6
280-360mm	29	23	19	14	10	5
200-280mm	30	23	18	14	10	4
80-200mm	24	20	19	18	14	5
0-80mm	27	17	16	19	14	6

Table 2. Particle size analysis: eastern ditch fills (Illus 3, section J-J). 0mm at base of section; 420mm at top of section.

Depth	Percentage of sample at given particle size					
	>1mm	>500µm	>250µm	>125µm	>63µm	<63µm
360-420mm	22	23	19	19	13	4
300-360mm	22	20	19	18	15	6
240-300mm	25	21	18	17	13	6
180-240mm	24	22	18	17	13	6
120-180mm	30	24	19	15	10	4
60-120mm	33	22	17	14	10	5
0-60mm	30	23	19	15	10	4

The reason for the heavy truncation of the excavated portions of the annexe ditch is remarkable, considering the relative depth of the ditches of the main camp. Ploughing is the main cause of horizontal truncation of archaeological features in a rural environment. However, the truncation of the annexe at Longforgan seems to have been especially pronounced in the region just to the north of the old A90 and was perhaps caused during the creation of the steep cutting down to the road. This interpretation is consistent with the apparent disappearance of the ditch just above the cutting on the aerial photographic coverage.

The purpose of the annexe on 63-acre camps is still a matter for debate. Suggested uses have been put forward by Maxwell (1989, 63) amongst others: 'it is possible that [the annexe] was intended to accommodate personnel who could not be conveniently housed in the large enclosure, perhaps native scouts or even hostages or prisoners. Equally possibly, it may have been used by a detachment left behind the main party to fulfil a care-and-maintenance role against the subsequent re-use of the defence-works'. Sadly, the excavations at Longforgan produced evidence for little more than the dimensions of the perimeter ditch of the annexe. In particular, the absence of internal features, save for a small, circular scoop of uncertain date or function, means that little can be added to the debate on the functions of annexes.

The lack of datable material recovered from the excavations at Longforgan is unexceptional. Excavation of camps of the 63-acre series has so far produced no datable material. However, current thinking, recounted in detail by Reed (1976, 92-

102), has it that such camps date from the campaigns of Severus and his son Caracalla in AD 208-211. Whilst Hanson (1978, 149) is right to point out that 'the generally accepted interpretation of the dates and associations of the temporary camps in Scotland is not the only possible solution and is in general based upon evidence of a largely circumstantial nature', the excavations at Longforgan have not provided evidence either to confirm or refute the Severan association of the 63-acre camps.

Clearly, further excavation of camps of the 63-acre series would be desirable. In particular, the identification of internal features in an annexe and investigation of the junction between the ditch of the main camp and that of the annexe would be useful. The way forward would perhaps be to conduct a set piece trial excavation on an especially well-preserved example.

Acknowledgements

The project was commissioned by Historic Scotland and wholly funded by the National Roads Directorate of the Scottish Office Development Department (SODD). The illustrations were produced by Kirsty Cameron. The author is grateful to Gordon Maxwell, Andrew Dunwell, Bill Finlayson and Ian Ralston for advice and comments on this paper. James Robertson of the Department of Law, Dundee University and Mr and Mrs Taylor of Longforgan stretched their memories and took walks in the woods to recall the positions of the trenches they excavated in the late 60s with Professor St Joseph. Finally, I am

extremely grateful to Gordon Maxwell to have been permitted access to the late Professor St Joseph's field notebooks and drawings.

Location of the archive

A full field-work report, details of the desk-based stages of the work and geophysical survey (Neighbour 1994), and the site records have been deposited in the National Monuments Record of Scotland (NMRS).

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This paper is published with the aid of a grant from Historic Scotland.

Abstract

The results of excavation at a 63-acre series Roman temporary camp, in advance of the upgrading of the A90 in the vicinity of Longforgan, are presented. The main excavation trench was positioned over the annexe to the camp. Two lengths of the ditch, forming the south-western and south-eastern sides of the annexe, were discovered and excavated. The ditches were found to have been heavily truncated horizontally. A single pit within the confines of the annexe was of uncertain date and function. The southern corner of the main camp, as recorded from aerial photographs, lay very close to the proposed realignment. However, excavation indicated that this part of the camp would be unaffected by the development. The plan of the camp presented is based upon aerial photographic work, the unpublished notebooks of St Joseph, and the results of excavation.

Keywords: Roman, temporary camp, annexe, Severan

