

ART. II. – *Recent Work on the Shap “Avenue”*. By T. CLARE, M.A.

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ALTHOUGH the existence of an avenue of standing stones at Shap has been reported sporadically for some four hundred years, very little is known of the site’s character. This paper presenting the results of fieldwork, limited excavation and an attempt to re-erect one of the members of the “avenue”, is intended as a contribution towards the redress of that situation.

The Character of the Site

There can be little doubt that only a small part of the monument survives, for as early as 1777 Nicolson & Burn noted the blasting and carrying away of stones for the foundations of buildings.¹ By 1824 George Hall was lamenting the destruction by inclosure of all the southern part “excepting fourteen stones”, which compose the turn at the south end.² A few decades later this group was itself the subject of mutilation, this time by the construction of the railway. Thus when Lukis and Ferguson came to review the evidence in 1884 and 1899 respectively³ there was precious little remaining other than the early, and at times apparently conflicting accounts. Comparison of these with field inspections led Lukis to conclude “that it is possible there may have been both a double row and a single row, but not as . . . part of one system”.⁴

The Ordnance Survey and the Royal Commission⁵ record nine stones or groups (A, E, I, M, N, O, R, S and T as well as the “Thunderstone”, Fig. 2) as the extant remains. Nevertheless it is apparent that fragments of others have been incorporated in field walls as indicated by Hall. As it seems unlikely that the fragments, such as those shown in Plate I, would have been moved very far from the original position of the complete stone, the distribution of broken stones should bear some resemblance to the former course of the monument. For this reason a comprehensive survey was undertaken in 1972.⁶

As Nicolson and Burn⁷ and Pennant⁸ describe the stones forming the site as being of a “kind of granite” the survey aimed to record all stones or fragments of non-limestone character in the area of the alleged monument, from NY567126 to NY536167; an area 0.5 km by 5.4 km. Eight categories of stone were initially recognised but these were grouped into three for the purpose of abstraction. The three types are shown in Figs 1 and 2. In the survey it was possible to isolate those stones which were obviously erratics, but it is now impossible to say whether similar stones are represented amongst those broken stones which must, if early accounts are correct, include remains of the avenue. It is almost certain that the stones forming the monument were themselves originally erratics, raising the question of whether the early antiquarians distinguished between the two. The term “thunderstone” as applied to several large boulders in the Shap area which are clearly erratics – the example in the survey area sits on a pedestal formed by



PLATE I. – Broken stone Q: Scale metric.

erosion – suggests however that such stones were distinguished from those held to form the “avenue”.

The pattern which emerged from fieldwork thus appears to correspond with the observations of the early antiquarians showing that the apparently conflicting accounts are in fact complementary. The concentration of broken stones at the southern end (Fig. 1) reflects the destruction recorded by Hall and the sharp angle between stones T & S (Fig. 2) corresponds to the “remarkable turn” alluded to by Routh, Stukeley’s surveyor⁹ – his distance from there to the southern terminus being 1.5 miles (2.3 km: the present distance is 2.5 km). North of that turn Routh noted “an appearance of the double row having continued . . . but the stones are only small”.¹⁰ Hodgson (1814) also described such a “continuation”¹¹ and it can be identified with stones U-Z (Fig. 2). Their Northern terminus is now in disturbed ground amongst which the remains of old enclosures (associated with quarrying?) can be discerned. This area would equate with “the four ovals or circles” of Routh¹² and the “square plot of stones nearly covered with earth” of Hodgson¹³ which they also considered to be the northern terminus.

The available evidence thus agrees with that provided by early antiquarians but what does it show? All except Lukis thought there had been a single monument. The main difficulty in such an interpretation is the “remarkable turn” between stones T & S. Avoidance of the slopes of Skellaw Hill cannot have been the reason for it would not require such an acute bend and the avenue had already traversed a similar hill at Q. There appear to be two possible explanations: either stones T & S belong to separate monuments or the Skellaw Hill barrow¹⁴ preceded the avenue and had to be avoided.

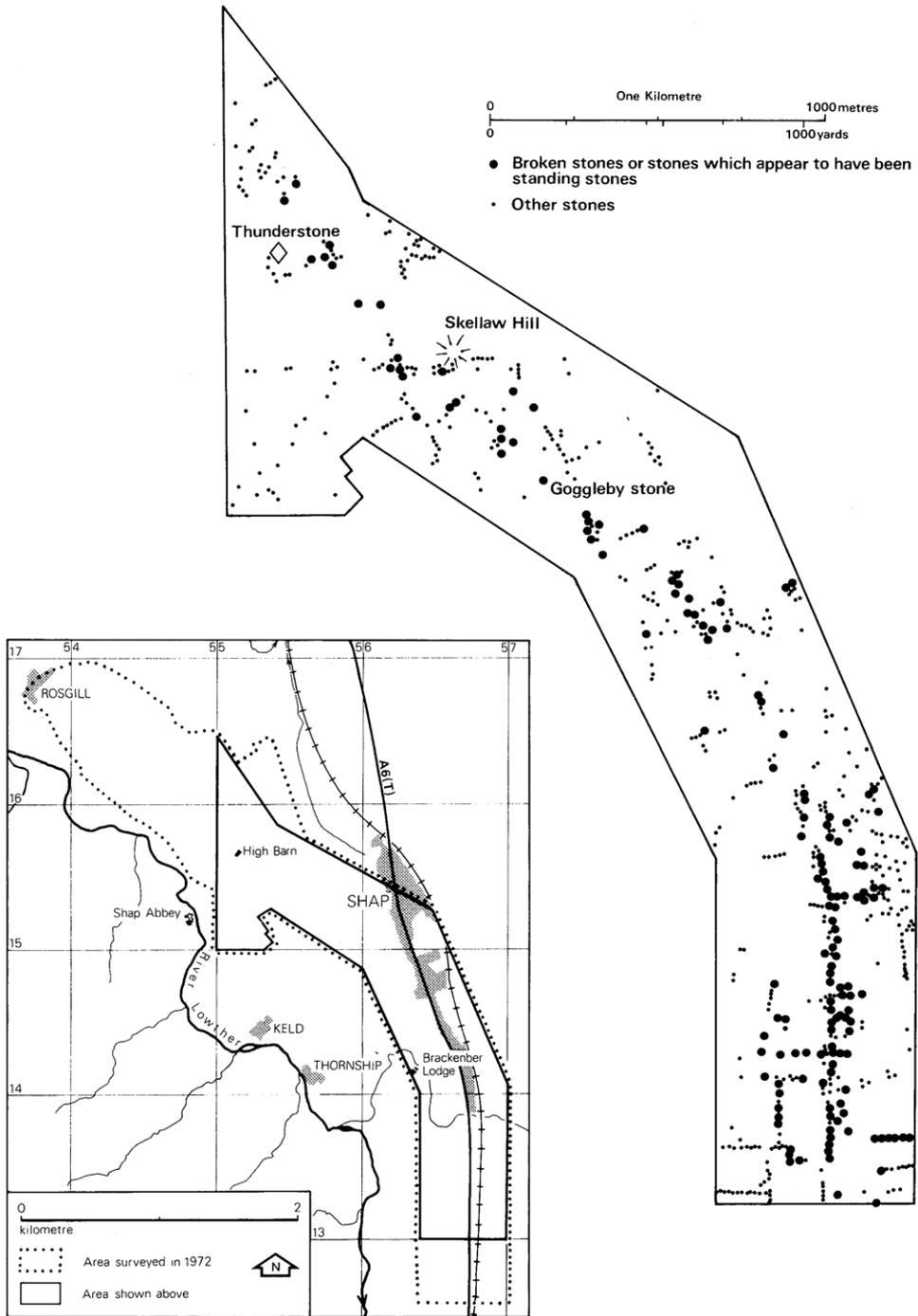


FIG. 1. – Shap Avenue: Area surveyed in 1972 showing stones of non-limestone character in field and field walls.

As avoidance of the barrow is unlikely there is reason for believing, with Lukis, that there were originally two alignments or avenues. The exact character of that represented by stones T-Z is uncertain. All but one of the members appear to be tabular in form; the exception, T, is larger and may well have been the southern terminal. Members of the other group, A-S, are more diverse in form; those at the southern end being almost

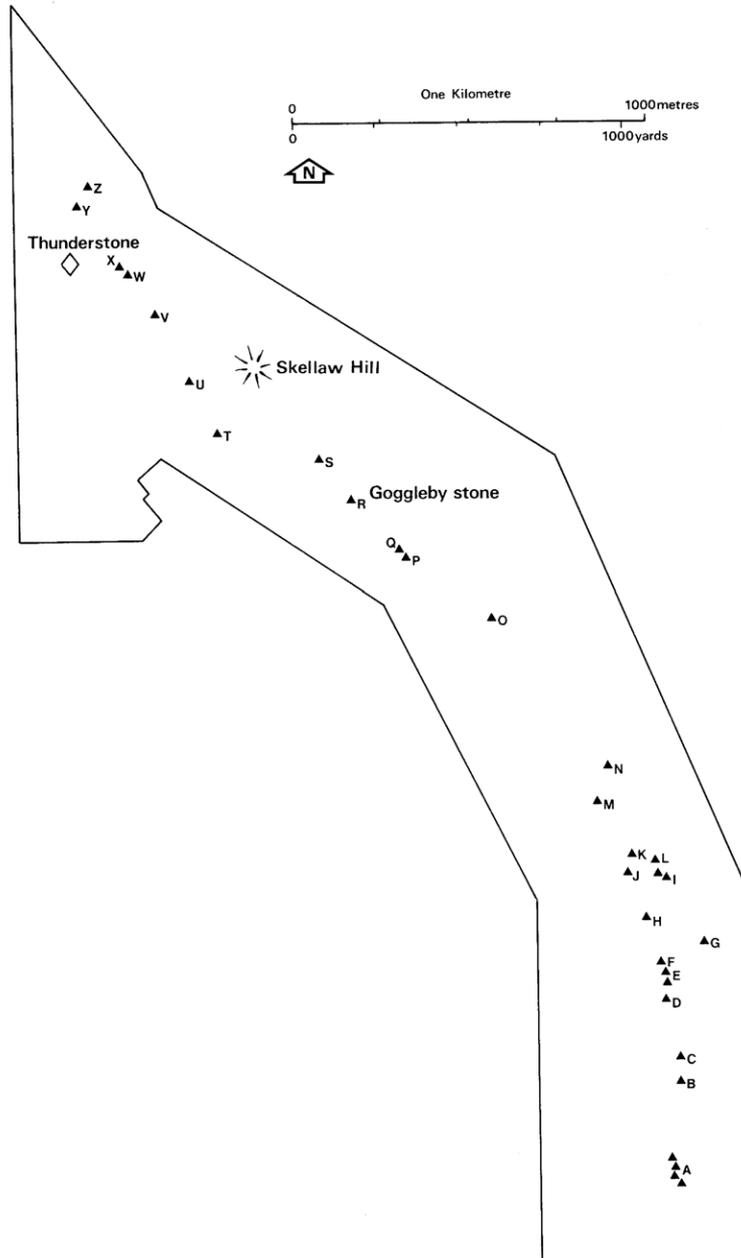


FIG. 2. – Shap Avenue: Stones which probably formed part of the avenue.

boulders, some, such as H, being tabular in form and those at the northern end more "pyramidal" in shape. Similarly the spacing seems to increase towards the northern end. It is possible that these stones also formed more than one "monument" with the Skellaw Hill barrow being an integral part, perhaps a terminal.¹⁵ The southern terminal would appear to have been the subcircular area (A) now partially buried by the railway embankment.

Excavation

During the course of fieldwork it was noted that the Goggleby Stone (R) (Plate II), formerly the last upright member of the monument(s), had fallen. In 1973 Dr. Laing of Liverpool University and the writer partially excavated the N.W. quadrant of the socket to ascertain the nature of the problem prior to full excavation. The work showed that a substantial part of the original socket was covered by the prostrate monolith. In 1975, following a request from the farmer to the Department of the Environment for the re-erection of the stone, a total excavation was undertaken. With some difficulty the stone

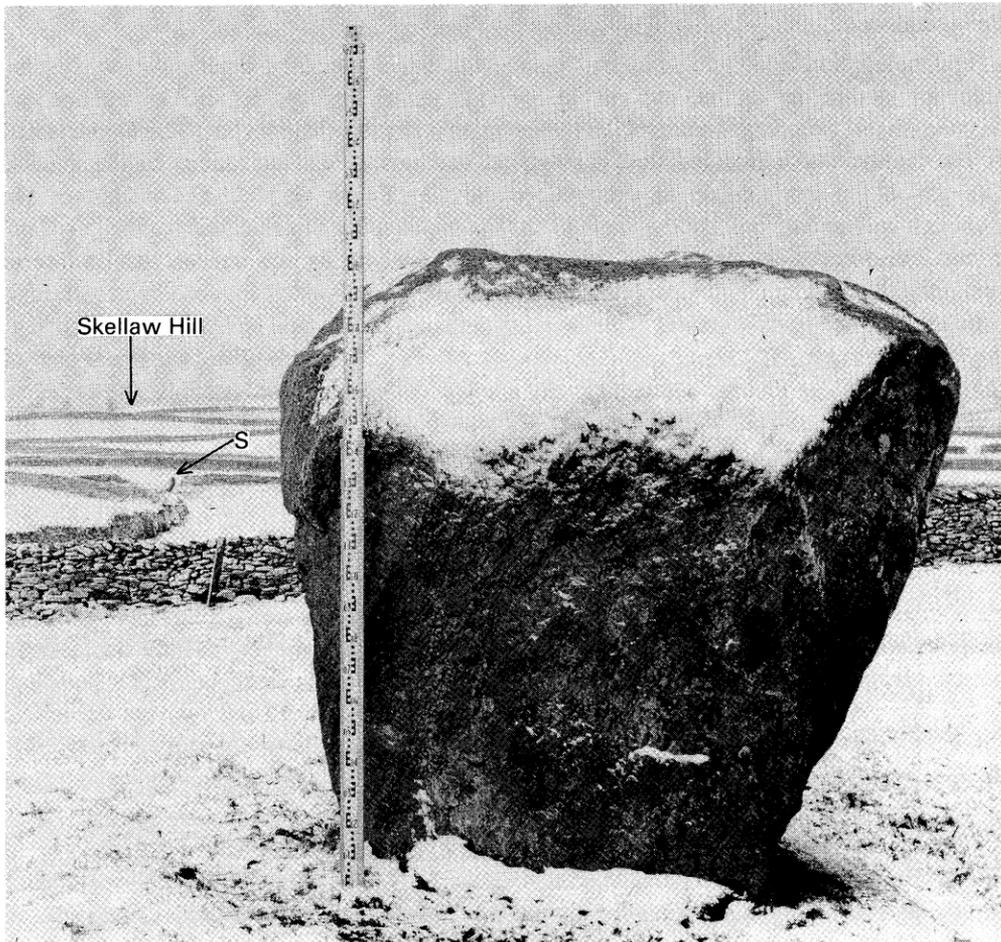


PLATE II. – Stone R – the Goggleby stone – after re-erection. Also visible is Stone S and Skellaw Hill (arrowed).

was hauled sideways allowing the previously excavated area to be extended (Fig. 3). The quadrant method was used and the stratigraphy is given in Appendix I and Fig. 4.

The evidence suggested that after excavation the socket had been partially filled with clay (layer 5), possibly backfilled natural with some old soil (the dark patches discovered within the layer). Analysis failed, however, to recover any pollen from these dark patches. The monolith was then slid into the hole and after being pulled upright wedged in that position by a stone. Other packing stones/material (layer 4) were then placed in the remaining portion of the socket. As the main packing stones were only in the upper part of the socket – it is uncertain whether layer 3 was original packing or accumulation of field clearance stones – there can never have been many and it would follow that removal of one or two stones would make the monolith unstable. In addition the smooth interface of clay layer 5 and the monolith would provide a perfect surface for the stone to slide over. It is significant, therefore, that the stone fell to the N.E. where there were no substantial packing stones remaining and that the socket wall on the opposite side was, in part, a smooth, slippery, concave rotational surface.

Re-erection

The excavation allowed the former position of the stone to be determined with some accuracy. A weathering line was visible on the monolith and the distance between it and its base was in broad agreement with the excavated depth of the socket. The Department of the Environment decided that a concrete surround (box) be placed in the ground into which the stone could be dropped, wedged and cemented. As the weight of the monolith was almost exactly the same as the lifting capacity of the mobile crane (12 tons) it was found necessary for the stone to recline by itself, in its new socket, until a lateral pull could bring it upright. Unfortunately, the shape and depth of the new hole, although sufficient for the stone to stand at its original depth, failed at first to hold the monolith at the required angle. The latter could only be accomplished by first filling the lower part of the socket with sand which was partially displaced by the stone, holding the latter in position until it could be hauled upright. The sand was then compacted with baulks and the space between it and the top of the concrete box packed with stones and concrete. The sand and stone-concrete packing were separated by polythene to prevent the percolation of water.

The resulting modern section was thus remarkably similar to the ancient one, a similarity which must be significant as the Department of the Environment's workmen were unaware of the results of the excavation. It seems apparent, therefore, that the purpose of the clay (layer 5) introduced by the original builders was to hold the stone in position until it could be pulled upright. Brown patches, interpreted as ancient soil, had been observed in the clay and by coincidence the Department of the Environment mixed soil with its sand (in this instance because there was an insufficient amount of the latter).

Date and Analogy

It is interesting to note that a number of standing stones elsewhere had clay or intermixed soil in the lower parts of their sockets. In the case of the West Kennet Avenue Smith attributed this to the testing of the stones' "stability before removal of supports",¹⁶ but that at Maen-Llwd, Carms., was thought by the excavator to have "provided a cushion on which the stone must have largely found its own equilibrium,

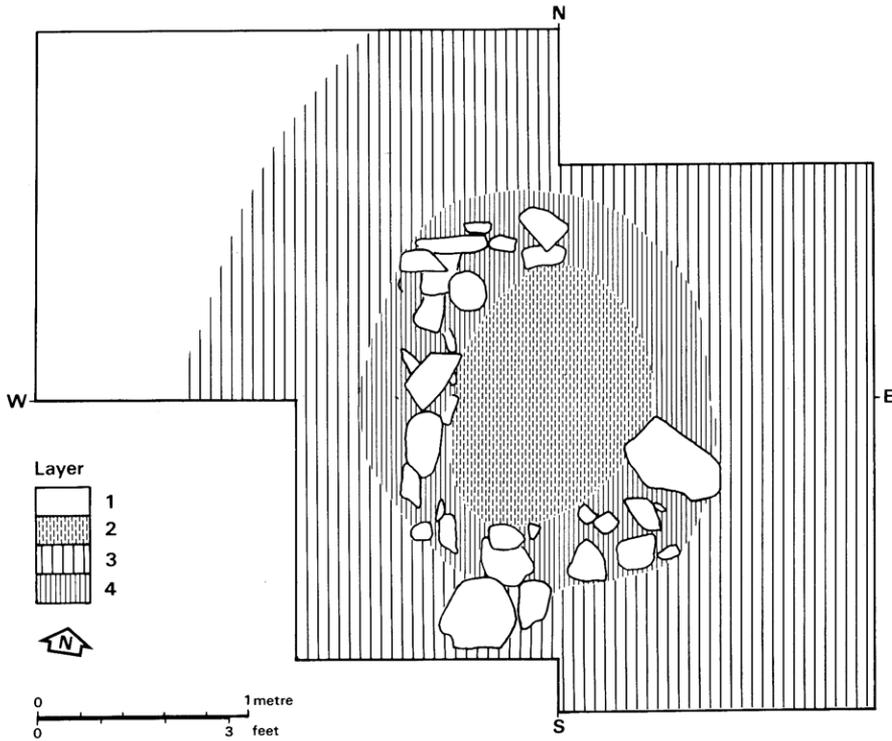
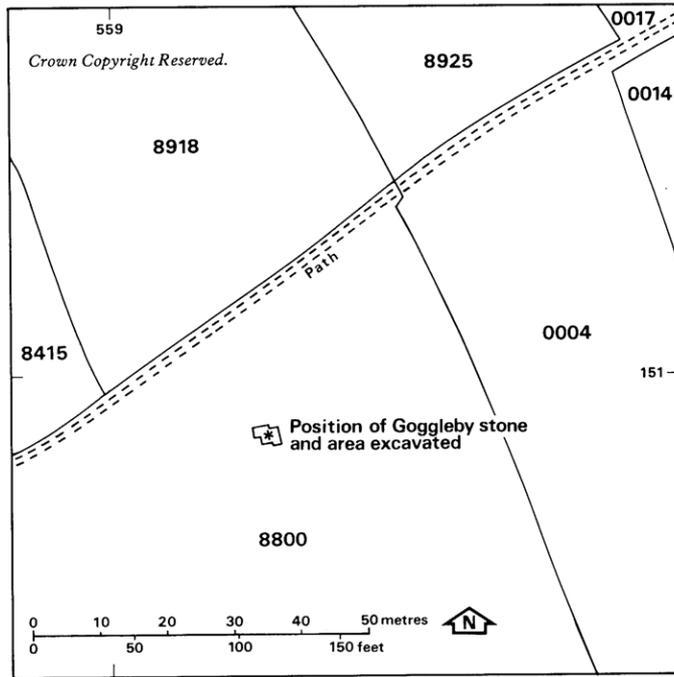


FIG. 3. - Goggleby Stone: Plan of area excavated showing packing and relationship to layer 3.



FIG. 4. - Goggleby Stone: Cross-sections

after which its own weight would have kept it upright".¹⁷ The only dateable evidence recovered by excavation at Shap – the lithic material – is unfortunately somewhat nondescript. Nevertheless it does fall within the period of other contemporary monuments in this country. Stukeley compared the site with the West Kennet Avenue – connecting the Avebury henge to a timber building with stone settings – which had Late Neolithic/Beaker associations.¹⁸ A similar date has been obtained from the stone avenues and rows of S.W. England,¹⁹ although there the monuments are narrower and the members smaller. However, in their stone circle, standing-stone and tumuli terminals, the West Country monuments provide a close parallel for Shap. The other stone avenues tentatively identified within Cumbria (Appendix II) are also analogous. The terminal of the Broomrigg alignment was thought to be a circle and that of the Lacra avenue was an arc of stones containing a burial and possibly a central cist. Similarly, the Moor Divock and Penhurrock avenues are said to have led towards tumuli. The other terminal at Penhurrock was alleged to be a slab and the Broadfield site appears to have ended at a large boulder. Unfortunately, the Moor Divock, Penhurrock and Broadfield sites are no longer extant and their authenticity is questionable.

It is, however, evident that the former character of the Shap avenue(s) as suggested here, was comparable to that of surviving avenues and alignments. On this basis a Late Neolithic date would be appropriate for the Shap site(s) but examples are also known in earlier contexts if not in the same material. For example, the cursuses – linear areas enclosed by earthen bank and ditch – appear to have served a similar purpose incorporating or terminating at (long) tumuli. A timber avenue led to the Kilham long enclosure/tumulus²⁰ and timber avenues in the Durrington Walls henge²¹ led to structures comparable to that forming the southern end of the West Kennet Avenue. Timber avenues also appear, apparently in Late Neolithic contexts, at Meldon Bridge, Peebles,²² although at that site probably in secular contexts.

Summary

The evidence of recent fieldwork has supported earlier descriptions and provided some evidence for the engineering associated with the erection of monoliths. As far as can be ascertained the form of the Shap site or sites was directly comparable with extant stone avenues and alignments, as was the method of erecting the members – by the provision in the socket of a cushion of clay or intermixed soil to help hold the monolith prior to its final positioning and consolidation.

Appendix I

Stratigraphy of the Goggleby Stone Socket

Fig. 4

Layer 1. Turf and topsoil. The finds were modern and included two slate writing pencils.

Layer 1a. This was only discernible in the N.W. quadrant and was differentiated from (1) by its more orange colour. The finds, substantially the same as in (1), included a small chip of mottled black chert.

Layer 2. Dark brown silt containing stones and modern debris. Some parts were distinguished by their looseness or the occurrence of white flecks suggesting limed clods of earth.

Layer 3. Brown friable soil with numerous stones, particularly in the upper part. Most of the finds belonged to the last few centuries, the exceptions being a rough core of sandy grey chert and a caramel-coloured piece of chert from which flakes had been detached.

Layer 4. A grey orange clay-like layer with large stones. The latter were, however, virtually absent from the N.E. quadrant. A small chip of mottled grey chert was recovered from the S.E. quadrant.

Layer 5. A stiff orange silt with dark brown patches. Samples of these were obtained.

On the western side a portion had been torn from the face of the layer, apparently by the falling monolith. On the opposite side of the socket there was a relatively large stone (approx. 30 cm x 7 cm) behind which there was a cavity.

Layer 6. Natural: an orange clay-like layer with stones, frequently small in size.

During removal of the 1973 backfill the following were recovered: one piece and one flake of grey banded chert and a scraper of light grey mottled flint.

The finds were deposited in Carlisle Museum, the notes and drawings in the County Record Office, Kendal.

Appendix 2

Other Stone Avenues and Alignments in Cumbria

Broadfield.	NY4144	<i>Archaeologia</i> 10, 108.
Broomrigg.	NY545486	CW2 xxv, 77; CW2 lii, 5.
Carlatton.	NY534510-NY525536	CW2 xxxv, 170-171.
Moor Divock.	NY494220	CW1 i, 165; CW1 iii, 252; CW1 viii, 330; <i>Royal Commission on the Ancient and Historical Monuments of England and Wales</i> (1936), 27.
Penhurrock.	NY629104	<i>Proceedings of the Society of Antiquaries of Scotland</i> 4, 445; CW1 ii, 208, CW1, vi, 179; <i>Archaeological Journal</i> 27, 200.
Lacra.	NY152813	CW2 xlvi, 5-13.

Notes and References

¹ J. Nicolson & R. Burn (1777), *History & Antiquities of Westmorland & Cumberland*, Vol. 1, 477. Strahan & Cadel, The Strand (1777).

² G. Hall, "Carl Loft's at Shap, Westmorland", *Gentleman's Magazine*, 94 (1824) pt, 1, 3.

³ Rev. W. C. Lukis, "Shap Avenue, Westmorland", *Proceedings of the Society of Antiquaries of London*, 10 (1894), 313-320.

R. S. Ferguson, "Shap Stones", CW1, xv, 1899, 27-34.

⁴ *Op. cit.* 319.

⁵ *Royal Commission on the Ancient and Historical Monuments of England and Wales, Westmorland*, (1936), 206.

⁶ T. Clare (1973), in *Aspects of the stone circles & kindred monuments of North West England*. Unpub. Univ. of Liverpool M.A. thesis.

⁷ *Op. cit.* Vol. I, 477.

⁸ As quoted by Ferguson *op. cit.*, 33.

⁹ Correspondence quoted by Lukis *op. cit.* 314.

- ¹⁰ *Op. cit.*, 314.
- ¹¹ J. Hodgson in J. Britton and E. W. Brayley (eds.), *The Beauties of England and Wales*, vol. 15, *Westmorland*, (London 1814), 139-140.
- ¹² *Op. cit.*, 314.
- ¹³ *Op. cit.*, 140.
- ¹⁴ Hall *op. cit.*, 3, says "human bones" were dug up there. The mound is approximately 15 m in diameter and 1 m high.
- ¹⁵ A view shared by Hall *op. cit.* 3.
- ¹⁶ I. F. Smith, *Windmill Hill and Avebury; A short account of the excavations 1925-1939* (London 1959), 20.
- ¹⁷ J. M. Lewis, "Excavations and Discoveries", *The Bulletin of the Board of Celtic Studies*, 21 (1965), 262.
- ¹⁸ I. F. Smith, *Windmill Hill and Avebury: excavations by A. Keiller* (Oxford 1965).
- ¹⁹ Summarised by A. Fox, *South West England* (London, 1964), 59-64.
- ²⁰ T. G. Manby, "The Kilham long barrow excavations, 1965-1969", *Antiquity* 45 (1971), 50-53, and "The Excavation of the Kilham long barrow, East Riding of Yorkshire", *Proceedings of the Prehistoric Society*, 42 (1976), 111-161.
- ²¹ G. F. Wainwright, *Durrington Walls, 1966-1968*, (London 1971).
- ²² C. Burgess, "Meldon Bridge: a Neolithic defended promontory complex near Peebles" in *Settlement & Economy in the 3rd & 2nd Millennia B.C.* (Oxford 1976).

