

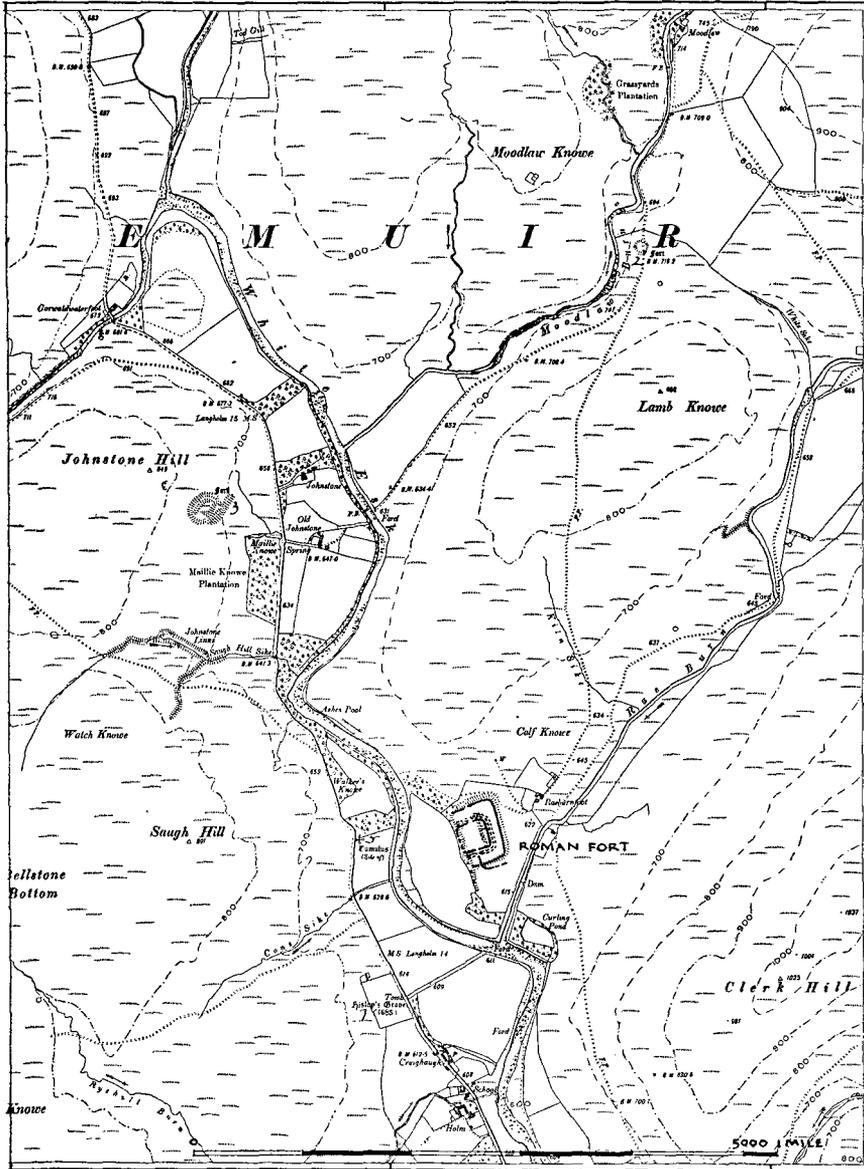
A NEW ROMAN MOUNTAIN-ROAD IN DUMFRIESSHIRE AND
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Read March 11, 1946.

The Roman fort at Raeburnfoot,¹ Dumfriesshire, is one of the most isolated and remote of Roman sites in Scotland. It lies at the head of Eskdale (fig. 1), fourteen miles above Langholm, at the point where the tortuous Esk emerges from the foothills of the Ettrick massif, having provided a minor through route between north and south. Traditionally, the valley below Raeburnfoot is said to have been occupied by a Roman road:² and

¹ For accounts of this site see *Statistical Account* (1841) *Dumfriesshire*, pp. 402-4; *R.C.A.H.M., Dumfriesshire*, item 172, p. 68; *J.R.S.*, vol. xxxvii. p. 166; *Trans. Dumfr. and Gall. N.H. and A. Soc.*, vol. xxiv. pp. 152-4.

² *Statistical Account* (1841) *Dumfriesshire*, p. 404, note, and p. 420 (Langholm parish).



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Fig. 1. The site of Raeburnfoot.

this tradition, while as yet wholly unverified by modern research, may well be worth credence, since the well-attested Roman marching-camp¹ at Gilnockie and various coin-finds,² including the early *aurei* from Broomholm, attest Roman penetration of the dale. If, however, a road may thus have connected Raeburnfoot with the lower valley, no one has suggested that it continued northwards, for a northward continuation would involve a course so tortuous as to be wholly unacceptable to the Roman engineer. Nor does the position of the fort at Raeburnfoot suggest that its function was to guard a route between north and south. It has no good outlook in either direction, and the northward view, in particular, is almost immediately cut off by the bold spur of Moodlaw Knowe, which juts out from the east side of the valley. This point is so obvious that when the writer paid his first visit to the site, with Mr James McIntyre, on 12th May 1935, he came away convinced that the function of the fort was to look eastwards up the long valley of the Rae Burn and westwards up the corresponding gap on the opposite side of the valley and that along this line would ultimately be found the explanation for the existence of so remote a site.

Somewhat later than 1935 facts began to accumulate in other parts of Roman Scotland which help us better to understand the function of Raeburnfoot. The Roman works there, perched on a 40-foot bluff now partly eroded by the turbulent Esk, comprise inner and outer superimposed works, each definable as a permanent post on the strength of its massive rampart.³ The outer and earlier work,⁴ a rectangle measuring some 570 by 540 feet over its 30-foot rampart, is defended by a single ditch, and its size is suited to a large cohort or an *ala*. The inner work,⁵ which plainly has succeeded it, measures some 270 feet square over its 38-foot rampart, and is defended by a double ditch. Its much smaller size plainly demonstrates that its garrison was a small one, whatever class of unit⁶ it comprised. But by 1939 discoveries elsewhere⁷ were showing that sites of this kind, small fortlets defended by a stout rampart and one or more ditches, are an outstanding

¹ Gilnockie, *R.C.A.H.M.*, *Dumfriesshire*, item 45, pp. 27–8, with plan (fig. 28). Cf. *Statistical Account*, *op. cit.*, p. 490.

² Sir George Macdonald, *Proc. Soc. Ant. Scot.*, vol. lii. p. 241. The *aurei* divide into six from Broomholm, one from Wauchope bridge holm and one from Canonbie, in a glebe field east of the church. They are so close in date, however, as to raise the question whether they did not form part of one hoard.

³ For details of these ramparts, recently examined by Dr St Joseph, see sources cited in note 1, p. 103.

⁴ There is no doubt that, as at Castleshaw, the outer work is earlier, since it would have been impossible to use it effectively with the inner work in existence. The east to west dimension is conjectural, but the planning suggests that the north to south road was axial. It seems doubtful whether the south gate has a *clavicula*, the appearance of such a feature being caused by the road swinging eastwards as it emerges from the gate. See *R.C.A.H.M.*, *loc. cit.*

⁵ It will be noted that the commencement of the north-west angle of the rampart of this work is visible and that the outer ditch appears to have been carried straight through to the edge of the escarpment, while the inner ditch swings round the angle (*ibid.*).

⁶ In Roman Germany forts of this size normally housed *numeri*, but the British system is unknown. In area the fort is most like Crawford. See *J.R.S.*, vol. xxix. p. 201.

⁷ See *J.R.S.*, vol. xxx. p. 161; *Antiquity*, vol. xiii. pp. 280–92.

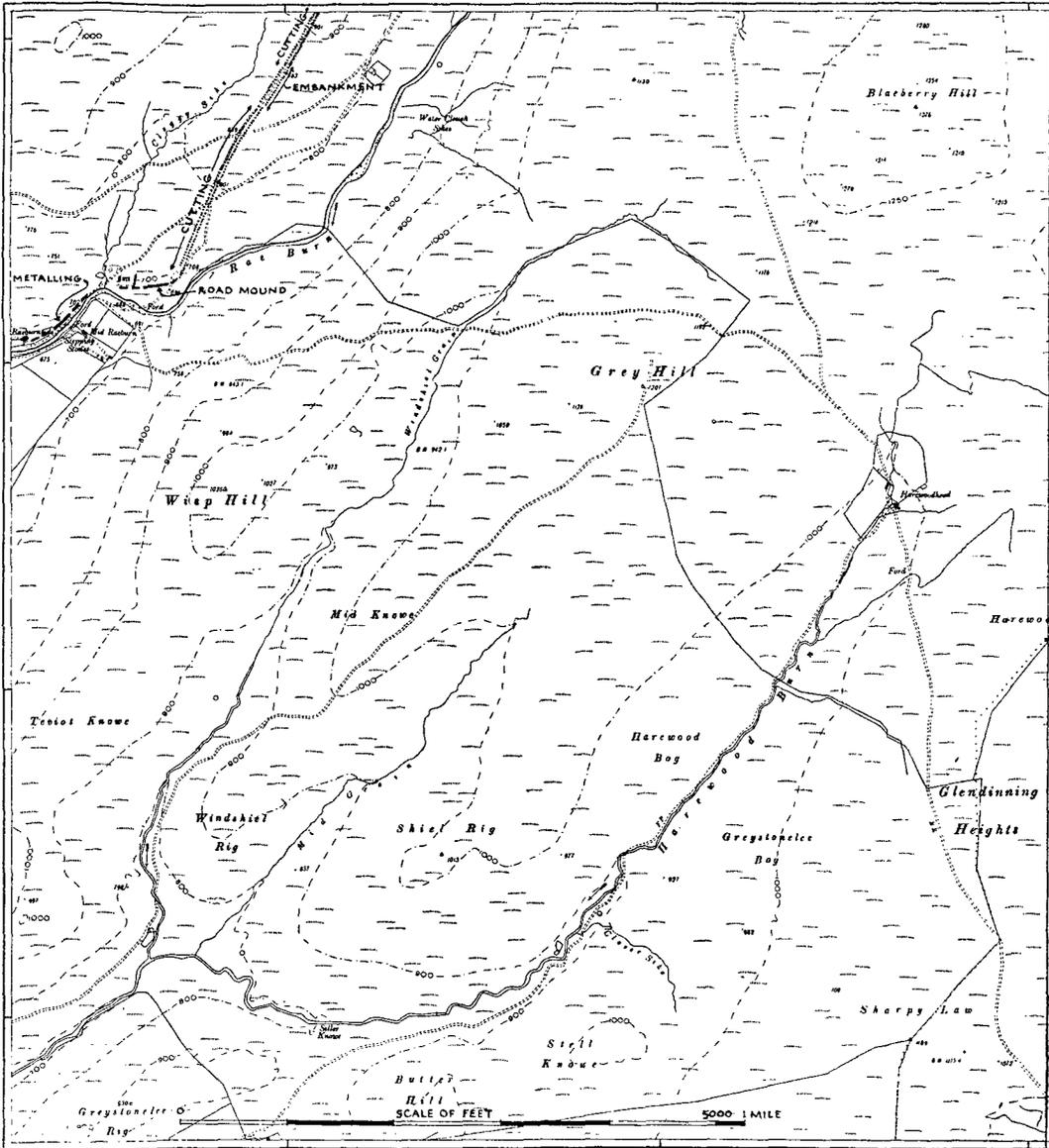
feature of the Antonine organisation of Southern Scotland. Six still smaller examples had then been identified—at Tassiesholm, Redshaw Burn, Durisdeer, Chew Green, Castle Creg, and Kaims Castle—and it has since become clear that this number is representative rather than in any way exhaustive. With the exception of Castle Creg, of which the connections are still to seek, all are connected with Roman roads. They were evidently the quarters for patrols, signallers, or convoy-guards; in short, of the minor units which knotted tight the relentless grip of the Roman net. The second fort at Raeburnfoot is obviously yet another example in the series, and this fact alone would give validity to the inference that it once formed a link in a vanished section of the strategic cordon.

A clue to the missing section was soon furnished by an unexpected source. The late R. P. Hardie, whose studies of mediæval roads in Lauderdale have all the strength that is to be derived from a detailed knowledge of maps and all the weakness of work unrelated to examination of the ground, drew attention¹ to Raeburnfoot in a digression upon the roads between Roxburgh and Annandale. He observed that the central massif of Craikmuir, here throwing off opposite spurs north of the Rae Burn and the Borthwick Water, was crossed by an old traffic line. Hardie's map was not closely enough contoured to show him that he was wrong in describing this route as occupying the crest of the spur. But, struck by the choice of ground, by the general straightness of the line, and by the relationship of that line to Raeburnfoot, he went so far as to suggest² that this road might be Roman in origin. It seems that he never visited the area to put this view to the test, nor did he add to his general conclusions the highly significant fact that no other direct and unswerving route across the central massif is attainable for long miles to north and south. But it was obviously desirable that someone should test the notion, and, in the course of his duties as a Royal Commissioner for Ancient Monuments, the writer took opportunity to examine the course of the road in Roxburghshire in July 1945, accompanied by Sir Walter Aitchison, Dr St Joseph, and Dr Philip Gell. The continuation in Dumfriesshire was viewed later in the same season by the writer alone, and an ordered account of the remarkable remains now visible on the ground is here offered.

For two miles north-east of the Roman fort at Raeburnfoot the valley of the Rae Burn offers no convincing remains of ancient roadways. The stream meanders about in a wide and stony bed cut deep in the valley floor, and the resultant terrace, which would carry roads or tracks above flood-level, is deep in tussocky grass. A modern cart-track wanders tortuously up the north side of the valley, and only close to the ford and bluff between Kiln Sike and White Sike is there any suggestion of a more solid road. Above Raeburnside, however, and opposite the footbridge to Mid Raeburn

¹ R. P. Hardie, *The Roads of Mediæval Lauderdale* (1942), pp. 47-8.

² *Ibid.*



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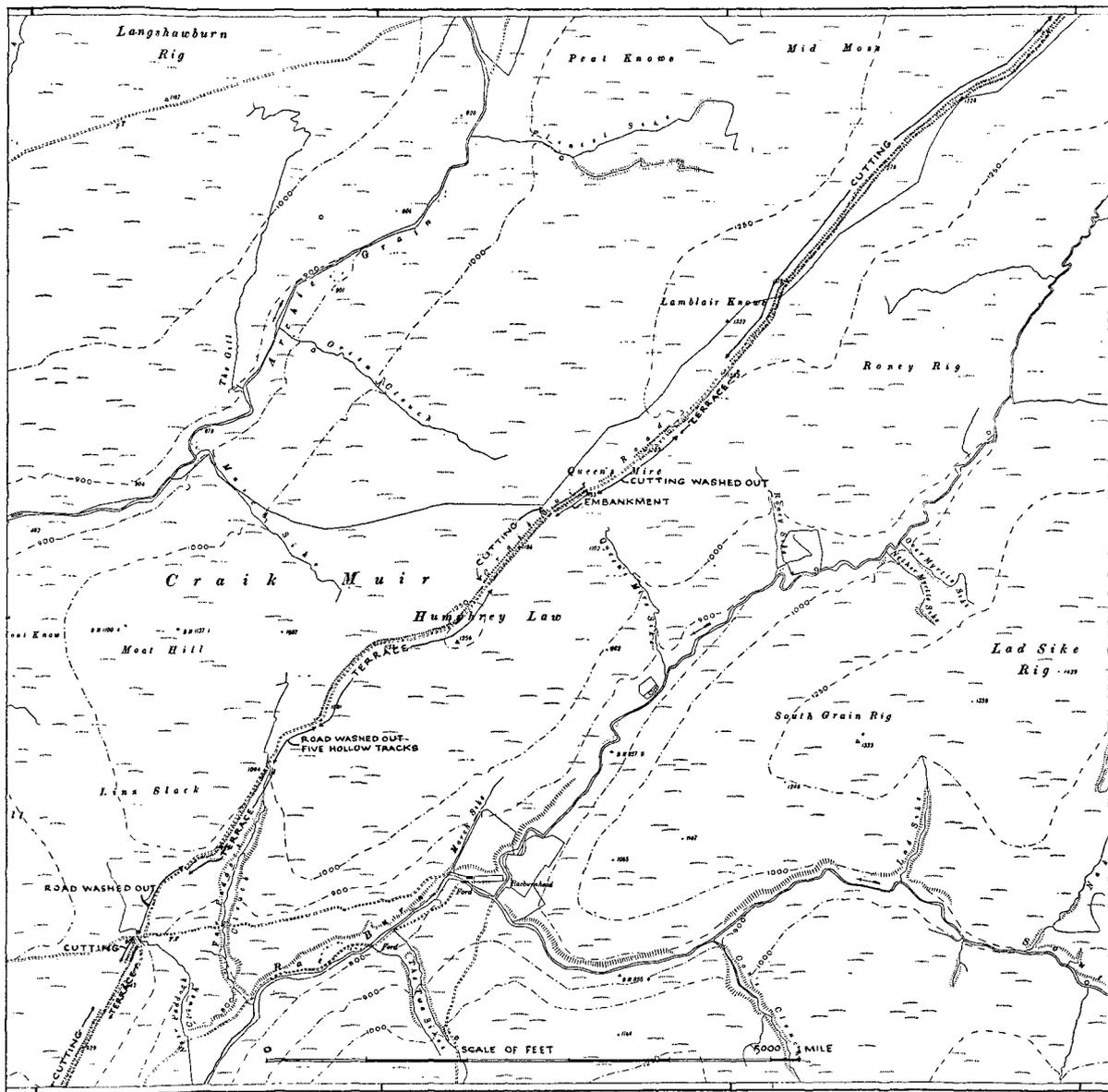
Fig. 2. The Roman road at Mid Raeburn.

farm (fig. 2), there is a strong metalled roadway running along the haugh north of the stream, but this is interrupted by heavy erosion of the north bank at the watersmeet of Rae Burn and Cleggy Sike. Then, east of two deserted cottages (not marked upon the Ordnance Map), the road appears again as a broad cambered mound, 2 feet high and 20 feet wide, running dead straight along the haugh to a point where a wide cutting carries it up on to the spur between the Rae Burn and Cleggy Sike. The mound here is evidently composed of the gravel which abounds in the haugh.

The foot of the cutting is much broken up by tracks and by modern carting, but it is soon plainly visible to north-west of the existing cart-track, and, as soon as the steep ascent is passed, the cart-track swings across to the left side of a broad terraced roadway at least 18 feet wide, formed by cut-and-fill in the hillside. The straight south-eastern edge of the feature is visible for the next thousand yards, with some bold embanking, extending for about 150 yards, half-way long the spur. Its antiquity is shown by the number of cart-tracks and hollow tracks, which meander freely within and beyond its limits, sometimes cutting it badly to pieces but never completely obscuring the general line.

The spur along which the road is running is then cut by Near Paddock Cleugh, draining out of a broad and marshy gap between the Rae Burn and Moodlaw Burn. The modern cart-track and some of the hollow tracks swing to east, and form a deep hollow road which very soon turns northwards in an oblique descent alongside the cleugh (fig. 3). The ancient line runs straight ahead for about 160 yards as a prominent terraced roadway, over 18 feet wide, and meets the head of the cleugh at right angles by means of a bold cutting about 50 yards long. The stream is here a broad marshy belt, in which "paddocks," or frogs, no doubt abound in due season, and the crossing is deep in mire, while the terraced ascent of the road on the other side is deeply cut to pieces by five hollow tracks which run on and beyond the terrace and speak of an age-old use of the original engineered track as well as its ultimate desertion. On the shoulder between Near Paddock Cleugh and Far Paddock Cleugh, however, the terraced roadway becomes clear again and so continues for about 400 yards. It is here 27 feet wide, with a deep hollow track on the south-east side; and material derived from the terracing has been used to form a broad embankment descending straight into Far Paddock Cleugh, though somewhat cut about by hollow tracks to the north-west. Across the stream the ascent is again much cut up and finally deserted by hollow tracks. The nature of the subsoil now becomes clear. It is a laminated shale,¹ of which the thin strata are tilted at an angle of over 70 degrees, so that they break off in small cubes closely resembling road metalling, though they are in reality detritus from the living rock.

¹ Geological Survey, sheet 16.



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Fig. 3. The Roman road on Humphrey Law and Lamblair Knowe.

The nature of the subsoil, here revealed, entirely explains the type of road adopted from the Rae Burn onwards. The shale lies immediately beneath the natural upper surface of thin weathered brash and tussocky grass. No other material for building a road is to be had, except river-gravel from the Rae Burn, and it would be impossible to make this lie upon the shale,¹ apart from question of transport. The engineers of the road which we are describing have thus perforce had recourse to the shale, forming their roadway in cuttings and terraces which, in the absence of alternative material, provide a road-surface of soft rock and material for embanking. The use of the shale surface or of the spoil from terracing or cutting also explains the absence of quarry pits. Had the road been constructed of quarried material laid upon the subsoil, either large sporadic quarries or a series of quarry-pits parallel with the roadway might have been expected to occur. But here the prepared track forms its own quarry, and the cut-and-fill technique employed in its construction provides ample material without going beyond the track of the road for it.

The road now climbs steadily from Far Paddock Cleugh along the north-west shoulder of Humphrey Law, aiming for a point just below the crest and thus avoiding the deep bays or cleughs on both sides of the ridge which reduce the passage along it to a series of comparatively narrow necks. It has here been a terraced road for a distance of some 700 yards. But when the summit, at about 1290 feet above sea-level, is passed, a fresh complication is introduced by the occurrence of a peat-bed, varying in thickness from a few inches to 4 or 5 feet. Faced by the peat, the roadway engineers, still compelled to rely upon the underlying shale for their surface, changed their methods and dug a broad cutting, 30 feet wide, through the peat and the underlying brash in order to bare the shale itself. Then, in order to give the necessary drainage and to prevent the road from becoming swamped, they cut drainage-ditches on both sides of the bottom of the cutting, thus leaving an almost flat causeway of living rock some 20 feet wide to serve as the roadway in the centre of the cutting. The original form of the work (fig. 4), however, is now frequently disguised, partly by growth and swamp and partly by hollow tracks which swerve about in the cutting, first wearing down the old surface and eventually avoiding the resultant swamps by intruding into the sides of cutting or even climbing out of it where the peat is not too deep. The modern cart-track picks its way among the resultant confusion as best it can. An excellent example of the relationship between old and new occurs at the top of the cutting, which is over 300 yards long, where it leaves the shoulder by a slight zigzag. The modern track zigzags the opposite way in order to avoid the swamp which has gathered at the elbow.

¹ Supposing a bed to have been cut in the shale to contain bottoming, the problem of drainage would raise impossible difficulties.

The cutting runs down to the Queen's Mire ¹ between Green Cleuch and Queen's Mire Sike, which was originally crossed by a bold embankment over 100 yards long, still discernible but much cut about by cross-drains and tracks. The hollow track lies to north and the cart-track further north still, running upon a small causeway of its own, clearly derived from a relatively modern quarry at the north end of the crossing. The old road has then climbed the south-east shoulder of Lamblair Knowe by a cutting some 300 yards long, much cut up by hollow tracks and the carting-track.

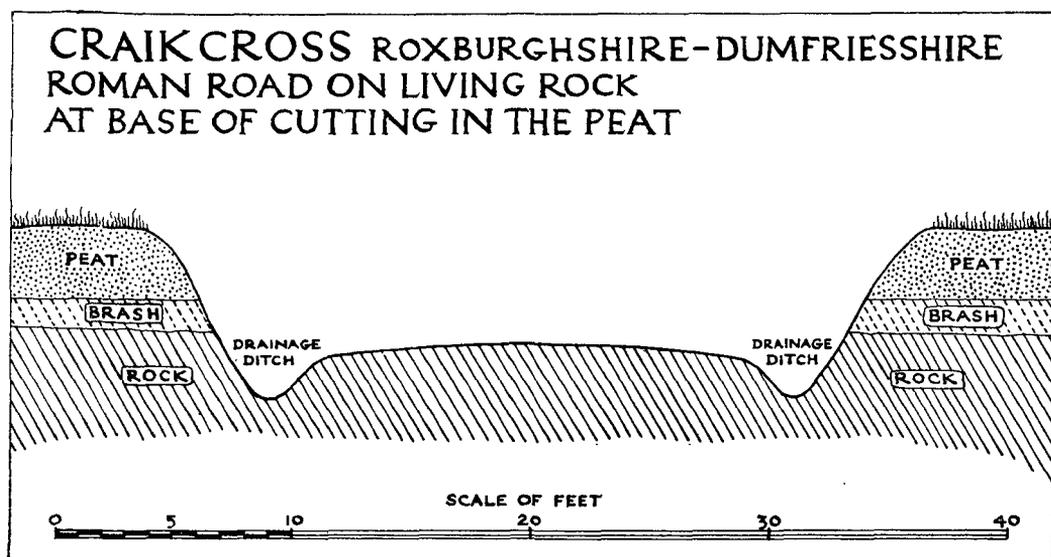
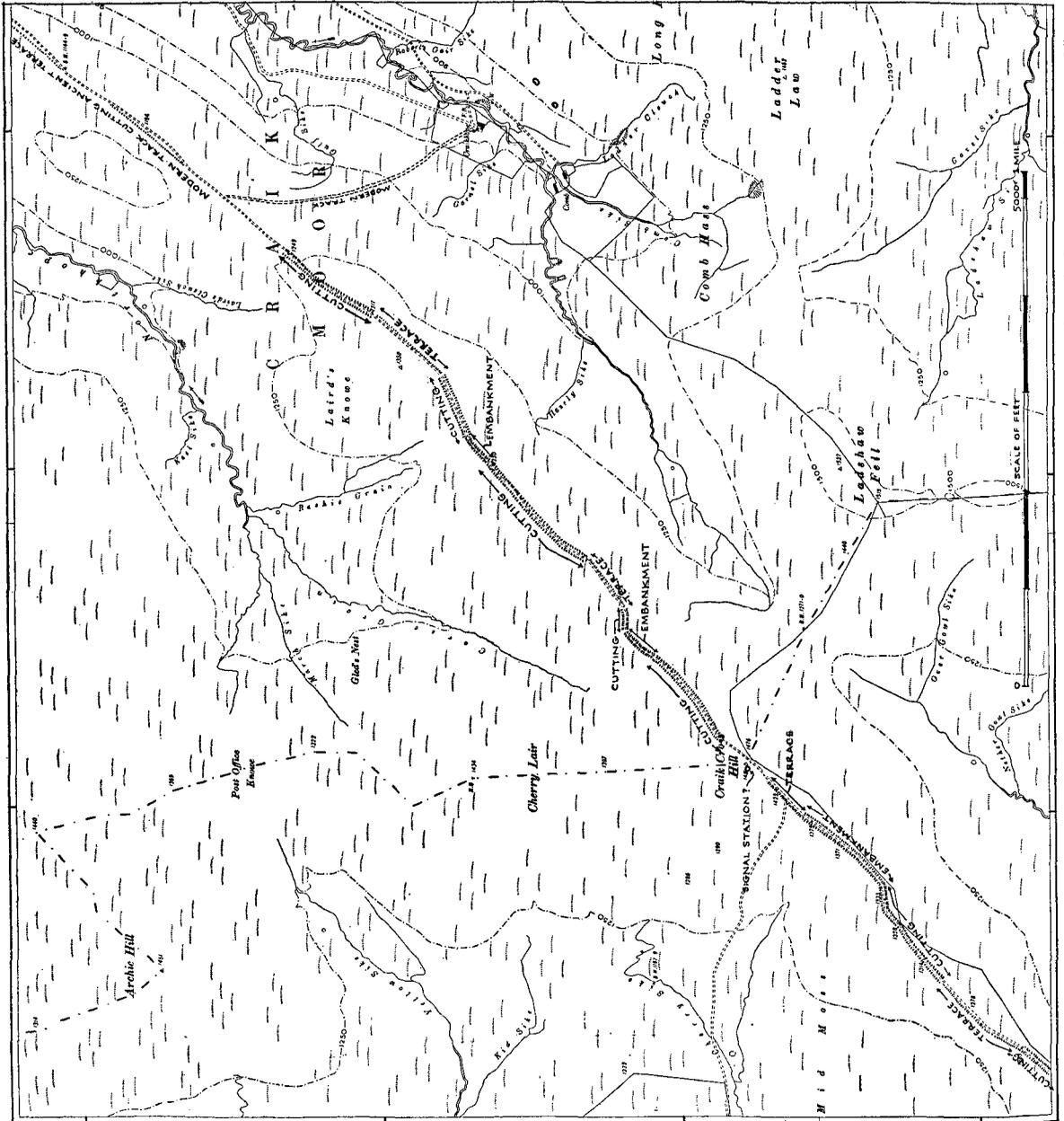


Fig. 4. Diagrammatic section of Roman road on Craik Moor.

Next comes a terrace of about the same length, where the modern track tends to make a lower shelf of its own and the older work is revealed as well over 20 feet wide. Now follows a long cutting in the peat, continuing for seven furlongs and laid out along the crest in seven very unequal point-to-point sectors. The best example of the angular changes of direction in this cutting is on Roney Rigg, where a boundary fence crosses the road, after which the cutting runs dead straight for 400 yards. The hollow tracks and carting-tracks, worn in the shale, here attain a depth of 3 feet, a fact which speaks eloquently of the high antiquity of the original feature. There follow (fig. 5) 300 yards of terraced track, over 21 feet wide, and a 400-yard cutting which descends to the flat and ill-drained neck between Cherry Sike and Gowl Sike and provides the material for a 380-yard embankment crossing

¹ The origin of the Queen's Mire is the local tradition concerning the journey of Mary Queen of Scots to Hermitage, which in fact took place by a more southerly route.



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Fig. 5. The Roman road at Craik Cross and Lehd's Knowe.

it. A terraced roadway then ascends the shoulder of Craik Cross, but the exact form of the road on the summit, 1476 feet above sea-level, is obscured by the hollow tracks, some of which converge into one broad hollow 5 feet deep. The original form of the road was apparently a shallow cutting, baring the rock.

The true summit of Craik Cross lies 22 yards north of the road and is 1481 feet above sea-level. From it an astonishing view is obtained. Immediately to north, the Ettrick Hills stand out bold and forbidding, while to west and south-west the distant horizon is closed by the fells above Torthorwald and by Criffel. Southwards, Birrenswark rears its distinctive table-mountain above the tangle of foothills, and the gleaming Solway outlines the Cumberland plain backed by the great buttress of Saddleback and Skiddaw. No less magnificent is the eastward view, where, on the north, the spurs of Ettrick jut out toward the Tweed and the triple peak of Eildon, upon which our road is manifestly aimed. To east stretch the wide valleys of Teviot and Rule, divided by the rugged mass of Ruberslaw, and to south the whole line of the Cheviot Hills, from Carter Bar to Cheviot, form a noble and clear-cut background to the swelling contours and twisted cleughs and hopes which run out towards Liddesdale and the North Tyne. Perhaps no summit in Southern Scotland affords a more remarkable view in every direction.

The actual summit north of the road is occupied by an earthwork, comprising a circular ditch 40 feet in diameter over its centre line with a bold mound inside it, 4 feet high and some distance away from the lip of the ditch. The effect is not that of a cairn or tumulus, but is highly reminiscent of the Roman signal-tower¹ at Robin Hood's Butt, on the high moor of Gillalees, between Birdoswald and Bewcastle. Only excavation, however, will show what reliability is to be placed upon the resemblance.

Once over the summit, the road plunges into a cutting 400 yards long, followed by an embankment 100 yards long, laid out in two straight sectors, across the neck between Corse Grain and the head of Borthwick Water. Then the road twists up on to the south-west side of the next shoulder (which has no clear recorded name), negotiating the rise by a cutting some 70 yards long and a terraced track 200 yards long. On the crest is a cutting over 350 yards long and 6 feet deep, in which the hollow tracks have extended the original width of 30 feet to about half as much again in places in an effort to keep out of the swampy bottom. On the neck between Rushie Grain and Hazely Sike the embankment derived from the cutting is almost completely buried in peat, and peat-cutters or shepherds have erected a

¹ *C.W.* 2, vol. i. pp. 82-3; vol. xxxiii. pp. 241-5: recent excavation by Dr St Joseph has, however, shown the mound to be an earthwork, of uncertain nature. See *Trans. Dumfr. and Gall. N.H. and A. Soc.*, vol. xxiv. p. 152.

little turf-built rectangular enclosure,¹ 24 by 42 feet in size, with a curved tail-like bank at the east end, right across the mouth of the cutting. The road next climbs on to Laird's Knowe in a cutting 200 yards long, much eroded and cut to pieces by hollow tracks, and a bold terrace well over 18 feet wide runs for 300 yards into a cutting through the peat about 370 yards long and 3 to 4 feet deep. At the eastern mouth of this cutting is another turf-walled enclosure across the line of the road, similar in size and plan to that previously described.

The road then becomes a terraced road once more, dropping gently down the south-eastern shoulder of Craik Moor, high above Craikhope and the Borthwick Water. It is here still aiming straight for the Eildons. At 250 yards below the eastern mouth of the cutting the terraced road is joined by a relatively modern track from Craikhope farmstead, predecessor of the still more modern metalled road which runs up the bottom of the valley on the south side of Borthwick Water. This Craikhope track, now used only to cart peats, has largely obliterated the remains of the older road by cutting a new and lower terrace along the edge of the older one. As the road descends towards the watersmeet of Northhope Burn and Borthwick Water all traces of ancient work disappear and the fringe of the cultivated area is reached. We have, however, now described over $6\frac{1}{2}$ miles of ancient roadway and it is time to take stock of the matter.

The first point which clearly emerges from a scrutiny of the remains is the high antiquity of the original engineered road. It is severely damaged at numerous points throughout the course by long desuetude and erosion, and as many as five hollow tracks, not to mention the modern carting-track, have worn their way deep through the already disused road. In the cuttings through the peat the state of the original roadway has become so bad, partly through wear and tear and partly through blockage of the original drainage system, that the tracks have made every effort to avoid it. Such a history of wear and tear on a rock surface clearly places the road well back beyond the age of modern engineered roads of any kind; and, in connection with this conclusion, it should be observed that there is no record in the *Statistical Accounts* of any road-making on this line during the eighteenth or nineteenth centuries.

The second point which emerges is the notable quality of the engineering of the original road. The impressive fact is not so much that a great roadway 20 feet wide has been driven for over six miles across wild moors and peat hags: it is that no roadway could have been here constructed at all without a penetrating appreciation of the local terrain, which imposes such formidable and peculiar conditions upon choice of materials and route. No construction could take place until the possibilities of the shale rock had been

¹ Christison, *Early Fortifications in Scotland*, p. 368, fig. 130, illustrates some rather different rectangular enclosures with not dissimilar tails; also p. 367, fig. 129. They are doubtless shielings of one kind or another.

thoroughly explored, and this entailed the mastery of the peat by vast cuttings, totalling almost two miles in length. The cutting and embanking is comparable with work upon a railway line, and from this a third point follows. The scale of the work is so vast that it would require labour beyond the resources of a local undertaking in any age.

When the full significance of these three points is realised it will be apparent that the double skill, in choice of course and use of materials, and the ample resources of labour are typical of one period alone before the rediscovery of road engineering in the eighteenth century, that is, the Roman Age. In short, a detailed study of the engineering of the line makes it possible to agree with Hardie's suggestion¹ that the original Craikmuir Road was Roman, since it reveals that the line was originally occupied by an engineered road whose magnitude and boldness of conception is in every way worthy of the Roman genius.

It may now be asked how far analogies for this type of construction are forthcoming from Roman roads. The local conditions impose, first, the use of rock as the road surface. This is matched upon Dere Street² at Shibden Edge, upon Blackstone Edge³ in Rag Sapling Clough, and upon Sarn Helen⁴ south of Caer Llugwy. Examples could be multiplied, but one more may be cited, because it belongs to the Queen of Roman roads, the Via Appia itself. On the rocky hillsides,⁵ south of the *pons Aricinus* and south of Terracina, this greatest of Roman roads used the living rock as its surface where the natural formation was suitable. The second condition, imposed by local vegetation, is the need for the cuttings through the peat. This is matched upon Blackstone Edge,⁶ where, from the summit to Rag Sapling Clough in Yorkshire, a distance of some 1400 yards, and from the summit to the Halifax road in Lancashire, about 1000 yards, very similar cuttings, through peat of much the same depth, permit the Roman pavement there to be laid upon a firm bottom of gritty sand. But Roman roads through peat mosses are much rarer than Roman roads on rock; they have been little studied and other analogies are not to hand. For example, the Roman road between Castleshaw and Slack, which undoubtedly crossed⁷ the deep peat beds of Standedge, is now so deeply buried in the accumulated cotton-grass of Featherbed Moss that no estimate of the original arrangement is possible. The principle of the use of the cutting in these conditions is, however, firmly established by its employment upon Blackstone Edge. One common feature of Roman roads is notably absent. There are no quarry pits⁸ along

¹ Hardie, *op. cit.*, p. 48.

² Personal observation: a detailed account of this road will appear in *R.C.A.H.M., Roxburghshire*.

³ *Trans. Rochdale Lit. and Sci. Soc.*, vol. xv. (1925), p. 53; *Huddersfield in Roman Times*, p. 89.

⁴ J. P. Hall, *Caer Llugwy* (1920), Appendix.

⁵ Personal observation.

⁶ *Huddersfield in Roman Times*, p. 88, fig. 55.

⁷ The road is plain as far as the shoulder of Standedge, above Castleshaw, and is next known for certain north of Slack.

⁸ Cf. *Proc. Soc. Ant. Scot.*, vol. lxxix. p. 172.

the course of the road, as so frequently along other Roman roads of Scotland. Their absence, as already explained, is due to the local geology. But it is interesting to observe an instructive parallel from Dere Street of the abandonment of normal construction and methods owing to scarcity of stone. Between Foulplay Head and Harden Edge, south of the Coquet, the course of Dere Street lies for a mile or more over a slightly dished plateau covered with shaly clay, where no outcrop of stone occurs. In this sector there are no quarry pits: using only the material immediately to hand, the constructors have reared a great *agger* of the local clay, 3 feet high and 28 feet wide, and have surfaced it, when beaten hard, with a thin skin of the broken shale. These conditions¹ were noted by the writer in 1945, during the cutting of a modern military road through the ancient mound, but it is not the first time that they have been seen, for General Roy, in his wisdom, records this kind of mound as an uncommon type² of construction. As he observes, it is a concession to local conditions. It is valuable as showing how far from the normal construction, with heavy bottoming and gravelled cambered top, a Roman road might deviate. In its own way, this deviation from the normal on Dere Street is as great as that upon the Craikmuir road, though the different local conditions produce a wide difference in kind.

Finally, we may return to the general significance of the road. First, there is no doubt as to its ultimate objective. Just as Dere Street, having crossed the Cheviot, sets its course, with intermediate concessions to local configuration, upon the Eildons, so does the Craikmuir road. Both are converging upon *Trimontium*, the largest fort in Roman Scotland and the pivot and centre of the road network behind the Antonine Wall. The Ingliston milestone,³ from west of Cramond, which is measured from *Trimontium*, emphasises this nodal aspect of the site. The function of our road is thus presumably to link the south-west with *Trimontium*, and the lonely site at Raeburnfoot falls into place as an intermediate fort or fortlet along it. Having regard to the siting of Raeburnfoot, and the fact that it watches not only the Rae Burn valley but a gap by which there is an easy approach to Eskdale from the southwest, there can be little doubt that the road once ran across the dale to join the main north and south road somewhere near Lockerbie, at the foot of Dryfedale. But at this point in our inquiry the old tradition of a Roman road penetrating Eskdale itself from Netherby and the south must be recalled. The strategical function of Netherby is a double one, to watch both Eskdale and Liddesdale. If it was thought necessary to continue the authenticated line of Roman road beyond Netherby and so to link the great strategic road-centre of Carlisle or Stanwix

¹ More recently, the same conditions have been observed by the writer on Dere Street south of Soutra Aisle, the *agger* being derived from a broad cutting on the uphill side of the road.

² Roy, *Military Antiquities*, p. 108: the third category in his description of types.

³ *C.I.L.*, vol. vii. p. 1085; *E.E.*, vol. ix. p. 620. The last line of the text reads *{Tri}monti m(ilia) p(assuum)*. . . . For the construction, see *E.E.*, vol. ix. p. 1253.

with that of *Trimontium*, there were two ways of doing this. The modern lines of communication choose Liddesdale: but both railway and roads become involved in very difficult and heavy engineering in doing so, taking circuitous valley routes or using narrow defiles of a kind unwelcome to the Roman engineer. Nor is there any tradition of a Roman road along this route. The alternative line is by lower Eskdale, where there is both a tradition and some actual evidence of Roman penetration, and beyond which we have now discovered the cross-route traversing the central massif. This route, unlike the modern roads farther south, does not occupy defiles, but seizes the one point where it is possible to engineer a straight and uninterrupted course across the mountains. The discovery must originally have been the result of a detailed and able reconnaissance of the area, and its value was very great; for it gave to the Romans the most southerly cross-link between east and west yet discovered to north of the Tyne-Solway line. It would be not unnatural to have linked Netherby with this cross-route by a direct road up the valley of the Esk, thus providing the most direct communication possible between the major strategical centres of Carlisle and Newstead.