OUTER HOUSE, COURT OF SESSION

OPINION OF LORD CARLOWAY

in the cause

RHUAIRIDH MACKENZIE, (AP),

Pursuer;

A291/00

against

PERTH & KINROSS COUNCIL and others

Defenders:

Pursuer: J Mitchell QC, Hammond; Balfour & Manson (for M. Hodge & Son, Blairgowrie)

Defenders: A Smith QC, Milligan; The Reid Cooper Partnership

22 January 2003

1. MERITS

(a) The Pleadings and the Issues

[1]It is agreed that on or about 18th September 1997 the pursuer lost control of his Honda motorcycle, when riding it along the A924 Bridge of Cally to Kirkmichael Road, and collided with road works. According to his pleadings, the pursuer had been riding in a north westerly direction towards Kirkmichael at about 4.30 p.m. The works were being executed by the defenders' workmen on a relatively straight stretch of road about eighty metres north west of the access road to Tomlea Farm. They involved the laying of drains under the road surface and the reinstatement of that surface after excavation. The workmen had gone away for the day leaving a number of signs, including cones, warning signs, and traffic lights relative to the works, notably in connection with the narrowing of the road to one lane located in the southbound part of the carriageway.

[2]The pursuer avers that he rounded a bend situated about eighty metres before the works. He was driving at between 25 and 30 mph. He changed down through his gears when saw the works, albeit that, according to his averments, the traffic lights governing the passage of traffic northwards though the works were at green. There was a car in front of the pursuer, about three or four car lengths distant. At this point, the pursuer became aware of dirt and gravel on the road surface and the existence of steel plates located across the road. He continues:

"[The pursuer] saw the plates move as the car in front went over them, leaving an obvious hole between the two plates. The plates had not been secured in place with bituminous macadam to form a ramp. There was no sign to warn motorists of the presence of the plates. There was no "ramp" sign in place. The pursuer braked to avoid going in to the hole, and as he did so, he skidded on the loose and unstable road surface, and lost control of the motorcycle, which toppled over, slid a distance along the roadway and collided with a parked road roller."

The pursuer goes on to plead that: the road roller was in a safety zone which should have been clear of obstructions; the barriers at the works were in the wrong place; and the signs at the works did not conform with those in Chapter 8 of the Traffic Signs Manual. His specific grounds of fault are that: (1) the defenders

should not have left dirt and gravel on the road surface; (2) the steel plates should have been secured, as was the normal practice, by bitumen to prevent slipping; (3) there ought to have been signs warning of the existence of the plates; (4) the road roller should not have been where it was; (5) the barriers should have correctly positioned; and (6) the signs should have complied with the Manual. In submissions, the pursuer did not insist upon any separate statutory case based upon the averments concerning section 60 of the Roads (Scotland) Act 1984 as set out in article four of his condescendence.

[3]The defenders do not admit the reason for the pursuer losing control of his motorcycle and colliding with the works. Upon record, they deny that the works were being carried out by their workmen. They deny the existence of steel plates across the road. They deny even the presence of the road roller. These denials are at best unfortunate since they relate to averments clearly within the knowledge of the defenders and it was never in dispute at the proof, nor indeed is there any reason to suppose that it could ever have been contested that: the works were being executed by the defenders' workmen; these workmen had positioned steel plates across the road; and the workmen had also left the road roller in the position averred by the pursuer. Indeed, as will be seen, all of these matters were covered in a report and sketch completed by a Mr Ian Parley (see below) submitted to the defenders' insurers at an early stage. Although the defenders also deny all of the pursuer's averments regarding road signs, notably in relation to warnings of the presence of the metal plates, they proceed to provide their own version about the existence of signs on site. The signs they aver were in place were triangles warning of the works, the traffic lights and the narrowing of the road. Of some remark, however, is the absence of any averment in this context of any signs warning of the metal plates such as, as will be explored in some detail later, "RAMP" and "RAMP AHEAD" signs. The defenders maintain that the road surface was not left in a dangerous condition but they do not positively state whether there was a hole in the road surface beneath the plates or not. This is again unfortunate since the pursuer, and perhaps his experts and advisers too, seemed to have had the impression at the start of the proof that such a hole did exist. Had the defenders made their position clear at the outset that, beneath the plates, there was a trench infilled to surface level then a great deal of effort and speculation might have been avoided. The defenders go on to say that the pursuer was going too fast at between 40 and 47 mph. In pleading both sole fault and contributory negligence, the defenders aver that the pursuer ought to have realised that he was riding through works. He ought therefore to have been riding at such a speed as would have enabled him to deal with any exigencies. He ought also to have kept at a safe distance behind any car so as to be able to react to any hazards.

[4]The issues are then: (1) what was the state of the road and the works at the time of the accident? This involves consideration of: (i) the signs in place; (ii) the metal plates; (iii) the road surface; and (iv) the road roller; (2) what state ought the works to have been in? This will also require consideration of the four numbered points (i) to (iv); (3) how did the accident happen, that is to say, what caused the pursuer to lose control of his motorcycle; and (4) where does the resolution of these factual matters leave the issues of: (i) negligence on the part of the defenders; and (ii) contributory negligence on the part of the pursuer?

(b) The Actual State of the Road and Works

[5]The general location of the accident is shown on an extract from an Ordinance Survey map [Pro 6/8]. A scale drawing of the configuration of the road, as it is now, was also produced [Pro 6/7]. The map and drawing were prepared by Mr Peter Sorton (see below). In terms of the joint minute, it is agreed that number 6/2 of process is a book of photographs taken by an officer from Tayside Police on the evening of the accident. Photograph 8 is a view looking south from the accident site showing the bend around which the pursuer travelled. On the right of this photograph there can be seen a pile of road signs including a rectangular one with a red background and the word "RAMP" in white lettering. Mr Sorton's evidence that a driver coming from the south would have an unobstructed view of the works for in excess of 100 metres was not in dispute [see the view in Pro 6/6 photograph 3].

(i) THE PURSUER'S ACCOUNT

[6]The pursuer was the first person to speak to the state of the road which greeted him as he rounded the bend. This he said was accurately depicted in photograph 1 of the Tayside Police photographs lodged by the pursuer [Pro 6/2]. This photograph is the same as one in a bundle, containing mostly, but not exclusively, the same photographs lodged by the defenders [Pro 7/1 photograph B]. The location of the photographer, determined by Mr Sorton as roughly the same as that in one of his photographs [Pro 6/6 photograph 4], is about 50 metres to the south of the metal plates (see below). Photograph 1 [Pro 6/2] shows a bright sunny day with long dark shadows of trees cast across the carriageway. There was a repaired area of road on the pursuer's left as he approached the works from the south. Also on his left, there was a rectangular red sign inscribed with the legend: "WHEN RED LIGHT SHOWS WAIT HERE" in white lettering. Further on there was a square white sign with a blue circle containing a white arrow directing traffic into the southbound lane at the point where the traffic lights were located and the carriageway narrowed to a single lane. There were no signs warning of a ramp. On the narrowed carriageway beyond the lights, as shown on photograph 1, were metal plates which had been placed to cover an area where drains had been laid in a trench running at a 45 degree angle diagonally across the road. The photograph shows traffic cones placed on the right hand side of the road where the trench ended. The plates were offset, with the left hand one extending further to the south. This was because of the angle of the drain across the road. The precise positioning can be seen in photograph 2. Photograph 5 is an even closer view of the plates and, according to the pursuer, shows a hole in the road at the left hand corner of the southern edge of the right hand plate. Running along the left hand side of the road, as seen in photograph 2, was an area where the road surface had been removed and a trench excavated, with the trench then filled in but not re-surfaced to road level. It was in this area, beyond the plates, that the road roller sat.

[7]The pursuer said that in the vicinity of the works, the surface of the road was gritty. It was "like driving on marbles". He thought that this grit could be seen in the foreground of photograph 2 [Pro 6/2] and also in photograph 1[Pro 6/2] where a strip on the surface, running up the centre of the photograph, appears darker than the rest. He seemed to think that something solid had scraped the surface to create this. He said he could feel the grittiness, when riding his motorcycle, at a point beyond the "...WAIT HERE" sign. He was prepared to offer the view that the surface had not been swept or cleaned.

(ii) WITNESSES ON THE SCENE

[8]Mrs Gladys Ogilvie (aged 59), who knew the pursuer, was the first witness on the scene who gave evidence. She recalled that she was wearing flimsy sandals when she ran towards the accident scene, having been flagged down by Mr. Burgess (see below). She said that she felt the road rough and the presence of small stones getting into her sandals. After the pursuer had been removed by the ambulance, Mrs Ogilvie recalled looking at the plates and noting that there was an overlap of the right one over the left. She also recalled the police speaking of a hole under the plates. Mr. Andrew Duncan (42), a friend of the pursuer, described the road surface as very dirty. Looking at photograph 2 [Pro 6/2], he said that from the plates southwards to the bottom of the photograph there was quite a depth of gravel, being fill from the works. He accepted that he was present when the photographs were taken and that it was hard to imagine, from the photographs, just how the road was. His wife, Kim Duncan (44) said that there were bits of gravel on the road which was generally dirty.

(iii) THE POLICE

[9]PC Louise Hillman (36) was the first officer on the scene, along with PC Graham Thomson (29). They arrived at about 5.10pm, having received the call at Blairgowrie some twenty minutes earlier. According to PC Hillman, she took the photographs [Pro 6/2 and 7/1]. PC Hillman said there was a small amount of gravel on the south side of and on the plates, but not a concentrated band. The photographs accorded with what she saw at the scene, including the amount of gravel as shown in photograph 5 [Pro 6/2]. PC Hillman said that the ramp sign, shown lying in a pile at the side of the road in photograph 8 [Pro 6/2], was in that position at the time she arrived at the scene. There was no sign indicating the presence of a ramp on display to oncoming traffic.

[10]PC Brian Anderson (36) arrived at the scene later and thought that he had taken the photographs. He said that the ramp sign lying on the verge, again as seen in the photographs [Pro 7/1 photograph N; Pro 6/2 photograph 8], did not look as if it had been knocked over into that position but placed there. There were no ramp signs in place. There was no tar around the plates. PC Anderson was of the view that plates never sit evenly on a road surface but have a bit of a wobble. He stepped onto the plates and there was a slight rocking movement of one or both of them. He noticed some loose debris but not an excessive amount, only that consistent with the existence of the works. Had he seen a hole then he would have noted it. He did not think that the plates would cause damage to a motorcycle.

[11]PC Thomson spoke to there being some debris on the plates, dust and small stones similar to material used in re-instating roads. However, he said that this was no more than might have been anticipated with works and, if he had thought it had been excessive, he would have asked for the road to be swept. He did not think it was excessive. He took certain measurements at the scene, which he noted in his notebook and was able to refer to. These included that some 95 metres from the works there was a nearside hazard warning sign indicating "road narrows". The "...WAIT HERE" sign was some twelve metres from the arrow in photograph 1 [Pro 6/2], which was in turn 1.55 metres from the traffic lights. The north most edge of the left hand plate was 13.6 metres from the traffic lights, with that plate measuring 1.9 x 1.25 metres and the right one some 1.97 x 1.28 metres. PC Thomson said that he had walked across the plates to see if they were capable of movement. He could not move the plates at all. He did not have any safety concerns regarding the plates. When looking at photograph 5 [Pro 6/2], PC Thomson accepted that he could see a hole at the left south corner of the right hand plate, but said that he did not see a hole at the time. If he had seen one then he would have recorded it if it had been significant.

[12]PC Thomson's evidence ended the second day of the proof. On the morning of the third day, a preliminary matter was raised at counsel's request in chambers. This involved counsel for the defenders giving advance warning that he was going to seek to lodge a photograph taken the day after the accident [this later became Pro 7/8]. The reason for this was the evidence given by the pursuer and PC Thomson that photograph 5 [Pro 6/2] appeared to show a hole. However, when looking at the original, one reason for that appeared to be that someone had marked it with a line of ink from a ballpoint pen. It was certainly true that someone had so marked the original. I subsequently allowed the new production to be lodged late. As chance would have it, in between the two diets of proof, the original photographs [Pro 6/2] were lost altogether but the ball point line can still be made out in the copy I was later provided with. Upon being recalled at the second diet of proof and being shown the new production [Pro 7/8], PC Thomson accepted that there was no hole at all despite the impression he had gained earlier from looking at photograph 5 [Pro 6/2; Pro 7/1 photograph C].

(iv)THE ROADMEN

[13]James Murray (62) was the JCB digger operator for the defenders at the time of the works. His hours of work were 7.45 am to 3.45 pm. He explained that, at the time of the accident, the works had progressed for some weeks. The road was closed during the works but re-opened shortly before 4.00 pm when the traffic lights would come into operation. The procedures for opening included making sure that signs were in position and sweeping the road with a brush, if necessary. The execution of these preliminaries to re-opening was the foreman's responsibility. The works, as shown in photograph D [Pro 7/1; Pro 6/2 photograph 2], involved the digging of a trench on the left hand side, then laying a drain and infilling the trench with "Type 1" dust and stone, which would be compacted in layers. The infill would be to within 60 mm of the road surface, that depth subsequently being completed with two layers of tarmacadam and sealed with pitch. The road roller had been left in its position in the trench because it had not been possible to leave it in a field. It would have been fenced off using barriers and the trench should have been coned, but not fenced, off. The steel plates were laid using the digger, given their weight. Sometimes there would be tar placed around the plates to make them less of a ramp, to reduce the sharp edges and to stop them moving and banging about. They could move if vehicles went over them. Sometimes too, "RAMP" signs would be put up at the plates and "RAMP AHEAD" signs perhaps 10 to 15 yards distant. Although the plates ought to have been tarred, it

was obvious from the photographs that this had not been done. Mr Murray had off set the plates because of the angle of the trench across the road. This was done using the back bucket of the digger and chains around the plates. The plates were manhandled, lowered vertically and dropped into position.

[14]Andrew Downie (51) was a roadman who acted both as labourer and roller driver. He explained that the plates were put down on top of the Type 1 material which had, in turn, been placed around the concrete encasing the drainage pipe. The plates were to protect the not yet hardened concrete. The Type 1 had filled the trench to surface level and it was this that could be seen in the darker area in between the two plates as shown in the new photograph [Pro 7/8] (i.e. the area perceived as a hole by the pursuer). Mr Downie said that he had personally cleaned up on the afternoon of the accident using a hand brush. There would have been nothing left on the surface which could have caused a motorcycle any difficulties. What was shown as a dark strip in the photographs [Pro 6/2 photograph 1; Pro 7/1 photograph B] was not loose material, although there might be a few loose chips, but chips compacted into tarmacadam. Mr Downie did not consider that the plates could move and he had seen motorcycles going over them at speeds of 25 to 30 mph. Cold tar was normally put around the plates but there was no need here, as the plates were lying flat. In any event, it had not been available on site that day.

[15]Mr. Downie thought that there ought to have been "RAMP AHEAD" signs put up some 50-60 metres from the plates as this was standard procedure and it could be dangerous not to put them up. This had not been done, as there were none available on the day. He had, along with his co-employee Lindsay Cruickshank (who did not give evidence), put up "RAMP" signs on both the north and south sides of the plates. The southern sign was placed partly on the road and partly on the verge on the right hand side of the road [Pro 7/1 photograph B]. He considered that the road roller was in a safe position, having been coned off. His recollection was that the barriers had not surrounded the roller but only gone as far as squaring off at the drain access cover [Pro 7/1 photograph F].

[16]William Ross (59) was the chargehand who accepted responsibility for day-to-day site safety. He confirmed what Mr Downie had said about what was underneath the plates and why. There was no tar put around the plates, as they were lying flat. He would have put tar down if the plates had been, as they could be, wobbly or dodgy, but there was no tar on site. When he was initially asked what signs would be put up at the site, he made no mention of "RAMP" signs, but did make reference to those that were otherwise in place. However, he went on to say that he was sure that he had instructed that "RAMP" signs be put up as it was dangerous not to do so. "RAMP AHEAD" signs had not been put up because there were none on site. He maintained that he had never been formally told about the need to put "RAMP AHEAD" signs up, although he had used them on other sites. Barriers had been placed to a point past the drain access cover with cones placed beyond that to the traffic lights. He also said that the road surface had been brushed before the plates had been put down.

[17]Ian Parley (52) was the project agent and depot manager. He was in charge of the works but had been so only for a few days before the accident. He was called to the scene after the accident and arrived at about 6.30 pm, leaving about half an hour later after replacing the barriers and cones. He put up "RAMP" signs, accepting that there was no indication that these had been in position earlier. He did not think about putting up "RAMP AHEAD" signs although he accepted that this would be normal since a "RAMP" sign was not enough. However, there were no "RAMP AHEAD" signs on site. Mr Parley also moved the roller at the suggestion of the police, which he agreed, in retrospect, was a sensible thing to do. He too confirmed that the plates covered a trench infilled with Type 1 material. He agreed that plates could move up and down but he checked the plates and found no such movement. He did not see significant quantities of loose material at the site. Had he done so, he would have arranged for it to be swept. The dark area on the surface of the southern approach to the site [Pro 7/1 photograph B; Pro 6/2 photograph 1] was simply a raised surface of dressing chips which had not been compacted into the surface.

(v) THE EXPERTS

[18]Mr Sorton gave evidence relative to the quantity of material on the road surface purely from an examination of the photographs. He said that photographs 1, 3 and 4 [Pro 6/2] showed a "moderate" quantity of loose material and that there was a "fair quantity" in photograph C [Pro 7/1 - Pro 6/2 photograph 5]. He used other descriptions of amounts in photographs B [Pro 7/1 - Pro 6/2 photograph 1] and D [Pro 7/1 - Pro 6/2 photograph 2]. He did accept, however, that the dark line in the road surface [Pro 6/2 photograph1; Pro 7/1 photograph D] was simply an area of rough road surface rather than one showing loose material.

(vi) ANALYSIS AND CONCLUSIONS

(a) the signs

[19]It is true that the police involvement with the incident was limited in the sense that they regarded it as a one-vehicle crash, as a result of which no persons would be charged. PC Hillman did not make notes at the time. However, I do not accept the defenders' submission that the police were "not interested" in what had happened. The incident was sufficiently serious to justify the instruction of photographs and certain measurements. Both were taken. PC Hillman's memory of her involvement seemed reasonably good. She appeared to give her evidence in an objective and balanced manner, freely acknowledging that she did not remember everything. This was the only motorcycle accident she had been involved in. I accept her evidence of what she did remember as credible and reliable. This includes the fact that the scene, which she encountered shortly after the accident, was, in relation to the positioning of the warning signs, as shown in the photographs [Pro 6/2]. The "RAMP" sign was not positioned in view of motorists but piled up at the side of the road as shown in photograph 8 [Pro 6/2]. Given PC Hillman's early arrival of the scene, in the absence of any evidence to the contrary, I have no reason to suppose that this sign had been moved after the accident and, in particular, that it had been moved having been involved in some way in the accident. I accept that there was no other sign in place warning of a ramp. I also accept PC Anderson' s evidence to that effect and indeed that of Mr Parley, both of whom also arrived on the scene not long after the accident had occurred. Indeed, Mr Parley's evidence (about which generally see below) was that he had put the "RAMP" signs up himself before leaving the site after the accident.

[20]I do not accept Mr Downie's evidence that he had placed "RAMP" signs at the plates. Perhaps he was confusing having done so on this occasion with previous days or perhaps he was concerned about what might have happened as a result of the failure to position them. In any event, his evidence was not consistent with the objective findings of those arriving at the scene immediately after the accident and I preferred that evidence. There was an odd passage in Mr Downie's evidence, when he seemed to be saying that he could see part of a ramp sign in photograph 2 [Pro 6/2] to the left of the persons sitting on the wall, i.e. perhaps obliquely suggesting that a ramp sign south of the plates had been knocked over the wall. However, as he later accepted, what he was seeing was clearly part of a barrier. This passage did suggest that Mr Downie was clutching at straws somewhat on this aspect of his evidence. I do accept Mr Downie when he said that no "RAMP AHEAD" signs were in position and that this was because, so far as the workmen on site were concerned, there were no such signs available on site. For similar reasons, I reject Mr Ross' evidence on whether "RAMP" were put up and also accept his evidence on why "RAMP AHEAD" signs were not in place, namely that there were none on site. However, as the person responsible for on-site safety, he had either, as he said, not been told to put such signs up or failed to obtain such signs from the depot, as he might have done. Ultimately, no one maintained that there had been any "RAMP AHEAD" signs in place and no contrary contention was put forward in submissions.

[21]I accept the evidence of the roadmen that part of the northbound lane of the carriageway was cordoned off by barriers. This was no doubt because the excavation there had not been infilled [see e.g. Pro 6/2 photograph 3]. These barriers would have squared off and gone beyond the drain access cover [Pro 6/2 photograph 4]. From there southwards, the infilled (but not surfaced) trench and road roller were simply coned off down to the traffic lights.

(b) the metal plates

[22]There was no dispute at the proof that the plates were in the positions illustrated by the photographs. I accept the evidence of the various roadmen that the plates covered a trench filled to road surface level with Type 1 infill. There was no hole or gap in the road surface albeit that the surface had not, on top of the Type 1, been made up with tarmacadam. Ultimately, this was not disputed by the pursuer by the time of submissions. The plates did not completely cover all of the Type 1. Where the plates met, there was a triangular area on the south side of the right hand plate where the Type 1 material was not covered (see especially photograph Pro 7/8). This area was of a noticeably darker colour to the rest of the surface and might have given the appearance of a hole or gap to a motorist driving from the south, especially given the light and shadow cast through the trees.

[23]I accept the evidence of PC Anderson that the plates were capable of movement. No doubt PC Thomson, and perhaps Mr Parley, had failed to move them when they stood on them, but others succeeded and such success illustrates that such movement could occur in the event of a vehicle, including a car, crossing them. The movement would be possible where one or more of the edges, especially the corners, of the plates did not rest upon an even surface. The surface upon which the plates rested was not even. For example, there is the unmade up surface of Type 1 on the left south corner of the right plate where the pursuer thought he saw a hole. This material would have moved under compression and a gap would exist between its compacted surface and the undersurface of the plate. There is also a broken area at the left north corner of the same plate [see Pro 6/2 photograph 5]. It was sometimes not clear what the witnesses were meaning when they said that the plates could not move. Sometimes they were meaning horizontal movement across the road surface. I accept that there would not be much, if any, movement of that type. But there could well have been vertical movement of one or other of the plates of the type described by the pursuer and I accept that this is what did occur (see below).

[24]There was no cold tar surrounding the plates as there might have been. The reason for this was not that the roadmen might not have seen the desirability for it as a method of reducing the sharpness of the plates' vertical edges and of preventing horizontal creep, but that there was no tar on site. The roadmen were not to know, prior to laying them, whether the plates would have rested evenly on the road or not, yet most of them accepted that tarring would be appropriate, if they did not. Nevertheless, no tar was brought to the site, as it could easily have been, and its absence was the reason why it was not used. It should have been, but not to prevent vertical movement of the plates. Placing cold tar around the plates may well have stopped or significantly retarded the potential for horizontal movement. It would also have prevented or reduced hazardous contact between vehicles and the vertical faces of the plates, especially if a plate was slightly raised at an edge. However, it would not have prevented vertical movement caused by the weight of a vehicle, if such movement was otherwise possible. It would not, in short, have acted as some form of glue sticking a plate to the surface of the road so as to resist the weight and consequent pressure of a vehicle, such as a heavy lorry.

(c) the road surface

[25]Although there was some loose debris on the road surface, I do not consider that this was significant generally or specifically in terms of being capable of having any material effect on the road holding or handling of a motorcycle. In relation to the amount of debris, I accept the evidence of PC Hillman, for the reasons which I have already given. Her evidence was that there was only a small amount of gravel to the south of and on the plates. I also accept the evidence of PC Thomson to similar effect. He seemed to give his evidence in an equally balanced manner and had a reasonable recollection of events. I am satisfied that, if there had been an excess of loose material on the surface, he would have had the area swept. Mr Parley's evidence, which I also accept (see below), was to the same effect. This evidence appears to be illustrated by what was described in the photographs.

[26]For reasons which I will expand upon later, I do not find the pursuer an entirely reliable historian in relation to the circumstances of his accident. One aspect of this is that I do not accept that, when approaching the plates, he could feel a loose road surface under his tyres. The pursuer's version of the road as a surface

covered in marbles was clearly exaggerated. No such excessive amount of loose material was present on the surface. It is not shown in either photograph 1 or 2 [Pro 6/2]. These photographs simply show a darkened area where the centre of a carriageway has an area of raised chips, where these have not been compressed completely into the tarmacadam by the tyres of vehicles over time. The pursuer's account of loose material appeared constructed from a misapprehension of what appears in the photographs. In any event, I also do not consider that the presence of any loose material of the quantity present could have played any part in the pursuer's loss of control of his motorcycle.

[27]Mr Duncan said that the road surface was very dirty and that may be correct. However, I do not accept his evidence that there was a depth of gravel on that surface. One reason for this is simply that I did not accept that any significant amount of loose gravel is depicted in the photographs, which were taken at the same time as Mr Duncan was viewing the scene. As Mr Duncan said, it is hard to imagine the surface material as he had described it, from looking at what was shown in the photographs. I agree with that and I am indeed unable to stretch my imagination that distance. Mrs Duncan's description of the road as generally dirty, with bits of gravel on its surface, is no doubt correct, but that is a far cry from saying that there was an amount of gravel or dirt significant or material enough to influence the road holding of a motorcycle.

[28]I do not find Mrs Ogilvie a reliable witness on matters such as the road surface. Some of the reasons for my view will be given later in relation to the pursuer's speed. Specifically on this matter, however, she was of the view that there was an overlap between the plates. There is no other evidence to this effect and I consider that her impression was mistaken. I also think it likely that she was mistaken in thinking that the police were discussing a hole under the plates, because there was clearly no such hole. I do not doubt that there was some gravel on the road and perhaps some of it got into her sandals, but again I do not think that the amount of gravel was of significance. No doubt Mrs Ogilvie was concentrating much more upon the state of the pursuer than on the surrounding ground conditions, and rightly so. Although reliable in her dealings with the pursuer at the accident scene, I do not find her reliable on the material elements of these conditions.

[29]In relation to the experts, Mr Sorton was giving evidence on quantities of loose material from the photographs. It is difficult, if not impossible, to gain any firm impression of a substantial quantity of loose material from the photographs, none of which seem to have been taken to illustrate loose material. I prefer the evidence of the police, who saw the surface at the time, to that gained purely from photographs. On this matter, I also accept the evidence of Mr Downie that he swept the area before the road was re-opened that evening. As Mr Ross said, the sweeping would be done prior to the placement of the plates. Had it not been done at that time then it would, no doubt, have been more difficult to lay the plates reasonably flat. Just how far in terms of distance southwards Mr Downie might have swept is perhaps less than clear, but I am satisfied that the road surface was left reasonably clear of debris.

(d) the road roller

[30]Despite the defenders' position on record, it was not ultimately disputed that the road roller had been left as shown in the photographs, a short distance (3-4 metres) from the plates. It was also not disputed that the pursuer came to rest having come off his motorcycle and hit the road roller.

(c) The State the road and works ought to have been in.

[31]Peter Sorton (aged 50), a consultant engaged in the investigation and reconstruction of road traffic accidents, spoke to his reports [Pro 6/5 and 6/28]. He referred to Chapter 8 Volume One of the Traffic Signs Manual - Traffic Safety Measures and Signs for Road Works and Temporary Situations 1991 [Pro 6/9]. This, he said, was the Bible used by all local authorities to determine appropriate safety measures for works. It is a substantial volume and would not be on site but used to prepare the relevant drawings for those who were to carry out the work. In its introductory section the Manual states:

"1.1.2.4 The need to provide clear and early warning of any obstruction cannot be emphasised too strongly...it is important that highway authorities, statutory undertakers and contractors give due attention to

detail in order to ensure the safety of the public...It is essential for the safety of all concerned that uniform and consistent procedures should be adopted. This chapter is intended to provide a national standard of good practice for the signing and marking of obstructions as well as for the temporary traffic control necessitated by such obstructions of the highway. The standard described is a minimum which should always be achieved. At difficult sites, further signs and other equipment may be necessary.

1.1.2.5 This chapter sets out a code of practice to enable the legal requirements to be met in a wide variety of circumstances, although it has no statutory force... Nevertheless the need to adhere at all times to its provisions as a general standard of good practice cannot be stressed too strongly."

In terms of section 2, the work under consideration here was "Type A Works" (para 2.2.1). Section 3 deals with the application of signs and begins by stressing the importance of adequate advance warning [paras 3.1.1, 3.1.4]. Specifically under reference to the surface condition of a road, it continues:

"3.2.12.2 The 'RAMP AHEAD' sign...warns of a sudden change of road level, which the driver is approaching, and should be sited not less than 30m before the ramp. It must always be used in conjunction with the 'RAMP' sign...

3.2.12.3 The 'RAMP' sign...is used at the ramp...."

This section also stresses the importance of delineating works to indicate the limits of the carriageway [para 3.4.1]. Particular provisions are stipulated for Type A works in section 4 and these include the need to adhere to the layouts which are provided in Volume Two of Chapter 8 [para 4.1.3]. There are particular layouts provided where portable traffic lights are involved. One of these involves a cable crossing a road and associated cover. Since that needs a "RAMP" sign, Mr Sorton considered that it was a useful illustration of what was required in the relatively rare case of plates being employed. This is Layout 10 [attached as part of Pro 6/9], where the critical distance is 30 metres between the 'RAMP AHEAD' sign and the hazard (in the case of the Layout, that being the cable cover). Mr Sorton was of the view that the absence of such a sign was important in this case particularly as the pursuer would not be warned of any hazard on the open lane, yet might find it difficult to see the hazard given the light and shadow across that lane.

[32]Mr Sorton thought that the positioning of the road roller on site, thus creating a heavy obstruction on the carriageway, created a danger. He also considered that the plates ought to have been surrounded by bitumen and that, at least without bitumen, they created a risk of puncture or even wheel damage. A bitumen surround would also prevent the plates from "creeping" horizontally along the road and potentially exposing what they were intended to cover. He thought that the plates were poorly positioned in that the gap between the two plates was capable of "tracking" a motorcycle wheel, this being, of itself, a potential hazard.

[33]Mr Alexander (see below) did not dispute that "RAMP" and "RAMP AHEAD" signs ought to have been in place but ventured to suggest that a ramp sign and perhaps also debris had been cleared away at the time of the accident, either by the events of it or to allow emergency vehicle access. He was happy with the positioning of the roller even if it was less than ideal. He made no significant mention of grit on the road or tarring the plates in his report. Mr Parley did not think that there was any need to put tar around the plates unless they were on an uneven surface. He accepted that tarring was normally done to bed the plates and provide a ramp up onto them. The views of the workmen on site relative to the use of tar have already been noted.

[34]I am of the view that there ought, in terms of the manual, to have been a "RAMP AHEAD" at least 30 metres before the plates and a "RAMP" sign at the plates themselves. This much was not disputed in submissions. Having regard to the particular circumstances of the works in this case, notably: (1) the nature of the ramp, being metal plates rather than a simple cable cover of the type illustrated in Layout 10; and (2) the prospect of stationery cars obscuring any "RAMP AHEAD" sign if placed at the minimum distance, the 30 metre dimension mentioned in Chapter 8 is very much a bare minimum. Mr Downie's view, that it ought to have been located at a distance of 50 to 60 metres, may represent a better approach. The metal plates ought

to have been surrounded with bitumen to reduce the level of ramp and to prevent the plates "creeping" horizontally across the road. As was also not disputed in submissions, the road surface ought to have been left free of any loose or slippery material which might pose a danger to motorists, including motorcyclists. The road roller ought not to have been left in the closed off part of the carriageway. In that regard, I accept Mr Sorton's view, to some extent supported by Mr Parley, that it posed a danger to those using the carriageway (see below). In so far as Mr Alexander and certain of the workman disagreed, I reject their evidence as failing to appreciate an obvious potential danger. Of course, there may be many fixed objects along a roadside (such as lamp posts), which require to be there. The placing of something substantial in the carriageway, albeit coned off, is a rather different matter where that positioning is entirely unnecessary.

(d) The cause of the Accident

(i) THE PURSUER'S ACCOUNT

[35]The pursuer lived at Steading Cottage, Meikleour, from where he worked as a farm labourer and stockman. Meikleour is some three miles south of Blairgowrie and fifteen miles or so north of Perth. According to the pursuer's evidence, he had bought the motorcycle, a 600 cc machine, following the break-up of his marriage, some six months before the accident. He had been used to motorcycles before his marriage and had passed the full motorcycle test parts 1 and 2 in 1986. He had a "clean" driving licence. The day of the accident was bright and sunny. At about 4 o'clock, the pursuer had finished his work, operating a combine harvester. He decided to go for a run on his motorcycle. He took the A93 through Blairgowrie to Bridge of Cally and then up the A924 through Strathardle towards Kirkmichael. Although he had various friends and relations in the area, he had no fixed view of where he might end up. He was not under any time pressure and was simply touring about, having a look around to see how far the other farms had progressed with the harvest.

[36]According to the pursuer, he progressed northwards at between 40 and 45 mph, perhaps nearer the lower than the higher figure. As he came round the bend before the works, he could see the traffic lights with a white F registered Ford Sierra stationery at them. He was, at least by then, aware of the presence of works ahead. The lights were initially at red but changed to green and the Sierra moved off. The pursuer did not need to stop but just slow down and follow the Sierra through the lights and the narrowed section of carriageway. He began to do so. At this point, he had not seen the plates. However, he did so as the Sierra drove over them. As it did, the right hand plate moved ("bounced" or "rattled") to reveal, what the pursuer perceived to be, a gap or hole in the road surface in front of that plate. As noted above, this hole, he said, is seen in one of the photographs [Pro 6/2 photograph 5] at the left hand corner of the south edge of the right hand plate. When he first saw the plates and hole, he was only two or three car lengths behind the Sierra. His estimate, using the parameters of the courtroom, amounted to something less than seven metres from the hole at the point when he first noticed its existence. He could not tell whether the hole was two inches or three feet deep. He was headed straight for it. He anticipated that if he hit it, he would be "away". He also thought that the plates might damage his tyre or wheel so he panicked and braked. The specific reason for his braking was not only his perception of a hole but also his notion that the plates would cause him difficulty. The presence of the plates alone, at least in motion, would have caused him to brake suddenly. As he put it, on braking, his front wheel "disappeared". The motorcycle had gone down. The pursuer's illustration of his braking was to liken it to an emergency situation where, for example, a child had walked out in front of him. The pursuer's evidence upon the grittiness of the road surface has already been described.

[37]At the time of seeing the hole/plates and braking, the pursuer estimated his speed at not more than 25 to 30 mph. He thought that this speed was reasonable. In that regard, he was of the view that, having seen the signs warning of the works, he was entitled to take the stance that all potential hazards would be behind the coned off area. He assumed, therefore, that there would be no hazards in the open lane. The pursuer maintained that if there had been a sign saying "RAMP", of the type shown in the photographs or warning "RAMP AHEAD", then he would have slowed down to a crawl because he would not have known how big a ramp was involved. If he had so slowed down then he would not have had to brake so hard.

[38]The pursuer recalled that at the time of the accident, a Mr Ian Burgess had been working in his garden and had come to his assistance. The pursuer asked him to telephone an ambulance. He said that, at the time when he was lying on the road, he had asked the police arriving at the scene to check out the hole that he had seen.

[39]The pursuer spoke to the lack of damage to the motorcycle. The motorcycle is shown in photographs 6 and 7 [Pro 6/2] in a position where it was placed having been retrieved from its initial resting place on the other side of the road. It had: a dislodged rear numberplate; a damaged rear tail light; no glass remaining in the nearside wing mirror; little, if any, body damage on the offside; and only cosmetic damage on the nearside. The pursuer said that, if it had hit anything at speed, it would have sustained greater damage.

(ii) WITNESSES ON THE SCENE

[40]There was no evidence, other than that of the pursuer, concerning the existence or actions of a white Sierra. There was no evidence from the first person at the scene, the neighbour, Mr. Burgess, to whom the pursuer spoke. However, Mrs Ogilvie said that she had been driving northwards from Blairgowrie behind the pursuer. The pursuer had gone through a set of traffic lights governing a bridge some distance south of the accident site. Mrs Ogilvie had been stopped at these lights. She said that she had waited about five minutes before the lights signalled her to progress. Despite this long wait, she said that she had then seen the motorcycle in front of her again. She was driving in her "little old Fiesta" and kept pace with the motorcycle through and beyond Bridge of Cally albeit that, as she thought, this seemed strange. As Mrs Ogilvie rounded the bend at the scene of the accident, Mr Burgess, who was a retired person, was already running down the road towards her, flagging her down before heading into his house, presumably to telephone the ambulance. He did not re-appear at the scene. Mrs Ogilvie spoke to the pursuer and thought that he had said something about hitting something on the road. She thought that he had mentioned the plates.

[41]Mr Duncan spoke to arriving at the scene not long before the pursuer was taken away by the ambulance. He was asked to take the pursuer's motorcycle away. He spoke to seeing the motorcycle on the opposite side of the road from the pursuer, who was near the road roller. The motorcycle had come to rest just south of the section of fencing or gate on the right of the road as shown in photograph 4 [Pro 6/2]. He checked the motorcycle over. It had cosmetic damage only and he was able to drive it away.

(iii) THE POLICE

[42]PC Hillman said that she spoke to the pursuer at the scene. According to her recollection, he could not remember what had happened. Indeed, he had said that he did not know how the accident had happened, that is to say how he came to lose control of the motorcycle. He did say, however, that he had not been going very fast. He may have mentioned metal plates, but she did not recall that. There were scrape marks on the left hand plate and for two to three metres to the south of it as shown on photograph 2 [Pro 6/2]. The pursuer was lying on the ground, having come to rest at the road roller, which was positioned as shown in the photographs.

[43]PC Thomson's measurements did not include the length of the scrape marks to the south of the plates as he did not think that of relevance at the time. He did say that the motorcycle was found on the right side of the road near the section of fence shown in photographs 3 and 4 [Pro 6/2]. Photograph L [Pro 7/1] showed this fence with a small piece of red and white debris possibly from the motorcycle in the centre at the bottom of the photograph. The distance from the mark on the verge at this point to the north edge of the right hand plate measured 17.8 metres. In relation to the marks on the plates shown in photograph 5 [Pro 6/2], the black and white marks could have come from the fairing and handle bar grip. The two blue marks could also have come from the fairing and the red mark from the lower fairing, with scoring from the footrest.

[44]I should add at this point that the only objection insisted upon at submissions was one taken by counsel for the pursuer during the course of the cross-examination of PC Thomson. PC Thomson had ended his examination-in-chief by saying that he did not recall speaking to the pursuer at the scene. At the start of

cross-examination, he said that he did speak to the pursuer some months later, when he appeared in his "halo" brace (see below) at Blairgowrie police station asking to see PC Hillman. The objection was taken to anything that the pursuer might have said to PC Hillman at that time. I allowed the evidence under reservation of all questions of competency and relevancy. PC Thomson said that PC Hillman had asked the pursuer what had happened and he had said that he had little recollection of what had happened. The line was not then pursued further by counsel for the defenders. In submissions, the pursuer argued that the evidence should not be admitted since the statement had not been put either to the pursuer or PC Hillman and it was thus not fair to adduce it from PC Thomson. The defenders maintained that such failures were only matters for comment and, whilst they might go to weight, did not prevent the evidence from being admissible. In my view, whether evidence of this type should be admitted or not depends on the circumstances. It might be admitted subject to comment and, indeed, this is the approach I would have taken had there simply been an omission to put it to PC Hillman. However, if the adducing of the evidence becomes what the Court considers to be unfair because it has not been put to the pursuer then the correct course may be to exclude it altogether. In this case, I do consider that it would be unfair to admit this evidence, it not having been put to the pursuer for his comment. Even although the pursuer was actually recalled after this evidence had been admitted subject to competency and relevancy, this matter was still not put to him. I will therefore sustain the pursuer's objection to this evidence and exclude it from consideration.

[45]PC Anderson commented that anyone approaching road works ought to anticipate that there may be a problem, including that the road surface may not be in a good condition. Speed should be adjusted in any event as any hazard beyond a road works sign should not come as a surprise.

(iv) THE PROJECT AGENT

[46]Mr Parley said that he had noticed the scrape or score marks when he first went on site. The following day, he returned to the site and took measurements. He then went to his office and completed a report for the defenders' insurers [Pro 7/3]. Attached to the report was a sketch of the works, as Mr Parley understood them, at the time of the accident, but also showing where the motorcycle had come to rest. This he assessed by reference to a motorcycle tyre mark on the grass verge, which was in a similar location to the resting place of the motorcycle spoken to by the witnesses first on the scene. The sketch then noted measurements taken by Mr Parley, including a distance of 13 metres from the motorcycle to the roller, 8 metres from the roller to the plates and 16 metres from the plates to the traffic lights. Also marked on the sketch were what Mr Parley described as "chainages". These were metre distances. At a point marked as about 20 metres south of the plates and somewhere between the "...WAIT HERE" sign and the traffic lights was "chainage 50". On the sketch, Mr Parley noted "*WHAT APPEARS TO BE SKID MARK STARTED AT CHAINAGE 50*". Mr Parley explained that he had tried to work out where the scrape marks had started. Next to the large obvious single unbroken scrape mark running south from the plates ran another parallel broken scrape mark. This, he said, could be seen in the photographs running to the bottom of photograph D [Pro 7/1; Pro 6/2 photograph 2]. He recalled that the double, or parallel, scrape marks extended some 15 to 16 metres. Further south and forming an extension of these was a further 7 or 8 metres of single skid mark. This skid mark was not black, of the type obtained where surface tarmacadam is melted, but Mr Parley still thought it had been caused by a tyre, perhaps as a result of dislodging chips fixed in but proud of the tarmacadam surface, although he accepted that this was speculation on his part. The skid mark started in the midline of the open carriageway and started to veer left.

(v) THE EXPERTS

[47]Mr. Sorton was of the view that plates could "bounce" if a vehicle went over them. They would have a ripple or wobble in them. He did not think that the plates would be conspicuous, albeit that they would be visible, from 50 metres away (the position of the photographer in Pro 7/1 photograph B, Pro 6/2 photograph 1). After looking at the new photograph [Pro 7/8], he agreed that the area perceived by the pursuer as a hole was an area of infilled Type 1 material without surface tarmacadam. Mr Sorton thought that from the time of realisation of the existence of a hazard to the application of the brakes (reaction time) would be more than the

Highway Code minimum for motorists of 0.68 seconds, but possibly as low as 0.75 seconds if the pursuer had been alert when going through the works. If it was as much as one second and he was travelling at 30 mph, the travel distance would be 13.41 metres.

[48]There was much analysis of what speed the pursuer might have been doing at the point when the motorcycle hit the ground, based upon a scientific formula. In order to apply this formula, it is first necessary to select a figure to represent the co-efficient of friction between the motorcycle and the road surface. Mr Sorton took a range of 0.35 to 0.55 for this purpose although a range of 0.15 to 0.7 was possible depending on the condition of the road surface (0.15 applying, for example, if there was ice). The figures were derived from empirical research and Mr Sorton appended two papers to his supplementary report [Pro 6/28], namely *Lambourn: Motorcycle Speeds and Sliding Distances* 1991 IMPACT 18; and *Foster and others: Motor Cycle Test Results* 1996. The figures were produced from tests, which involved dropping a motorcycle at speed onto a road surface from a specially devised trailer and seeing how far it would slide freely across the surface until coming to rest. Secondly, it is necessary to ascertain the distance slid freely by the motorcycle. After a false start in his first report, when he had been under the impression that the slide distance was as low as 10 metres, Mr Sorton took that distance to be about 23 metres, being the total of: (a) three metres to the south of the plates (his estimate of the scrape mark from the photographs); (b) the length of the plates (almost 2 metres); and (c) PC Thomson's distance from the plates to the motorcycle of 17.8 metres. In making his calculation, Mr Sorton was assuming that the motorcycle had not struck anything, to any significant extent, during its slide. In making the erroneous calculations in his first report, the laser copies of the photographs provided to him had not shown up the apparently heavy gouge marks which can be seen in the road surface beyond the plates (see photograph G of Pro 7/1; Pro 6/2 photograph 3, which Mr Sorton might not have seen at the early stage). However, applying the formula, if his lower co-efficient were used then the speed, when the motorcycle hit the road surface three metres south of the plates, was only 28 mph and, if the higher were employed, then the figure was 35 mph.

[49]From the photographs, Mr Sorton could not detect any conventional skid mark, that is to say a black mark on the road caused by the melting of tarmacadam by locked wheels. Mr Sorton thought that such a skid mark would be caused upon heavy braking at, say, 30 mph if the motorcycle wheels had locked on a surface other than one covered by loose material. Alternatively, the wheels had not locked upon heavy braking. In either case, the absence of a skid mark indicated that the motorcycle was either not going at any great speed or that it braked upon loose material. But even if there had been a skid mark prior to the marks seen in the photographs, a 5 metre skid would add only 4 mph to the 28 mph figure. Mr Sorton accepted, on seeing photograph D [Pro 7/1; Pro 6/2 photograph 2] that the dotted or broken white features to the right of the continuous scrape line might also have been caused by the motorcycle. However, he had taken the end of his scrape mark to be a point in the photograph at the end of the continuous line which he thought had been deliberately marked with a chalk line. No one admitted using chalk at the scene and this line may only be a combination of light and shadow. Mr Sorton thought that a reasonable speed for a motorcycle to cross the plates would be 10 mph but 35 mph might not be excessive for going through road works generally. If the pursuer had been travelling at only 30 mph when he spotted the hole or plate then in two seconds he would travel some 27 metres, so travelling only two to three car lengths away from the car in front was too close. If, as he said, the pursuer was only seven metres behind the car in front when he saw the car crossing the plates, he could not have caused the scrape marks to the south side of the plates.

[50]John Alexander (59), an accident investigator, gave evidence along the lines of his report [Pro 7/6], which had been instructed only a matter of weeks before the proof. It seems to have been on the basis of this report that the defenders tardily introduced the averment of excessive speed. Mr Alexander's ultimate reasoning to a large degree depended on Mr Parley's measurements, which, as has been noted, placed a skid mark starting some twenty metres to the south of the plates. In this connection, Mr Alexander thought that scrape marks, other than the continuous one, could be seen in the photographs [Pro 6/2 photograph 2; Pro 7/1 photograph D]. If the start of the skid mark spoken to by Mr Parley represented the point at which the pursuer braked then, using the formula, he was doing a much higher speed than that brought out by Mr Sorton's calculations. Even using Mr Sorton's co-efficient figures, he must have been travelling at between 36

and 45 mph when he hit the ground, even on the assumption that the skid mark was a scrape mark and its start represented where the motorcycle first hit the surface. If it was initially a skid mark, as distinct from a scrape mark, then the speed would have been even greater as there would have been braking and contact between tyre and road surface and not simply a motorcycle sliding along on its side. Mr Alexander thought that the better range of co-efficient figures was between 0.45 and 0.6 (the United States research was 0.4 to 0.75) and this would produce a speed of between 40 and 47 mph. He did not agree that, if the pursuer had been travelling at such a speed, there would be greater damage to the motorcycle. There was also reaction time to take into account. Mr Alexander agreed that the Highway Code figure of 0.68 seconds was too quick, as it was a figure established in laboratory tests in which car drivers had been forewarned. He suggested as much as 11/2 seconds although perhaps between 1.1 and 1.3 might be appropriate for an alert driver. In short, Mr Alexander's theory was that, if the pursuer was braking at a point where Mr Parley said the skid marks started, he was not doing so because of the existence of the plates.

(iv) ANALYSIS AND CONCLUSIONS

[51]In approaching the pursuer's evidence, I do so having regard to the defenders' acceptance, as stated by counsel during the course of his cross-examination of the pursuer, that the pursuer was telling the truth to the best of his ability albeit that he might be mistaken on certain matters. Although the Court may not be bound by such a concession, it is one of considerable importance. I also had in mind that the defenders, in submissions, did not take issue with the pursuer's evidence of a car going over the plates some distance in front of him. Bearing these matters in mind, I nevertheless reached the view that the pursuer was able to remember very little about the circumstances of the accident in so far as relating to the reasons for his loss of control of the motorcycle and its falling to the ground. I formed the view that much of what he did say about the accident was re-constructed in his mind from what he was told or came to understand some time afterwards. In reaching this view, I took into account several factors. These included, first, that the pursuer's initial thoughts after the accident were that the motorcycle wheel had gone into a hole. The photographs showing scratch marks leading up to the plates told a different story, as the pursuer accepted in evidence, namely that he had gone down before reaching the plates. The pursuer could not recollect accurately, therefore, from his own memory, why the motorcycle had gone down. Secondly, the pursuer's version that he was only seven metres behind the car when he saw the right hand plate rattle is simply impossible given even a minimum reaction time and on the assumption, which all accept, that he did cause scrape marks extending at least three metres south of the left hand plate. Even at three car lengths, which was said to be 12 metres, this seems very unlikely. In submissions, it was maintained for the pursuer that, if he had seen the plates at the 12 metre distance then, if he had reacted in terms of the Highway Code figure and had, as he said, been travelling at only 25 mph, then he could have reacted having travelled only 7.5 metres and even less if he had been going slower. I accept that multiple hypothesis in theory, but it assumes a number of matters including that the motorcycle hit the road almost immediately upon braking and without travelling forward any significant distance between these two events. It also does not explain why the motorcycle should behave in such a way at such a low speed if, as I have already found, there was no significant loose material on the surface. In that regard, had a motorcycle braked on loose material, it might be thought that signs of the tyres' travel through the loose material would have been in evidence to those examining the scene. It was not. Thirdly, it would appear that, at the time when he first gave evidence at the proof, the pursuer was under the impression that the plates covered an open excavated trench. He had gained this impression at least party from looking at the photographs prior to the proof rather than purely from his recollection at the time. When it was put to him that there was no hole or open trench under the plates, the pursuer was surprised at this not so much on the basis of his own recollection of what he had seen but because he could not then follow why the plates had been placed on the road surface in the first place. Fourthly, the pursuer had been shown the photographs [Pro 6/2] some time before the proof and had formed the impression that there was a hole illustrated by photograph 5. In fact, there never was a hole of the type perceived by the pursuer. Fifthly, the pursuer appears to have been made aware of the evidence of Mrs Ogilvie, since he said that she thought that he had not been out of her sight as he travelled northwards to the accident site. This seems to have played a part in his thinking over his speed when he rounded the bend before the works. The problem with this is, as will be seen, that her evidence on this is simply not acceptable. Sixthly, there was a degree of speculation in

the pursuer's evidence which I did not find particularly conducive to objective reasoning on his part. For example, he was prepared to proffer the view that the road had not been swept yet, on his own very limited knowledge of the surface, this seemed a less than convincing observation. Not surprisingly, the pursuer had little recollection of where he or his motorcycle had ended up on the road or indeed whether he or it had hit something solid such as the road roller. However, he was prepared to express a view on speed based on the lack of damage to the motorcycle and the extent of the injuries to himself. But, so far as the pursuer's own expertise is concerned, these factors could have told him very little about his likely speed prior to his undoubtedly hasty application of the brakes. I might add here that although the lack of substantial damage to the motorcycle indicates that its bodywork did not make contact with any solid object whilst travelling at any great speed, in the context of this case, where a motorcycle has travelled a considerable distance on its side before coming to rest at or against a grassy embankment, I do not consider that the lack of significant damage is of much assistance in assessing the speed which the pursuer was doing when he first hit the brakes. Finally, it is not without significance that the pursuer suffered very serious injuries and, at least for periods after the accident, notably almost a week before waking up in the Intensive Care Unit at Ninewells Hospital, Dundee, he had no recollection of events, albeit that during that week this would have been largely to do with the effects of sedation. I should say at this juncture that, in reaching the view that much of what the pursuer said about the accident has been created in his mind by what he learned after his initial partial recovery, I am in no way criticising those who would have, quite properly, gone over the evidence with him. I am simply commenting that the information gathered has had a major effect in fixing the pursuer's impression of what happened.

[52]In so far as the pursuer maintained at the proof that he had braked partly because of his perception of a hole, it is not without significance that Mrs Ogilvie made no mention of the pursuer referring to this although she did think that he referred to the metal plates. It is of even greater significance that, according to PC Hillman's evidence, which for reasons already given I accept as credible and reliable, the pursuer at the time could not remember what had caused him to lose control of the motorcycle or indeed what had happened in the accident. Of course, given the pursuer's condition, he might not have remembered at that time but regained his memory later. That is possible, but I do not think it is what happened in this case. The pursuer maintained that he had mentioned matters such as the hole to the police at the time, but that is not consistent with the police recollection of what he said.

[53]Crucially, however, although I am not persuaded that the pursuer's memory of the accident itself is to be entirely relied upon, I do find him reliable is in his evidence that, when approaching the works, he had no warning of the existence of the metal plates. I also accept his evidence that, as an experienced motorcyclist, had he had such a warning then he would have slowed down to a speed which would have avoided the necessity of him braking as hard as he felt he needed to do. At such a lower speed, the likelihood of him losing control of the motorcycle would have been materially reduced and this to a level at which it would have been unlikely that he would have lost control. The pursuer undoubtedly did brake and did so as if executing an emergency stop. He did not do that for no reason. I find and accept his evidence that he did so because of his sudden realisation of the existence of the metal plates across the road and perhaps also his perception that there might be a hole or gap in their vicinity. Such plates pose a potential danger especially to motorcyclists and the pursuer's realisation, perception and reaction were reasonable. Particularly with the sunlight streaming through the trees, across the area where the plates had been placed, it is readily understandable that a motorcyclist, being suddenly aware of the presence of a hazard such as the plates right across his immediate path, might think the worst and perceive a darkened area of shadow to be a greater danger of some sort such as a hole or gap in the road surface. Although I am not convinced that he saw a white F registered Sierra pulling off from the lights and crossing the plates, I do accept that his noticing of the plates occurred when there was some vertical movement of the plates on the road surface as a result of a vehicle some distance in front of him crossing them. That vehicle would have been considerably further than seven metres or three car lengths (12 metres) in front of him when he noticed the plates, given the necessary time for the pursuer to react, lose control and for the motorcycle to hit the ground. The plates would have initially been obscured by the presence of the vehicle. They would have been barely noticeable from 50 metres away (i.e. from about the position of the photographer in Pro 6/2 photograph 1) even if they had

rattled or bounced as the pursuer said they did. I conclude from this that the pursuer first noticed the plates at a point undoubtedly much greater than 12 metres away but some distance less than 50 metres. It is impossible to be precise, but on all the evidence, I conclude that he saw them at a distance of about thirty-five metres from the plates.

[54]In reaching that conclusion, I accept the evidence of Mr Parley that there was a tyre skid mark on the roadway about twenty metres south of the plates. This extended some seven metres as a skid and then became a light score mark extending for perhaps ten metres before reaching the three metres of heavy scoring to the south of the plates and connecting with the further amount on the plates themselves. In this regard, I accept the overall approximate distance noted by Mr Parley on the sketch and consider that his slightly different component dimensions given in evidence have to be fitted within that approximation. I accept Mr Parley generally, and despite the trenchant criticisms of his testimony in submissions, because I consider that he gave his evidence in a fair and balanced manner. Although it was submitted that he was defensive and evasive in respect of the defenders' failings, I did not find him so. Despite being the person responsible for safety overall, he freely conceded that the proper signs were not in place, that tar could have surrounded the plates and the roller should not have been where it was left. In relation in particular to the skid marks, he was the only person at the scene who purported to take measurements of the score/skid marks and to trace the starting point of the skid. He noted the distance down on a sketch, which he prepared the next day, at a time when the circumstances of the accident had not been fully investigated. I can think of no particular reason why he should make up the dimension of a skid/scrape mark if it did not exist. Of course, he was measuring the mark the next day and he might have been measuring something which had nothing to do with the accident. However, his description of it as an extension of the obvious scrape marks was convincing in relation to its starting point and subsequent veer, being consistent with the pursuer travelling in the open lane and braking and turning left to avoid the right hand rattling plate. The absence of a black skid mark is also coincident with the initial braking occurring upon and perhaps, as Mr Parley legitimately inferred, dislodging the loose proud chippings between the smoother worn parts of the road. I found his evidence of the existence of a skid followed by scrape marks as the motorcycle went down convincing having regard to all the known surrounding circumstances. The pursuer criticised Mr Parley also on the basis that his sketch did not contain all the information which it might have contained and did not, for example, mention scrape, as distinct from skid, marks. It did not refer to the lack of "RAMP" signs. However, it did cover the works in reasonable detail and was a fair and reasonable attempt at reconstructing the pre-accident works and imparting some information about the possible track of the motorcycle. It was also said that it was significant that Mr Parley's photographs, which he apparently took, were not produced. This is unfortunate and I do not know why that was but I am not prepared to draw a sinister inference from this failure given the lodging of other photographs illustrating the general scene.

[55]The pursuer's observation that he was entitled to take the view that any hazard at the works would have been within the coned off area and that therefore he was approaching a danger free, albeit narrowed, carriageway is too optimistic an approach to the potential dangers when going through works but certainly explains why, as I hold, he was progressing at an excessive speed in doing so. It is interesting that, when it was specifically put to the pursuer that he was going considerably in excess of 25-30 mph, he first responded by referring to what he thought would have happened to him if he had come off his motorcycle at such an excessive speed rather that providing a direct answer to the question. Even upon repetition of the question, his direct response this time was given under reference to what damage he thought would have been done to his motorcycle in such circumstances. From his demeanour under cross examination on this matter and the manner of his responses coupled with the other evidence in the case, I am of the view that the pursuer's evidence is not to be relied upon when offering a view of his actual or likely speed when going through the works. He may not, as he said to PC Hillman, have been going very fast, but I am left with the firm impression that the pursuer is simply unaware of what speed he was travelling at.

[56]The pursuer accepted that if he had seen the hole/plates at a point significantly earlier than that when he said he did see it/them, then he would have been in a position to take evasive action and would have driven over the plates at a slower speed, which he said might have been between 10-15 mph. I accept that. One

response from the pursuer was to say that he could not have seen the hole from a significant distance back from the plates such as from the foreground of photograph 1 [Pro 6/2; Pro 7/1 photograph B]. Although that may be strictly correct, especially as there was no hole anyway, he might well have perceived a hole or gap given the sunlight and shadow at a slightly lesser distance and could certainly have noticed a hazard in the form of plates if they were moving. He also accepted that, had the road surface been a good one then, had he been doing the speed he said he had been doing, he would have been able to slow down sufficiently upon braking as to avoid losing control of his motorcycle. I also accept that. Since I am of the view that the road surface was not one with loose material and that the pursuer did see and react to the plates some distance before he maintained he saw them in his evidence, I conclude that he was doing a significantly greater speed through the works than he maintained in evidence. Even taking Mr Sorton's co-efficient figures, having regard to the existence of the skid mark before the scrape starts, he must have been travelling well in excess of the 35 mph which might, on Mr Sorton's view (which I accept on this point), have been deemed reasonable if there had been only road works and no indication of a ramp. It is impossible to calculate with any precision what that speed might have been but looking at all the evidence (see below on the application of the formula) I think it must have been in the region of 40 to 45 mph when he first braked on realisation of the hazard. In so concluding, I do consider that the pursuer may well have reacted very quickly to the potential hazard, perhaps marginally lower than one second but not as low, following upon the evidence of both experts, as 0.68 seconds.

[57]Although the pursuer's evidence on speed might have been bolstered had Mrs Ogilvie's evidence been acceptable on this aspect, I do not find her evidence on the speed of the motorcycle acceptable. Apart from the reasons already given for rejecting Mrs Ogilvie as unreliable on certain aspects, her evidence on the length of time it took for a set of traffic lights to change was such that I had reason to doubt her reliability on matters such as time and, ultimately, speed. Even if she had been waiting for any appreciable length of time at the lights, I find it highly doubtful that her "little old Fiesta" would shortly thereafter have been keeping pace with the pursuer's motorcycle. Mrs Ogilvie herself said that this was strange. I agree that it is so and, indeed, so inherently improbable that I cannot accept it. Furthermore, by the time she arrived on the scene, there had been an opportunity for Mr Burgess to go to the pursuer, speak to him and run a distance down the road before flagging Mrs Ogilvie to stop. All of this suggests that Mrs Ogilvie was actually some way distant from the pursuer when the accident occurred.

[58]Ultimately, I did not think that I should take too much from the scientific calculations carried out by Mr Sorton and Mr Alexander based on the formula, other than to conclude that their figures for speed should be regarded as showing minimum rather than maximum ranges. In so saying, the figures were far from being unhelpful but I do think that there are problems in attempting to apply the formula. First, this motorcycle did not slide freely when it hit the ground but seems to have made significant gouges, and not just scrapes, in the road surface (see Test 4 in the Foster paper). Secondly, it ended up near or possibly even against an embankment so it is difficult to conclude that it simply came to rest at the end of its travel as distinct from hitting the embankment at some, albeit not at a great, speed. Thirdly, at the time this motorcycle was travelling, it had the pursuer on it for some distance. Just how and where it went on its travels from heading across the left hand plate and ending up at the right hand embankment is uncertain. Fourthly, as I have held, this motorcycle skidded some distance on braking, before control was lost and it fell to the ground. Ultimately, I think both Mr Sorton and Mr Alexander held legitimate views on the parameters of the co-efficient figures. Either one of their ranges might reasonably be looked at, at least as a check on what is likely to have happened rather than as the primary way in which to determine what occurred. I have attempted to apply their evidence on the co-efficient figures accordingly.

[59]The pursuer did have some powerful criticisms of Mr Alexander's evidence and report, which did suggest that he had applied his mind to the task with a view to challenging the pursuer's version rather than reaching an entirely objective and independent view. These criticisms included what I accept was not much more than pure speculation in relation to the removal of the road signs and surface materials from the accident scene and the assumption, albeit in the pursuer's favour, that the "skid" mark noted by Mr Parley was actually a scrape mark. They also included reference to both Mr Parley and Mr Alexander living in Blairgowrie and

being casually acquainted, at least according to Mr Alexander. However, I do not find that these points are so telling as to persuade me to reject Mr Alexander's evidence on the issue of speed. I accept his views in that regard, as I do Mr Sorton's, in so far as each expert based his calculations on the facts as each understood them, notably the length of the motorcycle slide. The defenders had some trenchant comments on Mr Sorton's views as seriously flawed, overdramatic and plainly ridiculous in part. Again, I do not accede to such submissions. It is true that Mr Sorton did say that the existence of a plate might cause a tyre to puncture or even a wheel to fracture, but I gathered that he was mainly talking about a situation where, for example, a motorcycle hit a plate when it was in a slightly raised condition rather than lying flat. It is also true that Mr Sorton queried Mr Alexander's use of material on co-efficient figures from the United States partly because of what he said were differences in road surfaces. I did not find the comment so far fetched as to be ridiculous. Ultimately, I do not think it necessary to choose between co-efficient ranges in order to reach the view I do reach in this case and do not do so. Taking both the experts' methods of working as potentially calculating the minimum speed upon realisation of the hazard, on my findings relative to Mr Parley's evidence, both sets of calculations can produce a speed of the magnitude I hold the pursuer was travelling at.

(e) Fault and Contributory Negligence

[60]The pursuer's averments of fact, as I have noted, set out a particular cause of the loss of control. It is correct to observe, as the defenders did in submissions, that the evidence, as it emerged, did not match with precision the averments in all particulars. However, I do not consider that such variations as do exist are fatal to the pursuer's cause. I have accepted that, as the pursuer was progressing, he did see a plate move as a car in front went over it. It may not have, as averred, left an obvious hole between the two plates, but it did reveal to the pursuer an area of unfinished road surface, which I accept he may well have perceived as a hole. The pursuer braked because of his perception. That perception might have been wrong in relation to a hole but it was correct in respect that there was a potential danger ahead in the form of the plates and a perceived hole. The pursuer did, as I hold, skid (as he avers) on the surface of the road. I do not find that the surface had any significant loose material on it, but it was probably on the more uneven centre section of the lane that the pursuer braked. The pursuer did, as a result, lose control and collide with the roller. The pursuer has then, made out much, but not all, of his case. So far as the six grounds of fault are concerned (see above), he does not succeed in respect of the dirt or gravel nor as regard the bitumen surround nor in respect of barriers, the latter two not having any material causal connection with the accident. However, he has proved fault relative to the "RAMP" and "RAMP AHEAD" signs. Although the former is not particularly significant, since its presence at the plates may not have been noticed until it was too late, the absence of the "RAMP AHEAD" sign was a material cause of the accident. If it had been placed at least 30 metres from the ramp then the pursuer would have noticed it some distance before that. Just when exactly that might have been may not be capable of precise measurement but looking, for example, at photograph 1 [Pro 6/2; Pro 7/1 photograph D], which is said to have been taken 50 metres from the plates (see above) and observing that the location of the lights and arrow is about fifteen or so metres from the front of the left hand plate (see PC Thomson and the Parley Sketch Pro 7/3), a ramp sign ought to have been noticeable at least twenty five and perhaps more than thirty metres distant and thus given the pursuer more than ample time to slow down to meet the hazard, rather than brake suddenly on realising than some form of unspecified hazard confronted him. As I have already held, the pursuer's reaction and actions were reasonable ones in the circumstances. So far as the defenders are concerned, they were at fault in failing to erect the "RAMP AHEAD" sign. In such circumstances, contrary to the defenders' submissions, the defenders ought to have anticipated that it was likely that a motorcyclist such as the pursuer might, upon sudden realisation of such hazard which they had not signalled, act in the way he did and brake suddenly causing loss of control and ultimately a collision of some sort. Upon that basis I hold that fault has been established and that the fault caused the accident.

[61]In relation to the road roller, it should not have been where it was. It was an obstruction near the carriageway. As such it was a hazard to persons using that carriageway who, for whatever reason, might, as motorists occasionally do, stray from it. This is the reason why such machinery should not be left in such a location, no doubt particularly where the carriageway has been narrowed by those then leaving machinery near its borders. On this ground also I find fault established. Of course it was not the roller which caused the

pursuer to lose control of his motorcycle. On the face of things, however, it was his collision with the roller which caused his significant injuries. On the evidence before me, that collision was the cause of those injuries and I do not think that I have any material upon which to conclude that the pursuer would have suffered these or similar injuries had the roller not been there. The pursuer lost control and seems to have been sliding with his motorcycle for some distance. He may possibly have suffered some injury in any event, but I do not have evidence to hold that he would have been likely to sustain such serious injury as he did. Indeed, from such evidence as there is, it may be that the opposite is the case. His motorcycle survived more or less intact and the pursuer was wearing the appropriate protective leather clothing and crash helmet. On this ground also I hold that the defenders' fault caused the pursuer's injuries.

[62]In relation to contributory negligence, I have held that the pursuer was travelling at an excessive speed through what he knew to be works. Had he been going at a reasonable speed, say 35 mph or less, he would not have had to brake as he did and thus lose control. In that regard I do find that the pursuer was negligent and that his negligence contributed to his accident. In assessing the degree of this, the pursuer submitted that, if the Court found that there had been excessive speed, then a percentage such as that applicable in seat belt cases, say 25% might be applicable. The defenders argued that only a speed in excess of 30 mph would have been negligent and that the percentage of culpability would increase with the level of speed up to about 50% if the pursuer were travelling at 48 mph or thereby. As I have already held, do not think that the pursuer was going that fast. Having regard to his likely speed and, given that I consider that the principal fault lies with the defenders, I assess the level of contributory negligence at one third.

2. DAMAGES

[63]Subject to the deduction for contributory negligence, the award of damages will be the total of the following relevant heads:

(a) Solatium

[64]In terms of the Joint Minute, solatium is agreed at £60,000, with one half of that attributable to the past. I will accordingly award that principal sum together with interest on half of the figure at half of the judicial rate from the date of the accident.

(b) Loss of Earnings

[65]In terms of the Joint Minute, the pursuer's past loss of wages is agreed at £8,750 inclusive of interest to the final day of the proof on 9th December 2002. I will award this amount plus any further amount of interest calculated to the date of the final decree.

[66]In relation to the future, several matters are also agreed in the joint minute. First it is said that, but for the accident, the pursuer would have remained in the employment of Messrs JP & A Hodge until retirement at the age of sixty-five. Secondly, his net annual loss of earnings from that employment would have been £13,152. The appropriate multiplier would be 18.28 to produce a total of £240,419. What remains to be calculated then is the amount which the pursuer is likely to earn over the same period.

[67]Prior to the accident, the pursuer worked as a stockman and labourer on the Hodge farm. Apart from a very limited period, when he had just left school, the pursuer had worked all his life in agriculture, having left school at sixteen with little more than a B in Ordinary Grade woodwork by way of formal qualifications. He comes from farming stock, his father being a farmer in Alyth and his brother having also recently been in farming, although now a Heavy Goods Vehicle driver. The pursuer had been with the Hodge farm for some years at the time of the accident. The farm extended to some 135 acres, split more or less equally between stock and arable. Apart from some part-time assistance from his predecessor, the pursuer did all the work on the farm. This involved heavy work with the stock of some 50 cattle, including: moving and adjusting gates and pen fences weighing 40 to 50 kilograms; rolling out bales for winter feed; and manhandling calves. The

pursuer looked after all aspects of the crops from "stubble to stubble" and including: ploughing; sowing; fertilising; and combining. He was a strong man at some 6' 2" and 13 1/2 stone, a stalwart of the local "tug-o-war" team.

[68]The medical evidence, which was not contradicted and which I accept, came from Manhal Nassif (aged 41), consultant orthopaedic surgeon at Ninewells Hospital, whose reports [Pro 6/34 and 35] were lodged. The pursuer sustained serious, indeed life threatening, injuries which have left him permanently impaired. He had fractures to his cervical spine as a result of which, despite some six months wearing a "halo" brace, he underwent cervical (C1/C2) fusion surgery. He now has limited movement of his head to the right or left. In order to turn his head to a significant degree, he has to rotate his torso from thoracic spine level or move his whole body. There may be deterioration in the area of the fused joint through wear and tear or arthritis. He sustained fractures of the right patella and tibial plateau, which saw him on crutches for some three months during which he was not allowed to weight-bear and which caused much loss of muscle strength. His left leg was severely gashed. Although this did not appear to have any lasting effects at the time, these have appeared as the pursuer has suffered pain in the right leg and his weight has been transferred from one leg to the other.

[69]Despite his injuries, the pursuer went back to work after something short of a year from the date of the accident. He worked essentially part-time as he received considerable help from relatives, including his father, brother and friends, while he attempted to rebuild his strength. The pursuer was able to cope with the work initially not only because of the help he was getting but also because he could work, to a large degree, at his own pace. Nevertheless, he was using painkillers and, after a day's work, steeping himself in a bath hot enough to turn him, in his words, the colour of a boiled lobster. The pain was primarily between his shoulder blades and in his right leg. Eventually, in November 2001, the pursuer realised that he could not continue to work on the farm. This occurred when, in the course of a day, he found himself capable of clipping the backs of only 10 calves prior to the winter whereas previously he would have managed all 40 and still had time to do other jobs. The reason was primarily the pain he was suffering. As a result, he gave in his notice and eventually ceased work on the farm on 19th April 2002, shortly before the first diet of proof. This decision was entirely reasonable.

[70]Mr. Nassif spoke to the deterioration of the pursuer's right knee, noticed upon a review in June 1999. Having been able to walk some fourteen miles without difficulty on an occasion the previous year, he was experiencing discomfort after only two or three miles. Mr Nassif first saw him at a review in the following year. At the time of the review on 23rd April 2002, the discomfort had turned to pain after only a mile of walking. Mr Nassif's conclusion then was that post traumatic osteo-arthritis of the knee was a "progressive pathology, difficult to influence conservatively" and was causing increasing pain and stiffness. It could warrant total knee replacement surgery [Pro 6/34 "prognosis"]. At a review on 2nd October 2002, a similar conclusion was reached, it being noted that osteo-arthritic changes of the patella joints were evident upon x ray. The pursuer had movement of only 0-125 degrees of flexion, the norm being from -5 to 140 degrees. Mr Nassif's treatment plan [Pro 6/35] was first to carry out an arthroscopy and remove the metal work inserted after the accident. This would involve two or three days in hospital and two to four weeks for recovery. Secondly, at a later stage, Mr Nassif would proceed to total knee replacement arthroplasty. This would involve eight to twelve days in hospital and six to twelve weeks' recovery. Mr Nassif noted, as was the case, that the pursuer was not enthusiastic about that and a review would be necessary after six months. If carried out, then there would be considerable benefits with a 90-95% success rate. But the prosthesis would fail in time and a further replacement would be needed in 10 to 15 years. There was also the possibility that, if the pursuer was now having trouble with his left knee, surgical intervention would be needed there if post traumatic arthritis appeared. On the basis of his medical condition, especially the knee condition, Mr Nassif considered heavy or repetitive lifting work inadvisable as was anything involving knee bending such as climbing ladders. However, if the right work were found for the pursuer then he would be able to do this until retirement. This might be full time work, if the knee replacement was successful.

[71]Upon being recalled as a witness at the continued diet in November 2002, the pursuer explained that he had been in touch with the disability employment adviser at his local job centre and had undertaken a course

in computing at Perth College. This was a part time course and he had one module to complete. He was able to complete two hours of work with a computer if able to stand up and move around periodically. He had also been able to go on a twelve-week course at Elmwood College, Cupar, designed to train excavator and digger drivers. He had difficulty with the excavators because of juddering and vibration and with the smaller diggers because of the confined working space. He thought he might try the larger dumper trucks as they had more comfortable working areas. However, he had only practised for short periods on the various machines yet had, nevertheless, been left stiff and sore, especially between his shoulders, after a day's work. This was not helped by the long drive to and from Cupar. His shoulder pain had improved after stopping the farm work but had grown worse during the course. He was not now receiving any active treatment for this pain other than painkillers and anti-inflammatory medicine. His right leg pain had improved after physiotherapy and a recommendation that he use tape to align his knee with the rest of his leg. The medical advice was that the right knee should be replaced but he was not yet ready for such an operation.

[72]So far as the future was concerned, the pursuer did not consider that he could return to farming on a full time basis. The problem with attempting to obtain occasional contracting farm work was that the contractor would expect him to work a full day and that was exactly what the pursuer was not capable of doing. The pursuer thought he might manage van driving, preferably on a part-time basis, if there was no heavy lifting. The problem with computer work was that, although he had the training, he had no experience in this field. He could do the work of a storeman but had not even obtained an interview for the one job he had applied for.

[73]I accept the pursuer as credible and reliable in his evidence about what has happened since the accident and what he regards as his prospects for the future. Indeed, I did not understand it to be challenged. The pursuer was, and is, keen to do what he can to obtain work but is in a labour market where others will be both more physically able and academically qualified than he is to do a given job. His disadvantage in the labour market is significant.

[74]Keith Carter, employment consultant, gave evidence on the pursuer's prospects and, in particular, spoke to his two reports [Pro 6/17 and 6/36]. He emphasised the difficulties which the pursuer undoubtedly has in the employment market albeit that the pursuer is keen to obtain work. Mr. Carter had spent some time analysing the variables applicable to the pursuer's situation and I accept his ultimate analysis. Three main conclusions can be drawn from his evidence. First, the pursuer is going to be fit only for light work in the future. This is likely to prevent him from carrying out the work of a plant operator, at least on a full-time and, I suspect, even a part-time, basis. Secondly, it is unlikely that the pursuer will be able to hold down full-time work, at least on a permanent basis. However, there remains a possibility, which should not be left out of account, that he may find such work and be able to maintain it. Thirdly, the pursuer is likely to take some time to find any kind of work and at least a year should be allowed for this. So far as rates of pay are concerned, the pursuer would be best suited to work such as that of a storeman in an agriculture related industry or outlet or perhaps as a van driver. Part time work as a storeman would earn the pursuer a little over £5,000 per annum gross (See e.g. Pro 6/17, tables "Snapshot of Jobs" and "Executive Summary post accident"; see also Pro 6/36, updated table 3, tables 7 and 8 notably the £5,028 figure in the latter). Eric Grant (57), another employment consultant, gave evidence in relation to his report [Pro 7/5]. He referred to the buoyant employment conditions in the Perth "drive to work" area. Full time light work was available. He suggested that the pursuer might obtain work as a storeman, sales assistant, driver or other similar position. I did not understand Mr Grant's evidence to be radically different from that of Mr Carter.

[75]In submissions, the pursuer maintained that the evidence disclosed that the pursuer might obtain part time intermittent work, at least after a year had passed during which the pursuer's right knee problems could be addressed. It was said that the pursuer would not be able to work full time and that he would be unlikely to work beyond the age of 50 or 55 years. From the intermittent part time employment, he could earn perhaps just over £5,000 but a deduction would have to be made for tax and national insurance. It was suggested that a lump sum of around £30,000 might be taken to represent the pursuer's likely total future earnings. The defenders, on the other hand, submitted that the medical evidence was such that the pursuer could work until

retirement if the correct job was found. The pursuer would be able to work part-time until retirement or perhaps even full-time on an intermittent basis. It was suggested that the pursuer's ability to work had been reduced by about one half and that the future earnings figure agreed should be halved to reach a fair conclusion on future loss.

[76]Balancing on the one hand that there is a prospect of full-time light work at double the part-time earnings quoted above with, on the other hand, the prospect of the pursuer having to have further periods of time off for surgical interventions and needing time to find work in the first place, a reasonable global estimate of the pursuer's future earnings can be based upon the rates for part-time work. I take this rate to be just over £5,000 gross per annum. Having regard to the relatively low incidence of tax and national insurance on such low wages (see 2002 "Facts and Figures" compiled by Members of the [English] Professional Negligence Bar Association- Table G1 referred to by the defenders in submissions), this ought to amount to about £4,900 net. Having regard also to the evidence of Mr Nassif, I think it reasonable to assume that, if the right work is found, the pursuer will be able to work until the normal retirement age. That being so, I will take the same multiplier as is quoted in the joint minute (18.28) to reach a total of £89,572 which I will deduct from the agreed £240,419 to produce a global figure for future loss of earnings of £150,847, which I assess as the future loss.

(c) Services etc.

[77]In terms of the joint minute, the value of the pursuer's claim for past services is £10,000, inclusive of interest. The amount in respect of future services is £25,000. The amount for miscellaneous expenses, again including any element for interest is £5,000. I will therefore award the sum of £40,000 under this head.

3. INTERLOCUTOR

[78]I will therefore: sustain the pursuer's first plea in law under deletion of the words "*et separatim* breach of statutory duty"; repel the defenders' first to fourth pleas-in-law; sustain the defenders' fifth plea-in-law to the extent of reducing the damages which might otherwise have been awarded by a fraction of one third. I will continue the cause on the issues of interest and expenses, these matters to be addressed at a By-Order hearing to be afterwards fixed. That may also give the pursuer the opportunity to lodge any schedule of damages required in terms of the Practice Note No. 3 of 1997.

[79]The pursuer requested certification of certain witnesses as skilled. Of those who gave evidence, these were Mr Nassif, Mr Sorton and Mr Carter. In addition a further road traffic expert, J.W. Ritch, a further surgeon, Mr J.P. Martindale, and an occupational therapist, Mr Cowan, the latter speaking to care costs, were said to qualify as skilled in terms of the rules. The defenders opposed only the certification of the occupational therapist. This was on the basis that the care report had proposed excessive figures whereas the care costs had ultimately been capable of agreement between counsel at much more modest figures. This witness was not, it was said, therefore necessary. However, there was a care claim and the figures ultimately agreed were by no means small. In these circumstances, I consider that it was necessary to employ the occupational therapist to make investigations in order that care evidence might be given at the proof. I will therefore certify all the witnesses referred to as experts. I was also asked to certify the three skilled witnesses, who did not give evidence, as in attendance. This was not opposed and I will grant that motion. No motion for certification has been made by the defenders.