IN THE SUPREME COURT OF JUDICATURE OF JAMAICA

IN COMMON LAW

SUIT NO. C.L. 1976/S104

BETWEEN	SAVOY CONSTRUCTION AND DREDGING COMPANY (Jamaica) LIMITED	PLAINTIFF
A N D	MOTOR OWNERS MUTUAL ASSOCIATION LIMITED	DEFENDANT

C.M.M. Daley and C.M. Walker of Daley, Walker and Lee-Hing for Plaintiff.

Lloyd Barnett and Lowell Smith for Defendant.

Heard: January 22, 23, 24, 25, 26, March 19, April 17, 1979

J U D G M E N T

Rowe, J.

Porto Bello lies on the main road from Montego Bay to Adelphi in Saint James. The land is described as hilly or very hilly, rising from the Montego river and undulating from mounds 60-70 feet high to hills of 600 feet in height.

Rural and Farms Properties Limited, decided to develop a housing estate to be known as Porto Bello Heights in this area and by an oral contract engaged the plaintiff, a related company, to carry out the construction works for the contract sum of $2,065,000. The plaintiff was obliged to undertake all the ~~infracture~~ infrastructure works and in addition to build such houses as were a necessary part of the sub-division approval granted by the Saint James Parish Council. It was a term of the agreement between the developers and the plaintiff that the plaintiff should take out a Contractor's All Risk policy of Insurance, this being a condition imposed by the First National City Bank who were the short-term financiers of the development. In compliance, the plaintiff through its brokers, took out a Contractor's All Risk policy CAR 15/0251/5 with the defendant covering the 18 months period 18-12-73 to 18-5-75 (Exhibit 1).

As is customary, the Insurance Policy contained a Schedule, Condition and Exceptions. I will set out the material parts.

"The Schedule -"

THE CONTRACT

Description	Situation	
DEVELOPMENT AND CONSTRUCTION OF HOUSES	Porto Bello, St. James	
	Contract Period	
	From: 18/12/73 To: 18/5/75	
	Maintenance Period	
	From: To:	
	Contract Price	$2,065,000.00
THE INSURANCE	SUM INSURED	EXCESS
Item.1 The permanent and/or temporary works forming part of the Contract and the materials and all other things (except temporary buildings, contractors tools plant and equipment and employees personal effects) used or intended to be used in connection with the Contract	$2,000,000.00	1 In respect of loss or damage arising out of Storm Tempest Hurricane Flood, Landslip, Subsidence, Collapse or Burglary $2,000.00
Item.2 Temporary Building	$ Nil	
Item. 3 Contractors tools plant and equipment not otherwise insured, brought on to the situation of and for the purposes of the Contract	$65,000.00	2 In respect of loss or damage arising out of Impact, Collision or Overturning $500.00

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THE INSURANCE	SUM INSURED	EXCESS
Item 4. Costs and expenses necessarily incurred by the Insured with the consent of the Association in demolishing or removing debris of the portion or portions of the property insured by Items 1 and 2 above destroyed by any peril hereby Insured against	$ Nil	3 Loss or damage arising out of any other cause except Fire $ 500.00 .....
Item 5. Employees personal effects	$ Nil	

FIRST or DEPOSIT PREMIUM $ 1350. 00 cents

/br

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CONDITIONS

"2: If any change shall occur materially varying any of the facts existing at the date of this Policy, the Contractor shall as soon as possible give notice in writing to the Association".

EXCEPTIONS

"This Policy does not cover :-

"(5) Loss or damage

(a) due to defective design

(b) to any property caused by defective material or workmanship wear and tear rust or gradual deterioration due to atmospheric conditions or otherwise .....

(f) the cessation of work whether total or partial

(6) Penalties under contract for delay or non-completion or consequential loss or damage of any nature whatsoever".

The works were not completed by 18th May, 1975 and the Policy Exhibit 1 was extended to November 18, 1975 with the similar terms, conditions and exceptions - Policy Endorsement Exhibit 1A.

Mr. St. John Hutton, a director of the plaintiff company, who gave evidence before me, had no intimate knowledge of the construction works at Porto Bello Heights as he relied on his team of architects, consulting engineers, and site engineers for the overall as well as the day to day programme of work.

Sometime in 1974 heavy rains fell in the area of the construction site and construction works were damaged. The plaintiff made a claim for the damage on the defendant company and that claim was settled. Rain fell in the Porto Bello area on the 15th November, 1976. The meteorologist who gave evidence said that in the 24 hours from 7 a.m. on the 15th to 7 a.m. on the 16th November, the rainfall recorded at Fairfield was 4 inches -

At Bogue 3.79 inches

At Barnett 3.75 inches

No rainfall was recorded in those areas for the 17th November,

The insured works were extensively damaged and the plaintiff claimed from the defendant the sum of $456,030.88 on the ground that the property insured by virtue of Exhibit 1, and 1A, was damaged by flood, storm, tempest, hurricane, landslip, subsidence, collapse or one or other of the said perils. The defendant denied liability on three grounds. Firstly that the alleged loss or damage was due to defective design, defective materials or workmanship, wear and tear or the cessation of work, total or partial; secondly that the plaintiff failed to take and caused to be taken all reasonable precautions to prevent loss and damage and thirdly that the plaintiff failed to give notice in writing to the defendant of the total or partial cessation of the said work which was a change materially varying facts which existed at the date of the policy.

THE EVIDENCE

Mr. Daley promised in his opening speech to produce the plans and specifications prepared by the engineers, the certificates issued by the consulting engineers who certified that work had been performed satisfactorily, and the percolation test showing the geology of the area. All these things he was unable to fulfil as the several experts whom he wished to call had left Jamaica and he could receive no co-operation from the defence to put in the documents by consent. The plaintiff relied heavily on Mr. Dalkeith Hanna, a Quantity Surveyor of the firm of Davidson and Hanna with offices in Montego Bay. This witness lived in the Montego Bay area and had a personal recollection of the rains which fell around the 15th and 16th November, 1976. He spoke of extensive flooding affecting roads and cultivated areas, as also

two U.D.C. projects at Catherine Hall and by the Montego Bay Parish Library. About two days after the rains - "about the 17th November," Mr. Hanna visited Porto Bello Housing development on the instructions of the plaintiff. The plaintiff's attorney constantly referred to the rains as "flood rains" and the witness adopted that language in his answers. For the time being I will use the neutral term "rains" as it might become necessary for me to determine whether the "rains" amounted to a peril insured against in the Contractor's All Risk Policy.

On behalf of the defendant, it was suggested that Mr. Hanna's first visit to Porto Bello was not on or about the 17th but on the 22nd November, 1975. I believe Mr. Hanna when he said he visited the site twice after the 16th November before he went there with the Insurance Adjuster, Mr. Gonsalves on November 22, 1975. Mr. Hanna observed that there was extensive damage done to the roadways, sidewalks, and retaining walls. The major damage was to be found in Milky Way, Carlisle Avenue, Pasture Drive, Skyline Avenue, Sunset Drive, Sheraton Avenue, and there was substantial damage to the lower section of the subdivision towards the river including Farm Drive, Hollywood Crescent, Farm Crescent, Weather Crescent and Penn Close. An elaborate map was prepared by Mr. Hanna to indicate the various types of damage and this map was introduced in evidence as Exhibit 3A. It was beautiful to look at and very complicated. It contained figures showing the measurements taken by Mr. Hanna but as there was no dispute as to the actual measurements or as to the physical nature of the damage, I need make no finding in respect of this elaborate map.

The plaintiff's claim was particularised under nine separate "CONDITIONS" plus an item for Stand-by Costs and one for Additional Site and Project Cost and the defendant attempted to deal with each "CONDITION" and item of claim. Each CONDITION sought to deal with

all the damage of a particular kind occurring anywhere on the site. The measurements to ground each Condition appear to have been taken with the concurrence of both parties and were treated as arithmetically accurate.

The roads in the subdivision had not all been completely constructed. Some were paved i.e. asphalted, e.g. part of Sunset Drive, Skyline Drive, Pasture Drive and Sheraton Avenue. Some were sealed but not paved - e.g. part of Sunset Drive, part of Skyline Drive, Sundowner Avenue, Sundowner Close and Upper Deck Avenue. Some were final rolled but not sealed e.g. Bay Roc Close, part of Sunset Drive, Carlisle Avenue, Mahoe Close, Miranda Avenue, Skyline Close, Hollywood Crescent, Weather Crescent, Farm Drive, Valley Close, Penn Close and Farm Crescent.

All the roads mentioned above were damaged. There was some subsidence in respect of the already paved roads and in respect of the other roads the sealer and fill material, as the case may be, in some areas were washed away. CONDITIONS 1, 2, 3, 6, 9 andpart of CONDITION 8 of the Statement of Claim related to damage done to the roadways.

CONDITION 4 gave particulars of damage to the concrete kerb walls. CONDITION 5 dealt with the cost of restoring pipe lines which were washed out and exposed on Sheraton Avenue, Sunset Drive and Bay Roc Close; while CONDITION 7 was concerned with repairs to sidewalks. Part of CONDITION 8 dealt with the repairs to two retaining walls one on Milky Way and the other on Sheraton Avenue.

CONDITION 1 related to damage to roads which had already been sealed and the claim was for $33,375.98. I was enlightened as to the method of road-making and in the process I learnt that following excavation of the top soil, marl is poured in, compacted and rolled, then a mixture, M.C.O., is poured on the prepared marl surface to act as a sealer between the marl below and the

asphalt that is subsequently to be laid down. At the stage when the M.C.O. is poured on, the road is regarded as sealed. Throughout the subdivision, as shown on the map Exhibit 3A coloured green, 15,818 square yards were damaged. Mr. Hanna relied upon the specifications for pricing the damaged areas under this heading as also on all other CONDITIONS in the claim. The defence argued that by using this formula to arrive at the re-instatement value, the quantity surveyor made no deduction for the Contractor's profit which would of necessity be included in the original pricing but which would not be recoverable from the defendant on an indemnity basis. In making his measurements and calculations it was no part of Mr. Hanna's functions to pass upon the design or the workmanship and he gave no thought to those matters.

The plaintiff called Mr. Vallin Thomas, an engineer of 15 years experience, who was the Project Manager for the Housing Scheme for 6 months from January, 1974 and who later, twice inspected the works, on the instructions of the First National City Bank. Under Mr. Thomas' day by day supervision the roads in the residential sector of the scheme were cut to sub-grade and completely marled, kerbing and laying of kerbs was in progress; water mains were complete; the retaining wall on Milky Way was completely built and the retaining wall on Sheraton Avenue was also completely built. According to Mr. Thomas the work was inspected periodically by a number of experts in particular fields and he received no complaints of either poor design or inferior workmanship. He mentioned inspections by Mr. Watt, of the firm of Watt and McDermott, Civil Engineers, who represented the long term lenders; the visits from the Consulting Engineers, Hue, Leow and Chin; and the inspections of the Superintendent of Roads, from the St. James Parish Council which took place before the roads could be marled or water-mains covered. Specifically,

the roads were surveyed by Mais, Storey and Partners, a firm of Surveyors and they did all the surveying of the roads and setting out of the boundaries. I did not have the benefit of the evidence of any of these independent professionals.

In about October, 1975, Mr. Thomas who was then acting as Consulting Engineer for First National City Bank visited the Porto Bello site and after an inspection lasting, he said, about 3 days, he put in a Report on 7th October, 1975 which was admitted in evidence. The roads in the subdivision were said to have been completely marled. All the roads in Phase 1 were asphalted. Curb walling was 90% complete. He wrote "on the whole the condition of the roads is good". Of the drainage, he said in that Report, that "most drainage was complete" and that "the drainage was adequate and satisfactory". He expressed pleasure at the state of the project and stated that with concerted efforts it could be completed within 6 weeks.

Mr. Thomas was asked to comment on the particulars in the defence as pleaded. He said that in his opinion the design of the retaining wall along Milky Way was adequate and that it was absurd to say that the wall had no footing as otherwise it could not stand up against the hillside. He said too that there was a belt course about every 8 feet in the wall and that the fill behind the wall was of granular material. He disagreed that there was any clay in that area. Concerning the drainage, he disagreed with the particulars in the defence and maintained that on his inspection the drainage appeared adequate. Whenever engineers in his view, are of the opinion that a slope is stable, a retaining wall is not constructed as otherwise the project would become too expensive.

At the time of his visit in October, 1975 Mr. Thomas did not observe any debris on the road and the quantity of debris seen on them after the rains was in his view evidence of the

intensity of the downpour. He further said that it was good engineering practice to leave the final rolled road for some time before putting on asphalt as an aid to compaction. It was also good engineering practice to complete the major works before turning to the final work on sidewalks.

In support of its contention that the damage to the project was caused partly by defective workmanship, the defence called Dr. Vincent Lawrence a civil engineer whose qualifications include a PhD in Engineering from Queen's University, Canada, specialising in soils. He is a partner in JENTECH Consultants Ltd., a firm of Consulting Engineers and at present on secondment to the Government of Jamaica as Managing Director of Jamaica Bauxite Mining. Prior to his secondment, Dr. Lawrence was engaged in soil engineering, and infra-structure designs which latter included designs for drainage, roadways, pavements, retaining walls and other retaining structures, and foundations of all sorts.

At the invitation of the defendant's claim-adjuster, Dr. Lawrence visited the Porto Bello Housing Development on the 3rd December, 1975 and carried out an inspection of the site and the works. He either took or was present when a series of photographs of the site and works were taken and these were put in evidence with the consent of the parties.

It is convenient to set out Dr. Lawrence's overall opinion in relation to the development works before treating with his evidence in detail. He said that a big part of the problem was that insufficient attention had been paid to drainage on that construction site. Certain construction practices used on the site fell below the standard normally expected and he gave as examples the following:-

(a) Retaining wall constructed without weep-holes

(b) no proper filter material behind retaining wall to ensure that drainage takes place

(c) filling across natural ravinies without ensuring that drainage takes place;

(d) no provision for adequate drainage at low points on roads and at intersections

(e) roads which were not sealed were not adequately compacted and he guessed that fill was thrown in at random.

(f) insufficient cross drains having regard to the particular terrain and the amount of run off it could generate.

(g) road work was not progressing at a sufficiently rapid pace.

(h) Retaining wall on Milky Way constructed without footing and without belt courses.

Dr. Lawrence said that he saw subsidence of the road surface and sidewalks along Pasture Drive. There was evidence of some washing out in areas close to a retaining wall through weep holes in that wall. The witness was of the opinion that due to the lack of filter material behind the wall, water got into the fill material from the side of the road opposite to the retaining wall, washed away the back fill and caused the subsidence. It was his opinion that the material used as backfill was not sufficiently coarse-grained to permit percolation of water while leaving the filter material undisturbed.

The plaintiff regarded as very significant the evidence of Dr. Lawrence that he saw on Bay Roc Close an exposed water-pipe about one foot below road surface, but that the road in that area was properly constructed and that the volume of water which was necessary to cause that damage would have damaged any road surface however well constructed.

There was a 50 feet long breakaway of a portion of Sunset Drive near to the corner of Miranda Avenue and Sundowner Avenue. In that area the land is quite steep with a side slope of approximately 60 degrees. The side walk was on the downside and was largely resting on fill. According to Dr. Lawrence the damage was a break-away of the road surface and the sidewalks were separated from the edge of the road. It was his opinion that the damage was largely due to lack of protection of the fill on the downslope side. Proper engineering practice would require some retaining structure, not necessarily a retaining wall, such as Gabions - which are wire mesh packed with stones, - and because of the volume and weight would give stability. Mr. Lawrence went on to say that having regard to the steep slopes and to the amount of water which the road was expected to carry at the intersection with Miranda Avenue, there was in his opinion need for some constructed structure to carry the water at that point, and saw none. The absence of the retaining structure coupled with the drainage pattern amounted in his opinion to non-conformity with good engineering practice. It is to be observed that Dr. Lawrence had no adverse comments on the workmanship or the materials used in building the road at this point. To my mind his structures would be applicable to a complaint as to faulty design only but the defendant abandoned that part of his defence which alleged defective design.

Sunset Drive suffered further damage near to Sundowner Avenue. Dr. Lawrence said this was due to subsidence of the roadway and sidewalks. This section of the road was built at the top of a natural ravine and the method of construction used was simply to place fill material in the ravine to build it up to the road level. At the road surface there was an intake culvert which would drain off water running on the road surface to the down side of the slope. However, water from the surrounding hillside which sloped at approximately 45 degrees, when it got to the road surface would be blocked by the fill and would either have to flow through the fill to the other side or back up and flow over the fill. From Dr. Lawrence's observations the water from the hillside eroded the fill and removed it to a large extent, consequently causing the road to subside and break away.

In relation to the natural ravine, the proper engineering practice according to Dr. Lawrence, required significant drainage works under the road which could either be a culvert or other drainage channel. Such underground drainage was not provided.

CARLISLE AVENUE

From the evidence of Dr. Lawrence it appeared that where Carlisle Avenue meets Sunset Drive is a low point in the subdivision. Carlisle Avenue was carrying most of the drainage and at that point no provision - e.g. an intake basin, was made to catch the volume of water and to channel it towards the river. Whatever water came down that road would simply spill over the edge of the roadway.

Dr. Lawrence observed a breakaway of the sidewalk at a point where it had been prepared for casting but not yet cast. The fill material was loose and there were loosly packed stones on top of the fill. There was scouring and breakaway of sections of the roadway and there was failure of the embankment adjacent to the roadway.

At that same low point the roadway was constructed across a natural gully course by building up the level with fill material without making provision for underground drainage.

MIRANDA AVENUE

There was a little bit of washing out at the edge of the sidewalk and the top end of the Avenue which ended in a natural gully infringed on the gully course and was washed away. The method of construction on that roadway appeared to Dr. Lawrence to have conformed with general engineering practice but he felt that a retaining wall ought to have been used to protect the top end of the road where it joined the gully course.

SHERATON AVENUE

The retaining wall had moved slightly and resulted in subsidence and cracking of the road surface and sidewalk. The wall was not "keyed in", i.e. tied to the natural ground, said Dr. Lawrence, and as a consequence the water flowed adjacent to and around the wall and washed out some of the fill material. If, said he, the wall had been "keyed in" properly to the side of the hill the damage ought not to have occurred.

FARM DRIVE AND FARM CRESCENT

These roads had been rolled and fine graded and made ready for sealing but according to Dr. Lawrence they had been left in that state for a considerable period of time so much so that active green life was observed on the roadways. That being the lowest point in the sub-division, a considerable amount of debris was deposited there.

RETAINING WALL -MILKY WAY

There was a retaining wall along Milky Way, 16 feet high, 3-4 feet wide at the base and 1 foot 8 inches wide at the top. That wall failed and a section thereof was completely torn away permitting observation of a cross-section of the wall. A number

of photographs were taken depicting the damage done to this wall and those numbered 13 - 26 inclusive were shown to me.

The slope behind that wall was off at about 40-45 degrees to a gully course 50-60 feet below. The bottom of the wall appeared to Dr. Lawrence to be about 2 - 3 feet below ground surface. There was scouring at the foot of the wall and Dr. Lawrence said he poked about with a piece of stick and discovered that at the point of the break in the wall there was no foundation, there was no foundation or footing to the wall.

There were no weep holes in that section of the wall. There were no belt - courses in that wall, except one at the very top of the wall. The material behind the wall was marl and other limestone material.

In Dr. Lawrence's opinion, in order to give stability to a wall of that height, - 16 feet-which was intended to retain a roadway, one would expect at least 2 belt courses. Under no circumstances should such a wall be without a single belt course. In his view the wall was inherently unstable, with a safety factor below one (1) in circumstances when the ordinary safety factor should be 1.5. Having regard to the nature of the backfill, the absence of a foundation, the absence of weep holes and the absence of belt courses, when the soil behind the wall became water-logged, it would build up considerable pressure on the wall and it was bound to fail.

Mr. Daley submitted that Dr. Lawrence's evidence was lacking in cogency and could be of little help to the Court for a number of reasons. It was admitted by Dr. Lawrence that he visited the site only once and that for a period of 2 hours, that he had not seen or inspected the infra-structure drawings, plans and specifications or the Conditions of Approval of the St. James Parish Council in relation to the Housing Development. Because the opinion of the expert was given without an investigation of

the design requirements, Mr. Daley submitted that the evidence amounted to no more than a subjective critique of engineering practice and was not an opinion on whether the works carried out met the objective engineering standards laid down by the competent authority, viz, The St. James Parish Cpuncil. Mr. Daley went so far as to say that an opinion given in those circumstances was speculative and worthless.

THE LAW AS TO CAUSATION

The question of the quantum of damages will fall for easy resolution once the problem of causation is settled. Mr. Daley submitted that the law relating to causation in insurance cases is settled and it is that the law looks exclusively to the immediate and proximate cause, all causes preceeding the proximate cause being rejected as too remote. In the instant case, he said, that the evidence clearly indicates that the proximate cause of the damage to the insured property was flood or a peril insured against and it is therefore irrelevant to consider the effect, if any of the defect in design and other matters raised by the defendant.

The defendant did not pursue the allegation as to defective design.

Dr. Barnett submitted that the onus was on the plaintiff to prove that there was a flood and that the flood was proximate cause of those losses. A convenient starting point is to take a quotation from Ivamy, General Principles of Insurance Law, 3rd Edition at page 358.

> "Every event is the effect of some cause ..... It (the Law) looks exclusively to the immediate and proximate cause, all causes preceeding the proximate cause being rejected as too remote. The doctrine of the proximate cause, which is common to all branches of insurance, is based upon the presumed intention of the parties as expressed in the contract unto which they have entered."

Proximate cause is to be sharply contrasted with "last" cause. The word "proximate" means proximate in efficiency, rather than proximate in time. Other words, which have been held to mean the same thing as proximate, in this context are "dominant" or "direct". See Halse Laws 3rd Ed. Vol. 22 p. 90 para. 159.

In Leyland Shipping Company Limited vs. Norwich Union Fire Insurance Society Limited [1918] A.C. 350; a ship was insured against (inter alia) perils of the sea, by a time policy containing a warranty against all consequences of hostility. While on a voyage the ship was torpedoed by a German submarine 25 miles from Harve. She began to sink but with the aid of tugs was taken alongside a quay in the outer harbour. A gale sprang up and the harbour authorities for the safety of the harbour had the ship removed to a berth inside the outer breakwater where she was moored. Two days later she sank. The court held that the torpedoing was the proximate cause of the loss.

At p. 369 Lord Shaw of Dunfermline said:

> "What does proximate here means? to treat proximate cause as if it was the cause which is proximate in time is, as I have said, out of the question. The cause which is truly proximate is that which is proximate in efficiency. That efficiency may have been preserved although other causes may meantime have sprung up which have yet not destroyed it, or truly impaired it, and it may culminate in a result of which it still remains the real efficient cause to which the event can be ascribed".

Sea water did enter into that particular ship through the hole in its side but as Lord Dunedin said, " after the torpedo struck her she was a doomed ship, unless she could get into a place of real safety".

The doctrine of proximate cause has to be applied to ascertain which of successive causes is the cause to which the loss is to be attributed.

In Winspear v. The Accident Insurance Company Limited /1880/ 6 Q.B.D. 42, W. effected an insurance with the defendant against "any personal injury caused by accidental, external and visible means and the direct effect of such injury should occasion his death." The insurance was not to extend "to any injury caused by or arising from natural disease or weakness or exhaustion consequent upon disease." While we was crossing and fording a stream, he was seized with an epileptic fit and fell into the stream and was there drowned while suffering from the fit, but he did not sustain any personal injury to occasion death other than drowning. The Court of Appeal affirmed the judgment of the Exchequer Division on the ground that the death was due to drowning, an injury covered by the policy as on the facts he did not die from the disease of epilepsy.

A somewhat more complicated case is that of Lawrence v. The Accidental Insurance Company Limited /1881/ 7 Q.B.D. 216. There, a policy of insurance against death from accidental injury, contained the following condition:-

> "This policy insures payment only in cases of injury accidentally occurring from material and external cause operating upon the person of the insured, where such accidental injury is the direct and sole cause of death to the insured, but it does not insure in case of death arising from fits .....
> or any injury whether consequent upon such accidental injury or not and whether causing such death or jointly with such accidental injury".

The insured while at a railway station was seized with a fit and fell forwards off the platform across the railway, when the

engine and carriage which were passing went over his body and he was killed.

The Court of Appeal followed the decision in Winspear and held that on the facts, death arose from the engine destroying the insured and not from the previous fact of a fit having attacked him and so brought him there. Watkin-Williams,J, said, "According to the true principle of law we must look at only the immediate and proximate cause of death and it seems to me to be impracticable to go back to cause upon cause, which would lead us back ultimately to the birth of the person, for if he had never been born the accident would not have happened". In concluding he said, I therefore put my decision on the broad ground that, according to the true construction of this policy and this proviso, this was not an act arising from a fit, and therefore whether it contributed directly or by any other mode to the happening of the subsequent accident, it seems to me wholly immaterial ....." Lord Esher,M.R. in Pink and others v. Flemming /1890/ 25 Q.B.D. 396 at 397, did say that "according to the law of Marine Insurance the last cause only must be looked to and the others rejected, although the result would not have been produced without them". The doctrine of "last opportunity" has disappeared from the law and in the light of the decision of the House of Lords, in the Leyland Shipping Co. v. Norwich Union Fire Insurance Society case, I respectfully decline to treat Lord Esher's statement herein as now authoriative. Lord Summer stressed that a court must endeavour to find the "common sense cause" of the damage or loss. In Becker, Gray and Company v. London Assurance Corporation /1918/ A.C. 101 at 116, he said,

> "Cause and effect are the same for under-writers as for other people. Proximate cause is not a device to avoid the trouble of discovering the real cause or the "common sense cause", and though it has been and always should be rigorously applied in insurance cases,

> it helps the one side no oftener than it helps the other. I believe it to be nothing more or less than the real meaning of the parties to a contract of insurance".

The latest case on causation cited by Mr. Daley was Howard Barrow Ltd. v. Ocean Accident and Guarantee Corporation Ltd. /1940/67 Ll.L. Rep. 27. By a policy of insurance, O. Ltd. agreed to indemnify H. Ltd. against liability to pay for accidental damage to property happening in the course of the business of H. Ltd. who were road and sewer contractors and builders. The policy contained however, the following exceptions:-

> "The indemnity contained in this policy shall not apply to or include .....
> (5) Liability in respect of injury or damage caused by or in connection with or arising from fire, explosion or flood".

While H. Ltd. was engaged in constructing a culvert in a stream, its workman negligently caused a plank to get carried away downstream. This plank blocked a grating and as a consequence the water in the stream overflowed its bank and spread in large volume over a field, under a railway bridge, and entered the premises of another to a depth of some 12-18 inches and did considerable damage. H. Ltd. paid for the damage so caused and sought indemnity from O. Ltd. under the policy.

In the course of his judgment MacNaughton J, observed:-

> "There is also no doubt that the overflow of water in the circumstances and in the volume and to the extent stated above may properly be described as a flood and that it was not caused by an exceptional fall of rain".

Then he continued at a later point in the judgment:-

> "It was conceded that the damage was caused by water and that the water was in such a volume, and to such an extent, that it could properly be

> described as a flood; indeed I do not know that there is any other word that could adequately describe what happened. But Mr. Samuels argued; although it is true that water caused the damage you must look further back, and since the arbitrator finds that it was the negligence of H. Ltd. that caused the flood, then it is not true to say that the damage was caused by flood, because the damage was caused by negligence. It seems to me that the damage was caused by flood and by something else".

Other cases were cited to me illustrative of the application of the doctrine of proximate cause, but apart from the one below they do not need to be mentioned.

In Wayne Tank and Pump Co. Ltd. v. Employers' Liability Assurance Corporation Ltd. [1973] 2 Ll. L. Rep. 237,

The plaintiff effected a policy of insurance covering indemnity for all sums which the plaintiff should be legally liable to pay as damages consequent upon damage to property as a result of accidents happening in the course of their business. An exception in the policy stated:

> "The company will not indemnify the insured in respect of a liability consequent upon .....
> (5) death, injury or damage caused by the nature or condition of any goods or the containers thereof sold or supplied by or on behalf of the insured".

In the course of its business the plaintiff installed storage tanks at H. Ltd. plasticine mill and fitted a pipe made of Durapipe which was found to be unable to witstand heat. An employee of the plaintiff switched on the heating device at 4 p.m. on one day, left it unattended and at 5 a.m. the following morning there was a disastrous fire. Durapipe should not have been used as it could not withstand heat and the installation should not have been left unattended. The insurers repudiated liability

and relied upon the exception clause.

The Court of Appeal were unanimous that the dangerous nature of the machinery was the dominant cause of the fire and within the exception.

Lord Denning said:-

> "I would ask as a matter of common-senes, what was the effective or dominant cause of the fire? To that question I would answer that it was the dangerous installation of a pipe which was likely to melt under heat. It seems to me that the conduct of the man in switching on the heating tape was just the trigger - the precipitating event - which brought about the disaster. There would have been no trouble whatever if the system had been properly designed and installed".

Cairns and Roskill L.JJ. held that if there are two equally effective causes of the damage one being within the exception caluse and the other not, the claimant is not entitled to recover.

Mr. Daley stressed, and I think quite rightly, that the insurance policy Exhibit 1 and 1A, was a Contratcors all Risk Policy, covering damage" from any cause" not excluded in the contract. There is no term, condition or exception in that policy relating to or excluding Acts of God and in my judgment the plaintiff is not required to prove that the volume of rain which fell on the 15 - 16 November, 1975 satisfied the ordinary meaning of "flood". I find that 4 inches of rainfall in the Porto Bello area in a 24 hour period was quite exceptional rainfall when one considers that the monthly mean rainfall over the 30 year period 1931-1960 for three stations surrounding Porto Bello was:

Pie River	-	5'4" inches
Fairfield	-	6'0" "
Bogue	-	5'8 "

Indeed Mr. Hoilet, the Meterologist said that by the standard of the 30 years mean rainfall for November, the rains which

fell in the Porto Bello area on 15 - 16 November, 1975 must be considered "pretty heavy rainfall". The authorities of S & M Hotels Ltd. vs. Legal and General Assurance Society Ltd. [1972] 1 Ll. L. Rep. 157 and Anderson v. Norwich Union Fire Insurance Society Ltd. [1977] 1 Ll. L. Rep. 253, cited by Dr. Barnett, are unhelpful in that in both cases the court was concerned to determine whether on the accepted facts what occurred amounted to a "Storm" and in the latter case whether it could also amount to a "Flood". It was necessary in those cases for the plaintiff to prove "storm" and "flood" as those were the perils insured against.

The plaintiff in the instant case is not precluded from claiming under the policy on the ground that he has been unable to prove the intensity and duration of any particular shower of rain on November 15 -16, 1975 or that the down-pour falls within any common rubric e.g. flood.

As, Dr. Barnett put the matter in his final written submissions, if the opinion of Dr. Lawrence is accepted then a considerable amount of the damage the subject of this claim would be due directly to (a) bad engineering practice, (b) poor programming and (c) faulty material.

In order to determine what was the proximate cause of the damage to the retaining wall on Milky Way, I take into consideration the evidence of the plaintiff that that wall was constructed in 1974 and withstood the rains of that year which caused damage to other property as also the evidence of Mr. Thomas that the wall was built under his supervision and if it had been without a footing it would have fallen because of its own weight before completion. I had the opportunity of seeing the photographs taken by Dr. Lawrence and Mr. Gonsalves of the section of the wall that had been broken away and the photographs show quite clearly that there were no belt courses in that section of that wall. Dr. Lawrence's evidence as to the absence of the footing

was less conclusive and his poking about with a stick is not to my mind a satisfactory way to establish the non-existence of the footing. It would have been quite simple for the stones at ground level to have been removed so as to put the matter beyond doubt.

The construction of a retaining wall to a height of 16 feet against a hillside for the purpose of retaining a roadway without that wall containing at least 2 belt courses, was a highly dangerous operation. I agree entirely with Dr. Lawrence that such a wall was inherently unstable with an inadequate safety factor and would be bound to fail as soon as pressure built up behind that wall. Mr. Thomas' evidence that the wall had belt courses at about every 8 feet is totally contradicted by the photographic evidence. I apply the reasoning of the Court of Appeal in Wayne Tank and Pump Co. Ltd. v. Employers Liability Assurance Corporation Ltd. [1973] 2 Ll. L. Rep. 237 supra and hold that the proximate cause of the failure of the retaining wall on Milky Way, was defective workmanship, and to borrow Lord Denning's phrase, the rains were but the trigger to set off that damage. The entire claim under CONDITION 8, under the heading "Milky Way" fails.

Dr. Lawrence did not find any fault with the construction of the retaining wall along Sheraton Avenue. What he did say is that that wall was not "keyed in" to the natural land and water was therefore able to get between the land and the wall and undermine the wall. This was an unfinished site and it is common knowledge and supported by the evidence that even with proper programming bits and pieces of work will be held over until final tidying up. On a common-sense approach I cannot say that failure to "key in" the retaining wall on Sheraton Avenue was the effective cause of the damage. I find that the proximate cause of the damage to the retaining wall along Sheraton Avenue was the "flooding" of the site.

I wish to draw a distinction between the general condition of the drainage on the site and the condition of the drainage at the points at which the road was constructed across natural ravines without adequate cross drains. Mr. Thomas did not deal specifically with the condition of the drainage where Sunset Avenue meets Sundowner, nor at the point where Sunset Avenue meets with Carlisle Avenue. The evidenceof Dr. Lawrence is uncontradicted that at these two points the method of constructing the road was the filling up of the natural ravine without any provision whatever for drainage of the water which would flow naturally from the hillside across, through or under the roadway to the lower side of the natural ravine. This method of construction was contrary to all known engineering practice and invited disaster and in my view it was the improper construction method in these two instances which was the effective cause of the damage or loss. These rains were the first real test that the roadways were undergoing at these points and they failed the test miserably. The rains were not the cause of these losses. At my invitation, the attorneys for both parties agreed that the portion of the plaintiff's claim specifically referable to the damage at Sunset Drive and Carlisle Avenue amounts to $17,056.39.

In my view the general comments of Dr. Lawrence as to the drainage system would relate to the question of faulty design and not specifically to faulty workmanship. Dr. Lawrence did not inspect the plans, spsecifications and drawings and indeed in those circumstances the defendant could not but abandon his complaint that the drainage design was defective. I formed the opinion that in instances Dr. Lawrence was thinking not just of what one would term "proper engineering practice" but really of what would the engineering ideal given unlimited funds and expertise.

His treatment of the type of retaining structure which would protect Sunset Avenue in the vicinity of Miranda Avenue is a case in point. He felt that a retaining wall was unnecessary and recommended the use of Gabions. I infer that in those circumstances there is much room for difference of opinion between consulting engineers of the highest competence and integrity. I had the same feeling about his suggestion that the construction of a retaining wall at the end of Miranda Avenue would protect the tip of that road from the encroachment of the river.

Apart from what I have said about the construction of the roads across natural ravines without cross-drains, I accept the opinion of Mr. Thomas "that the drainage was adequate and satisfactory".

I can deal quite shortly with the defence that there was a cessation of the work whether total or partial. This was based on the fact that the pay sheets submitted by the plaintiff showed unusual inactivity on the site, that there was an absence of heavy equipment on the site evidencing a bustling construction site; and that the condition of the unpaved roads showed that they had been in that state for a considerable period of time. Mr. Gonsalves agreed that it was not every type of slow down of operations or phasing of operations which would have to be reported to the defendant company.

The evidence is that delays and over-runs are common in the construction industry. True the revised estimate of time for the conclusion of the project was 18th November, 1975 at which time the work was unfinished and it would require a further 6 weeks to complete the project. Mr. Hutton for the plaintiff, said that the contract for the paving of the road had been granted to Asphalt Paving Co. Ltd. There was money available to

pay them and the only reason why the asphalting had not been completed was the unavailability of machinery.

I agree that there was a slow down in operations on the insured site but I do not agree that there was any total or partial cessation of work on that site. It is a question of degree as to whether there was a partial cessation of work, and having regard to the fact that the project was more than 80% complete and the remaining work was either contracted for or in progress, I see no sufficient evidence that there was a partial cessation of work in November, 1975. Consequently there was no necessity for the plaintiff to give notice in writing to the defendant as contended for by the defendant.

There was no evidence whatever to support the defendant's contention that there was a material change varying any fact existing at the date of the policy. I do not consider that the plaintiff's failure to complete the construction within 6 months from May, 1975 could be treated as such a fact. I have already said a slow down in the operations due to the non-performance of the asphalting company was a normal occurrence which could have been remedied at any time. There is no evidence on which I could find that the plaintiff failed to take reasonable precautions to prevent loss or damage. A week before the damage Mr. Thomas was writing to the First National City Bank that he was pleased with the present state of the project.

The next issue to which I must address myself is what is the meaning of Item 4 of the Schedule to the Insurance Policy. That item runs thus:-

THE INSURANCE

> "Item 4 Costs and expenses necessarily incurred by the insured with the consent of the Association in demolishing or removing debris of the portion or portions of the property insured by Item 1 and 2 above destroyed or damaged by any peril hereby insured against. Sum Assured - Nil.

The plaintiff thus had the opportunity to take out specific insurance coverage in respect of any work of demolition he would be required to do, in the event of loss or damage as also any debris he would be required to remove but he declined to do so. Claims were made by the plaintiff under:-

CONDITION 1 - Scarify Surface

CONDITION 3 - Demolish remains of concrete kerbs and clear away.

CONDITION 5 - Excavate loose material around and under exposed pipes

CONDITION 6 - Excavate road surfacing

CONDITION 7 - Demolish remains of existing side walk and clear away.

CONDITION 8 - Excavate road surface when previously paved Sunset 2 No. Pasture 2 No. Sheraton.

REPAIRS TO RETAINING WALL - SHERATON AVENUE "Demolish damaged section of retaining wall and clear away.

CONDITION 9 - Removal of debris

All these claims were resisted by the defendant on the ground that they fall within Item 4 of the policy for which no coverage was requested by the plaintiff, and consequently they are not covered by the policy Exhibit 1 and 1A.

"Debris" means the remains of anything broken down or destroyed; accumulation arising from waste of roads etc". Shorter Oxford Dictionary and New Webster Dictionary. Mr. Daley argued that if a building had been damaged, the work of demolition prior to re-building was no part of the new structure and any expenses incurred in that demolition would not be covered as no insurance cover was taken by the plaintiff under Item 4. If, however, a road was damaged, the position was entirely different.

He said that in the ordinary process of road building there must first be an excavation and this would be so whether there had been a damaged surface or not. The argument is attractive but it fails to convince me.

There was no written Construction Contract between the plaintiff and its employers and the plans and specification on which the construction was based were not produced. However, this contract was principally one for infrastructure work and by far the largest item was road building. The plaintiff was said to be an experienced contracting company and must have had in contemplation that damage could have been done to the roads during the period of construction. The parties must have contemplated that foreign matter could have been deposited upon the roads during construction by one or other of the perils insured against.

The decision not to seek insurance cover for demolition of any kind or the removal of debris from the portion of the works destroyed or damaged was the plaintiff's alone and he too must bear the consequences.

I hold therefore that there was no insurance cover for:-

Condition 1 - Item 1, as to scarify surface means no more than to stir or scrape the surface of the road, so as to be able to clear away the accumulated debris.

Condition 9 - comes within the four walls of Item 4 of Exhibit 1, and indeed Condition 9 is headed "Removal of debris".

Condition 4 - Item 1;

Condition 5 - Item 1;

Condition 6 - Item 1;

Condition 7 - Item 1;

Condition 8 - Breakouts - Item 1;

Condition 8 - Repairs to retaining wall -Sheraton Avenue Item 1; are all disallowed as they are claims for work of demolition.

There was no evidence whatever to support the claim for Stand-by Costs nor was there any evidence to support the claim for Additional Site and Project Costs. In any event both these items were excluded from the policy by virtue of Exception 6 as they were clearly consequential loss.

I turn now to deal with the final question of the quantum of damages (if any) to be awarded under each Condition of the Particualrs to paragraph 3 of the Statement of Claim. Mr. Hanna the Quantity Surveyor, who gave evidence for the plaintiff admitted that in arriving at the money value for the repair work, he looked at the plans, specifications and bill of quantities and used the prices set out there. The defendant contended that those prices would need to be scaled down for a number of reasons. In the first place, if all the work recommended by Mr. Hanna was done, the work site would be put in a condition better than it was at the time of the damage. Secondly, the original prices included the contractor's profit margin and since the repairs were remedial work and the policy was an indemnity policy, the profit aspect should also be deducted. There was also evidence that the plaintiff's site Manager had told the defendant's representative that some rain had fallen on the site after 18th November and this the defendant said could have caused additional damage to the site. The defendant admitted that they did not know what the construction site looked like immediately before the rains but contended that since the defendant was not given the opportunity to examine the bill of quantities, in all the circumstances the allowable items should be reduced to 35%.

Mr. Gonsalves speculated that paved roadways could get damaged in the course of ordinary usage. He said too that green vegetable matter was seen growing on some of the roads indicating that they had been left in a state of partial completion for a long time. Mr. Gonsalves said too, that had there been no question of engineering faults which would have the effect of excluding the insurers liability completely in respect of some of the items, the adjusters were prepared to recommend to the defendant that the plaintiff claim be settled for an amount between $130,000 and $160,000.00

It seems to me that Mr. Gonsalves in coming to his conclusions did not pay sufficient attention to the opniion of Mr. Thomas who had seen and examined the roads in the project as late as October, 1975. Mr. Thomas had said,"On the whole the condition of the roads is good". It is true that at one time Mr. Thomas had been the employee of the plaintiff on that very project and further that I have found his evidence unreliable as to the retaining wall on Milky Way, but I was quite impressed with him as a practical engineer, and I saw no reason to reject his evidence on the other matters about which he gave specific evidence. I think that a realistic reduction of the allowable claims under the several heads mentioned by Mr. Gonsalves should be 25% and not 35% as contended for by the plaintiff.

CONDITION 1

Apart from item 1 of this CONDITION the defendant did not raise any challenge to the claims set forth therein and for the reasons I have given above, the claim on item 1 - scarify surface,is disallowed. The other items amounting to $31,161.46 are allowed.

CONDITION 2

I do not accept the contention of Mr. Gonsalves that the roads which had been final rolled would in any event have

have to be re-rolled before they could have been asphalted. The damage to the road had been so extensive that his opinion expressed in evidence can but be speculative. The defendant did not contest the other items of condition 2 and the entire amount claimed viz - $64, 194.64 is allowed.

The following items of the plaintiff claim are therefore disallowed :-

CONDITION 1 - Item 1
CONDITION 3 - Item 2
CONDITION 4 - Item 1
Item 5
CONDITION 5 - Item 1
CONDITION 6 - Item 1
CONDITION 7 - Item 1
CONDITION 8 - Item 1
Items 16-27
Item 28
Item 37
CONDITION 9 - The entire claim
STAND-BY COSTS. The entire claim
ADDITIONAL SITE COSTS. The entire claim.

I accept the joint statement of Counsel who did the arithmetic that the disallowances would reduce the plaintiff's claim to $203,882.83. From this sum I deduct the amount of $17,056.39 in respect of the sections of Sunset Drive and Carlisle Avenue which were built across natural ravines, leaving a balance of $186,826.44. When this amount is scaled down by 25% the balance is $140,119.83. From this amount the policy excess of $2,000 should be subtracted leaving the sum due to the plaintiff as $138,119.83.

I give judgment for the plaintiff for $138.119.83(with

interest at 6% per annum from the date of the service of the Writ) and with Costs to be taxed or agreed.

I certify that plaintiff's attorney is entitled to Costs of $750.00 on the brief and refreshers on the normal scale.

Before parting with the case I wish to record my gratitude to Counsel on both sides for presenting their closing addresses in writing and for appearing in Court in the Easter recess to receive the judgment. Their co-operation saved a considerable amount of court time.

I.D. Rowe
Judge