Neutral Citation 2012 [IEHC] 293

THE HIGH COURT

[2006 No. 56 P]

BETWEEN

JAMES O'CALLAGHAN

PLAINTIFF

v.

LIMERICK CITY COUNCIL AND ROADBRIDGE LIMITED AND MURPHY INTERNATIONAL LIMITED

DEFENDANTS

Judgment of Mr. Justice Hedigan delivered the 12th of July 2012

1. The plaintiff resides at 8 Palmerstown Court, Mungret Street, Limerick. The first named defendant is the city council for the limerick city functional area and has its offices at City Hall, Limerick. The second named defendant is a limited liability company and has its registered offices at Dock Road, Bunlicky, Limerick. The third named defendant is a limited liability company and has its registered offices at Hiview House, Highgate Road, London, NW5 1TN.

2. The plaintiff's claim is for:-

> (a) Damages for loss, damage, inconvenience and expense suffered and sustained by the Plaintiff owing to the negligence and breach of duty (including breach of statutory duty) and/or nuisance and/or breach of the Rule in *Rylands v Fletcher* and/or for trespass and/or interference with the Plaintiff's property rights and/or for breach of the Plaintiff's rights of support and/or such other or further basis as is deemed fit arising out of works being carried out by the Defendants at or near the canal bank, Clare Street, Limerick and which caused interference and damage to the Plaintiff's property adjacent thereto.
>
> (b) If necessary, an Injunction or Order requiring the Defendants to restore the Plaintiff's property to its condition prior to the matters complained of herein.
>
> (c) Such interim and/or interlocutory relief as is deemed fit.

Background Facts

3.1 The plaintiff in these proceedings seeks damages arising out of the manner in which works were carried out under the Limerick Drainage Scheme. The plaintiff is the owner of a dwellinghouse and associated outhouses at Canal Bank, Clare Street, Limerick. The plaintiff's property is located approximately 10 metres from the canal wall. Extensive works took place on the canal in the course of the Limerick Drainage Scheme. Limerick City Council ("the Council") appointed Roadbridge Limited ("Roadbridge") as the main contractor in respect of contract number 3.2 Interceptor Sewers ISU Southern on the Limerick Main Drainage Scheme. These were the works which took place in the vicinity of the plaintiff's property. The appointment was made pursuant to the Institution of Engineers of Ireland Conditions of Contract for use in connection with works of civil engineering construction (Third Edition, 1980 Revised and Reprinted October, 1990). The original plans for contract 3.2 envisaged a tunnelled drive along Clare Street, Limerick which would join the two sections between ISU 4 and Manhole 10. However due to issues such as traffic disruption, a variation was ordered by the Council whereby a new drive was directed running directly from ISU 4 to Manhole 10. The proposal for this was a tunnel drive adjacent to the canal along the canal bank. There were difficulties laying the sewer between ISU 4 and MH10 in the proposed fashion and this drive was discontinued in early 2003. This necessitated proposals for alternatives as to how to connect the sewer between ISU 4 and Manhole 10. Roadbridge proposed a form of construction which effectively ran in an open cut down the canal bed itself in a straight line between the two points. Representations were made by Waterways Ireland who were concerned that a straight drive would result in damage to a Waterways Ireland Lock. The engineer having charge of the contract decided to choose a route which would avoid any possible damage to the lock. The engineer appointed was White Young Green and its representative was the resident engineer Russell Naylor. It was decided that the work to be carried out was partly to be by way of open cut within the bed of the canal itself from structures known as ISU 1.03 A and ISU 1.03B and thereafter by tunnelling works to manhole 10. The engineer Mr Naylor wanted and it was decided to include an "S" bend in order to take the tunnel drive away from the lock structure in the canal. This was to meet the concerns of Waterways Ireland.

3.2 Subsequent to this decision Roadbridge effected the open-cut works along the canal bed between ISU1.03A and ISU1.03B with these works concluding in or around 25th August, 2003. After the completion of the open-cut works to ISU 1.03B the question of the remaining section to Manhole 10 was considered. The engineer directed that the S Bend structure should be constructed with the tunnel running from manhole 10 to a reception pit which in turn was to be tied into ISU 1.03B. The latter structure was to be effected by a cofferdam. The cofferdam was located adjacent to the plaintiff's house and it entailed the driving in and removal of sheet piles in this area.

3.3 There was disagreement between the parties in relation to the construction of the tunnel from ISU 1.03B to Manhole 10. This disagreement centred on whether to use dewatering or not. On 7th October, 2003 Mr. Eamon Curran Contracts Manager with Roadbridge wrote to Mr. Felix Cocker Engineer with Limerick Main Drainage. Mr. Curran stated in this correspondence:-

> "Further to our meeting of last week please find attached details of the dewatering wells to be placed adjacent to the tunnel drive between Point Band manhole 10... The pumps and generator are on site and will be used if required. The excavation of the drive pit adjacent to manhole 10 is now below -2.50 m O.D. and in the tunnel horizon. We are at present excavating a stiff impermeable clay with minimal ground water infiltration."

Mr. Naylor in correspondence dated 9th October, 2003 to White Young Green, expressed his concerns vis-á-vis the dewatering scheme which was being proposed by Roadbridge. On the 28th October, 2003 Mr. Curran responded by proposing further testing along the proposed route of the tunnel to provide information with regard to likely water drawdown in the gravel layer confined between the silt/clay layer and the bedrock. The resident Engineer remained of the view that dewatering on a continuous basis should be carried out. In correspondence of the 4th November, 2003 Roadbridge commented:-

> "We would like to reaffirm our position that dewatering should not be carried out unless absolutely necessary. Inspection of the clay face at the launch pit would seem to indicate that it is impervious and that water does not pose an immediate risk. Pumping substantial volumes of water from the gravel layers over a period of time will remove the fines and decrease the pore water pressure. This may lead to settlement of the overlying soils."

In a further letter of the 4th November, 2003 Mr Curran commented in relation to dewatering:-

> "Following the events over the last few days it is our understanding that all decisions regarding the dewatering and operation of the tunnelling machine are to be taken by the resident engineer. We hereby undertake to carry out his instructions but feel we must advise of the implications of these actions on the likely outturn cost, and present indemnity insurances in place under the contract. We have been advised by our insurers that they cannot accept responsibility for actions over which we have no control."

3.4 Limerick Main Drainage insisted that Roadbridge stick to their own method statement which called for continuous dewatering. The issue of dewatering was discussed at a site meeting of the 5th November, 2003. The minutes of this site meeting state:-

> "The section of work from MH10 to MH1.4 was discussed. LMD were very concerned that they had not received a full dewatering plan or settlement calculations in the method statement for the tunnelling works at MH10 as requested. This work had now commenced, approval to continue working would only be given on a day-by-day basis provided that the dewatering was proven to be effective and alignment and settlement were kept to the required tolerances. LMD insisted that Roadbridge Limited carry out the dewatering indicated in their method statement and that it was not sufficient to dewater only if they considered it necessary. LMD considered that Roadbridge's proposal would be too late to prevent settlement and tunnel misalignment if silty sand and gravels under a high water pressure were encountered in the face. Ground water levels should therefore be kept below the invert of the tunnel. Measurements taken to date indicated that the dewatering installed would be able to achieve this and only result in minimal settlement but this would continue to be assessed on a daily basis."

Subsequently, dewatering continued on a continuous basis until 3rd December, 2003. The reception pit was finished by 10th November, 2003. The tunnelling works were finished by 3rd December, 2003.

3.5 On 22nd, 23rd and 24th December, 2003 Roadbridge carried out the tie in works between ISU 1.03B and the reception pit by way of the cofferdam. Mr. Eamon Curran had sent to Felix Cocker of Limerick Main Drainage the drawings for the manner in which the tie was going to be carried out and specifically sought the approval for same by site correspondence dated 2nd December, 2003. No method statement however was provided for the connection between Reception Pit 1.03c and Point B. No written response was made to Roadbridge.

3.6 On the 14th January, 2004 the plaintiff, Mr James O'Callaghan made a telephone call to Mr Russell Naylor to inform him that his property on the canal bank had sustained severe structural cracks. Mr Naylor visited the property on the 14th of January to view the damage. Photographs taken then by Mr. Russell Naylor show severe damage to the property. In November 2005 the third named defendant Murphy International Limited were hired by the Council to install a cobblelock pathway along the canal bank. This project was in effect the completion of the work by the defendants on the canal bank. Vibrating equipment was used in the installation. A 300mm zone was left in front of the plaintiff's property. The parties disagree about the extent to which the use of vibrating equipment increased the cracking in the property. The cobblelock was put at 50mm higher than the level of the floors of the house. As a result of the damage to the house, it had to be boarded up in about February 2004 and abandoned as it was obviously unsafe to use or let out at that stage given the substantial structural cracking. The property deteriorated in condition and was vandalized. In 2007 the plaintiff received a notice from the corporation about the condition of the property. The property remains in a semi ruinous state and there has been, prior to the hearing, no agreement on either the extent of the damage sustained or the responsibility for the damage.

Plaintiff's Submissions

4.1 The first and second named defendants both concede that damage was caused to the plaintiff's property during the course of the limerick main drainage project. The Council claims that the cracking was caused by the manner in which Roadbridge carried out the work adjacent to the plaintiff's property, whereas Roadbridge claims that the cracking was caused by dewatering ordered by the Council. In either case the plaintiff is entitled to compensation. The plaintiff claims that on or about the 13 or 14th of January, 2004 substantial cracking and movement of his house occured. The plaintiff claims that further damage was caused during pavement reinstatement works subsequently carried out by Murphy International on behalf of the Council. The engineering evidence on behalf of each of the parties during the course of the hearing was in agreement that the house will have to be demolished as a result of the damage caused to it. The evidence was that the canal wall adjacent to the plaintiff's property moved a considerable distance outwards and downwards as a result of these works and that a section of the wall of up to 20 metres was also removed by the second named defendant in the course of the works. From about November 2003, there was substantial movement of the ground at and near the plaintiff's property.

4.2 Counsel on behalf of the plaintiff submits that he ought to be entitled to a joint and several finding of liability in respect of all three defendants. It was argued by the first named defendant that there ought to be no finding of liability in respect of the third named defendant. The evidence of the plaintiff's engineer Mr Cotter regarding the further damage caused by the works carried out by the third named defendant was not challenged by the first and third named defendants. Mr Cotter gave evidence, that the reinstated road surface outside the plaintiff's property was about 50mm higher than the floor of the plaintiff's property which rendered it uninhabitable as water would drain into the property. The plaintiff submits that the first named defendant ought to be liable to the plaintiff in respect of the damage caused during the works. Mr. Naylor, on behalf of the first named defendant, admitted that the damage was caused during the course of the works. The first named defendant was the party who brought the nuisance concerned to the plaintiff's property and it was their contractors who caused the damage. Irrespective of whether the damage was as a result of de-watering or failure to support the wall during the connection works, the evidence was that the first named defendant's representative Mr. Felix Cocker was directly involved with the site works in terms of visiting and inspecting. The evidence was that

the second named defendant carried out the works by means of "method statements" agreed with the first named defendant. The first named defendant commissioned the drainage works which were initially to be along Clare Street. It then directed a change of direction for the line of the drain along the canal bank. It commissioned the second named defendant to lay their pipes adjacent to the plaintiff's property. In these circumstances the plaintiff submits that the first named defendant ought not be entitled to pass all such liability to its contractor the second named defendant and seek to avoid direct liability itself to the plaintiff. The first named defendant commissioned the works which gave rise to the resulting damage to the plaintiff's property, it ought to be directly liable to the plaintiff not only on that basis but also on the basis of vicarious liability. The second and third named defendants are also so liable. It is then a matter between the first and second named defendants as to what degree that liability is apportioned between them.

4.3 The plaintiff's has made a claim for damages under the following headings:- (i) reconstruction, (ii) renovation, (iii) rental income lost, (iv) expert fees incurred, (v) lost development opportunity, (vi) the plaintiff's own expenses, (vii) lost property value. (i)Reconstruction:- the parties have been able to agree the cost of reconstruction is €300,000 however this is the only category which they have agreed.

(ii) Renovation:- After purchasing the property in 2001 for €220,000, the plaintiff carried out substantial works of renovation and restoration in the property. Evidence was given in that respect by Mr. Farren, the Architect who assisted him in that project. The evidence was that he spent about €104,000 on renovations to the interior of the main house and the annex. This work proceeded until 2003. As a result of the damage to the house, the house had to be boarded up in about February 2004 and abandoned as it was obviously unsafe to use or let out at that stage given the substantial structural cracking there. The plaintiff's evidence was that he intended to reside in the property himself and rent out the annex portion which he intended to develop into townhouses.

4.4 (iii) Rental income lost:- In terms of loss of rental income, the plaintiff's evidence was that when he purchased the property it was rented to the McAllister family for £800 per month . The plaintiff continued to rent the house to the McAllister family until January 2003 when they left the property because the general disruption from the nearby works was interfering with their occupation of the property. After that, the Council agreed to rent the property during the course of the works and they paid €1,000 a month rent to the plaintiff until September 2004. The plaintiff claims loss of rental income from September 2004 to date, plus loss of rental for the six months which it will take to reconstruct the property. It was accepted by the valuer's for each party that in the period 2007/2008, rental incomes dropped. However the plaintiff's valuer Ms. Leddin, stated in her evidence that rental values are still strong in Limerick and she felt that the plaintiff would be receiving rent of €750 per month in 2011, had the damage not been caused to the property. The loss of rent claimed from 2004 to 2012 and continuing including for the six month period for demolition and reconstruction works comes to €82,200.00.

4.5 (iv) Expert fees:- The plaintiff also has a claim for costs associated with expert fees. These include the fees of Arup Engineers, Garwin Farren Architect, Brian Archer Limited and Dunworth and Associates regarding ancillary costs incurred in relation to the planning application and in dealing with the damage caused and as to the restoration works done to the property. In total expert fees amount to €30,714.33.

4.6 (v) Lost development opportunity:- The plaintiff's evidence was that he intended to reside in the renovated property himself and to rent the annex portion which he intended to develop into townhouses. The evidence was that the plaintiff had submitted a planning application for two town houses in the annex to the property. In 2003 the planning application was refused on one ground only, namely that it was premature pending completion of the Limerick Main Drainage Works in the vicinity. Mr. Archer's evidence on behalf of the plaintiff was that once this prematurity objection was obviated, which he considered it would have been in 2004 when the main drainage works in the vicinity were completed, then the plaintiff would obtain planning permission for those town houses. Ms. Leddin's evidence was that these sites in 2004 had a value, on the basis that they had planning permission, of €150,000 each. It was common case that in general the values of all properties diminished considerably in the years since 2008. In terms of *quantum* however, the plaintiff's loss should be seen from the perspective of values in the 2004/2005 period, when on the basis of the evidence of Mr Archer, he would have been in a position to develop the annex to the house at that stage and reside in the main house himself as was his intent. Therefore, he ought to be entitled to recover the loss of developmental value in respect of those two sites. The plaintiff argues that the evidence established it was probable planning permission would be granted for these annex sites. Notably it was established in evidence that there were no issues regarding access to the property. In this regard Waterways Ireland confirmed that a right of way existed in favour of the plaintiff to the property. The sites were worth €150,000 each, Ms Leddin puts a current value of €50,000 on each site therefore the total loss of value for the two sites comes to €200,000.

4.7 (vi) His own expenses:- The plaintiff gave evidence that he spent a considerable amount of his own time firstly assisting with the renovations and then meeting experts and lawyers in relation to his case. The plaintiff gave evidence that he acted as a runner during the renovations and also worked weekends on the project. His accountant has worked out that based on 30 hours per week multiplied by his current rate of pay he is entitled to €41,280.00.

(vii) Lost property value:- The plaintiff claims that he is entitled to the differential between the market value of the property at the time of the damage and the current value of the property. Ms. Leddin claims that in 2004, at the time of the damage, the property had a value of about €500,000. Ms. Leddin presented a comparator of a Lock Keepers house in Celbridge, Co. Kildare and which was for sale for €575,000. Her evidence was that there was no nearer comparator in the adjacent Limerick area for the property and she disputed the comparators suggested by the defendants. Ms Leddin suggests that the current value of the property is €100.000. Therefore the total loss of value is €400,000.00.

4.8 In total the claim in is for €1,108, 194.33 which breaks down as follows:

€300,000 in respect of costs of reconstruction

€104,000 in respect of loss of internal renovations

€82,200 in respect of lost of rent

€30,714.33 in respect of expert fees

€150,000 in respect of lost development opportunity

€41, 280 in respect of time the plaintiff's time dealing with this matter,

€400,000 loss of value of house.

4.9 The first named defendant argues on the basis of *Munnelly v. Calcon Ltd & Others* [1978] IR 387 that the plaintiff is only entitled to receive damages in a sum equivalent to the amount by which the value of his property had been diminished by the acts of the defendants. The plaintiff contends that the measure of loss to him as a result of the damage to the house ought to be determined on the basis of the value of the house in 2004/2005 and not at current values. The plaintiff's evidence was that he intended to reside in the house. Furthermore there was considerable evidence to the effect that this property was a unique property and there has been considerable Joss to the plaintiff, notwithstanding that the parties may have agreed a sum for demolition and reinstatement to the property. The evidence was that the property dated back at least to the 19th century. The age of the property, its vintage and location and that it had originally been the lock keeper's house and was adjacent to the lock gates referred to in the proceedings were the reasons the plaintiff purchased the property in the first place. In *Kelleher and Kelleher v. Don O'Connor & Co,* IEHC 2010 313 16th July 2010 the High Court dealt with the question of damages in the property context. Clarke J held at paragraph 9.1:-

> "it is important to start with the fundamental proposition that, in almost all cases, the principal function of the award of damages is to seek to put the party concerned back into the position in which they would have been had the relevant wrongdoing not occurred".

The plaintiff submits that this general principle ought to apply in the circumstances here. The plaintiff contends that the Court is entitled to use whatever mechanism it deems appropriate so as to restore the plaintiff to the position he was in prior to the damage. The plaintiff ought to be entitled to compensation for that damage against the defendants jointly and severally. The first named defendant commissioned and directed the offending works and the second named defendant as the main contractor carried out same. The plaintiff ought to be compensated for his loss so that as far as possible he can be restored to the position he would have been in had the damage not occurred. This ought not to take into account the subsequent drop in property values generally. In valuing the house regard might be had to (a) the unique nature of the property and (b) the considerable expense he had incurred on the property at the time of the damage and (c) the loss of its development value per the annex portion, and (d) his loss of use of same in the interim together with (e) all ancillary losses.

Submissions on behalf of the first and third named defendant

5.1 Counsel on behalf of the first and third named defendant's, submitted that the evidence given in the hearing establishes on the balance of probabilities that the damage caused to the plaintiff's property was as a result of the works carried out by the second defendant which occurred after the 3rd December, 2003. The said works resulted in a sudden movement of the canal wall, as a result of the second defendant's failure to adequately protect and stabilise the canal wall and the failure to properly support the ground at the location of the works which took place immediately adjacent to the plaintiff's property. The works (connection of Reception Pit 1.03c to Point B) caused the ground which had been supported by the canal wall to destabilise and led to very severe structural cracking of the plaintiff's property. The works caused the canal wall to move out towards the centre of the canal and subside downwards by more than 700mm during the "open cut works". During the open cut works it is accepted by the second defendants that one of the causes of the settlement of 700mm was the positioning of an excavator on or near the canal wall. The evidence has established that the second defendants used very heavy machinery for a considerable period of time immediately outside the plaintiff's property without providing any adequate support to the surrounding ground despite being aware of the damage caused by their excavator during the open cut works. He argues that it has been established by evidence that during the "connection works" the second defendants were carrying out piling works immediately outside the plaintiff's property using the aforementioned heavy machinery including a vibrating machine to dislodge the piles. It was accepted by all the witnesses, including the second defendant's expert witness Mr. Peters, that carrying out piling works without first ensuring that the surrounding ground was adequately supported would cause damage.

5.2 The first and third defendant's submit that the sudden movement caused by the second defendant's excavation and piling activities caused severe damage to the property. As a result of this damage the plaintiff contacted Russell Naylor who visited the site. The photographs taken by Russell Naylor very clearly illustrate the substantial works that were in progress when he arrived at the site on the 14th January, 2004. Mr. Naylor in his evidence stated that there was very significant movement recorded on the canal wall at the northern side (Grove Island). Mr. Naylor's evidence was that between the 10th December, 2003 and the 4th February, 2004 there was a sudden and catastrophic movement at monitoring Points BW5, BW6, BW7, which are 37m, 43m and 49m's respectively from the nearest dewatering well.

5.3 The evidence given on behalf of the first and third defendants by Mr. O'Sullivan, an expert engineer experienced in settlement, was that the canal wall was supporting the ground behind it and when the canal wall moved it settled and rotated. This affected the ground behind it that was supporting the house. Mr. O'Sullivan very carefully examined the cracking in the plaintiff's property and gave evidence to the effect that the cracking rotated out towards the canal wall and his evidence was that the cracking was not connected with dewatering. The only persons who saw the damage to the property were Mr. Cotter and Mr. Higgins the expert witnesses for the plaintiff and Mr. Naylor and Mr. O'Sullivan the expert witnesses for the first defendant and they all agree on the causes of damage to the house.

5.4 The second defendant called one expert witness, Mr. Peters who concluded in his revised report that dewatering was the most significant cause of all the damage to the plaintiff's property. His report and evidence also suggest that the impact of the tunnelling itself from Manhole 10 to Reception Pit 1.03c was very small, perhaps 2-3mm. His report also suggested that the Reception Pit Cofferdam at 1.03c was a very significant structure involving very deep excavation; very close to the plaintiff's property and would have quite a large zone of influence of perhaps 18m which would go right under the plaintiff's property. He opined that the cofferdam should have been located elsewhere and that it posed too much of a risk to the properties. In his report and in his evidence Mr. Peters accepts that piling work or the removal of piles would cause settlement to occur and in dealing with a sudden event which he states took place in early February 2004 he took the view that this sudden movement of ground could have been caused by such piling activities.

5.5 The second defendants claim that dewatering was not required during the tunnelling from Manhole 10 to the Reception Pit 1.03c. The evidence of Mr. Curran a witness, for the second defendants was that he was against continuous dewatering and was of the view that dewatering should be used only as and when required. The first defendants' resident engineer Mr. Naylor gave evidence that dewatering on a continuous basis was required and he stated that the first defendant had a Geotechnical Engineer on site, Mr. Miles Friedman who was insisting that dewatering was necessary. There is also the report from Project Dewatering Limited, a specialist dewatering company which said that dewatering was necessary. It further stated that it would only result in 0.1 mm of settlement and it advised that there was no risk of residual or latent settlement. It is to be noted that this firm were retained by the second defendants tunnelling experts, Messrs A.E. Yates Limited, to advise them in relation to dewatering. The second defendants, as required by the terms and conditions of contract, provided a method statement for the tunnelling operation which included dewatering. Mr. Naylor gave evidence that it was prudent and reasonable to use continuous dewatering in light of the severe damage

caused by the failure of the tunnelling which began at Manhole 1.04 in which there was massive settlement and no dewatering. Mr. Naylor in his evidence stated that the dewatering was seen as a precautionary measure rather then a reactionary measure. The correspondence on the issue of dewatering on the 4th and 6th November, 2003 and minutes of site meeting 5th November, 2003, show that there was a disagreement between Mr Curran and Mr Naylor in relation to the necessity of continuous dewatering. The evidence of Mr. Curran was to the effect that he was against continuous dewatering and felt that he was being ordered by Mr. Naylor to perform this. Mr. Naylor in response stated that all he was doing was insisting that the second defendants adhere to their own method statement which called for continuous dewatering.

Paragraph 2 of the letter of the 6th November, 2003 provides that the dewatering:-

> "will remain in operation throughout the drive unless monitoring indicated that it is counter productive with regard to settlement"

It is submitted that this is clear evidence that the second defendants, the first defendants and the Engineer White Young Green had reached agreement that there would be continuous dewatering as per the second defendants method statement. The second defendant did not reply to the letter of the 6th of November, 2003 objecting to the contents of the above paragraph and there is no evidence of any further complaints being made in relation to the issue and it is submitted that the reason for this is that there was finally agreement as to the contents of the letter of the 6th of November, 2003.

5.6 It is submitted by the first and third defendants that the second defendants have failed to establish on the balance of probabilities that dewatering caused the damage to the plaintiff's property. The dewatering in question was deep well dewatering with the wells driven to a depth of eight meters. In his evidence Mr. Peters agreed with the fact that this was deep well dewatering. The ground conditions at the site of the tunnelling from Manhole 10 to the Reception Pit at 1.03c would not lead to movement at the surface, caused by deep well dewatering. The evidence of Mr. Higgins for the plaintiff, Mr. O'Sullivan for the first named defendant and the project dewatering report all support this contention. The cracking in the plaintiff's buildings indicated movement to the north, towards the canal wall and not to the west towards the nearest dewatering well (W3). The cracking is not consistent with the cracking one would expect to see as a result of dewatering. Cracking from dewatering should be radial whereas the cracking evident in Mr. O'Callaghan's house was rotational and as a result of the ground moving towards the canal.

5.7 The first and third defendants also argue that if it were the case that deep well dewatering might have an influence on the surface then evidence showed that the maximum limit of the zone of influence is approximately 15m as indicated in Mr. Peters Report. All of the two storey buildings are outside the zone of influence and all of the two storey buildings have suffered significant movement and cracking. The gable end of the property was severely damaged by cracking and it is 30 meters from dewatering Well 3, the closest to the plaintiff's property. The sudden movement referred to in the evidence which occurred on the 13th or the 14th of January 2004 occurred over five weeks after the dewatering was turned off on the 3rd December, 2003. The damage to the Northern Canal Wall on the Grove Island side cannot be explained by dewatering but can only be explained by inadequate temporary support provided to the ground during the connection works carried out by the second defendant. Mr. Peter's original report submitted to the court and his subsequent revised report show the nearest dewatering well at a point 10m from the plaintiff's property. The correct position should have been 15.7m from the two storey building. In Mr. Peters original report he based his findings and conclusions on the premise that dewatering took place over a two month period. Mr. Peters accepted on cross examination that the revised report had to reflect that the impact of dewatering (if any) had to be lessened greatly with the reduction in the period of dewatering from two months to one month. Mr. Peters prepared two reports, both based on a 1Om separation between the nearest well and the two-storey buildings. His conclusions did not change, nor did his evidence even though he accepted that the separation was actually 15.7m. It is significant that Mr. Peters never saw the inside of the plaintiff's property, his first site visit was in October 2011. It should be noted that Messrs Higgins, Cotter, Naylor and O'Sullivan all visited the site at the critical time, 2004 and reached similar conclusions, that a sudden ground movement caused the damage. It is therefore submitted that Mr Peters report cannot be relied upon.

5.8 Counsel for the first and third defendants submitted that the second defendants were negligent and acted in breach of contract in that they failed to provide a method statement for the connection between Reception Pit 1.03c and Point B, as required by Clause 14 of the General Terms and Conditions of Contract. The second defendants also commenced this stage of the works without providing notification to the Engineer. The second defendants failed to adequately support the ground in the vicinity of the plaintiff's property when they knew that failure to do so was likely to cause damage to the said property. The second defendants carried out piling works without ensuring that the ground was properly supported and they failed to heed the warnings given to them at site meetings about the settlement which was occurring on the canal walls and the effect that that settlement could have on the plaintiff's property.

5.9 The assertion made by Mr. Curran that the route chosen to complete the works (S Bend) was at the behest of the first defendant is incorrect. The evidence establishes that the route was chosen following representations by Waterways Ireland. The evidence establishes that the route chosen was to avoid any possible damage to the Waterways Ireland Lock which had been renovated at considerable public expense. It is submitted that all of the works including the connection between 1.03c and Point B are temporary works completed under the ordered variation and are the responsibility of the contractor in accordance with clauses 7, 8, 14, and 22 of the contract. It is submitted that the responsibility for these works did not transfer to the Resident Engineer at any stage. The evidence of Mr. Higgins in this regard was to the effect that under the General Conditions of Contract the contractor was responsible for any issues caused by the carrying out of these works. In the course of his evidence Mr. Curran made reference to Clause 20 (3) "Excepted Risks". Clause 20 deals with the responsibility of the contractor for the care of the works and the responsibility of the contractor to make good, at his own cost, any such damage to the works. This clause has no relevance to the indemnity issue which is clearly covered by Clause 22.

5.10 These defendants argue that the evidence in the case does not establish on the balance of probabilities that the paving works carried out by Murphy International Limited contributed in any way to the damage caused to the plaintiff's property. Mr. Higgins and Mr. Cotter indicated that they were making assumptions in relation to the equipment that was used by Murphy International Limited. They did not have the benefit of Mr. Ryan's evidence to the effect that only light vibrating equipment was used and a 300mm zone was left between where their work finished and the front face of the plaintiff's property. This work did not cause a problem for the house. Furthermore because the supporting ground underneath the house had been compromised by the time of Mr. Cotter's first visit on the 30th January, 2004, the support for the house had to be restored and this restoration could only be achieved by piling. The site is extremely restricted piling could only be undertaken within the house and the only economical way to do this is to demolish the house. Any cracking that occurred after the end of January 2004 did not alter this necessity.

5.11 The plaintiff has made a claim for damages of €1,108, 194.33 which breaks down as follows:- (i) €300,000 in respect of costs of reconstruction , (ii) €104,000 in respect of loss of internal renovations, (iii) €82,200 in respect of loss of rent , (iv) €30,714.33 in respect of expert fees, (v) €150,000 in respect of lost development opportunity, (vi) €41, 280 in respect of the plaintiff's time dealing with this matter, (vii) €400,000 loss of value of the property. These defendants had the following observations;

(i) Reconstruction:- It is agreed between the parties that if damages are to be measured on the basis of demolition and reconstruction of the premises, the cost amounts to €300,000.

(ii) Renovation- The plaintiff's claims for €104,000 in respect of renovations. In cross examination by Mr McKeon the plaintiff admitted that he did not have receipts vouching this €104,000 he claims to have spent. Mr. Naylor gave evidence that the only works he saw taking place were stripping of timbers and painting. It is submitted that this work would not cost €104,000, and the evidence does not support the plaintiff's claim that he spent €104,000 on renovation works.

(iii) Rental income lost- evidence in relation to values was given by PJ Power auctioneer on behalf of the Council. Unlike Ms Leddin when Mr Power was compiling his expert report he compared the property with other properties in the area. On the basis of this comparison he determined that the rental value of the property in 2005 was €600 per month. Mr Power pointed out that problems with access to the property and parking would make it difficult to rent this property. The total for lost rent according to Mr Power is €67,000 whereas Ms Leddin values lost rent at €82,200.

(iv) Expert fees. The plaintiff also has a claim for costs associated with expert fees. These include the fees of Arup Engineers, Garwin Farren Architect, Brian Archer Limited and Dunworth and Associates regarding ancillary costs incurred in relation to the planning application and in dealing with the damage caused and as to the restoration works done to the property. In total expert fees amount to €30,714.33. These defendants argue that these costs were not properly proved in evidence.

(v) Lost Development opportunity:- The plaintiff claims €200,000 in respect of lost development opportunity. The plaintiff's application for planning permission for two town houses was refused on the basis of prematurity. There were no guarantees that if he applied again he would be successful. The local Authority would have been concerned with the absence of open space, the density of the development, and problems with access. Mr Power values the house and sites together at a value of €100.000. Ms Leddin values the house today at €100.000 and the sites today at €50,000 each.

(vi) His own expenses- The plaintiff's that his claim of working 30 hours per week on the renovations while at the same time he was holding down a full time job was not credible. (vii) Lost property value- The plaintiff has claimed €400,000 in lost property value on the basis that Ms Leddin valued the property at €500,000 in 2004 and €100,000 today. It is submitted that the plaintiff is not entitled to both reconstruction cost and the loss in value of the property. Mr Power valued the property in 2004 at €175,000. He stated that after the plaintiff purchased the property in 2001 the area had fallen into decline and experienced problems with anti social behaviour. Ms Leddin values the house today at €100.000 and the sites today at €50,000 each. Mr Power values the house and sites at a total of €100.000. Mr Power took into account the problems with parking in arriving at his values, and the absence of any open space with the house or sites.

Submissions on behalf of the second named defendant
6.1 Roadbridge and its experts are of the opinion that the level of dewatering caused ground settlement and consolidation causing cracking to the plaintiff's house and annex. In their view dewatering was the primary cause of the damage to the plaintiff's premises. Allied to this was the unavoidable damage which would be caused by the tie in works and their proximity to the plaintiff's buildings. The plaintiff's expert evidence was that a combination of activities in the vicinity of his house caused settlement to his property. The evidence on behalf of the first named defendant was that the dewatering was irrelevant and that the greater part of the damage was caused to the plaintiff's house by the removal of the canal wall during the tie in or failure to support the ground during this process including the removal of sheet piles at the cofferdam in the vicinity of the reception pit. However, Eamon Curran on behalf of Roadbridge testified that he had been opposed to the tie-in occurring in the vicinity of the plaintiff's house but was instructed to construct the tie-in and S bend connecting to a large reception pit in the vicinity of the plaintiff's premises.

6.2 Eamon Curran said that the intense dewatering of the tunnel which occurred by means of the three wells caused the undermining of the structures leading to the damage to the plaintiff's house. He gave evidence that damage was apparent to the annex wall at an early stage during the works and that it was no surprise to him that subsequently damage developed in the plaintiff's house. The tunnelling works were finished by 3rd December, 2003. By this date monitoring points U and Von the annex of the plaintiff's house showed movements of 25 millimetre and 27 millimetres, increasing to 35mm and 39mm respectively by 19th December, 2003. Mr Curran in his evidence explained why he raised concerns with respect to de-watering. He cited inter alia Roadbridge's experience at Corcanree Industrial Estate where dewatering caused significant settlement. He relied upon his knowledge of the type of soil which would be encountered in the tunnel drive between Manhole 10 and ISU 1.03B; the impact which dewatering to the extent of 1,000 cubic metres per well per day would have; the amount of settlement which would occur; and the likely impact this settlement would have on the buildings adjacent, particularly the plaintiff's. The second named defendant's expert Geotechnical Engineer Mr Peters gave evidence that in his view dewatering was responsible for 50-60% of the damage to the plaintiff's property.

6.3 The fact there was an open cut section along the bed of the canal meant that it was unavoidable some degree of interference with the canal walls themselves would take place which was acknowledged by all parties. Hence, Roadbridge agreed a provisional sum of IR£35,000.00 for any such remedial works. The status of the canal walls were known to be only marginally stable from a report commissioned from Dr. Eric Farrell in 1999. A significant factor in the settlement of the property was the decision directed by Mr Naylor to construct an S bend structure with the tunnel running from manhole 10 to a reception pit which in turn was to be tied into ISU 1.03B. The latter structure was to be effected by a cofferdam. Mr Curran in his evidence expressed the unequivocal view that as the cofferdam was adjacent to the plaintiff's house and as it involved works such as the driving in and removal of sheet piles using heavy machinery, it was inevitable that some damage to the buildings at that location, primarily those belonging to the plaintiff. In his evidence to the court Mr Peters stated that in addition to the dewatering there were a combination of events which caused the balance of the damage. In his view the reception pit ought not to have been constructed where it was. This was done solely on the instruction of Mr Naylor who directed that Roadbridge install the pit at this location.

6.4 No evidence was adduced by any of the defendants that the plaintiff was not entitled to succeed in the claim. The issue for determination is as to the respective liability of the defendants. The contract entered into between the Council and Roadbridge was pursuant to the Conditions of Contract and Forms of Tender Agreement and Bond for Use in Connection with Works of Civil Engineering Construction Third Edition 1980 (as revised) of the Institution of Engineers of Ireland. It is accepted that pursuant to clause 2, the resident engineer had no authority to relieve the contractor of any of his duties or obligations or to make any variation of or in the works. Clause 8 set out the general obligations of the contractor. The contractor was obliged under the contract to construct, complete and maintain the works and to take full responsibility for the adequacy, stability and safety of all site operations and

methods of construction provided however that the contractor was not to be responsible for the design or specification of the permanent works or of any temporary works designed by the engineer. Roadbridge submitted that the instruction provided by the engineer together with his design and construction of the S bend, the reception pit location and the dewatering removed any responsibility from Roadbridge for these works. Clause 22 provides at subparagraph 1 that the contractor is liable and obliged to indemnify the employer against all losses or claims which might arise out of or in consequence of the construction and maintenance of the works and against all other claims. However, it is important to note the following namely in 22(1)(a) that the liability of the contractor is to be reduced proportionately to the extent that the act or neglect of the employer his servants or agents may have contributed to the loss or damage, that there is no obligation to indemnify where as set out in clause 22(1)(b)(4) damage (other than that resulting from the contractors method of construction) arises which is the unavoidable result of the construction of the works in accordance with the contract. Allied to this provision is the obligation at clause 22(2) that the employer is obliged to indemnify the contractor from claims which are referred to in the proviso to sub clause 1 of clause 22 while the employer's liability to indemnify is to be reduced proportionately to the extent that the act or neglect of the contractor or its subcontractors may have contributed to the damage. Roadbridge are relying upon the obligation set out in clause 22(2) for the purpose of obtaining a full indemnity in these proceedings. There are a number of circumstances which Roadbridge say constitute an act or neglect, an unavoidable result of the construction of the works or an excepted risk for the purposes of clause 22. First, the instruction given to construct a reception pit in the vicinity of the plaintiff's house. Second the obligation to tie in by an S bend the works between the end of the open cut section in the canal bed through the canal wall to the reception pit. Third the obligation to maintain continuous dewatering on the tunnelling section from manhole 4 notwithstanding the objection of the contractor. Fourth the failure to permit the contractor to dewater as required despite this forming part of the temporary works. Fifth the fact that responsibility was taken by the employer through the engineer for the design and construction of these works in the immediate vicinity of the plaintiff's property notwithstanding the likely effect which this would have upon his property.

6.5 The 2nd defendant argues that, in interpreting the contract, the court has to decide what the intention of the parties was having regard to the language used in the contract itself and the surrounding circumstances. The general principles of interpretation applicable under Irish law were set out by the Supreme Court in *Analog Devices BV & Ors v Zurich Insurance Company* [2005] IR 274 The Supreme Court endorsed the view expressed by Griffin J. in *Rohan Construction Limited v Insurance Corporation of Ireland plc* [1988] ILRM 373 where he set out the view at p391 that:-

> "The cardinal rule is that the intention of the parties must prevail but the intention is to be looked for on the face of the policy, including any documents incorporated therewith, in the words in which the parties have themselves chosen to express their meaning. The court must not speculate as to their intention, apart from their words, but may, if necessary, interpret the words by reference to the surrounding circumstances. The whole of the policy must be looked at and not merely a particular clause".

Mr Lucey SC for the second defendant submitted that the interpretation of the contract is straightforward. In an analysis of the factual issues it demonstrates that Roadbridge were instructed and directed to construct the works in accordance with the design of the employer in this area and that the responsibility ultimately lay with the employer for its act in usurping the functions of the contractor. The position of Limerick City Council with regard to the instruction to dewater appears to be that it was included in the method statement furnished to them by Roadbridge which was compiled by Project Dewatering in July 2003. Limerick City Council seek to rely on the fact that this method statement provided for very little settlement in the event of dewatering. Mr Lucey submitted that Roadbridge had worked in the ground where the tunnelling was to take place and had determined that given the nature of the soil it was satisfactory merely to dewater as and when necessary. This was the expert assessment of Eamon Curran which was ignored. There was a failure on behalf of Limerick City Council to conduct any ground investigations in the new route chosen. Roadbridge made suggestions as to the route to be followed which were overruled. The overruling involved a tie in through the canal bank in front of the plaintiff's property. An analysis of the clay soil encountered at manhole 1.04 was critical and demonstrated that there was no need for continuous dewatering. Notwithstanding the physical evidence an instruction was given to continuously dewater. No regard appears to have been had to the effect which this had on the soil and on the likely settlement in its vicinity. As a consequence not only is the contractor not liable to indemnify the employer pursuant to the provisions of clause 22.1 but the contractor is entitled to rely upon the provisions of the indemnity set forth in clause 22.2. There were no acts or neglect on the part of the contractor which contributed to the damage as a consequence of which there should be no reduction in the indemnity to be afforded to the contractor.

6.6 Further damage was caused to the plaintiff's property by the actions of Murphy in constructing a boulevard outside the house and raising the level of the street. Only one witness gave evidence on behalf of Murphy, Mr. Liam Ryan who did not have available to him any documents upon which his evidence was based. He sought to minimise the extent of the damage caused to the plaintiff's house by these works. However, such evidence can be contrasted with the views of Arup engineers who attended at the plaintiff's house when Road bridge were carrying out works, after Roadbridge had concluded works and after Murphy had executed its pavement works. It was their view that there was a contribution in the region of I0 to 15% by the Murphy works with more settlement having been caused. While John Higgins, engineer was reluctant to put a percentage on the damage caused by Murphy, he was of the view that there had been some further damage inflicted. Gary Cotter engineer estimated that the Murphy works triggered further movement and its contribution to the damage was in the region of 10 to 15%. Mr Cotter highlighted the significant issue caused by the raising of the footpath outside which had a major impact as it was now 50mm higher than the plaintiff's property

6.7 With regard to the plaintiff's claim for damages in the sum of €1,108,194.33, the 2nd defendant deals with each of these as follows;

(i) Reconstruction costs:- it is agreed between the parties that if damages are to be measured on the basis of demolition and reconstruction of the premises, the cost would amount to €300,000.

(ii) Renovation costs:- the plaintiff alleges that he performed €104,000 of renovation works in 2003 before the cracking occurred in January, 2004. During cross-examination by Mr Lucey the plaintiff stated he paid his builder Mr. Clohessy €104,000. The plaintiff was asked did he pay VAT. The plaintiff said that he paid €104,000 inclusive of VAT. The plaintiff was asked whether he paid entirely in cash, he responded that he made four or five payment of cash which included €20,000 at the start of the project and €20,000 midway through the work. The plaintiff stated that he knew Mr. Clohessy well and he obliged him by paying him in the manner which Mr Clohessy requested. It was put to the plaintiff that when he was asked to provide all receipts in relation to the renovation work he was unable to provide any documents of relevance. The plaintiff was asked why in 2009 he claimed €40,000 in respect of the renovations whereas he now claims €104,000. It was put to him that he surely knew in 2009 what he had spent in 2003. He responded that €104,000 was the most accurate figure he could arrive at. The second defendant submits that this evidence does not support the plaintiff's claim that he spent €104,000 on renovation works.

(iii) Rent lost:-The plaintiff claims loss of rental income of approximately €82,200 ongoing. The claim for losses based on loss of rental

is overstated. It fails to include any consideration of the market, cost of maintenance, cost of rental periods during which the property might not be occupied.

(iv) Expert fees:- No issue arose with the nature of the fees due to ARUP, however the evidence of Garwyn Farran did not support the extent of works nor of his fees. Mr Farren was asked had he notes recording time spent on the job. He stated that he had destroyed these. It was submitted that it was not credible that Mr Farren came up with the same figure as Mr Clohessy of €104,000 for the cost of the works done when he had no notes.

(v) Lost development opportunity. The plaintiff claims for loss of development opportunity. This relates to a claim for two sites which the plaintiff alleges that he would have developed and as a consequence has lost €200,000. During cross-examination by Counsel for Roadbridge it was put to the plaintiff that the proximity of the sites to a petrol station would make them undesirable. Evidence was adduced on behalf of Roadbridge from Des O' Malley, valuer and Steven Dowds, planner. It was the evidence of Des O'Malley that the sites only had a value of €25,000 each in 2004 and have no value today. The evidence of Steven Dowd planner was significant. He was aware that planning permission for the sites had been refused as premature in 2003. While prematurity was the only reason stated, in his view there were other reasons why planners were likely to have refused permission. If the plaintiff had resubmitted an application for planning for the two sites between 2004 and 2007 the evidence of Mr. Dowd's was that the application was likely to fail for a myriad of reasons including access, density, open space, aspect and changes in policy and standards including the introduction of the Limerick City Development Plan of 2004. This plan has been replaced by the 2010 Plan. Both plans contain standards and requirements which could not be met on site. As a consequence the second defendant submits that the basis of the claim for losses arising out of failure to potentially develop or sell sites is untenable.

(vi) As regards the plaintiff claim for €41,280 in respect of his own time dealing with this matter. The second defendant argues that this claim is not supported by any evidence.

(vii) Loss of value of house. Mr O'Malley of Sherry Fitzgerald gave evidence that the area where Mr Callaghan's property is located is in decline, and has a lot of problems with anti social behaviour and that there are a lot of derelict properties in the area. In cross examination Ms Leddin agreed that there are now problems with anti social behaviour. The plaintiff has claimed for loss of value of the property. This is claimed at €400,000 on the basis that the property then had a value of €500,000 but now has a value of €100,000. It is submitted that there is a clear element of double accounting in the claims made as the plaintiff is not entitled to the loss in value of the property together with reconstruction costs. It was the evidence of Des O'Malley that the property in fact at the height of the market was only worth in the region of €190,000 and now in a habitable state was only worth in the region of €90,000. In its current poor condition he was of the view that it was only worth €55,000. This evidence is important as it shows that in fact the plaintiff has a loss only in the value of the property in the region of €135,000. The evidence in this case is that the plaintiff retains a property with a certain value. There were works required to the property before any damage was inflicted in the course of contract 3.2. It is the submission of Roadbridge that the cost of reinstatement is greater than the amount by which the value of the property has diminished. In those circumstances the measure of damages ought to be the difference between its value pre damage at €190,000 and its value post damage at €55,000.

Decision of the Court
7.1 It is agreed by all parties that the plaintiff is entitled to compensation for the damage to his house at Canal Bank, Clare Street, Limerick. In issue between the plaintiff and the defendants is the measure of this damage. The first and third named defendants claim the damage to the house was caused in the first instance by the second defendant whose tunnelling work on site caused the canal wall to subside, thereby causing the ground adjacent to the plaintiff's house to move and cause fatal cracking to occur in the house. This was compounded by their work subsequently in relation to the connection work and the reception pit. The second defendant claims that this cracking was caused by the dewatering process during the critical phase of the tunnelling ordered by the first defendant's resident engineer. They had opposed dewatering fearing it would undermine the ground and cause it to subside. They had been forced to dewater and had warned they would not be responsible for any damage caused thereby. The second defendant also claims that some of the damage to the plaintiff's house was caused by the third defendant when they finished off the reinstatement of the pavement on the canal bank. Their use of machinery to pile the cobbles on the pavement and their finishing the road surface above the level of the door sill of the plaintiff's house caused further damage.

7.2 Thus, the first question for the Court to address is the respective levels of liability of the defendants among themselves. The first defendant indicated at the outset of the hearing that they were taking up the defence on behalf of the third defendant. They also argued that the evidence showed that the third defendant had no liability for any damage. The evidence that I heard in this case has satisfied me that this is correct. The work done by the third defendant was over one year later and was to finish off the canal bank with a fine cobbled boulevard. The evidence, which I accept, was that the machinery used to lay the cobbles did not have the strength to create vibrations sufficient to cause any structural damage to the house. Moreover, a 300mm zone was left between their work and the plaintiff's house. Indeed, all the evidence points to the massive works surrounding the open cut and tunnelling as being the obvious source of the damage caused to the house. Furthermore, the fact that the level of the pavement is now very slightly above the level of the door sill in the house is an irrelevance in the context of the requirement now admitted by all that the house must be demolished and rebuilt. The evidence was that any differential problem involved can be easily resolved in that process. I find, therefore, that the third defendant has no liability in respect of the plaintiff's claim.

7.3 Liability lies therefore between the first and the second defendants. Having heard all the evidence in this case, it seems to me that this entire operation along the canal bank was from the outset a project fraught with peril for the structural integrity of the adjoining buildings. It is common case that the structural stability of the almost two hundred year old canal wall was very doubtful. The second defendant argues that the first defendant is responsible because, in relation to the tunnelling works, they insisted, over the second defendant's strenuous objections, on continuous dewatering. In relation to the connection works and coffer dam, the second defendant argues that its authority in this respect was usurped and they were forced by the first defendant's engineer to do the connection in this way and in a manner designed by him. The first defendant insists that dewatering is a red herring and had nothing to do with the problems encountered by the plaintiff. In relation to the connection works, the first defendant relies on the absence of the method statement that should have been furnished to them by the second defendant before they commenced the connection works. They also say this work commenced without their knowledge. They note, finally, in this regard, that the reason for the S bend and cofferdam being located where they were was because of representations from Waterways Ireland. Their fear was that the adjacent lock gates of the canal would be adversely affected by tunnelling under them. These gates and the lock itself had only recently been restored at considerable public expense.

7.4 Dealing first with the dewatering issue. I heard evidence in this regard from Joseph O'Sullivan, Consultant Engineer, who is experienced in settlement problems. He had also experience in dealing with about five hundred cases of dewatering problems in Cork where he said it is a sensitive issue. Mr. O'Sullivan examined the cracking in the plaintiff's house. He noted that the cracking rotated out towards the canal wall. He stated his firm view that the damage he saw was not consistent with dewatering damage. He noted,

and it was accepted by all parties, that what was involved here was deep well dewatering. This of itself should not cause damage on the surface. Even if it could, the damage caused would be radial and would be within a certain zone of influence. The damage here, he stated, was not radial and was clearly outside the zone of influence. He noted, and ultimately it was accepted by the second defendant, that Mr. Peters, a geotechnical expert who was called as a dewatering expert by the second defendant had wrongly positioned the nearest well to the house when he drafted his report initially. Contrary to this initial report, the well was actually located outside the 15 metre zone of influence of dewatering.

7.5 Mr.Peters gave evidence that dewatering led to settling and damage to the house. It was, he thought, the most significant cause of settlement. He considered this caused fifty per cent to sixty per cent of the house damage. As noted above, however, Mr. Peters had worked on some incorrect assumptions. He agreed he had thought there was two months of dewatering whereas in fact there had been just one. He thought the position of the nearest well for dewatering (Well 3) was closer to the house than it actually was. He had thought it was twelve metres whereas it was, in fact, located 15.7 metres from the nearest gable wall of the house. These are significant errors made in his original assessment of the situation. Moreover, he never inspected the house internally but worked off Mr. O'Sullivan's photographs. I note also that Mr. Peters gave his opinion on dewatering six years later and entirely on the basis of his analysis of data. All the experts at the time were agreed it was necessary. Moreover it was albeit after much discussion and dissent from Mr. Curran, included in the method statement. Mr. Peters was obliged to twice revise his report on the basis of further information he received including evidence he had heard in court during the hearing. He seemed initially unsure as to whether this was deep well dewatering but conceded in the end that it was.

7.6 The issue is a difficult one to resolve. The Court must decide it on the balance of probabilities. I consider Mr. O'Sullivan to have been a more convincing witness. Despite sticking to his original assessment even after having discovered his location of Well 3 was incorrect, that the period of dewatering was half of what he originally believed and his acceptance in cross-examination that this was in fact deep well dewatering, Mr. Peters' evidence seemed much less convincing. I note also that he had not inspected the interior of the house whereas Mr. O'Sullivan had. Mr. Cotter, Mr. Higgins and Mr. Naylor also had inspected the interior. All were agreed that the damage to the house was not caused by dewatering. It seems to me that the fully accepted instability of the canal wall together with the impressively massive and heavy machinery that was deployed on site in close proximity to the plaintiff's house combined together to cause such differential movement of the subsurface support as to cause fully the damage sustained thereto. In my judgment dewatering as a main or even partial cause has not been sustained on the evidence. It must be noted moreover that following considerable discussion of this matter, at the demand of the resident engineer, Mr. Naylor, of Geotechnical Engineer Miles Friedman and Project Dewatering Ltd., the second defendant had provided in their method statement that dewatering would remain in operation throughout the drive. Even though it is clear he disagreed with Mr. Naylor on the need for it, I find that Mr. Curran bowed to the inevitable and as indicated in the letter of 6th November, 2003, agreed to the continuous dewatering. On this basis even were dewatering to have been found to be responsible in full or in part, it appears to me that this would not assist the second defendant who had under its contract undertaken the work and the risk thereof including that of dewatering. Responsibility for damages caused by this stage of the works is entirely that of the 2nd defendant.

7.7 The difficulty in resolving this dispute grows complex in attempting to determine whether the primary cause of the damage to the plaintiff's house was the initial tunnelling works or the connection works which involved the construction of the S bend and cofferdam. After considering all the evidence herein, it seems to me that the extent to which responsibility for the damage can be allocated between these two distinct phases of the works involved is all but unknowable. All the experts agreed that the two hundred year old structures and the ground upon which they lay, had done some moving over that long period of time. The structures above and below ground had come to terms with each other over those two hundred years. If the stability of any part of the supporting canal wall or the ground was compromised, then all structures would take some time to regain the balance between themselves. How long this would take was unpredictable. What weak or strong areas would remain and how strong or weak they would be must, it follows, be unknowable. Thus, it seems to me that the Court is forced to the conclusion that the cause of the damage to the plaintiff's house must be allocated on a fifty/fifty basis between these two stages of work because there is quite simply no otherway to determine the relative liability therefor.

7.8 The necessity to divide liability between the two different stages of work arises, in my view, because the nature of the relationship between the parties seemed to undergo some significant change when it came to the connection and cofferdam stage of the works. The liability of the second defendant for the first stage has already been found by me, but what of the second stage -the connection works?

The nature of the relationship during the "connection stage"

7.9 It is clear from the evidence that during the "tunnelling" stage, relations between the first and the second defendant became strained. Dewatering was the first real example of this. There was disagreement at the outset over whether there should be a straight drive under the canal lock, as Mr. Curran preferred, or an S bend and cofferdam, as Mr. Naylor preferred, and ultimately ordered. As noted above, there was strong disagreement on the dewatering issue. It seems to me on the evidence that the lead parties lost confidence in each other. John Higgins, former director of Arup and Consultant Engineer, stated in his evidence (13/12/2011) that there seemed to be confusion as to who was in charge. Mr. Naylor stated in his evidence (21/12/2011) that there was a lot of friction. He, for instance, was never happy with the open cut, yet it went ahead. Mr. Curran opposed the S bend, yet it went ahead. He stated in his evidence (9/02/2012) that after the letter of the 4th November, 2003, he considered that Roadbridge, as contractor, was under the direct control of the resident engineer. He stated he no longer had control. Yet he was the man in charge on the ground. He agreed there was no method statement in regard to the "connection works" but he had sent a letter and considered he had supplied sufficient information on what he proposed to do and was not asked for more. Mr. Curran summed it up by saying in evidence that it was an unusual situation and one he had not come across before. Mr. Naylor stated unequivocally that the connection works started without his or his client's knowledge. That, he says, is why the first defendant did not shout stop, as he put it. It is hard to credit that the connection work could start without the first defendant's knowledge. If it actually did, it is most surprising since bearing in the mind the nature of the work and the manifest lack of confidence all round, the first defendant should have been keeping the closest possible supervision over the work. Mr. Curran did state in evidence that Felix Cocker for Limerick Main drainage was on site every day. Mr. Naylor doubted this and Mr. Cocker did not give evidence. On the evidence, Mr. Naylor did seem very surprised that the work had started.

7.10 In order to deal with liability for this part of the works, the Court must first look to the contractual terms involved. These are contained in the *Conditions of Contract and Forms of Tender, Agreement and Bond*, 3rd Ed. 1980 and specifically, paragraph 22 thereof. This provides as follows:

> "22(1) The contractor shall be liable for and shall indemnify and keep indemnified the employer against all losses and claims for injuries or damage (save as otherwise provided in paragraph (b) hereof) to any person or property whatsoever (other than the works for which insurance is required under Clause 21 but including surface or other damage to land being

the Site suffered by any persons in beneficial occupation of such land) which may arise out of or in consequence of the construction and maintenance of the Works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

Provided always that:-

(a) the contractor's liability to indemnify the employer as aforesaid shall be limited to the sum stated in the appendix to the form of tender and (in accordance with the operation of sub-clause (2) of this clause) shall be reduced proportionately to the extent that the act or neglect of the employer, his servants or agents, may have contributed to the said loss, injury or damage;

(b) …

(iv) damage (other than that resulting from the contractor's method of construction) which is the unavoidable result of the construction of the works in accordance with the contract; ..."

For the purposes of this judgment, it seems to me that the above may be summarised as follows:-

(1) the contractor is liable and must indemnify the employer against all claims for damage (save for paragraph (b) reservations),

(2) liability may be reduced proportionately to the extent that the act or neglect of the employer may have contributed to the loss,

(3) the contractor is not liable for damage which is the unavoidable result of construction in accordance with the contract.

7.11 The questions that arise for the Court therefore seem to me to be (1) Was there any act or neglect on the part of the employer that may have contributed to the damage that I have found was caused by the "connection" stage of the works, *i.e*. fifty per cent of the damage to the plaintiff's property; (2) Was the damage the unavoidable result of the construction which was done in accordance with the contract? On the evidence that I have heard, it seems to me that the first and second defendants are jointly responsible for the breakdown in mutual confidence and in the chain of command that resulted in the connection works being executed in such a way as to have contributed, as I have already found, to fifty per cent of the damage caused to the plaintiff's house. In respect of the first defendant, I find that this amounts to an act or neglect on their part that contributed to the damage to the plaintiff's property. In relation to the second defendant, on the balance of probabilities I do not consider that the damage caused was the unavoidable result of the construction done in accordance with the contract. In my judgment the connection works as ordered could have been constructed in a way that would have avoided damage to the house had proper securing been done of the cofferdam and tunnel connection. Piles were removed too soon from the dam. Massive machinery was used too close to the plaintiff's house. Photographs of the work in progress show it was carried out with scant regard for the adjacent house.

Thus the relative responsibility of the two defendants in relation to the connection works is, in my judgment, equivalent because although the work was carried out without due care to avoid damage to the plaintiff's house, this all followed from the breakdown in the chain of command on the ground. One thing had to follow the other and so I find that in respect of the "connection works" the first and second defendants bear responsibility on a fifty per cent basis each. This means that I find liability in respect of the damage caused to the plaintiff's property is to be apportioned on the basis overall of seventy five per cent to the second defendant and twenty five per cent to the first.

The quantum of damage

7.12 The plaintiff claims under a number of headings: (a) loss of house and cost of reconstruction and associated works agreed at €300,000; (b) loss in respect of the internal renovation of his house up to the date of damage, *i.e*. December 2003, (c) loss of the value of the house, (d) loss of rent, (e) loss of value of the two annexe sites, (f) professional fees, (g) loss of his own time.

7.13 The principles which the Court should apply to this kind of case have been summarised in *Halsburys Laws of England*, Volume 12, where the learned authors state at paragraph 868;

"The prima facie measure of damages for all torts affecting lands is the diminution in value to the plaintiff, or in the case of a plaintiff in possession with full ownership, the cost of reasonable reinstatement. In the latter case no deduction falls to be made merely because the plaintiff gets new for old, that is to say a betterment which is the necessary result of reinstatement. In general consequential loss of profits may be recovered in accordance with general principles and, in the case of a private individual such consequential loss such as a necessary stay in a hotel and general damage for inconvenience."

In *Kelleher & Kelleher v. Don O'Connor & Co.,* IEHC 2010 313, Clarke J. stated at paragraph 9.1:

"It is important to start with the fundamental proposition that, in almost all cases, the principal function of the award of damages is to seek to put the party concerned back into the position in which they would have been had the relevant wrongdoing not occurred. . . . In the case of a tort, the court has to attempt to put the plaintiff back into the position in which that plaintiff would have been had the tort not occurred at all. It is the pre-incident position that the court must look at as a starting point."

Thus, it seems to me, that this Court should seek to put the plaintiff back in the position he would have been in had the incident herein not occurred. That can be done by awarding the agreed cost of demolition and rebuilding together with an amount to compensate for loss of use in the intervening years. Costs involved in renovation of the house cannot be given in addition because, on the basis that the plaintiff will have the house rebuilt, he will have substantially the same house as he had pre-incident and post renovation cost. If the plaintiff is to have the house rebuilt then no damages can be awarded for loss of value. The original house would have increased and decreased in value over the intervening years had no incident of damage occurred. No account therefore should be taken for change in value over the intervening post-incident years. In relation to the two annexe sites, I take it that the reconstruction costs agreed reflect the cost of reconstructing these annexes to their pre incident state as well because the plaintiff in his written submissions states;

"Loss of the house and the cost of reconstruction and associated works as agreed between the parties and as indicated to the Court during the hearing and as accepted in the second named defendant's submissions €300,000."

7.14 The claim the plaintiff makes in relation to these annexe sites is really one of lost opportunity on the basis that he would have got planning permission for them, developed them as townhouses and reaped the profits there from either by sale or rent. This claim is grounded on the plaintiff's claim that he would have obtained planning permission for these sites. Planning permission was sought for these sites in 2003 but was refused. The plaintiff notes that the only ground for refusal stated was that the application was premature. He extrapolates from this that were he to apply after the works on the canal were finished, he would be all but assured of obtaining planning permission. Dealing with this, Stephen Dowds, a town planner with thirty years experience gave expert evidence on behalf of the second defendant. He observed that planning permission did not always set out the full reason for refusal. He expressed the greatest doubt that the plaintiff would have obtained planning permission in a later application. He noted that the density at the site was very high. There was no private open space whatever- not even a balcony. The front faced directly on to the canal bank, the back on to a filling station. There would be no window south in the living room area. The ground floor of the proposed houses would be mostly taken up by the garage. There would be access problems. Mr. Dowds also testified that since 2003, there had been two new development plans for Limerick- in 2004 and 2010. These provided more specific requirements in relation to residential issues, *e.g*. private open space is now a requirement whereas it had not been before. He expressed the opinion that a planning permission would have been contrary to either the 2004 or 2010 plans. I accept Mr Dowds evidence. Thus, on the balance of probabilities, I think planning permission would have been refused. Thus, I hold that the plaintiff has not been able to sustain this claim on the evidence.

7. 15 In relation to professional fees, those relating to the pre-incident renovation of the house cannot be allowed because in having the house rebuilt the plaintiff is put back into the *status quo ante*. That state was of a house renovated with all the professional costs having been paid or ought to have been. Equally, those fees relating to the applications for planning permission cannot be allowed for the same reason as the claim for loss of value of the sites as set out above. The professional fees that can be allowed are those properly incurred after the damage to the house and connected with assessing the damage and the requirements for reinstatement. These are part of the plaintiff's costs in making his case and thus fall to be assessed and awarded as costs in the action. Professional fees are lumped together in the written submissions of the plaintiff and have not been broken down between the three categories specified, *i.e*. planning application, damage caused and restoration works. Professional fees incurred in helping the plaintiff assess the damage which was caused to his property should, as noted, more properly be assessed as part of the costs of preparing his case. Fees in relation to planning permission cannot be allowed because as I have already found, that claim has not been established. Restoration works pre incident cannot be awarded. I do not think, therefore, that any award can be made in regard to this heading in the context of damages.

7.16 The final heading claimed by the plaintiff is for his own time dealing with this matter. The plaintiff said in evidence that his life had been turned upside down over the last ten years. I can readily understand and accept that. I note the plaintiff is a property manager and that therefore he would have a role perhaps somewhat greater in trying to deal with this situation that the average plaintiff. I think some damages are due here under the heading general damages for the distress and inconvenience which has resulted from this incident of damage.

7.17 Summarising and assessing damage;

(i) I assess the cost of demolition and reinstatement of the buildings at the agreed figure of €300,000,

(ii) I assess the loss of use of the house on the basis that the best valuation thereof is the rental value thereof less a notional maintenance cost over the years to date.

The period of rental loss should be from January 2004 to date plus six months for rebuilding, *i.e*. nine years. The evidence was that the property was rented to the McAllisters for €800 per month prior to the incident. When they moved out due to the works, the second defendant through Mr. Naylor agreed to pay €1,000 per month rental. This latter figure may be assumed to contain a premium for the disruption caused as well as the rent. Whilst it was accepted that rental values dropped over the years, the plaintiff's valuer, Ms. Leddin, gave convincing evidence that rental values remained strong in Limerick. This confirmed the plaintiff's own evidence. She considered a figure of €750 per month could be achieved today were the house rented as fully renovated. It must be recollected that had the incident never occurred, the house would not have become derelict. The value of the rental should be on the basis of a good house in good condition. Moreover, it must also be borne in mind that the canal bank would have been paved and all the works completed in what Limerick County Council according to the evidence considered would be a feature area. Thus, its location would have been far more desirable than it seems today. Taking all this into consideration, I do not consider Ms. Leddin's valuation to be unrealistic. Off that figure, however, must come an amount for the normal maintenance costs that would have been payable by a landlord together with some allowance for periods of non occupation. I have no evidence in this regard and can only assess such costs at a notional figure of twenty five per cent. Thus, rounding up slightly, I would assess the value of the loss of use by the plaintiff of his house at €600 per month. Over nine years this amounts to €64,800. (iii) For general damages in respect of the plaintiff's distress, inconvenience and loss of time, I assess a figure of €40,000.

Thus, the total of damages to be awarded amounts to a sum of €404,800 and liability therefor is assessed on the basis of seventy five per cent against the second defendant and twenty five per cent against the first defendant.