



# Construction

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## DESIGN LIABILITY

A talk given by Alexander Hickey, barrister, 4 Pump Court at the Arbrix Conference  
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1. These days anyone can be a designer or (more accurately) can be fixed with design liability. Design liability can attach to an architect, an engineer, builders and their sub-contractors, sometimes reverting to the Employer where he makes a choice during design, sometimes even a supplier in circumstances where they may not have thought they were doing the designing – I am going to call these people the ‘designer’ in this talk. In one sense it may not be right to call them the designer because they may not actually have provided a design at all but nevertheless the design risk for one reason or another has come to rest with them.
2. Whenever a case arises where there is an issue about a defective design, lawyers rub their hands. With so many potential targets, so many arguments, it is a gold-mine. You can usually run defences or claims against other parties of design versus workmanship, or sometimes play ‘pass the design parcel’ or shout about a duty to warn. Typically when you raise a design issue, fingers start pointing the blame in all different directions. For the arbitrator or judge who has the task of deciding who is liable to whom in a design case, it is not a gold-mine but a minefield. With so many targets, so many arguments, too many bewildering principles across contract, statute and tort with tests which sometimes appear to be inconsistent and lacking coherence it seems not all designers are equal, some are more liable than others.
3. My design this afternoon is gingerly to plot a small path through this very large field so that afterwards, the job of the arbitrator or judge facing making a decision in a design case is made that much easier. As designer of this talk that is my plan but I want to make clear I do not guarantee the result!
4. One of the major tasks is to decide whether a particular person’s scope of duty is to guarantee the result or to use reasonable skill and care. Some designers are under a duty to make sure that the design is reasonably fit for purpose – i.e. guaranteeing the result. In other situations the designer’s duty is different: he has to use reasonable skill and care in making his design and so long as he does so, he will not be liable if the design is nevertheless flawed.

5. There is a danger in thinking of design liability as a claim which is essentially based on negligence and getting bogged down in the paraphernalia of making a negligence claim against the designer. No pleading seems complete without alleging negligence these days and there is a tendency of making life more difficult by engaging experts on whether this practice or that was an acceptable practice within the field.
6. It is important to keep in mind that the 'fitness for purpose' duty is a strict liability and negligence does not need to be proved, and where the designer is also the builder with such an obligation it removes the need to bother about a distinction between design and workmanship? The questions are often easier contractual ones: does the design work and does it meet the contract requirements. And the negligence aspect of a case can sometimes be a distraction. As an advocate, it is worth considering whether one can successfully pursue an opponent on a fitness for purpose basis and avoid all the extra hassle and expense involved in a negligence dispute. It is perhaps something that Arbitrators should perhaps bear in mind when agonising over the decision to make in their awards.
7. Then again, be too clever and one might find yourself with the problem that your successful claim against your opponent on a strict liability basis bears no fruit because your opponent doesn't have the benefit of the helpful professional indemnity coverage he would have had if found negligent. No doubt most Arbitrators are alive to that commercial situation too. It helps to explain sometimes why parties (or more accurately their lawyers) persist in over-complicating what could otherwise be a straightforward case.
8. Design liability will depend upon who is suing whom. One needs to be cautious in considering the welter of authorities that are likely to be cited: a case that might at first sight appear to lay down a principle on the scope of design duty, may not assist in a different case with a different situation. Such cases are heavily dependent upon who the parties to the litigation are and is also crucially dependent upon the contractual arrangements between the various parties.
9. There are essentially three main contractual types to consider: the traditional procurement method, the traditional method with a twist, where some of the design is taken on by the contractor, and a design and build package arrangement.
10. As you all know, in a traditional procurement, the Employer engages a professional consultant or a team of professional consultants to design the works. The Employer separately engages a contractor whose job it is to carry out the works by following the design. Both the professionals and the contractor owe their respective obligations to the Employer. In some cases the professionals might also owe duties to the contractor or to third parties.
11. At the other end of the spectrum under a design and build package arrangement, the contractor takes on the design and construction of the works. Typically this actually means that the Employer's team of professional consultants have carried out some or all of the design work in advance and

their retainers are simply novated to the contractor who takes responsibility for their design product so far as the Employer is concerned. In this way the Employer need only have recourse to the contractor. The contractor may also have recourse to the professional designer in some circumstances.

12. Somewhere in between, being neither one or the other is a contractor who is engaged on a traditional procurement method but where some element of the design is contracted out to him (or to a sub-contractor): JCT 98 with design portion is a good example.
13. In each case the scope of the professional designer's duties are often (but not always) the same. But for the contractor the duties are different, depending upon the basis on which he is contractually engaged. In every situation (whether dealing with a professional designer or a contractor) where any design liability is involved, however it will be necessary to look carefully at the precise contractual chain. It is all too easy to fall into the trap of assuming that professional designers owe one type of duty and contractors another.

### **The professional designer**

14. The elite corps of designers is professional. Architects and engineers have the special skills necessary to formulate and express a design using a combination of technical specifications, calculations and drawings. As a starting point a layman might expect such people to be able to get the design right to achieve a result. A layman might expect the designer of foundations to be able to achieve a foundation design that will not fail. But the layman may be surprised to find that flawed designs are (often) acceptable to the law, provided the professional has done as well as the profession properly expects of them.
15. Professionals are rarely willing to guarantee a result. Unless his retainer expressly says otherwise or unless the Court holds that it is to be implied into the particular contract as a matter of fact, a professional designer has a duty to the Employer to carry out his work with the reasonable skill and care which is to be expected of a competent designer: **George Hawkins v Chrysler (UK) Ltd and Burne Associates** (1986) 38 BLR 36 That will be his duty in contract (it will be implied into the contract even if there is no express mention of the duty). He will also have an identical duty of care owed to the Employer in tort.
16. The test of what constitutes 'reasonable skill and care' is relatively straightforward in principle, even if in practice in a given situation it might be difficult to establish. It is often referred to as the 'Bolam test' after the name of the case, **Bolam v Friern Hospital Management Committee** [1957] 1 WLR 582 at 586

'Where you get a situation which involves the use of some special skill or competence, then the test as to whether there has been negligence or not is....the standard of the ordinary skilled man exercising and professing to have that special skill. A man need not possess the highest expert skill

at the risk of being found negligent. It is well-established law that it is sufficient if he exercises the ordinary skills of an ordinary competent man exercising that particular art.'

17. Or as Bingham LJ put it in **Eckersley v Binnie & Partners** (1988) 18 Con LR 1

'a professional man...must bring to any professional task he undertakes no less expertise, skill and care than other ordinarily competent members would bring but need bring no more. The law does not require of a professional man that he be a paragon combining the qualities of polymath and prophet'.

18. So, generally, professional designers are found liable to the Employer for defective design, only if the defective design was due to negligence. But this is only a general rule: I will discuss a little later when professional designers may have a strict design liability even if they were non-negligent. For the moment I want to explore a professional designer's design liability in negligence.

*Negligence – duty to client*

19. When is the designer negligent? It is easy enough to acknowledge that a mistake or error in the design does not necessarily equate to negligence. What is more difficult for decision-makers is when a professional designer's mistake or error is negligent and whether a flawed design is the result of a negligent approach. In order to prove negligence, it is not enough to call expert evidence in the relevant field to show that there is a body of opinion within the relevant profession that would have approached the design differently or better. Nor is expert opinion that the expert would have regarded the designer's acts or omissions as negligent – thereby trespassing on the decision-maker's remit. What must be shown by way of expert evidence is that there is no reasonable body of opinion within the relevant profession that would regard the designer's acts or omissions as acceptable at the time of those acts or omissions. Perhaps the best way of putting it is to say that it must be proved that no reasonably competent designer would have acted in the way that this particular designer did in all the circumstances.

20. It is important to make sure the expert evidence one calls is effectively a peer review of the professional who is doing a task which calls for a special skill. One must be careful about calling evidence from an expert in a different or more specialised field than the professional under scrutiny. On the other hand one must remember that a person who decides to do a job that falls within the sphere of a qualified professional can be judged by the standard of the qualified professional even though that person is not himself qualified: for example an architect who ventures to advise on structural soundness instead of a structural engineer, the architect can and should be judged by the standards of a structural engineer, rather than that of an architect. And a particular designer may be judged by a higher standard than ordinary competent practitioners where he professes to have a greater skill than ordinary competent practitioners or if in fact he possesses greater knowledge: see **Wimpey Construction UK Ltd v Poole** (1984) 27 BLR 58

21. Sometimes the professional is to be fixed with a greater experience than he may in fact have and is to be judged by that standard. For example under GC/Works/5, at Condition 10 (1.10 in the 1999 form):

‘The Consultant shall perform the Services in accordance with all Statutory requirements and with the reasonable skill, care and diligence of a properly qualified and competent consultant experienced in performing such Services on projects of similar size, scope, timescale and complexity as the Project’. [Emphasis added]

22. A difficulty which is often encountered evidentially is confusing the standard which ordinary members of the particular profession regularly in fact achieve with that which ordinary members of the particular profession should be expected to achieve in the opinion of the court. It should come as no surprise that, for Judges, it is the latter approach which prevails – as Oliver J observed in **Midland Bank Trust Co Ltd v Hett, Stubbs & Kemp** [1979] 1 Ch 384 at 403C, ‘*the extent of the legal duty in any given situation must, I think, be a question of law for the Court*’. Hence Judges are inclined to prefer the opinion evidence of one expert over that of another where it meets with their perception of what is a proper practice. Although it will not be lightly done, even if a Court finds that there is evidence of a body of opinion within a particular profession it still reserves the right to find that that body of opinion is not a proper or reasonable body of opinion: see the medical negligence case: **Bolitho v City & Hackney Health Authority** [1998] AC 232 (at 241G-242B).

23. And sometimes, the fact of failure of the design is itself potent evidence of a negligent design: people naturally expect buildings and facilities to stay up, not fall down and not exhibit structural cracks and the like: if they do, there is a natural tendency to regard the designer as having gone seriously wrong. But one cannot take failure too far, particularly if the design concerns something novel or state of the art:

‘If you employ an architect about a novel thing, about which he has had little experience, if it has not had the test of experience, failure may be consistent with skill. The history of all great improvements shows failure of those who embark in them.’ *Turner v Garland (1853)*’

The results in design liability cases are by and large driven by what are regarded as the broad merits in all the circumstances.

24. In normal circumstances, professional designer will not be relieved from liability their design simply by obtaining their employer's approval and endorsement. But it seems that if it is known that there is only one really ‘foolproof’ scheme, and other schemes which are riskier (but usually cheaper), it is the designer's duty to tell the employer and leave the decision to them. If the Employer then decides to press ahead with a riskier scheme the approval by the Employer may discharge the designer from liability: (*City of Brantford v Kemp & Wallace-Carruthers Ltd*(1960) 23 DLR 640, Canada a Canadian case)

25. The design liability of professionals is often complicated by the fact that the professional designer normally retains some role in the construction process. I want to spend a few minutes discussing the duty of a professional designer who also remains involved in the construction process, because there have been some important developments in the law in recent years.
26. A designer who is supervising the construction of the design is normally under a continuing duty to keep his design under review. It probably began in **Brickfield Properties v Newton** [1971] 1 WLR 862 Sachs LJ said '*The architect is under a continuing duty to check that his design will work in practice and to correct any errors which may emerge*'.
27. Two points remained unclear in the various cases that followed.
- (1) Is the duty reactive (i. e only review the design if some problem emerges to put the designer on notice) or proactive (i.e. the designer to take steps to review the workability of the design)?
  - (2) For how long does the duty last?
28. In **London Borough of Merton v Lowe** (1988) 18 Con LR 1 Judge Stubb QC referred to the subsequent discovery of a defect as reactivating or reviving the duty and imposed on the designer the duty to take necessary steps to correct the defect. A similar approach was taken in **Tesco v Norman Hitchcox Partnership** (1997) 56 Con LR 42 where it was held by Judge Lewis QC that Architects who designed the building and administered the works had a continuing duty up to practical completion to see that the design of the building was appropriate and if before then defects came to his attention to remedy them.
29. In **J Sainsbury plc v Broadway Malyan** [1999] PNLR 286, Judge Lloyd QC held that the duty to review the design did not mean that he had to '*keep previous work under constant review or to report a mistake that has been discovered, except where third parties may be affected..... but it does come into play when an architect has occasion to look again at the design eg where there is evidence of a possible deficiency or where, as here, the design itself is to be modified.*'
30. Firmly in the reactive camp is **Chesham Properties Ltd v Bucknall Austin Project Management Services Ltd** (1996) 82 BLR 92 where Judge Hicks QC rejected a submission that a professional had an implied duty to investigate and report to a client on the causes of defects due to his own deficiencies. For a while therefore a designer was not obliged to 'turn himself in'.
31. Some authorities favoured a more proactive approach. **Equitable Debenture Assets Corp Ltd v William Moss Group Ltd** (1984) 2 Con LR 1 is often seen as a 'pro-active' case. Judge Newey QC held that Architects had a continuing duty to check the initial design as the work proceeded up to practical completion and if necessary to take steps to correct the design. But since in that case defects appeared before completion the case may be explained as one of the 'reactive' cases.

32. In **University of Glasgow v William Whitfield** (1988) 42 BLR 66, Judge Bowsher QC suggested that where ‘*an architect has had drawn to his attention that damage has resulted from a design which he knew or ought to have known was bad from the start, he has a particular duty to his client to disclose what he had been under a continuing duty to reveal, namely what he knows of the design defects as possible causes of the problem.*’ In that sense he does not just react, he should investigate and report on what he knows. Judge Bowsher QC also went on to say that there was no authority for the proposition that the continuing duty only extends only until practical completion and he saw no reason in principle why the duty should be so limited in time despite the fact that the architect's right to require work to be done alters at that point.
33. In **New Islington & Hackney Housing Association Ltd v Pollard Thomas Ltd** [2001] 1 B.L.R. 74 After practical completion new tenants reported complaints about the noise levels in the blocks of flats. The client asked the Architects for details of their design for sound-proofing insulation and whether it complied with the Building Regulations. The Architects provided details as requested but did not review their sound-proofing design. The claimant argued that the Architect was under a duty to review the design until the end of its retainer – the issue of final certificates. Mr Justice Dyson (as he then was) held that in that case the Architect’s duty to check his design and correct errors in the design ceased on practical completion of the project. He held that the Architect had not been notified of any problems with the design which might have revived his duty or triggered a new one, there was simply a request for information.
34. There are a number of important points in Mr Justice Dyson’s decision which is likely to be followed, since it reviewed all the main authorities (except *Chesham Properties*). Mr Justice Dyson held that
- (1) The designer who supervises or inspects work will be under a continuing duty to review and check the work until that work is incorporated in the works (not all the way up to practical completion). The example he used was foundations which are built much earlier than completion of the superstructure. This will have a bearing on the time when the limitation period runs from.
  - (2) The duty to review only arises if the designer has good reason to reconsider the original design. What is a good reason is to be judged objectively by the standard of a reasonable, competent designer.
  - (3) An Architect on the RIBA standard conditions of engagement would owe a duty until practical completion. There was no implied or express term requiring him review the design or issue variations as a result after practical completion
  - (4) If the employer requests him to investigate a potential design defect after practical completion the Architect may refuse or say he will do so for an extra fee, since work to investigate the effectiveness of the design is not part of his original engagement.
35. The context in which many of these cases were decided is limitation, i.e. the need for claimants to show that the designer had a continuing duty to review his design is an attempt to overcome the fact that the claim is more than 6 years later than the original implementation of the design. *University of*

*Glasgow v Whitfield* offered the tantalising prospect of the duty continuing beyond practical completion in principle in certain circumstances – *New Islington* reduced the chances of that argument succeeding. It may still be possible where there is notification of a defect during the defects liability period which triggers the reactive duty of an architect.

36. In the **Cheltenham Ladies College v The Oxford Architects Partnership** (unreported 17 November 2006, Ramsey J) the Architects appealed an Arbitrator's award which held that the College's claims in respect of works to the basement tanking and to the design of fire-doors were not time-barred. The Architects had agreed in Article 5 of the RIBA conditions CE/95 to a contractual limitation period 'Six years from completion of the Architect's Services, or, where the Services specific to building projects Stages K-L are provided by the Architect, from the date of practical completion of the Project.' The works to the basement and the design of the fire-doors took place earlier than practical completion. However, the arbitrator decided that the claims were not time-barred because the Architects were bound to and did review their design up to practical completion, and that parties had agreed to a contractual limitation period of 6 years from PC. It was argued, based on *New Islington* that the designer's duty continued until PC so that should be the date for accrual of the cause of action and that the parties had agreed limitation should be extended for 6 years from that date. On that basis the claims were made in time. In effect, it was said that the contractual limitation period extended the normal 6 year rule from date of breach (contract) or date of damage (tort).
37. Mr Justice Ramsey allowed the appeal and remitted the case back to the arbitrator in the light of his findings. He concluded that Article 5 was merely an additional contractual time limit which did not have the effect of extending the statutory limitation period. If that were to be done it would need clearly expressed words. Article 5 did not expressly exclude the Architect's rights to rely on a statutory limitation defence. Mr Justice Ramsey did not consider that Article 5 or *New Islington* can be relied on to define when a cause of action accrues.
38. More interesting for today's purposes is what else Mr Justice Ramsey said. He was quite clear that an architect's duty depends on the terms of his engagement.
- (1) If the designer is only engaged to carry out the design, it would be difficult for a continuing duty to arise.
  - (2) If his engagement includes services during construction, there may be a continuing duty.
  - (3) There is some confusion as to the meaning of continuing duty to review in this context and when the cause of action accrues. If the architect produces a design that is defective, the cause will accrue when the design is produced.
  - (4) The continuing duty does not give rise to a continually accruing cause of action. So a failure to review a design is different from a failure to design. These breaches occur on different dates.
  - (5) As to the approach to be taken to the duty to review a design, Mr Justice Ramsey agreed with the *New Islington* case.

39. A difficult point which arises in a number of cases, is whether the designer's retainer in respect of the design really is the end point of the designer's potential design liability. It is frequently the case that a designer will argue that this or that (inspection, review, verification of design assumptions) was not in his retainer and that he owed no greater duty in tort outside that retainer. (The problem arises often enough with ground investigations particularly where they are carried out relatively cheaply for property developers where usually the investigator says he was paid a small amount of money for a 'preliminary' investigation.) Some recent cases suggest that the position is not so clear cut.
40. In **Mirant Asia Pacific Construction (Hong Kong) Ltd v Ove-Arup & Partners** [2005] EWCA 1585 [2006] 1 BLR 187. Ove Arup was responsible for designing foundations for boiler units for a coal-fired power station in the Philippines, from concept to preliminary and finally detailed design. Ove Arup entered into two separate agreements with Mirant: a design agreement and a site services agreement. The design agreement had omitted a proposal to have technical site supervision which included a role for a small team of engineers to confirm that the design intent was being fulfilled –the Court of Appeal held that this only meant to make sure the construction followed the design, rather than checking the design assumptions.
41. Ove Arup carried out its initial design of the foundations in 1995 and early 1996. Ove Arup could not carry out a detailed ground investigation because the ground on which the foundations were to be laid needed to be blasted and excavated. Ove Arup had difficulties in getting the data to calculate the pressure tolerances for the boiler foundations on the ground. So Ove Arup produced a provisional design based on an assumption that the relevant ground had a bearing capacity of 3MPa and limited information to enable the initial design works to proceed. Ove Arup recommended that a detailed ground investigation should be undertaken to verify the ground conditions before detailed design and construction works proceeded and assumed that this would be done when inspection of foundations was made on site.
42. In January 1996, Ove Arup was expecting to be involved on site in two separate capacities. It was expecting to supervise the ground investigations; and it expected that the person supervising the ground investigations would also be involved in surface mapping and visual inspection to verify important assumptions relating to the geology of the site including the bearing capacity of 3MPa. In the event this did not happen.
43. The site services agreement was made in March 1996 and provided that Ove Arup was to supervise the ground investigation work and to fulfil the requirements of a site foundation engineer in such matters as approving ground conditions for foundations. Although Ove Arup did have a team on site during the foundation works to approve the ground conditions for construction by surface examination it was held that this did not involve work to verify the design assumptions which required a more extensive investigation. Accordingly the design was completed and construction commenced based on the unverified design assumptions

44. The Judge considered together the issues whether Ove Arup exercised due care and skill in the design of the boiler foundations and the verification of the assumption on which the design was based; and whether it exercised due care and skill in the specification and supervision of the ground investigation. The Judge held that Ove Arup failed to take any adequate steps to satisfy itself that the design assumption was properly verified or confirmed. Ove Arup contended that it was good engineering practice to proceed with foundations on the basis of assumed allowable bearing pressures and to verify the assumption by the inspection of the foundations on site. The Judge held that Arup had breached its design agreement by failing to produce its design with reasonable care and skill and by failing to verify the preliminary design assumption upon which its design was based. The Judge found that Ove Arup had not breached the site services agreement, which did not include an obligation to verify the design assumptions.
45. Ove Arup appealed. One of the grounds was that the judge was wrong to hold that Ove Arup had a duty under the design agreement to verify the 3MPa design assumption and that it was in breach of that duty. Mirant cross-appealed against the finding that Ove Arup was not in breach of the ground investigation agreement (in case the appeal succeeded). The Court of Appeal dismissed Ove Arup's appeal and held (amongst other things) that
- (1) Ove Arup was under an obligation to see that work to verify the design assumption was undertaken by someone. If the engineer's design is based on assumptions then he has an obligation '*to see to it that the requisite additional information is acquired to verify the assumptions. He does not necessarily have to get the additional information personally but he must see to it personally that someone does, and he must see to it that the client knows that the additional information has to be obtained.*'
  - (2) Absent an explicit warning and disclaimer, it would not be sufficient for a designer whose initial design was based on an unverified assumption to leave it to the client alone to obtain and evaluate the additional information
  - (3) Arup's case supposed that verification of the foundation design assumption required only surface examination of the foundation such as a site supervisor would habitually do. There might be many contracts for which this might be sufficient, but not, on the facts, this contract. The evidence made it clear that more extensive investigation was needed.
  - (4) A foundation designer had to see to it in appropriate circumstances that his assumptions were verified to the extent that a reasonably competent design would require. The judge had ample evidence to determine, as he did, what the required extent was in this case (see para 91).
46. So **Mirant Asia** is authority for a much more pro-active duty to review a design than earlier cases in cases where the design is based on some assumptions. While the result may be right on the facts the result in this case seems to suggest that designers may have implied into their contracts a duty to make sure that the design assumptions are still valid. It remains to be tested what steps the designer has to take to satisfy the Mirant-style duty or what will constitute an appropriate disclaimer or caveat to avoid the Mirant-style duty.

47. See also the British Library case - **Dept National Heritage v Steensen Varming Mulcahy** (1998) 60 Con LR where an experimental design or an unusual approach was said by the Judge to impose on the designer a particularly high duty on him to keep his design under review.
48. There are other cases which appear to stretch the designer's liability wider than the black letter of his retainer. In **Hart Investments Ltd v Fidler** [2007] EWHC 1058 (TCC) per Mr Recorder Roger Stewart QC (reported by Baillii) a structural engineer, Fidler, was appointed by Hart to design the permanent works to a house – the works involved retaining the façade walls and excavating a deep basement and he retained a role of inspecting the permanent works. As part of the temporary works necessary to carry out the permanent works, the contractor needed to install propping. Normally, the contractor is responsible for the design of any temporary works and it does not form part of the designer's duty. Perhaps unusually Fidler had actually designed those for the contractor as well under a separate retainer and it may be this which was ultimately significant in that case. In the event the contractor failed to use props and consequently the façade walls fell down. It was found as a fact that the lack of props was something that Fidler should have noticed during a site inspection shortly before the collapse, when he should have appreciated the danger. Hart sued Fidler in contract and tort and the issues in the case were whether (1) an engineer who is employed in relation to the permanent works had a duty to the employer to point out defects in the temporary works to the contractor and whether (2) if the engineer failed to do so would he be liable in damages to the Employer for the consequences. Fidler argued that it was not part of his contract, and that he owed no duty of care to the employer for economic loss for damage caused to the building.
22. The judge considered that if an engineer employed by an owner in respect of permanent works observes a state of temporary works which is dangerous and causing immediate peril to the permanent works in respect of which he is employed, he is obliged to take such steps as are open to him to obviate that danger. The Judge found the case analogous to the solicitor's negligence case of Credit Lyonnaise v. Russell Jones and Walker [2003] PNLR 17 where Laddie J rejected an argument that the solicitors retainer was narrow and did not extend to advising on the meaning of the agreement or the law: if there was a plain and obvious danger it was the solicitors' duty to point it out, even if he was not strictly employed in relation to that danger. The Judge quoted the following passage from Laddie J's judgment
- "A solicitor is not a general insurer against his client's legal problems. His duties are defined by the terms of the agreed retainer. This is the normal case, although White v. Jones [1995] 2 A.C. 207 suggest that obligations may occasionally arise outside the terms of the retainer or where there is no retainer at all. Ignoring such exceptions, the solicitor only has to expend time and effort in what he has been engaged to do and for which the client agreed to pay. He is under no general obligation to expend time and effort on issues outside the retainer. However if, in the course of doing that for which he is retained, he becomes aware of a risk or a potential risk to the client, it is his duty to inform the client. In doing that he is neither going beyond the scope of his instructions nor is he doing "extra" work for which he is not to

be paid. He is simply reporting back to the client on issues of concern, which he learns of as a result of, and in the course of, carrying out his express instructions.....If a dentist is asked to treat a patient's tooth and, on looking into the latter's mouth, he notices that an adjacent tooth is need of treatment, it is his duty to warn the patient accordingly. So too, if in the course of carrying out instructions within his area of competence a lawyer notices or ought to notice a problem or risk for the client of which it is reasonable to assume the client may not be aware, the lawyer must warn him.'

49. The Judge found that the Mr Fidler was in breach of a contractual duty direct to the claimant, that contractual duty being to point out an obvious danger to the permanent works which he himself observed when on site on 3<sup>rd</sup> February. Given the existence of that contractual duty the Judge also concluded that there was a concurrent duty of care in tort sufficient to extend to the prevention of economic loss of the sort contemplated by the House of Lords in Henderson v. Merrett. Of interest for future cases perhaps is that the Judge felt bold enough to go even further and find, even if there were no contractual relationship, that there was a duty of care in tort not to cause economic loss by reason of the special relationship between the parties. 'I would, if necessary, be prepared to find the existence of such a duty on the special facts of this case, as follows: It seems to me that in a closely allied respect, namely the permanent works, Hart Investments were indeed relying upon Mr Fidler's pocket book. I refer most expressly to the reference to professional indemnity in the June letter. Second, it seems to me that on any view the tasks in this case in relation to temporary and permanent works were closely intertwined, they were undertaken by the same person, Mr Fidler. He had the same job number. He did not, as far as I can see, distinguish, and one would not expect him to distinguish precisely what he was doing when. Further, I do not consider that the claimant or anyone in a position of the claimant would analyse too closely exactly what it was that Mr Fidler was doing whilst on site. Plainly, as it seems to me, there would not be a duty to the claimant that the temporary works be undertaken in a particular way, but it does not seem to me that it would a very limited extension to impose a duty in the circumstances of this case upon the engineer to prevent economic loss to a structure which he was himself seeking to safeguard for a considerable period of time. For those short reasons, I would, if necessary, have found the existence of a duty in respect of the second failing which I have identified, even if I had not found a contractual duty.'

*Negligence – duty to others*

50. What about his liability to others? Here there has been some uncertainty and it is wrapped up in the problems of economic loss. The present position seems to be that absent some direct contractual relationship or in exceptional circumstances that would create a special relationship, a professional designer owes no duty of care in tort to third parties to avoid economic loss, although that general rule is subject to some exceptions (see below).
51. For a while it was not clear whether there was even a tort duty owed to the client in respect of economic loss. In **Storey v Charles Church Developments Limited** (1995) 73 Con LR 1 the claimant claimed damages in contract and tort from a D&B contractor for the cost of underpinning required to rectify structural defects that had occurred in the property as a result of defective

foundations. The case was run on concurrent duty of care in tort the claimant's claim in contract having been statute barred. HHJ Hicks QC applied Henderson v Merrett and found that by contracting with the claimant the contractor assumed responsibility to exercise reasonable skill and care in design and the owner had relied upon it to do so. Accordingly, the Hedley Byrne principle applied, which meant that the claimant could recover for economic loss. He concluded that such duty was not affected because the designer in the case was also the builder.

52. In **Payne v John Setchell Limited** [2002] BLR 489 HHJ Lloyd QC took a different approach. In this case the claimants were subsequent owners of the properties which had suffered damage as a result of defective foundation design prepared by the defendant structural engineer. The claimants suggested that since the original owners had the benefit of a claim in tort against the engineer for breach of his concurrent duty of care in tort in designing the foundations and in certifying their suitability, they as subsequent purchasers would have acquired an identical cause of action upon their acquisition of the properties under section 3 of the Latent Damage Act 1986. It was crucial to their case to establish a duty of care in tort by the structural engineer extending to economic loss. HHJ Humphrey LLoyd QC declined to follow **Storey** and held:-

“In my judgment *Murphy and DOE v. Bates* establish that, as a matter of policy, any person undertaking work or services in the course of a construction process is ordinarily liable only for physical injury or for property damage other than to the building itself but is not liable for other losses – i.e. economic loss. If any liability for such economic loss is to arise it must be for other reasons, e.g. as a result of advice or statements made upon which reliance is placed in circumstances which create a relationship where there is in law to be an assumption of the responsibility for loss – i.e. within the principle of *Hedley Byrne v. Heller*...In my judgment a designer is not liable in negligence to the client or to a subsequent purchaser for the cost of putting right a flaw in a design that the designer has produced that has not caused physical injury or damage, just as a contractor is not liable.”

53. But **Payne** has not been followed in subsequent cases and is considered to be wrong. It proceeded on a misunderstanding of **Murphy** which was not concerned with the scope of the concurrent duty of care in tort owed to a client. The position is correctly set out in **Tesco Stores Limited v Costain Construction Limited** [2003] [EWHC] 1487 (TCC); (2003) CILL 2062. Costain was a design and build contractor of a superstore for Tesco. The design of fire-stopping/inhibitors was subcontracted. Tesco maintained that Costain was responsible to Tesco for the design and owed a duty of care which mirrored its contractual obligations. When a fire broke out the lack of fire-stops meant that damage was more extensive than it would otherwise have been. The Judge held

“I differ from the analysis of Judge Lloyd with great hesitation, but I have to say that it does not seem to me that *Murphy v. Brentwood District Council* and the other authorities to which he referred do establish the proposition that a builder never owes a duty of care which extends to not causing economic loss, only that he does not do so in the absence of ‘a special relationship’...If the position now is, as I consider that it is, that anyone who

undertakes by contract to perform a service for another upon terms, express or implied, that the service will be performed with reasonable skill and care, owes a duty of care to like effect to the other contracting party or parties which extends to not causing economic loss, there seems to be no logical justification for making an exception in the case of a builder or the designer of a building. My reading of the authorities does not require or permit the making of such exception. I draw comfort in my analysis from the observation of Schiemann L.J. in Bellefield No. 1 that in his view the builder in that case did owe a duty of care to the original owner in respect of damage to the building itself.'

54. There was a similar finding in **Mirant Asia** above as reported at (2005) 97 Con LR 1. This part of the case was not appealed to the Court of Appeal.
55. As for a duty to third parties, in the main the answer from two cases is that there is no such duty to avoid economic loss. The first is **Architype Properties Limited v Dewhurst Macfarlane & Partners (a firm)** (2003) 96 Con LR 35. Architype had been appointed by Arbco as the lead consultant for the design and construction of a new visitor's centre, chapel and associated buildings ("the premises"). The defendant ("Dewhurst") had been retained by Architype to act as its sub-consultant civil and structural engineers. Serious defects were found in the course of the construction of the premises. Remedial works were carried out which was alleged to have delayed the project. Arbco assigned its claims against Dewhurst to Architype and so Architype claimed damages in its own right and as an assignee of Arbco's claims against Dewhurst.
56. Dewhurst denied a duty of care to Arbco and applied to strike out parts of Architype's Particulars of Claim. Although Dewhurst accepted for the purpose of the application that it possessed a special skill in civil and structural engineering and that it was aware that the engineering design was done by them for the benefit of Arbco and that Arbco were in the factual sense relying on its skill as engineers it said that this was a "straight chain of contracts case" and in these circumstances there was no privity of contract between Arbco and Architype and no responsibility on the part of Dewhurst to Arbco. Dewhurst also relied upon the fact that there was ultimately no collateral warranty in circumstances where one had been offered. Architype said it was arguable that Dewhurst owed Arbco a duty of care. It said that if Dewhurst did hold itself out as possessing a special skill and it was reasonably foreseeable that Arbco would rely and did in fact rely on Dewhurst's special skill this gave rise to a duty of care in accordance with the principles set out in Hedley Byrne v Heller and Junior Books.
57. HHJ Toulmin CMG QC held that Architype's position was unarguable:-
- (1) Junior Books had to be confined to its own particular unique facts and given that the facts of the present case were not identical to the facts in Junior Books (the present case concerned services not products; participation in the design team rather than a self-contained part of

the work and the engineers were not nominated by the employer) he was not obliged to follow Junior Books.

- (2) In any event, the parties had structured their contractual relationship in such a way that was inconsistent with an assumption of responsibility between Dewhurst and Arbco.
- (3) The fact that the question of a collateral warranty was raised at the time of the formation of the sub-contract but was not pursued was not essential to the argument but an additional point in favour of his conclusion that there was no duty of care owed by Dewhurst to Arbco.

58. In **Mirant Asia** HHJ Toulmin CMG QC also rejected a claim that the engineers owed a duty to prevent economic loss to a company ("SCC") which was part of the same group of companies as the CEPAS (the company with which had the contract with Arup) even though he held that SCC had in fact relied upon the engineers' skill and care in the performance of their contract with CEPAS. The particular intricate contractual chain was deliberately structured in this way (for tax reasons) and was therefore inconsistent with an assumption of responsibility. That point was not appealed.

59. In **Baxall Securities Limited v Sheard Walshaw Partnership** [2002] BLR 100 the claim was brought by the tenant of a warehouse against the developer's architects for defective roof design which had led to the claimant's stored goods being damaged in two floods. The tenant alleged that the roof design was defective in that (1) it ought to have had but did not have overflows and (2) it had not been designed for sufficient capacity for the rainfall to be expected in the area. It was accepted by the architects on appeal (although they had argued the contrary at first instance) that they owed a duty of care to subsequent purchasers of the property in regard to latent defects in the property. The claim ultimately failed against the architect because it was a patent defect that was responsible for the floods.

60. In **Bellefield Computer Services v E. Turner & Sons Limited (No.2)** [2003] Lloyds Rep PN 53 the Court was concerned with Part 20 proceedings brought by a contractor against the architect to whom the contractor had sub-contracted some of the design of the dairy, which caught fire causing loss to the subsequent owners. The builders were statute barred from bringing a claim for damages pursuant to their contract with the architect. Accordingly, the contractor brought a claim for a contribution under the Civil Liability (Contribution) Act 1978. In order to succeed, the contractor had to show that the architect had owed a duty of care to the subsequent owners of the dairy.

61. Lord Justice Potter (who gave the leading judgment in the Court of Appeal) identified four principles governing the existence and scope of an architect's duty to a subsequent owner or occupier:-

- (1) An architect may in appropriate circumstances owe a duty of care in tort and be liable to a subsequent occupier of the building which the architect has designed and/or the construction of which he has supervised in respect of latent defects in the building of which there is no possibility of inspection.

- (2) The question whether a particular defect comes within the scope of an architect's duty of care to a subsequent occupier will depend upon the original design and/or supervisory obligations of the architect in question. The architect will not owe a duty of care in respect of defects for which he never had any design or supervisory responsibility in the first place.
- (3) If a dangerous defect arises as the result of a negligent omission on the part of the architect, he cannot excuse himself from liability on the grounds that he delegated the duty of design of the relevant part of the building works, unless he obtains the permission of his employer to do so.
- (4) The detailed duties of an architect in relation to his design function depend upon the application of the general principles above stated to the particular facts of the case, including any special terms agreed. The precise ambit of such duties will usually depend upon expert evidence from members of the profession as to what a competent, experienced architect would do in the circumstances.

62. The Court of Appeal applied the second and fourth principles on the facts. The architects escaped liability because their duty was limited by the terms of their engagement by the design and build contractor. It was found that they had no obligation to provide a detailed design for the critical fire-resisting features and they had not agreed to supervise/inspect the works during construction. Notably May LJ expressly reserved for future consideration the question whether or to what extent the scope of an architect's duty of care to a subsequent owner could extend to loss not associated with physical damage. See also **Sahib Foods Limited v Paskin Kyiades Sands (a firm)** [2003] PNLR 30, a claim which failed on the facts but where the **Baxall** approach was followed and **Pearson Education Ltd v the Charter Partnership [2005] EWHC 2021 (TCC)** a case very similar to Baxall, where a claim based on the designer's duty of care to subsequent owners in respect of a latent design defect was upheld.

63. There have been three fairly recent cases in which a professional has sought to mount a defence on the basis that he should not be held responsible for losses because of the knowledge or skill of another participant in the project. The defence has been put on the basis that the professional has not acted in breach of his duty. It has also been put on the basis that the other participant's failures have broken the chain of causation between the professional's breach and losses suffered. In each case the defence has been unsuccessful. In **Sahib** the experts were agreed that not all reasonably competent architects would have been aware of the risk of fire spreading as a result of the use of the combustible panels. The defendants were nevertheless held to be in breach of duty because they in fact knew of that risk. The defendant sought to deny avoid liability on the basis that the claimant had all the information that was available to the defendants and therefore also knew of the risk. HHJ Bowers held that this provided no defence to the allegation of breach:-

*"A competent architect does not present a design that he knows to be deficient in an important respect and then discuss with the client whether the deficiency should be removed. Still less does he present such a design and say, I did not need to tell the client about that deficiency because the client already knew that such a feature was not required. Take a simple example. An architect*

*designs a house as a residence for a client who happens to be a surveyor and forgets to require a damp-proof course under a parapet wall. If after construction the client complains, it is no answer for the architect to say 'well you knew about the need for the damp proof course as well as I did'. The architect is employed to use his own skill and judgment. There is no duty on the client who happens to have a particular skill to examine the architect's designs and tell the architect where he has gone wrong. If I, as a lawyer, go to a solicitor for advice and pay him for it, I do not see why I should be criticised if I fail to do that solicitor's work all over again and check whether he has got it right."*

64. The case shows that a professional designer who is aware of a serious danger attaching to his design needs to consider all the ways in which the danger may occur including the carelessness of the client. If he is to avoid liability he has to bring the risks of the cost-cutting design clearly to the attention of the client making sure that the client explicitly accepts such risks.
  
65. **Six Continents Retail Limited v Carford Catering Limited** [2003] EWCA 1790 concerned a claim against a project manager who had been retained to design and install kitchen equipment at a Harvester restaurant. Fire damage was caused by the fixing of a rotisserie grill to a combustible wall. The project manager had warned the owner that the method of installation might create a fire risk. The claimant owner took no steps to respond to that letter. The Court of Appeal held that the warning given by the project manager was insufficient. It went on to hold that even if the project manager had given a sufficient warning of a risk of fire it would still not have discharged its duty because the outcome was one which the project manager should have prevented from happening. In other words it could not discharge its duty by notifying the owners that a risk of fire had arisen from the project managers own want of care. An alternative argument that the owner's failure to respond to the warning had broken the chain of causation between breach and loss was also rejected.
  
66. In **Linden Homes South East Limited v LBH Wembley Limited** (2003) 87 Con LR 180 a claim was made against geotechnical and engineering consultants engaged to investigate a site for the purpose of identifying appropriate foundations design. The chosen design was found to be unsuitable after work had begun. The consultants argued that although they had recommended the design, the final say on the foundations design lay with the client's specialist contractor and it was that choice of design by the specialist contractor which was the effective cause of loss. This argument failed. Mr. Recorder Ayles QC held that the specialist contractor had been entitled to rely upon the consultants' site investigation report in choosing the foundations design. The report had negligently failed to disclose matters which meant that the design ultimately chosen would be ineffective.

### **Non-negligent design liability**

67. One cannot always assume that where a professional designer is involved, the design obligation is limited to the exercise of 'reasonable skill and care'.
68. There is a famous case where a professional designer was held to have a strict liability. In **Greaves Contractors Ltd v Baynham Meikle & Partners** [1975] 1 WLR 1095 a design and build contractor employed a structural engineer to design the structure of a warehouse it was building for a client to store barrels of oil. The D&B contractor told the engineer that the first and upper floors needed to take the weight of forklift trucks carrying heavy barrels of oil. The floors of the completed warehouse began to crack under vibrations from the fork lift trucks. The contractor had to pay the building owner for the cost of remedial works having admitted liability (so it conceded fitness for purpose of the design). The Court of Appeal held that in the circumstances of that case there was an implied term in the engineers's contract with the contractor that that the engineer should design a warehouse fit for that purpose which was made known to it, but it had breached its duty and was liable. The Court of Appeal was careful to emphasise that the decision did not lay down a general principle applicable to professional men. Here there was an implied term on the facts – because the actual intention of the parties made it obvious that such a term should be implied. It was not a case where the term was implied by law where the law presumes what the intentions of the parties should have been. Lord Denning left open the question whether such a term could be implied by law although he appears to have shut it again for other cases in the 'absence of special circumstances' in **Hawkins v Chrysler** (above).
69. A second case which came close to deciding the point is the **Independent Broadcasting Authority v EMI Electronics and BICC Construction** (1980) 14 BLR 1 (HL) concerning the collapse of a television mast on Elmley Moor. The mast owner IBA sued the main contractor EMI for breach of contract (IMechE/IEE) and negligence and also sued BICC the sub-contractors for damages for negligence, breach of warranty and negligent mis-statement. Part of IBA's case was the contention that the design had to be fit for purpose and it was not. The House of Lords held that BICC had been negligent in the design of the mast, that it gave IBA a negligent mis-statement because it assured IBA that they were satisfied the mast will not oscillate dangerously (IBA was concerned because another mast had been reported as oscillating) and that EMI was contractually responsible to IBA for a negligent design. Because the House was able to find negligence it did not need to decide whether there was an implied term in law as to fitness for purpose in the contract between IBA and EMI and also in the contract between EMI and BICC. However
- (1) Viscount Dilhorne commented that had that been argued he would have been 'surprised if it had been concluded that they had not done so'.
  - (2) Lord Fraser suggested that there same principle in *Young & Marten* with regard to materials should apply here even though EMI did not have specialist knowledge of mast design and would IBA would not be relying on EMI, in circumstances where EMI could recover from BICC.

- (3) Lord Scarman suggested that in the absence of a term negating the obligation a person who 'contracts to design an article for the purpose made known to him undertakes that the design is reasonably fit for the purpose. Such a design obligation is consistent with the statutory law regulating the sale of goods'.

(That case is also interesting for the comments the Lords made about the 'state of the art' arguments run by the designers about using untried and untested technology. One described the fact that there was a 'venture into the unknown' meant there was a clear duty to think through the problem rather than proceed speculatively. It seems that state of the art arguments are rarely likely to succeed because in most cases the designer may well be found to be negligent.)

70. It is common enough to find that design and build contractors like to treat professional consultants like sub-contractors and to pass all their own obligations on to the consultant on a back-to-back basis. Sometimes a professional designer may be caught out because of the contractual chain he is in, where he has not taken sufficient steps to protect himself. A good example of this is **Consultants Group International v John Worman Ltd** (1987) 9 Con LR 46. There a contractor undertook design responsibility in its construction contract to build an abattoir for the employer suitable to qualify for a UK domestic abattoir grant and of a standard to be considered for an EC grant – in that case the obligation was to design and construct an abattoir which was fit for purpose. The actual designers CGI, a firm of architects were contracted to the contractor who made clear to CGI that they did not have the relevant experience and would be relying upon CGI. When CGI sued for unpaid fees they were met with a claim for breach of contract for designing an abattoir that was not fit for purpose. CGI argued that their retainer only required them to exercise reasonable skill and care in their design. The Court held that CGI had a design obligation to the contractor which was co-extensive with the contractor's obligation with the Employer. The Judge found that there was an express term on a construction of the retainer but went on to say that if he was wrong, then it was an implied term.
71. Where an employer has employed a design and build contractor, it is usual to find that the employer also requires direct collateral warranties in relation to design from those professional designers who are contracted to the contractor. Such warranties are usually given on the basis of the exercise of 'reasonable skill and care'. As we shall see, sometimes this can present a mismatch for the employer because that may provide a weaker remedy against the professional designer than he may have against the contractor. But the fact that a professional designer has given such a warranty to an Employer does not, I suggest, alleviate the potential trap that the designer appointed to a design and build contractor might owe the contractor a more stringent type of design obligation..
72. A professional designer may also find himself stuck with a strict liability (even if his contract is limited to reasonable skill and care) where a claim can be brought against him under the Defective Premises Act 1972. As was observed in *Murphy v Brentwood District Council* [1991] 1 AC 398.

*'By section 1 of the Defective Premises Act 1972 Parliament has in fact imposed upon builders and others undertaking work in the provision of dwellings the obligations of a **transmissible warranty of quality of their work and of the fitness for habitation of the completed dwelling**. But, besides being limited to dwellings, liability under that Act is subject to a limitation period of six years from completed of the work and to the exclusion provided for by s.2'*

The DPA is not used as often as it might be against professionals. As well as being useful in large residential projects a DPA claim it could perhaps be used in projects involving nursing or care homes, prisons and hotels because of the lack of definition of what is a 'dwellings'.

73. Similarly, there are other statutory duties that a designer must strictly comply with such as the CDM regulations.

### **Contractors**

74. Traditionally contractors did not do design. Contractors simply built what was already designed for them. The nature of the contract was the provision of labour and goods and materials. It is well established that a traditional contractor impliedly warrants that
- (1) The work will be carried out with reasonable care and skill
  - (2) The goods supplied or materials used will be 'merchantable' – these days this means of satisfactory quality; and
  - (3) The goods supplied or materials used will be fit for their intended purpose where
    - (i) the purpose is made known to the contractor by the employer and
    - (ii) it is reasonable for the employer to rely upon the contractor and the employer did so rely.

See **Young & Marten v McManus Childs** [1969] 1 AC 454 (HL); **Miller v Cannon Hill Estates** [1931] 2 KB 113; **Myers v Brent Cross Service Co** [1934] 1 KB 46; and **Hancock v BW Brazier (Anerley) Ltd** [1966] 1 WLR 1317.

75. One can see immediately that because the builder is providing goods and materials there is a cross-fertilisation from the law relating to the sale and supply of goods which requires the implied terms that normally apply to the sale of goods.
76. But it is too simplistic to say that a traditional contractor has no obligations relating to design. It is well established that a contractor is responsible for the design of temporary works because the temporary works are part of the working methods adopted by the contractor: it is 'how' the contractor implements the construction of the works.
77. Similarly, a contractor is normally contractually responsible for complying with statutory requirements such as building regulations and bye-laws which may require him to avoid any errors there may be in a design. For example see clause 6 of JCT 98 and see now JCT 05. Sometimes the contractor has to make effectively a design choice in selecting materials where for example the design documents

leave it to the skill and judgment of the contractor. The distinction between design requirements and construction details are blurred. In a recent case I acted for sub-contractor supplying and installing standard DW/142 ductwork, which was the design chosen by a professional consultant for installing ductwork to convey oil-based smoke in a fire training centre. The specification left it to the contractor to select the appropriate sealant to DW/142. There was a fire caused by the escape of oil from the duct. The professional designer and the main contractor both pointed the finger at the sub-contractor and alleged that the relevant bit of the design lay with the subcontractor. There was some debate as to whether the sub-contractor was supplying a sealant that complied with the specification requirement of DW/142 or was in fact involved in the design.

78. A main contractor on the JCT 98 form clause 35.21 is not responsible for design work carried out by a nominated sub-contractor (unless there is a clear statement in the main contract that the contractor is to be liable). A similar provision exists in ICE 6 and ICE 7. However, one must be careful when for example as in JCT 98 clause 42 there is performance specified work: there the contractor has to produce a statement showing how he will meet the employer's requirements. If he does not exercise reasonable skill and care he could nevertheless end up being responsible for the defective design of a nominated sub-contractor.
79. In the absence of an express stipulation to the contrary, a contractor who takes on design responsibility warrants that the design is reasonably fit for purpose. See **Viking Grain Storage Limited v TH White Installations Ltd** (1986) BLR 103. In that case the defendant contractor agreed to design and construct a grain storage facility. The plaintiff employer alleged a number of defects in the design and the materials used for construction that rendered the facility unfit for their purpose. The defendant accepted that it was required to choose materials that were of good quality and reasonably fit for their purpose but argued that so far as design was concerned its obligation was only to use reasonable skill and care. The Court disagreed and held that in the circumstances it was an implied term that the storage facility would be designed and built to be fit for the purpose which had been made known to the defendant.
80. I have always found it odd that the 'default' position at law imposes upon a contractor a more onerous design obligation than it expects of the professional designer. The explanation usually given is that a contractor is under unavoidable competitive pressures to design down to the minimum acceptable standard compatible with maintaining their position in the market. Hudson argues that this means the employer needs the protection that comes with a warranty of fitness for purpose. By contrast it is said that a professional designer is not under such pressures and, if anything, is influenced in the direction of conservative over-design. In any event the reduced scope of liability discourages inhibition against innovation.

81. In practice, express contractual stipulations reducing a contractor's liability are common in some standard forms. Where JCT With Contractor's Design (WCD 1998) is used<sup>1</sup> the clause 2.5 provides that the contractor's design obligation is the same obligation as an independent designer would have to an Employer – in other words it is only a duty to exercise reasonable skill and care, not fitness for purpose (except for DPA claims though!). It makes it important for a contractor to use the correct form –otherwise he may expect a reasonable skill and care obligation but end up with the more onerous default position.
82. Under the standard JCT contract 1998 there was a cumbersome design portion supplement for contractors who took on part of the design but not all of it. Fortunately the new version JCT 05 has done away with the supplement and brought it into the body of the contract so it is important to make sure as a contractor you delete the optional recitals dealing with design if you don't want to take on design responsibility. This too limits the contractor's liability to that of reasonable care in respect of its part of the design.
83. Under JCT's new editions in 2005 there are the following forms to use where a contractor takes on design responsibilities.
- (1) MWD 05
  - (2) ICD 05
  - (3) SB 05 (DP)
  - (4) DB05
84. MWD and ICD are new and are for use at the smaller end of the market where the contractor is required to have some design input (for a discrete element) subject to supervision from an architect or contract administrator. Both contracts require the employer to supply detailed requirements for the contractor's design portion and to examine the contractor's proposals to satisfy himself that the proposals are adequate. Curiously the wording of the design obligation is different: ICD chooses to prefer the formulation linking design obligations as that of the professional designer whereas MWD opts for 'reasonable skill care and diligence'. It is doubtful that this will lead to any discernable difference.
85. The design obligations under the SB 05 are set out in clauses 2.2 and 2.19. The design obligations under DB05 are set out in clauses 2.1 and 2.17. These provide essentially that the contractor's design obligation is the same obligation as an independent designer would have to an Employer – in other words it is only a duty to exercise reasonable skill and care, not fitness for purpose (except for DPA claims though!).
86. Importantly SB WCD, DB05, ICD 05 and MWD05 expressly provide that the contractor is not responsible for checking the adequacy of any design contained in the Employer's Requirements. So the contractor's obligations in respect of design are limited to the design it produces and liability for employer's design is expressly excluded. This is to overcome the result of **Co-operative Insurance**

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<sup>1</sup> When originally published by the JCT in 1981 it was the first design and build type of contract.

**Society Ltd v Henry Boot Scotland Ltd** (2002) 19 CLJ 109. In that case, concerned with the standard form with the design portion, the Judge held that the contractor was responsible for using reasonable care and skill to satisfy itself that the design assumptions for the pre-existing design (which the contractor was then to develop) were appropriate and capable of being constructed – this involved checking the employer’s design was not defective or negligent. It is frequently the case that Employers insert an express provision requiring the contractor to check the Employer’s Requirements so one needs to be on the look-out for this.

87. In any event, under SBC (clauses 2.15 and 2.17), DB and ICD a contractor is still obliged to notify the employer of any inadequacies in the design of which he becomes aware. He is supposed to claim reimbursement and a variation.
88. A contractor carrying out work under the Major Projects Form 2003 will almost always take on some design work. The extent to which the contractor takes on design work however is fluid and flexible dependent upon what the parties want as the guidance notes suggest. The contract provides that the contractor shall not be responsible for the adequacy of the design contained in the Employer’s Requirements so it will very much depend upon how the Employer’s requirements are drafted in the tender stage – it would be sensible to spell out clearly who is responsible for what. Otherwise the designer’s liability in clause 11.3 is to exercise skill and care of a professional designer appropriately qualified, competent and experienced in work of a similar scope nature and size of the project. The contractor does not warrant that his designs will be suitable for any particular purpose. But he does give an unqualified assurance that he will meet statutory requirements and any performance specification and the stipulated guidance on the selection of materials.

*Other forms*

89. I will mention these briefly. The ICE Design and Construct requires the contractor to exercise reasonable skill, care and diligence in carrying out the design. Beware. This may not be sufficiently clear as an exclusion of the fitness for purpose duty that is otherwise imposed on contractors. After all, the exercise of reasonable skill and care is not of itself inconsistent with the additional duty of warranting the design is fit for purpose. At least two commentators suggest that it does not exclude fitness for purpose: see Eggleston, the ICE Design and Construct Contract A Commentary, section 1.4 page 6-7; see Cornes, Design Liability, section 8.6 p186. I share that view, but it has not, to my knowledge, been tested in a reportable case.
90. Compare that with GC/Works/1 which makes the contractor responsible for the design. It expressly says in clause 10(2) that he will exercise reasonable skill, care and diligence. The clause goes on to say that the contractor further accepts that his liability for defects in the design shall be the same as that of a professional designer.
91. ACA 1990 is sometimes used where a contractor takes some of the design by completing the architect’s design. The contractor is expressly made responsible for mistakes, inaccuracies and omissions in the design provided by him. He also gives two warranties. The first is that the works,

including his design will comply with the requirements of the contract. Secondly he warrants that those parts of the works which are designed by him will be fit for the purposes for which they are required (clause 3.1) but this does not apply to design carried out by the architect. It is not clear whether this is affected by **Co-op v Henry Boot** and it would seem that wherever the architect's designs are taken on and completed by the contractor it would become part of the contractor's design.

92. The IChemE model form for process plants require fitness for purpose for the work carried out by the contractor.
93. The MF/1 form published by the IME, IEE and ACA makes the contractor responsible for the detailed design of the plant and the works. However where some of the design was provided by the purchaser or the engineer, the contractor will be responsible for the design unless within a reasonable time of receipt of that design he has given notice disclaiming responsibility.