Specifications and Legal Responsibility

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Abstract

This paper explores briefly the change in incinerator specifications with related changes in legal responsibility. Potential liability of the contractor, manufacturer and professional is demonstrated by reference to specific cases. Public competitive bidding and the use of patented equipment are discussed in considerable depth. Third party liability of the contractor and professional is reviewed with broad coverage of various legal pitfalls awaiting the professional.

Introduction

To place our subject in proper perspective, we must bear in mind that nothing can be done to stop another person from bringing an action against us. What we can do perhaps is adopt reasonable procedures and practices which will minimize the possibility of a recovery in the event an action is brought. If an individual undertakes to practice engineering, he holds himself out to the party with whom he contracts to be one skilled in his profession, with an adequate knowledge of the science of design and construction, and he implicitly represents that he will exercise reasonable care, judgment and technical skill to see that the designs are properly accomplished and the work is properly done. Fancy wording and devious contractual methods, which some may attempt to use, cannot avoid these implied responsibilities. As professional people, we must be willing to assume these responsibilities if we are to continue as respected leaders of the construction industry.

Trends in Incinerator Specifications

If one reviews the history of incineration in this country he finds that in the early days most of the technical knowledge was centered in personnel connected with various incinerator manufacturers and contractors. The natural outgrowth of this situation was the use of generally worded performance specifications which placed the burden on the contractor to produce a given end result. Unfortunately, there were many cases where the contractor himself judged the adequacy of his own performance. From a point of view of legal responsibility, if a contractor undertakes the design and construction of a facility to meet a given end result, he will be held to the specified performance. Should his plant fail to perform he must continue to make changes and modifications or for that matter completely reconstruct a given facility in order to comply with contract requirements.

As practicing professional engineers became interested in the field and the technical aspects of design and construction became more widely known, the engineering profession prepared more detailed plans and specifications to accomplish the required end result. If the plans and specifications are definite as to dimensions, construction and equipment, and if the contractor performs as specified, normally he will not be held to a specified...
performance. In other words, we cannot require the contractor to perform in a specific manner and also hold him responsible for the end result. One of the classic cases in this area of the law involved a contract for construction of a water-tight basement. The specifications detailed the manner in which the contractor was to proceed with his work, and also required him to guarantee that the basement would be dry for a period of five years following completion of the work. The contractor performed his work completely in accord with contract requirements. The basement leaked — the owner then sought to hold the contractor to his guarantee. The court found that the contractor cannot be held both to performance of a specific method and a specified end result. Accordingly, the court released the contractor from his guarantee.

The net effect of this change from a performance-type specification to the detailed plan and specification is to place greater responsibility for design on the professional.

**Legal Effect of These Trends**

With more detailed plans and specifications being prepared, the contractor is responsible for strict performance in accord with these detailed requirements. However, the responsibility for the end result rests with the professional. This legal effect must not be construed to mean that the law requires the engineer to be perfect. However, if he represents himself to be knowledgeable in a given field of engineering, the courts will expect that he display in his designs that knowledge, skill and ability which would be displayed by other professionals acting in a similar capacity. If an engineer represents himself as one specializing in the design of incinerators, the courts will hold him to a much higher degree of proficiency and skill than one who does not claim to be a specialist.

In the case of Coombs vs. Beede [1] the court stated the general rule applying to the professional as follows:

"The undertaking of an [engineer] implies that he possesses skill and ability, including taste, sufficient to enable him to perform the required services at least ordinarily and reasonably well; and that he will exercise and apply, in the given case, his skill and ability, his judgment and taste, reasonably and without neglect. But the understanding does not imply or warrant a satisfactory result. It will be enough that any failure shall not be by the fault of the [engineer]. There is no implied promise that miscalculations may not occur. An error of judgment is not necessarily evidence of a want of skill or care, for mistakes and miscalculations are incident to all the business of life."

**Competitive Bidding and Patented Equipment in Public Work**

There are a number of equipment items and processes which have been patented in the incinerator field. A natural question arises concerning a possible conflict where competitive bidding is used and patented equipment is specified outright.

Where the owner is an individual, a partnership or a private corporation, competitive bidding is not mandatory, so there is no reason why equipment carefully selected should not be specified outright. Of course, every owner is interested in obtaining more for his money and competition does sharpen pencils. Under no circumstance should the private owner be required to accept anything that is not specifically what he wants.

In public work we have an entirely different problem. When a public works contract is made we visualize a situation where the public officials and the contractor agree with an interested taxpayer looking over their shoulders observing everything that is done. The taxpayer holds a big legal club which he may use to avoid the entire agreement.

Competitive bidding for public construction contracts has been a requirement as far back as 1845 and is a common requirement of Federal, State and local government. The courts have stated the purpose of competitive bidding to be as follows:

"To protect the public against collusive contracts; to secure fair competition upon equal terms to all bidders; to remove not only collusion, but temptation for collusion and opportunity for gain at public expense; to close all avenues to favoritism and fraud in its various forms; to secure the best values for the [public] at the lowest possible expense; to afford an equal advantage to all desiring to do business with the [public] by affording an opportunity for an exact comparison of bids.

"Laws of this kind requiring contracts to be let to the lowest bidder are based upon public economy, are of great importance to the taxpayers, and ought not to be frittered away by exceptions.

"They originated, perhaps, in distrust of public officers whose duty it is to make public contracts, but they also serve the purpose of affording to the business men and taxpayers a fair opportunity to participate in the benefits flowing from such contracts, which are nowadays amongst the most important items of the present day business world.

"Insofar as they thus serve the object of protecting the public against collusive contracts and prevent favoritism toward contractors by public officials and tend to secure fair competition upon equal terms to all bidders, they remove temptation on the part of public officers to seek private gain at the taxpayers' expense, are of highly remedial character, and should receive a construction always which will fully effectuate and advance their true intent and purpose and which will avoid the likelihood of same being circumvented, evaded or defeated." [2]

There are two well recognized exceptions to the competitive bidding requirement:

The first exception occurs when it is not desirable or possible to advertise for a particular work. For example, work which requires specialized skills or the professional services of engineers, lawyers, architects, etc., is not bid competitively; or if a particular type of structure is
needed or a particular article, piece of equipment or material is necessary to accomplish a certain purpose these may be obtained without competitive bids.

The second well-known exception develops when an emergency occurs and remedial measures cannot be delayed to comply with competitive bidding requirements.

Everyone present has some knowledge of a subtle or bold attempt to circumvent the purpose of the law. A case in point deals with actions of a Board of Water Commissioners. A local ordinance gave an emergency purchasing power not to exceed $500 without competitive bids. The Water Commissioners proceeded to purchase regularly just short of $500 worth of a particular water meter and the purchases were made without competitive bids. A taxpayer brought a successful action to restrain the Commissioners, since the ordinance only permitted emergency buying without competitive bids. The practice of the Commission was not emergency buying even though they had so classified it [3].

Competitive bidding statutes are to protect the public, not contractors or equipment suppliers. It is the taxpayer who raises the question of competitive bidding. It may surprise you to know that a bidder is presumed to know the law and is presumed to know whether or not the public officials have complied with the public bidding statutes. If a taxpayer brings a successful action to vacate an award or void an existing contract, the contractor is without remedy. In fact, in some states when a contract has been declared void the contractor must repay all payments made to him and the municipality can retain whatever benefits it has received. However, there is another line of decisions which New York follows, in which the contractor may keep payments received when the municipality retains the benefits or where the circumstances make it impossible to restore the benefits to the contractor.

Of equal concern to the owner, engineer, and contractor is the court's interpretation of a specification requirement demanding the use of patented material or equipment. Some courts hold that to specify a patented item to the exclusion of other items is a violation of the competitive bidding statutes. This has been called the "Wisconsin rule" and is based on the theory that a specification calling for a patented item is not in the public interest because it stifles competitive bidding. The other rule, which we believe represents the weight of authority, permits a specification for a patented item provided the purpose of the specification is not the mere elimination of competitive bidding. This is sometimes referred to as the "Michigan rule". This rule is based on reasoning that "where a statute requires competitive bidding, it is not violated or does not apply when all of the competition is allowed which the situation permits; that a municipality should not be denied the right for the benefit of its citizens to avail itself of useful inventions and discoveries even though protected by patents and that when a city exercising its power to make the public improvements in good faith, decides to contract for the use of patented articles, there is created no monopoly and no abatement in competition beyond what necessarily results from the rights and privileges given the patentee by the Federal Government." [4]

An interesting case in New York held that "the adoption of specifications for a patented pavement does not prevent competition or competitive bidding and that when the patentee of the material or equipment has offered the use of the product to all bidders on the contract at a fixed price, the competitive bidding requirement has been satisfied." [5] When a patented item is specified, we believe it good practice to require that the owner of the patented item make it available equally to all prospective bidders. Perhaps the surest method of preventing the "favored contractor" treatment by the owner of the patented item is to specify the firm price and other details so that all prospective bidders will make the same allowance for the patented item.

**Alternative Proposals**

On many projects the engineer will request alternative proposals on different types of incinerator stokers with, we believe, the primary purpose of obtaining a very favorable bid for his client. In a given installation it may not always be in the client's best interest merely to shop for the lowest price. The industry demands and, in fact, requires superior performance in order to comply with more and more stringent air pollution control requirements.

There may be some situations where alternative proposals can be justified. If alternative proposals are sought, usually they require structural changes and other modifications which properly should be done by the designer. This imposes a tremendous increase in required engineering design. It is suggested that the engineer's contract of employment include a suitable provision for an increased fee for the alternative designs prepared. Too often the client feels that this is part and parcel of the basic design and is reluctant to pay for the additional service, even though he may have realized substantial savings in construction cost.

Many alternative proposals make provision for evaluation of bids based upon stipulated costs for power, labor, water and similar economic factors of operation. If the specifications clearly delegate to the engineer the right to evaluate bids to establish the lowest and best bid for the client to accept, this evaluation will be upheld.

**Contractor's Responsibility**

In the usual situation, where the owner through his engineer furnished the plans and specifications to the contractor, the contractor in turn is bound to follow these
plans and specifications. If the contractor does this to the letter, he will not be held responsible for the end result. The courts hold the situation to be one in which the owner warrants to the contractor the sufficiency of the plans and specifications to accomplish the intended result.

Of particular interest is the wording which appears in the proposal. If the proposal expressly states that the bidder has carefully reviewed the plans and specifications for the project, and in submitting his bid he accepts and warrants them as being sufficient for the purpose intended, the contractor then will be held accountable not only for performance of the work but for the end result as well. In private work, the “package deal” contractor, who does both the design and the construction, is accountable to the owner not only for the method but for the result as well.

A problem which occurs frequently is one where the proposal form requires the submission of a number of alternative prices, data and other information. What happens when the low bidder has failed to fill in all of the required information? Generally speaking, these are omissions which the awarding authority may waive. However, if the omission is one which destroys or seriously affects fair competitive bidding, it cannot be waived. A great deal of latitude is given to the awarding authority in these matters.

The time for completion of the work has been a cause for litigation. When a project is difficult to construct, has many factors which may cause delay, or perhaps is threatened by a major labor strike, it is the first inclination of the engineer to let the bidder state in his proposal the number of days required for completion. On public work this can be fatal.

In cases where the engineer has required the bidder to stipulate the number of days required for completion, taxpayer actions to set aside the award have been successful since there is no common basis for comparing the bids and determining the low bidder. For example, a pipeline is advertised for bids and the bidders are required to set the price and the time for completion. Bidder A sets $350,000 with a completion time of 75 calendar days; Bidder B sets $390,000 with a completion time of 40 calendar days; and Bidder C sets $340,000 with a completion time of 150 calendar days. Who is really the low bidder? When the engineer attempts to act like King Solomon and decide the question, the courts have uniformly held this cannot be done.

Where liquidated damages are called for in the contract documents, it is possible to allow the bidder to stipulate the number of days for completion provided the bids are evaluated and compared to recognize the factors of time and liquidated damages.

By giving effect to the time and specified damages there is a common basis for comparing proposals. It is suggested that the contract documents carefully spell out how the comparison will be made, to avoid any misunderstanding by prospective bidders.

Manufacturer’s Responsibility

Legal liability of the manufacturer is commonly referred to as the law of products liability and, in this area, there are three prime theories of liability:

1. Negligence – or the failure to use reasonable care in the manufacturing process, including design, testing, information on how to use, etc.

2. Warranty or Contract – premised upon the expressed and implied warranties, arising from the sale of a product.

3. Strict Liability in Tort – a revolutionary concept which has emerged in this field of the law.

The first and third theories of liability are tort actions predicated upon a civil wrong having been committed by the manufacturer giving rise to an action for damages.

The first theory is the normal theory of negligence in which the manufacturer is held to owe a duty to exercise reasonable care in the design, manufacture and inspection of the product he sells. He also has the duty to instruct the purchaser in the proper use of the product and to warn of any danger which may not be readily apparent to the user. The manufacturer owes this duty to a very wide spectrum of individuals – purchasers, users, bystanders, or anyone who foreseeably could be injured from the defective product.

The third theory, or strict liability in tort, is pretty much a concept in which the person injured or who suffers property damage due to a defective product, is considered to have proven his case when he shows the product to be defective and, further, that the defect caused the injury or damage. This means, in effect, that the damaged or injured party is relieved of the burden of proving actual negligence in design, manufacture or inspection. This presentation has been over-simplified, since there are a number of conditions which must be present to invoke this theory of liability.

Of prime interest to the professional, however, is the second theory or warranty theory of liability. This is the area in which the professional normally operates in his relation to the manufacturer or material supplier. Cases have been reported where the professional assumes great responsibility when he relies solely on the advertising literature of the manufacturer in selecting and specifying a product for a given application.

The matter of responsibility changes when there is a written exchange of correpsondence or specific evidence in writing from the manufacturer which says in simple language that the material or equipment to be specified is suitable for the purpose and locale in which it is to be used. We now have an expressed warranty even though the word “warranty” may not have been used. In this
connection, on all important material or equipment selections, it would seem appropriate to have an expression in writing from the manufacturer that the use to which the professional will put his product is proper and correct. If possible, review of a specification draft covering the item is good practice.

Thoughts occur concerning substitute materials or equipment offered by a contractor for use in a given installation which materials or equipment have not been specified or researched by the professional. Perhaps it would be reasonable to require that the manufacturer of the substitute material or equipment guarantee its use and performance in the project for which it is being offered. Perhaps we should be thinking in terms of the words "approved and warranted or guaranteed equal" rather than simply "approved equal."

As a matter of policy, the professional should keep a careful file of his correspondence with material and equipment suppliers and preserve this file for a period well beyond the construction phase of the project. The period might well be determined by the applicable statute of limitations.

**Engineer's Responsibility**

Perhaps the best way to present this subject is to review briefly the engineer's potential liability to (1) his client, (2) the contractor and (3) other third persons.

**Potential Liability to the Client**

The engineer's liability is usually related to one or more of the following: (a) Defective plans and specifications, (b) Incorrect estimates of cost, (c) Negligent supervision of construction, (d) Failure to comply with local codes and ordinances, (e) Improper payment certificates.

**Defective Plans and Specifications.** When an engineer prepares plans and specifications for a project in the exercise of his profession he owes his client the duty to exercise reasonable skill, ability and judgment without negligence. If, as occurred in the Drexel Institute of Technology Case, the professional selects and uses a material with which he is not familiar and the result is defective construction, the professional will be held liable. In this case, the court's conclusion was as follows:

"The evidence convinces us that the fault in this building lies in the design and for that fault the architects are answerable. An architect impliedly warrants not only that he has the skill, knowledge and judgment required to produce a result that will meet the needs of his employer, but that in the preparation of plans and specifications and in the supervision of the work he will employ that skill, knowledge and judgment without negligence. For negligence in the performance of his work, he is liable to his employer if damage results. In the instant case, the architects, in considering the use of Perlite as an aggregate for the roof fill, were admittedly dealing with a material with which they had no experience and of whose characteristics they had the most superficial knowledge ... the consideration which they did give to this question strikes us as so superficial as to convict them of negligence." [6]

This particular case should be a warning to architects and engineers alike that they are on thin ice when they use materials of which they have very little knowledge. The measure of damages in case of this type may be considered in two ways. If the defect can be remedied at reasonable expense, the damages will be the cost of making these corrections in the work. If, however, the defect is so intimately engaged with the structure or is inherent in the construction that it cannot be remedied at reasonable expense without tearing the structure down and rebuilding it, then the usual measure of damages is the difference between the value of the building as it exists and the value it would have had, had it been constructed in the correct manner.

**Incorrect Estimates of Cost.** Perhaps one of the most disagreeable moments for an engineer is that "moment of truth" when the actual construction cost as developed by the lowest acceptable bid is found to be well in excess of the client's budget. There are rather severe penalties for negligent estimates of cost or ill considered assurances as to the cost of a project when the client has definitely imposed a cost limitation. Where an engineer knows or it can be shown that he should have known that the client has limited funds, and the engineer prepares plans and specifications which call for a greater sum to be expended by the client, he not only risks all payment for his professional services but, in addition, may be held liable for any damages which the client may suffer by reason of his negligent estimate.

**Negligent Supervision of Construction.** If an engineer approves construction which is in violation of the plans and specifications, and damage to the client results, he will be held liable for this negligence. A simple case in point is that of Alexander vs. Hammarberg [7]. An architect in this case was retained to prepare plans and specifications for a house and a contract for construction was entered into with a contractor. Following the completion of the work, and on advice of the architect, the owner signed the necessary completion certificate. It soon developed that the floors were not level and that plaster was cracking due to foundation settlement. The client withheld final payment from the contractor and an action was brought to foreclose the contractor's mechanics lien. It developed that the architect had approved the construction of a portion of the foundation on filled ground, whereas the specifications provided that all of the footings were to be carried to original or natural ground level. The architect was held liable for the damages which resulted from his negligent approval of this violation of the contract. There may have been
some question here as to whether the architect merely approved or whether he directed the contractor to construct the footings on the filled material. In either case, we believe the result would be the same.

**Failure to Comply with Local Codes and Ordinances.**
The courts have held that an architect or an engineer is considered an expert in his particular line of work. Not only must he know materials and safe design, but he is also required to know the building restrictions imposed by the community where the project will be constructed. If the architect or engineer prepares plans and specifications which do not meet the building code, he may lose all compensation for his services. However, the client must allow him, at no additional expense, to make necessary revisions in the plans to meet the code requirements. If these cannot be done, the architect or engineer will be in serious danger of losing his compensation. When it comes to zoning restrictions, some courts are inclined to make these decisions the responsibility of the client rather than the architect or engineer.

**Improper Payment Certificates.** When an engineer is negligent in approving a contractor's claim for payment, he will be held liable to the client for any excess payment made in reliance on the certification. There is an interesting case wherein the contract required that the contractor submit evidence that payrolls and bills from suppliers had been paid before the architect was to issue his certificate of completion. The architect issued his certificate without demanding this evidence from the contractor. As a result the sum retained on the contract was released to the contractor. The contractor failed and the surety brought an action against the architect for his negligent action. The court held the architect was liable since the surety was entitled to the protection which the contract documents provided. It was the duty of the architect to determine that the bills had been paid and the architect owed this duty both to his client and to the surety for whose mutual protection the contract retainer was provided.

As a general rule, if a contractor is overpaid to the client's ultimate loss or damage, the architect or engineer who is negligent in approving such overpayment will be liable to his client.

**Potential Liability to the Contractor**
There are cases where the architect or engineer through negligence in performing his duty in supervision of construction, has been held liable in damages to the contractor. A case in point is U.S. vs. Rogers and Rogers [8] where a negligent architect approved construction although certain tests of concrete had shown that it did not meet the requirements of the specifications. The court held in this case that an architect or an engineer owes a duty to perform properly his supervision of construction not only to his client, but also to the contractor who is relying on the architect's judgment and skill.

**Potential Liability to Third Persons**
Third party liability finds its origin in a negligence tort action where one party owes a duty to another and that duty is not fulfilled. The old common law limited the right of action and liability to persons having privity of contract. This common law has been expanded to offer a right of action to parties not in privity of contract, particularly in cases where a dangerous chattel or structure is involved.

This particular field of potential liability is one of the most frustrating and exasperating for engineers. Take for example the famous case of Day vs. National U.S. Radiator Corporation where a subcontractor's employee was killed when a hot water heating boiler exploded due to the absence of a pressure relief valve which had been specified but not installed. In this case, the subcontractor was grossly negligent and the deceased's estate had received compensation as provided under the Workmen's Compensation Act. However, this recovery was limited; therefore, every effort was made to find others who might possibly be held liable and where the recovery would not be limited. The architects, of course, were made the goat of this action which involved all of the equipment suppliers as well as the architect and his associate engineer. The case hinged on whether or not the architects had been negligent in the performance of their duties as defined in their contract of employment. After the Lower and Appellate Courts had held for the plaintiff, the Supreme Court finally reversed the decision and held for the architect. It is reasonable to assume that much of the activity of the professional societies in revision of their contract documents was influenced by the Lower Court's decision in this case.

It is most important that the construction contract contain a clearly stated provision that the contractor will indemnify and hold harmless the owner, the owner's employees, the engineer and the engineer's employees from any liability or claim growing out of the performance of the work.

In a Pennsylvania case a sewer contractor failed to brace and sheet a trench. The engineer did not order the contractor to use sheeting, although he had knowledge of the unsafe trench condition. The trench caved in and killed an employee of the contractor. The estate of the deceased sued the community and the engineer on the ground that the engineer was negligent because he had control of the work and had failed to order the necessary sheeting. The court held the municipality and the engineer liable. The municipality and the engineer then brought an action against the contractor to indemnify them under the terms of the construction contract for the total amount that had been paid to the estate. The contractor argued in his own defense that the municipality and its engineer were concurrently negligent because they had
control in the performance of the contract, and that at best the recovery against him should be limited to the amount of his Workmen’s Compensation Liability. It is interesting to note here that the deceased’s estate, rather than accepting the very limited recovery under Workmen’s Compensation Act, brought an action against third parties, where there was no limit to his recovery, rather than against his employer. This is the same legal procedure that the plaintiff followed in the Day vs. National U.S. Radiator case. The court held the contractor liable and required him to indemnify the community and its engineer for the full amount of the recovery without limitation. This case points up certain important factors: (1) the Contract Documents should contain the necessary “hold harmless clauses”, (2) the clauses should protect both the owner and his engineer and their employees from any claim growing out of the work. When a workman is killed or seriously injured on a construction job his recovery is limited under Workmen’s Compensation Insurance. If he can bring a successful action against some third party, usually the owner or his engineer, his recovery will not be limited.

A somewhat similar case in New York was decided in favor of the engineer. In this case the architects and engineers were retained to supervise the work to insure performance of construction in accordance with the plans and to see that standards of safety were met as to permanent construction. During the erection of the Chase Manhattan Building a construction worker employed by the foundation contractor was injured when one of the heavy drills piled near a platform on which there were vibrating air compressors, fell and struck the construction worker as he passed beneath the platform. The injured workman brought an action against the architects and engineers and the bank claiming that the architects and engineers under his contract with the bank to supervise construction owed the injured workman a duty to see that standards of safety were observed and that the architects and engineers had failed in this duty and should therefore be held liable.

The case was carried to the Court of Appeals (New York court of last resort) and judgment for the architects and engineers was affirmed. The important portion of the court’s decision follows: “As to defendants architects and engineers, the evidence showed that their sole supervisory function was to insure performance of the construction work in accordance with the plans and specifications; to see that standards of safety were met in relation to the permanent construction, adjacent buildings, streets and subways, but not the safety of temporary platforms used in connection with the permanent construction work. There being no duty, we do not reach the question of liability to a third party by reason of nonfeasance.”

Again we see how important it is to define the engineer’s duties in his contract of employment. If he had agreed with the bank to supervise construction and assure safe working conditions for construction workers it is quite possible he would have been held liable.

We have seen how the engineer may be charged with liability for negligence in his supervision of construction. If his designs are defective, he will be held responsible for accidents which occur and flow directly from the defective design. Until the client accepts the project, the engineer will be responsible for all defects in the work resulting from defective plans and specifications, if a person is injured as a result of such defect. After the client has accepted the work and occupied the premises, the liability for defective design continues ad infinitum where the defect is a hidden defect, not an obvious one. As an illustration, consider the case of Inman v. Binghamton Housing Authority [9]. Six years after the completion of the work a two year old child fell from a stoop located at the rear entrance of plaintiff’s apartment. The stoop was approximately 2 feet above grade and had access steps which did not extend the full width of the porch. No railing was provided. The court held that this defect was an obvious one and that it was discoverable by reasonable inspection. In this case the structure did not possess any latent defect or an unknown danger. The absence of a railing was known and discoverable. Therefore, the court held for the architect. If this defect had been a hidden defect, such as an inadequate structural member, the court might have held against the architect.

In most cases involving liability to third persons, a dangerous instrumentality is involved. What the courts have considered a dangerous instrumentality may raise a few eyebrows. Some of the items are automobiles, lawn chairs and wash basins. Where a dangerous instrumentality or a dangerous condition is present as a result of the design and someone is injured because of it, then the liability of the engineer and the contractor may well continue, even after the structure has been turned over to the client. If there is a hidden defect in the structure which the client has not discovered prior to his acceptance, the engineer will remain responsible and liable for injuries or death caused by that defect if it is a result of the engineer’s negligence.

If an engineer misrepresents subsurface information to prospective bidders or has issued information known to be incorrect, he may well be defending an action, even by subcontractors of the general contractor. For example, if certain information concerning foundation conditions is available and only part of the information is given or shown to prospective bidders, the architect or engineer may find himself defending such an action for damages which allegedly result from this misrepresentation.

**Engineer-Employee**

The engineer-employee does not assume the same
legal responsibilities his engineer-employer accepts when the employer signs a design contract. Insofar as we have been able to determine, the relationship is that of an ordinary employer and employee. The employee, even though he may be a professional man, cannot be held liable for his negligent acts. However, if an error or omission is made maliciously he would be held liable to his employer. The engineer engaged as an independent contractor would be held liable for his negligent acts.

**Conclusion**

We have covered a broadrange of subjects, many of which were lightly discussed. In a paper of this type it is impossible to explore any one item in depth. From a legal responsibility point of view we would suggest:

1. to the contractor, that he carefully follow the plans and specifications with an absolute minimum of substitutions;
2. to the equipment manufacturer, not to write letters recommending his equipment for a specific application unless you know that it will perform — in addition, to be as forthright in telling the professional what the material or equipment cannot do as he is in telling him what it can do; and
3. to the professional, we believe it reasonable to take such steps as Errors and Omission insurance and carefully worded contracts, which spell out the professional’s obligation to his client.

*Every rule of law has its exceptions. If you have a problem by all means seek competent legal advice.*

In final analysis, the contractor, the manufacturer and the professional will be judged by how well or how negligently he performs the duties of his commission. There is no legal substitute for good performance.

**References**

[9] Inman vs. Binghamton Housing Authority, 3 N.Y. 2d 137.