

REVISION TO SUBCONSULTANT'S WORK

Case No. 02-7

Facts:

Engineer A is the prime design professional on a facilities project that includes the surrounding landscaping design. Engineer A retains Subconsultant LA to prepare a planting scheme. Subconsultant LA's scheme includes 5,000 plantings based upon projected plant mortality projections (50% survival rate) which is the generally accepted and established industry and professional standard. After receiving Subconsultant LA's proposal, Engineer A reduces the number of required plantings to 3,500 in order to reduce expenses for the Owner. Engineer A also includes the 3,500 number in the bidding documents with an added requirement of a two-year planting warranty, specifying 200% replacement in the event survival rate is 60% or less. Contractor is selected as the low bidder and Contractor plants 3,500 plants. A year later, Owner notifies Contractor that the survival rate was 60% and Contractor is required to plant 1,400 additional plants. Owner suffers significant inconvenience, additional maintenance costs, and long term expenses. The Contractor suffers significant additional expenses.

Ouestions:

- 1. Was it ethical for Engineer A to reduce the number of plantings recommended by Subconsultant LA to 3,500 and increase the survival percentage in the specifications in order to save expenses for the Owner?
- 2. Was it ethical for Engineer A to include a requirement of a two-year planting warranty, specifying 200% replacement in the event survival rate is 60% or less?

References:

Section I.2.	-	Code of Ethics:	Engineers, in the fulfillment of their professional duties, shall perform services only in areas of their competence.
Section II.2.a.	-	Code of Ethics:	Engineers shall undertake assignments only when qualified by education or experience in the specific technical fields involved.
Section II.2.b.	-	Code of Ethics:	Engineers shall not affix their signatures to any plans or documents dealing with subject matter in which they lack competence, nor to any plan or document not prepared under their direction and control.
Section II.3.a.	-	Code of Ethics:	Engineers shall be objective and truthful in professional reports, statements, or testimony. They shall include all relevant and pertinent information in such reports, statements, or testimony, which should bear the date indicating when it was current.
Section II.3.b.	-	Code of Ethics:	Engineers may express publicly technical opinions that are founded upon knowledge of the facts and competence in the subject matter.
Section II.5.	-	Code of Ethics:	Engineers shall avoid deceptive acts.

Discussion:



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The NSPE Board of Ethical Review (Board) has addressed issues relating to the misrepresentation of facts on occasion, although not under factual situations similar to the one in this case. Earlier cases involved misrepresentation of an engineering firm's staff to potential clients and others. In BER Case 83-1, Engineer A worked for Engineer B. Engineer B notified Engineer A that Engineer B was going to terminate Engineer A because of lack of work. Engineer A continued to work for Engineer B for several additional months after the termination notice. During that period, Engineer B distributed a previously printed brochure listing Engineer A as one of Engineer B's key employees, and continued to use the previously printed brochure with Engineer A's name in it well after Engineer B did, in fact, terminate Engineer A. The Board ruled that it was not unethical for Engineer B to distribute a previously printed brochure listing Engineer A as a key employee providing Engineer B apprised the prospective client during negotiation of Engineer A's pending termination. The Board also ruled that it was unethical for Engineer B to distribute a brochure listing Engineer A as a key employee after Engineer A's actual termination. Interpreting the meaning of NSPE Code Section II.5.a, we noted that the words "pertinent facts" are those facts that have a clear and decisive relevance to a matter at hand. Another way to characterize pertinent facts is those that are "relevant and highly significant." "We determined whether (1) Engineer B in fact misrepresented 'pertinent facts' and (2) whether it was the intent and purpose of Engineer B to 'enhance the firm's qualifications We noted that both factors must be present for a violation of NSPE Code Section II.5.a to exist. We also noted that it is not unusual for an engineering firm that seeks to promote itself for business reasons to include in such a brochure a statement of the firm's experience, its history, its qualifications, as well as the names and qualifications of the members of the firm. We said that the names of the firm's members are often quite significant to the client selecting the firm. The client may be familiar with an individual member of the firm as represented in the brochure. We concluded that the inclusion of the name of Engineer A in the firm's brochure constituted a misrepresentation of 'pertinent facts'."

In BER Case 83-1, a second point which we considered was whether it was the "intent and purpose" of Engineer B to "enhance the firm's qualifications and work" by including Engineer A's name in the promotional brochure after Engineer A left the firm. The facts presented in the case demonstrated that Engineer B acted with "intent and purpose" in distributing the misleading brochure. Engineer B was well aware of the impending termination of Engineer A as Engineer B was the very person who terminated Engineer A. Engineer B distributed the brochure while Engineer A was still employed but had been given a notice of termination. The Board noted that this could easily mislead potential clients into believing that Engineer A, noted as a key employee, would be available in the firm for consultation on future projects. Moreover, Engineer B distributed the brochure after Engineer A had left the firm. The Board concluded that this would be a clear misrepresentation of a pertinent fact with the intent to enhance the firm's qualifications and as such constituted a violation of the NSPE Code.

Another case, BER Case 90-4, also involved the misrepresentation of a firm's staff. The case involved Engineer X, who was employed by Firm Y, a medium-sized engineering consulting



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firm controlled by Engineer Z. Engineer X was one of a few engineers in Firm Y with expertise in hydrology, but the firm's work in the field of hydrology did not constitute a significant percentage of the firm's work. Engineer X, an associate with the firm, gave two weeks notice of her intent to move to another firm. Thereafter, Engineer Z, a principal in Firm Y, continued to distribute a brochure identifying Engineer X as an employee of the firm and list Engineer X on the firm resume. In finding that it was not unethical for Engineer Z to continue to represent Engineer X as an employee of Firm Y under the circumstances described, the Board noted that it was reluctant to conclude that the actions of Firm Y and Engineer Z in including the name and resume of Engineer X in the firm's brochure demonstrate an intent to "enhance the firm's qualifications and work." Said the Board, "there does not appear to be the same motive on the part of the principal engineer or the firm to act in a manner which will materially benefit the firm as was so in BER Case 83-1. Here, the action by Firm Y and Engineer Z appear more in the manner of an oversight without malice or intent. While this Board has found that unethical conduct in the past occurred in the absence of intentional actions, we do not consider the facts of this case to be of a nature to make such a finding."

Turning to the facts in the present case, while the earlier cases are unlike the present case, the Board believes there are some basic lessons that can be drawn from them that relate to the issue of professional competence and qualifications. In BER Case 83-1, in determining whether a misrepresentation existed, the Board should consider whether the facts are "pertinent facts" and "highly relevant facts." The Board thinks that is instructive in the present case because the facts at issue appear to be both "pertinent" and "highly relevant." It is also the Board's view that, unlike BER Case 90-4, Engineer A's actions may have at least in part have been motivated from an intent to enhance the firm's qualifications and work and, however, ill-advised, improve Engineer A's standing with the Owner. While the Board fully recognizes that Engineer A had a basic obligation to protect the interests of the Owner and in pursuing that obligation, negotiated for the benefit of the Owner, the Board is concerned that Engineer A received technical information from a competent consultant and then changed and misapplied portions of that information—information for which Engineer A did not have competence or expertise. While the Board recognizes that Engineer A may have been trying to make up the difference in plantings for the benefit of the owner with the warranty for replacement plantings, the Board is concerned that Engineer A violated obligations to Subconsultant LA by misrepresenting and changing Subconsultant LA's work in an area where Engineer A presumably did not have competence. While it is arguable that the Contractor was charged with some knowledge of the issues, it would appear that the Contractor was relying upon the integrity of the bidding documents in preparing its bid. In the final analysis, it is the Board's view Engineer A was engaged in a form of overreaching which, while on the surface was for the Owner's benefit, was in the end detrimental to the Owner since it delayed completion of the project and may have added additional costs to the project.

Conclusions:



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- 1. It was unethical for Engineer A to reduce the number of plantings to save money for owner without consulting the professional Subconsultant LA for a new 3500 planting plan.
- 2. It would have been ethical if Engineer A had consulted with Subconsultant LA as suggested above because the survival rate and replacement policy would have been properly addressed.

BOARD OF ETHICAL REVIEW

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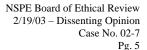
The following members did not participate in the approval of this opinion: Louis L. Guy, Jr., P.E., F.NSPE William D. Lawson, P.E., NSPE

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Each opinion is intended as guidance to individual practicing engineers, students and the public. In regard to the question of application of the NSPE Code to engineering organizations (e.g., corporations, partnerships, sole-proprietorships, government agencies, university engineering departments, etc.), the specific business form or type should not negate nor detract from the conformance of individuals to the NSPE Code. The NSPE Code deals with professional services—which must be performed by real persons. Real persons in turn establish and implement policies within business structures.

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NSPE BER Case 02-7 -- Dissenting Opinion

The role of a "prime design professional" is comprehensive. It includes understanding the client/Owner's values and priorities as well as project budget limitations. It also includes decisions on where and even whether to use subconsultants for various elements of the design. Further, the prime design professional is legally and ethically responsible for the entire facilities project, including the "surrounding landscape design". Depending on the location (urban, suburban or rural), the type of facility (industrial plant, office building, or wastewater treatment facility), and the scope and extent of the project, the planting scheme may be purely cosmetic and relate only to public relations instead of project function. Key to the project success is the prime consultant's understanding and interpretation of the Owner's wishes and budget.

At this time there is no legal or ethical obligation to use the services of a landscape architect, or to follow a landscape architect's advice, despite concerted efforts to the contrary by the landscape architecture community. While it would be permissible, professionally and ethically, for Engineer A to confer with Subconsultant LA prior to changing Subconsultant LA's recommendations regarding the plantings, it is our opinion that the decision to do so would be at the discretion of Engineer A. That is, Engineer A would not be ethically <u>obligated</u> to confer in all cases.

The decision will turn on competence, and the nature of the technical issue under consideration – landscape plantings associated with a facilities project – might in fact not be so esoteric that Engineer A would be unqualified or lack competence to modify the design and bidding documents. If so, the engineer would not be working outside his/her area of expertise, but simply working for the best interests of the Owner. Rather than overstepping the bounds of professional jurisdiction, the case is just as easily framed as one of aggressive advocacy on behalf of – perhaps even at the insistence of – the Owner.

As to the matter of Contractor D being awarded the landscaping bid under the terms specified by Engineer A, all three parties – the Owner, Engineer, and Contractor – faced uncertainty about the degree of plant mortality which none of them could fully predict, and part of the bidding process involved assessment of risk. Further, the presumption of an open bidding process is that a valid bid by the contractor represents an agreement to do the work as specified, and therefore is tacit acceptance of the risk of doing such business. Had things gone differently, with more rainfall perhaps, the plant mortality rate might never have dropped to the 60% threshold, and all parties would have benefited from Engineer A's approach.

In sum, while the conclusion reached by the BER majority might fit the facts, a broader view of professional authority and responsibility of the prime design professional allows us to conclude that, if Engineer A felt he was competent to do so, it was ethical for Engineer A to specify the number of plantings in the project, even if this was less than the number recommended by the subconsultant hired for advice, and it was ethical to structure the planting element of the construction contract to identify a higher survival percentage, a longer planting warranty, and/or a more rigid replacement clause than is common or was recommended by the subconsultant.

Louis L. Guy, Jr., P.E., F.NSPE William D. Lawson, P.E., NSPE