

Report on a Case by the Board of Ethical Review

Case No. 86-4

Modification of Signed and Sealed Plans by Other Than Responsible Engineer

Facts:

Engineer A prepared subdivision plans for a client. These plans included a 5-sheet set of grading plans and a 38-sheet set of public improvement plans. Each set had a cover sheet and all sheets in each set were signed and sealed by Engineer A.

The client was not satisfied with the plans, so he discharged Engineer A after paying the complete fee for production of the plans. The client asked Engineer A for his original drawings. Engineer A complied, retaining a set of reproducibles.

Engineer B was later retained by the client to review and redesign the project. The client gave Engineer B the set of plans produced by Engineer A to use as a guide in the redesign.

Engineer B reviewed the original drawings, made changes on the grading plans, including deletion of one sheet, raising the elevation of the housing pads and changing routing of the street. Engineer B did not note what changes were made nor did he sign any of the sheets, including the cover sheet.

Engineer B also made major design changes to the storm drains, pipe dimensions, sewers, and utilities in the public improvement plans. He made no notation of the changes, did not sign the plans, and left Engineer A's seal and signature intact.

Engineer B placed a note on the title sheet of the public improvement plans, leaving Engineer A's signature and seal intact, stating that he, Engineer B, is taking responsibility for the "revisions of the plans," making no notation what those changes were.

At no time after Engineer B was retained were there any communications between the two engineers.

Questions:

- 1. Was Engineer B unethical in performing services for the client without notifying Engineer A?
- 2. Was Engineer B unethical in making changes on specific sheets of a set of drawings without clearly identifying those changes?
- 3. Was Engineer B unethical in failing to note his assumption of responsibility for the entire set of drawings?



References:

Code of Ethics - Section III.3.a. - "Engineers shall avoid the use of statements containing a material misrepresentation of fact or omitting a material fact necessary to keep statements from being misleading; statements intended or likely to create an unjustified expectation; statements containing prediction of future success; statements containing an opinion as to the quality of the Engineers' services; or statements intended or likely to attract clients by the use of showmanship, puffery, or self-laudation, including the use of slogans, jingles, or sensational language or format."

Section III.8.a. - "Engineers in private practice shall not review the work of another engineer for the same client, except with the knowledge of such engineer, or unless the connection of such engineer with the work has been terminated."

Section III.9. - "Engineers shall accept personal responsibility for all professional activities."

Discussion:

The issue of one engineer reviewing the work of another engineer has been the subject of many Board decisions over the years. Section III.8.a. admonishes engineers against reviewing the work of another engineer for the same client except with the expressed knowledge of the engineer or unless the original relationship between the first engineer and the client has been terminated.

In Case 79-7 an engineer was asked to inspect mechanical and electrical engineering work performed seven years earlier. The Board concluded that the engineer notified the former engineer that the engineer was being retained to perform review and inspection services and that the review would entail a review of the original design. Said the Board: "It may be helpful for future guidance to again point out that the purpose of Section 12(a) (now Section III.8.a.) is to provide the engineer whose work is being reviewed by another engineer an opportunity to submit ... comments or explanations for... technical decision, thereby enabling the reviewing engineer to have the benefit of a fuller understanding of the technical considerations in the original design in framing . . . comments or suggestions for the ultimate benefit of the client."



While the facts of Case 79-7 are different from those in the instant case in that in the instant case the client clearly discharged Engineer A from his services, we think that many of the reasons for Section III.8.a. as stated in Case 79-7 are relevant to the discussion of the facts present in this case. While this Board concedes that Engineer B did not act unethically in agreeing to review the work of Engineer A without notifying Engineer A, we are troubled by much of the actions undertaken by Engineer B subsequent to his review of Engineer A's work. While it is true that Engineer A had been "discharged" by the client, Engineer A still maintained a connection with the work which he had performed by virtue of the fact that the client passed along Engineer A's work product to Engineer B. In addition, the facts indicate that Engineer B took those plans and made certain modifications in those plans. For the reasons cited in Case 79-7 we think it would have been wiser and more professional for Engineer B to consult with Engineer A before undertaking to modify the plans prepared by Engineer A.

The more critical issue involved in this case concerns Engineer B's activities relating to the "redesign" of the project. We view the conduct of Engineer B under the facts of this case to be misleading either intentionally or unwittingly. It is clear that Engineer B had an ethical obligation to make all necessary notations of changes which he had made with respect to the grading plans, housing pads, routing of streets, storm drains, pipe dimensions, sewers, and utilities. His failure to do so constituted a form of deception which places him in violation of Section III.3.a.

We acknowledge that Engineer B did in fact note on the title sheet of the public improvement plans that he was taking responsibility for the "revisions of the plans." However, as we have indicated, Engineer B's failure to state with specificity what those changes in fact were made such a notation on the title sheet virtually meaningless.

In addition, we are troubled by Engineer B's failure to acknowledge responsibility for the full design by notations on the drawings. (See Section III.9.) This suggests a lack of recognition on the part of Engineer B that his modifications in the design might have a significant impact upon the efficacy and integrity of the entire project design. Engineer B seems to have taken the position that he would only assume responsibility for those changes which he had made by virtue of his modifications, failing to recognize the fact that once he began to make fundamental changes to certain aspects of the design, his modifications might have an overall impact upon the entire design of the project.

The facts seem to suggest that the client gave Engineer B the plans prepared by Engineer A to use as a guide in the redesign. Rather than starting from scratch and redesigning the project, Engineer B appears to have "mixed and matched" the plans prepared by Engineer A with what he thought would be appropriate, never indicating which represented the work of Engineer A and which represented his own work. We think such conduct violates Section III.9. of the Code.



Conclusions:

- Q1. Engineer B was not unethical in performing services for the client without first notifying Engineer A.
- Q2. Engineer B was unethical in making changes on specific sheets of a set of drawings without clearly indicating those changes.
- Q3. Engineer B was unethical in failing to note his assumption of full responsibility for the entire set of drawings.

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Board of Ethical Review: F. Wendell Beard, P.E., Ernest C. James, P.E., Robert W. Jarvis, P.E., Everett D. Thompson, P.E., J. Kent Roberts, P.E., chairman

Dissenting Opinion: Some of Engineer A's work was retained. Engineer B did not originate that work and was not in responsible charge of it. Also, case facts indicate Engineer B reviewed A's work without benefit of the basis of design, design calculations, and technical specifications. Pertinent to this case, but not covered in the case text, is Code II.2.c. requiring each technical segment of a project to be "signed and sealed only by the qualified engineer who prepared the segment." There appears to be no major difference in ethical concept between identifying responsibility for each technical segment and this case where Engineers A and B, of different business entity, contributed to project design. Under these conditions Engineer B could not ethically assume responsibility for the entire design. *Robert J. Haefeli, P.E.*

Dissenting Opinion: This case is one of many which can be expected to produce painful conflicts for the engineering profession in the marketplace of liability. The high public esteem which our profession has enjoyed in public opinion polls is due, in part, to the premise that the interest of the public and the client is paramount, and this view has been reaffirmed in numerous BER opinions. Question 3 poses a particularly ominous dilemma for the practicing professional and clearly delineates a conflict between ethical standards of the highest order and legal liability. Section III.9. brings this issue into sharp focus on the instant case. A literal application of this Code section was applied in the majority opinion on Question 3. It is obvious, however, that such a strict application places Engineer B in an untenable position of " . . . accept(ing) personal responsibility for all professional activities," a position of virtually unlimited liability thrust upon him by the manner in which his client chose to handle the situation. To argue that III.9. can be applied equally to Engineer A is to negate the application of III.8.a. to Question 1. On Question 3 the Board should have found that Engineer B was not unethical based primarily on the adjective "full" contained in the question as being too restrictive an expectation for Engineer B's liability. James L. Polk, P.E.