Florida–Ethics for Professional Engineers

One (1) Continuing Education Unit
Course #0010039

Approved Continuing Education for Licensed Professional Engineers

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Course Description:

The Florida Ethics course satisfies the continuing education requirement of 1 hour of Ethics.

The course is designed as a distance learning interactive course that enables the practicing professional engineer to the revisit the emphasis that his or her professional license has a direct and vital impact on the safety, health, and welfare of the public.

Objectives:

The primary objective of this course is to familiarize the student with the standards of professional behavior for adherence to the highest principles of ethical conduct as well as apply those principles in reviewing real case studies.

Upon successful completion of the course, the student will be well versed to exhibit the highest standards of honesty and integrity deemed paramount to his or her license and profession.

Grading:

Students must achieve a minimum score of 70% on the online quiz to pass this course.

The quiz may be taken as many times as necessary.

The student will be asked at the end of the quiz to attest that he or she has personally and successfully completed all chapters of instruction.

The quiz may be viewed in the final chapter of this course.

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CODE OF ETHICS

Preamble

Engineering is an important and learned profession. As members of this profession, engineers are expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness, and equity, and must be dedicated to the protection of the public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct.

I. Fundamental Canons

Engineers, in the fulfillment of their professional duties, shall:

1) Hold paramount the safety, health, and welfare of the public.

2) Perform services only in areas of their competence.

3) Issue public statements only in an objective and truthful manner.

4) Act for each employer or client as faithful agents or trustees.

5) Avoid deceptive acts.

6) Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession.

II. Rules of Practice

1. Engineers shall hold paramount the safety, health, and welfare of the public.

1) If engineers' judgment is overruled under circumstances that endanger life or property, they shall notify their employer or client and such other authority as may be appropriate.

2) Engineers shall approve only those engineering documents that are in conformity with applicable standards.

3) Engineers shall not reveal facts, data, or information without the prior consent of the client or employer except as authorized or required by law or this Code.

4) Engineers shall not permit the use of their name or associate in business ventures with any person or firm that they believe is engaged in fraudulent or dishonest enterprise.

5) Engineers shall not aid or abet the unlawful practice of engineering by a person or firm.

6) Engineers having knowledge of any alleged violation of this Code shall report thereon to appropriate professional bodies and, when relevant, also to public authorities, and cooperate with the proper authorities in furnishing such information or assistance as may be required.

2. Engineers shall perform services only in the areas of their competence.

1) Engineers shall undertake assignments only when qualified by education or experience in the specific technical fields involved.

2) 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.

3) Engineers may accept assignments and assume responsibility for coordination of an entire project and sign and seal the engineering documents for the entire project, provided that each technical segment is signed and sealed only by the qualified engineers who prepared the segment.

3. Engineers shall issue public statements only in an objective and truthful manner.

1) 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.

2) Engineers may express publicly technical opinions that are founded upon knowledge of the facts and competence in the subject matter.

3) Engineers shall issue no statements, criticisms, or arguments on technical matters that are inspired or paid for by interested parties, unless they have prefaced their comments by explicitly identifying the interested parties on whose behalf they are speaking, and by revealing the existence of any interest the engineers may have in the matters.

4. Engineers shall act for each employer or client as faithful agents or trustees.

1) Engineers shall disclose all known or potential conflicts of interest that could influence or appear to influence their judgment or the quality of their services.

2) Engineers shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.

3) Engineers shall not solicit or accept financial or other valuable consideration, directly or indirectly, from outside agents in connection with the work for which they are responsible.

4) Engineers in public service as members, advisors, or employees of a governmental or quasi-governmental body or department shall not participate in decisions with respect to services solicited or provided by them or their organizations in private or public engineering practice.

5) Engineers shall not solicit or accept a contract from a governmental body on which a principal or officer of their organization serves as a member.

5. Engineers shall avoid deceptive acts.

1) Engineers shall not falsify their qualifications or permit misrepresentation of their or their associates' qualifications. They shall not misrepresent or exaggerate their responsibility in or for the subject matter of prior assignments. Brochures or other presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, joint venturers, or past accomplishments.

2) Engineers shall not offer, give, solicit, or receive, either directly or indirectly, any contribution to influence the award of a contract by public authority, or which may be reasonably construed by the public as having the effect or intent of influencing the awarding of a contract. They shall not offer any gift or other valuable consideration in order to secure work. They shall not pay a commission, percentage, or brokerage fee in order to secure work, except to a bona fide employee or bona fide established commercial or marketing agencies retained by them.

III. Professional Obligations

1. Engineers shall be guided in all their relations by the highest standards of honesty and integrity.

1) Engineers shall acknowledge their errors and shall not distort or alter the facts.

2) Engineers shall advise their clients or employers when they believe a project will not be successful.

3) Engineers shall not accept outside employment to the detriment of their regular work or interest. Before accepting any outside engineering employment, they will notify their employers.

4) Engineers shall not attempt to attract an engineer from another employer by false or misleading pretenses.

5) Engineers shall not promote their own interest at the expense of the dignity and integrity of the profession.

2. Engineers shall at all times strive to serve the public interest.

1) Engineers are encouraged to participate in civic affairs; career guidance for youths; and work for the advancement of the safety, health, and well-being of their community.

2) Engineers shall not complete, sign, or seal plans and/or specifications that are not in conformity with applicable engineering standards. If the client or employer insists on such unprofessional conduct, they shall notify the proper authorities and withdraw from further service on the project.

3) Engineers are encouraged to extend public knowledge and appreciation of engineering and its achievements.

4) Engineers are encouraged to adhere to the principles of sustainable development[1] in order to protect the environment for future generations.

3. Engineers shall avoid all conduct or practice that deceives the public.

1) Engineers shall avoid the use of statements containing a material misrepresentation of fact or omitting a material fact.

2) Consistent with the foregoing, engineers may advertise for recruitment of personnel.

3) Consistent with the foregoing, engineers may prepare articles for the lay or technical press, but such articles shall not imply credit to the author for work performed by others.

4. Engineers shall not disclose, without consent, confidential information concerning the business affairs or technical processes of any present or former client or employer, or public body on which they serve.

1) Engineers shall not, without the consent of all interested parties, promote or arrange for new employment or practice in connection with a specific project for which the engineer has gained particular and specialized knowledge.

2) Engineers shall not, without the consent of all interested parties, participate in or represent an adversary interest in connection with a specific project or proceeding in which the engineer has gained particular specialized knowledge on behalf of a former client or employer.

5. Engineers shall not be influenced in their professional duties by conflicting interests.

1) Engineers shall not accept financial or other considerations, including free engineering designs, from material or equipment suppliers for specifying their product.

2) Engineers shall not accept commissions or allowances, directly or indirectly, from contractors or other parties dealing with clients or employers of the engineer in connection with work for which the engineer is responsible.

6. Engineers shall not attempt to obtain employment or advancement or professional engagements by untruthfully criticizing other engineers, or by other improper or questionable methods.

1) Engineers shall not request, propose, or accept a commission on a contingent basis under circumstances in which their judgment may be compromised.

2) Engineers in salaried positions shall accept part-time engineering work only to the extent consistent with policies of the employer and in accordance with ethical considerations.

3) Engineers shall not, without consent, use equipment, supplies, laboratory, or office facilities of an employer to carry on outside private practice.

7. Engineers shall not attempt to injure, maliciously or falsely, directly or indirectly, the professional reputation, prospects, practice, or employment of other engineers. Engineers who believe others are guilty of unethical or illegal practice shall present such information to the proper authority for action.

1) 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.

2) Engineers in governmental, industrial, or educational employ are entitled to review and evaluate the work of other engineers when so required by their employment duties.

3) Engineers in sales or industrial employ are entitled to make engineering comparisons of represented products with products of other suppliers.

8. Engineers shall accept personal responsibility for their professional activities, provided, however, that engineers may seek indemnification for services arising out of their practice for other than gross negligence, where the engineer's interests cannot otherwise be protected.

1) Engineers shall conform with state registration laws in the practice of engineering.

2) Engineers shall not use association with a nonengineer, a corporation, or partnership as a "cloak" for unethical acts.

9. Engineers shall give credit for engineering work to those to whom credit is due and will recognize the proprietary interests of others.

1) Engineers shall, whenever possible, name the person or persons who may be individually responsible for designs, inventions, writings, or other accomplishments.

2) Engineers using designs supplied by a client recognize that the designs remain the property of the client and may not be duplicated by the engineer for others without express permission.

3) Engineers, before undertaking work for others in connection with which the engineer may make improvements, plans, designs, inventions, or other records that may justify copyrights or patents, should enter into a positive agreement regarding ownership.

4) Engineers' designs, data, records, and notes referring exclusively to an employer's work are the employer's property. The employer should indemnify the engineer for use of the information for any purpose other than the original purpose.

5) Engineers shall continue their professional development throughout their careers and should keep current in their specialty fields by engaging in professional practice, participating in continuing education courses, reading in the technical literature, and attending professional meetings and seminars.

ETHICS CASE REVIEWS

CASE 1: Incomplete Plans and Specifications

Engineer, Government, and Contractor Responsibilities

Facts:

Engineer A responds to an RFP from a small local public agency to build a new dam to be financed in part by a federal grant. Engineer A's firm's impressive brochure and personal interview results in the award of a contract for the design, drawings, and specifications.

The signed and sealed drawings and specifications are ultimately approved by Engineer B of the engineering staff of the federal agency funding the project, and the project is thereafter duly advertised for bids and a contract is awarded to the low bidder, Hi-Lo Construction. The local public agency does not have the in-house technical resources to review the drawings and specifications.

At the pre-construction conference, it is pointed out by Engineer C, owner of Hi-Lo Construction, that much of the design detail is lacking in the drawings and specifications and that Hi-Lo Construction declares that certain parts of the project are "unbuildable" without major changes. Engineer A generally agrees with Hi-Lo's characterization, but in his defense responds that he felt pressured to deliver the drawings and specifications on a specified date but did not inform anyone as to their incompleteness. While much of the information was missing from the drawings and specifications, Engineer A was confident that sufficient federal funds (and not local funding) would cover any potential increased costs.

References:

Section I.1. - Code of Ethics: Engineers, in the fulfillment of their professional duties, shall hold paramount the safety, health and welfare of the public.

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.5. - Code of Ethics: Engineers shall avoid deceptive acts.

Section III.1.b. - Code of Ethics: Engineers shall advise their clients or employers when they believe a project will not be successful.

Section III.2.b. - Code of Ethics: Engineers shall not complete, sign or seal plans and/or specifications that are not in conformity with applicable engineering standards. If the client or employer insists on such unprofessional conduct, they shall notify the proper authorities and withdraw from further service on the project.

Discussion:

The NSPE Board of Ethical Review (BER) has considered cases involving similar situations in the past. In BER Case No. 82-5, where an engineer employed by a large defense industry firm documented and reported to his employer excessive costs and time delays by sub-contractors, the Board ruled that the engineer did not have an ethical obligation to continue his efforts to secure a change in the policy after his employer rejected his reports or to report his concerns to proper authority, but has an ethical right to do so as a matter of personal conscience. The Board noted that the case did not involve a danger to the public health or safety but related to a claim of unsatisfactory plans and the unjustified expenditure of public funds. The Board indicated that it could dismiss the case on the narrow ground that the NSPE Code does not apply to a claim not involving public health and safety, but that was too narrow a reading of the ethical duties of engineers engaged in such activities. The Board also stated that if an engineer feels strongly that an employer's course of conduct is improper when related to public concerns, and if the engineer feels compelled to blow the whistle to expose facts as he sees them, he may well have to pay the price of loss of employment. In this type of situation, the Board felt that the ethical duty or right of the engineer becomes a matter of personal conscience, but the Board was unwilling to make a blanket statement that there is an ethical duty in these kinds of situations for the engineer to continue the campaign within the company and make the issue one for public discussion.

As in Case No. 82-5, the issue does not allege a danger to public health or safety but is premised upon a claim of unsatisfactory plans and the unjustified expenditure of public funds. In Case No. 82-5, the Board found that, while the Code did not require disclosure, the engineer did have an ethical right to pursue the matter further, even to the point of public disclosure. Unlike Case No. 82-5, this case does not involve a conflict with the ethical requirement of confidentiality but concerns the affirmative responsibility of engineers to complete plans in conformity with applicable engineering standards and avoid deceptive acts.

While the Board certainly hopes that the facts involved in this case are very unique and do not represent more than a small fraction of public design and construction projects in the United States, it appears that the facts as presented in this case are, unfortunately, not as unique as one might hope.

It is clear that Engineer A had an obligation to provide a complete set of design drawings and specifications on the project in which Engineer A was engaged. Unlike what is required on some projects (e.g., design/build or construction contracts with specific design delegation clauses or provisions) where the engineer is expected to only design a certain percentage of the project prior to the selection of the contractor, here, Engineer A was fully required to provide the complete design on the project. Engineer A's bold assertion that the work was incomplete, but that this was due to time pressures and his expectation that Federal funds would be awarded to complete the work is wholly unconvincing. Engineer A was selected for his expertise, which presumably included Engineer A's ability to fully perform the work based on project time parameters.

Engineer A's comment about Federal funds borders on fraud and misrepresentation and is a clear violation of the NSPE Code.

Engineer B's approval of Engineer A's incomplete plans is troubling, although we do not know all of the facts and circumstances relating to the decision to approve. Engineers have an obligation to perform services within their area of competence. If Engineer B was not able to perform the necessary reviews of Engineer A's work, Engineer B should have provided this information to a supervisor who would have assigned an appropriate engineer to perform the review. Not possessing adequate competency to perform a task is not in and of itself a violation of the NSPE Code, but the failure to recognize the lack of competency and take appropriate action to address the situation is a violation of the NSPE Code.

Finally, the Board believes that Engineer C's actions in bidding on an "unbuildable" contract is also very troubling. Presumably, Engineer C had an opportunity to review the bidding documents which included appropriate engineering drawings, plans, and specifications. From such a review, Engineer C should have had a sense of what would be necessary to complete the project. If the engineering documents were incomplete or inadequate, then Engineer C's bid should have reflected that fact and contained appropriate bid items for additional services required to complete the work for the benefit of the owner. In addition, Engineer C could have requested further clarification from the owner or Engineer A in order to better understand the engineering drawings.

As an engineer and a contractor presumably, Engineer C had the necessary background and experience to carefully evaluate the engineering drawings as well as other aspects of the work in order to make an informed decision as to whether to bid on the project. Engineer C had no one to fault but himself for the problems Engineer C encountered in attempting to build the project. Engineer C submitted the low bid on the

project, presumably knowing inadequacies of the documents as well as the obvious risks involved.

CASE 2: Incomplete Plans and Specifications

Use of P.E. Designation Not Licensed in State in Which Complaint is Filed

Facts:

Engineer A is a safety engineer for a federal agency. He is responsible for independently overseeing the proper implementation of worker and nuclear safety programs in the agency's facilities, which are located in many different states, including the state in which Engineer A is licensed, State Y. Engineer A is not required to be licensed by the federal agency, but has become licensed because of his personal commitment to the engineering profession.

Engineer A has never used his seal in the course of his employment. When Engineer A moves to State Z, he does not obtain an engineering license in State Z. Engineer A reads a newspaper account about LMN Engineering, a subcontractor to the federal agency in which he works, having a conflict of interest with the agency. Engineer A, acting on his ethical obligation to report violations of the NSPE Code of Ethics to a public authority, files a complaint against LMN Engineering. In the text of the complaint, Engineer A indicates that he is licensed in State Y but not licensed in State Z and signs the letter "Engineer A, P.E."

Engineer A is thereafter notified by the State Z engineering licensure board that his use of the title "P.E." in the letter is inappropriate because he is not licensed in State Z.

References:

Section II.1. - Code of Ethics: Engineers shall hold paramount the safety, health, and welfare of the public.

Section II.1.e. - Code of Ethics: Engineers having knowledge of any alleged violation of this Code shall report thereon to appropriate professional bodies and, when relevant, also to public authorities, and cooperate with the proper authorities in furnishing such information or assistance as may be required.

Section II.3. - Code of Ethics: Engineers shall issue public statements only in an objective and truthful manner.

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 III.3.a. - Code of Ethics: Engineers shall avoid the use of statements containing a material mis-representation of fact or omitting a material fact.

Discussion:

The use of appropriate engineering titles has long been an important issue within the engineering profession. Misuse of engineering titles has the effect of misleading and deceiving the general public, as well as diminishing the image and stature of qualified engineering professionals. In recent years, efforts have been undertaken to educate individuals and companies about the inappropriate use of engineering titles or references by many engineering organizations and state engineering licensure boards. State engineering licensure boards have also increasingly taken a stricter position on the use of the reference, "P.E.," by licensed engineers not licensed in the state in which the reference is being used. In fact, some states have developed guidelines on appropriate use of the "P.E." reference.

The NSPE Board of Ethical Review has had recent occasion to consider the use of appropriate engineering titles. For example, the Board has had three occasions to consider cases involving alleged misrepresentation of credentials or status. BER Case No. 90-4 involved the question of whether it was ethical for Engineer Z, a principal in an engineering firm, to continue to represent Engineer X as an employee of his Firm. Engineer X had been employed by Firm Y, a medium-sized engineering consulting 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 its work. Engineer X, an associate with the firm, gave two week's notice of her intent to move to another firm. Thereafter, Engineer Z continued to distribute a brochure identifying Engineer X as an employee of Firm Y and list Engineer X on the firm's resume.

In concluding that Engineer Z's actions were not unethical, the Board noted that under the facts of the case, there was no suggestion that any of the brochures or other promotional material describe Engineer X as a "key employee" in the firm. Nor was there any effort or attempt on the part of Firm Y to highlight the activities or achievements of Engineer X in the field of hydrology. While the facts reveal that Engineer X was one of the few engineers in the firm with expertise in the field of hydrology, Engineer X was not the only engineer in the firm who possessed such expertise. In addition, it appeared that this area of practice did not constitute a significant portion of the services provided by Firm Y. Therefore, the Board concluded that the inclusion of Engineer X's name in the firm's brochure and resume did not constitute a misrepresentation of "pertinent facts."

Importantly, however, in BER Case No. 90-4, the Board went on to note that "We must make clear that we are not condoning the failure of an engineering firm to correct material (brochures, resumes, etc.) which might have the unintentional effect of misleading clients, potential clients, and others. While we recognize the realities of firm practice and the logistical problems involved in marketing and promotion, we do believe it is important for firms to take actions to expeditiously correct any false impressions which might exist." The Board continued by noting that "we believe engineering firms that use printed material as part of their marketing efforts should take reasonable steps to assure that such written matter is as accurate and up-to-date as possible. In the case of marketing brochures and other similar materials, errata sheets, cover letters, strike-outs and, if necessary, reprints should be employed within a reasonable period of time to correct inaccuracies, particularly where a firm has reason to believe that a misunderstanding might occur. Firms that fail to take such measures run the risk of breaching ethical behavior."

Later, in BER Case No. 91-9, the Board considered a case involving Engineer A, who misrepresented his educational credentials. In carefully considering earlier BER opinions, the Board again noted that the issue of falsification or misrepresentation of academic or professional qualifications is a core ethical issue because it goes to the heart of engineering ethics—the protection of the public health and safety through the establishment of rules of conduct that help to assure that the public receives the highest quality engineering services possible.

The Board has noted its deep concern over situations and circumstances in which an individual expressly or implicitly falsifies or misrepresents academic or professional qualifications to employers, clients, or members of the public.

More recently, in BER Case No. 97-8, Engineer A was licensed as a professional engineer in State B, the state in which Engineer A resided. Engineer A was about to retire from his full-time employment with ENG Co. As part of this transition and because Engineer A would no longer be engaged in the practice of engineering under his state's law, Engineer A planned to discontinue his professional engineering license, which was paid for by his former employer. Engineer A planned to continue serving on several local governmental boards. Because of his association with and the pride he had for engineering, Engineer A wanted to continue to use the P.E. designation after his name on his board business card and on the board's letterhead. Engineer A took pride in his longstanding status as a professional engineer and believed he would be giving professional engineering added recognition by including the reference on the letterhead, which included other individuals such as attorneys and architects. State B did not have a provision in its law addressing the issue of "inactive status." In reviewing

this issue, the Board noted that at first blush, the facts appeared to present a set of circumstances that would dictate an obvious result. It would appear on its face that an individual who has a close affinity with the engineering profession during his or her lifetime should be permitted to continue to use the P.E. designation after retirement. Once earned, it would seem unjust to deny one the right to call oneself a professional engineer (P.E.), particularly where the individual is seeking to enhance the recognition of professional engineers and professional engineering.

However, upon further examination, the Board deemed the issue to be more complex than first thought and raised the question of misrepresentation of credentials or status. The facts in BER Case No. 97-8 were quite different in degree than those involved in the earlier cases reviewed, and the Board noted that the facts did involve a degree, albeit slight, of misrepresentation. While it was true that Engineer A had demonstrated the necessary qualifications to be licensed as a professional engineer, Engineer A made a conscious and intentional decision to cease maintaining his status as a professional engineer in his state. While the Board recognized and appreciated Engineer A's desire to enhance the status and image of all professional engineers by indicating his professional status, they believed it was important that this status be represented in a manner that is above reproach, particularly because of the very public nature of Engineer A's position on several local governmental boards. The Board concluded that at a minimum, Engineer A should have indicated his inactive or retired status next to the P.E. designation. To do otherwise would create a misleading impression that Engineer A was currently licensed under state law in the jurisdiction in which he resided, and this could potentially cause embarrassment to all professional engineers. There was nothing demeaning or derogatory for an engineer to provide this straightforward and simple clarification in his status. To do so would clearly be consistent with the letter and the spirit of the law and avoid any possible questions or doubts about any actions, however unintentional, to mislead or deceive anyone concerning Engineer A's current status as an engineer. The Board concluded that it would be ethical for Engineer A to continue to use the P.E. designation after his name, as long as Engineer A indicated his inactive or retired status next to the P.E. designation, and as long as this was done in compliance with the state engineering licensing laws and regulations.

Turning to the facts in the instant case, the Board believes that the conclusion reached in BER Case No. 97-8 is partly applicable to the discussion in the present case. As noted earlier, the Board recognizes that state engineering licensure boards are becoming increasingly strict on the use of engineering titles and references. However, in view of Engineer A's clarification in the body of his letter to the engineering licensure board concerning his licensure status in states Y and Z, and the fact that the complaint

letter was sent to a limited group of individuals, the Board believes that Engineer A was not attempting to mislead or deceive the board or any other group or individual concerning his licensure status. Instead, the Board believes Engineer A's actions were probably an oversight, or at worst, a misunderstanding of the law or requirements of State Z.

Therefore, the Board cannot conclude that Engineer A's actions, although criticized by a state engineering licensure board, amount to a violation of the NSPE Code. At the same time, the Board must caution all engineering licensees on the need to be familiar with the technical requirements contained in applicable state engineering licensure statutes and regulations to avoid unintended violations of the law.

The NSPE Code of Ethics is a national code of ethics and this Board believes the NSPE Code obligates NSPE members to report ethical violations to the appropriate authorities in whatever jurisdiction the NSPE member observes the violation. This obligation is separate and apart from the obligation a professional engineer may have under state law.

As to the second question, Engineer A's actions are fully consistent with the professional and ethical obligation to hold paramount the health, safety and welfare of the public. While this obligation is codified in state laws, its application cannot be restricted within state boundaries. The NSPE Code of Ethics is a national code of ethics and this Board believes the NSPE Code obligates NSPE members to report ethical violations to the appropriate authorities in whatever jurisdiction the NSPE member observes the violation. This obligation is separate and apart from the obligation a Professional Engineer may have under state law.

CASE 3: Responsible Charge

Working Part-Time for a Firm

Facts:

Engineer A is a licensed professional engineer and land surveyor in state A. Engineer A is associated with a firm, XYZ Engineering and Surveying (which offers professional engineering and surveying), as the licensed professional engineer in charge under the state's certificate of authorization requirement. The firm has not performed any work outside of state A. Engineer A's understanding of the law of state A is that a licensed professional engineer is to be in "responsible charge" of engineering and a person licensed as a professional land surveyor is to be in "responsible charge" of land surveying. These persons in responsible charge can be a principal of the firm or an employee of the firm under the state's laws.

The agreement Engineer A has with XYZ Engineering and Surveying is that XYZ grants Engineer A 10% share of the stock in the firm and as compensation for his engineering services, Engineer A will receive 5% of the gross billings for engineering work for which the seal of a licensed engineer in responsible charge of engineering is required. This agreement is contingent on the understanding that if any one of the three principals of XYZ Engineering and Surveying becomes licensed as a professional engineer in state A, the agreement will become void and the 10% stock will be returned to XYZ Engineering and Surveying.

In addition to working with XYZ Engineering and Surveying, Engineer A has a full-time engineering position for a state governmental agency. This work requires no engineering license. Engineer A works thirty-five hours per week on a flex-time basis and provides about twenty hours per week supervising engineering services at the firm, plus an additional twelve hours of work on the weekends. Engineer A does not normally go into the field for XYZ Engineering and Surveying but is available for consultation, twenty-four hours a day.

Both the state governmental agency and the engineering firm are aware of Engineer A's activities as a dual employee and do not object to these activities.

References:

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.2.c. -Code of Ethics: Engineers may accept assignments and assume responsibility for coordination of an entire project and sign and seal the engineering documents for the entire project, provided that each technical segment is signed and sealed only by the qualified engineers who prepared the segment.

Section II.4.d. -Code of Ethics: Engineers in public service as members, advisors or employees of a governmental or quasi-governmental body or department shall not participate in decisions with respect to services solicited or provided by them or their organizations in private or public engineering practice.

Section II.4.e. -Code of Ethics: Engineers shall not solicit or accept a contract from a governmental body on which a principal or officer of their organization serves as a member.

Section II.5.a. -Code of Ethics: Engineers shall not falsify their qualifications or permit misrepresentation of their, or their associates' qualifications. They shall not misrepresent or exaggerate their responsibility in or for the subject matter of prior assignments. Brochures or other presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, joint-venturers or past accomplishments.

Section III.1.c. -Code of Ethics: Engineers shall not accept outside employment to the detriment of their regular work or interest. Before accepting any outside engineering employment, they will notify their employers.

Section III.6.a. -Code of Ethics: Engineers shall not request, propose, or accept a commission on a contingent basis under circumstances in which their judgment may be compromised.

Section III.6.b. -Code of Ethics: Engineers in salaried positions shall accept part-time engineering work only to the extent consistent with policies of the employer and in accordance with ethical considerations.

Discussion:

The circumstances faced by Engineer A in this case are not unlike circumstances occasionally faced by other engineers who seek to explore career opportunities beyond a full-time position. A key question involved in such activities is whether the engineer can devote sufficient attention to the responsibilities involved in an ethical manner.

Engineers are frequently required to provide oversight and review of the work of others under their supervision and sign and seal the drawings. As noted in NSPE Code Section II.2.b. it states that engineers are not permitted to affix their signatures to any plans and documents dealing with subject matter in which they lack competence, nor to

any plan or document not prepared under their direction and control. This principle is one of the most basic and fundamental ethical principles to which professional engineers are required to adhere because it goes to the heart of the public trust upon which their professional status is based.

The BER has in the past had occasion to consider cases similar to this case. In BER Case No. 91-8, an Engineer's firm was retained by a major fuel company to perform site investigations in connection with certain requirements under state and federal environmental regulations. Under the procedures established by the Engineer's firm, the site visits would be conducted by engineering technicians under direct supervision of Engineer A who would perform all observations, sampling, and preliminary report preparation. Engineering technicians would also take photographs of the sites. No professional engineers were present during the site visits. Following site visits, all pertinent information and material was presented to Engineer A who was competent in this field. Following a careful review, Engineer A would certify that the evaluations were conducted in accordance with engineering principles.

In considering whether it was ethical for Engineer A to certify that the evaluations were conducted in accordance with engineering principles, the Board noted that the NSPE Code of Ethics is very clear concerning the requirements of engineers not to affix their signatures to any plans or documents dealing with subject matter in which the engineers lack competence, nor to any plan or document not prepared under their direction and control (See NSPE Code Section II.2.b.). The BER concluded that it was ethical for the engineer to certify that the evaluations were conducted in accordance with engineering principles so long as the engineer exercising direction and control performs a careful and detailed review of the material submitted by the engineer's staff and there has been full compliance with NSPE Code Section II.2.c.

Also, in BER Case No. 86-2, an engineer was the chief engineer within a large engineering firm and affixed his seal to some of the plans prepared by licensed engineers working under his general direction who did not affix their seals to the plans. At times, the engineer also sealed plans prepared by unlicensed graduate engineers working under his general supervision. Because of the size of the organization and the large number of projects being designed at any one time, the engineer found it impossible to give a detailed review or check of the design. He believed he was ethically and legally correct in not doing so because of his confidence in the ability of those he had hired and who were working under his general direction and supervision. By general direction and supervision, the engineer meant that he was involved in helping to establish the concept, the design requirements, and review elements of the design or project status as the design progressed. The engineer was consulted about technical

questions and he provided answers and direction in these matters. In evaluation of the facts and circumstances in this case, the Board focused on the language in the NSPE Code Section II.2.b. relating to the obligation of engineers not to affix their signature to documents or plans ... not prepared under their "direction and control." Following a careful review of the plain meaning of the terms "direction" and "control," the Board concluded that the terms have meaning which, when combined, would suggest that an engineer would be required to perform all tasks related to the preparation of the drawings, plans, and specifications in order for the engineer ethically to affix his seal. The Board also noted at the time that the NCEES Model Law would require that an engineer must be in "responsible charge" -- meaning "direct control and personal supervision of engineering work" -- in order to affix his seal. After careful evaluation, the Board concluded that it would not be ethical for the engineer to seal plans that have not been prepared by him or which he has not checked and reviewed in detail.

In BER Case No. 90-6, the Board considered two separate fact situations involving the signing and sealing by an engineer of documents prepared using a CADD system. In considering the facts, the Board noted that the rendering of the Board's decision in BER Case No. 86-2 raised a considerable degree of discussion within the engineering community because to many it appeared to be inconsistent with customary and general prevailing practices within the engineering profession and would therefore place a significant number of practitioners in conflict with the provisions of the Code. The Board noted at the time that the Code of Ethics is not a static document and must reflect and be in consonance with general prevailing practices within the engineering profession. Said the Board, "the Code must not impose an impossible or idealistic standard upon engineers, but rather must establish a benchmark of reasonable and rational methods of practice for it to maintain its credibility and adherence." The Board determined that the conclusion in BER Case No. 86-2 should be modified to reflect actual practices which exist within engineering and not impose an impossible standard upon practice. Said the Board, "Were the Board to decide BER Case No. 86-2 today, the Board would conclude that it was not unethical for the engineer in that instance to seal plans that were not personally prepared by him as long as those plans were checked and reviewed by the engineer in some detail. The Board does not believe this represents a reversal of the Board's decision in BER Case No. 86-2, but rather a clarification, particularly for those who were troubled by the Board's discussion and conclusion in that case."

Once again, we follow the reasoning in BER Case No. 90-6 and its clarification of BER Case No. 86-2. Under the facts in the instant case, we believe it was appropriate for Engineer A to sign and seal the drawings under the facts and circumstance involved in this case. Engineer A is providing approximately thirty-two hours each week of

engineering services to the firm and is on call twenty-four hours a day to provide engineering field services for the benefit of the firm and its clients. His responsibilities appear to be consistent with the state's certificate of authorization requirements, are limited to professional engineering services and do not involve land surveying services. As noted under the facts, Engineer A has a flexible schedule with his other employer and presumably is able to adjust his schedule to meet the needs of his employers. While it appears that Engineer A may be stretching his role as an engineer in responsible charge for the firm, without more evidence to suggest improper activity, we are hesitant to conclude that Engineer A was violating the NSPE Code of Ethics.

The manner in which Engineer A is compensated does not appear to contain any specific provision which would necessarily run afoul of the NSPE Code of Ethics. Under NSPE Code Section III.6.a., engineers are not permitted to request, propose or accept a commission on a contingency basis under circumstances in which their judgment may be compromised. Although it could be argued that Engineer A's receiving 5% of the gross billings for engineering work for which the seal of a licensed engineer is required could potentially compromise Engineer A's judgment, we believe that would stretch this provision of the NSPE Code of Ethics beyond its actual intent. Otherwise, virtually any compensation scheme that was not based upon the number of hours worked could be held to be in violation of the NSPE Code of Ethics and that would be an impractical conclusion.

In addition, the Board views the transfer provision ("The agreement is contingent on the understanding that if any one of the three principals of XYZ Engineering and Surveying becomes licensed as a professional engineer in state A, the agreement will become void and the 10% stock will be returned to XYZ Engineering and Surveying") is not of a nature that would compromise Engineer A's judgment. Instead, the Board views this provision as a means of the firm's principals' maintaining control over the management of the firm.

With regard to Engineer A's dual role as an governmental employee and a private employee, as noted under the facts, both the state governmental agency and the engineering firm are aware of Engineer A's activities as a dual employee and do not object to these activities. However, the Board must note that should a conflict-of-interest arise (e.g., where Engineer A or the firm's activities conflict with the governmental employer's activities or interests) Engineer A will need to carefully address those activities consistent with NSPE Code Sections III.6.b., II.4.d., II.4.e. and other applicable provisions of the NSPE Code.

As has been noted in cases similar to this one, while the actions of Engineer A may be consistent with the NSPE Code of Ethics, it is critical for an engineer under

these circumstances to understand the need to perform a careful review of all pertinent material before signing and sealing appropriate plans and drawings. We are of the view that so long as the professional engineer exercising direction and control performs a careful and detailed review of the material submitted by the engineer's staff, there has been compliance with NSPE Code Section II.2.c. In addition, Engineer A must carefully review and understand all state requirements regarding "responsible charge" activities including possible local office and employment restrictions.

CASE 4: Failure to Report Information

Affecting Public Safety

Facts:

Tenants of an apartment building sue the owner to force him to repair many defects in the building which affect the quality of use. Owner's attorney hires Engineer A to inspect the building and give expert testimony in support of the owner. Engineer A discovers serious structural defects in the building which he believes constitute an immediate threat to the safety of the tenants. The tenants' suit has not mentioned these safety related defects. Upon reporting the findings to the attorney, Engineer A is told he must maintain this information as confidential as it is part of a lawsuit. Engineer A complies with the request of the attorney.

References:

Section II.1.a. - Engineers shall at all times recognize that their primary obligation is to protect the safety, health, property and welfare of the public. If their professional judgment is overruled under circumstances where the safety, health, property or welfare of the public are endangered, they shall notify their employer or client and such other authority as may be appropriate.

Section II.1.c. - Engineers shall not reveal facts, data or information obtained in a professional capacity without the prior consent of the client or employer except as authorized or required by law or this Code.

Discussion:

The obligation of the engineer to protect the public health and safety has long been acknowledged by the Code of Ethics and by the Board of Ethical Review. This responsibility rests with the recognition that engineers with their education, training and experience possess a level of knowledge and understanding concerning technical matters which is superior to that of the lay public. It also is rooted in the implicit fact that as individuals who are granted a license by the state to practice, engineers have a duty to engage in practice which is consistent with the interests of the state and its citizenry.

This obligation has long been recognized by this board. A good example is BER Case 84-5. There, a client planned a project and hired Engineer A to furnish complete engineering services for a project. Because of the potentially dangerous nature of implementing the design during the construction phase, Engineer A recommended to the client that a full-time, on-site project representative should be hired for the project.

After reviewing the completed project plans and costs, the client indicated to Engineer A that the project would be too costly if such a representative were hired.

Engineer A proceeded with the work on the project even though he had recommended that a full-time, on-site project representative should be hired. In discussing the issue of whether it was unethical for Engineer A to proceed with work on the project knowing that the client would not agree to hire a full-time, on-site project representative, the Board noted that Section II.1.a. admonishes engineers to recognize that their primary obligation is to protect the public safety, health, property and welfare. Under the facts, Engineer A did not recognize this primary obligation. Engineer A, using his best professional judgment, made a recommendation consistent with that obligation.

However, when cost concerns were raised by the client, Engineer A abandoned the ethical duty and proceeded with the work on the project. The Board concluded that Engineer A appeared to have acted in a manner that suggests that the primary obligation was not to the public but to the client's economic concerns. For that reason, Engineer A was in violation of Section II.1.a. of the Code.

Although the public health and safety clearly is the most basic and fundamental ethical obligation of engineers, other important ethical obligations exist for which engineers must be ever mindful. One important ethical consideration is the obligation of engineers not to reveal information of the client without the prior consent of the client.

The Board has had reason to consider this ethical issue on occasion. In BER Case 82- 2, Engineer A offered home inspection services, whereby Engineer A undertook to perform an engineering inspection of residences by prospective purchasers. Following an inspection, Engineer A would render a written report to the prospective purchaser. Engineer A performed this service for a client for a fee and prepared a one-page written report, concluding that the residence was in generally good condition requiring no major repairs, but noting several minor items needing attention.

Engineer A submitted his report to the client showing that a carbon copy was sent to the real estate firm handling the sale of the residence. The client objected that such action prejudiced their interests by lessening their bargaining position with the owners of the residence. They also complained that Engineer A acted unethically in submitting a copy of the report to others who had not been a party to the agreement for the inspection services. In concluding that Engineer A acted unethically in submitting a copy of the home inspection to the real estate firm representing the owner, the Board concluded that although it did not appear from the facts that Engineer A had acted with some ulterior motive or intention to cause the client any harm, the principle of the right of confidentiality on behalf of the client predominated.

Given these two cases, it is clear that there may be facts and circumstances in which the ethical obligation of engineers in protecting the public health and safety conflict with the ethical obligation of engineers to maintain the right of confidentiality in data and other information obtained on behalf of a client. While we recognize that this conflict is a natural tension which exists within the Code, we think that under the facts of this case, there were reasonable alternatives available to Engineer A which could assist him in averting an ethical conflict.

It appears that Engineer A, having become aware of the imminent danger to the structure, had an obligation to make absolutely certain that the tenants and public authorities were made immediately aware of the dangers that existed. Engineer A's client was the attorney and technically Engineer A had an obligation not to reveal facts, data or other information in a professional capacity without the prior consent of attorney. However, there were valid reasons why Engineer A should have revealed the information directly to the tenants and public authorities.

Unlike the facts presented in BER Case 82-2, there is not any conflict or potential conflict of interest that exists between owner and attorney with regard to the information. Although Attorney retained Engineer A directly, he did so on behalf and for the benefit of the owner. Therefore, the key issue in BER Case 82-2 upon which an ethical violation was found, is absent in this case.

Section II.1.c. makes a clear exception concerning the obligation of engineers not to reveal facts obtained in a professional capacity without the client's consent. That exception allows the disclosure of such information in cases authorized by the Code or required by law. We believe that in cases where the public health and safety is endangered, engineers not only have the right but also the ethical responsibility to reveal such facts to the proper persons. We also believe that state board rules of professional conduct might require such action by professional engineers.

CASE 5: Conflict-Of-Interest

Third Party Developer

Facts:

A developer, Mall Dev, has approached a town requesting approval to construct a development on a vacant site in Niceville. Based on the size of the development, Niceville is requesting that an environmental impact statement be prepared that will address traffic operations, as well as other issues.

Niceville requests an outside consultant, Engineer A, to assist the town in scoping out the necessary traffic analyses and to review and advise Niceville on possible traffic impacts of the proposed development. The development will be both retail and offices and will contain a supermarket.

The consultant, Engineer A, is also assisting other jurisdictions in review of proposals by Mall Dev. Engineer A has disclosed to the town all relationships, if any, with the proposed developer, Mall Dev with announced tenants, and with other customers that develop sites for retail development. Niceville is satisfied that there is no conflict of interest.

More specifically, Engineer A is not currently representing any other developers in the town, but in the past has prepared traffic impact studies for other developers on projects concerning other developments constructed in Niceville. Engineer A is currently providing traffic impact studies to other developers in other jurisdictions, as well as services to Mall Dev. These have all been disclosed to Niceville.

Mall Dev, however, has informed Niceville that it believes the use of the consultant Engineer A is a conflict of interest and breaches the code of professional ethics. Mall Dev bases its belief on the fact that Engineer A has worked in the past, and is currently working for, other developers who compete for the same tenants Mall Dev tries to attract to its developments.

References:

Section I.4. - Code of Ethics: Act for each employer or client as faithful agents or trustees.

Section II.4.a. - Code of Ethics: Engineers shall disclose all known or potential conflicts of interest which could influence or appear to influence their judgment or the quality of their services.

Section II.4.b. - Code of Ethics: Engineers shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.

Discussion:

Fundamental to the practice of engineering is the duty of loyalty of the engineer to the client. This is an individual and personal obligation that all engineers owe uniquely to their clients. It includes the basic responsibility to perform professional services in a competent manner, considering a client's overall project requirements and needs. In performing their work, all engineers must seek to avoid situations or circumstances that call into question this basic duty. One of the most common examples in which an engineer's duty to the client is called into question is the area of conflict of interests.

A classic illustration of this was BER Case No. 88-1. In that case, Engineer A was retained by the county to perform a feasibility study and make recommendations concerning the location of a new power facility in the county. Two parcels of land located on a river had been identified by the county as the "candidates" for facility sites. The first parcel was undeveloped and owned by an individual who planned to build a recreational home for his family. The second parcel, owned by Engineer A, was a developed parcel of land. Engineer A disclosed that he was the owner of the second parcel of land and recommended that the county build the facility on the undeveloped parcel of land because (1) it was a better location for the power facility from an engineering standpoint, and (2) it would be less costly for the county to acquire. The county did not object to having Engineer A perform the feasibility study.

In determining that it was not ethical for Engineer A to perform a feasibility study and make recommendations concerning the location of a new power facility in the county, the Board noted that although Engineer A's professional opinion was supported by two important public policy considerations (e.g., that the undeveloped parcel was a better location for a power facility and that the county's cost of acquiring the developed property would be higher than the cost of acquiring the undeveloped tract of land), these reasons were not sufficient to justify Engineer A's decision to perform the feasibility study for the county. The Board noted that public perceptions play an important role in engineering ethics. The facts and circumstances of Engineer A's study may have appeared to suggest a benefit to the "common good" if his recommended course of action was followed but these same facts and circumstances allow for the appearance of impropriety, and this can easily damage public confidence in the engineering profession. Clearly there could have been public perception under the facts

that Engineer A did not want to risk personal disruption of his developed property or possibly anticipated future appreciation of the value of the property. Engineer A should have followed the far simpler and more ethical approach recommended in the earlier BER Case No. 69-13 which stated, "(The Engineer) can avoid such a conflict under these facts either by disposing of his land holdings prior to undertaking the commission or by declining to perform the services if it is not feasible or desirable for him to dispose of his land at the particular time."

In the earlier cited BER Case No. 69-13, the Board reviewed a situation in which an engineer was an officer in an incorporated consulting engineering firm that was primarily engaged in civil engineering projects for clients. Early in the engineer's life, he had acquired a tract of land by inheritance, which was in an area being developed for residential and industrial use. The engineer's firm had been retained to study and recommend a water and sewer system in the general area of his land interest. The question faced by the Board under those facts was "May the engineer ethically design a water and sewer system in the general area of his land interest?"

The Board ruled that the engineer could not ethically design the system under those circumstances. The Board recognized that the issue was a difficult one to resolve, pointing to the fact that there was no conflict of interest when the engineer entered his practice. The conflict developed in the normal course of his practice, when it became apparent that his study and recommendation could lead to the location of a water and sewer system near his land. This could bring a considerable appreciation in the value of his land, depending upon the exact location of certain system elements in proximity to his land. The BER stated that while the engineer must make full disclosure of his personal interest to his client before proceeding with the project, such disclosure was not enough under the NSPE Code of Ethics. The Board concluded by saying, "This is a harsh result, but so long as men are in their motivations somewhat 'lower than angels,' it is a necessary conclusion to achieve compliance with both the letter and the spirit of the NSPE Code. The real test of ethical conduct is not when compliance with the NSPE Code comports with the interest of those it is intended to govern, but when compliance is adverse to personal interest."

In the more recent BER Case No. 85-6, the Board reviewed similar facts and circumstances and came to a different result. There, an engineer was retained by the state to perform certain feasibility studies relating to a possible highway spur. The state was considering the possibility of constructing the highway spur through an area adjacent to a residential community in which the engineer's residence was located. After learning of the proposed location of the spur, the engineer disclosed to the state

the fact that his residential property might be affected and fully disclosed the potential conflict with the state. The state did not object to the engineer performing the work.

Engineer A proceeded with his feasibility study and ultimately recommended that the spur be constructed. In ruling that it was not unethical for the engineer to perform the feasibility study, despite the fact that his land might be affected thereby, the Board noted that the ethical obligations contained in NSPE Code Section II.4.a. do not require the engineer to "avoid" any and all situations that may or may not raise the specter of a conflict of interest. Such an interpretation of the NSPE Code, The Board said, would leave engineers without any real understanding of the ethical issues nor any guidance as to how to deal with the problem. The BER noted that the basic purpose of a code of ethics is to provide the engineering profession with a better awareness and understanding of the ethical issues that impact the public. The Board concluded that only through interacting with the public and clients will engineers be able to comprehend the true dimensions of ethical issues.

Turning to the facts in this case, while the circumstances described are somewhat different than the earlier cases considered, the Board believes some of the basic principles and issues considered are useful in understanding the present case. First, it is clear from the language in the NSPE Code and its application in the earlier cases that the obligation concerning conflicts of interest is owed to an "employer" or a "client." Therefore, under the facts presented, it appears that the duty would be owed solely to the "client," (e.g., the town Niceville) and would not extend to any third party (e.g., the developer Mall Dev). In other words, a conflict of interest cannot be asserted as a matter of ethical practice by a third party against an engineer. While Engineer A is performing work for Mall Dev in other jurisdictions and has obligations to Mall Dev, there is no factual assertion of a conflict of interest by Mall Dev other than a general, non- specific assertion of possible prejudice and bias. This, without more, is insufficient to raise a conflict. To conclude otherwise would result in subjecting an engineer's practice activities to a "veto" by any third party that might decide to allege some particular interest on a project.

The Board can easily imagine an endless list of speculative and baseless conflicts of interest alleged by third parties against engineers performing services for public agencies in order to improve the third party's business opportunities. We can also speculate that an ill-motivated client could assert in bad faith a conflict against an engineer for purely self-serving, and even malicious, motives. Under the NSPE Code, a third party, such as a developer, does not have a legitimate basis upon which to complain of an alleged conflict of interest, and once an "employer" or "client" is satisfied that no conflict of interest exists, the question of whether a conflict of interest

exists should be resolved. Under the facts, it is clear that with full disclosure to all parties, Engineer A can pursue work with Niceville. As in all such cases, it is important that such situations be viewed in light of the total situation being contemplated.

Second, the NSPE Code language clearly recognizes that engineers frequently face conflicts of interest in their practice and are obligated to address them by disclosing all known or potential conflicts that could influence or appear to influence their judgment or the quality of their services. By doing so, the engineer fulfills his/her ethical obligation under the NSPE Code. Under the facts, this obligation appears to have been completely fulfilled with by Engineer A.

CASE 6: Providing Design to Client's Competitor

Facts:

Engineer A is hired by Developer X to perform design and construction-phase services for a subdivision for Developer X. Per the agreement with Developer X, Engineer A is paid 30% of his fee by Developer X. Engineer A submits the design drawings and plans to the county authorities and permits are issued for the benefit of Developer X. Developer X cannot get financing for the project, and Developer X tells Engineer A that Engineer A should not disclose the contents of the drawings and plans to any unauthorized third party. Developer Y, a client of Engineer A and also a business competitor of Developer X, is interested in the subdivision project. Developer Y has secured financing for the project and approaches Engineer A, requesting that he perform the design on the project and requests that Engineer A provide the design documents for Developer Y's review. Since Engineer A was not paid his entire fee for his completed project design by Developer X, Engineer A agrees to provide the design drawings and plans to Developer Y and agrees to charge Developer Y only for the changes to the original subdivision design drawings and plans.

References:

Section II.1.c. - Code of Ethics: Engineers shall not reveal facts, data or information without the prior consent of the client or employer except as authorized or required by law or this Code.

Section II.4. - Code of Ethics: Engineers shall act for each employer or client as faithful agents or trustees.

Section II.4.b. - Code of Ethics: Engineers shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.

Section III.4.a. - Code of Ethics: Engineers shall not, without the consent of all interested parties, promote or arrange for new employment or practice in connection with a specific project for which the Engineer has gained particular and specialized knowledge.

Discussion:

The facts in this case raise a conflict between the obligations of an engineer not to disclose information that is considered confidential by the client and the right to be properly compensated for professional services.

Among the issues left unclear under the facts in this case is any indication of whether Engineer A and Developer X ever had a specific agreement that addressed the issue of ownership of the engineering drawings, plans, and specifications, and whether ownership and possession of those documents remains with the engineer, particularly where the owner fails to completely compensate the engineer for those documents.

In Case 67-3, Engineer X was retained by a municipality to prepare plans and specifications for a comprehensive sanitary sewer program. After approximately 80% of the total project was constructed in subsequent years, Engineer X's contract was terminated, and he was paid in full for his services. Ten years later, the municipality retained another engineer to revise and update the plans and specifications prepared by Engineer X. The municipality requested Engineer X to provide it with originals or copies of the plans and specification which Engineer X had in his possession, offering to pay Engineer X the cost of reproduction. Engineer X refused to comply with the request. The original contract was silent as to ownership of the plans and specifications but did contain a clause stating that: "If the City requires more than six complete sets of final plans, specifications and documents, the Engineers agree to provide any number of additional copies for no more that blueprinting, mimeographing and mailing costs." In finding that Engineer X was ethically obligated to provide the originals or copies of the plans to the municipality, the Board noted that as a general rule in the absence of a contract provision on ownership of plans, the plans and contract documents are the property of the client.

The Client’s ownership of plans in the absence of contrary contract provisions was reaffirmed in Case 88-4, where Engineer A was retained by an architect to provide mechanical engineering services in connection with the design of a small office building. Engineer A performed her services, but payment remained in dispute. Subsequently Engineer A refused to provide the owner a record set of plans despite his offer to pay reproduction costs and mediate the dispute. The Board confirmed that the plans were the property of the developer. However, they maintained that the owner had the status of a client and that: "It was unethical for Engineer A to refuse to provide the owner with the drawings and to decline owner's offer to attempt to mediate the dispute between Engineer A and the architect."

The obligation of engineers under II.1.c. to "…not reveal facts, data or information without the prior consent of the client." was the subject of Case 82-2 where "an engineering consultant performed home inspection services for a prospective purchaser of a residence and thereafter disclosed the contents of the report to the real estate firm handling the sale of the residence without the client’s consent. The Board

reaffirmed the principle of the right of confidentiality on behalf of the client in ruling that the engineer acted unethically.

Although Engineer A may have had some basis for thinking that he was not fully obligated to Developer X, since Developer X only compensated Engineer A for 30% of his professional and other services, we believe that Engineer A's consideration of this issue was at least affected by his ongoing client relationship with Developer Y, a party with whom Engineer A may have felt a sense of loyalty. However, in view of the fact that Developer Y was a competitor of Developer X, Developer X would certainly be justified in believing that Engineer A's actions were in conflict with Engineer A's obligations to Developer X.

While it is true that Engineer A was entitled to full compensation for his design services for Developer X, that alone was not justification for Engineer A to provide the reviewed and approved design drawings to Developer Y. Weighing all of the facts, it is clear to the Board that the fee dispute and Engineer A providing the design drawings to Developer Y are separate and distinct issues that should not have been linked in Engineer A's decision to provide the plans to Developer Y.

It is clear from all of the Code references cited that, without Developer X's consent, Engineer A should not share the plans with another client. The Code is silent about failure of clients to provide agreed compensation and how that would affect their status as clients.

It is the Board's view that before providing the plans to a third party, Engineer A should have made every reasonable effort to resolve his situation with Developer X. In those negotiations, Engineer A could link a settlement of the issue of his fee on the project and consent to use the project plans for other clients.

Given the conclusion that Engineer A should not have taken the action of providing the project drawings to Developer Y, the Board concludes that Engineer A should not have charged Developer Y for the changes made to the drawings. At the same time, the Board notes that had Engineer A been able to negotiate an agreement with Developer X under which Engineer A would be able transfer rights of use to Developer Y, the Board would not be troubled by Engineer A charging Developer Y for the changes made to the project drawings. Presumably, those changes would involve time and effort on the part of Engineer A for which he would be entitled to compensation by Developer Y.

REFERENCES

National Society of Professional Engineers, *Code of Ethics*
http://www.nspe.org/resources/ethics/code-ethics

National Society of Professional Engineers, *Board of Ethical Review Cases*
http://www.nspe.org/resources/ethics/ethics-resources/board-of-ethical-review-cases

Note: The following questions must be answered online in our learning system

Click here to Access the Online Quiz

QUIZ QUESTIONS

1. ***True or False. If an engineers´ judgment is overruled under circumstances that endanger life or property, they shall notify their employers or clients and such other authority as may be appropriate.***
2. ***True or False. Engineers, in the fulfillment of their professional duties, must carefully consider the safety, health, and welfare of the public.*** (Take a minute to answer, reference difference between "must" & "shall" in contractual obligations)
3. ***True or False. Engineers shall not solicit or accept financial or other valuable consideration, directly or indirectly, from outside agents in connection with the work for which they are responsible.***
4. ***True or False. Engineers shall not solicit nor accept a contract from a governmental body on which a principal or officer of their organization serves as a member.***
5. ***True or False. Engineers shall not reveal facts, data, or information without the prior consent of the client or employer except as authorized or required by law or this Code.***
6. ***True or False. Engineers shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.***
7. ***True or False. Engineers shall be objective and truthful in professional reports, statements, or testimony.***
8. ***True or False. Engineers shall acknowledge their errors and shall not distort or alter the facts.***
9. ***True or False. Engineers may perform services outside of their areas of competence as long as they inform their employers or clients.***
10. ***True or False. Engineers may accept assignments and assume responsibility for coordination of an entire project and sign and seal the engineering documents for the entire project, provided that each technical segment is signed and sealed only by the qualified engineers who prepared the segment.***

11. *Where do you go to research more professional engineering ethic review cases?*
    a. *Floridabar.org, ethics hotline*
    b. *Farmer's Almanac*
    c. *NSPE.org, click ethics, click board of ethical review Cases*
    d. *Penny Saver Classifieds - Ethics*
12. *In Case 6, True or False (Yes or No)? Was it unethical for Engineer A to provide a copy of the design drawings and plans to Developer?*
13. *In Case 6, True or False (Yes or No)? Was it ethical for Engineer A to charge Developer Y for the changes to the original subdivision design drawings and plans?*
14. *In Case 5, True or False (Yes or No)? Would Engineer A's work for Niceville constitute a conflict of interest?*
15. *In Case 5, True or False (Yes or No)? Was it appropriate for Mall Dev to raise an ethical issue relating to Engineer A's actions?*
16. *In Case 4, True or False (Yes or No)? Was it ethical for Engineer A to conceal his knowledge of the safety-related defects in view of the fact that it was an attorney who told him he was legally bound to maintain confidentiality?*
17. *In Case 3, True or False (Yes or No)? Is it unethical for Engineer A to be associated with XYZ Engineering and Surveying in the manner described?*
18. *In Case 3, in regards to having dual employment at both XYZ Engineering and Surveying as well as a state government agency, Engineer A violated which Code of Ethics?*
    a. *II.4.d*
    b. *II.4.e*
    c. *III.6.b*
    d. *No violation occurred*
19. *In Case 2, True or False (Yes or No)? Did Engineer A have an ethical obligation under the NSPE Code of Ethics to file a complaint in a state in which he was not licensed?*
20. *In Case 2, True or False (Yes or No)? Was it ethical for Engineer A to indicate in a State Z complaint letter, in which he had already indicated that he was not licensed in State Z, that he was a professional engineer?*
21. *I have personally and successfully completed each chapter of instruction.*