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Decision-making and Ethics in Everyday Practice for Land Surveyors

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Patrick C. Garner, P.L.S.

If it is not right, do not do it; if it is not true, do not say it.
Marcus Aurelius

Before examining the seven individual Canons in the “Surveyor's Creed and Canons” promulgated by the NSPS, we need to study the preamble to the code. The preamble sets the tone for the conduct that frames the subsequent seven “Canons.”

Surveyor's Creed and Canons

As a Professional Surveyor, I dedicate my professional knowledge and skills to the advancement and betterment of human welfare.

I pledge:

To give the utmost of performance;

To participate in none but honest enterprise;

To live and work according to the laws of humankind and the highest standards of professional conduct; and

To place service before profit, honor and standing of the profession before personal advantage, and the public welfare above all other considerations.

These basic principles are common to almost all professions. In fact, they also reflect many of the beliefs that drove the Founding Fathers to establish the United States. Above all, the principles are noteworthy in their basic premise: professionals work hard, perform honestly, conduct themselves according to the highest standards and place public welfare above their own.

The NSPS Canons are:

Canon 1.

A Professional Surveyor should refrain from conduct that is detrimental to the public.

Canon 2.

A Professional Surveyor should abide by the rules and regulations pertaining to the practice of surveying within the licensing jurisdiction.

Canon 3.

A Professional Surveyor should accept assignments only in one's area of professional competence and expertise.

Canon 4.

A Professional Surveyor should develop and communicate a professional analysis and opinion without bias or personal interest.

Canon 5.

A Professional Surveyor should maintain the confidential nature of the surveyor-client relationship.

Canon 6.

A Professional Surveyor should use care to avoid advertising or solicitation that is misleading or otherwise contrary to the public interest.

Canon 7.

A Professional Surveyor should maintain professional integrity when dealing with members of other professions.

Following the same sequence, we will now examine seven situations that highlight decision-based errors a surveyor could make. After reviewing each event, we will briefly discuss the situational error the surveyor makes, and then review the correct action that the surveyor should have made. (Note: Details have been changed to keep the emphasis on the situational challenges, and not on the parties involved.)

Situation One.

Underlying Canon

A Professional Surveyor should refrain from conduct that is detrimental to the public.

This Canon is perhaps the most sweeping. Numerous situations could be used to illustrate “conduct that is detrimental to the public.” The Merriam-Webster Dictionary defines “conduct” as,

A mode or standard of personal behavior especially as based on moral principles.

Moral principles are generally considered to be,

The principles of right and wrong that are accepted by a culture or a social group.

This course assumes that land surveyors inherently *understand* and practice the principles of right and wrong. Given that basic assumption, let’s examine one of many possible situations that a surveyor might encounter where a poor decision would be “detrimental to the public”:

Situation

Jones is a practicing land surveyor with a specialty in retracing boundaries. Property-owner Smith, who owns the back 40 acres off South Street, contacts him. Smith notes that he needs his northern line run. Smith is also quick to explain that his other lines are well established; in fact, he offers to show Surveyor Jones the two corners that define the ends of the northern line. He then says, “You can’t see down the line because of all the brush. If you’d just set some stakes about every 50-feet down the line from end to end, I’d write you a check.”

Jones knows that to “run the northern line” he has to survey the entire Smith parcel, and must conduct research on the deeds and corners of abutters to Smith. He calculates costs and then quotes a price of \$2,500 to Smith. Smith shakes his head and says, “Follow me. I’ll have to show you what I mean.” He then walks Jones to the two corners that he says show the northern line. Both corners look old. Smith says, “I like you, but your competitor will do the work for \$1,000. Think about it and give me a call. I can’t wait more than a day.”

Jones is low on work and worried constantly about making payroll. The next morning, against his better instincts, he calls Smith and offers to run the northern line for \$950. Smith agrees. Within a week Jones has set stakes down the northern line after occupying only the two corner monuments Smith had shown him. A week later Smith erects a chain-link fence down the line, then within a month builds a large accessory building exactly 10-feet off the Jones' line. 10-feet is the minimum-zoning setback in town for a building to be set off a property line.

Late that year Surveyor Jones is served by a lawsuit from the northern abutter to Smith. The suit recites facts, which include that: (1) the abutter hired a surveyor; (2) the surveyor found the northern Smith line to be staked 12-feet into the abutter's property; and (3) the abutter had had a long-running feud with Smith, during which Smith shouted, "You'll be sorry you crossed me." The suit asks for \$300,000 in damages.

The next day Surveyor Jones is served by a second suit—this one from his former client, Smith. The Smith suit claims that Smith relied solely on the professional judgment of Surveyor Jones when building his fence and erecting his building. The Smith suit asks for \$775,000 in damages, conceding that the Jones survey is wrong.

Discussion

Surveyor Jones has clearly damaged both Smith and his northerly abutter by his decisions and subsequent conduct. If the so-called Smith corners were correct, Jones might have gotten away with his decision not to check the other corners. But he gambled, although he was experienced and knew better. Whatever his motivations, he cut corners rather than to lose the work. By doing so, his conduct was "detrimental to the public."

What action would have been correct?

After initially meeting Smith, Jones should have called him the next morning and fully explained the intricacies of performing boundary surveys. He could have taken the opportunity to educate Smith, noting that, as a land surveyor, he was required by both ethics and state regulation to verify not only Smith's entire parcel, but also to analyze his abutter's deeds. Jones could have also noted that no competent surveyor would run only one line.

Situation Two.

Underlying Canon.

A Professional Surveyor should abide by the rules and regulations pertaining to the practice of surveying within the licensing jurisdiction.

Situation

Surveyor Jones works in a state that prohibits land surveyors from designing storm water systems, including culverts, manholes and catch basins. The state mandates that only civil engineers can design these structures. Jones, who has been in private practice for a decade, worked for a number of years in a large, multidisciplinary engineering firm. While there, under an engineer's supervision, he sized storm pipes and numerous road culverts for highway projects. Many engineers in the firm knew they could turn to Jones when they needed a pipe sized quickly, or when they needed to determine, for instance, the "Q" for a 25-year storm.

Since becoming registered as a land surveyor, Jones has performed topographic and boundary surveys, as well as provided construction control and staking. Smith, who still owns the back 40 acres off South Street, contacts Jones about designing a 20-lot subdivision. The work will entail lot and road layout, as well as the design of a basic storm water system for street runoff. The local municipality requires hydrologic calculations for storm events up to a 50-year event.

Smith asks Jones if his firm is capable of doing it all, “soup to nuts.” The contract will be the largest Jones has had since he began his business. Certain that he can do as well as any engineer, Surveyor Jones replies, “You bet. We’re your one-stop shop here.”

Discussion

Though competent in his own mind, Surveyor Jones is not licensed to design storm water structures. By doing so, he is clearly not abiding “by the rules and regulations pertaining to the practice of surveying within the licensing jurisdiction.” Jones may rationalize to himself, “No one will be harmed,” or, “I can calculate storm water structures as well as any engineer,” but in fact, by designing the drainage he will potentially harm Smith and risk losing his own professional license.

What action would have been correct?

Surveyor Jones should have subcontracted with a registered civil engineer before agreeing to design the subdivision storm water infrastructure. His alternative would have been to tell Smith that he was not licensed to design storm water systems, and that he could recommend an engineer or cooperate with an engineer of Smith’s choosing.

Situation Three.

Underlying Canon

A Professional Surveyor should accept assignments only in one's area of professional competence and expertise.

Although similar to Situation Two, Situation Three is not the same, and is often not as obvious. Accepting “assignments only in one's area of professional competence and expertise” means that a surveyor—although ostensibly licensed to perform any and all surveys—should not accept certain types of survey work unless fully experienced and competent. An example would be a registered surveyor who, throughout his career, has only conducted construction control for large-scale highway projects and is approached to mediate a controversial boundary dispute. Although there are numerous examples, let’s examine the construction specialist and the ethical quandary he faces.

Situation

Jones, a registered surveyor, has spent 20-years providing precise horizontal and vertical control for major interstate roadways. Although qualified by registration to provide boundary surveys, he has not conducted a boundary survey since he was a Party Chief working his way through school.

One weekend Jones is approached at home by a neighbor who describes a running dispute she has had with her next-door neighbor. The dispute had become ugly six months before when the neighbor tore down her new fence with a rented backhoe. The police had been called to break up the ensuing argument. After extensive and expensive

legal maneuvering, the opposing attorneys finally recommend that the abutters find an “expert” to mediate the dispute. The attorneys suggest that the expert do a “first order survey of both properties.” Another neighbor recommends Surveyor Jones, noting, “There’s a good man down the street who’s been doing surveys all his life.”

Without hesitation, Jones agrees to perform the work, anticipating the challenge and looking forward to the chance to become reacquainted with what he remembers as the complex world of boundary surveys. Surveyor Jones can also use the extra income, which he considers an unexpected windfall.

Discussion

Though certainly licensed as a surveyor, Jones has no competence to perform a boundary survey, and consequently misleads all parties. By accepting the work, he is highly likely to make matters worse.

Remember that the preamble to the NSPS Code includes the pledge that a surveyor will put “the public welfare above all other considerations.” This admonition would apply to a topographical specialist who is asked to perform an ALTA survey, or a photogrammetrist who is approached about conducting a five-mile, first order level run for critical vertical control. Ethically, a surveyor performs surveys within his area of competence, however narrow or broad.

What action would have been correct?

Jones should have simply stated that boundaries were not his area of expertise. As a courtesy he might have offered to find a competent surveyor, or even to work with a qualified surveyor to solve the dispute. The latter solution *could* help him begin to qualify to do boundary work on his own in the future.

Situation Four.

Underlying Canon

A Professional Surveyor should develop and communicate a professional analysis and opinion without bias or personal interest.

This canon is most commonly violated when a professional does work for close friends or family. A number of states have issued detailed ethical prohibitions against representing a relative such as a husband, wife, parent, brother or sister, particularly in public forums. Others prohibit such work unless the professional has fully disclosed the familial relationship. A common public perception is that a professional cannot be neutral or unbiased when working for a close relative.

This adage applies through all professions. Doctors will rarely perform surgery on a close relative. Attorneys think twice about representing a parent, spouse, or brother, particularly in a courtroom setting. These conventions exist because, when we work for those we care about, logic is often clouded by emotion. We are tempted to stretch results to achieve positive results—and the end result is rarely one “without bias or personal interest.”

Situation

White, a registered surveyor, works for a large urban surveying and planning firm. To her delight, she is assigned to manage the approval of a new subdivision in her childhood town. The project allows her to visit with her parents and older brother. Her brother sits as the Chairman of the local planning agency, and offers her help (and hints) to speed up

her project's approval. Making her work even easier, her brother owns a silent share in the project and offers to act as the go-between for his partners.

Yet to her dismay, the project becomes controversial. A neighborhood group forms and dozens of angry abutters come to every hearing. She represents her firm, making all the presentations and discussing on-going revisions. Because she is married and has changed her maiden name, no one is aware of her relationship to the board Chairman. Neither she nor her brother announces their relationship. Nor does her brother disclose his interest in the project.

On the night of the final vote, the board splits 3 to 3. The Chairman casts the deciding vote in favor of the project. Afterward, Surveyor White goes from board member to member, thanking them and shaking their hand. As she shakes her brother's hand, the Vice Chairman says with humor, "My, you two look alike! You're not related, are you?" Surveyor White smiles and says nothing. Her brother shuffles papers and announces loudly, "Next hearing!"

Discussion

Although her brother is equally at fault, White cannot represent her project objectively. Not only is her brother the chairman of the approving board, she is aware that he is a part owner in the project. Yet she accepts inside information from him and fails to publicly disclose their relationship. She is deeply biased and he is duplicitous.

What action would have been correct?

White should have disclosed her relationship to both her firm and to the approving board. She is guilty of having both "bias and personal interest."

These situations are such common ethical dilemmas that another example is warranted:

Situation

Jones, a surveyor we have met before, is asked by his sister to survey her lot. She wants to put a fence down her side and rear property lines. She figures Jones will do the work for free, and she and her husband even offer to "hold the rod." Jones agrees and comes out to do the work on a weekend.

As with so many surveys, this one becomes unexpectedly complicated. First, a neighbor tells him to quit "trespassing" on her land. She backs off when Jones' sister introduces him as her "big brother." Then Jones finds his relatives' two rear property corners, but they are short by exactly 10-feet from the platted distances. When his brother-in-law catches on to the problem, he demands that Jones set new corners at the "correct" distance. Jones' sister rushes out, and on hearing from her husband that they have "lost" 10-feet, breaks into tears.

In the ensuing bedlam, Jones decides to push the line back 10-feet. No one will ever know, and besides, how can he go wrong by setting corners at the deed distance? In short order, he sets two new iron pipes. For good measure he pulls out the original rear corners. The whole survey takes 2 ½ hours. His sister has saved a "fortune," as she calls it. And the family looks at Jones as having done his duty.

Discussion

Surveyor Jones cannot be objective. He has agreed to work for his sister, and in her mind, every foot is critical. Inevitably, Jones wants to please her and the family. Because he is not getting paid, he is also motivated to finish the work as quickly as possible.

Rather than analyze the discrepancy he discovers in the rear distances, his sister's tears sway Jones. He quickly rationalizes a solution, rather than setting "the public welfare above all other considerations."

What action would have been correct?

Jones should have recommended a colleague to do the work or brought in a colleague under whom he could work. He clearly had a "personal interest." due to his familial relationship. If he had persuaded himself that he could be objective—which would have been an ethical error—he should have conducted the work in a correct manner, as he would have any other survey. The 10-foot error should have been properly analyzed. He should not have rushed to a decision. Regardless, his initial error was feeling a greater obligation to his sister than to the public.

Situation Five.

Underlying Canon

A Professional Surveyor should maintain the confidential nature of the surveyor-client relationship.

This canon requires a professional to maintain the confidentiality of privileged information. Privileged information may include details of ownership, financial data, communications and personal information. Further, a surveyor must not use any information about the client or the client's project, without the express permission of the client. As important, a surveyor must not use any information that he gains in the course of the client's project as a means of making personal profit if such action is adverse to the interests of clients, employers or the public.

Situation

Jones, a registered surveyor, is hired by an out-of-state consortium to provide development services for a new mall. The consortium's representative meets with Jones and notes that his group is secretly assembling large tracts of contiguous farmland. He is emphatic that their long-term plan must remain confidential to prevent land prices from soaring.

In the course of explaining the project to Jones, the representative lays out a plan showing properties they have optioned and prices they have paid. He notes that the owner of one critical piece of land has not cooperated, and that he is struggling to persuade the owner to sell. Although Jones does not say so, he immediately recognizes the tract and name as belonging to an old school friend. After a few hours of discussion, the consortium's representative signs a contract with Jones to perform various surveys and leaves him with a sizeable retainer.

That evening Jones drives over to his old friend's home. He says nothing about the property, just that he has regretted not seeing more of him. He invites his friend to join him for dinner the next weekend. There over dinner he learns that his friend has been considering moving to the west coast—and his friend notes quizzically that "out of the blue" he had been contacted by a man who expressed interest in the land.

Jones' friend says, "No way would I sell to someone I don't know. This land has been in my family a long time."

Jones says quietly, "You know, I've always wanted a small farm..."

Over a drink, they strike a deal, and Jones promises to sign an agreement within a week. His friend feels lucky. Jones is already planning his next move.

On Monday Jones has his attorney draw up a trust. The trust is structured so that the owner remains hidden from the public. The trust proceeds to sign an offer to purchase. Jones has effectively tied up the land. Jones then places a call to the consortium's representative, noting that he has inside information about how to purchase the farm. He notes that he understands the owner, now a trust, will sell for a certain amount. He does not reveal that the amount is exactly double what he is paying for the farm. In fact, he says nothing about his involvement with the property. The consortium's representative hesitates, noting that the price is high. But after a moment he acknowledges that the parcel is critical to the project. He asks Jones to put the deal together for him as quickly as possible.

Discussion

Jones enriches himself by his use of inside and confidential information. Worse, he enriches himself at the expense of his client. The confidential nature of their relationship prohibits Jones from making personal profit from his information, particularly if doing so is adverse to the interests of his client.

Jones partially rationalizes his actions on the basis that the consortium's representative had not succeeded in buying the farm, and in fact, might never have persuaded his friend to sell. Yet Jones cannot presuppose that his friend would not have sold without his intervention. In time his client might well have struck a deal—after all, Jones' friend was eager to move—and that deal might have been at a far better price. Ethically, Jones had no choice in this matter: He should never have acquired the property for his own benefit.

What action would have been correct?

Jones should simply have performed the surveying services required by the consortium. He would not have been in error contacting his friend for dinner, but he could not have discussed the proposed project with him.

Situation Six.

Underlying Canon

A Professional Surveyor should use care to avoid advertising or solicitation that is misleading or otherwise contrary to the public interest.

This canon is unambiguous. One does not solicit services without being qualified to perform them. Note that this canon is closely related to Canon Three (*A Professional Surveyor should accept assignments only in one's area of professional competence and expertise.*)

Therefore, a registered surveyor can neither advertise services that he is unqualified to perform, nor can he accept assignments unless he is qualified to perform them.

Situation

White, a registered surveyor who is employed by a large multidisciplinary firm, leaves to form her own firm. Although she is not a registered engineer, most competing firms are partnerships consisting of a registered land surveyor and a registered civil engineer. She believes she will be at a disadvantage without being able to offer similar services. Before incorporating her new firm, she holds discussions with several independent civil engineers, but she is unable to interest them in a partnership.

Feeling pressured to incorporate before she begins any work, she instructs her attorney to create a new firm. She names it, *White Surveying & Engineering, Inc.* Moving rapidly she also has letterhead printed, and has a sign made for the outside of her offices—all of these public displays read in large letters, *White Surveying & Engineering, Inc.*, and in smaller letters below the firm's name, *Planning, Surveying & Engineering Services.*

Within the first week of opening her doors, a client offers her a project that entails a boundary survey, structural design of a high wall and enlargement of several failed drainage structures that have recently washed out under heavy storms. On his inquiry, she assures him that her firm is ready and willing to proceed. When the contract is signed, she immediately places a phone call to a retired civil engineer she knows casually. When he emphasizes he is fully retired and intends to stay that way, she decides she does not need an engineer. She concludes that doubling the size of the failed drainage structures should be sufficient. She also decides to copy a wall detail from some old plans she has.

Discussion

Surveyor White solicits work from the public for which she is not qualified. With the name of her incorporated firm, letterhead and signage, she overtly offers services that she is unable to provide. She assures a potential client that she can provide these services.

What action would have been correct?

Unless she could provide registered engineering services—which she could potentially do by subcontracting with an engineering firm—she should have only offered “*Planning & Surveying Services.*” Note: Many state boards require surveyors who advertise engineering services to employ an engineer for a minimum number of hours a week (usually 20 - 30); some states require full-time employment.

Situation Seven.

Underlying Canon

A Professional Surveyor should maintain professional integrity when dealing with members of other professions.

A surveyor cannot follow someone else's dictates and still maintain professional integrity. (One of the Ethical Principles held by the Federation of International Surveyors (FIG) states that surveyors “acknowledge the need for integrity, independence, care and competence.”) A surveyor makes independent decisions based on his professional expertise. A surveyor's competence and skill must be maintained as inviolate when working with other professionals. Professional relationships must be collegial, not hierarchal.

Situation

White, a registered surveyor who is employed by a large multidisciplinary firm, is supervised by a woman who holds multi-state registrations as a civil engineer but who is not registered as a surveyor. White's supervisor routinely marks up her survey plans, usually adding notes, minor details and maintaining what she calls "consistency between the firm's engineering and surveying plans." At times White has been troubled by her supervisor's decisions, but none of the revisions have changed essential survey data. The supervisor also conducts White's annual job reviews and determines her bonuses. White has always duly made the requested changes.

One day a plan is returned to White's desk. Her supervisor has indicated five concrete bounds at corners that White knows do not exist. White immediately notes to her supervisor that no monuments were found or set in those locations. Her supervisor explains with some irritation that she has just come from a monthly project meeting with the firm's client, and that she assured the owner that all corners were monumented. She notes that she will have White set the corners when they can squeeze in the field time. But she insists that White add notes to the plan confirming the monument's existence—she states that doing so is critical to assure the firm payment on its current project invoice.

Returning to her office, White opens the project mapping in CAD. She quickly adds notes showing concrete bounds at the missing corners. She also makes a note to herself in her calendar to send a field crew out within the month. The plan is plotted and Jennifer stamps and signs it. Within 24 hours the plan is mailed to the client.

Discussion

Surveyor White abandons independence as a registered surveyor, accepting pressure from her supervisor to show survey-related revisions that she knows to be inaccurate. She stamps and certifies to a plan that misrepresents actual conditions. Although she intends to later correct her mistake by setting the missing corners, circumstances may prevent that from occurring.

What action would have been correct?

As a registered surveyor, White should have explained to her supervisor that the firm could not release a plan that misrepresented actual conditions. She could have also suggested that they delay sending the plan for a day, and that a survey crew immediately set the missing five corners. After the monuments are set, the plan showing the corners could have been mailed.

White could have also noted to her supervisor that the firm would have been embarrassed had the client gone out on the site and been unable to find corners shown on a certified map. She could have reminded her supervisor that the firm might have then been exposed to damages, as well as the possibility of losing of a valued client.

Conclusion

Maintaining high ethics is fundamental to any professional practice. Although many surveyors spend the majority of their early careers learning the legal and technical nuances of land surveying, they encounter constant ethical challenges when they begin to actually practice their profession. These dilemmas frequently challenge their perceptions of right and wrong. They also constantly remind a surveyor that their duty is to the public first.

After many decades of debate, professional societies and state boards have largely determined that the following canons are essential to every professional:

A Professional Surveyor should refrain from conduct that is detrimental to the public.

A Professional Surveyor should abide by the rules and regulations pertaining to the practice of surveying within the licensing jurisdiction.

A Professional Surveyor should accept assignments only in one's area of professional competence and expertise.

A Professional Surveyor should develop and communicate a professional analysis and opinion without bias or personal interest.

A Professional Surveyor should maintain the confidential nature of the surveyor-client relationship.

A Professional Surveyor should use care to avoid advertising or solicitation that is misleading or otherwise contrary to the public interest, and

A Professional Surveyor should maintain professional integrity when dealing with members of other professions.

This course has presented a series of typical examples of the ethical challenges many surveyors face. From misrepresenting services to misidentifying personal relationships before an approving authority, the examples highlight the pitfalls of cutting corners, or gambling when personal gain trumps the public good. Failure to follow high ethical standards may lead to having one's license revoked, or being the subject of legal action. When a surveyor accepts professional licensure, he or she accepts the liabilities that follow failure to abide by prescribed ethical standards.

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