

# What's the Angle?

## (Case 1010)

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### The Case:

Julie Adams is the sole proprietor of a small, but successful, structural engineering firm in a large, older city in the Midwest. Her success is the result of a lot of hard work for more than ten years, as well as establishing excellent relations with her clients. One of the specialty areas that has evolved in her practice has been the renovation of major historic commercial buildings, many in the downtown financial district of the city.

Julie has been asked to do a structural survey of the Inverness Block, an old, well-recognized, seven-story granite-faced building in the financial district close to several other buildings which her firm has investigated for renovations in the past. One of her largest clients, Charles A. Smith, is in the final stages of negotiations to sell the Inverness Block to a group of foreign investors represented by Sam Goldworthy, a local attorney. This sale is very important to Smith because it is the last of his properties to be put on the market, and represents the liquid capital he needs to retire to a 30-acre estate he has acquired on Grand Cayman Island, where there is a most advantageous tax structure.

In order to wrap up some of the final details and firm up the purchase price (which at present is quite generous), Sam Goldworthy has requested a structural survey of specific building elements, including the outdated window casements, among others. Mr. Smith agrees to have the survey completed, and negotiates a fair price with Julie Adams to do the work. They sign an agreement which contains Smith's usual clause that "all information discovered by the engineer shall become the property of the client (Smith) and shall not be released to others without the client's express written consent."

Since Julie is personally tied up with overseeing several structural design projects and she understands that the results of the proposed survey are crucial to completing the purchase negotiations for the building before the established deadline, she assigns Brock Williams, one of her most experienced structural engineers, to proceed with the survey of the Inverness Block. Brock proceeds immediately, covers all of the workscope items required, except for inspection of the window casements, which he saves until last.

When he gets to the window casements, they appear to be in excellent shape. However, since there is so much money involved in the purchase negotiations,

he decides to dismantle three units at random for a better determination. With permission from Mr. Smith, Brock carefully dismantles one of the units and uses a flashlight to look into the wall cavity to see how the windows are attached. A steel strap for anchoring the windows is clearly visible in the uncovered space.

As he is about to replace the dismantled window unit, Brock notices that the three-inch exterior granite veneer is attached to the building by clip angles welded to the steel building frame, typical of an early example of stone-cladding on steel-frame construction. In the beam of the flashlight, the clip angle within reach appears to be rusted. Curious as to the extent of this apparent corrosion, Brock reaches into the space, grasps the clip angle and, to his horror, finds that it breaks off in his hand without any significant pressure. Looking closer at the fracture, he determines that the clip is rusted virtually through the entire cross section.

Immediately the implication of his discovery dawns on Brock, since if this condition is typical throughout the building, the cost of repairs could approach the value of the building itself. As he muses about this unwelcome discovery, he glances down to the street level and busy sidewalk below, and involuntarily shudders, imagining the potential damage and injury which could be caused if one or more of the granite veneer blocks were to become dislodged and fall. Realizing that this rusted clip angle may only be an isolated instance, he quickly dismantles the remaining two window units, only to discover the same situation with the clip angles within reach. Based on this evidence, it appears that the exterior granite veneer blocks are merely stacked on one another, with very little attachment to the building frame.

Working late that night, Brock finishes his written report covering only the specific items required in the contract scope of work. The first thing in the morning, he hands the report to Julie Adams, and orally advises her of his findings regarding the rusted clip angles, which were not specifically part of their scope of work. She in turn makes an appointment with Charles Smith and delivers the report to him in person that afternoon. At the same time, she advises Smith of the clip angle situation.

Smith thanks Julie for giving him the information, compliments her on doing a thorough job, as usual, and says that the written report will be passed on to Goldworthy, as requested. He then indicates that he has other important matters to attend to and quickly ends the meeting. On the way back to the office, Julie goes over her conversation with Smith in her mind, and is bothered by the sudden termination of the meeting. As a result, she calls Smith on the telephone as soon as she gets back to her office, indicating that the condition of the exterior cladding is a far more important issue than any of the items covered in the written report.

Charles Smith tells her that he appreciates her concern, but the purchase deal is too far along to do anything about it. Since the buyers and their representative have had access to the building for several months, they could have investigated and determined the condition of the granite cladding themselves. In fact, they may already know about it and have accounted for it in their financial offer of purchase. If not, it will turn up on one of the required periodic building checks in the future, if it is really a substantial problem. In addition, he says that the deal is now ready to close the following afternoon, and her cooperation in seeing things his way will result in additional work on other projects in the future. Besides, if she will feel more comfortable, he will give her a confidential letter confirming that she had fully informed him of the cladding situation.

Not knowing what else to say, she murmurs her assent.

That night, Julie presents the situation to her husband for his comments. After hearing the story, he indicates that these things happen all the time, and it is the responsibility of the buyer to be satisfied with regard to the condition of the building. Besides, having Smith complete the deal successfully has serious implications about the future of her business relationship with him, and therefore serious implications regarding the future success of her company. After all, there are the fifteen other people working for Julie, as well as their families, to think of. Making an issue of the situation, or even worse going public, would only destroy that relationship with Smith, and could jeopardize her business. Besides, in the heat of the moment she accepted the information given her by Brock, but since she did not observe the clip angles personally, can she be sure that Brock's conclusions were accurate?

What should Julie do, if anything?

### **Alternate Approaches and Survey Results for "What's the Angle?" (Case 1010)**

1. Do nothing more. The report has been written and delivered in accordance with the contracted scope of work, which did not include inspection of the granite veneer clip angles. In addition, the client, Mr. Smith, has been notified of the condition of the clip angles observed, and it is his responsibility to deal with that information as he feels appropriate. Also, the contract specifically required that "all information discovered by the engineer shall become the property of the client and shall not be released to others without the client's express written consent."

Percentage of votes agreeing: 4%

2. Do nothing more. There is no evidence that the rusted clip angle situation is widespread. It is reasonable to deduce that the clip angles closest to the window casements would be the ones most exposed to moisture entering the wall cavity because the window casements are old, and while

structurally sound, most likely leak a fair amount around the outside. Julie might recommend that the window casements be caulked from the outside, if Smith feels it to be appropriate.

Percentage of votes agreeing: 0%

3. Do nothing more. Mr. Smith has indicated that the purchase deal is too far along to do anything about it at this late date. Additionally, the new owners are equally responsible since they had access to the building for several months and may even know of the problem themselves. Not everything is disclosed between buyer and seller in these sorts of negotiations. If not, one of the periodic building checks will pick up the clip angle defect in the future. The new owners will be in a much better position to handle the corrective action at that time, since they will not be rushed by a deadline and will not have to do a haphazard repair job.

Percentage of votes agreeing: 1%

4. Do nothing more. Mr. Smith has said that he will write Julie a confidential letter to her indicating that she notified him of the situation, and if, by chance, anything should happen in the future, the letter will prove she acted in a professional manner by informing Smith of the situation. Julie certainly cannot be responsible for contracting for the repair work and certifying that every granite block in the building has been repaired. She runs an engineering firm, and is not a building repair contractor nor does she own the property. In addition, Smith indicated that he has additional business for Julie's firm in the future, and it would be a poor business decision to jeopardize the well-being of her staff by incurring Smith's ire.

Percentage of votes agreeing: 6%

5. Amend the report to clearly state the elements of work that her firm was retained to complete, and add a list of items that were specifically excluded from their services (probably six to eight items long) so that it is clear when the probable accident happens that the cladding anchors/clips were not meant to be examined as part of her firm's scope of services.

Percentage of votes agreeing: 4%

6. Write a separate report to Smith describing the condition of the observed clip angles, recommending that the building be closed immediately and the adjacent sidewalks and portions of streets which could be effected by falling granite veneer blocks be cordoned off. Indicate that as the structural engineer, she has an ethical duty to protect the health, safety and welfare of the public. This is a matter of responsibility to the public, which takes precedence over contract clauses requiring confidentiality.

Percentage of votes agreeing: 23%

7. Approach Smith again and recommend that she be retained to make additional clip angle observations throughout the building to determine the

extent of the problem. If it is localized adjacent to the window casements, or only near a few window casements (perhaps on the side of the building most exposed to wind and rain), it will not be a major issue to rectify, even though it may delay closing the purchase and sales agreement for a period of time. It is quite possible that Brock Williams may have over-emphasized his perception of the problem due to the time constraint to complete the inspection project, and the fact that he only made observations at three locations.

Percentage of votes agreeing: 23%

8. The public safety issue, if there is one in this case, is the responsibility of the owner (Smith), unless Julie is certain there is imminent danger to the public. Therefore, informing the owner is all that is necessary.

Percentage of votes agreeing: 1%

9. Make an after-hours telephone call to Goldworthy's office and leave a voice message suggesting that he defer closing the deal until he has his own independent structural assessment made, if he hasn't already had one done.

Percentage of votes agreeing: 1%

10. Immediately consult with her attorney to ascertain her 'legal' position concerning the release of information to persons other than her client, in violation of the provisions of her contract with Mr. Smith. She could be committing a breach of her contract with Smith which could lead to an expensive law suit.

Percentage of votes agreeing: 11%

11. Tell Smith that it may be necessary to confer with the local building officials, and he should consider doing this sooner than later, if for no other reason than to inform them of what has transpired and what steps (if any) are being taken to determine the extent of the perceived problem. While panic is not warranted at this point, due diligence is.

Percentage of votes agreeing: 11%

12. Inform the city building official personally of Brock's findings. The most important goal is getting the building repaired immediately. Further, Julie Adams's self-interest is to preserve and enhance her hard-earned reputation, which will crumble if the granite blocks fall.

Percentage of votes agreeing: 2%

13. Tell Smith that if he does not inform the city building official of the condition of the exterior veneer clips as observed by Brock within 24 hours, she will do so herself.

Percentage of votes agreeing: 10%

14. Do as Smith requested and submit the report without mention of the observed condition of the exterior veneer clips. However, she should also make an anonymous telephone call to the Channel 9 investigative team to alert them to the building problem.  
Percentage of votes agreeing: 0%
15. After sale of the Inverness Block is completed, Julie should meet with the city building official and suggest, based on her observations in the downtown area over some period of time, that they should pay particular attention to stone veneer buildings without mentioning this specific case. She should indicate that her observations were limited in extent, but sufficient to be concerning. This way the public authorities can 'discover' and take credit for catching and resolving a dangerous situation.  
Percentage of votes agreeing: 3%

### **Forum Comments from Respondents**

1. All too often, engineers have a tendency to jump to conclusions that are based on meager evidence. It is always wise to determine the extent of the problem as far as possible before choosing a course of action. Nonetheless, in a situation such as this where there appears to be a real potential of injury, as well as property damage, it is also wise to proceed without delay to gather the necessary information in order to make a wise and principled decision.
2. In addition to the ethical obligation of the engineer to protect the health, safety and welfare of the public, in many states there is the legal duty to inform appropriate authorities of situations discovered which may cause injury to the public.
3. Julie should request permission to look at some more of the clips, on her own time if necessary. If Smith refuses to let her look at the clips she has to go public right then and there. If she finds that it is a serious problem, she must make sure that the matter is known to the buyers and they are aware that it must be fixed.
4. Julie should offer to do the additional clip assessment work free or at a reduced cost. Cost should not be allowed to contribute to a potentially significant public hazard.
5. The decision on what to do about the findings is Mr. Smith's. It would be best for him if he knew the full extent of the problem. If it is a problem only around the windows, or only on one side of the building, the buyer may be OK with taking care of it. If the façade is going to collapse next week, I'm sure that Mr. Smith doesn't want to just let it go. Including this in the report

helps him realize his responsibility in the situation. Offering to help is a professionally and ethically sound course or action for Julie.

6. Julie should not have signed the contract in the first place without stating that she would not compromise her ethical duties.
7. Smith's arguments about insufficient time to do anything because of the purchase agreement deadline are prevalent in many instances where property transfer is involved. In reality, a change in the established deadline can always be negotiated by the parties. It is far better that the seller notify the buyer of such a last-minute potential problem and negotiate an appropriate method of handling it, than to keep it undisclosed, only to find that s/he is sued by the buyer at later date for not disclosing the issue. Whether the allegation will hold up in court or not doesn't matter. The cost to the seller of adequate legal defense against the complaint, as well as the time and energy involved in defending the case, can be substantial, especially if injury or a loss of life is involved.
8. Engineers who believe that a letter from the client, or the client's lawyer, will protect them from a future law suit and judgment are naive at best. While a specific indemnification agreement wherein the client holds the engineer harmless in all instances may be some protection, if it is a question of the legality of the engineer's actions, such an agreement may not be adequate. It is always better to do the right thing (and hopefully, for the right reason).
9. Promises by the client for future work appear to be prevalent in many instances. Nonetheless, such promises are only as good as the integrity of the person making them. The engineer ought to seriously consider whether it is in the firm's best interest to continue to do work for such a client if it appears that these promises are made only to persuade the engineer to "bend the rules" here and there. Sooner or later, greater problems with the client are most certain to arise, and it will be all the more difficult for the engineer to avoid involvement in unethical or illegal situations due to previous, progressive "rule bending". No promise of future work, no matter how attractive, is worth the loss of the engineer's integrity. Also, it should be remembered that Mr. Smith wants to leave town forever to retire to his Grand Cayman Island estate, and therefore will likely not continue to do business in this city or area, if anywhere.
10. Although Julie has a contractual obligation of confidentiality, a case could be stated that the responsibility to the safety of the public would override and release her from the contractual obligation.
11. Acceptance of the confidential letter from Smith could be construed as a cover up and would make Julie an accomplice in any actions taken at a later

date. She also has to consider her responsibility to her employees in the event that she were sued for malpractice.

12. Julie cannot go behind her client's back and report her findings about the build [sic]. She signed a contract of confidentiality [sic]. It may hamper her work relations with Mr. Smith. She also has to take in to consideration the employees and their families. Client confidentiality [sic] is part of the engineer's "Codes of ethics" [sic].
13. Julie should have Brock complete the entire report including the findings regarding the clip angles and transmit it to the client, Smith, with a cover letter indicating that because of the potential threat to public safety and life, a copy of the report will be sent to the local building official. She should also include an invoice for her firm's services.
14. The issue of disclosure of a defective building condition is a matter of real estate law. If Smith is breaking the law by not disclosing the potentially dangerous condition, the real estate transaction could be nullified, even if the problem is discovered at a later date. In such a case, the new buyer would have no problem receiving compensatory damages as well. Julie should inform Smith of such a possible scenario and note that if such a criminal or civil action is filed, Julie's firm would no longer be bound by their confidentiality agreement and would be obligated under the law to provide all information requested.
15. Julie should inform the city building official that her client has important and relevant information involving the safety of the public and explain that she cannot reveal the information because of a confidentiality clause in her contract with the client.
16. Julie should keep an eye on her husband since he has a well-developed ability to rationalize and may have other moral shortcomings that may affect her more personally.