

the curt brown chronicles



Engineers and Surveying

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Most engineering colleges offer training in computations, mapping and instrumentation, but little or nothing in surveying law. A man may be a beautiful technician, a skilled mathematician, and an expert at making measurements, but of what value is his skill if he does not know where to place a legal property corner? Almost 100% of the fault we find with the men we employ is their ignorance of where to place property corners. The objection is frequently raised that the subject of land law is not engineering. But is that true? Everyone is expected to obey the law and everyone is presumed to know the law. The property surveyor is licensed to set property corners and he is expected to set them in accordance with the correct principles of law. He is not practicing law; he is merely obeying law in the same fashion that you or I do when we obey the speed limit. And if land law is never engineering, why has the engineer from time immemorial had the task of locating right-of-way lines and property lines for his fixed works?

The one thing that elevates the property surveyor above the technician is his knowledge of where to place property corners. Thus, in a given property description there may be conflicts due to senior considerations, intentions of the parties, record monuments, natural or artificial monuments, lines marked and surveyed, distance, area, bearing, possession, mathematical error, magnetic or astronomic bearing or coordinates. There may be the

problem of how to distribute accretions and the beds of vacated streets. And then title may be awarded on the basis of possession, rather than upon the existing written deeds.

The civil engineers wish to have all the privileges and rights of the licensed land surveyor, yet too frequently they do not recognize the responsibility of educating themselves for the duties involved. Thus,

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in the State of California the engineer is exempt from the surveyors act, and the engineers act does not specify that the engineer shall be qualified as a property surveyor. For this reason it has been the custom for only minor questions on surveying to be asked on the civil engineers registration examination. At the time the law was passed it was undoubtedly true that most civil engineers had better training in surveying. But today the picture has changed.

The biggest fault with so called land surveying education is that it is often treated as a minor part of another curriculum. The architect takes a few units of surveying. The land planner, the forester, the landscape architect and others likewise receive a minimum of training in what is

called surveying. And rapidly joining the ranks of these is the civil engineer. I do not claim this to be right or wrong—I am merely pointing out a condition that exists.

If the civil engineer wants to be considered as the person who designs dams, bridges, sewage treatment works, structures and the like; and he wants to consider surveying as a tool to accomplish that end,

the de-emphasis-on surveying is good. And the application of the name “measurements” to what was formerly surveying would be a step in the right direction. The courses presently called surveying and offered to land planners, architects and the like might also be called courses in “measurements.” Thus, those taking “measurements” would not be led to believe that they are qualified land surveyors. But if the civil engineer wants to be thought of as competent to do land surveying, the de-emphasis on surveying is bad. ■

Author **Michael Pallamary** has compiled the writings and lectures of the late Curtis M. Brown. These works are published in *The Curt Brown Chronicles*.