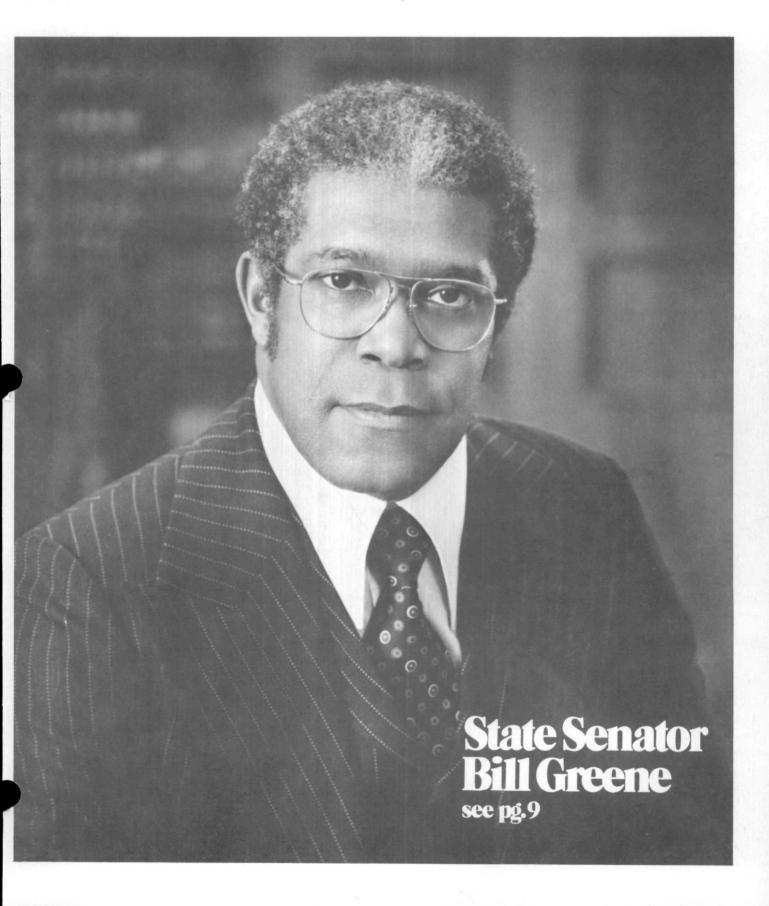
The California Surveyor

No. 58

The Voice of the Land Surveyors of California

Winter 1979



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The California Surveyor

is the quarterly publication of The California Land Surveyors Association and is published as a service to the Land Surveying profession of California. It is mailed to all Licensed Land Surveyors and Land Surveyors in Training in the state of California as well as to all members of California Land Surveyor Association. *The California Surveyor* is an open forum for all surveyors, with an editorial policy predicated on the preamble to the constitution of the California Land Surveyors Association and its stated aims and objectives, which read:

"Recognizing that the true merit of a profession is determined by the value of its services to society, the 'California Land Surveyors Association' does hereby dedicate itself to the promotion and protection of the profession of Land Surveying as a social and economic influence vital to the welfare of society, community, and state."

"The purpose of this organization is to promote the common good and welfare of its members in their activities in the profession of Land Surveying, to promote and maintain the highest possible standards of professional ethics and practices, to promote professional uniformity, to promote public faith and dependence in the Land Surveyors and their work."

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Membership in the California Land Surveyors Association as a sustaining member is open to any individual, company or corporation who, by the interest in the Land Surveying profession, is desirous of supporting the purposes and objectives of this association. For information regarding sustaining membership, contact the Editor of *The California Surveyor*.

Editorial Material

All articles, reports, letters and contributions are accepted and will be considered for publication regardless of the author's affiliation with the California Land Surveyors Association. Material should be sent to *The California Surveyor*.

EDITOR: R. E. Baldwin, L.S. 1345 California St. Berkeley, CA 94703

DEADLINE DATES FOR THE CALIFORNIA SURVEYOR

CONVENTION ... JANUARY 11, 1980 SPRING......MAY 16, 1980

Articles, Reports, Letters, etc., received after the above mentioned date will be placed in the next edition.

Editor

Cover: State Senator Bill Greene



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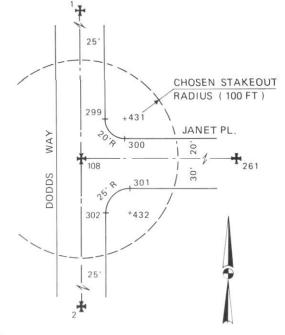
1. SELECT program.

2. ENTER requested data:

(P.1.) POINT?	BACK OFFSET?
108.	
1ST C/L)	(NEXT C/L) TO POINT?
O POINT?	2.
1.	OFFSET?
FFSET?	25.
25.	CODUED DOCATE
NEXT C/L)	CORNER RADIUS:
O POINT?	23.
261.	RADIUS=
FFSET?	25.0000
20.	DELTA=
ORNER RADIUS?	90.00000 LENGTH=
20.	39.2699
	TANGENT=
ADIUS=	25.0000
20.0000 ELTA=	CHORD=
90.00000	35.3553
ENGTH=	(BC/PC)
31.4159	POINT#?
ANGENT=	301.
20.0000 HORD=	9263.0842
28.2843	10052.6976
	(RADIUS)
BC/PC)	POINT#?
OINT#?	432.
299. 9332.9924	9238.0843
10027,4417	10052.7890
	(EC/PT)
RADIUS)	POINT#?
DINT#?	302.
431.	9237.9931
9333.0656 10047.4415	10027.7894
	BACK OFFSET?
EC/PT)	Silver Strater:
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300. 9313.0656	
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then, for staking out all points within a 100' radius of #108:





. . . with the stakeout data printed on an optional page printer:

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301.	SE 59.14445	120.45155	120.57505	241.55409	-	59.02095	-	118.04191	58.31	9263.0842	10052.697
302.	SE 24.39132	155.20468	155.33218	311.06435	-	24.26382	-	48.53165	60.42	9237.9931	10027.789
431.	NE 48.09243	48.09243	48.21593	96.43585	-	131.38007	-	263.16015	60.21	9333.0656	10047.441
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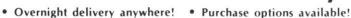
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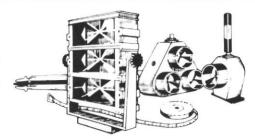
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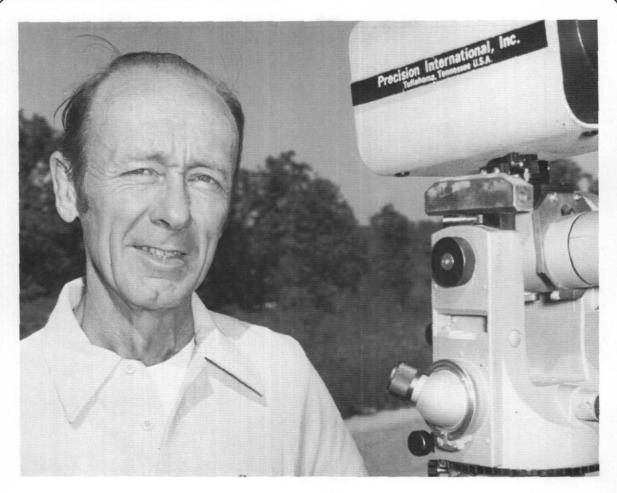
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The EDM

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Editorial

While the Calfornia Surveyor may appear to be one of the more polished L.S. Association publications, its appearance and the fact that you keep receiving it more or less on schedule tend to hide the problems involved in putting it out. In reality, there is often a problem simply obtaining enough copy to put out an edition, and at times it is a last minute mix of whatever is available. This amounts to filling up space rather than a careful editing of current, important items.

At the July CLSA Board meeting I presented my ideas for the California Surveyor and asked them: 1) what they really wanted, and 2) how much they were willing to spend to get it.

At the July meeting they adopted my ideas as policy regarding what is wanted. This essentially stresses aintaining the quality of the actual magazine, and working to improve the content to better serve CLSA and our readers.

To accomplish this requires not

only input from readers regarding what they want and don't want, but their active participation in gathering information and writing articles. There are plenty of CLSA committees which could provide current information regarding legislation, the Board or Registration, etc. There is also a lot of local news, such as the article in this edition's "Issues", which will go unnoticed by the majority of Land Surveyors unless someone takes the time to see that it gets to the California Surveyor. Without your help the California Surveyor will remain relatively uninformative about many important issues.

The Executive Director has informed me that the California Surveyor is to be made self sustaining, with advertising revenue offsetting production and mailing costs.

This may necessitate drastic changes both in the publication itself and in its production. For example, we could handle our own advertising or do our own layout rather than using professional services. This would save money, but would require even more time of the CLSA headquarters staff. If sometimes takes a month for the California Surveyor to get to you as it is. It is also likely to lower the quality of the finished product. Also, though we do have a subscription rate, we have not made use of this rate because until now the California Surveyor has been considered a service.

There is no simple solution, but comments and suggestions from you, the reader, regarding what you want and what you are willing to sacrifice will help us make the best decision. And only your actual involvement in gathering news will make it a meaningful publication.

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Cover Story

SENATOR BILL GREENE

State Senator Bill Greene was elected to that post in a Special election on March 4, 1975. He is a Democrat and represents the southcentral section of Los Angeles along with the contract cities of Bell, Cudahy, Huntington Park, Maywood, Vernon, South Gate, and Watts.

Bill was born in Kansas City, Missouri, where he attended school up to and including Lincoln Junior College before going on to the University of Michigan.

Prior to becoming State Senator, Bill served in a variety of capacities, both public and private, where he demonstrated his commitment to public service and to individual rights.

He was the first black clerk to the Assembly, Consultant to the

Speaker, and when former Lt. Governor Mervin M. Dymally was an Assemblyman, Bill Greene was his Legislative Assistant. From 1966 to 1975, Bill was the Assemblyman for the 47th District. He also served as Field Representative for the Los Angeles Democratic Central Committee and as Regional Director for the California Federation of Young Democrats.

On the private side of the coin, Bill was the Legislative advocate for the Building Service Employees International Union, Business Representative for Los Angeles City Employees, and a Field Representative for Congress of Racial Equality, and is a former Freedom Rider.

A veteran of the United States Air Force, Bill married Yvonne LaFargue. They have two daughters, Alisa and Jan.

In the Senate, Bill is Chairman of

the Senate Industrial Relations Committee, and serves on the Senate Governmental Organization and Senate Finance Committees and on the Select Committee on Housing and Urban Affairs and Select Committee on Genetic Diseases.

As a member of the Senate Business and Professions Committee, he is in a position to study legislation affecting professions. Bill Greene sponsored Senate Bill 2 in the Senate and then carried it to the Assembly. He appeared before the various policy and fiscal committees to testify on its behalf and it is largely due to his personal efforts that Senate Bill 2 has become Chapter Law.



Senator Greene at his Birthday Party flanked by CLSA/Legislative Advocate Alvar Yelvington (L) and CLSA Director at Large Don Bender (R).

Letters

October 14, 1979 Editor:

During the August meeting of the Sacramento Chapter C.L.S.A. your essay entitled "Thoughts on 'The Surveyor" was introduced to our membership by Jim Dowden. Jim asked the members present to respond to possible new concepts and/or criticisms of the format of "The Surveyor". After some discussion, a committee was formed consisting of myself and whomever else I enlist to help me to formulate and set to print some of the ideas.

In reading your "Thoughts on 'The Surveyor" we find many good sound ideas as to the direction we must head as a professional organization. As a matter of fact, Bob, you were so thorough in your summary that there seems to be very little left to say, but a vast amount to be done by all of us.

If we had to list the most important function for "The Surveyor" it would have to be public relations. One of our major problems as a profession has been getting the general public to view us as professionals.

Many in our ranks begin to loose sight of themselves as actually being a professional person. The potential for "The Surveyor" to act as a spearhead for the advancement of our professional status is easy to see. The problem is to create enough interest to get everyone involved to educate the public and ourselves as well of that fact.

One idea that was suggested was to make "The Surveyor" a collectors item on controversial subjects such as adverse possession, warrantee statements, county lines, and proper map filing procedures. We've covered areas like this before, but not in a way that one could save and catalogue these issues for further use. This, of course, would require the coordinating of knowledgeable individuals and the printing of a predetermined list of topics.

Another important topic is the current laws affecting the surveyor. What better way to keep us up to date than "The Surveyor"? We could also publish important court cases of interest to guide us in our day to day decisions.

To make "The Surveyor" mor useful, a larger classified ad section should be printed listing job possibilities and availability of used equipment.

We thought that possibly a monthly magazine would be needed to include all these topics. This would mean a subscription fee could be asked of the members to cover the cost of printing. I, personally, would be willing to pay a subscription fee. We need to check if others would too.

Stories, advertisement, and chapter news are fine, but we should try to make "The Surveyor" a magazine one can keep around for reference. Not something that gets read once and tossed in the round file. I was thinking of a collection of pictures of old surveying equipment that are suitable for framing would be a novel fold-out idea.

In the coming months we will be gathering other publications for more ideas. Maybe then we can be of further help. In the meantime, we will do our best to aid you in any way we can in your new position as edite of "The California Surveyor".

The best of luck,

John C. Spencer, L.S.

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Education

THE SUBDIVISION MAP ACT: A SURVEYOR'S NIGHTMARE

by Robert E. Merritt, Jr.

PART TWO



Robert E. Merritt, Jr. is a partner in the San Francisco law firm of Steinhart, Goldberg, Feigenbaum & Ladar. He practices extensively in real estate law with particular emphasis in real estate development.

The first part of this article, taken from a speech by Mr. Merritt to the Beverly Hills Bar Association on May 18, 1978, appeared in the Fall, 1979 issue of the California Surveyor.

APPROVALS AND DENIALS

Most Map Act litigation these days concerns map approvals and denials. Unfortunately for subdividers there is no approval criteria which, if met, require approval. Rather, there are all sorts of booby-traps to be avoided and when the subdivider falls into one, the best he can do is argue that the City has acted arbitrarily or unreasonably. For this reason, the role of attorneys at tentative map hearings on controversial subdivisions has become increasingly important. Everything depends on the record made at the hearing.

The act requires that before any map is approved, the legislative body must find that the subdivision is consistent with the city or county general plan. Consistency only exists if the general plan is officially adopted and the proposed subdivision or land use is compatible with the "objectives, policies, general land uses and programs" specified in the plan.

The general plan refers to the land

use plan required by every city and county under provisions of the Planning and Zoning Law. It must contain the following nine elements: land use: housing; circulation; conservation; seismic safety; open space; noise; safety and scenic highways. If properly done, the general plan is a comprehensive document that includes a statement of policies and text as well as maps and diagrams showing prospective land uses. It often takes several years to complete. Although the deadline for preparation of these plans has long expired, it is not unusual, even today, for a city not to have a completed general plan and even when complete there may be serious questions as to whether the plan meets state requirementsespecially the requirement that the housing element provide housing for all economic segments of the community.

If the general plan is not complete. it now seems well established that the city cannot validly approve subdivisions. It cannot make the required findings of consistency of the subdivision with the general plan because there is no general plan (almost complete does not make it). Therefore, if a controversial subdivision is involved and the attorneys for the opponents are marginally competent, they can hold up the project pending completion of an adequate plan. This is considerable ammunition in the hands of an opponent and there appears to be no proven redress against the City for their dilatory conduct. It is possible a city could be held liable in damages for failure to perform the mandatory duty of completing the general plan, under the theory of Morris v. County of Marin, 18 C3d 901 (1977), but the question has not been presented to the appellate courts.

The Act further states that the legislative body shall deny approval of either a tentative or final map if it makes certain findings—one of which is that "... the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat". An environmental impact report will often disclose adverse environmental

impacts of the project, but go on to discuss mitigation measures or positive features which allow the city fathers to conclude that the project should proceed. However, the Map Act admits of no such balancing test, if the above provision is taken literally. It would seem to require denial if substantial environmental damage would result, regardless of mitigation or positive benefit.

An issue recently before the California Supreme Court was whether a city can deny a final map if the final map is in substantial compliance with an approved tentative map.

In Youngblood v. Board of Supervisors of San Diego County, 22 Cal 3d 644 (1968), the county amended the general plan shortly after approving the tentative map and then approved a final map that was allegedly inconsistent with the plan as amended, although it conformed to the tentative map. Youngblood brought suit arguing that the county could not approve the final map because of lack of consistency. The California Supreme Court found that the consistency requirement was satisfied because the final subdivision map was consistent with the general plan as it existed on the date of tentative map approval.

The conclusion of the Court makes sense. There should be some point in time when the developer knows what is expected so he can decide whether to go forward or abandon the project. That point has traditionally and logically been the hearing on the tentative map and the language of the Act, as well as the mapping procedure, supports this view. The final map process has been simply a formalization of the approved tentative map and a time for posting of tax bonds and security to insure performance of conditions. It is wasteful of resources and unfair to reopen the substantive merits of the subdivision at final map approval.

The situation has also arisen where a city for some reason cannot, or chooses not, to act at all in approving a tentative or final map. The language of the Map Act provides that if the map is not acted upon within a given period of time, it is deemed approved. Govt. Code

WILD ☆ TOPCON ☆ GURLEY ☆ KEUFFEL & ESSER ☆ DAVID WHITE \$ \$ JWJ LIETZ CHICAGO STEEL SCHONSTEDT THOMMENS ☆ DIXON ☆ AERVOE ☆ FILSON RABONE-CHESTERMAN ☆ LUFKIN ☆ SANDVIK SILVA ☆ HASTINGS ☆ BRUNTON ☆ LENKER SUUNTO ☆ KESON ☆ DASCO ☆ KUKER-RANKEN TAYLOR ☆ CHARVOZ—CARSEN CUTTER ☆ L.DARLING COLLINS \$ **HULTAFORS** ROLATAPE ☆ TELEDYNE—NATIONAL ☆ WILD AMERICAN PAULIN \$ BAUSCH BETHLEHEM STEEL ☆ RIAISDELL ☆ CONE-SITE COUNCIL GAMMON GLENDALE OPTICA ☆ MOUND CIT WILD ☆ TOPCON ☆ KEUFFEL & F PATH ☆ DAVID LWLCHICAGO STEEL THOMMENS ☆ DIXON RABONE-CHESTERMAN JANDVIK SILVA ☆ HASTINGS ☆ SUUNTO ☆ KESON ☆ UKFR-RANKFN CUTTER \$ COLLINS ING HULTAFORS ROLATAPF NE-NATIONAL ☆ WILD AMER! BAUSCH & LOMB LEL ☆ BLAISDELL ☆ CONE-SITE DIAMOND GAMMON OPTICAL ☆ HASSALL ☆ MOUND CITY TOPCON ☆ GURLEY ☆ KEUFFEL & ESSER ☆ \$ JWJ DAVID WHITE CHICAGO STEEL TAPE SCHONSTEDT THOMMENS ☆ DIXON ☆ AERVOE ☆ FILSON RABONE-CHESTERMAN ☆ LUFKIN ☆ SANDVIK SILVA ☆ HASTINGS ☆ BRUNTON ☆ LENKER SUUNTO ☆ KESON ☆ DASCO ☆ KUKER-RANKEN TAYLOR ☆ CHARVOZ—CARSEN CUTTER J. L. DARLING A HULTAFORS ROLATAPE ☆ TELEDYNE—NATIONAL ☆ WILD PAULIN V BAUSCH LOMB BETHLEHEM STEEL ☆ BLAISDELL ☆ CONE-SITE GAMMON COUNCIL DIAMOND GLENDALE OPTICAL ☆ HASSALL ☆ MOUND CITY

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§§66458, 66452.4 and 66452.5 However, this concept of automatic approval was frustrated by the courts in Woodland Hills Residents Assn. v. City Council of Los Angeles, 44 CA 3d 825 (1975). In Woodland Hills the Los Angeles City Council by virtu of a tie vote denied an appeal by residents of a tentative map for a controversial subdivision. Neither the Planning Commission nor the City Council affirmatively approved the map or made findings of consistency with the general plan. In an action by the residents to compel the City to vacate the map, the developer and the City argued that the map was deemed approved. The Court of Appeals rejected this argument because the required findings of consistency of the map with the general plan had not been made. In effect, the court rendered inoperative the automatic approval provisions of the Act.

I cannot help but wonder whether the automatic approval provisions of some recent legislation affecting subdivisions and other permits for development will suffer a similar fate. I am speaking of AB 884—enacted by the legislature in 1977 (Govt. Code §65920 et. seq.) which arose out of the Dow Chemical controversy in northern California Simply stated, this new law provide that the legislative body must act upon any development project within one year after it has been accepted as complete by the city or the permit will be deemed approved. The one year period can be extended for a period of ninety days if both the city and the developer consent. The statute clearly affects subdivisions, but it is questionable whether it will be viewed as reversing the rule of the Woodland Hills case. The law was recently clarified to make it clear that it is the tentative map, rather than the final map, that must be approved within the limited time period. (Statutes 1978, Ch 1113 3).

PROHIBITIONS AND ENFORCEMENT

Probably one of the best things going for subdividers under the Map Act is the relatively short statute of limitations contained in the Act. Any action to attack or set aside a decision approving or rejecting a map must be commenced and service of summons effected within 180 days after the decision. (Govt. Code §66499.37). The question of whether the statute begins running from the filing of the tentative map or the final map was addressed in the case of Save El Toro

v. Day, 74 CA 3d 64 (1977). The court reasoned that the 180 days ran from the approval of the final map, but it should be emphasized that the case preceded the Youngblood case and the local ordinance in question reated the act of final map approval as discretionary. In light of Youngblood, the holding in the case is questionable and one would expect the statute to begin running from tentative map approval.

It is worth taking note of the Map Act prohibitions. Where a parcel map is required the subdivider must not sell, lease or finance any parcel or commence construction of any building (except model homes) or allow occupancy before the map is filed. When a final map is required, offering the property for sale or lease or contracting to sell or lease is also prohibited until the map is filed.

As a practical matter these restrictions are commonly ignored. For example, it has become the practice of the Department of Real Estate to issue a preliminary public report (known as a "pink report") to a subdivider who has substantially completed filing with the Department, but who is awaiting approval of the final map. This preliminary report allows the subdivider to solicit purhasers and take reservations for lots. By all definitions this is an offering of the property which flies in the face of the plain language of the Map Act.

The construction prohibition can create some headaches with condominiums. Many engineers prefer to begin condominium foundations and prepare their condominium plan based on an as-built survey. In such cases, the developer is forced to file a single parcel condominium map which does not show buildings or air space (as is permitted by Govt. Code §66427) and subsequently record a separate condominium plan. Since most cities will regulate the condominium design through other land use ordinances, this single parcel map is a waste of time and effort. It would be better to have the subdivision map and condominium plan combined into one document if the Act would permit it under such circumstances.

There is also a question of what acts constitute commencement of construction. Practice among cities will vary as to whether grading and even the pouring of foundations is allowed before the map is filed.

Since the final map prohibitions

extend to offers and contracts to sell or lease, it is reasonable to believe that the parcel map prohibitions against sale or lease refer to conveyance and do not prohibit a deposit receipt or option agreement before the map is filed. However, if the seller contemplates offering a series of options to purchase five or more unsubdivided parcels of land, even for development purposes, he must obtain a subdivision map before the offer is made.

The remedies available to private parties for violation of the Map Act include rescission and damages. The period within which these actions can be commenced is limited to one year after the date of discovery of the violation. This raises the question of whether a purchaser or lessee will be held to have notice of violations that reasonable inquiry and examination of title would disclose or whether actual notice is required? The problem is even more troublesome for the seller. If your seller client suspects a past violation, how do you advise the client so that you can begin the statute running on the purchaser without blowing the deal or exposing your client to damages?

I was once involved in a sizeable transaction representing a purchaser where I suspected a Map Act violation by the seller. The seller, over a period of time had obtained various parcel maps on portions of the property. If these transactions were tied together in sequence, the resulting division would exceed five parcels and a subdivision map rather than a parcel map should have been filed. (In this regard see Bright v. Board of Supervisors, 66 CA 3d 191 (1977), and a very recent Attorney General's opinion, 61 Ops. Atty. Gen. 114). When I casually broached the subject, the seller's attorney became concerned about the possibility of my client rescinding the transaction within the one year period and after considerable discussion we agreed to waive any rescission and damage rights under the Act. Seller's counsel then began to worry about such a waiver being against public policy and void. After more discussion, we finally agreed if the waiver was void. the Seller would pay a nominal sum as liquidated damages for any violation. I suspect he still did not sleep well for the next year.

One answer to this dilemma is to ask the city planning department for what is known as a certificate of compliance. Once issued, this establishes

conclusively that your client's property and any past divisions comply with the Act. This may sound like a way out, but it can also be a way in-into more problems. When you ask the city for a certificate of compliance they may, in fact, discover a violation (probably not the one you suspected) and record on the property what is called a conditional certificate of compliance. This effectively places a giant cloud on the title, until the conditions have been met. If this was your idea, your client may not be very happy when he gets your bill

For all its problems we have managed to live with the Map Act. This is not so much a tribute to legislative draftsmanship as it is to the fact that most of the people who work on a day-to-day basis with the Act (e.g., planning officials, surveyors, engineers) take a practical approach and often ignore the problems they cannot answer.

Sometimes answers come from the wrong place. People are always getting the Subdivided Lands Act and the Subdivision Map Act confused. As a result, I am used to hearing how such and such a practice under the Map Act is permissible because a local deputy at the Department of Real Estate gave an opinion to that effect.

Also, cities and counties have adopted local subdivision ordinances which they come to know and love, to the point of forgetting that the state act even exists. These local ordinances are often several years behind changes in the state act and accordingly so is the practice in many cities and counties.

As professionals, we must guard against this nonchalance toward the law at the risk of being accused of being impractical. Otherwise, we may find ourselves at the wrong end of a malpractice suit.

Within the time allotted, I regretably report that I have discussed only a few of the many ambiguities, contradictions and impracticalities contained in the Map Act. It is an example of piecemeal legislation at its worst. Perhaps someday it can be revised into a simpler and more workable law, but I am not too hopeful. (We all saw how the tax law was simplified by the Tax Reform Act of 1976.) In the meantime, although our role in life is to point up the problems, we can secretly hope that common sense will prevail.



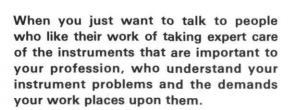
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Tidal Survey

CALIFORNIA TIDE SURVEY NEARS COMPLETION

by Jim Dowden, L.S. Coordinator, Calif/NOS Marine Boundary Program

In June of 1980, the Joint California/National Ocean Survey Marine Boundary Program in California will be completed.

The matching fund program began in 1973 as a result of protracted and extensive litigation in South San Francisco Bay and, in subsequent years has been extended to include San Pablo Bay, Sacramento-San Joaquin Delta, Humboldt Bay, Moss Landing and selected sites in San Diego County.

Due to the mutuality of the benefits to be derived from the data collected by the survey, the National Ocean Survey (N.O.S.) a component of the National Oceanic and Atmospheric Administration (N.O.A.A.) and the State of California entered to a master agreement to provide for a 4 year program of reoccupation of historic tide stations in California's tidal environment.

Tidal observations are used to produce a variety of services and products such as tables of predictions, currents, and local tidal datums for reduction of hydrography and wet land title and boundary determinations.

Personnel of the California Tide Party are headquartered at Tiburon, Marin County and consist of four State employees and four Federal employees. The party is headed by a Commissioned Officer in the NOAA Corps, and receives its administrative direction through the Pacific Marine Center in Seattle, Washington.

The mission of the California Tide Party is to install and maintain the necessary instrumentation, recover and set at least five tidal bench marks at each station site and draft the necessary descriptions. Spirit level connections are then run between the tide staff and the local bench marks periodic intervals to monitor the installation and preserve the datum (M.L.L.W.).

Upon completion of the installation, a local contractor is retained to monitor the operation of the instrumentation, collect and forward the record to headquarters and advise the tide party in the event of loss, malfunction or vandalism to the gauge.

The Tide Party has established a small repair shop and can perform most maintenance tasks at head-quarters.

To date, installations have been made at some 160 locations throughout the State, and has produced some 2500 station months of record.

At one time during the program, nearly 70 gauges were operating simultaneously!

On a weekly basis, the station record is sent by the local observer to the Tiburon headquarters for field review and then forwarded to the tides and water levels branch of the National Ocean Survey in Rockville, Maryland for processing.

After processing, tidal data makes its appearance in a variety of NOS publications such as Nautical Charts, tables of predictions, lists of Tidal Bench Marks and Datums, and "Pilots".

Commission personnel assigned to the California Tide Party must exhibit a variety of skills, be willing to travel extensively and work long hours. Tasks normally considered routine on land, take on new dimensions when performed in tidal marshes, open bays and estuaries, and extensive mud flats.

Work frequently must be scheduled around the tides and performed with one eye on the task at hand, and the other on the Tide Staff! The unwary or uncautious will soon find

themselves spending the next 6 hours through the midday sun, sitting on a mud flat till the next high water! Perhaps the only comfort being, that like death and taxes, the following high water will, with absolute certainty, occur. For that is the nature of the tides.

Over the past four years, a number of individuals have occupied the four State positions with the party. The designated positions are Student Engineering Aids which results in a limited term appointment of nine consecutive months. Several individuals have returned after the required three month layoff, for a double tour of duty.

The party is under the direct supervision of Lt. Fain McGough, NOS, assisted by Rich Edwing, NOS, and Dave Olsen, NOS. Dave Olsen had two tours of duty as a State employee and was retained on the Party as a NOS employee.

Data processing and logistical support are provided by the Office of Oceanography in Rockville, Maryland, under the general direction of Capt. Wes Hull, NOS, Chief; Carroll I. Thurlow, Deputy Chief; Jim Hubbard, and Ray Smith of the Tidal Datums Section; and Don Carrier and Doug Martin of the Requirements and Facilities Branch.

At the present time, some 55 tide stations are currently still operating throughout California and about 40% of the data has been processed and is on file in Sacramento.

A modest extension of the program through June of 1980, involving some 19 gauge sites in support of scientific studies, is in process.

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Liability

A PRIMER ON LIABILITY

"The Surveyor: To What Extent is He Liable to Third Parties?", The Nebraska Surveyor, Fall Issue, P.O. Box 207, Wahoo, NE 68066. Reprinted by permission.

The following is a condensation of a paper written by Darrell R. Dean, Jr., and John G. McEntyre, both of the School of Civil Engineering at Purdue University. The paper appeared in the "Empire State Surveyor."

The courts have held surveyors liable for inaccurate surveys — mistaken boundary lines location, incorrect placement of construction stakes, incorrect acreage computation, inaccurate plats — regardless of whether the inaccurate survey was made intentionally or by mistake.

It is generally accepted that basically, the surveyor owes a duty to his client, whether it is specifically written out in a contractural agreement or simply left to the discretion of the surveyor to adhere to the standards of the profession; and a breach of this duty may result in litigation with the surveyor as the defendant.

'The surveyor owes a duty to his client whether written out in a contractual agreement or simply left to the discretion of the surveyor to adhere to the standards of the profession.'

To comply with the surveyor's professional obligation, it is often stated that a surveyor must perform a survey "such as any other prudent surveyor would under the same or similar set of circumstances." A breach of duty not under a contract is a "tort."

A surveyor may also be held liable not only to his original client, but to a third person "if it is reasonable to believe that the third person may act in reliance toward the survey."

In their paper, Dean and McEntyre used the classifications of W.L. Prosser's "Misrepresentation and Third Persons," appearing in the Vanderbilt Law Review. According to Prosser, liability or misrepresentation of the surveyor to the third person is founded upon three bases — intent, neglience or strict liability without either.

"Misrepresentation based on intent occurs when a false representation is consciously made and is considered deceit. Deceit is actually one of four species of fraud. Negligence is involved when the defendant fails to exercise due care and prudence and is unconscious of the false representation. The doctrine of strict liability holds the defendant responsible merely because he made the false statement, even though he reasonably believes it to be true and has exercised prudent care under the circumstances."

The following are circumstances classified by Prosser which illustrate the extent of a surveyor's liability to a third party.

'Liability may be incurred if it is reasonable to believe that the third person may act in reliance toward the survey.'

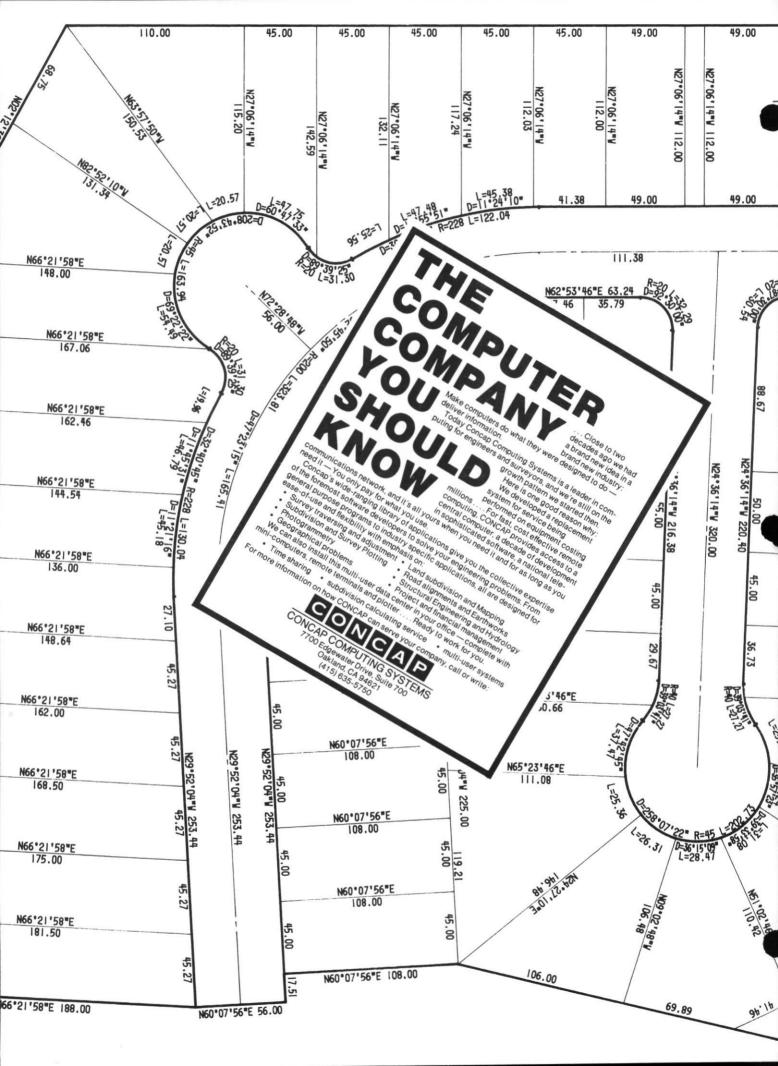
- 1. Plaintiff is identified: Defendant's purpose is to influence him. A surveyor is hired to establish a boundary line in a very valuable stand of walnut timber, and the surveyor is aware that the location will influence a prospective investor. He is liable for deceit, negligence or strict liability.
- 2. Plaintiff is identified: Defendant has special reason to expect his action. In the case of CRAIG V. EVERETTE M. BROOKS CO.. the surveyor was employed to design and stake out a road the plaintiff, a general contractor, was employed by the same person to construct the road. The surveyor located construction stakes incorrectly, causing the contractor to lose money. A Massachusetts appellate court overruled the trial court's decision which held the defendant was not liable for the negligent placement of road stakes.
- 3. Plaintiff is identified: Defendant has no special reason to expect his action. A surveyor is employed by a two adjoining landowners to establish boundary between them. When the property was surveyed, a company owning mineral rights under one of the properties was strip mining coal. The company stripping coal up to the line which was erroneously established for

the adjoining landowners. According to Prosser's principles, the surveyor would not be held liable to the coal company provided the survey was made exclusively for the benefit of the landowners and the surveyor had no reason to expect the mining company to place any reliance in the survey.

'The doctrine of strict liability holds the defendant responsible merely because he made the false statement, even though he reasonably believes it to be true....'

- 4. Plaintiff is an unidentified member of a group or class: Defendant's purpose is to influence any of its members. A surveyor is employed to design and lay out a subdivision. He is liable to a third person who buys a lot in the subdivision.
- 5. Plaintiff is an unidentified member of a group or class: Defendant has special reason to expect that any member of it may be reached and influenced. In the case of ROZNY V. MARNULL, the surveyor surveyed a lot and furnished the landowner with a plate showing monumented corners and boundary limits on the street line and provided on the plat a guaranteed accuracy statement. The plaintiff in the case later bought the lot, built a house relying on the plat and inaccurate corners, and suffered damage as a result. The Supreme Court of Illinois held the surveyor liable for negligence based on the opinion that the defendant knew that the plat would be used and relied on by other then the person employing him.
- 6. The effect of a public duty. A Surveyor making a subdivision plat which is required to be recorded in the public records is liable for any misrepresentation on the plat.
- 7. Plaintiff is unidentified: Defendant has no special reason to expect that he may act in reliance. The surveyor is not liable to a third person. In the case of HOWELL V. BETTS, an error was made in a survey and description for a landowner in 1934. In 1958, the plaintiff in the case purchased the land

(Continued on Page 26)



ssues

"Issues" is designed to provide discussion of issues critical to the Land Surveyor. To continue it needs your input—articles and information on current issues which are of immediate concern to you.

THE PUBLIC TRUST

In an article entitled, "County Cuts Public Works Budget, Service" published in the November 7 Contra Costa Times Author Russ Yarrow

writes the following:

"The Board of Supervisors slashed the Public Works Department's budget by \$155,000 Tuesday, eliminating one traditional service that could result in future home lots overlapping by several feet, Director Vernon Cline warned.

"Among the biggest cuts made by the board Tuesday was the elimination of \$28,000 for the double-checks Public Works engineers make on survey monuments in new subdivisions.

"The monuments are the points in new subdivisions and developments that delineate property boundaries, and miscalculations can result in parcels overlapping, which has happened with older developments, in the Alamo-Danville area. Cline told the board in an earlier report.

Historically, said Cline, one out of every 30 inspections has turned up major errors in monument locations, he said.

""We've had some gross errors in the past,' he said, 'There was one surveyor we found once who was using an I. W. Harper bottle for a transit and getting two and three foot overlaps. That took five years to straighten out."

The following letter was sent to Mr. Cline by the East Bay Chapter in response to his statements:

November 14, 1979

Vernon L. Cline, Director Contra Costa County Public

Works Department 651 Pine Street Martinez, CA 94553 Dear Mr. Cline,

The article in the Wednesday, November 7 Contra Costa Times by Russ Yarrow quotes you in a manner indicating that you attribute gross errors in monument locations to surveyors. Also you mention one surveyor in particular "... using an I.W. Harper bottle for a transit and getting two and three foot overlaps. That took five years to straighten out." I have a few questions in regard to your remarks. Is it not true that most of the subdivisions and developments filed in the county are filed by engineers? Do engineers ever set monuments wrong? I do not recall seeing anything concerning the I.W. Harper bottle brought before the Board of Registration. I would like to look into this further. If the man was not brought before the board, why wasn't he? What were the dates it occured? Also, why did it take Contra Costa County engineers five years to straighten out a problem that was disclosed in checking monuments when they were first set?

The East Bay Chapter of the California Land Surveyors Association has a map review committee concerned with just such problems and when mistakes are found they usually are corrected rather quickly or the matter is referred to the Board of Registration for action. Contra Costa County has not participated with the California Land Surveyors Association in work to maintain high professional standards for surveyors and also engineers doing surveying, nor in other efforts to establish and maintain cooperation and improvements in all aspects of surveying in the East Bay area. You sign the County Surveyors Certificates on record maps. Your signature is over the title "ROAD COMMISSIONER - SURVEYOR." As a professional in the position you occupy, you or your representative should be in leadership in programs such as those undertaken by the California Land Surveyors Association. There are monthly C.L.S.A. meeting notices sent to Contra Costa County, and in the last four or five years there have been very few times, perhaps two or three, that a representative from Contra Costa County has attended a meeting. Did you get reports from those few meetings attended?

Another aspect of this that I would like comment on from you has to do with responsibility for the location of the monuments you refer to in your

interview with Yarrow. I have no problem with counties checking monument locations, but I do not believe the Subdivision Map Act or the Land Surveyors Act assigns responsibility to the counties or local agencies for the location of monuments set by private surveyors and engineers. The latter are the responsible parties, and if they are irresponsible they should not be allowed to practice. You and I and other persons concerned in these matters have an obligation to see that they do

I request cooperation from you with the organizations that are established to help with such problems as you allude to in your interview. Also I feel that you are wrong and demonstrate a degree of irresponsibility yourself in lashing out with only part of a story in public comment against others when you are hurting because your department has been deprived of some of its financing. At this late date I do not know how your words could be recalled or changed to reflect actual conditions, but I wish it were possible.

Respectfully, Wendle Whipple President, East Bay Chapter California Land Surveyors Association

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News Digest

This section of the California Surveyor is designed to provide access to information by printing short news items, reviewing articles from other publications, and reviewing new products. Its success depends upon readers responding with information to be included herein.

BOARD OF REGISTRATION PROPOSES CHANGES FOR INDIVIDUAL EXAMINATION

Proposal to Amend Section 437 to read as follows:

437. Individual Examination.

- (a) Individual examinations for registration, licensure, certification or authorization shall be either oral or written or a combination of both, in the discretion of the board. They may be held at times and places convenient to the board.
- (b) An applicant for registration as a professional engineer will be considered for assignment to an inividual examination provided his qualifications meet all the requirements of the code and rules of the board and provided he meets one or more of the following requirements:
- (1) Holds valid registration as a professional engineer in another state, in the same branch in which he is applying; such registration having been obtained by passing written examinations of comparable standard to those examinations required in California.
- (2) Furnish evidence of at least 28 years of experience in engineering work satisfactory to the board evidencing that the applicant is competent to practice engineering in the branch for which applicant is applying for registration.*
- (c) An applicant for authority to use the title "structural engineer" may be considered for the individual examination only if he has passed a 16-hour examination in another state which the board may deem equivalent to the written examination for structural authority given h California. This 16-hour examination shall have been in addition to the regular examination series for registration as a professional engineer, and shall have contained

significant emphasis on seismic design and lateral load considerations.

*appropriate experience credit for education may be given in accordance with Sections 6751-6753 of the Professional Engineers Act.

LEFT A HAIR . . . LEFT A HAIR . . . HIT THE DIRT!

"Man Fires Shots at Survey Crew," The Press-Tribune Sept. 19, 1979 Roseville, California Submitted by F.D. "Bud" Uzes

A 50-year-old Newcastle man has been charged with assault after firing shots at two members of a survey crew.

Shots were fired at Sterling Altobell of Loomis and Patrick Roach of Newcastle at Newcastle Road and the Boardman Canal.

The shots landed between the victims, according to the Placer County Sheriff's Department.

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With the consumer debt climbing to new all-time highs and fuel costs for both homes and automobiles threatening to take a bigger than ever bite out of household budgets this winter, now is the time for creditors to clear their books of uncollected receivables.

Past-due bills will not become any easier to collect as the economy and personal finances weaken. When faced with a choice between paying the heating bill or an already delinquent account, most overextended consumers will opt for the former.

To secure the money due them, creditors are advised to keep a fixed eye on their receivables throughout the coming months. I.C. Systems recommends that members using their association-approved collection service submit any currently outstanding accounts at once and turn over subsequent delinquencies as soon as they become sixty days past due.

A sound collection procedure at any time, this practice assumes added importance in view of the predicted downslide. Creditors who act on delinquencies promptly stand the best chance of recovering their money before winter sets in and tightens its availability.

For more information contact:

I. C. SYSTEM, INC. 3499 North Lexington Avenue P.O. Box 43567 St. Paul, Minnesota 55164 Phone: 612/483-8201

PRISM CORRECTIONS

"The EDM Corner Reflector Constant Is Not Constant," by L.A. Kivioja, Surveying and Mapping, June 1978, A.C.S.M., 210 Little Falls St., Falls Church, Va. 22046, and "Comment and Discussion" containing errata and addenda to the above article, Surveying and Mapping, June 1979.

In his article in the June 1978 issue of Surveying & Mapping, Professor Kivioja gave those relying on EDMs for extremely accurate measurements something to ponder when he calculated the error in distance for measurements made when the incident light path is not normal to the front reflector plane. For example, he calculated the error in horizontal distance for an incident angle of 30° to be 5.737 mm.

Mr. Hans Edvardsson, manager at AGA Corporation, has informed the California Surveyor that his associate, Mr. Ragnar Schöldström along with Mr. Charles A. Whitten (NGS ret.), found the original calculations to be in error, and that Professor Kivioja has revised his calculations and published the results in the June 1979 issue of Surveying and Mapping. In the above example, the calculated error in horizontal distance has been reduced from 5.757 mm to 0.914 mm.

It is hoped that this review will allow those who read the June 1978 article, but missed the June 1979 article, to rest easier.



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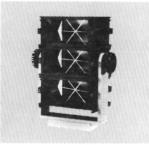
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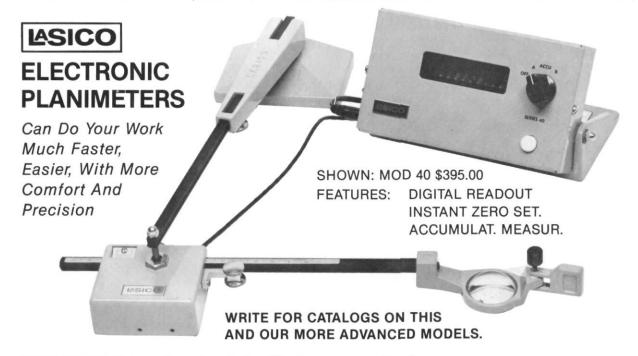


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Perspectives

KNOWING WHEN TO STOP

by Eugene Lockton

How far out on the end of a limb should you let a client push you? The following series of letters illustrates that question and attempts a reply.

Dear Client:

This is in response to your request for legal precedent in the determination of the boundary of your holdings as shown on our Preliminary Survey of a portion Tidelot 10, Salt Marsh and Tidelands Map No. 106.

The line was originally created by the Treaty of Guadalupe Hidalgo ceding California and New Mexico to the United States. Following was the patent from the USA to John Read of the Rancho Corte Madera del Presidio. In 1894 in Valentine v. Sloss, 103 Cal 215, the Court held in confirmation of the patent, "When a decree of confirmation under a Mexican grant followed the language of the grant bounding the land upon the Bay of San Francisco and the survey and atent extended beyond the line of extraordinary high tide, and to ordinary high tide, so as to include tidelands claimed under patents from the state, the survey and patent will control as to the land granted by the U.S. and entitle The confirmees to recover the tidelands" (Decision copied verbatim).

Earlier (1864) U.S. v. Pacheco, 69 US 587, had stated . . "A call for a bay boundary in a confirmation decree or patent runs to the line of ordinary high water mark unless otherwise specified." Again, a riparian owner on navigable water has no rights below high tide line as against the State, such lands having been reserved to states. (City of Oakland v. E. K. Wood Lumber Co., (1930) 292 P. 1076, 211 C. 16). Also Coburn v. San Mateo County (CC 1896) 75F 520.

The Meander Line along your holdings is by many unfamiliar with riparian law, regarded as a property boundary. Note *McLeod* v. *Reyes* (1935) 40 P 2d 839, 4 C.A. 2d 143, which states the rule that, unless different intent is shown by instrument of coneyance, a grant of tidewater lands between private parties conveys to hightide line applies, *notwithstanding Meander Line run by Government Surveyors.* (emphasis added)

In short, your property has an "ambulatory water boundary" and fluctuates as long as shoreline conditions are natural and unaffected by man-made changes. See *City of Oakland* v. *Buteau* 180 Cal. 83 87 (1919). Also Civil Code Sec. 1014, enacted 1872. In addition you must recognize that a public easement exists on any land covered by water. This doctrine which hitherto was accepted as being restricted to navigation and fisheries was further expanded in *Marks* v. *Whitney*, 6 Cal. 3d 462, 428 n 13.

It was my privilege to define the line of O.H.T., in the move which instigated the suit.

The Supreme Court handed down a similar landmark opinion in *Gion* v. *City of Santa Cruz*, 2 Cal. 3d 29, 42. I cite this case to call to your attention the trend which seems to point to a diminishing pecuniary value in tide lot proprietorship, perhaps suggesting a relaxing of your "territorial imperative." All portions of a navigable body of water... are legally classified as navigable waters. *Churchill Co.* v. *Kingsbury*, 178 Cal. 558, 559 (1918), *Barney* v. *Keokuk*, 94 U.S. 324, 336 (1876).

Due to out-of-court settlement of the Kent case, People v. Wm. Kent Estate Co., 242 Cal. App. 2d 156, at Appellate level it is doubtful that any surveyor can with certainty and precision, establish a tidal boundary. The lower court's opinion hung on the "California Rule" which grew out of the Teschemacher Case (1861) based on an ambiguous dictum rather than conformance with the common law. It is probable that Justice Field in Teschemacher did not intend to establish a unique California rule but was simply reciting the English Common Law Rule as it existed before 1850 when California was admitted to the Union, failing to recognize the then-controlling common law case of Attorney-General v. Chambers, 4 De G.M.& G. 206, which had been decided in 1854.

Kent, if adjudicated would have settled among other problems for the surveyor the uncertainties involved by the addition or exclusion of spring and fall neap tides, and/or the monthly lunar tides to the computations establishing the level of "ordinary high tide." For this reason our California Land Surveyors Association engaged counsel and filed an amicus, only to be disappointed by the out-of-court settlement. However, you will find in City of Los Angeles v. Borax Consolidated Limited, 74 F 2d 901, 904-905 (9th Cir. 1935) an excellent discussion of the tidal boundary problem.

You can avail yourself of most of this material at the County Law Library at the Civic Center.

Good reading!

Very truly yours,

Dear Surveyor:

We have received your plat of survey of properties adjoining properties of Tide Lot 10, Salt Marsh and Tide Lands Map No. 106. On this plat the residence is indicated being on parcel #5-4-4, which is apparently the assessor's parcel number. The plat is on a scale of one to twenty. This would indicate that the house encroaches to the east on the Co. property approximately twenty feet on the south end diagonally to approximately five feet on the north end. This assumes that the ordinary high tide line is the boundary which separates the westerly edge of the Co. property from the easterly edge of the residence property.

It would be appreciated if you would write me a letter stating that the boundary separating the two properties is the ordinary high tide line; that the present proposed location of the residence encroaches on the Co. property indicating the extent of the encroachment.

For your information there is enclosed herewith a copy of the title insurance policy. Also enclosed herewith is copy of legal opinion indicating these tide lands are of a different classification than most tide lands.

Again, what we wish is a letter indicating that the ordinary high tide line is the westerly boundary of the

(Continued on Page 29)

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Price and Delivery-The Hewlett-Packard 3851A Data Collector is priced at \$2,950.00 (U.S. price). Delivery is 2 weeks from receipt of order.

For more information, contact Hewlett-Packard Company, INQUI-RIES MANAGER, Loveland Civi Engineering Division, P.O. Box 301-C Loveland, Colorado, 80537. Phone: (303) 667-5000, extension 2137.

New Literature

HEWLETT-PACKARD SURVEYING COMPUTATION **SYSTEMS BROCHURE**

A new, color brochure, Bulletin No. 5952-9161, describes the complete line of Hewlett-Packard Surveying Computation products that have been designed specifically for the civil engineering field. The brochure is available without charge from Hewlett-Packard.

The illustrated brochure describes the HP 3841 Surveying Computation Systems that are available from Hewlett-Packard along with a description of the features and specifications of HP's complete library of surveying software. Also described is the HP 3851A Data Collector which provides the "electronic-link" between field instruments and computational equipment and the HP 9871A Character Impact Printer.

A complete listing of the programs that are included in the Primary, Secondary, and Earthwork Pacs is also included. Contact: INQUIRIES MANAGER, Hewlett-Packard Company, Civil Engineering Division, P.O. Box 301-C, Loveland, Colorado 80537.

AGA SYSTEM 120 BROCHURE AVAILABLE

AGA Corporation has available an eight-page, four-color brochure describing the Geodimeter Station System 120, a complete survey data acquisition system based on the Geodimeter 120 and Geodat 120 memory.

The illustrated literature contains

Book Nook

- Shore and Sea Boundaries (1962)
 Reprint 1975—Aaron L. Shalowitz, U.S. Department of Commerce Publication No. 10-1
- Tide and Current Glossary— U.S. Department of Commerce, N.O.A.A.—National Ocean Survey (1949) Revised 1975. Special Publication No. 228. \$ 0.75 ea.
- 3. Proceedings; Water and Water Related Boundaries Workshop II, May 20 & 21, 1977, Irvine, CA (262 pages)

CLSA Members . . . \$15.00 ea. Non-Members . . . \$20.00 ea.

- 4. Coastal Zone Map #TP-00189 -Florida, Palm Beach County, Lantana to Boynton Beach— 1.10,000 (1970)
 - An extremely interesting map format which contains detailed printed instructions to Surveyors on How to Locate a Mean High Water Line According to Law, adopted by the Florida State Legislature. A real collector's item \$ 2.50 ea.
- 5. Restoration of Lost or Obliterated Corners & Subdivision of Sections—a guide for surveyors—United State Department of the Interior, Bureau of Land Management—1974 Edition. . .75 ea.
- Metric Practice Guide for Surveying and Mapping American Congress on Surveying and Mapping. This Metric Practice Guide has been prepared to aid those engaged in surveying and mapping

- in the use of the International System of Units (SI) in accordance with recommendations contained in the Metric Conversion Act of 1975, Public Law 94-168. 1.50 ea.
- 7. Cassette Tape Recordings of the CLSA Water & Water Related Boundaries Workshop II at Irvine, CA-May 25-26, 1977. Costs have been established as follows:
 - Complete 10 cassette set, including "Proceedings" (Item 3 above) (Over 8 hours of lecture and discussion)

CLSA Members \$50.00 Non-Members \$60.00

- a. The Pornography of Water and Water Related Boundaries (Terms and Terminology)— James N. Dowden, L.S., Boundary Determination Officer, State Lands Commission.
- b. Tides, Time and Shoreline Processes – Dr. Warren C. Thompson, Professor of Physical Oceanography, U.S. Naval Post Graduate School, Monterey.
- c. California Law Looks at the Water Boundary-Peter H. F. Graber, Esq., Deputy Attorney General, Land Law Section, Department of Justice.
- d. The Ordinary High Water

 Mark How Determined! –

 Ned Washburn, Esq., Attorney at Law, Landes, Ripley

 & Diamond, San Francisco,

 CA
- c. To Insure or Not to Insure— That is the Exception!— James R. Dorsey, L.S., Executive Vice President, Winter,

- Durnford, Dorsey and Associates, Land Consultants.
- f. More Muddles in the Puddle— The Jurisdictional Aspects and Boundaries of the California Coastal Zone Commission and San Francisco Bay Conservation and Development Commission—Raymond B. Thinggaard, L.S., Assistant Manager Real Property, Leslie Salt Co.
- g. Internal Conflicts—State V. Federal Rules, Sovereign Lands and Rights—Ed Griffin, L.S., Chief, Branch of Cadastral Surveys, California State Office of U.S. Bureau of Land Management.
- h. The Restless Tides and the Marine Boundary Program of the National Ocean Survey—Carrol I. Thurlow, Deputy Chief, Oceanographic Division, Office of Marine Surveys and Maps, N.O.S.
- Slope and Undulations of Tidal Datum Planes and Quantification of Accuracy of Various Methods—Cdr. A. Nicholas Bodnar, R.C.E. (California) Principal Engineer, Requirements and Facilities Section, Tides and Water Levels Branch, Oceanographic Division, Office of Marine Surveys and Maps, N.O.S.
- j. Survey Procedures For Determination of Mean High Water-Jack E. Guth, Capt. N.O.S. (Ret.), President of Coast Survey Limited, Herndon, VA.

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LIABILITY

(Continued from Page 17)

and relied on the inaccurate survey and description. The Supreme Court of Tennessee held that the surveyor was not liable, expressing concern about "unlimited liability" for "unlimited time."

8. The different transaction. "No liability is incurred if a product or service is not used in the way it is intended to be used." If a surveyor makes a topographic map to be used for reconnaissance purposes and later the map is used in the final decision for a facility, the surveyor is not liable for any damage suffered as a result.

Statutes of Limitation protect surveyors somewhat from unlimited liability. Originally, the statute began running when the error was made, although in many states the statute of limitations begins running out when the error is discovered.

In summary, "A surveyor may be held liable for an inaccurate survey to

either an identified or unidentified third person with whom there is no privity. Liability may be incurred if it is reasonable to believe that the third person may act in reliance toward the survey." For protection against liability, Dean and McEntyre suggested the surveyor:

- Have knowledge of circumstances where liability has been or might be incurred;
- 2. Have a knowledge of the basis of liability:
- Seek professional legal counsel on contracts with clients, on survey certifications to limit liability, or to ascertain any aspects of the law relating to liability, in the jurisdiction where the survey practices;
- Based on 1, 2 and 3, determine whether liability (errors and ommissions) insurance should be obtained for all services rendered or perhaps just for selected services or clients.

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	March 10-14	1980 SPRING A.C.S.M. CONVENTION, St. Louis, MO
	March 27-29	C.L.S.A. CONFERENCE, SHERATON INN, Fresno, CA
	April 26	C.L.S.A. BOARD OF DIRECTORS MEETING
	July 26	C.L.S.A. BOARD OF DIRECTORS MEETING
	August 10-12	N.C.E.E. ANNUAL MEETING, Hyatt Lake Tahoe, Lake
		Tahoe, Nevada
	October 7-10	A.C.S.M. FALL CONFERENCE, Niagara Falls
	October 18	C.L.S.A. BOARD OF DIRECTORS MEETING
	1981	
	February 18-22	WESTERN STATES REGIONAL CONFERENCE OF LAND
		SURVEYORS, M.G.M. Grand Hotel, Reno, Nevada
	February 22-27	A.C.S.M. SPRING CONFERENCE, Washington, D.C.
	August 9-12	N.C.E.E. ANNUAL MEETING, Williams Plaza, Tulsa,
		Oklahoma
	September 8-12	A.C.S.M. FALL 1981 CONFERENCE, San Francisco, CA
	1982	
	March	A.C.S.M. SPRING CONFERENCE, Denver, Colorado
	September 19-25	A.C.S.M. FALL CONFERENCE, Hollywood, Fla.
	Please send infor	mation on meetings, to be included in this Calendar, along with
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	Santa Rosa, CA	95401
l		endar of Events

C.L.S.A. BOARD OF DIRECTORS MEETING

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PERSPECTIVES

(Continued from Page 23)

Co. property. Also a statement that the present planned location of the house encroaches on the Co. property. Your letter should include a statement of the extent of the encroachment.

Very sincerely,

Dear Client:

Responding to your letter of July 20 ult. several observations not apparent on the drawing, perhaps may deserve comment. The most important, of all matters pertaining to tidal boundaries, is the means of establishing the intersection of the plane of ordinary high tide with the protruding land mass. The exact determination of the true boundary, due to infinitesimal meanderings of the shore line is, by necessity, an abstraction. From a practical viewpoint, neither the precise elevation of O.H.T. nor the precise configuration of the shore line need be considered if he adjoiners are content with a reasonable approximation of the ideal line. Our work was based on techniques expected to yield a positional

error no greater than one foot. Accordingly, in compliance with your telephone request of even date, I can state that the structure trespasses Tide Lot 10 to the extent of 22 feet at one end and 5 feet at the other end. My statement that the westerly boundary of the Martha Co. property is the ordinary high tide line would scarcely bear the force of the title policy description "-to the shore of San Francisco Bay at ordinary high tide; thence along said shore line-" And still less the authority of the many sustaining court decisions. However, you may consider such to be my statement.

Personally I would not lean too heavily on some of the opinions given in a letter of May 28, 1920. Much law has since been made, broadening the interpretation of the government's residual rights held in trust for the use of the public.

Very truly yours,

NEW LITERATURE

(Continued from Page 24)

detailed information regarding the System 120's use with virtually any theodolite for automatic measurement, display, and recording of vertical height, slope distance, horizontal distance and vertical angle.

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Complete technical specifications for the Geodimeter 120 are also supplied.

The free brochure is available from AGA Corporation, Geodimeter Division, 385 Bel Marin Keys, Suite F, Novato, California 94947, (415) 883-2367; or 550 County Avenue, Secaucus, N.J. 07094, (201) 348-3955.

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The California Surveyor is requesting cover photos from its readership. Photos should be 8 x 10 glossy-for-repro. Information regarding the subject of the photo plus the photographer/contributor should be sent to the Editor along with the photo and a letter giving The Cal Surveyor permission to publish the material.

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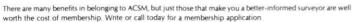
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Askania A-2e 1" Directional Theodolite	15.00	300.00
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Wild T-3 Theodolite (.2" direct reading)	35.00	600.0
Lietz B-1 Engineers Automatic Level	6.00	100.00
Wild NA2 Automatic Level	15.00	150.00
Zeiss Ni2 Level	15.00	150.00
Marine Surveying Equipment:		
Raytheon DE-119 Recording Fathometer*	20.00	400.00
Raytheon DE-719 Recording Fathometer*	25.00	500.00
Raytheon 723 Precision Survey Fathometer*	50.00	600.00
accuracy .25 pct. to 250 fathoms		
Raytheon DSF-600 Deepwater Fathometer	200.00	2,000.00
EG&G Mark 1-B Side Scan Sonar * **	500.00	4,000.00
EG&G Uniboom Siesmic Profiler * **	400.00	3,000.00
EG&G Sparker (1000 joule) * **	400.00	3,000.00
Braincon-Histogram Recording Current Meter	50.00	500.00
Teledyne-Gurley Current Meter	25.00	250.00
Honeywell Sea Scanar	50.00	500.00
Shipek Sediment Sampler	50.00	300.00
Miscellaneous:		
American Paulin Altimeter M-1	4.00	75.00
American Paulin Recording Barograph	15.00	150.00
Triple Prism reflector assembly	3.00	65.00
HP 9815 Surveying Calculator with Software	30.00	300.00
Super Cobra (portable drill)	20.00	300.00
GE Radios (Porta-mobil and Master)	10.00	100.00
Power Plants (110 & 12 V)	15.00	150.00
Telan Thermal-Electric Generator, 30 day e	endurance	
unattended with 100 lb. propane bottle	25.00	250.00
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