

The People Need You

By Mike Majchrzak, P.E., G.E., M.ASCE

The recent Presidential primaries have spurred a high awareness and excitement in our political system and in the running of our own government. This interest has further emphasized our need for leadership. This leadership is needed to provide an assault on issues such as high oil prices, increasing cost of living, declining housing markets, declining municipal budgets, a roller coaster stock market, global warming, and the war in Iraq. The people crave a way to solve these



Figure 1. Astronaut and resident Stephen Robinson presents Mayor Mike Majchrzak (left) with the Town's patch which flew with Robinson in space on the STS-85 Discovery mission in August 1997.

problems at local, state, and national levels. How better to address the need to solve these problems than to have leaders from the scientific community such as engineers, geologists, and scientists — leaders who are trained to analyze and solve problems? The scientific community brings a rational sense to solving problems with a step-by-step analysis, and often is not as swayed by special interests. How can we as geologists, scientists, and engineers provide that grass-roots leadership?

Getting Involved

Involvement can be in many forms depending on the level of government, the type of participation, the responsibilities, the length of time of service, and how much fun you want to have. In 1986, about 10 years following graduation from college as a geotechnical engineer, and living in the same small community of 16,000 people in the hills east of San Francisco, I was struck by the desire to become involved in my community. Involvement is probably part of our "inner self." Volunteering, be it coaching sports, being a scout leader, aiding the needy, clearing parks, or participating in religious groups or volunteer organizations, provides a sense of participation and impact. And, it's usually matched with your passion. Having been a Boy Scout, I had developed a strong sense of commitment to my country and community. Now it was time to serve.

So I called the local government. I remember a long silence during the conversation because typically someone off the

street does not show interest. The Town had an opening on the Design Review Board. How about that — an engineer applying for a spot on the Design Review Board! What a perfect match! The interview occurred with my ego high. And, guess what? I was not appointed. Depressed, acceptance of the fact that I had not been selected to the Design Review Board did not come easy to this young, world-shaking engineer.

But four months later, I got a call after someone else stepped down. Would I serve? Of course.

In preparation, I read the General Plan for the Town, the municipal code, and the design review guidelines. The General Plan is the strategic document that sets the direction for the community. Strategic Plan? I know what that is because all scientific and engineering businesses now have one. It took me a while to feel comfortable in the role, which included reviewing designs of structures, walls, fences, parks, and signs. Wow, I was actually participating in what the community looked like; that was awesome! I remember how important business signs were. We are a small bedroom community, where, as they say, the streets are rolled up after 10 p.m. every night. So, we did not want internally illuminated signs. We stuck by that direction, and had to take on several McDonald's, Bank of Americas, and Taco Bell's to come up with a better-than-typical design. We had a certain approach and, like our engineering clients want many times, not just the typical. This was good because it gave me confidence in interacting with the project managers and clients at work. And, it made you feel like an essential part of the community.

Making an Impact

As an example of hands-on impact, I discovered that there were no geotechnical requirements for improvements in our community that are located on landslide-prone

hills. Being the only geotechnical engineer that the Town had ever seen in a community service role, we decided to take on the development and implementation of design standards for geotechnical aspects of projects. The first step was that the developer needed a geotechnical report. That was actually a novel idea back then, but now it is common practice. However, the government and the developers were very critical, claiming that a geotechnical report was not necessary and created additional costs. It took a lot of pavement pounding to get community support, but now every substantial project needs a geotechnical report. This was even more fun because my involvement actually created improvements in the system and greater public safety.

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Also rewarding was the interaction with the people that came before the Design Review Board. The object of the board was to work with the applicants, not just make rulings. There was one project where the applicant wanted to build a home but wanted to cover more of the building pad than allowed by the guideline. Finally, after much debate, the applicant’s wife stood up and said, “We just got married. He has five kids from his previous marriage and I have four. We can’t find a place where we can all live together, so we’re living apart.” The longer we delayed the construction of the new home, the longer she was being kept separate from her new husband, and she was passionate about being with her husband. We worked out the difference that night.

Moving Up

My mother-in-law asked me if I would be interested in the next step beyond the Design Review Board, which was a subcommittee of the Planning Commission. My first reaction to moving to the Planning Commission was to say no because I am an engineer, not a planner dealing with the layout of the Town and the implication of the General Plan. However, after some time, I came to understand that the purpose of the Planning Commission was to solve problems and implement solutions based on technically strong judgments supported by analytical reasoning, understanding the sense of community desire, and financial feasibility. So after being on the Design Review Board for 2 ½ years, I applied, and was selected to the Planning Commission.

Being on the Planning Commission was easier than anticipated. We addressed land planning issues, heights of structures, hillside development criteria, development agreements, new streets, design criteria, improvements of parks and other public lands, and many more aspects



identified in the General Plan. I served on the Planning Commission for three terms of two years each (the maximum allowed under Town rules). It took me almost two years to really understand the role. What really helped both me and the other Commissioners was my strong understanding of analytical processes. We did not need to know specific technical information because we had Town staff and consultants to assist, but it was the strong understanding of the process of addressing and solving the problems that was so helpful.

This involvement perfectly matched my professional growth. As a staff engineer moving into a project manager role at work, the Design Review Board matched well with my strengths and passions. Moving to the Planning Commission expanded my viewpoint as I grew into a project manager. Where the Design Review Board emphasized how projects looked (similar to being a staff engineer), the Planning Commission looked at functionality, and how it all fit together. Boy, was this neat (sorry for the 1960’s phrase) and fun! I tried new concepts at the Planning Commission and then at work, and vice-versa.

The Town Council

In 1994, my mother-in-law asked if I would move on to the next step, Town Council, an elected position. You’ve got to be kidding. I’m not a politician. I’m an engineer!!! Politicians are lower than low. And I’m not much of a baby-kisser and hand-shaker; that’s probably why I am an engineer. It got me thinking, though. Would I be able to focus on more global aspects of our community, rather than on specific details? I discussed it with a number of people, and the answer was definitely to run. The response was “we don’t necessarily agree with you all the time, but we know that you will analyze the situation, create a process, and get it done. We

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want people to get things done, not tell us how they can't do it.”

I recently heard a line by the political comic Lewis Black, who was questioning why we did not have a current national energy policy. The response, he commented, was that the politician's response was “that is too hard.” Addressing and solving problems are what scientists, geologists, and engineers do. So why not run?

Running for a political body became just another problem to solve using the processes developed by my engineering education and training. What amazed me was that people actually gave money and time to the campaign. It was scary to run a political campaign, and I walked the neighborhood, stood in front of the local market passing out fliers, was interviewed on television, ate meals at the local volunteer groups, and did things that were outside the typical engineering constraints with which we surround ourselves. Well, we won, and we won big. I use “we” because it took a huge commitment from my wife and children.

Serving on the Town Council was again different, but using the analytical processes ingrained in me made it easier. Serving on the Council occurred at about the same time that my career took a change. I moved from being primarily an engineer and project manager to being an office manager and then regional manager. What I learned at the Council about interacting and connecting with people helped me develop skills as a manager, and vice-versa. Overseeing a Town is similar to overseeing a very

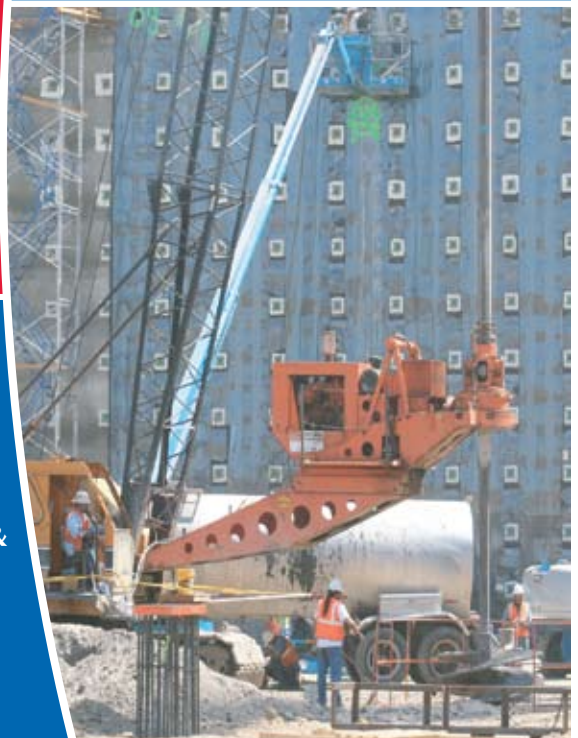
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large project or office with multiple disciplines, budget and people constraints, and changing expectations from your client (in this case, the people of the Town). The fun part was that I was able to implement improvements. I started looking at the running of the fire department, whether there should be a skate park, whether the old-looking shopping center should be improved, upgrading the police department, committing funds for infrastructure, assisting in helping the government be responsive to the community needs, and keeping the budget balanced.

These, and many other items, matched extremely well with my activities as a project manager. We implemented goal-setting with all of the government departments and boards (like we were doing at the business level), managed budgets in similar format to our businesses, and dealt with HR issues. Interaction with the people of the community (whether the Town or the company where I am employed) was extremely important in order to understand their wants and needs. And, you make an impact. After being elected to three terms on the Town Council, and then serving three terms as Mayor, I decided that it was time to give younger people the opportunity to sculpt the community. This is also what I have done at work.

Your Community Needs You

As scientists, geologists, and engineers, we generally have a need to be part of the community. Our involvement typically takes the form of creating new structures, repairs of landslides, repairing or improving the infrastructure, and developing a better environment. Being part of the government provides an additional sense of involvement and impact that starts at an earlier stage and allows for total satisfaction by being involved from conception to completion. The community where you live also wants that involvement and impact, and needs your problem-solving approach. I hope my story spurs a passion in you to take your skills and apply them to the community around you.

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why it will be important that “for a profession that defines itself as problem solvers,” we become part of the solution and leaders of change by rightly taking our place at the public policy decision-making table.

ASCE’s Codes and Standards Council serves ASCE and its members by monitoring standards and building code development groups, and assisting when new standards are developed by ASCE. Traditionally, standards and codes have been used to guide designers and quality-control entities such as laboratories. But when litigation or the threat of it is raised, the prescriptive features of codes and standards can become paramount along with a clear understanding of the standard of care. Because geo-professionals need to understand the impacts of codes and standards and standard of care on their practice, these topics were part of a panel discussion at Geo-Congress ‘08 in New Orleans. Robert Thompson has captured the most important aspects of that discussion in “Standard of Care Versus Codes and Standards.”

In Skip Watts’ commentary, “The Erosion of Geoscience Education Programs,” he alerts us to a recurring problem, the loss of or the reduction of geoscience programs at many of our nation’s colleges and universities, at a time when demands seem to be the greatest. While there are many factors at play, he asks the geo-engineering community to take actions to help stem and reverse this troubling and too-pervasive trend.

Kord Wissmann’s commentary, “The Grass is Greener,” reminds us that as the world is “going green,” there are numerous problem areas with burning geo-needs and who better than us to start solving them?

Most of us know or eventually learn that agreeing to serve the wrong clients or client representatives may be the top cause of claims and losses geotechnical engineers face. Because our GeoCurmudgeon has seen it happen way too many times, he offers some astute guidelines to help us consider whether to accept or decline a potential project assignment. Check them out.

This message was prepared by Jim Withiam, Editor-in-Chief of Geo-Strata.

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