

**A Professional Engineer Serving in Local Elected Political Office –
Personal Observations**

By: Craig N. Musselman, P.E., Dist.M. ASCE

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The purpose of this “paper” is to present personal observations about some of the benefits to the public and some of the challenges faced by a Professional Engineer in serving as a local elected official, in response to a request for such a paper. This is not a scholarly paper; it doesn’t seem to be a scholarly topic. Rather, it is a series of personal observations of one engineer serving in a specific local elected role, with some conclusions drawn which may be of interest to other engineers who may consider serving the public in political office. It is written in an informal style.

What is described in this “paper” isn’t very important in the grand scheme of things. It describes experiences at the lowest, and most basic, level of elected office in our political system. The experiences and the challenges faced by an engineer serving in political office are certainly different at this level than would be the case in serving at a state or national level. They say that “all politics are local”, and these circumstances are as local as one can get, serving in office as an elected official in a small New England town.

Background

Descriptions of both this specific political office, and this engineer, are presented below to set the background.

The community is a semi-rural oceanfront community in New Hampshire with a population of 5,300. The Town has extraordinary natural resources including seven miles of ocean beaches, many hundreds of acres of salt marsh, and a group of small islands seven miles off the coast, called the Isles of Shoals. Despite intense development pressures over the past 60 years, the town has been successful in retaining its semi-rural character through the acquisition and other preservation of forests and wetlands off the Town's rural roadway system. This is a nice place to live, and real estate values have risen accordingly over the years. This is generally perceived as an affluent community as it has one of the highest median incomes in a state which itself ranks high in median income in the US. Despite that, the percentage of households of modest means is similar to that of other less affluent communities in the region.

Unlike in some other areas of the country, New Hampshire is divided into Towns and Cities, each of which provides necessary services to its residents. County and other regional governmental entities provide only specific, limited services. Most public services are provided by the municipality.

Towns in New Hampshire are governed by a "Town Meeting form of government" whereby residents vote at the polls to elect local officials, adopt a budget, adopt or amend ordinances, and vote on "warrant articles" which can be capital appropriations for a new facility or piece of equipment, or non-money items such as a statement of community opinion regarding global warming. Voting day is preceded by a "deliberative session"

where the steadily dwindling number of people who show up deliberate and decide each specific warrant article to be voted upon. In the Town Meeting form of government, the voters are the legislative body which sets budgets and broad direction.

The governing body in a town is the Board of Selectmen (some in New England are calling it "Selectperson" so that it isn't sexist, but we don't, mostly because we never have). The Board of Selectmen has the statutory responsibility to run the affairs of the Town in accordance with the votes of Town Meeting. In our community, it is a three member board. I serve as one of the three Selectmen. All decisions are made by majority vote.

I have served with two other Selectmen who are very different people; a fact of life in politics. One is a retired mail carrier and a fiery local politico who would be as at home as a Boston city councilor as he is in this small New Hampshire community. He has his finger on the pulse of the community. He once staged a media event, handcuffing himself to a Selectman from another community, around a flagpole, to protest the establishment of a statewide property tax which was unfair to local communities. The other Selectman is a retired teacher who is an artist and a gifted writer. Her family has lived in this community for more than 300 years, and she protects the Town, its traditions and its natural resources with steady resolve. Fiery and steady. Very different. I've appreciated both of them.

The affairs of the Town are run by the Selectmen with the assistance of a Town Administrator who has virtually no statutory authority, but carries out the directives of the Selectmen. Despite the lack of authority, he capably gets most things done with policy guidance from the board. The Town Administrator is an affable and smart ex-Police Chief who retired young and took this on as a second career. He manages police, fire, public works, recreation, welfare, assessing, personnel and town finances under the responsibility of the board.

I am a civil and environmental engineer with thirty three years experience in the planning, design and construction administration of public works facilities – wastewater, water, solid waste, roads, drainage, public works facilities, and a minor league baseball stadium thrown in for fun. I have completed public works projects working for over 100 towns and cities in New England, so I have experience with Boards of Selectmen of various levels of function and dysfunction. I also manage my own small firm with 20 some employees, so for many years I've managed an organization and its business, with what that entails.

I am a “newcomer” to this community, having moved here from an adjacent community four years ago, but I have served the Town off and on for thirty years as their consulting engineer on various projects. This is a tough place politically. It was the site of one of the most contentious sewerage battles in the history of New England, and I was in the middle of those battles as their consulting engineer for a decade. At one hot public meeting, one of the eloquent local denizens, aggrieved by something he erroneously

thought that I thought, rose to say, “Sir, you epitomize all that is wrong with the twentieth century”. That’s a heavy burden for a then 29 year old engineer to bear. I suppose I bore that burden for a long time; at least until the dawn of the twenty first century. Anyway, although things have been wild and wooly politically in the past in this community, things are relatively tame at the moment. In local politics, that’s usually when something is about to blow.

So, enough of the background. What are the benefits of having an engineer serve in local political office and what are some of the challenges faced? Some observations follow.

Ethics

Politicians are constrained by whatever statutory requirements exist governing the behavior of public officials. In our state, by my read, this is limited to constraints regarding actions which might benefit them personally, and upholding the constitution and laws of both the state and the US. It’s not a long code of ethics. And the interpretation of that short code is subject to the unique sense of right and wrong of each individual. Engineers, on the other hand, function under codes of professional conduct which vary by the state in which the engineer practices, and also by codes of conduct

from various professional organizations, such as NSPE and ASCE in my case. These codes of conduct become ingrained in the way we function over time. In my experience, the vast majority of engineers function well within these codes of professional conduct, and don't routinely test the limits.

An engineer can't, and shouldn't, "check these codes of conduct at the door" when they become involved in politics. This is a distinct advantage in serving the public, and is important in gaining public trust.

The code of professional conduct, however, typically applies when an engineer is providing services in a professional capacity as a Professional Engineer. When a P.E. is serving in political office, in a political role and not in a professional role, the professional engineering standards of conduct probably don't legally apply, and the same ethical constraints apply to an engineer as would apply to any citizen, in most cases. There are some cases in local political office where one might be found to be practicing engineering simply because of the topic being addressed and the engineer's background. There is potential for gray areas, in my experience. I am aware of legal precedents in some states where an engineer serving in a non-engineering role is not held to the engineering code of conduct in that specific circumstance. Still, it is better not to check your code of conduct "at the door" when serving in political office, in that most provisions of engineering codes of conduct lend themselves well to transparent, open decision-making in the public interest.

In my experience, there are two exceptions to the code of professional conduct which do not apply, or always apply, to service in local politics, as described below.

In my state, among many other things, the code requires engineers to make all statements in an objective and truthful manner, and include all relevant and pertinent information in such statements. There are times in political office when relevant facts aren't public knowledge and can't be disclosed for a variety of entirely legitimate reasons. There are other times when it just isn't in the public interest to debate every last detail of a decision which is otherwise clear, and clearly in the public interest. And there are often times when in the course of decision-making it is in the public interest to be other than objective, and to ardently advocate a certain point of view. In political office, your job in some measure is to encourage public discourse and input, but at times it becomes necessary to influence that discourse in the interest of reaching good decisions. It is a different role than the practice of engineering. The code of ethics needs to be applied appropriately within the political context to best serve the interest of the public, and at times, this specific aspect of the code of conduct doesn't and need not apply. If that sounds ominous, it isn't intended. Sometimes, this is simply a different role and requires a different demeanor in the public interest than would be the case in professional practice.

The second exception is that engineering codes of conduct typically require performing services only within your areas of competence. Serving in political office requires that you make decisions on matters about which you know very little and have no professional competence whatsoever. It is the nature of the thing. On these matters, you

ask questions, and make decisions as a somewhat informed citizen, hopefully, and certainly not as a professional.

There are some differences and exceptions as described above. But think about how much most political discourse would be improved if all politicians ascribed to the ethical constraints listed below. These are all taken from the New Hampshire standards of conduct for professional engineers, modified somewhat and paraphrased to apply to political office rather than to professional practice.

1. Issue statements in an objective and truthful fashion, and include all relevant and pertinent information in such statements (where appropriate, see above);
2. Act at all times as a faithful agent or trustee of the public interest of the entity which you serve;
3. Avoid deceptive acts;
4. Conduct yourself honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the office;
5. Issue no statements, criticisms, or arguments on matters of public policy which are influenced or paid for by an interested party, unless the interest of that party is clear, and a matter of public record where appropriate;
6. Do not attempt to injure, maliciously or falsely, directly or indirectly, or indiscriminately criticize others in public;

7. Inform the public (and/or withdraw from deliberation and voting) in the event of any business associations, interest or circumstances which could influence your judgment or the quality of your public service;
8. Not solicit or accept financial or other valuable considerations from anyone doing business with the public entity you serve;
9. Not knowingly associate with any person who is engaging in fraudulent or dishonest practices.

The above fairly represents the basis on which an engineer who does not “check his or her code of conduct at the door” should function. It is up to the reader to gauge whether government would improve if more people serving in political office would adhere to similar standards of conduct.

The Engineering Thought Process Applied to Political Decision-Making

Engineers are trained and experienced in a deliberate problem-solving process involving determining what the problem is, formulating and evaluating alternative solutions to that problem, assessing the impacts and risks of alternatives, choosing a course of action, figuring out how to get it done, and doing it. This becomes as ingrained in us as does our ethical conduct. There is no other way to validly solve any problem without going

through those steps in the thought process in some fashion. We don't need to be pedantic about it, but none of those steps should be skipped in any decision-making.

Here's the problem with our engineering thought process in local politics, though. In my experience, there are two problems or challenges.

A wise engineering professor I once had explained that the trick with engineering is to figure out all the information that you need in order to assess and solve a problem. You then cut that information in half and think about how to manage the risk of not knowing the half that you cut out. You then cut that in half again, and go do the job. He used to add to that saying that you call it "close enough for government work". The challenge in politics is that you cut the information you need by a factor of 10, or more. In this role, you never have the time or resources to get bogged down in minutia. There are too many details. You know from long experience that the "devil is in the details", but you're in a policy making role. At times, this feels a little like flying on a trapeze without a net, to an engineer. Sometimes you have to make decisions with 5% of the information you would need to make an engineering decision.

This exacerbates the second problem.

Engineers are in responsible charge. We can't function otherwise. To people in other walks of life, I'm sure we seem to varying extents like control freaks. But we simply cannot do what we do without being in responsible charge. In politics, you are in responsible charge of absolutely nothing. Nothing. In setting policy, you are utterly

dependent on staff and others pulling together the details, which you will never see, and getting the policy implemented right. In some cases, that will be done by staff and others who are true professionals, competent, working cooperatively, and can be trusted implicitly. There's a great deal of implicit faith in staff necessary in this role. There are checks and balances, but there's a lot of faith as well. Sometimes, public policy gets carried out by staff who you know may not "get it" or who may disagree. In this case, the capabilities and willingness of individuals to implement things needs to be taken into account in the decision itself, as in the "assessing risk part" of the wise professor's advice. You aren't in control.

So, you are deciding things without any of the detail you normally need to decide anything, and relying upon people with varying capabilities to get things done, and you have no control over any of the details. Flying without a net. That's what it feels like sometimes. But, still, I think it is a positive thing to have an engineer who understands those variables provide input in the decision-making process.

Running for Office

This is really out of character for most engineers.

The first time you put up political signs is strange. It seems inappropriately self-serving, which it is. We as engineers don't do that type of thing. It is odd to see your own political sign, and then you have to keep driving by them for as long as they're up.

The best way to run for political office is to meet people individually, through knocking on doors or at numerous parties held to meet as many people as you can. It is so out of character for me that I didn't do it. I put up signs, did a mass mailing to all residents using a tri-fold that explained my background and what I could do to help, and let it ride. A candidate's night held by the local league of voters was easy; it was like making a presentation to the public on an engineering project, only talking about town issues and how I would address them. In this circumstance, what I did to run for office was sufficient, but most who run for office need to get over what I chose not to get over and get out and meet a lot of people and find out their concerns.

The tradition in New England on voting day is that one stands outside the polling place for the full twelve hours, even if it is 25 degrees and sleeting. On some of these days, it seems that it is a good thing if your legs freeze, because otherwise they might buckle.

And then the votes are counted. In almost all circumstances, you don't have a really good sense as to how many votes you might get. At this low political level, you don't have polls, and don't have a clue. You could be surprised in either direction. You know you will feel oddly rejected if you lose, and may or may not have a sense as to why you might lose. But someone has to lose. And voters can decide how they vote for all sorts of reasons. This is no different really than in the practice of engineering when you submit great proposals, and sometimes you win, and sometimes you lose, and sometimes the reason you lost makes sense, and sometimes it doesn't at all. Elections are the same

way. Win or lose, you just deal with it, learn from it as best you can, and move on. You can say “don’t take losing personally”, but that is easier said than done, because, at the local level, this is personal.

Don’t Do it for the Money

In my role, I receive a stipend which by my calculation compensates me for my time at considerably less than the minimum wage rate. That is largesse compared to our state legislature. We have a citizens legislature which I understand used to be something like the fourth largest legislative body in the world, until the Soviet Union went out, at which time it became the third largest. The legislators get paid \$100 per year plus mileage. Keep practicing engineering unless you’re already retired. This is public service. One doesn’t do it for the money.

Do it for the Right Reasons

Some people run for political office because it gives them a sense of importance, or they have an axe to grind regarding a specific political issue, or they would like more things to do, or they like to hear themselves talk, or they have a sense that winning may feed their ego, or they would like to raise their public profile. All of these reasons, and many others one could list, are completely wrong-headed. One should run for public office out of a

sense of service to the public, and a desire to serve the greater good. Applying engineering judgment, to matters of engineering and other matters, can serve that purpose. It isn't painless. Serving in political office can be of benefit to the public and personally sustainable if done for the right reasons.

Litigiousness

In our litigious culture, it seems at times that there are some people with too much money and perhaps too little to do. Not many, but some. They sue each other, with the Town in the middle, or they sue the Town. Between that and the increasing litigiousness surrounding land use decisions (the primary source of legal disputes in my experience), the number and type of lawsuits that public entities are involved in can be shocking.

Good lawyers use every argument and resource at their disposal, and the legal haranguing on both sides is often surprising. The public virtually never hears of these matters, as the communications with counsel are privileged and not public information. My view as an engineer was that disagreements can almost always be negotiated to achieve fair solutions outside of the court system. I have learned that not to be the case in many circumstances.

In some cases there appears to be no intent to arrive at a fair resolution, and in others there appears to be some manner of interest in litigating and appealing regardless of the merits. Having an engineer, among others, serving in local political office is of benefit as some engineers have long experience in interpreting statutes, dealing with lawyers, and

negotiating. I have found this situation to be worse than I ever suspected, despite the fact that I have worked with municipalities for decades. I just didn't know what went on behind the scenes.

Engineering Issues

Local political officials deal with a lot of engineering issues. In a few short years as a Selectman, I have dealt with:

1. making a decision on a round-about versus a signalized intersection;
2. working with the state DOT to finalize design concepts for replacing a bridge in a sensitive location;
3. keeping a summer resort hotel closed for a time in July until they met the fire code;
4. negotiating deals to get the ability to control water levels in public and private impoundments to create storage volume in the event of extreme weather events;
5. building a new public safety complex and dealing with major contractual disagreements (successfully);
6. attempting (unsuccessfully to date) to resolve a drainage lawsuit;
7. formulating and advocating passage of a bill in the state legislature to change the enabling legislation of a regional sewerage authority in the town's interest;
8. dealing with policies on tree cutting by utilities;

9. responding to natural disasters (how come we keep having the hundred year storm over and over again, people ask);
10. providing input on a salt marsh restoration project;
11. evaluating a change to single stream recycling;
12. planning a new salt storage facility;
13. planning (or not planning) sewerage extensions,; and
14. formulating the charge for a Town Energy Committee to address.

That is a lot of things in a few short years. All of these are engineering issues which required addressing on the part of local elected officials. Can thoughtful and well meaning politicians who are not engineers deal with these matters? Sure. They always have. Can an engineer in local political office be helpful with these types of issues? Absolutely. We would undoubtedly make better public decisions regarding engineering matters if engineers became more involved in the political decision-making process. A cynical consulting engineer might think that this is a lot of free consulting engineering. But it really isn't at the level of consulting engineering. It is overall public policy input and guidance, and nothing whatsoever in detail.

Budget and Financial Matters

Engineers are analytical by nature and most deal with matters of budgets, economics and finances on a regular basis.

Polite people describe our Board of Selectmen over many decades as having been spendthrifts, or maybe penurious. Others who are less polite say that the Board is cheap. One of our board members says with pride, “yes, we’re cheap; we’ve always been that way.” Always goes back centuries in this case. We bleed every nickel out of every rock, but spend money to do what really needs to get done. Despite being cheap, we as a town appropriated \$5 million to acquire and preserve land because maintaining the character of the town and preserving its natural resources are of paramount importance. So, we’re cheap, except when it really matters.

Can an engineer help in formulating and managing budgets? Sure. Having an engineer in the mix brings another set of analytical eyes to a process which is typically well done otherwise.

Reputation Risk

There is not insignificant risk in serving in political office that your reputation can take significant hits. This may not be a major issue for engineers who work in the public sector and have secure positions, but for an engineer in private practice, this issue merits consideration. In politics, decisions need to be made and someone is often aggrieved by each decision. It may only be a matter of time before everyone is aggrieved, or so it seems sometimes, and it may also only be a matter of time before you’ve been “called every name in the book”. This being a free country, citizens are free to make whatever

statements they wish, short of slander and libel, and newspapers are free to report any manner of public discourse regardless of merit, and they at times seem to do so with glee. In local politics, the risk is being caught in the crossfire of local arguments, sometimes rational, sometimes entirely irrational. For an engineer in private practice, where reputation is key to marketing success, the downside of serving in political office may exceed any conceivable upside (if there is any), if looked at only from a marketing perspective. This downside needs to be carefully considered by practicing engineers. Providing leadership has its risks. That doesn't mean that one shouldn't endeavor to provide political leadership, but rather that the risks should be considered.

Engineers with years of experience in dealing with the public have an advantage in serving in public office. Most engineers learn over time not to take the anger and irrationality of some members of the public personally, and to respond in a measured and professional fashion. Engineers who respond in kind to personal affronts don't tend to practice engineering in the public for long. This type of measured demeanor is what is required in local politics.

Business Conflicts

If you are a consulting engineer, serving in political office can run contrary to your business interests. Our board took a position on a piece of legislation pertaining to ports

and harbors which was opposite the view of the quasi-state agency overseeing ports and harbors. As the board chair, I signed letters to our state legislative delegation encouraging them to defeat a bill which was perceived not to be in the public interest. Somehow, our letter was printed in the newspaper as a letter to the editor, which resulted in the ire of, and an aggressive nasty letter in response from, the head of the quasi-state agency. During this same week, our firm had a qualifications based proposal, one of twelve, before this same agency and agency head, for the design of a bike path. Not good. But unavoidable.

Extraneous Issues

In politics, one needs to deal with matters both of importance and of little importance. In my case, the oddest circumstance was a hotly contested public debate over whether to continue a long-standing tradition of having an annual “Caliveras County” frog-jumping contest, on public property. The previous debate on this issue elicited calls from newspapers from as far away as London, and the decision had been made to continue jumping the frogs. In this debate, advocates of tradition on the one hand, harkening Mark Twain, and advocates of stopping claimed abuse of frogs and the environment on the other hand, each approached the microphone, young and old alike dressed as frogs, to make their case. On a straw vote of those present, those arguing for better treatment of frogs won the day, and the tradition was ended. There are a lot of extraneous issues to

deal with; most of them not nearly as humorous. In fact, most of the decisions which need to be made at this level are mundane “no-brainers”, and dealing with these housekeeping sorts of issues is about as interesting as watching paint dry, as they say.

Public Employee Matters

For an engineer in private practice, dealing with matters related to public employees is likely to come as a surprise. Many employment practices have grown by precedence and union negotiations over many decades. Many human resources and labor contract provisions are matters which would never be considered for a nanosecond in the “real world”. But they are what they are, and changes, rational though they might be, need to be negotiated, often at significant cost. So, in many cases, labor provisions which are clearly not in the public interest continue long term. The due process related to grievance procedures can be tedious when issues are petty and/or personalities are at the core of the problem. And when an employee isn’t working out, it is nearly a dilemma. In the private sector, there is much more flexibility. In the public sector, with the constraints at every turn, sometimes it seems as if it’s “six strikes and you’re out”.

The Press and the Public's Right to Know

Particularly at the local level, the public has a right to know what goes on with decisions and the decision-making process. This has certain exceptions, typically pertaining to legal matters of various sorts and personnel matters. The “smoky back room” where political decisions have been made in cities many years ago is, or should be, a thing of the distant past. Transparency is required in local politics in this “day and age”. Engineers can help in this fashion, in that transparency comes easy.

Dealing with the press is something. Newspapers are in business to sell newspapers. Fair and balanced journalistic reporting is what you might generally expect, but it is not always the case. Bold screaming headlines at times have no bearing on reality, and sometimes little bearing on the story immediately below. One would expect newspapers to report the news, but sometimes the presentation itself is creating the news, seemingly purposely at times. In political office, one needs to deal with the press openly, explaining relevant issues clearly, as necessary. But the story as reported can be expected at times to differ from the reality of the situation. See the section entitled “reputation risk” for further thought. Every story bears some manner of risk of inaccuracy, sensationalism, bias, and views of others which may or may not have any validity. In most cases, a response is inappropriate, and one goes on. The best advice typically is not to seek out coverage on unnecessary matters, and once coverage is underway, communicate, communicate, as appropriate to the issue at hand. And hope for the best.

On the other side of the coin, a cooperative relationship with the press is necessary in the public sector, as it is typically the most effective means of providing information to the citizenry on matters of importance.

Press coverage at times isn't dependent upon the importance of the issue. We regularly have no or little press coverage of meetings at which matters of some significant importance to the community are discussed and decided. And we've had multiple television station news trucks to cover a decision to permit a decorative fence in front of the residence of an internationally famous author. Not news at all. Go figure.

It Stays with you 24/7

Like your professional practice, this is another thing which occupies your thoughts all the time. Thinking through what is going on and how to deal with various issues is a continuous process. It's not, and shouldn't be, a consuming thing, but it will dilute your focus somewhat from the various other parts of your life which take focus. And as soon as one issue is put to bed, others are arising. It's typically one thing after another. As I was walking into a conference room in Philadelphia for an engineering meeting, my cell phone rang with the Police Chief calling to describe the response to a drive-by shooting in town. You've got to be kidding, a drive-by shooting, in our quiet town? I thought we had police to deal with speeding and dog issues at the beach.

Time

It takes more time than you initially think. While most public meetings are in the evening, many other activities inevitably require weekday attention. These are unpredictable, and need to be fit into one's schedule. Court appearances, grievance hearings, legislative testimony, and the like get done at their schedule, not yours, and require attention. In my case, I have the employment flexibility do be able to do what needs to get done, subject to project meetings and other work related schedules which can't be changed, which must take precedence over all other things. I also travel around the country on professional business about once a month on average, and am fortunate that those with whom I work, both in the office and in town, are more than willing to adjust schedules as necessary to work around my schedule. This flexibility is necessary.

The day and evening time devoted to public service is time which is not devoted to one's engineering practice, family and home, and whatever one does for fun and personal interest. It needs to be carefully considered as to whether or not the time commitment is affordable.

Summary and Conclusions

Engineers can provide effective and valuable leadership, and appropriately help to shape public policy, by serving in local elected political office. This is particularly true for those who are experienced in public projects, and who have firm management experience.

Running for office is likely out of character for many or most engineers, and takes getting used to. But you can't serve in elected office unless you win an election, and you can't win unless you run for office. The ethical conduct ingrained in engineers through years of professional practice serves them well in political office, and can be an important component in gaining and maintaining public trust. An engineer serving in political office brings expertise in engineering projects and in economics and budgeting which are important skills in local politics. Engineers considering this manner of public service and leadership need to carefully consider the reputation risk inherent in "wild and wooly" local politics, and in press coverage of local political issues. Serving in public office entails a significant time commitment, and flexibility in one's engineering practice to be able to provide the necessary time is essential.