

Book Review Editor: Theodore J. Wiedner, Ph.D., P.E., AIA

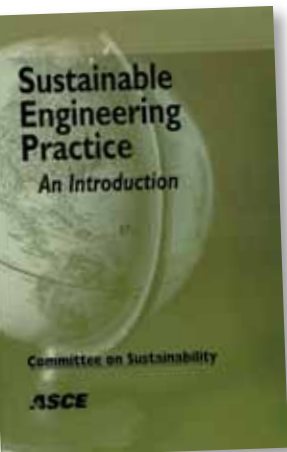
### The technical focus of this issue

includes two books about engineering; one that addresses the engineer's responsibility to be sustainable, and one about making effective use of engineering consultants. Both of these books emphasize the technical nature of the facilities business, but also the social, non-technical nature of our daily responsibilities.

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### SUSTAINABLE ENGINEERING PRACTICE, AN INTRODUCTION

ASCE Committee on Sustainability, ASCE, Reston, VA, 2004, 123 pages, softcover, plus CD, \$32.25.



Just as APPA has been involved in sustainability issues since 1914 so have civil engineers. Sustainable Engineering Practice provides a history of how civil engineers (whose expertise includes roads, bridges and structures, water treatment, dams and canals, energy transmission, and water control projects)

is a collection of reports, recommendations, and examples of notable sustainable solutions.

*Sustainable Engineering Practice* provides a brief history of world-wide sustainability since the Rio Summit of 1992, which formed the World Engineering Partnership for Sustainable Development, among other things. It also reviews the numerous initiatives that engineering societies have undertaken and completed since the Rio Summit. Among the initiatives are:

- an increased focus on the total cost of ownership
- sustainability in engineering education
- conservation of natural resources

- reduction of pollution, and
- environmental life-cycle assessment.

There are several examples of sustainable projects conducted by the U.S. Army Corps of Engineers, which reduced energy consumption to reduce environmental impact while saving money for other activities. These examples can be applied to many large facilities typical of higher education settings.

There are numerous other ideas presented that fall in the civil engineering profession, such as roads, transit, and water management. Needless to say, these can sometimes be difficult to implement due to societal inertia, which we all experience it, often until it's almost too late.

This moderately priced book and CD provide good references for anyone making facility decisions whether for a single building, campus, or town.

### HOW TO WORK EFFECTIVELY WITH CONSULTING ENGINEERS: GETTING THE BEST PROJECT AT THE RIGHT PRICE

Taskforce for the Update of Manual 45, ASCE, Reston, VA, 2004, 75 pages, softcover, \$24.

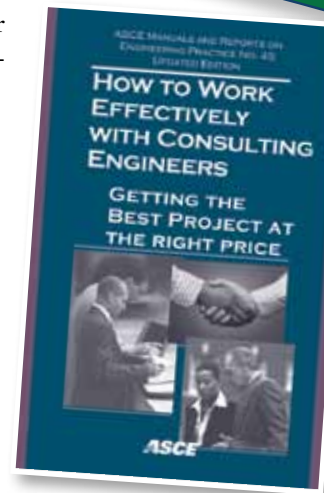
I'm biased. I expect professionals to work that way and I expect to have a professional relationship with them. I also take the attitude that it's important to think like the professional you're working with in order to have an effective relationship. So I read *How to Work Effectively* from several perspectives and was satisfied that most of my biases were reasonable.

It's not always good to read what you like, because you don't often learn something new. So you should be cautious. But I think *How to Work Effectively* does a good job of explaining different ways engineers can have a contractual relationship with their clients, and the reasons why one method is more logical than another.

From the owner — who hires engineers for various building projects — *How to Work Effectively* outlines the results of various levels of preparation on the owner's part, and how the professional's fee is affected by the information known when the contract is negotiated.

Obviously, more upfront information reduces questions and gives the professional the amount of effort needed to deliver the services. Correspondingly, the owner gains an understanding of how a professional calculates costs for services based on salaries, benefits, overhead, and profit. As a campus service provider, this same information helps me determine my organization's value.

There's nothing new about the elements of this book; the AIA has a similar publication, developed by the AIA Minnesota chapter and available online. But it's mostly focused on residential work as opposed to institutional work. The ASCE book is methodical, both broad and focused, and straightforward. It looks from the owner's and professional's perspective to identify best practices for a given setting. It is enlightening for owners and consultants who work with engineers. If you need to improve your understanding of the design-construction process with engineers, this may fill your needs. ☺



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