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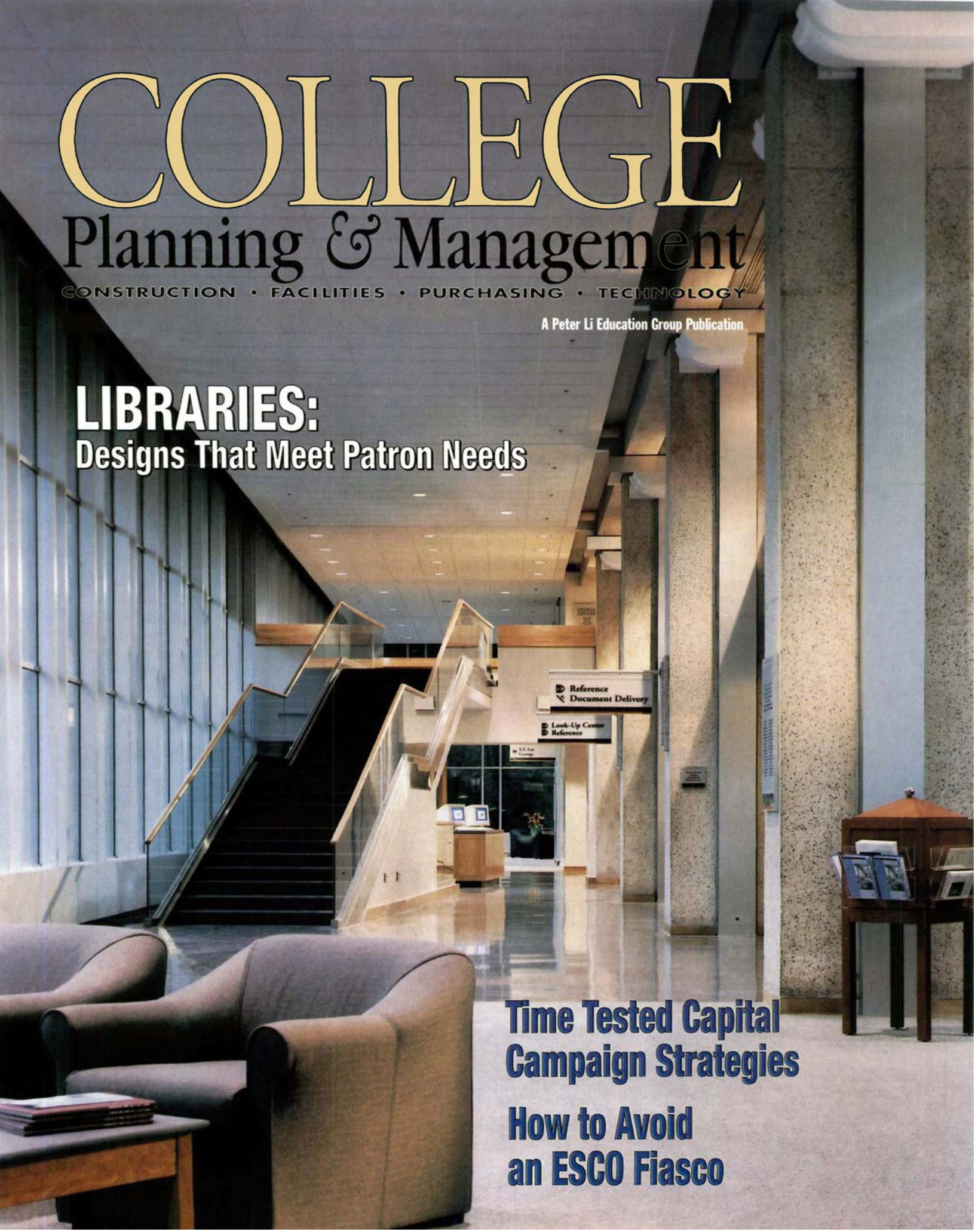

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How to Avoid an ESCO Fiasco

How to Avoid an ESCO Fiasco

Facility managers at Ohio University used a performance contracting consultant to assist them in hiring an energy services company that could implement an energy conservation project.

by Dorothy Wright, staff writer

Performance contracting seems like a win-win proposition: Work with an energy services company (ESCO) to implement an energy conservation project that will improve facilities and lower energy and operation costs. Pay the ESCO using the energy savings - not capital funds. After the payback period, keep the savings. Yet many college and university facilities planners are reluctant to do so. Some lack experience with this approach to funding and implementing a facilities project. Others have heard of cases in which a project simply did not deliver results or, worse yet, an educational institution became embroiled in litigation with the ESCO.

Facility managers at Ohio University in Athens, Ohio, found an effective solution: They relied on an independent consultant experienced in performance contracting to guide them through the process of selecting an ESCO. Now the university and its ESCO are in the first phase of implementing an energy efficiency project comprising new and upgraded lighting, heating and ventilation systems; enhanced building controls; and water conservation measures, including low-flow plumbing fixtures. When the project is completed, **the university will save $2 million to $2.5 million a year in energy and operating costs, which will pay for the project within 10 years.** After the payback

Photo courtesy Ohio University

Ohio University's independent consultant ZDS helped administrators select an ESCO to implement an energy efficiency project that will save $2 million to $2.5 million a year in energy and operating costs.

university will retain the annual savings.

Founded in 1804, today Ohio University is an educational community of 20,000 students and 3,500 faculty and staff. The 1,700-acre campus has some 190 buildings comprising a total 6.7 million square feet. In the 1970s the university created an energy management fund to carry out energy conservation projects, implementing a number of effective initiatives through the years. In the mid-1990s, with utility costs projected to rise to $19.1 million by 2020, the university knew it was time to make a major investment in upgrading its infrastructure and increasing energy efficiency.

The university's facility managers first identified performance contracting as a means to implement a new central chilled water plant. "Initially, the university saw no way to do this with existing resources, so we started looking for alternatives," says Terry Conry, director of Facilities Management. "While we have an outstanding staff, we didn't have anyone who personally had gone through a performance contract selection or implementation process. We were concerned about it, and we looked for help."

Selecting a Consultant

The consultant's key service would be to assist the university in selecting an ESCO. Through open advertisements and direct invitations, consultants were invited to submit their qualifications for consideration. After an evaluation of the RFQs, the university's facilities management team developed a short list of consultants, who were asked to provide the university with a proposal detailing their experience in the field of performance contracting. References were carefully checked, and interviews were conducted with finalists. All members of the consultant's staff who would be assigned to work with the university were required to be present for the interview.

The consultant's past experience with similar projects in colleges and universities was essential to Ohio University. "The consultants were asked to provide a list of at least five performance-based energy projects completed in the higher education environment," explains Ted Fares, director, Engineering and Technical Services, Ohio University.

Candidates were required to prove their expertise in design, planning, specifications, implementation and monitoring of energy conservation projects. "They had to be capable of analyzing energy use at our facilities and making recommendations for energy conservation projects which, if implemented, would provide guaranteed energy savings to Ohio University," Fares says.

Most important, they needed past experience in awarding similar contracts to ESCOs. "Knowledge of the legal and financial issues surrounding performance contracting was essential," Fares says

In addition, the consultant needed to be able to train the university's staff in operation, final inspection and commissioning.

As a result, the university selected ZDS Design/Consulting Service. Based in St. Albans, W.Va., and Cincinnati, Ohio, ZDS is a consulting engineering firm specializing in mechanical and electrical engineering, indoor air quality, commissioning and energy conservation projects.

ZDS had previously worked with the university in a traditional design and mechanical/electrical engineering role. "Our role in this project was to assist the university in defining its needs, ensure that the structure of the program met these needs and guide the university in its selection of a performance contractor," says Todd Zachwieja principal, ZDS.

Selecting the ESCO

The ESCO was selected through a two-step, RFQ/RFP process. The university advertised internationally, nationally and locally in trade magazines and newspapers. The advertisement required all candidates to attend a meeting at Ohio University to obtain the RFQ document, walk through the campus and participate in a question-and-answer session.

RFQ submittals from 14 ESCO candidates were evaluated and candidates short-listed by a committee of 12, comprising the university's architect, facility engineers, energy managers, administrators and service personnel, and ZDS. The two ESCOs who made it past the first cut were required to submit a detailed RFP.

The two-step process lengthened the selection process by about eight months, Conry says, while at the same time streamlining it. "ZDS provided a template that the companies had to respond to, to keep them from burying us in paper," he explains. "We asked everyone clear, concise questions, then limited the amount of additional information they could add. Nevertheless we got two- to three-inch-thick binders back from each firm. We took a lot of time going through those and checked references carefully."

Conry says one of the advantages of the two-step process is that it effectively narrows

“Many universities really don't understand performance contracting, and they are scared to death of it.”

- Sherwood Wilson

the field for the RFP. "If we had had the complete RFP done by 14 companies we would have had a mountain of paper," he says. “This streamlined the process even though the initial step took extra time."

Conry says there a lot of similarities among candidates, but some distinct differences revealed by the RFQ. “One is the level of experience in performance contracting in higher education," he says. "Second, some had more solid in-house engineering teams and wouldn't need to go to subcontractors as much - we liked that accountability. Third, they differed in their philosophies of project staging and customer service,"

The RFP got to the nitty gritty. "We said, 'Here are sample buildings: We want you to bring in your engineering team and give us specific proposals for improvements, tell us what the cost savings are, and explicitly show us how you calculated these cost savings,'" Conry says. "That allowed us to see how creative their engineering teams were, how sensitive they are to occupants during the implementation/construction, and how conservative or liberal they were in calculating the energy savings on a given measure. It was good to have that type of in-depth analysis of fewer firms."

As a result, the university selected as its energy services partner Vestar, an energy efficiency design, engineering, construction and facility operation firm with headquarters in Cincinnati, Ohio, and Toronto, Ontario.

Ironically, design and construction of the chilled water plant, which initially drove the university to explore performance contract- is not part of the performance contract with Vestar. Conry says it did not have a quick enough payback - 10 years, as required by Ohio state law. That project is proceeding in phases under a separate contract, funded with Ohio University operating money, revenues accrued in its energy management fund and bonds, he says, "but coordinated with the energy performance contract to make sure that the system we are building is efficient and that we have controls in place that allow it to be operated efficiently in the future."

Consultant Proves Beneficial

Considering that the energy efficiency program implemented under the performance contract will **save the university more than $2 million a year**, Ohio University's facility planners and managers are convinced that their consultant, **ZDS, is worth the monies the university paid for their services**. **"It was important to have somebody guide us through the process," says Sherwood Wilson, associate vice president for Facilities and Auxiliaries**. "It is also important when you are doing something new to have an independent trustees and administrators of the validity of the approach. Performance contracting was a new concept here."

Indeed, it's still a new concept. "Many universities really don't understand performance contracting, and they are scared to death of it," he says. "Performance contracting can be as little or as much as you want it to be - it is a concept, not a template. It can be styled and adjusted to meet the needs of your own campus."

But many administrators and planners shy away from hiring consultants. "They see consultants wanting to charge fees to guide them through a process they think they can already do themselves," Wilson says. "Our energy management program was very successful through the years, but it only picked the 'low fruit.' We still identified a need for a $25- to $30-millon performance contract."

That's why hiring a consultant is smart business, Wilson says. "Having a professional to get you started is worth every penny." ■