'LEEDing' the way

Healthy LEED budgets bank on planning, teamwork and communication

By Jeff Katkowsky

LEED CERTIFICATION FOR HEALTHCARE got off to a rough start when original guidelines for new construction didn't take into account the special needs of medical facilities. Fast forward just a few years and LEED is getting ready to launch version 3.0. For anyone contemplating a new medical facility, the question isn't to LEED or not LEED. It's what level can be achieved and how much will it cost.

Take heart. Research from the U.S. Green Building Council estimates LEED projects achieve certification within budget and within the same cost range as non-LEED projects. If there are additional expenses, industry experts say they are typically 2 percent above overall construction costs.

Still, for many healthcare administrators and building managers, LEED is an intimidating money-management proposition. Surprisingly, green budget challenges aren't going to be about finding less expensive materials or sacrificing prized features. Instead, keeping a LEED project on track is all about planning, teamwork and continuous, ongoing communication.

The budget challenge for this Detroit Medical Center project was ensuring the operation of MEP systems during the space build-out. By bringing in subcontractors during the design phase, the DMC met system requirements and achieved significant savings through innovative approaches to the suite's MEP distribution. Hospitals can earn LEED credits by using low-resin laminate flooring and low-VOC paint. Upgrading a facility, as was done here, provides additional LEED-credit opportunities.

To earn LEED certification, this project used several earth-friendly materials, including low-resin MDF millwork (being installed), carpeting made from recycled materials and low-VOC paint.

CONTRACT TRANSPARENCY

The first step to successfully managing the budget of any project is the contract. It's no different for a LEED effort. With the goal of eliminating costly surprises deep into the project, consider the contract as the first chance to begin team building and creating avenues of communication.

During the bidding process, convey expectations for clarity and transparency. Resulting proposals will plainly spell out both covered and non-covered costs. Normally the general contractor covers "hard" costs like materials and labor. These expenses, the same for LEED and non-LEED, should be broken down to a percentage of overall costs and a cost per square foot.

So-called "soft" costs — permits, sewer and water tap fees, and engineering — typically aren't included. And just like a non-LEED project, the general contractor should provide budgetary allowances for these fees so that you clearly understand your potential exposure. In addition, look for a "qualifications/clarifications" segment in the contract. It details the basis of the proposal and tells exactly what's in and what's out. Again, the idea is to avoid surprises later on.

Lastly, don't pay extra fees to your general contractor for a LEED project. With owners, administrators and constituents demanding green buildings, LEED is considered a value-add. So while processes may take longer because suppliers don't carry large inventories of some materials, and the paperwork is tenfold (it's all about documentation), LEED is part of doing business in the 21st century.

DESIGN-BUILD

Next, build a team that includes both contractor and architect. From project start to finish, a winning LEED budget requires open communication. Known as design-build, multifaceted LEED healthcare project budgets can benefit from the shared expertise and vision of contractor and architect at the start of the design phase. And better yet, the USGBC says synergy among key project stakeholders can ultimately improve the building's performance. Later on, this team approach may prove invaluable in rescuing a faltering budget. For estimating purposes, a design-build approach taps the general contractor's knowledge of prevailing market costs for labor and materials, new or emerging technologies and methods and workable timelines. If possible, ask the general contractor to include any specialty sub-contractors whose particular experience can elevate overall planning.

Most importantly, avoid simply handing off drawings and plans for bidding. With no context of budget or LEED goals, the proposals will most likely exceed available funds. Worse, the project start is compromised because bids have to be reworked to fit financial parameters.

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THE CHARRETTE

Once the design-build team is assembled, it's time to get everyone all on the same page. A key tool in this process is the charrette. The charrette is a working meeting that serves to bring focus to all vital stakeholders, from consultant and hospital administrator to architect, engineer and general contractor.

Typically, the general contractor organizes a charrette at the beginning of the design phase and establishes a collaborative and open discussion. Here the team explores compliance issues, desired LEED certification level, budget mandates and the give and take of the LEED process. In other words, critical pre-planning left undone can significantly impact a budget. When the charrette is completed, a detailed document containing major project points serves as a critical tool in managing change orders, expectations and the balance sheet.

LEED CHECKLIST

The charrette should include a thorough review of the LEED checklist. For new construction and build-outs, it is a key budget driver. First, identify the LEED classification level desired. Projects are rated platinum, gold and silver. The level achieved is based on the number of credits earned. Each category has a point spread to allow some flexibility. With the checklist in hand, determine what can and cannot be complied with within budget constraints.

Like other LEED activities, this process benefits from an integrated team able to develop creative ways to generate compliance points. For instance, what cannot be afforded in rapidly renewable materials such as wool and cotton, or Forest Stewardship Council-certified wood, can be made up with recycling, low-VOC paint, HVAC or the building skin. Plus, combined brainpower can uncover opportunities to add credits through better site selection, alternative materials and proximity to worker services such as mass transit, banking and food.

The LEED charrette/checklist will serve as a compliance guide throughout the building process. The needs of the checklist must constantly be communicated and discussed so opportunities aren't lost, the budget isn't blown by costly corrections and most important, certification isn't compromised.

LEED credits come in many shapes and forms. For a build-out in Detroit, existing materials, like these light fixtures, were reused and recycled for spare parts. The credits earned helped offset those not earned elsewhere. For LEED certification, carefully documenting these types of processes and procedures is critical.

RED FLAGS

If communication is consistent with the general contractor throughout the build, chances are there won't be any surprises or red flags. That's not to say the project will be trouble-free. Complex facilities, even in the most controlled environments, will always encounter some element of the unknown. But through regular team meetings and audits, issues can be anticipated and efficiently resolved. Still, all project stakeholders should be aware of warning signs that can spell budget and, by extension, timeline trouble.

First, watch for changes to agreed-upon procedures. Are plans being altered without required approval? Are pay applications disorganized and missing attachments? Are project changes coming in fast and furious without proper documentation? Are regular audits not being completed? Each is a potential red flag. Keep in mind, too, these same signs can mean LEED certification, which relies almost exclusively on the general contractor's organized documentation, may be in danger, too.

BUDGET RESCUE

If an experienced general contractor is hired, value engineering may be mentioned. While the term makes architects and designers nervous, value engineering provides an opportunity to get the budget back on track. This is accomplished by implementing more efficient ways of realizing the architect's design and function. The solution might call for substituted materials or alternative build and installation processes. But if the entire team is engaged, there's no need to sacrifice original project integrity.

In addition, a good general contractor will call upon a network of established and well-qualified subcontractors. Pooling resources, talent and knowledge, these professionals can often find a way to rescue a balance sheet in distress.

THE GENERAL CONTRACTOR

As mentioned earlier, getting the healthcare facility project LEED-certified depends on how well key processes and materials have been documented. With that said, the USGBC recommendation for green project design, "implementing an integrated, systems-oriented approach" should apply to the general contractor's operations philosophy, too. In addition to references and reputation, look for the general contractor to use construction methods designed to bring projects together in the most efficient way possible. These might include supply chain and sight logistics specifications, prefabrication and offsite assembly.

Ask about digital communications, too. More general contractors are adapting Internet technology in the field to deliver up-to-the-minute project reporting. By themselves, methods and technology don't point to a qualified contractor, but do suggest a committed professional adapting to emerging buildings trends like LEED.

THREE-LEGGED STOOL

Three key elements drive the successful budget management of any complex building project: planning, teamwork and communication. For LEED-certified healthcare projects, these tools are critical. At the front end, planning reveals what LEED level to achieve. Later on, planning will ensure LEED credit opportunities are not missed or overlooked in the initial design. Teamwork will guarantee the full leverage of expertise each building professional brings to the project. Furthermore, team synergies may produce unexpected, albeit very positive, results.

Lastly, communication is considered the third leg of a three-legged stool. Without ongoing, transparent and open communication, the LEED project, and its budget, simply won't stand. With so many moving parts, as well as the tremendous amount of information that must be documented, effective communications is essential. n

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