Security in a Fully Functioning Academic Library During Renovation

DAVID DELBERT KRUGER and SANDRA BARSTOW
University of Wyoming, Laramie, Wyoming, USA

The University of Wyoming Libraries are currently experiencing a major expansion and renovation of the William Robertson Coe Library, the flagship library. From the standpoint of security, the challenges of creating a new addition adjacent to the existing structure are minor in comparison to the difficulties of renovating the existing building in several phases while providing a safe working environment for the library employees, providing patrons with access to the collections and technological infrastructure of a research library, and enabling construction personnel to work safely in various parts of the building at all hours. Communication is key to coordinating security activities and ensuring a safe workplace.

KEYWORDS library construction, library renovation, library security

The major difference between dealing with typical library security issues, such as problem patrons, theft, and vandalism, and dealing with security situations related to construction is that the construction personnel are performing work that will benefit the library staff once it is completed. Library personnel and construction personnel form a team, working together to improve physical space. They need to collaborate rather than see each other as adversaries. It is important to remember that the construction workers are accustomed to working in an unoccupied space, not a fully functioning library. In addition to moving heavy equipment, sawing, jack-hammering, shooting nails, and drilling, they are equally likely to be eating, drinking, playing the radio, talking loudly, and even smoking or chewing tobacco if no one specifically bars those behaviors early in the project. They are also

Received April 15, 2008; accepted April 29, 2008
Address correspondence to Sandra Barstow, University of Wyoming Libraries, Dept. 3334, 1000 E. University Ave., Laramie, WY 82071, USA. E-mail: sbarstow@uwyo.edu
rather careless of their tools and equipment because they do not expect the general public to come wandering into their workspaces. The security problems of a library building under renovation affect library personnel and construction workers, as well as the patrons who expect to use the library’s assets in a normal manner although the physical facility is undergoing major disruptions.

BACKGROUND

In 2004, the Wyoming Legislature appropriated funding for a 94,500-square-foot addition to the 158,000-square-foot William Robertson Coe Library. Two years later, after the architects and engineers developed the detailed specifications for the project, the University of Wyoming (UW) selected FCI Constructors, Inc. (FCI) as the construction-manager-at-risk for the construction and renovation. Prior to FCI’s involvement in the project, it had been assumed that normal activities would continue in the existing building while the addition was built and that at some point the entire collection, along with staff, furnishings, and fixtures, would be shifted to the new structure, leaving the existing building vacant for a top-to-bottom renovation. The entire project was to be completed over a two-year period. As FCI’s planners developed the detailed schedule for the project, they soon concluded that the only way this project could be completed in two years would be to renovate the existing building concurrently with the new construction activity. An elaborate plan involving much staging and shifting of people and collections was accepted by UW, and the groundbreaking for the new structure occurred on October 5, 2007.

Prior to that milestone, library staff had been hard at work since February 2006, shifting materials in the former science library across campus to make space for a new 19,000-square-foot compact-shelving installation, the Annex, to which all bound journals from 2005 and earlier would be relocated permanently. Not only would this move pave the way for the eventual consolidation of all current periodicals and monographic collections in the expanded and renovated Coe building, but it would also make more space available in the Coe building during the renovation process. The compact shelving installation project was completed by March 2007; as this work had been accomplished in two phases, the library staff were able to start moving materials from Coe to the Annex in the fall of 2006 before all the new compact shelving had been installed. The shifting of materials from Coe to the Annex continues today, and has provided good experience in how to move large parts of the library collection from one place to another.

According to FCI’s master plan for completing the expansion and renovation project in two years, the first phase of renovation was to begin in
January 2008. This phase involved the top two floors of the stack tower, a 1978 addition to the original 1957 Coe Library building. Working with student employees and library staff, Access Services personnel were able to clear the two floors of materials and furniture by the end of December 2007. Meanwhile, since the fall of 2007, FCI subcontractors had been performing plumbing and electrical work in the 1978 part of the building, giving the library staff an inkling of the security implications of having construction workers toiling in an occupied library that was open for business. The clash of cultures would only become more pronounced as the construction workers occupied the vacant floors of the stack tower and began demolition activities, including asbestos abatement and removal of existing structural elements.

**Literature Review**

Although some resources address various aspects of library security, the focus is primarily on loss prevention and disaster recovery. Shuman’s *Library Security and Safety Handbook* is a good, fairly recent overview of the topic. The literature on construction and renovation in libraries has little to say on the topic of interacting with contractors who are renovating the library building while the occupants are attempting to carry on normal operations. Leighton and Weber devote a few paragraphs to this subject, and their advice is useful but lacking in detailed suggestions for implementation. Trotta and Trotta provide some excellent checklists for general library safety and security considerations. Similarly, Cravey suggests policies and guidelines for ensuring the safety of library patrons, staff, and facilities. Campus Crime Prevention Programs’ publication includes a checklist for a library security self-assessment, which, while not specific to building renovations, has useful pointers on how to verify that the building is secure when opening and closing each day, and guidelines for ensuring the security of the exterior. Thompson and McCarthy cover the issues of security master planning, in exhaustive detail, from the standpoint of buildings in general.

Yet the interactions between building occupants and construction personnel are not covered in any of these resources. The construction and real-estate oriented journals are more helpful in this regard. Cordasco provides a brief but comprehensive list of considerations in providing access to buildings in general; many of these items are relevant when a building is undergoing a renovation. Hassanain and Al-Mudhei identify key elements that affect occupants of open-plan office buildings under renovation. Their survey of employees who had experience working in office spaces during renovation identified functional, technical, behavioral, and managerial factors affecting business continuity. They found that informing staff well in advance of renovation work helped employees perform work functions
more effectively. Hassanain and Al-Mudhei also include a checklist of ways to reduce the impact of renovation on the occupants' productivity, most of which involve advance planning and good communication to the staff. Enos provides helpful suggestions for planning for phased relocations of staff during a renovation project and considering the costs of providing temporary “swing” space versus the costs of a longer project timeline. Rush discusses the coexistence of construction personnel with students and faculty in a school setting and offers suggestions to help make that process free from disaster. Given the fact that few librarians have much construction experience and that a major expansion to a library building is a once-in-a-career experience for most librarians, it is no surprise that so little has been written on this subject.

COORDINATING SECURITY PLANNING AND IMPLEMENTATION

Before making any concrete security assessments, a library security contact was designated to represent UW Libraries. This person would identify and assess security issues and serve as a centralized conduit for security information both inside and outside the UW Libraries. One library contact could establish professional relationships with contractors as well as the UW’s Facilities Planning coordinator and quickly disseminate external information to the internal library organization. Should something unusual be observed by any member of the library organization, the library security contact could quickly be notified for feedback and appropriate action, often involving these external entities. The assistant dean, who was already acting as the UW Libraries’ liaison with Facilities Planning and FCI, was selected to carry out this role. In addition, the special projects librarian was selected to be her backup, working with the assistant dean to communicate security issues and to function as the library security contact in her absence. A Library Building Transition Team was also established, comprised of the assistant dean, the special projects librarian, and library department heads affected by construction. This committee helped facilitate a dialogue on behalf of the internal organization, and identified additional security issues to address.

Whether formal or informal, a needs assessment is a must for identifying security issues during a library renovation. The UW Libraries’ needs assessment involved the assistant dean visiting with contractors and the UW Facilities Planning coordinator before ground was broken, looking over the construction plans and the phasing of construction activity as well as the impact of that activity on public areas and library services at any given time. Next, a physical walk-through was conducted within the library itself, looking in particular for a potential construction access point convenient to construction zones outside of the building. Through consultation with the lead contractor and the University Facilities Planning coordinator, the
assistant dean determined where the fenced construction areas would be adjacent to the building. It made sense to select an access point that was adjacent to the external construction zone, because this would be the shortest distance for construction workers and not accessible to the public from the outside. This arrangement would allow Coe Library to maintain a secure public access point at the front of the building near the circulation desk and a reasonably secure construction access point adjacent to the construction site.

Clearly, one of the two public elevators in the 1978 addition would need to be designated for construction use, while the other would be restricted from accessing floors under construction. This separation would protect public patrons from unexpected contact with construction and demolition materials coming and going in the building. Other decisions involved implementing controls for internal public areas, such as restrooms, that would become temporary construction zones.

Occasionally the assistant dean discovered by communicating with contractors that exterior construction activities had unanticipated interior consequences. For example, to provide a connection between the existing building and the new addition, exterior cladding on the east side of the building had to be removed from the second floor straight up to the fifth floor. An interior walk-through inspection made it clear that buffer walls would be needed on every floor where the cladding would be removed, because plywood and plastic sheeting were the only barriers between patrons, the outside of the building, and a significant amount of construction noise and debris. However, after the buffer walls were constructed, their encroachment on the outer aisles of the stacks eliminated wheelchair access to materials in those areas. Since FCI could not alter the buffer walls to widen the aisles, and Access Services lacked space to relocate the affected stacks, the special projects librarian used signage to offer alternate access routes and additional library service for retrieving materials in those areas. As security issues were identified, proposed solutions and controls were brought before the Library Building Transition Team for feedback and approval before being implemented. The assistant dean and special projects librarian tried to provide ample communication about the solutions and controls in place, targeting all affected parties.

SECURITY ISSUES INVOLVED IN THE RENOVATION AND CONSTRUCTION

In planning for construction, UW Libraries approached security issues from a philosophy of assets protection rather than loss prevention. Goals were not limited to merely avoiding theft, loss, or damage to the library collection
or the building itself; rather, the concept of security was expanded to include
the people within the building as well as the services provided. UW Libraries
wanted to protect collections without quarantining them, maintain the quality
of library services, and sustain a healthy library environment. The overarch-
ing question for library security was, “Who can go where, and when?” The
challenge during a library renovation is having construction zones adjacent
to publicly accessible areas, and the need for construction workers to access
those areas during all hours.

This dual accessibility issue is particularly apparent in relation to getting
in and out of the building. Prior to construction, the Coe Library building
and collections were fairly secure. If anyone, from the university president
to a student worker, wanted to enter the building, he or she had to do
so through the front doors. These doors were monitored by a 3M security
system and were adjacent to the circulation desk. All other doors were
alarmed emergency exits, with the exception of a loading dock, which was
accessible only through two locked doors. The renovation would involve
asbestos abatement, demolition, and construction, so loads of construction
materials would be coming out of the building as well as into it. The loading
dock would be demolished in the first phase of construction, leaving only
the front entrance for all access. Postal and freight deliveries would have to
go through the front doors, along with patrons and staff.

Because it was not acceptable to have construction workers constantly
moving in and out of the public entrance, an alternate access point for
construction activities would be needed. FCI’s early solution was to remove
the grate over the entrance to the electrical vault in the basement and to
come and go via a ladder into the vault. From that point they had access
to the entire building. This solution worked pretty well until the plumbing
subcontractor had to bring a new, forty-eight-inch diameter sump pit liner
into the building, and it had to be carried through the current periodicals
stacks and down the front stairs into the basement. After this delivery, it
was apparent that a surface-level entrance would need to be designated for
future deliveries of materials.

The fact that this alternate access point would have to be one of
the emergency exits posed additional issues. First, the alarms for that
exit would have to be turned off, creating the possibility of a patron
using it to leave the building undetected. Second, security gates would
not be possible for this alternative access point because wide pallets
and heavy wheelbarrows would repeatedly be coming and going. This
situation exposed a weakness to the building and collection security,
since library materials could conceivably be removed via this exit with-
out properly being charged. Third, using a designated emergency exit as
a construction-access point brought up additional security issues in the
event of an emergency. FCI had set up their base of operations in the
parking lot north of the library building and had fenced off the area around
their equipment plus the ground on which the new addition would be built. The fence blocked a main student path from the dorms to the classroom buildings, so some of the more athletic students found ways to go over or through the fence. Signs helped, because UW students are mainly decent and law-abiding citizens. However, since the construction exit led into a dead-end, fenced construction zone, and the emergency exit sign had been removed, patrons and staff could not use it in an emergency. They needed directions to more appropriate egress points.

The adjacency of construction zones and public areas also posed security issues within the building. Going back to the question, “Who can go where, and when?”, the transition team considered how to keep construction workers primarily in construction zones and, more importantly, the public out of construction zones. The designation of zones is a moving challenge during a renovation, because the renovation process itself is often in phased movement. Designated areas could shift from being public areas to construction zones, and back to public areas. The first phase of construction involved renovating the entire fourth and fifth floors, areas that had previously held publicly accessible stacks. It was necessary to inform the public about these areas and to limit public access to these areas via the elevators or stairs. Some renovation activities, such as plumbing, electrical, and exterior work, could temporarily affect publicly accessible floors. The objective was to ensure proper barriers existed between the construction activities and the public accessing library collections.

The curiosity of library staff wanting to access construction zones was an additional issue. The Facilities Planning coordinator made it clear that no library personnel, not even the dean, were authorized to enter library construction zones without an escort from Facilities Planning or FCI. Although this policy was communicated to all library staff, the staff still wanted to satisfy their curiosity. Many of the library staff were well acquainted with the existing building, and since everyone was getting either a new or refurbished office space, many were also interested in seeing construction progress. Rather than completely restricting access, the assistant dean felt the best way to inform library staff was to provide guided tours of the construction site. Before the first tour occurred, the assistant dean and the special projects librarian addressed logistical issues, such as on-site hardhat requirements for a larger group and adequate ways for the Facilities Planning coordinator to audibly address large groups. The Facilities Planning coordinator not only conducted the tours but was able to bring hard hats for library staff, accommodating roughly 20 people per tour. The special projects librarian provided a portable mic and speaker for the Facilities Planning coordinator to adequately address each group, and photographed significant portions of the tour for the Library Construction Web site. The latter activity allowed those who missed the tour to view construction progress at their convenience. When staff demand exceeded twenty people per tour, the
Facilities Planning coordinator conducted an additional tour immediately after the first one to accommodate the overflow. While the tours required extra effort to arrange and conduct, they ultimately controlled library staff access to the construction zones while satisfying staff curiosity about the new building.

**ONGOING SECURITY IMPLEMENTATION**

Some security issues can be handled internally, but the ongoing relationship with the Facilities Planning coordinator makes it easy to keep him informed whenever an issue arises with FCI or the subcontractors that requires his intervention.

The two-way communication provided by the library security contact position has proven invaluable. For example, a student worker arriving one morning to open the circulation desk reported that one of the front doors was ajar. Due to air pressure in the vestibule, the front doors do not automatically close consistently, and all library employees have been trained to manually force them shut if they leave during hours the library is not open. The assistant dean determined that the cause of this incident was construction workers exiting through this door when the library was not open. Since the assistant dean had well-established lines of communication with the contractors and the Facilities Planning coordinator, she was able to bring this concern to their attention, and the problem was solved by barring contractor egress through the front doors when the library was closed. It should be noted that this solution only worked as well as the communication lines within the subcontractors’ organizations. Every time a subcontractor hired a new apprentice, the library staff would know because the front doors would be left ajar again. The communication process would have to be repeated regularly for the duration of the project.

Another issue involved an open security gate to the external construction site. Although this gate could not provide unauthorized access to the building, it posed a safety risk to anyone entering the construction zone after dark, as it controlled entry to the excavation site. A student worker noticed the open gate when walking home and e-mailed the assistant dean as a precaution. The assistant dean was able to solve this problem by communicating with the UW Police Department and reporting the incident to the Facilities Planning coordinator.

The communication process continues smoothly even when the designated contact is unavailable. When catalogers began smelling what appeared to be a natural gas leak, they notified the special projects librarian, who was able to confirm that the odor was sewer gas escaping from a new sewer line. In this case, a quick phone call to the Facilities Planning coordinator resulted in an answer relayed to the library staff so they did not have to needlessly evacuate the building.
Renovation is dusty work, and because the occupied building must be protected by an operating fire alarm system, there are occasional false alarms. Working with the UW Police Department and the City of Laramie Fire Department, the assistant dean developed the policy that all fire alarms were to be treated as real, even if FCI assured her that they were false alarms. An occasional unnecessary evacuation was seen as a necessary inconvenience and preferable to allowing occupants to remain in the building. It is important to note that many of these security issues were identified from the grassroots level of library staff and resolved outside of the library, through the assistant dean. Nevertheless, security issues are never fully resolved until communication about them is given back to the internal organization. Construction itself is a process of change, and people can naturally be uneasy about it. As a result, all security issues and solutions need to be communicated back to the internal organization and any affected parties. The assistant dean is responsible for ensuring that this communication flow occurs.

SUCCESSFUL STRATEGIES FOR MAINTAINING CONTACT

Communication has evolved throughout the construction process, particularly in terms of the communication technology in use. One challenge for the assistant dean is being accessible while frequently being outside of a conventional office for construction meetings and other job duties. From the beginning of the project, staff have been instructed to “cc” the special projects librarian on construction communication directed to the assistant dean. This arrangement has facilitated quick responses whenever the assistant dean was unavailable and pressing issues arose. In addition, the assistant dean and the special projects librarian were each issued a BlackBerry to carry with them at all times. This portable communication device allows the assistant dean to be reached anywhere that receives a wireless signal. Virtually any communication that would normally come to the assistant dean’s office also comes to her BlackBerry, in some cases before it reaches her office. UW’s enterprise server serves as a link directly from Outlook e-mail accounts to the BlackBerries, so the assistant dean is able to receive and respond to e-mail messages instantly, and the special projects librarian can monitor those same security issues simultaneously. Ultimately, the assistant dean, as library security contact, and the special projects librarian, as her backup, can immediately inform each other and follow up on security issues, even when neither is actually in the building. Since their BlackBerries also act as cell phones, both have been on call for emergency situations, from work, home, or anywhere with cell phone coverage.

As with most university campuses, UW has a shortage of parking spaces. Construction activity exacerbates parking problems by taking away additional parking spaces. For the Libraries’ project alone, the construction zone
set up for FCI takes up half the area of what had previously been the Student Union parking lot. Although the construction zone was fenced off and signed accordingly, students have illegally used the construction site as “free-for-all” parking spaces. Open construction gates have repeatedly been an invitation for rogue parking, particularly in the evenings when construction activity is minimal and subcontractors are working in the construction zone. This problem is difficult to resolve because subcontractors often show up in personal cars or trucks that are virtually indistinguishable from those being driven by students. Temporary construction zones can be even more difficult to control. When construction work forced the two-week closure of the street in front of Coe Library, student vehicles began appearing in front of the building despite the fact that construction workers had barricaded the street. The dean of Libraries observed one student moving some of the barricades to drive through and park; a heavy equipment operator dismounted his machine and suggested the student park elsewhere. The presence of a construction fence or barrier was obviously not a deterrent, particularly if gates were left open, and the practice of rogue parking posed security risks for the construction project as well as the students. Resolving this problem necessitated monitoring construction zones and expanding communication to include law enforcement that had jurisdiction over those areas. UW Police were notified for enforcing and ticketing vehicles parked in construction areas on campus, and City of Laramie Police were notified for enforcing and ticketing parking in construction areas that were adjacent to city streets. In addition, communication to FCI and its subcontractors about securing construction zone gates and proper subcontractor parking continues to be an ongoing challenge.

Communication to the various people interested in the project is also evolving. When construction began, UW Libraries unveiled a library-construction Web site as a clearinghouse for all information related to the project. Visitors to the site could find construction updates and notifications, project overviews, and images, including a live external Web cam. Important information was frequently disseminated through the Web site’s blog, giving visitors an opportunity to post questions or comments in response. UW Libraries have received positive feedback from this construction Web site and consider it a success. The assistant dean also prepares a weekly update that is posted to the staff intranet, and each update attracts an avid readership.

Quickly disseminating information to affected parties outside of the library organization but inside the library building itself can be difficult. Coe Library houses a coffee shop, disabilities-support laboratory, teaching center, testing center, and writing laboratory as well as the largest computer lab on campus. These organizations have no direct affiliation with UW Libraries. Similarly, the building’s custodial staff are not part of UW Libraries staff. In addition, the History Building, while separate from Coe Library, is physically connected to the 1957 part of the Coe building and shares sewer and
plumbing lines with the library, so its occupants could likely be affected by construction activity in the library part of the building. Often, construction information would change so quickly that it would lose its relevance by the time it was accessed via the Web site, and in some cases, construction surprises merited a sense of awareness and urgency for those in the area. In one frightening case, due to a water table miscalculation, an excavation area for the new addition suddenly developed an eighteen-foot deep, thirty-foot square sinkhole adjacent to the existing library, with the drop-off immediately beyond the threshold of an emergency exit. This situation posed an obvious hazard to the library occupants, and the same sinkhole also prevented safe emergency egress for anyone in the neighboring History Building. If the front doors of the History Building became unavailable as an exit, occupants attempting to leave via the rear exits would be trapped between their building and Coe Library. For the sake of safety, construction information had to be shared with other departments or organizations outside the UW Libraries. The assistant dean and the special projects librarian decided to address this problem by personally contacting nonlibrary occupants from the History Building and Coe Library. Later, this arrangement was formalized by setting up a construction distribution list with their e-mail addresses to keep them up to date. Time-sensitive construction updates are now selectively mailed through this construction distribution list, which includes the library staff distribution list as one of its recipients.

Effective signage is certainly a component of good security, but developing useful signs can be more complex than one might expect. The special projects librarian created signs that identified the construction zone entrance and removed the sign from the former emergency exit that was now functioning as a construction access point. Public patrons initially tried exiting through the construction entrance when open construction gates led out into public areas, so that exit now features “hardhat required” signage that encourages patrons to use the front exits only. Portable signs at eye level throughout the building also inform patrons. For urgent information, handwritten messages on dry-erase easels are placed temporarily in the front vestibule, to avoid cluttering that area with too many permanent signs. An additional signing option is a digital kiosk, which provides images and short messages in a looped presentation. The special projects librarian is also looking at functional signage, such as hand-held maps, directing patrons to the current locations of collections that are being shifted.

Sometimes, however, even the best communication and signage cannot deter a determined but misguided mind. Early in the project, the lead contractor notified the assistant dean that the sewer line on the east side of the building would be out of service for approximately two weeks. All restrooms on the east side of the building would be out of service during that time, although the restrooms on the west side would be functioning normally. The doors on all restrooms are intentionally not lockable, so signs were mounted
on the outer door of every restroom affected (twelve in all). The plumbing contractor went a step further by placing an “X” of caution tape across each threshold, approximately waist high. As an additional precaution, signs were set up at the front of the building, an announcement was posted to the construction Web site, and an e-mail notification was sent to the library and construction distribution list.

Nevertheless, the plumbing contractor informed the assistant dean that their sewer work area was soon compromised with fresh human waste. Not only did the offender ignore the signage, he or she was willing to get down on all fours, reach under the caution tape, push a door open while crawling on a dirty floor under the caution tape, and use a nonfunctioning toilet. There may not be a solution for the mindset that creates such irrational problems, but most potential problems, even the unexpected, can be addressed with an effective communication strategy.

CONCLUSION

For the UW Libraries staff, the expectation as to how the library construction project would affect library security has certainly changed over time. Indeed, the construction project itself has changed significantly from when it was first conceptualized, and library staff have evolved with it. In some cases, entire ideas or approaches have changed, such as undergoing new addition construction and existing building renovation concurrently rather than consecutively. In other cases, the construction process simply moved into new phases of work in different areas of the building, and the staff have had to respond to new security concerns. Keeping assets perpetually protected has required not only having a plan for security but also being flexible and responsive to changes in the plan.

In a security philosophy of assets protection, ensuring the quality of library services, the library atmosphere, and the safety and morale of employees and patrons are as much a part of security as making sure a book is properly checked out. Supporting this wider scope of library security, especially during a major construction project, requires effective communication from all levels and in all directions. The library security contact ensures this effective communication is ever-present. No matter what happens during construction, if faculty, staff, or student workers see anything out of the ordinary, they know whom to contact immediately, and they expect prompt responses to their queries.

Establishing our library security contact at the forefront of the construction process was a great idea. The assistant dean has not only served as the central contact for all UW Libraries personnel, but she has also established and developed relationships with construction entities external to the libraries. Nurturing these relationships does not eliminate all security
problems, but it does prevent many problems and provides affirmative and satisfying solutions for any that arise. Library personnel and construction workers are not adversaries. They are cooperative components of one team, working together to ultimately improve physical space. If the library organization and all participants in the construction process are encompassed by the library’s sphere of communication, virtually no security problem is beyond the library’s reach for a solution.

NOTES

1. Bruce A. Shuman, *Library Security and Safety Handbook: Prevention, Policies, and Procedures* (Chicago: American Library Association, 1999).
2. Philip D. Leighton and David C. Weber, *Planning Academic and Research Library Buildings* (Chicago: American Library Association, 1999), 625.
3. Carmine J. Trotta and Marcia Trotta, *The Librarian’s Facility Management Handbook* (New York: Neal-Schuman, 2001).
4. Pamela Cravey, *Protecting Library Staff, Users, Collections, and Facilities* (New York: Neal-Schuman, 2001).
5. Campus Crime Prevention Programs, *Complete Library Safety and Security Manual: A Comprehensive Resource Manual for Academic and Public Library Professionals and Law Enforcement Officers* (Goshen, KY: Campus Crime Prevention Programs, 1998), 127–29, 135–36.
6. David V. Thompson and Bill McCarthy, “Security Master Planning,” in Barbara A. Nadel (Ed.), *Building Security: Handbook for Architectural Planning and Design* (New York: McGraw-Hill, 2004), 2.1–2.30.
7. Jerry Cordasco, “Essential Access Q & A,” *Security* 41, no. 12 (December 2004): 18–20.
8. Mohammad A. Hassanaain and Ali Al-Mudheir, “Business Continuity During Facility Renovations,” *Journal of Corporate Real Estate* 8, no. 2 (2006): 62–72.
9. Charles Enos, “Tenant and System Criteria are Keys to Making Phased Renovations Work,” *Building Operating Management* 50, no. 3 (March 2003), http://www.facilitiesnet.com/bom/article.asp?id=1571.
10. Richard D. Rush, “Construction in the Mix,” *American School and University* 74, no. 12 (August 2002): 156–59.