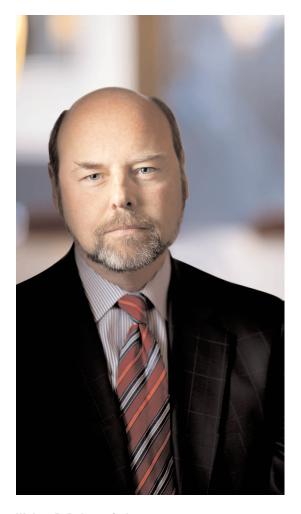








### PUBLISHER'S COLUMN



Walter P. Palmer, 3rd

With summer in full swing and collective bargaining behind us, many think we are on auto pilot for the summer. This could not be farther from the truth. We are still in the grips of a great construction recession, owners are questioning our value, and we still can't seem to all get along.

I have written about the dark, hard times that we face before on this page, but now is the time that we really must get along. Our future depends on it, and those who came before us expect our dedication to this issue.

This is a great opportunity for the union construction industry. If it will be rebuilt, we will be the ones that define the future of union construction both here in the Philadelphia area and across the nation.

Let us not forget the triangle of partners in this process. In no particular order they are: the unions, the owners and the contractors. Theses three points of the triangle represent the collaborative balance that we all have become comfortable with in the union construction industry. The triangle is a structure with each point supporting the other. When one point fails, the structure falls and subsequently becomes a straight line -- with a beginning and an end. We cannot let this end. We must rebuild, restore and strengthen our three points. With renewed strength and belief in ourselves and our customers, we will succeed.

This is the opportunity before us. Let's all keep working forward to deliver the best projects on time, within budget and with dignity.

So with that thought of collaboration, this issue covers the implications of sustainability in the industry. Construction Today® covers the issue from the owners' perspective, from retrofitting office buildings, to the space saving and efficient use of cloud computing. We are also pleased to feature Philadelphia's newest piece of art from renowned found objects artist Tom Deninger. Recently installed in 1650 Arch Street, this piece was created using "trash". The piece captures the spirit of sustainability and offers endless new perspectives. Take a closer look at the cover and tell us what you see.

One more note about the artist. Tom's work is soon to be featured at the Smithsonian. Congratulations and welcome to Philadelphia.

So think sustainability, and think collaboration and we will all be better off.

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Cover: Art created by artist Tom Deninger for the lobby of 1650 Arch Street. The piece is made of 100% recycled trash and found objects

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### SUSTAINABILITY & THE CLOUD

### **Exploring This Transformative Trend in Business**

By Steve Oliver

The trend toward cloud computing and the tangible benefits it offers has many companies considering a shift to this technology model. In a cloud computing model, information technology (IT) services are delivered in a hosted environment via the Internet, providing secure access to data and applications from any network device - from a desktop PC or laptop, to a smartphone or iPad. Unlike traditional IT services, cloud-based services are delivered on a pay-as-you-go model (enabling IT expense to flex with usage); are elastic (enabling the organization to use as much or as little as needed at any point in time); and are fully managed by the technology provider (reducing costs and system administration). In addition, cloud computing is emerging as a viable way to reduce the need for natural resources.

As a supplier of cloud computing services, I am often asked the same questions by clients considering this option: Who else is doing it? Can it help us be more "green"? How will it benefit our company? Can it reduce our exposure? And what do the numbers look like?

These are the same questions posed by Josh Weingram, Project Manager at Dranoff Properties. He sought a better IT environment for properties such as Locust on the Park, The Left Bank, 777 South

Broad, Venice Lofts, and Victor Lofts, among others, and considered the cloud as a possible solution.

The big take-away for Dranoff Properties: The tremendous opportunity to gain efficiencies, especially for leasing agents and building managers. Adding its own private cloud to store all property-related DNA in one place – with the ability to collaborate and share documents from any location via multiple computers and even iPads – has proven a significant game-changer for Dranoff Properties.

the switch to cloud computing can pay dividends when looking to reduce capital expenditures

Moving to the cloud saved Dranoff money, too. All of its properties were due for a technology refresh, which would have required a sizable investment in servers and workstations and consumed additional natural resources. By moving to the cloud instead, Dranoff avoided a significant capital expenditure. Instead of large upfront costs, predictable variable costs are now the norm.

But they're not stopping there. Next up for Dranoff Properties? Running the entire Chestnut Street office out of the Philadel-



LEFT: Dranoff leasing agents have the ability to access and share Locust on the Park documents via the cloud. BOTTOM: Dranoff's private Cloud enables all Venice Lofts information to be housed in one central location and not on any one computer.





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phia Technology Park in the Navy Yard through the power of cloud computing.

Can cloud computing not just enable growth, but actually fuel business growth? That is the expectation of The Galt Company, an energy management solutions firm. With the Ciright webbased solution as its engine, Galt expects to double its business in three years.

"We were operating with Excel spreadsheets that made it difficult to access and track information," said Joseph Coyle, President of the Galt Company. The company also found it cumbersome to respond to Request For Proposals (RFPs) – a key to growing the business. So Galt made the switch to Ciright, an enterprise-level cloud solution that offered flexible features in four key functional areas:

- Project management, including flexible project scheduling and digital document management
- CRM (customer relationship management), with pipeline visibility and accurate sales metrics
- HR, including progressive incentive compensation schemes



Log-in screen of Ciright application.

- ERP, including strong project accounting and financial forecasting

The web-based, secure Ciright application allowed Galt to add all of those critical capabilities – while avoiding significant investments in Systems Applications and Products in Data Processing (SAP), servers, backup systems and in-house IT expertise. In other words, cloud computing helps Galt achieve reduced energy consumption for its customers - the premise on which the company is founded.

"Now we can manage time-sensitive tasks, execute proposals in minutes, create a cohesive sales team environment and introduce advanced building energy management options to our clients," Coyle said. An added plus: Galt is harvesting and responding to RFPs it might not have been able to touch before.

"We can bring together the various teams involved, envelope them as a single project on the system, and understand and track all of the players involved to get the RFP pulled together," he said.

Galt may be on a rapid growth track, but it has no concerns about the solution keeping up. "Ciright has the built-in capacity to expand as we continue our rapid growth," Coyle said. "And as we attempt to sell Ciright EMS for our clients, it helps that we can tell them we already use Ciright in-house."

When evaluating whether to move to the cloud, some companies take a phased approach – adding one or two functions (such as e-mail or accounting) to test the waters. Once they're comfortable that they're gaining good access, efficiency and

security, they shift more functions to the cloud over time. Others jump in all at once.

There's no single right answer. The approach that works best for you is the one that suits your needs and preferences. But whether it's phased in or completed all at once, the switch to cloud computing can pay dividends for any company looking to reduce capital expenditures, improve efficiency, enhance security and go "green".

Steve Oliver is principal of Systems Solution, Inc. (SSI)..







### THE EDGE

### It's What Keeps People Working

By Lisa Godlewski

The conference room we are in looks out over the yard of B. Pietrini & Sons trucks, pumps and concrete mixers. One floor below us equipment and employees are on the move as we sit, trying to capture on paper the survival strategy of this family owned company.

"I guess it all started on July 17, 1943 when a fellow named Elwood Gordon enlisted my father to become a Union Cement Mason for Local #820 Cement Masons of Norristown," says Fran Pietrini, President of B. Pietrini & Sons. "He started as a finisher, and from there worked his way up to General Foreman. Over the years he enlisted some of his family and friends to join the union and work alongside him. Then in 1948, he and my mother Irene started B. Pietrini Concrete & Masonry," with the help of many of those he had enlisted.

It is immediately clear that "family first" is the business strategy that is helping B. Pietrini & Sons weather not only this economic maelstrom, but all of the ups and downs the industry has faced since the company began. Fran joined his father in 1958 and Fran's brother Butch came on board ten years after that. Then in 1973 Bernard, Sr. retired and passed the company to Fran as President and Butch as Vice President. And today, as we talk upstairs, Fran's son Marc is in his father's office

planning the next day's jobs schedule.

But in this company, "family" means a lot more than just relatives. Fran rattles off a list of people who have worked for the company for ten, fifteen, even thirty years. "We pride ourselves in the fact that we have 38 people who have worked with us for anywhere from 15 to 30 years. The people "that we have had with us in the past, and are with us currently, are the backbone of this organization. They work hard every day and take pride in what they do and always do this as a team," says Fran.

It is immediately clear that it's "family first" at B. Pietrini & Sons ... but family doesn't just mean relatives here

"We have always treated our employees fairly," he continues. "I give them room for growth. Don't penalize them when they make a mistake, nurture and encourage them. Don't ever be afraid to come tell me you made a mistake," says Fran. The only thing that needs to be done with a mistake is to fix it and hope to not do it again. In other words, keep moving forward

Moving forward is not always as easy as it sounds, however. Over the company's



sixty-three year history, the employees of B. Pietrini & Sons have endured economic booms and busts, as well as a shrinking union market share.

In the early years the company specialized in pouring concrete floors (flatwork) and in the late Seventies placed as much as 2 million square feet a year. Later the company took on more foundation work and by the Eighties started to do reinforced concrete projects. Over the years the company diversified doing self-leveling, stamped concrete, excavation, site work, and just about anything in concrete. They still rely on, and do, many small projects that are important to the company's existence. No project is too large or too small. These jobs stretch from Philadelphia, throughout the surrounding counties and into New Jersey and Delaware.

TOP LEFT: The RCS P Climbing Protection System.

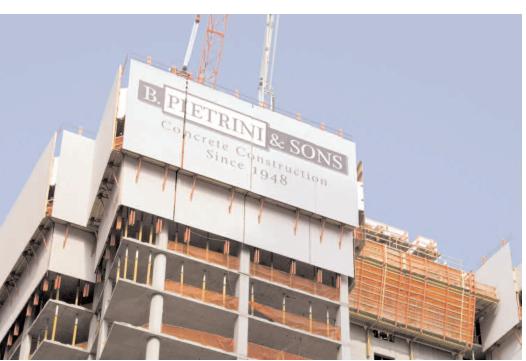
BOTTOM RIGHT: Aerial view of the B. Pietrini work at the Residences of the Ritz-Carlton.

"The people who are here today are the ones that have kept me in business for years. I can't shut the doors on them now."

One of the big changes B. Pietrini & Sons has seen over the years is the non-union companies "biting at our feet" in the counties. For example the Routes 422 and 202 corridors used to be a large portion of B. Pietrini's work. That area is now a hot bed for non-union work. "Our area started getting smaller and smaller, so we had to expand to larger geographic areas. We had to go where the work was," says Fran. "It's what you have to do to keep your people working."

B. Pietrini & Sons knew to edge forward past its competition, it needed to become the best at multi-story and large concrete projects. This move to keep the "edge" paid off for the company. The company grew in 2007–2008 from a "family" of about 150 to a workforce high of approximately 400 employees.

Making the jump to complicated concrete formwork is not the only strategy the company has employed to keep the edge. In 1972 the company purchased its first concrete pump after being treated rudely by a rental company. Butch and Fran knew that a pump meant increased efficiency, and that gave them leverage over their competitors. "We saw early on that is the way the industry was going. Butch was the first one in the City of Philadelphia to utilize a placing boom," says Fran.



ABOVE: This system is used for fall protection and encapsulates the perimeter of the building one floor up,



Like any edge though, it never lasts. What was next? Finishing equipment. "We were pioneers in their use, and we still are. The ride on trowel machine really raised the quality and production of floors," says Fran. In addition, B. Pietrini & Sons was the first union contractor in the area to purchase a laser screed, where the machine actually places the floor for you. While laser screeds had been a tool of non-union companies, union companies shied away from choosing technology over the skill of a union craftsman. But, efficiency is an edge and so technology won out. "Years ago we used to do 15,000 square feet a day, with a laser screed it's double or even triple that," says Fran. "It's a move we had to make."

Then a trip to Europe helped B. Pietrini & Sons once again gain the edge. Fran was the first to implement the use of European formwork systems on his jobs. In Spring 2007 the company introduced the use of the RCS P Climbing Protection System to bring safety to a new plateau in high-rise construction. The system encapsulates the perimeter of the building one floor up and is used for fall protection. The company has always placed a high importance on safety and with the help of the RCS P System, the company had an EMR of .718 in 2008, the lowest of any concrete contractor in Pennsylvania.

But once again, as with any edge, it is quickly lost. Within a year a lot of his competition was also using European formwork systems. But Fran is not discouraged that competitors are dulling this particular edge. "I am glad that others see the value of these systems and are implementing them on their projects," says Fran.

So what is the one razor-sharp edge that B. Pietrini & Sons has always held onto? It's people. In fact, in light of the difficulties the industry is facing, now, I ask Fran, why he wants to continue working. Stated simply, "I do this for the people."

These are the people who have made this company successful, who also take pride in creating some of the most high profile buildings in the region. B. Pietrini & Sons has been a part of many of Philadelphia's landmarks including: Race Street Pier, Citizens Bank Park, 10 Rittenhouse, The Residences at The Ritz-Carlton, and Commerce Square.

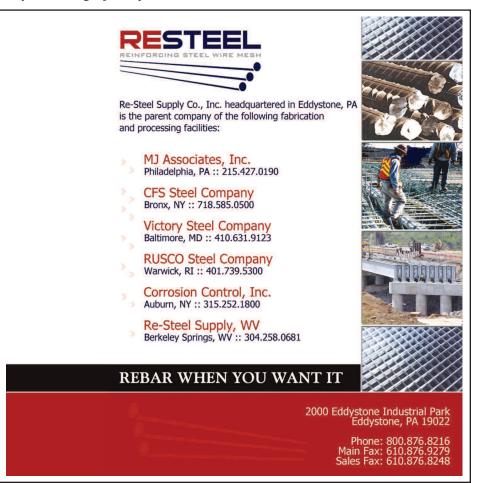
The Phillies' stadium was one of the company's favorite projects. Beyond building the new home for the soon-to-be World Champions, it was a huge challenge schedule and weather wise. "We were pouring concrete in the rain the day before they opened. We had our men and women placing 500 yards of concrete sidewalk the Sunday before opening day," says Fran. "When you do a good job, you really feel good, when you do a bad job you really feel bad, and with the Phillies Stadium we feel really good."

The company's most challenging project to date was the Kimmel Center because of the complexity of design. "No one will ever understand the intricacies of that building." It was so difficult because of the need to eliminate the vibration and sound isolation from the nearby subway system and provide noise isolation in the performance halls. "We had to construct it so that no external sound entered the hall," he says.

But if you ask Fran now what the most challenging issues facing the company today is? He might just say survival. Fran is looking out the window at his men and women below. "We need to be different," he says. "I've decided that if a job can't make a profit then we can't do it." Making a profit to support his employees seems like a simple strategy. But the way things are now, the idea seems almost crazy.

"This is unprecedented. People are overreacting and are doing crazy things, like taking jobs for prices that don't make any sense." Subcontractors are working for less than cost and construction managers and general contractors are discounting their prices, resulting in what he perceives will cause many good firms to close their doors. Fran will not do that. "The people who are here today are the ones that have made this company successful and kept us in business for years. He and his son are committed to have this business continue.

Lisa Godlewski, M.A. is the Director of Public Affairs for the General Building Contractors Association (GBCA).



### **GPIC TAKES ROOT**

The Greater Philadelphia Innovation Cluster's (GPIC)
Call for Energy-Smart Buildings Will Drive Demand Across Region

By Mark Seltzer and Christine Knapp

An exciting new initiative is now taking froot at The Navy Yard in Philadelphia that will help create jobs, stimulate the regional economy and make our buildings more efficient. The Greater Philadelphia Innovation Cluster (GPIC) for Energy-Efficient Buildings is a consortium of academic institutions, federal laboratories, global industry partners, regional economic development agencies and other stakeholders who joined forces to secure close to \$130 million in grants from the U.S. Department of Energy (DOE) and other federal agencies.

Located just minutes from Center City Philadelphia, The Navy Yard is a dynamic 1,200 acre waterfront area, offering a mixed-use experience of diverse architectural styles comprised of both new and historically renovated office buildings, large industrial and distribution facilities, and research and development laboratories. With a diverse existing tenant base largely focused on sustainability, The Navy Yard has emerged as a thriving development energized by its unique culture and elevated sense of social responsibility.

The Navy Yard is home to more than 115 companies that together employ more than 8,000 people and occupy 5.8 million square feet. The Navy Yard business roster includes a mix of local, regional, and national companies, including Urban

Outfitters' world headquarters, Tasty Baking Company's headquarters and baking and distribution center, and GlaxoSmithKline's North American headquarters (currently under construction).

A former Defense Base Closure and Realignment (BRAC) site, The Navy Yard is managed by Philadelphia Industrial Development Corporation (PIDC), a core GPIC member and quasi-governmental economic development agency. The Navy Yard represents one of the nation's largest and most dynamic redevelopment opportunities and offers the GPIC a number of distinct advantages.

One of the cornerstones of redevelopment to date has been to make The Navy Yard a national center of excellence for energy research, education, and commercialization focused specifically on clean and efficient energy production, storage, and management. Four other U.S. Department of Energy projects are already located at the Navy Yard: The Mid-Atlantic Clean Energy Applications Center, the Northern Mid-Atlantic Solar Training Center, The GridStar Smart Grid Training Center and the Build America Residential Retrofit Center.

The Navy Yard will function as a "living laboratory" for the GPIC, serving as a test bed for energy-efficient building system technology development and integration at the single building, building cluster and district energy levels. The Navy Yard is home to 282 existing buildings that range in age, building type, and use and provide opportunities for efficient building technology demonstrations.

The goals of the GPIC are to improve energy efficiency and reduce carbon emissions of new and existing buildings and to stimulate private investment and quality job creation in the Greater Philadelphia region, the larger Mid-Atlantic region, and beyond.

The GPIC will focus on full spectrum retrofit of existing average size commercial and multi-family residential buildings. The program goal is to transform the commercial building retrofit and new construction processes into a systems-delivery industry and demonstrate building operational energy savings of 50% by 2013-2015 in a scalable, repeatable, and cost effective manner across a broad building stock while preserving workplace quality.

The GPIC focus on average sized commercial building retrofits comes because commercial building stock turns over slowly and major overhauls are relatively rare. Major retrofit demonstrations are emerging, like the Empire State Building, but they are rare point solutions, achieve less

GPIC's approach will demand that contractors be involved in the design process of buildings from the very beginning and to be a part of team decision making.

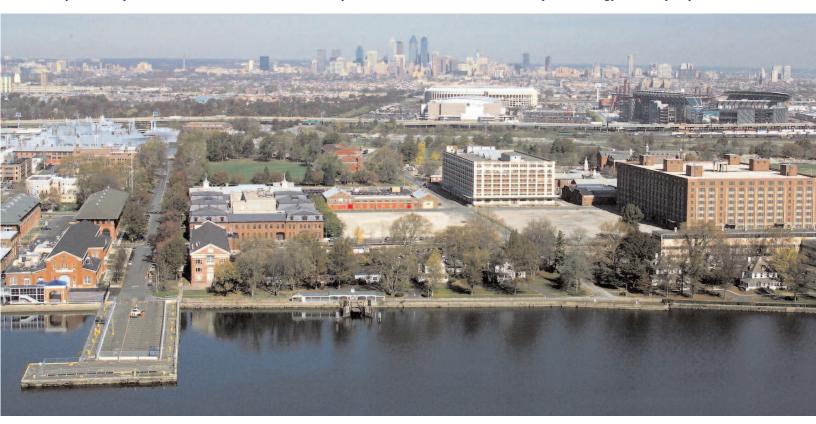
than 40% energy improvement, and are not generally scalable to the less than 100,000 square foot building stock.

One of the GPIC's key goals is to unite the building retrofit environment and promote an integrated approach. Retrofits and building design are often done in a fragmented way, which harms the overall energy performance of buildings. New design tools being developed by GPIC will help building owners and managers more easily understand their building's energy systems and cut costs. For example, the Separations Act in Pennsylvania requires a minimum of four prime contractors -General, Electrical, HVAC, and Plumbing - for every public building construction project exceeding \$4,000. The separation of these contractors results in a fragmented building design that does not maximize efficiency.

A move towards an integrated approach will demand that general contractors be involved in the design process of buildings from the very beginning and to be a part of team decision making. The commissioning for buildings will also move towards more performance-based outcomes and general contractors will need to see that buildings perform as intended.

GPIC is one of three Energy Innovation Hubs initiated by DOE. Modeled in part after the Department's successful Bioenergy Research Centers, the Hubs will help advance highly promising areas of energy science and engineering from the early stage of research to the point where the technology can be handed off to the private sector. This work will ultimately lead to new clean energy solutions and new jobs for America's families. Each Hub will foster unique, cross-disciplinary collaborations by bringing together leading scientists to focus on a high priority technology. GPIC is unique among the Hubs in that it has a regional economic and job creation focus in addition to its energy goals.

DOE set a goal to reduce the annual energy use of buildings by 80 percent in the year 2050. An interim goal of demonstrating 50 percent energy efficiency improvement was



An aerial view of the 1,200 acre Naval Yard. Building 661, the former community center of the Navy, will house GPIC. Four other U.S. Department of Energy projects are already located at the Navy Yard.



Contractors who want to best position themselves for this emerging market demand will want to keep tabs on new training opportunities coming from GPIC.

LEFT: President Barack Obama visits GPIC.

BELOW: Contractors should consider bringing more energy expertise into their in-house teams to become comfortable with the new technologies seen here.

selected to stretch beyond applying conventional solutions which have been demonstrated in select retrofit examples in the 30 percent efficiency improvement range. This 50 percent energy efficiency goal requires that the technical, policy and workforce solutions sets are scalable to at least 50 percent of today's commercial building stock. This goal demands rethinking every technical approach and solution set as well as adopting new business value propositions, public policy positions and workforce development processes.

A comprehensive research, development and deployment program will be performed that simultaneously addresses the maturation of integrated design and system technologies, exploration of new business models and public policies that accelerate the technology adoption, and the creation of robust workforce development paths. The GPIC tasks have been divided into five broad areas of research:

**Design Tools, led by IBM** - specific research investments in systems for the creation of system engineering practices and associated design processes and tools, leveraging advances in high performance computing.

Integrated Technologies, led by United Technologies Research Center - research investments to develop systems solutions for the full spectrum of building retrofits and the enabling component technologies are proposed. Robust control and diagnos-



tics implementation platforms are then proposed for realizing the system solutions that lead to the deep retrofit designs proposed to be demonstrated.

Policy, Markets and Behavior, led by University of Pennsylvania - comprehensive research program targeted at understanding the policy, market and behavior obstacles to the uptake of energy efficient building system technologies and to model and implemented instruments that substantially increase the speed of technology adoption through increased return on investment.

Education and Workforce Development, led by Princeton Plasma Physics Lab - the required

education and workforce development that will ensure the broad adoption and use of the energy efficient system technologies proposed and demonstrated.

Deployment and Commercialization, led by Ben Franklin Technology Partners of Southeastern Pennsylvania - the path to relevant scale technology demonstrations and deployments that catalyze rapid commercialization and economic growth associated with the buildings and energy sector.

The Navy Yard provides for co-location of all GPIC co-applicant and strategic partner personnel. Co-location is an essential characteristic of successful innovation clusters, allowing for spherical integrated research and the development, demonstration and delivery of tools, technology, products and processes. Stage one of GPIC's development will see key HUB personnel housed in a retrofitted, historically significant building. The retrofit design, delivery, commissioning and monitored operation of the facility will itself be utilized to develop tools and methods needed by the GPIC to transform the conventional building planning and construction process from a fragmented serial design and deliver process into system performance driven, integrated, parallel, team design and delivery processes that effect substantive changes with respect to energy efficiencies.

PIDC controls all utilities at The Navy Yard, including the electric grid, which provides a unique opportunity to apply and demonstrate Smart Grid and demandresponse control technologies applicable to building system energy efficiencies. In addition, a number of businesses on site at The Navy Yard have already expressed an interest in exploring ways to take advantage of the cluster's energy efficient building expertise. The Navy Yard provides GPIC's experimental laboratory the ability to test and evaluate technology, architectural and engineering impacts, tradecraft and assessment tools and public policy implications, including electric and other utility rate tariff designs in an integrated fashion on an unprecedented scale.

In stage two of GPIC's development, the Commonwealth of Pennsylvania in conjunction with PIDC is committed to construct a new research laboratory and education facility in The Navy Yard to accommodate HUB personnel and the planned growth in GPIC-associated endeavors beyond the initial investment by federal funding agencies and GPIC founding members.

Contractors will have no doubt noticed the increased demand for LEED and energy-smart buildings over the past few years. GPIC's efforts to dramatically increase the energy efficiency of commercial buildings through integrated retrofits will result in further increasing that demand in the region and beyond. Contractors who want to best position

themselves for this emerging market demand will want to keep tabs on new training opportunities coming from GPIC and other regional trainers. Contractors should also consider bringing more energy expertise into their in-house teams in order to influence the way specifications for buildings are written to maximize efficiency. These experts could also help their team become more comfortable with new technologies that are expected to be tested and deployed by GPIC.

Building 661, the former community center for the Navy, will undergo a full-spectrum retrofit. A new, advanced integrated building science laboratory will also be constructed. These two buildings will house GPIC personnel and will function as living laboratories- from design through construction, commissioning and operation- for developing the tools, methods and policies necessary to transform the building industry into a model of energy independence, operating efficiency and

economic sustainability. Lessons learned from the project would then guide ongoing redevelopment of The Navy Yard's large set of historically significant buildings that could be deeply retrofitted in a sustainable manner.

Learn more http://gpichub.org where you can sign up for the newsletter, read the HUBlog, look for upcoming educational events, or submit your innovative product or technology for review and identify collaboration opportunities.

Mark Seltzer is the Director, Management & Development of the Philadelphia Industrial Development Corporation (PIDC). Christine Knapp is the Manager of Public and Client Relations for the Greater Philadelphia Innovation Cluster (GPIC). Knapp is also a member of the Mayor's Sustainability Advisory Board and is a co-chair of the Green Economy Task Force.



## SUSTAINABILITY IN HOSPITAL DESIGN

### A Surgical Addition

By Amy Floresta

**S**hore Memorial Hospital is a not-forprofit community hospital located in Somers Point, New Jersey. The surrounding area is primarily residential, with a mix of retail/commercial buildings and educational facilities. Shore Memorial Hospital is Somers Point's largest employer, providing over 1,600 jobs.

As institutions whose mission is the advancement of human health, hospitals are uniquely suited to embrace sustainable design. Hospitals use more resources energy, water and air - than most other building types. Nevertheless, the regulatory and technical complexity of hospital design and operations presents challenges to the sustainability equation, and LEED certification of hospitals has lagged behind other building types. With the new surgical addition, Shore Memorial Hospital has met the challenge to be at the forefront of green hospital design and operations. The new surgical addition has been designed to achieve LEED Silver certification under LEED for New Construction, version 2.2. Final documentation will be submitted in early fall.

The existing hospital occupies four contiguous, interconnected buildings constructed between 1956 and 1985. Two key interventional programs, Cardiovascular Institute and Surgical Services, are located in the oldest buildings which are no longer

suited to the technological demands of these programs and which offer no room for growth. The relocation of interventional and associated programs to the new addition accommodates the infrastructural support and space needs of these technology-intensive programs. The addition provides a new, more welcoming entry to the entire hospital complex as well as more direct access to interventional procedures.

The 145,000 square-foot, four-story, surgical addition is located immediately east of the existing hospital, on the site of a former surface parking lot. A new medical office building and parking garage have been constructed directly across Brighton Avenue, also replacing surface parking. A pedestrian bridge located on the second level connects the parking garage to the medical office building and the surgical addition.

The construction of the surgical addition, together with the parking structure, bridge and medical office building, establishes a new, campus-like site development along Brighton Avenue and a central, welcoming arrival point for the expanded hospital complex. Existing facilities such as the Cancer Center on the north side of Brighton and the emergency department immediately northwest of the new hospital entry are drawn into the site arrival sequence. Landscaping and site lighting link both



Hospitals use more resources - energy, water and air - than most other buildings. Shore Memorial Hospital sought to reduce this consumption and is on track for LEED Silver Certification.

sides of Brighton and extend the hospital entry court. The pedestrian bridge connecting the hospital with the new parking structure at the second level physically defines the entry court, while orienting visitors, patients and staff with views toward the new hospital entry and lobby.

The slightly higher site elevation that runs through the new hospital entry supports larger native tree species as well as indigenous grasses. This landscape continues from the entry island, through the garden court between the new lobby and the existing building, to the south terrace on New York Avenue. The highly transparent lobby and connecting walkway to the existing building affords views to and through the native landscape from multiple levels. A roof garden at the fourth floor Foundation Board Room continues to weave the landscape through the building.

The new buildings and landscaping have replaced dark asphalt surface parking lots with a net decrease in impervious area. Hospitals are uniquely suited to embrace sustainable design

Surface lots create a heat island effect when absorbed heat is re-radiated to nearby people, plants, buildings and cars. The heat island effect has been diminished by replacing these expanses of asphalt with landscaping, vegetated roofs and white membrane roofing. This will lower building cooling demand, reduce the need to irrigate plantings, and increase human comfort. Over 29% of the project site area is vegetated open space.

Storm water run-off from surface parking is contaminated with petroleum deposits. The parking structure will greatly reduce contamination of the watershed, since most of the parking will be covered. Water collected from floor drains within the structure will be filtered

before discharge to the municipal sanitary system. The rate at which storm water is discharged into the municipal system will be managed by retention areas replicating natural wetlands. The vegetated roof garden will also retain and filter storm water. Additionally, the vegetation will protect the roof membrane from ultraviolet degradation, extending its life. The storm water management plan decreases the volume of storm water runoff by more than 25%, limiting disruption of the site's natural hydrology.

The new Surgical Services Suite contains eleven operating rooms and is more than two times the size of the existing facility. Six of the new operating rooms are designed for specialty procedures such as orthopedics, neurological and ophthalmic surgeries that are increasing in demand; five rooms are designed for general-purpose surgery. The addition houses all surgical support spaces including patient registration, pre-admission testing, surgical



The vegetated roof garden retains and filters stormwater.

By choosing to build green, Shore Memorial invested modest additional capital for long-term operational benefits. Energy use is projected to be over 14% less than a conventional building. reception, pre-operative prep, and the post-anesthesia care unit. Other interventional programs relocated to the addition include the Cardiovascular Institute, endoscopy services, IV therapy and the sterile processing department serving these programs. A connecting corridor and dedicated patient transport elevators seamlessly link the new surgical facility to inpatient units and the emergency department which remain in the existing buildings.

Besides providing for current and projected infrastructure, technology, and space needs for interventional programs, the new addition will improve patient convenience, staff efficiency and overall experience for patients, staff and visitors. Lounges for patients and families are accessed directly off the new lobby on each floor and have direct views back to the entry and out to the landscape. Visitor and patient arrival and flow is organized to provide views to primary destinations and back to points of arrival for clear way-finding. Public areas, most staff areas and many patient areas are day-lit by windows, skylights or borrowed lights, with views from many of these spaces to the outdoors or to the lobby atrium. Large skylights bring daylight into the pre- and post-operative patient care units. Transparent and translucent glazing is used to provide daylight and privacy as appropriate to the use of the space. Access to daylight and views greatly enhances occupant well-being. Individual controls for lighting, HVAC systems and interior shades have been provided for occupant comfort and control.

Indoor air quality is a critical consideration for a health care facility. Indoor air quality has been monitored during construction of the new surgical addition. Materials and finishes used within the building, including paints, carpets, sealants, adhesives and composite wood products, contain no-to-low levels of volatile organic compounds. Entry grat-



The heat island effect has been dimished by replacing asphalt with landscaping, vegetated roofs and white membrane roofing.

ings and well-ventilated chemical storage areas will control pollutants at their source.

A central plant has been located at the first level of the parking structure, to centralize cooling and emergency generator infrastructure, take advantage of load diversities, and maximize space for program uses in the new hospital addition. The design of the building envelope and HVAC systems is integrated to optimize the effectiveness of both. High-efficiency boilers, chillers, pumps and air handlers have been installed. Energy use is projected to be over 14% less than a conventional building.

Electric lighting is a large source of interior heat gain, increasing cooling demand. Energy-efficient light fixtures have been used throughout the building. Public spaces and many common staff areas are day-lit. When sufficient daylight is available in public spaces, electric lighting can be dimmed with daylight sensors. Occupancy sensors control lights where appropriate, in storage and conference rooms. Lighting is 16% more efficient than a comparable baseline building.

Low-flow plumbing fixtures and automatic sensor faucets manage use of potable water. The projected water use is 40% less than a typical baseline building.

By using primary building materials sourced or manufactured within 500 miles of the site, energy use for construction transportation has been reduced. An abundance of high-quality and appropriate building materials are available in the mid-Atlantic region. Over 40% of the materials used in the building are from regional sources. Over 35% of the building materials contain recycled content, with steel and concrete being primary contributors. The construction of buildings produces a large amount of waste, including waste from demolition and land-clearing debris. Over 90% of the construction waste from the project was diverted from disposal in landfills and incinerators.

Shore Memorial Hospital is developing a comprehensive program to inform staff, patients, their families and the community about the sustainability features of the building and its benefit to and impact on the community. The program will include comprehensive signage identifying green features, a slide show for employee orientation, educational flyers, scheduled building tours, and a virtual tour on the hospital's website.

By choosing to build a green hospital, Shore Memorial has invested modest additional capital for long-term operational benefits. The new hospital addition will consume fewer resources and enhance staff and patient experience. The construction has also provided timely investment in the local economy and, together with the environmental benefits, will be a lasting legacy of the hospital's commitment to the Somers Point community.

Amy Floresta, AIA, LEED AP is a Project Manager for Ballinger.



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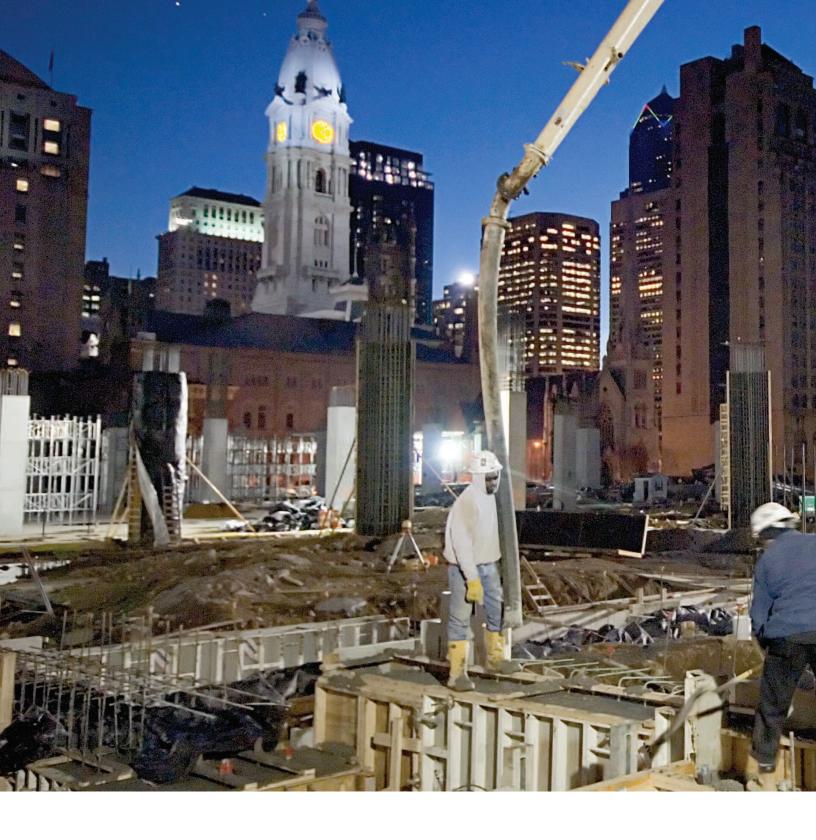
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# SUSTAINABILITY Pin Real Estate

New Construction, Green Building Retrofits, and the Implications of Sustainability in Real Estate

By Matthew Weko

Not a fad, and so much more than a trend, sustainability and the momentum surrounding it have spurred changes impacting everything from design and construction to occupancy, leasing, and legislation. Sustainability continues to dramatically shift the future of business.

The principles of sustainability affect the workplace and the workforce, from the materials and methods of design and construction to work styles and products. The economic benefits – aligning with trends to incorporate sustainability into work and life – are being realized by building owners, investors, and users of space.

Taking a wider look at sustainability's role in commercial real estate will inform the construction community's shared perspective. The amount and type of space required for business in terms of sustainability principles — light-filled, technologically advanced, energy-efficient, and flexible — are changing the way commercial leases are written and negotiated. Research in Philadelphia and elsewhere points to increased rental rates, higher absorption, and lower vacancy in green real estate.

A day will come when there's no distinction between what is green and what is not. For now, advancing the dialogue within our professional community will ensure everyone reaps the benefits.

According to the U.S. Green Building Council, American buildings account for 72 percent of electric-

ity consumption, 39 percent of energy usage, 38 percent of all carbon dioxide emissions, 40 percent of raw materials usage, 30 percent of waste output (136 million tons annually), and 14 percent of potable water consumption.

In a March 2008 study, CoStar found that green buildings (those characterized by either LEED certification or the Energy Star label) display both reduced energy usage and increased rental and sale prices. Buildings with the Energy Star label were found to have average energy savings of 40 percent over nonlabeled counterparts and a 35 percent reduction in carbon emissions. At the time of the study, Energy Starlabeled buildings sold for an average of \$61 per square foot more than non-green buildings. The trend followed with LEED certified buildings, with sales averaging \$171 more per square foot than non-green buildings. Rent premiums for LEED certified buildings averaged \$11.33 per square foot while Energy Star labeled buildings' rental rates averaged \$2.40 per square foot over non-green counterparts.

Jones Lang LaSalle's 2011 Quarter 2 Green Gauge research investigated the Philadelphia Metropolitan

Statistical Area's stock of Class A and B buildings with 25,000 square feet or greater (excluding owner-occupied and medical office buildings). Research found that green buildings (defined as either LEED certified or Energy Star labeled) have overall vacancy of 12.8 percent and YTD net absorption of 256,193 square feet, while commanding average asking rental rates of per square foot. Greater Philadelphia's non-green office buildings have overall vacancy of 16.9 percent, YTD net absorption of 314,220 square feet, and average asking rents of \$22.21 per square foot. In the Philadelphia Central Business District as well as the suburban Pennsylvania and Southern New Jersey markets, rents are rising for green buildings, whereas rents remain stagnant for non-green buildings. The charts provided additional statistics from the research.

Sustainable real estate positively impacts the environment, communities, and the economy. Environmental benefits include preservation of ecosystems and biodiversity, improved air and water quality, reduced solid waste, and natural resource conservation. Sustainable buildings contribute to quality of life by improving indoor air quality, ensuring thermal comfort, enhancing acoustics, supporting occupant comfort and health, improving employee productivity and satisfaction, and minimizing strain on local

infrastructure.

New workplace planning and design seeks to use less space better. The evolving workplace offers collaborative spaces to meet and share ideas, flexibility for high functionality on demand, reduction or abandonment of private offices, maximum daylighting, and advanced technology for technological mobility within and outside the office. While aspects of this future workplace may not be present in all offices, executives and real estate leaders are – or should be – thinking about how to accommodate these space utilization trends within the businesses they lead. If not in practice, then in planning, the future workplace is being conceived and continually refined.

Think about sustainability in terms of future-proofing your assets and yourself. For commercial real estate professionals and building owners, sustainability means attracting and retaining tenants, protecting and enhancing asset value, ensuring good quality and efficient asset management, and fostering a positive reputation. Sustainability features may help owners and occupiers of space mitigate the risk of losing tenants while reducing utility costs and operating expenses.

For the construction community, sustainability can mean job creation, alterative building materials and methodology, and ongoing building modernization opportunities. With sustainability now prevalent in the design and construction community, there are no longer cost premiums to develop green buildings.

Sustainable new construction and green retrofits are motivated by a host of industry drivers. Businesses of all types are recognizing the need to develop more sustainable and efficient business practices, accepting energy supply constraints and national security issues posed by energy dependence, and facing increased pressures from employees, customers, and shareholders. Ongoing federal, state, and local legislative action and increased corporate self-regulation are further pressures.

These industry drivers directly effect changes in commercial real estate. There is growing pressure to alter appraisal values for lending and purchasing based on sustainability features. Reduced operating costs through efficiency and improved work environments increase real estate marketability and competitiveness, and translate to productivity, recruitment, and retention benefits for occupiers of space. Building owners find it possible to fund improvements through energy savings, see a better return on investment, and maintain the value of their assets.

Emerging policy and imminent government regulations related to green real estate should be of concern to all design, construction, and real estate professionals.



Celebrated artist Tom Deninger was commissioned to create art from the castoff objects of the tenants at 1650 Arch Street. A "junk" collection was held in the lobby of the building, where tenants dropped off plastic bottles, toys, computer parts, and anything they wanted to see reused. Deninger then created his interpretation of "sustainability" in his Rhode Island studio.

Deninger's approach is to appropriate objects to serve a function other than their intended use. He explains his approach as following nature's evolution - a series of mutations helps something survive, that then winds up defining a new species. He talks about his work as "discovery by accident while working on another problem."

The piece is intended to be viewed from many angles so that the artwork is constantly changing. The building owners wanted both tenants and passers-by to be reminded of the value and beauty in recycling.

The artwork was installed in the new lobby of 1650 Arch Street on August 4, 2011.

### Asking Rental Rates by Submarket

	Current Philadelphia MSA Office Supply (1,202 properties)			Current Philadelphia MSA Green Buildings (84 properties)			Green vs. Non-Green	Q1 2011 Green Rental	
	Rental Rate	Previous 12 Months	12 month outlook	Rental Rate	Previous 12 Months	12 month outlook	Rental Rate Difference	Rate	
Philadelphia MSA Office	\$22.51 p.s.f	•	<b>1</b>	\$26.67 p.s.f.	<b>1</b>	<b>1</b>	\$4.16	\$26.69	
CBD Class A	\$26.44 p.s.f.	•	<b>1</b>	\$27.31 p.s.f.	<b>1</b>	<b>1</b>	\$0.87	\$27.73	
CBD Class B	\$22.77 p.s.f.	<b>^</b>	<b>→</b>	\$21.80 p.s.f. <sup>1</sup>	<b>^</b>	<b>→</b>	- \$0.97	\$21.14	
PA Suburbs Class A	\$25.75 p.s.f.	<b>↓</b>	<b>^</b>	\$28.87 p.s.f.	<b>1</b>	<b>1</b>	\$3.12	\$28.38	
PA Suburbs Class B	\$21.06 p.s.f	<b>^</b>	<b>→</b>	\$22.60 p.s.f.	$lack \Psi$	<b>1</b>	\$1.54	\$22.34	
Southern NJ Class A	\$19.13 p.s.f.	<b>^</b>	Ψ	\$30.89 p.s.f.	<b>1</b>	<b>1</b>	\$11.76	\$24.69	
Southern NJ Class B	\$17.55 p.s.f.	<b>1</b>	Ψ	\$14.62 p.s.f	Ψ	<b>1</b>	- \$2.93	\$14.62	
■ Positive change ■ Neutral change ■ Negative change			Arrows indicate direction of change.						

Source: Jones Lange LaSalle Green Gauge - Q2, July 2011

<sup>1</sup> There are only two (2) Class B Green buildings in the CBD. Vacancy is 8.5% (112,413 SF)

Policymakers are becoming attuned to existing buildings as the most significant source of energy consumption and greenhouse gas emissions. Rapid growth in enacted policies in recent years has been coupled with bills passing unanimously or with significant majority, indicating broad support for sustainability policy.

Introduced in May 2011 by Senators Shaheen (D., N.H.) and Portman (R.,OH), the Federal Energy Savings and Industrial Competitiveness Act offers energy-efficiency upgrades for existing buildings with special incentives for industrial facilities. The bill would create national model building energy codes, appliance standards, and worker training programs.

The IRS currently offers the Energy-Efficient Commercial Buildings Deduction, with full and partial deductions available for the cost of energy-efficient commercial building systems upgrades. Proposed changes to the deduction will apply the tax incentive to additional building efficiency stakeholders and building types, including REITs and multi-family buildings. The amount of the incentive may be linked to the energy savings achieved.

Philadelphia government has demonstrated support of green initiatives, striving to make the city one of the nation's greenest. Greenworks Philadelphia debuted in

2009, a plan described by Mayor Michael Nutter as, "a vision for how Philadelphia can and should seize the moment, building upon the assets left to us by earlier Philadelphians and creating a better future for ourselves, our children, and generations still to come." Bill No. 080025 signed January 19, 2010 instituted a LEED Silver requirement for city-funded construction projects over 10,000 square feet, supporting the Greenworks energy-conservation mandate requiring capital projects undertaken by all city departments to use at least 20 percent less energy than basic code-compliant structures.

### Leases are beginning to address green issues

Pennsylvania passed Act 129 in 2008, adding to and amending the Public Utility Code in an effort to reduce energy consumption and demand across the commonwealth. Incentives are also available for installation of energy-efficient HVAC, lighting, and refrigeration equipment. While Pennsylvania incentives do not yet apply to renewable energy sources, on-site energy generation, design services, or internal labor, the Database for State Incentives for Renewables and Efficiency (DSIRE: http://www.dsireusa.org) is the

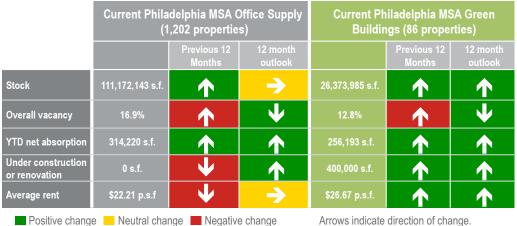
most up-to-date resource for what incentives are available.

Sustainable real estate has been shown to benefit the workforce. On average, people in the U.S. spent about 90 percent of time indoors, where the EPA indicates levels of pollutants may be 10 times higher than outdoors. Natural light and air quality have both been linked to human performance. Improvements in indoor environments are estimated to save \$17-48 billion in total health gains and \$20-160 billion in worker performance.

According to statistics cited by the U.S. Green Building Council, improved lighting has been linked to a 27 percent reduction in the number of headaches, which accounts for 0.7 percent of overall employee health insurance cost at approximately \$35 per employee annually. Students with the most classroom daylighting progressed 20 percent faster on math tests and 26 percent faster on reading tests in one year than those with less daylighting.

Lower rates of employee absenteeism have also been reported in high-performance buildings, particularly those with natural daylight and high indoor air quality. According to the U.S. Green Building Council's "Making the Business Case for High Performance Green Buildings," Lockheed Martin managers at the company's Sunnydale, CA, facility reported a 15

### Philadelphia MSA – Green Office Buildings



Inventory: Class A and B buildings with 25,000 square feet and greater.

Excludes: Owner Occupied and Medical Office Buildings.

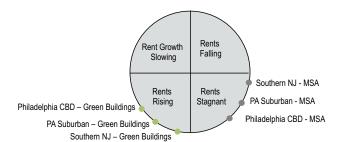
Green: Defined as either LEED or EnergyStar certified.



Arrows indicate direction of change.

#### **Market conditions**

- 86 "Green" Office Buildings in the Philadelphia MSA
- 24 CBD Class A Office Buildings
- 2 CBD Class B Office Buildings
- 40 PA Suburban Class A Office Buildings
- 12 PA Suburban Class B Office Buildings
- 4 Southern NJ Class A Office Buildings
- 4 Southern NJ Class B Office Buildings



This diagram illustrates where Jones Lang LaSalle estimates each prime office market is within its individual rental cycle at the end of the quarter. Markets can move around the clock at different speeds and directions.

### Green vs. non-green new construction since 2007

		Previous 12 Months	12 month				
		MOTILIS	outlook		Previous 12 Months	12 month outlook	
Stock	2,950,665 s.f.	<b>1</b>	<b>→</b>	2,336,280 s.f.	<b>1</b>	<b>1</b>	
Overall vacancy	28.5%	<b>1</b>	Ψ	17.3%	<b>1</b>	Ψ	
YTD net absorption	113,971 s.f.	<b>1</b>	<b>↑</b>	79,473 s.f.	<b>↑</b>	<b>^</b>	Rental Rate Differences
Under construction	0 s.f.	Ψ	<b>→</b>	400,000 s.f.	<b>^</b>	<b>→</b>	Dilicitinos
Average asking rent	\$26.29	Ψ	<b>^</b>	\$32.86	<b>1</b>	<b>1</b>	\$6.57
Class A asking rent	\$26.69	Ψ	<b>^</b>	\$33.13	<b>^</b>	<b>1</b>	\$6.44
Class B asking rent	\$22.81	Ψ	<b>→</b>	\$27.50	<b>↑</b>	<b>1</b>	\$4.69

#### **Green New Construction Property Breakdown:**

- 2 Philadelphia CBD Class A Office Buildings
- 6 PA Suburban 5 Class A Office Buildings; 1 Class B Office Building
- 2 Southern NJ Class A Office Buildings
- Inventory: Class A and B buildings with 25,000 square feet and greater.
- Excludes: Owner Occupied and Medical Office Buildings.
- · Green: Defined as either LEED or EnergyStar certified.



This diagram is a convenient method of comparing the relative position of markets in their rental cycle. The position is not necessarily representative of investment or development market prospects. The position refers to prime face rental values

percent drop in employee absenteeism as a result of the building's green design.

Lighting accounts for about 30 percent of commercial electric use. Upgraded lighting offers a high-return, low-risk investment for existing office buildings. Using the Generic Electric Energy Cost Calculator (http://www.csgnetwork.com/elecenergycalcs.html) it costs approximately \$24.99 per hour to light a one million-square-foot building. Reducing the lighting by a single hour would save \$9,121.35 per year. Removing just one fluorescent bulb saves \$14.60/year. Removing one 60 watt incandescent bulb saves \$21.90/year. Simply powering off at the

end of the workday can attain savings of \$80 to \$100 per computer per year. EPA recommendations encourage setting computers to sleep or hibernate mode for additional energy savings. According to the "Guide to Reducing Energy Use in Office Equipment," one workstation, if left on after business hours and without automatic power management, produces nearly one ton of carbon dioxide a year.

The construction community can work with commercial real estate owners to enhance corporate performance and wellness. Regular inspections of equipment and controls can ensure performance and efficiency. ASTM International Standards

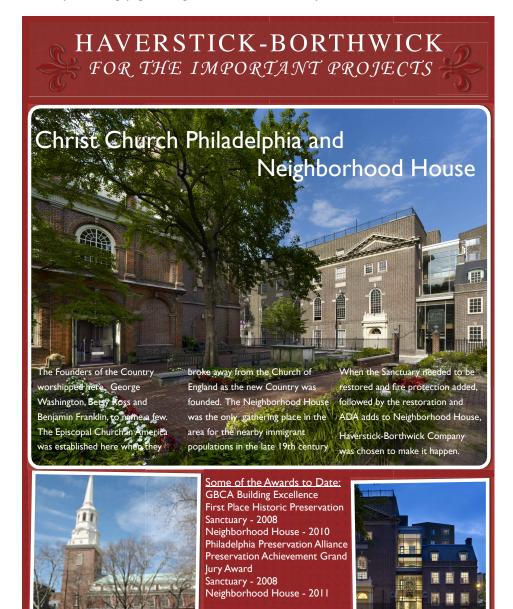
indicates sealing all holes or openings in a building exterior to limit air leakage can reduce energy consumption by 14 percent, yielding savings of over \$12,000 per year. Reducing temperatures and lighting when buildings are not occupied and scheduling janitorial service during daytime hours can lead to further savings.

The biggest changes commercial real estate professional see related to sustainability can be found in changes to lease provisions. Case in point: the Building Owners and Managers Association (BOMA) even sells a model green lease. Leases are beginning to address green issues, from the incorporation of LEED or Energy Star rating standards to ways in which tenants must work together to maintain a building's green status. Both parties' environmental objectives should be clearly stated as they relate to water and energy consumption, emissions, waste, and indoor air quality.

In this context, the construction and tenant improvement alterations languages of many leases are being rewritten to allow for inspection and/or certification of the build-out by a green building professional. Compliance may be required for construction-waste recycling, Energy Star or other efficient equipment usage, and soil or sedimentation control. Documentation may be requested for all materials and equipment used on a job – from air filtration media to low or no-VOC paints, adhesives, furniture, and fabrics. From work letter and contractor regulations to supporting information-sharing among tenants and construction teams, the new lease provisions are impacting real estate on multiple levels.

Investors, owners, and occupiers are becoming ever more interested in sustainability. LEED and Energy Star regulations are posing new issues with real estate transactions as well as with design and construction. Early commitment to sustainability goals can result in an easier and more affordable process for all parties, where financial incentives may be investigated and capitalized upon, and an experienced team can offer guidance and support.

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### **GOVERNMENT UPDATE**

### From the US Capitol

Construction employment remained mired in a five-year-long slump as the industry shed another 9,000 jobs from May to June, according to an analysis of new federal employment data released in the Associated July by General Contractors of America (AGC). Association officials said that declines in public sector construction activity will negate any pickup in private sector demand unless Congress and states promptly and fully fund needed infrastructure spending and streamline the approval process for public projects.

The industry unemployment rate fell from 20.1 percent a year ago to 15.6 percent in June 2011, said Ken Simonson, the association's chief economist. However, Simonson noted that the June 2011 employment total of 5,513,000 was only 2,000 higher than in June 2010 and more than 2.2 million, or 29 percent, below the peak in April 2006.

"Even with the drop in the industry unemployment rate, the lack of hiring means that people are leaving construction, not going back into it," Simonson said. "That will make future expansion all the more difficult."

The construction economist noted that employment in heavy and civil engineer-

ing construction—the segment that had previously added jobs as a result of federal funding for stimulus, military base realignment and Gulf Coast hurricane protection projects—shrank for the second month in a row, by 1,800 jobs, although the June 2011 total was 23,000 jobs or 2.8 percent higher than a year earlier. Residential building and specialty trade employment dropped a combined 9,900 jobs in June and 35,000, or 1.7 percent, over the past 12 months. Nonresidential building and specialty trade contractors added a net 2,700 jobs for the month and 16,200 jobs, or 0.6 percent, over 12 months.

People are leaving construction, not going back into it. That makes the future more difficult.

"In the second half of 2011, there should be a strong gain in apartment and manufacturing construction; some improvement in construction of hospitals, distribution centers and hotel renovations; and ongoing strength in power and energy projects," Simonson predicted. "But job creation in these niches may be swamped by further declines in public construction and continued weakness in single-family homebuilding, office and retail work."

Association officials said that it is vital for public officials at all levels of government to renew commitments to maintain and update infrastructure. The construction association also reiterated its call to streamline approvals of public works.

"The announcement of the outline of a long-delayed federal highway and transit funding authorization, with a quicker approval process, is an encouraging note, but the proposed funding level is grossly inadequate," said Stephen E. Sandherr, executive AGC's chief officer. "Meanwhile, a budget stalemate in Minnesota has already led to a halt in state highway projects there, adding to the unacceptably high loss of construction jobs. Other road, school and public works projects are at risk of shutting down soon unless government officials act promptly.

### From the PA Capitol

With a quick stroke of his pen during the evening of June 30th, Pennsylvania Governor Tom Corbett went one-for-one on state budgets being signed into law. And even though it wasn't a perfect budget season, the Commonwealth's Chief Executive did walk away with a couple of key items checked off his gubernatorial "to do" list.

Clearly, his top goal was an "on-time" budget with controlled spending, no new taxes and no tax increases. There was some debate regarding hospital funding, but most believe he went three for three. While speculation is rampant about what impact such a stringent state fiscal plan will have on everything from schools to social service providers, the jury remains out on what actual implications the FY 2011-12 budget is going to have for those entities that rely on some level of state funding.

One thing that will be severely impacted by the state's budget strings being pulled so tight is the Redevelopment Assistance Capital Program (RCAP). Generally speaking, this is a program that drives public bond funding to private institutions (i.e. colleges and universities) for major construction initiatives. While the Governor continues to approve

projects already in process, it is not likely there will be any "new" projects approved anytime soon.

A few weeks before the budget was completed, the General Assembly sent the Governor one of this top policy priorities, tort reform legislation. Widely supported by Pennsylvania's business community, including the General Contractors Association of Pennsylvania (GCAP), Senate Bill 1131 reforms the joint and several doctrine, by disallowing joint liability in cases where a defendant is less than 60 percent legally responsible for some action.

Prior to the passage of the "Fair Share Act," Pennsylvania was one of nine states and the District of Columbia that didn't have such a statute in place. The bill's prime sponsor, Senate Majority Appropriations Chairman Sen. Jake Corman (R-Centre) said "the bill strikes the right balance between fostering a healthy business environment for job growth and ensuring victims will remain compensated for their injuries."

Another important change to be signed into law in June for Pennsylvania's construction businesses was Act 26 of 2011. This legislation eliminated the twicemonthly sales tax remittance reporting requirement that actually took effect earlier this year. With the passage of Act 26, businesses will only have to report sales tax once a month using an estimated tax for the current month based on the prior year's remittance and a true-up payment for the prior month tax.

Also in June, the House Labor and Industry Committee held a public hearing on HB 1602 sponsored by Rep. Tom Killion (R-Delaware). This legislation would amend Pennsylvania's Mechanics' Lien law by adding "Notice of Commencement" and "Notice of Furnishing" requirements to help ensure the efficient and timely payment of contractors and subcontractors on construction projects.

GCAP participated in the hearing and told Committee members that the bill is important because it will let everyone know who is providing goods and/or services and who might potentially be in a position to file a lien if they are not paid

in a timely matter. GCAP also supports the legislation because it will actually increase the likelihood that all vendors are paid on time without eliminating the lien rights of any business entity involved in a project. All of this will help ensure that everyone working on the project – from the general contractor down to the smallest sub-sub/supplier – receives what they are owed when they are owed it.

The bill would also change the timetable for those seeking to file a lien claim. GCAP has indicated that it is comfortable with keeping the time limit at six months.

### From Philadelphia

In June Mayor Michal A. Nutter released the 2011 Greenworks Progress Report. The report announced that in the two years since implementing the plan, the City and its partners have started or completed work on 135 of the 151, or 89%, of Greenworks initiatives.

Accomplishments during the second year of Greenworks implementation include:

- Launch of EnergyWorks, a comprehensive energy efficiency solutions program offering energy audits, low-interest financing, and certified contractors for home and business owners in the Greater Philadelphia region.
- Installation of 55,000 and replacement of 30,000 LED traffic signals, saving over \$1 million a year in electricity costs.
- Acceptance of Philadelphia Water Department's Green City, Clean Waters, a groundbreaking stormwater management plan, by the Pennsylvania Department of Environmental Protection
- Release of Green2015: An Action Plan for the First 500 Acres, a study establishing green space expansion strate gies, by Philadelphia Parks & Recreation and PennPraxis
- Philadelphia Department of Public Health's launch of Get Healthy Philly program to reduce obesity by increasing access to healthy, affordable food and opportunities for physical activity

- Installation of the first City-owned solar project, a 250 kW array at the Southeast Water Pollution Control Plant
- Weatherization of over 2,300 homes, saving low-income homeowners money on their energy bills
- City Council legislation permitting the use of sustainable materials such as pervious pavement for sidewalk paving, and the Streets Department installing the City's first porous pavement street, which reduces the number of pollutants that enter our waterways and creates safer driving conditions in hazardous weather.
- Reconstruction of the South Street Bridge with dedicated bike lanes and wider sidewalks, showcasing City's dedication to complete streets.

To view the full Greenworks plan as well as the 2010 and 2011 Progress Reports and regular updates, visit our website at www.phila.gov/green.

### From Philadelphia City Council

In late June, Mayor Nutter vetoed a bill that would have required many businesses to allow their employees to accrue paid sick time. While the General Building Contractors Association (GBCA) recognizes the need to treat workers fairly, this legislation would add additional constraints on the industry during a difficult time.

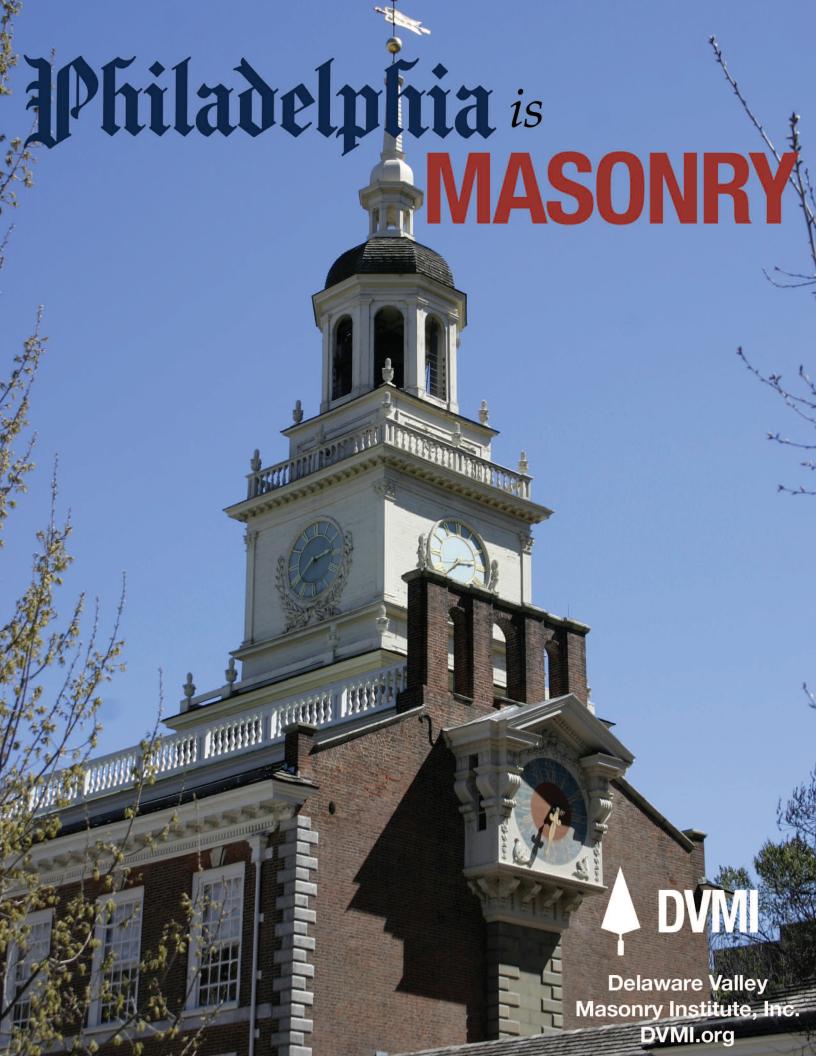
The GBCA membership was instrumental in vocalizing to Council that the bill, as originally written, would interfere with the collective bargaining process. The bill sponsors listened to the members' concerns and the bill was amended to exempt industries that are collectively bargained. While this is considered a win for the industry, the GBCA membership was encouraged to continue to express the strain this legislation would put on an already taxed and struggling industry.

Twelve votes would be needed to overturn the Mayor's veto. The bill's sponsors may try to resurrect the legislation in the fall, although the bill only passed with the minimum of nine votes. It is important that Construction Today® readers and GBCA members keep active in the efforts to alert all of Council about the industry's objection to this legislation!

### **2011 Greenworks Progress Report**

Excerpt of some of the annual impacts of measurable *Greenworks* initiatives. To view the full *Greenworks* plan as well as the 2010 and 2011 Progress Reports and regular updates, visit our website at www.phila.gov/green.

updates, visit our we	GHG Redu (MT CO2e)	Renewable Generated	MWh Redu	MMBTU Re (Electricity	MMBTU Re (Not Includ Electricity)	Waste Dive from Landf	
TARGET	INITIATIVE	GHC (MT	Ren Gen	Σ	MM (Ele	M N N N N N N N N N N N N N N N N N N N	Was fron
Target 1: Reduce City Governement Energy Use	Install New Lighting Replaced 85,000 LED traffic signals	4,924		9,274	31,641		
	Develop Energy Load/Demand Management Practices	40		53	179		
	City Car Management Plan Reduced City Fleet by 542 Cars since 2003	10,780				136,393	
Target 2: Reduce Citywide Building Energy Consumption	Greenworks Loan Fund Energy Efficiency Projects	77		126	431	188	
Target 3: Retrofit 15% of Housing Stock	EnergyWorks Residential Retrofts (156 houses)	338		403	1,374	2,339	
	ECA Residential Retrofits (1,105 houses)	2,393		2,853	9,734	16,569	
	PHDC Residential Retrofits (1,196 houses)	2,590		3,088	10,536	17,933	
	PGW EnergySense (2,000 houses)	4,332		5,164	17,618	29,988	
	TOTAL	9,653		11,507	39,262	66,829	
Target 4: Purchase and Generate 20% of	250 KW Solar Array Installed at SE Pollution Control Plant	164	309				
Electricity from Alternative Energy	Renewable Energy Credits (City of Philadelphia) – 19,500 MWH	10,353	19,500				
Sources	Renewable Energy Credits (Rest of City) – 305,082 MWH	161,980	305,082				
Target 6: Improve Air Quality Toward Attainment of Federal Standards	Purcahse Biodiesl for Use in City Fleet (741,905 gallons FY10)	947					
	Purchase Hybrid Buses (SEPTA Purchased 472)	12,798				173,046	
Target 7: Divert 70% of Solid Waste from	City Collected Curbside Recycling (99,000 tons)	227,269					59,530
Landfill	City Facility Recycling (924 tons)	2,121					556
	Privately Collected Recycling (175,000 tons)	401,738					105,230
	Electronic Waste Recycling (204 tons)	470					204
	C&D Recycling (584,000 tons)	781,415					552,853



### WHAT I HATE ABOUT OSHA

By Jim White

Almost everywhere I go, people talk about how OSHA screws up their work, slows them down and makes life miserable. I rarely hear someone say, "Man, OSHA is really doing a great job." Here are seven of the most common complaints I hear when teaching safety classes.

- 1. They come onto my site and it's private property. I own this building and land, so I should be able to tell OSHA they can't come in. According to a 1973 Supreme Court ruling (Marshall v. Barlow's Inc.), you can do so, if you want. In that case, it was ruled that private property used as a business is subject to the same protection as any other private property. I wouldn't advise it, though. If the OSHA Field Safety Compliance Officer is not allowed access, he can then get a search warrant and have it served by U.S. marshals. That could ruin your day.
- 2. OSHA tells me I now have to pay for all my employees' PPE. What's that about? They have to buy their own tools, so they should pay for PPE, right? Not really. OSHA found that in many cases, employees purchased PPE that was ineffective or just incorrect. It's pretty sad when OSHA has to bring out a final rule telling employers they have to supply

- the PPE required for a job (11/15/2007). In 2008, 5,214 workers died on the job. Who was looking out for them?
- 3. Speaking of PPE, we never had that junk when I was in the field, and we did just fine. Did I just hear, "We've always done it that way?" Or maybe it was, "Real men don't need that crap." Think about this: Prior to 1970, there were about half as many workers in the United States as there are today, and there were 14,300 job-related deaths. Today, with a work force more than twice as large, fewer than 5,000 workers are killed on the job in a year. Comparing relative rates (1970) vs 2008) there are about 82 percent fewer fatalities now than in 1970. That sounds pretty good, unless you consider that 5,214 workers were given capital punishment for the crime of going to work. Doesn't sound so good, does it? Maybe the good old days weren't so good.
- 4. OSHA writes citations that cost me money. How am I supposed to stay in business? Short answer: Maybe you shouldn't be in business if you can't protect your workers. Long answer: OSHA will reduce the fines for citations based on several factors:
  - Number of employees

- No citations within five years
- · Good-faith efforts

Be aware that OSHA is moving forward with the Severe Violator Enforcement Program (SVEP), which affects the size of the fine for 23 different regulations involving fall hazards and other hazards identified by OSHA. The SVEP will allow OSHA to cite each violation, instead of grouping them. It also allows OSHA to reduce the size of any fine reductions it would normally give. Lastly on this topic, OSHA is raising the dollar amount for its citations. Serious violations will be subject to fines up to \$12,000, and willful citations can be as high as \$250,000! Now, that dog has some real teeth!

5. How am I supposed to understand this gibberish OSHA calls regulations? It's true that OSHA's regulations are written in "broad, regulatory, non-prescriptive language," as one of my OSHA buddies says. I do believe that is the definition Webster's gives for the word "vague." That being said, there are several resources to help. OSHA will come to your site, perform an audit, and not cite you for its findings. You will have to correct those problems within a certain abatement period, but now you will know exactly what needs to be done. They also can set you up with a larger company that will mentor you. If you

I own this building and land, so I should be able to tell OSHA they can't come in.

are the bookish type, there are dozens of books dealing with OSHA regulations, not to mention training that is offered by outside providers. The NFPA 70E standard is an excellent source of information if you're trying to decipher the OSHA regulations. The regulations are somewhat vague, but 70E provides guidance on how to meet the OSHA electrical regulations.

- 6. Following OSHA regulations slows me down. They certainly will. Performing a task in a safe manner will always take more time than going at it unsafely. You have to plan and prepare, assemble what is needed, and then follow your plan -- that all takes time. In the electrical trade we had a saying: "There are old electricians and there are fast electricians, but there are no old, fast electricians." I think that covers the need for speed.
- 7. I don't have the time to study all those regulations or even the 70E. I'm trying to run my business. Time, they say, is of the essence. Isn't it worth some of your valuable time to learn how to protect your employees? Isn't it worth some of your employees' time to learn how to

protect themselves? Item number 5 also would apply to this complaint, as the solutions would be similar. It amazes me how workers in this country (not all, but the majority) feel it is someone else's responsibility to keep them safe. Unfortunately, our society has moved to one that refuses to acknowledge responsibility for mis-actions. Everyone, give a big hand to our legal system, which has managed to twist logic to where we no longer have to admit we screwed up.

Safety is serious business. Lives and quality of life depend on a safe work environment, as well as safe work practices. The employer is responsible to provide a workplace free from recognized hazards (recognized being recognized by the industry and OSHA). This would include developing an Electrical Safety Program, procedures, policies to protect workers, and providing PPE. Workers must implement those, however. I recently heard of the workers at one facility going to their union (and the union supported them) to prevent the implementation of a company's ESP. I don't know all of the details, but it certainly sounds like wrong-headed thinking.

Think about this: Being killed is one thing. It's over and done with. Being maimed or crippled is an entirely different level. Now, for the rest of your life, every day, you have to deal with the consequences of the accident. One keynote speaker at the 2007 IEEE/IAS/Electrical Safety Workshop was an ex-lineman who had been severely injured in an accident. He said, "No matter how much money you get from the insurance company or the lawsuit, it doesn't make your life better. You take what's left of your life, and you make the most of it." He lost both of his legs and an arm. I'll just take his word for it, thank you.l

This was originally posted on http://ohsonline.com on April 21, 2011. For information about this article or about safety, contact Hiliary Holloway, Director of Safety & Health at the General Building Contractors Association (GBCA).



# THE BLACK SWAN THEORY

How the Absence of Marketing Can Lead to a Black Swan Event

By Joseph Hoffman

According to the prominent author, philosopher and NYU professor, Nassim Taleb, a black swan is an event that can be positive or negative, but deemed improbable, yet can cause massive consequences. It is based on an Old World premise that black swans did not exist, because one was never seen until settlers ventured to Australia. Applied to today's world, a black swan event has three attributes.

- It's beyond expectations, and cannot be predicted.
- 2. It has extreme and startling impact.
- 3. It is subject to after the fact explanations.

Typical black swan events include the 1929 Stock Market Crash, the Destruction of Pompeii following the eruption of Mt. Vesuvius in 79 A.D and the Atomic Bomb on Hiroshima in 1945. They include recent events such as the U.S. Attacks on Sept 11th and the Japanese Tsunami on March 11, 2011. Black Swans are game-changers. They can also include unpredictable slower moving events such as the Collapse of the Roman Empire. Such events depend on which side you are on as to whether you are the recipient of a black swan event. Apple's successful product launch of the iphone can be perceived as a black swan for the competition, but certainly not for Apple. To some companies it had a devastating effect. The same was true for the momentous "flash crash" on May 5, 2010 date, when the stock market unexpectedly dropped 600 points in 10 minutes resulting in catastrophic losses to some. Fortunes indeed could have been made by knowing in advance the last two events.

Potential black swan events with potentially devastating effects are on the horizon. But what is the probability that they will impact you or your company? Is it even worthwhile to consider black swan events, let alone perform the calculations? What benefits can be derived by considering a black swan in your strategic plan? How statistically significant are these outlier events?

We often hear that there are three types of people. Those that make it happen; those that let it happen, and those that don't know what happened. It applies to black swan events in marketing. You can prepare your company with a strong defense, take the initiative by creating a black swan for your competitors, or you can do nothing and just let things happen.

**Black Swan Defense.** There are a series of initiatives you can undertake to avoid being overtaken by outlier events and/or the competition. For one, you can reduce risk and widen your moat. Taleb suggests

identifying the danger zone, which he calls the Fourth Quadrant. By defining the boundaries with reliable management information, including market intelligence, competition, economic conditions, etc., you're in a better position to make policy rules on certain initiatives to avoid. Provided below are several initiatives which I call the "6 R's" to maintain a Black Swan Defense.

**Recognition.** Assess the risks. Develop solid management information. Investigate thoroughly. Are you in only one market? Do you have too many eggs in one basket? Think about the lack of investigation by many smart, but uninformed people who placed their eggs in the Bernard Madoff basket.

**Risk Management.** Managing risk includes the gathering of more intelligence than normal, tracking more indicators, and widening the moat with improved capability, technology positioning. Do you have a contingency plan?

**Response.** How you respond to a cataclysmic event depends on a number of factors. Having a contingency plan in place is key, but the event may be new or extreme. Quick thinking, good decision-making and flexibility may be critical in your response. Is your staff aware of the company's contingency plan?

**Redundancy.** Back-up and redundancy will improve your capability to respond to the drastic changes that may be necessary. Is your staff prepared to serve in a different capacity? If you close an office, can your staff work from home or at a project site effectively? Can additional people get involved in marketing if necessary?

**Recovery.** In order to minimize any damage, time is of the essence to implement your contingency plan. Draw on all your resources, especially marketing, since additional sales make the valleys less steep. Capture low hanging fruit.

**Record.** Once through the event, there will be lessons learned which can benefit oth

There are risks and costs to a program of action.
But they are far less than inaction." – JFK

ers. Maintain good documentation of the conditions, sequence of events, staff involvement, decisions made, actions taken, outcome/results and recommendations. Were there any early warning indicators? What would you do differently?

Black Swan Offense. As plate tectonics serves scientists as a valuable predictor of earthquakes, so should the good marketer in anticipation of the unexpected. However, one should not expect that your historical model will always work in the future. As the flash crash impacted the stock market exposing the fallacy of the institutions' models and vulnerabilities of their investment portfolios, and the Japanese Tsunami exceeded scientific tectonic analysis, it should serve as a warning to better plan and take more initiative. The following are several proactive marketing suggestions which will enhance your company's position in the market place. Over a period of time, it can create a black swan situation for your competition.

**Niche.** Enhance your service offering, so it significantly exceeds the competition. Good performance and delivering on time within budget is not enough. Today, it's considered a ticket for admission. As a constructor, do you have a unique system or process that can be further developed? Is their special equipment that only your firm is licensed to use?

**Technology.** Investing in technology strengthens the company in many ways. It can augment your service, and if you have a niche, widen the moat. Do you think the world is going less tech? Again, you need to go beyond the use of commercially available software that is specified in the bidding documents. Are you on the cutting edge of the software? Are you working with any vendors to enhance any

products that will better position your firm? If doctors can employ robotics for surgery, why can't constructors implement robotic apps for construction? Robotics is currently limited to climbing poles to inspect, surface refinishing, steel frame welding and fabrication.

Ideas. Create a strategic environment for generating ideas and building your company. Don't depend on brainstorming for ideas. The research shows otherwise. A flash of brilliance will most likely come when you least expect it...driving, brushing your teeth, etc. The key is harnessing the ideas into a viable strategy that can be successfully implemented.

Without marketing, the development of new ideas, and technology can get lost on deaf ears. Marketing is vital to establishing the brand, developing awareness and conveying the corporate vision. In conjunction with business development and a reasonable amount of allocated time, you can carve out a niche before the competition can respond. By winning strategic contracts, enhancing technology and with

some clever marketing, you can slowly

create a black swan situation for your

competition.

Marketing and Business Development.

John F. Kennedy once said "there are risks and costs to a program of action. But they are far less than the long-range risks and costs of comfortable inaction." It is easy to do nothing and simply react to a future black swan event. With construction down and opportunities fewer, some firms may be more susceptible to a black swan event than they realize. Hopefully, the above marketing ideas are useful in navigating and coping with a black swan event.

Joseph Hoffman, president of www.jsbarclaymarketing.com, has more than 30 years of experience in the industry, and served as the senior marketing officer for a number of well-known construction management and engineering companies.

# ACORD, BUT NO SATISFACTION

#### The Recent Changes in Certificates of Insurance

By A. Peter Prinsen, Sean H. Brogan, Stanley A. Martin and Richard H. Lowe

In September 2009, a change made to the Association for Cooperative Operations Research and Development's (ACORD) Form 25, Certificate of Liability Insurance, eliminated language in the old form where the insurer agreed to "endeavor" to provide notice to the certificate holder of a cancellation of the first named insured's policy—and instead clarified that the policy itself governs the duty to notify of cancellation of the policy.

This change has only recently begun to affect the marketplace because ACORD gives its brokers a year before they are required to start using the new form.

The change in the language arose in response to comments from insurance commissioners' offices in several states that the prior language may have been misleading. A basic tenet of insurance law is that a certificate of insurance cannot modify or amend the terms of an insurance policy. Regarding notice of cancellation, most policies did not require the insurers to notify certificate holders or additional insureds; rather, the insurer's duty to notify ran only to the first named insured. Thus, if the old ACORD certificate stated that the insurer would "endeavor to" notify certificate holders-many of whom were additional insureds—that could be construed as misleading, even if the old certificate also contained language that the insurer could not be held liable for failure to provide such notice.

Another reason for the language change may have been that the old ACORD certificate contained one blank that had to be filled in to clarify the number of days before cancellation that the notice had to be provided. Typically, the number 30 was inserted, to show that the insurer would endeavor to provide 30 days' notice. An issue with that language, however, was that most policies required only 10 days' notice if the reason for the cancellation was failure to make payment of the insurance premiums. Therefore, the fact that the certificate had only one blank to fill inwhen there were two different time periods that might apply—made the language all the more inaccurate.

The change in the ACORD language is a response to clarify prior language.

Now that the ACORD certificate with the new language is required, and will now be the standard form seen in the marketplace, the following question arises: Should any action be taken?

The simple answer is "yes," but different action is suggested for different scenarios.

The most basic action that should be considered is to review pending contracts

to determine if the change in the terms of the ACORD certificate leads to a situation where the lower-tier party cannot comply with the insurance provisions of its construction contract. This could occur in an owner-general contractor contract, if that contract requires the general contractor to provide a certificate of insurance that requires the contractor's insurer to provide notice to the owner regarding the cancellation of the contractor's liability policy.

Inability to comply with contract terms could easily occur, because many contracts have provisions that require the general contractor to deliver a certificate of insurance that contains specific language. For example, the American Institute of Architects' (AIA) A201 "General Conditions" contains such language, as follows:

§ 11.1.3 Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work and thereafter upon renewal or replacement of each required policy of insurance. These certificates and the insurance policies required by this Section

11.1 shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner.

Similarly, the ConsensusDOCS 200 "Standard Agreement and General Conditions between Owner and Constructor" contains a provision requiring a contractor to provide insurance that provides notice to the Owner of a cancellation of the policy:

10.2.4. The policies of insurance required under subsection 10.2.1 shall contain a provision that the coverage afforded under the policies shall not be cancelled or allowed to expire until at least thirty (30) Days' prior written notice has been given to the Owner.

Thus, if the contract under review contains language such as that noted above, but there is no longer any "endeavor to" language in the ACORD certificate to satisfy that contractual obligation, a general contractor could easily be in violation of its contract if the policy follows the familiar path of not requiring the insurer to pro-

vide notice to anyone other than to the general contractor as the first named insured.

In such a case, the following possible solutions may be worth consideration.

Starting with the easiest scenario, the policy might already require the insurer to provide notice to certificate holders or additional insureds. If so, a copy of the relevant portion of the insurance policy can be appended per the new ACORD certificate as "additional evidence" on a separate sheet, as part of the certification that the policy complies with the contractual requirement.

If the insurance policy does not require the insurer to provide notice of cancellation to certificate holders or additional insureds, it may be possible to add an endorsement to the insurance policy whereby the insurer agrees to provide notice of cancellation to specified entities. This endorsement could take two forms. The first form would list specific entities to whom the insurer agrees to provide notice (see, for example, The Travelers Indemnity Company form IL T4 00 12 09). The second form would be for the

# STEEL ERECTORS ASSOCIATION OF METROPOLITAN PHILADELPHIA AND VICINITY

Cornell & Company

Delaware Valley Erectors, Inc.

E & R Erectors

Gardner Steel Erection, Inc.

Northwest Erectors, Inc.

PBA Construction, Inc.
Pencoyd Iron Works, Inc.
Roma Steel Erection, Inc.
Steel Suppliers Erectors
XLE Metals

endorsement to reflect the insurer's agreement to provide "blanket" notification to a list of organizations shown on a schedule provided by the first named insured (see, for example, Zurich American Insurance Company form U-GL-1114-A CW). It is more likely that an insurer would be willing to agree to an endorsement in which the specific names are included when the endorsement is added, to potentially avoid any additional administrative burden on the insurer if the need for providing notice arises at a later date. It is important to note one concern with this approach: As a practical matter, insurers may take many months to issue endorsements, much longer than the time it takes a broker to issue an updated certificate. Therefore, the endorsement approach may not be speedy enough to serve as a practical solution.

Now consider the scenario that may be more challenging to resolve: If the insurance policy does not contain language compatible with the contractual obligations and the insurer will not agree to add an endorsement addressing the issue, then the lower-tier party (in this case, the general contractor) who needs to be in compliance with its contractual obligations may have another way to address the issue. Perhaps the contractual language is vague about how the notice can be given.

Indeed, neither the AIA nor the ConsensusDOCS language cited above specifies that it is the insurer who must provide the notice. Rather, the language is written in the passive tense—merely that notice of cancellation must be provided.

Thus, the possibility remains that the lower-tier party could comply with its contractual obligations by giving the required notice (typically 30 days). To be safe, perhaps the lower-tier party could suggest that the two parties enter into a "no-cost" change order, clarifying that the lower-tier party can provide the notice itself. The higher-tier party (the hypothetical owner) may object to this approach because of the risk of having to rely on the lower-tier party for notice, when the likely reason for having to provide the notice is the fact that the lower-tier contractor has failed to pay its insurance premium. As a practical matter, if the lower-tier party cannot pay its insurance premium, Now that the ACORD certificate with new language is required, it is time to take action

the higher-tier party may have more concerns about the lower-tier party's ability to perform the contract than the lapse of the lower-tier party's insurance coverage. Perhaps having a promise of notice from the lower-tier party is better than nothing.

The higher-tier party can gain some comfort that the lower-tier party's insurance remains in place by requiring the lower-tier party to provide new and updated certificates of insurance on a monthly basis—perhaps with payment applications—in order to confirm that the insurance remains in place. Even if there is a cancellation without prior notice, the period that could be subject to the lapse of coverage would be relatively short and contained.

If the higher-tier party refuses to enter into a "no-cost" change order to address the changes in the ACORD certificate, the lower-tier party may provide notice to the higher-tier party that its refusal to accept notification from the lower-tier party is a force majeure event, should the lower-tier party be able to show that its inability to comply with the contractual requirements arises from actions beyond its control.

It is important to consider that both parties might try improving their abilities to track the dates on which policies expire. Thirdparty vendors can help with this task.

Finally, the risk of cancellation of a policy may not be the largest risk that a higher-tier party faces. The greater risk to an owner may be that its general contractor fails to assure that its subcontractors continue to provide new certificates of insurance after the coverage period reflected in the certificate of insurance provided when the subcontracts originally commenced. Thus, a renewed sense of vigilance, to confirm that the insurance required to remain in place for the duration of a project actually does remain in place, may be a favorable benefit of issues raised by the new ACORD forms.

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#### THE DELAWARE RIVER REVITALIZATION

In 1983 a plan was put in place to take the central waterfront on the Delaware River and transform it into a mixed-use area combining both residential and commercial uses. The plan never came to fruition.

However a new, yet similar plan called the Master Plan for the Central Delaware: Transforming Philadelphia's Waterfront seems to indicate that large, positive changes are imminent. The Delaware River project is set to be an incremental building project based on the growth of Philadelphia's economy over a set number of years.

Currently, the Delaware River Waterfront Corporation (DRWC) is developing and refining a plan for the central part of the Delaware River located in Philadelphia.

#### The plan includes:

- · A network of civic and public spaces developed as distinctive public amenities supported by a public financing strategy focused on initial public investments in basic infrastructure to serve as catalysts for high-quality private development on priority sites in supporting Philadelphia's transformation to a twenty-first century lifestyle city.
- An increased program of free and sponsored events that bring people to the waterfront.
- Accommodations for diverse land uses, including the working port, hotels, commercial, retail and flex office/light industrial. The plan envisions the development of primarily dense low to mid-rise residential neighborhoods with service retail, cafes, bars and restaurants, entertainment venues, and other uses that support year-round activities.
- A multimodal transportation and transit plan that includes facilities for streetcar/transit, vehicles, bicycles, and pedestrians that shapes and serves walkable communities and links waterfront destinations to each other, connects waterfront residents to employment centers, provides at-grade service to Center City, and is an integral element of the regional transportation network.
- A phasing strategy which concentrates initial public funding and therefore development on nodes of public land near transit and other assets in order to generate a critical mass of activity in key locations as well as to pace development so that it corresponds with projected absorption rates.

For more information visit www.delawareriverwaterfrontcorp.com.

#### BUSINESSWEEK RECOGNIZES PHILADELPHIA ARCHITECTURE FIRM AS ONE OF AMERICA'S MOST PROMISING SOCIAL ENTREPRENEURS OF 2011

Founded in 2001, Re:Vision Architecture is a Philadelphia based green architecture and sustainability consulting firm with a mission to re-vision and re-calibrate the balance between built and natural environments. Re: Vision was recognized by Business Week as one of America's most promising social entrepreneurs of 2011.

With buildings consuming 40% of the land, water, energy, and raw materials used globally, development presents the single largest opportunity for changing the sustainability equation. For this reason, Re: Vision specializes exclusively in green building projects, from design through operations.

Congratulations Re: Vision!

#### CAMPBELL'S SOUP COMPANY EMPLOYEE CENTER RECEIVES LEED SILVER CERTIFICATION

The U.S. Green Building Council (USGBC) has awarded the Campbell Soup Company LEED NC Silver Certification through implementation of a number of different sustainable strategies.



The Campbell Soup Company wanted to represent its evolving

efforts to show innovation, progression, and a stimulation of local economic growth. To show these efforts, the company constructed a diverse, environmentally friendly structure to hold the various employee services within the company. Opened in June of 2010, this new building employs energy efficient HVAC systems, water conservation, recycled building materials, and daylight harvesting technologies, along with a number of other green features. The recent construction of this structure helps to represent the Campbell Soup Company's principles and beliefs, at the same time proving that it supports advances in sustainable development.

The Campbell's Soup Company Employee Center was a 2010 Construction Excellence Awards winner for Best Commercial Project Over \$15 Million.

#### 777 S. BROAD STREET RECEIVES LEED SILVER RECOGNITION

This past June, architect JKR Partners teamed up with Dranoff Properties and celebrated their recent achievement of LEED Silver Certification for the residential building at 777 South Broad.

This \$70 million project serves as a new link between the Avenue of the Arts and the South end of Broad Street. This previously empty lot was turned it into a new, five story, luxury, residential space with over 140 loft style apartments. The street level is equipped with vast retail space and a large parking area for the residents.



During the design, construction and operation phases of this project, many green techniques were implemented. While achieving their LEED certification, 777 South Broad was able to excel in energy, lighting, water and material use while still being able to put a variety of other sustainable practices in place. Both the building and its residents have, and will, continue to reduce their respective carbon footprints in numerous ways, all of which contribute to the greater good of the community. For example, the residents are able to leave their cars behind during the days and nights and utilize the transit options that Philadelphia has to offer.

777 S. Broad Street was a finalist in the 2010 Construction Excellence Awards in the category of Best Commercial Project Over \$15 million.

#### VICKI LEE WINS 2011 MINORITY BUSINESS LEADER AWARD

Congratulations to Vicki Lee, President of Old Philadelphia Associates, Inc., for being one of a select group of individuals to win the award for top business professionals of ethnic backgrounds in the 2011 Minority Business Leader Awards.



Lee currently serves on the General Building Contractor Association's

(GBCA) Board of Directors and is a member of the GBCA Associate Member Committee.

# REGISTRATION OPEN FOR THE GBCA FALL GOLF OUTING TO BENEFIT CHOP

This event is open to all General Building Contractors Association (GBCA) members and is a benefit for Children's Hospital of Philadelphia (CHOP), a distinguished, world-class facility located right in our backyard. This golf outing is put on each year by the GBCA Associate Member committee with the intention of bringing general and subcontractors together for a good cause.

Date: Monday, September 26, 2011

Location: Woodcrest Country Club, Cherry Hill, NJ

Cost: \$275 per person

Inclusions: Lunch, Open Bar, Hors d'oeuvres, Buffet Dinner,

and prizes.

Sponsorships include Refreshment Stations on the course, \$1100, as well as Hole Sponsorships for \$300 each.

Register online at www.gbca.com/events.

# MERCY VOCATIONAL HIGH SCHOOL HOLDS TOOLS FOR LIFE EVENT — OCTOBER 28, 2011

The Tools for Life Event on October 28, 2011 is an opportunity for donors to help cover the cost of educating students who cannot afford to attend Mercy Vocational High School. Financial commitment at any sponsorship level for this event is deeply appreciated.

With a daily attendance rate of 97% and a 99% graduation rate, students earn notonly a four year high school diploma but also receive additional certifications in their chosen careers. Practical experience enables Mercy students to graduate with career-ready skills, which is of increasing importance in the-current job market. In addition, students are encouraged to develop values that build the foundation for their lives as strong employees, neighbors and citizens.

Seven career-related shops (Business Education, Carpentry, Computer Technician, Cosmetology, Culinary Arts, Electricity, and the Nursing Assistant Training Program) give students access to new programs and opportunities that can change their lives.

Please visit <u>www.mercyvocational.org</u> and click on the Tools for Life Event logo for more information.

# CARPENTER ARCHITECTS TEAM TOGETHER (CATT) COMPETITION 2011

The May 2011 Carpenters Joint Apprenticeship Committee (JAC) Open House once again featured the annual Carpenters Architects Team Together (CATT) competition. This competition involves General Building Contractors Association (GBCA) contractors, American Institute of Architects (AIA) architects, Carpenter apprentices and students from the Charter High School for Architecture + Design (CHAD) and Mercy Vocational High School. Representatives from each of these groups take part in the design and build completion that stresses the desirability of a collaborative approach in the construction process. The emphasis was firmly on working as a team as people from different ages, professions and stages in life worked together to deliver a project. We are optimistic that the experience encourages students to look into construction as a career choice.

The Open House was the culmination of several weeks of student meeting with architects and contractors to develop design concepts that would be practical, exciting to the eye and buildable in an eight-hour time frame.

This year it was decided to build room dividers/partitions for use at the two schools. All kinds of useable options could be incorporated into these projects and the teams let their imaginations generate some incredibly interesting designs while at the same time delivering practical, useable structures.

We would like to thank the following GBCA members for participating in this program - Bittenbender Constuction, LP (Tom Loesch), Gilbane Building Co. (Maggie Reed), Haverstick-Borthwick Co. (Jeremy Daross) and Frank V.

Radomski & Sons, Inc. (Matt

The following architectural firms gave generously of their time: Ballinger, Kling Stubbins, Meyer Design and SPG3. We must also thank Frank Leo of CHAD and Steve Hove of Mercy Vocational High School.



Completed wall partition from 2011 CATT competition.

#### WRAP UP - GBCA JUNE GOLF OUTING 2011

The General Building Contractors Association (GBCA) Annual June Golf Outing took place on Monday, June 20, 2011 at the Philadelphia Cricket Club. The event was attended by 170 GBCA members and guests. A special thanks to our hole and event sponsors, especially United Rentals, for providing the lift for the 50/50 Ball Drop to benefit the Northern Home for Children.



Visit www.gbca.com for labor, safety, education and event information.

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Visit www.awards.gbca.com for more information or to RSVP.

DATE: November 14, 2011

TIME: 3:30 - Excellence Awards Program 4:30 - Networking Reception LOCATION: Hotel Palomar, Philadelphia

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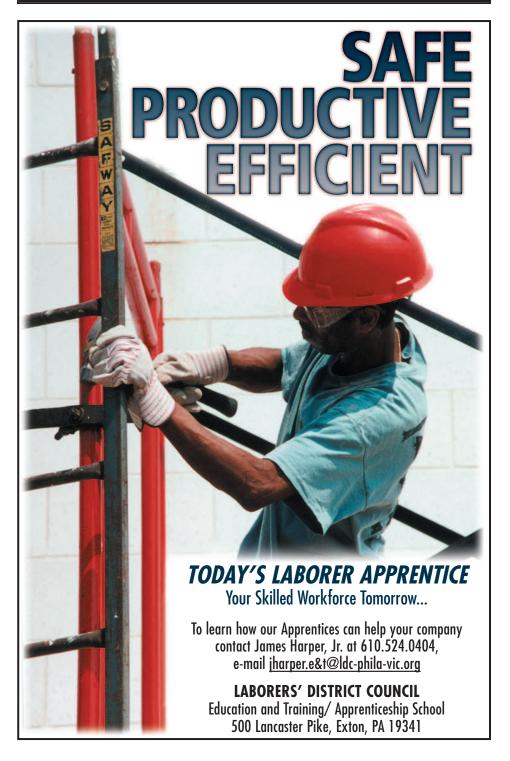
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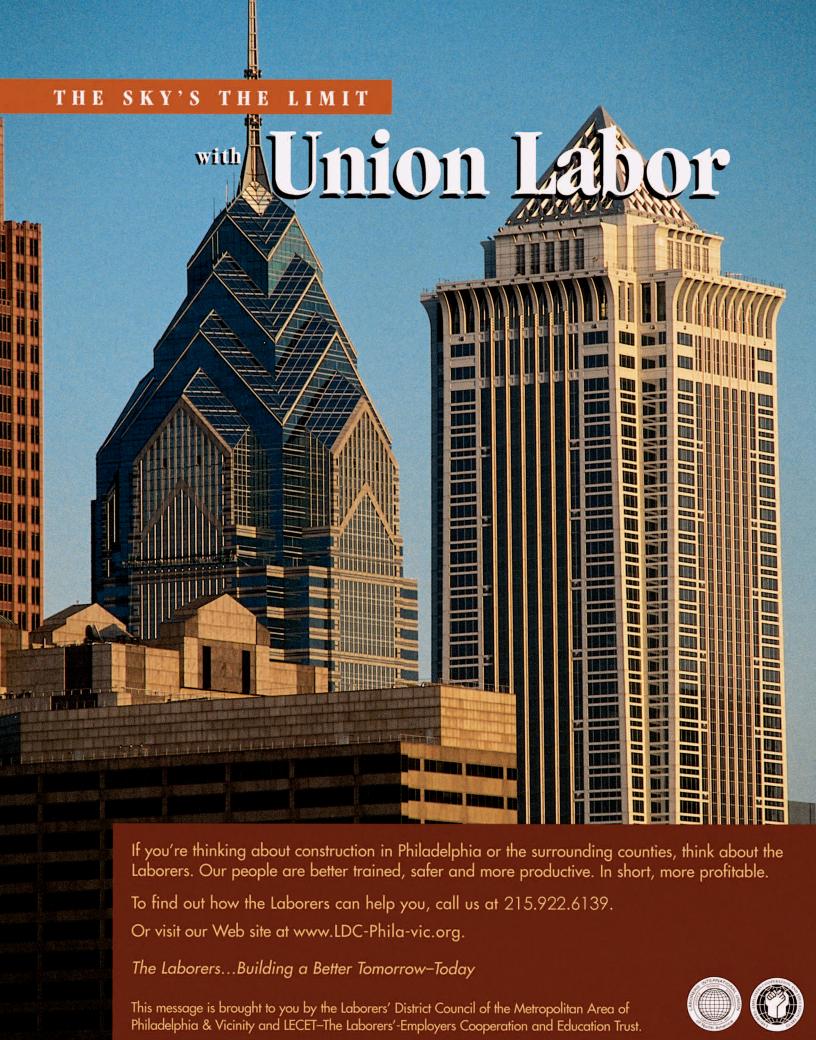


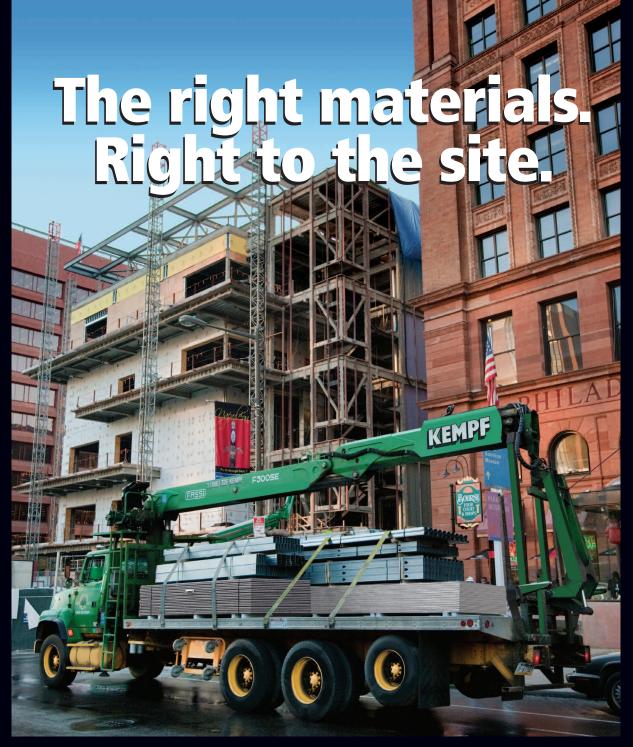
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