

Building Information Modeling (BIM)

by C. Dinos Liollo, AIA, LEED AP and M. Dennis Knight, PE, LEED AP, CCS, CxA

Technology is advancing so fast that there is a common concurrence in industry that business today will be outdated in two years. Staying on the "cutting edge" is an absolute imperative and Liollo Architecture remains proactive in this regard, continuing to institute many new and improved services for the benefit of our clients. BIM is one such service.

Building Information Modeling, or BIM, is a powerful 21st century design tool. Its implementation into Liollo culture has been a 4 year

venture through the leadership of our Principal of Practice Management, Dennis Knight, PE, LEED AP, CCS, with an in-house staff committee that has included Geoff Mohney AIA, LEED AP, Jay White, AIA, LEED AP, Josh Caplea, AIA, LEED AP, Liz Magalis, LEED AP, and Michael Edwards, AIA, LEED AP.

In essence, BIM is a computer model that represents the physical and functional characteristics of a building project. As a shared knowledge resource, in conjunction with third party interoperable databases and analytical tools, BIM has the capacity to bring together in one computer model the efforts of the entire design team, building team, building users and those who will maintain the building after occupancy.

If you would like additional information, or a presentation of its components, please contact Dinos Liollo, AIA, LEED AP or Dennis Knight, PE, LEED AP, CCS

Since BIM generates 3D computer models, the architect and owner can more quickly visualize a proposed building design. This helps facilitate many decisions at a very early stage of the project, which in turn, can save real dollars when compared to the cost of changes as a project progresses further into the documentation and construction phases.

In construction, BIM can help facilitate ownership of design intent with 3D details. And since the building model is comprehensive, scheduling

and cost data, for example, can be easily extracted. All changes to a project instituted during construction can be integrated into the model directly, eliminating paper based record drawings.

Finally, after construction, BIM also serves as a 3D blueprint for building maintenance and operation staff. It can be a great tool in scheduled maintenance events, operations, warranty management, asset tracking and planning capital needs and budgeting.

Of course, this is just a quick overview of what BIM offers, and there is so much more. Just think how much further we will have advanced 2 years in the future.



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Seth Cantley, LEED AP

Cantley Elected AIA SC State Director

Liollo Architecture is pleased to announce that Seth Cantley, LEED AP has been elected as one of three AIA SC State Directors. Seth will be representing the Lowcountry region.

When Seth takes his role in January 2010, he will be assigned by the President of AIA SC to chair a Committee/Task Force such as Education, Design, Government Affairs, Communications, Membership, or Emerging Professionals. Congratulations, Seth.

Higher Ed/Early Childhood Center Design Honored



The Gail & Terry Richardson Center for the Child at FMU
CEFPI SE 2009 Best In Class Award – Higher Education or Special Ed Facility

The Gail and Terry Richardson Center for the Child at Francis Marion University in Florence was recognized as the Best In Class Higher Education or Special Ed Facility category at the Council for Educational Facilities Planners International (CEFPI) Southeast 2009 Conference in March. The CEFPI Southeast region is comprised of the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia, as well as Jamaica and Puerto Rico.

Principal Presents at CEFPI SE Convention



Cherie A. Liollo, AIA, LEED AP

Cherie A. Liollo, AIA, LEED AP, Principal, was a featured speaker at the annual Council of Educational Facility Planners (CEFPI) Southeast Region conference in Williamsburg, VA this March. Cherie was invited to discuss the collaborative design process for Gibbes Middle School in Columbia, SC, which has been awarded CEFPI Best In Class awards at both the 2009 State and 2008 Regional levels.

Architects Earn Accreditation



Jay White, AIA, LEED AP, Michael Edwards, AIA, LEED AP, and David Bouffard, AIA, LEED AP

Please join us in congratulating Jay White, AIA, Associate, David Bouffard, AIA, Associate and Michael Edwards, AIA for earning LEED® Accredited Professional status. Liollo Architecture now has 18 LEED APs on staff.

Studio Highlights

Government **Fort Sumter National Monument Historic Structures Report**



Liollo has been retained by the National Park Service to prepare a Historic Structures Report for Fort Sumter and Battery Huger. This report will provide a concise history of the architecture and evaluate treatment options for the historic features still visible. There are numerous existing features present today that do not correspond to the original 1829 plans for the Fort, making it necessary to evaluate past historic events to determine when, how and why those various changes were made. This evaluation will help set historic priorities for where preservation and treatment efforts need to be focused. Through on site evaluations the Fort's materials, such as brick, iron and concrete, will be assessed for recommended solutions to fort maintenance and repair.



Government **St. Paul's Fire District Capital Program**



Liollo Architecture is working with the St. Paul's Fire District on three capital projects: construction of the new Station Number 7 on Highway 174, a new Maintenance and Training Facility, and a major addition and renovation of the Station Number 1 Headquarters facility on Highway 162 in Hollywood, South Carolina. St. Paul's Fire District serves a predominantly rural area of 235 square miles; one of the largest in the state. Station Number 7 will be the newest substation and provide expanded service to the Meggett and Yorges Island area. Liollo performed programming and master planning services for the SPFD to delineate the scope of the projects and has completed schematic designs. We are now moving into document production and are excited to be working with St. Paul's in expanding both their service and training capabilities.

Liollo Links

Principal Earns CxA Status



M. Dennis Knight, CxA

Liollo is pleased to announce that M. Dennis Knight, PE, LEED AP, CCS, has passed the required AABC Commissioning Group (ACG) exam to become a Certified Commissioning Authority (CxA).

A Commissioning Authority leads the commissioning team and is responsible for planning, organizing, and facilitating the completion of the commissioning process on behalf of the owner. The CxA must also have a complete understanding of the commissioning process (according to the ACG Guidelines) and possess the organizational, documentation, communications, and team-building skills that are necessary to lead and coordinate the commissioning team and to verify that the intent of the building owner is achieved.

Designer Registered



Brian A. Sanders, AIA, LEED AP

Congratulations to Brian A. Sanders, AIA, LEED AP for his successful completion of the Architect Registration Examination. Brian is now a Registered

Architect with the State of South Carolina. He has a Bachelor of Arts from Davidson College and a Masters of Architecture from Tulane University.

Footings to Finishes

Education **Ashley River Creative Arts Elementary School**



Liollo Architecture was retained to design the replacement school for the Ashley River Creative Arts Elementary Magnet School in West Ashley, Charleston. The firm developed a phased construction plan to allow the school to remain open while portions are demolished and rebuilt. The plan consists of 75,000 sf, retaining a 13,500 sf portion of the existing school. The school will feature many LEED-based aspects, such as natural lighting, low maintenance finishes and high performance HVAC system and envelope design.

Higher Education **College of Charleston New Science Center**



Construction is underway for the College of Charleston's new Science Center, designed in association with Ballinger, Inc of Philadelphia, PA. The 150,000 square foot facility will house biology and chemistry curricula. This site is one of the anchor sites that define the "gateway" entry to the historic downtown area of Charleston and is adjacent to an historic neighborhood whose scale and architectural language have been addressed in the design process.

Fort Johnson MS Career Fair



Gregory Swinton, Architect Intern I, answers questions about careers in architecture

Liollo Architecture was proud to participate in the annual Fort Johnson Middle School Career Fair on April 2. The event allows students to learn about their career options and what educational steps are required to be successful therein.

Helpful Green Hint:

Remove unnecessary articles from your car. Each 100 pounds of weight decreases fuel efficiency by 1%.

Would you like to help us reduce paper consumption? Go electronic and have our newsletter emailed to you! Please send your request to jane@liollo.com.