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Issue 3

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please welcome...

Erin Kwong joined enVErgie as an intern this summer. She is a rising architecture undergraduate student at the University of Maryland, College Park. Erin is the editor of the newsletter and reports, and is currently pursuing the LEED Green Associate certification.

national museum of african american history and culture

The NMAAHC, to be constructed on the National Mall in Washington, D.C., is the first national museum to be devoted exclusively to the documentation of African American life. The five acre site will be developed with landscaping and improvements to be used for

outdoor museum programs and to be consistent with its context as contributing to a National Historic Landmark.

enVErgie Consulting facilitated two Value Engingeering (VE) studies on this project at the schematic design and



design development phases. 20 out of 57 proposals from the first VE study were wholly or partly implemented, resulting in an implemented savings of \$9.8 million. The second VE study included 55 proposals with a potential initial cost savings of \$48 million.

LEED version 4 postponed to 2013

LEED v.4 (originally named LEED 2012) has been postponed to 2013 due to extensive concerns from the USGBC membership. This major revamp will be a combination of new credits and updates of existing credits. Credit additions for the New Construction (NC) rating system will include Site Assessment, Cooling Tower Water Use, Water Metering, Advanced Energy Metering, Demand Response, Material Disclosure and Optimization, Material Ingredient Reporting, Avoidance of Chemicals of Concern, Enhanced Indoor Air Quality Strategies, and Acoustic Performance.

In addition, Energy Performance requirements will be updated to reference ASHRAE 90.1-2010. This represents about a 20% tighter requirement than LEED v.3.





enVErgie provides full service sustainability consulting

enVErgie holds LEED Accredited Professional (AP) status for all five LEED categories:

-New Construction -Interior Construction -Operation & Maintenance -Homes -Neighborhood Development

Although there are similarities among these different LEED categories, they are specifically designed for different project types and have diverse requirements. A LEED AP with the appropriate credential is necessary to advise the design team on matters regarding sustainability and LEED certification.

value methodology: application to LEED charrettes

Value methodology, abbreviated as VM, is the systematic application of recognized techniques which identify the function of a product or service and provide the necessary function reliably at lowest overall cost. This methodology is easily applied in facilitating a charrette for the Leadership in Energy & Environmental Design (LEED), a family of sustainability rating systems for building construction and operations.

A LEED charrette is typically held early in the design phase in order to confirm project sustainability goals and to select the sustainability design features for the project. The VM tools, including function analysis, brainstorming, evaluation, development, and life cycle cost analysis, can be effectively used to enhance efficiency and productivity in this setting.

Benson Kwong presented a paper on this subject at the June 2012 SAVE International conference. If interested, please contact enVErgie for a copy of this paper.

enVErgie performs life cycle cost analysis for architect of the capitol

enVErgie performed a life cycle cost analysis to evaluate different reroofing options for the Hart Senate Building. Options included inverted roof membrane assembly (IRMA), cool roof with single ply membrane, and a combination of vegetated roof and Photovoltaic (PV) array. Issues studied included:

Energy performance Replacement interval and cost Stormwater reduction benefits of vegetative roof Alternative financing for PV Solar Renewable Energy Credit

enVErgie consulting, LLC, is a small MBE/DBE firm providing support services for the building architectural and engineering community. Our mission is to provide tools to project teams to deliver designs that are sustainable, energy efficient, functional, and economical. Our areas of expertise include:

- Sustainable Design
- Value Engineering
- Life Cycle Cost Management
- Cost Estimating
- Energy Conservation



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