
NEW TRENDS IN CONSTRUCTION

TRAINING AGENDA

Thursday, November 20, 2014

I. Overview and Significance of Trends in New Construction

- A. What Drives the Trends
 - Health
 - Environment
 - Resident composition
 - Financial Resources
- B. What are the Trends
 - Project Planning and Management
 - Innovative Design Models
 - Environmental Construction Techniques
 - Energy Efficiency and Energy Consumption
 - Natural Resources Utilization
 - Progressive Development Management

II. Construction Methods and Materials

- A. Design and operation of zero-net-energy housing and near zero energy homes & Weather-wise construction
- B. Solar power in construction/Solar Site Alignment
- C. Factory Built - Permanent Modular Construction
- D. Straw Bale Housing Construction
- E. Construction with Insulating Concrete Forms (ICFs)

III. Environmental Construction Techniques

- A. Techniques for blending site with natural environment, including utilizing native plants and tree preservation
- B. Techniques to achieve low to zero construction waste.
- C. Overview of interior design decisions and materials choices
- D. Indoor Air Quality Considerations

Friday November 21st, 2014

IV. Energy Efficiency and Energy Consumption

- A. Whole house ventilation systems
- B. Air to air heat exchangers
- C. Energy efficient single room heat methods
- D. Geothermal application

V. New Ways to Consider Costs

- A. Life-Cycle Costs: Upfront vs. Long term
- B. Cost-Efficiency and Green Materials

VI. Planning/Project Conception

Determining Need for a Project

- A. Overview of Needs Assessment or Tribal Membership Survey: Explain purpose and content of NA or TMS and how to effectively implement to eliminate bias and gain clear information to fill existing needs
- B. Review importance of conducting focus groups, including all interested parties within the Tribal community, to successful planning efforts and to encourage community buy-in
- C. Discuss appropriate time at which to conduct focus groups
- D. Review strategies to blend Needs Assessment data and focus group outcomes

Community Engagement on New Types of Housing

- A. Initiating and Facilitating Community Involvement in Design Process
- B. Leading and Educating Community in the New Types of Design and Impacts
- C. Project Management participation

Funding Sources/Costs of Green Materials

- A. Overview of funding sources for housing and community facility construction: emphasis will be on sources for new construction and *new trends* that bring funding opportunities.
- B. Review of Federal Statutes and State Regulations for mixed income developments—LIHTC, and other state funds impose additional requirements when it comes to planning, construction materials and types of developments.

VII. Wrap-Up