

GOAL SETTING AND INTEGRATED DESIGN CHARRETTE DOCUMENTATION

The following documentation details the findings of the Goal Setting and Integrated Design Charrette. Please reference Enterprise Green Communities Criteria (GCC) 2015 mandatory measure 1.1a Goal Setting for additional guidance. Guidance regarding this mandatory measure can be found in the [GCC 2015](#) and below.



Developer Name: _____

Project Name: _____

Address _____

(Street/City/State): _____

Charrette Date: _____

Goals

A statement of the overall green development goals of the project and the expended intended outcomes from addressing those goals.

Integrative Process

A summary of the integrative process that was used to select the building strategies, systems and materials that will be incorporated into the project.



1.1a Goal Setting

REQUIREMENTS

A successful integrative design process is more art than science. It also is often the determining factor in ultimately achieving a successful project. Develop an integrative design process that works best for your project team and intentions. At minimum, document:

1. A statement of the overall green development goals of the project and the expected intended outcomes from addressing those goals.
2. A summary of the integrative process that was used to select the green building strategies, systems and materials that will be incorporated into the project.
3. A description of how progress and success against these goals will be measured throughout the completion of design, construction and operation to ensure that the green features are included and correctly installed.

RATIONALE

Integrative design is used to maximize project budget and effective solutions with a holistic, comprehensive approach. As a result, it is supported by criteria in all of the other categories. An integrative project delivery process facilitates the design and development team's achievement of green objectives throughout the project life cycle. The outcomes of an integrative project delivery process can include substantially lower development costs and greater health, economic and environmental benefits for residents, property owners and communities.

RECOMMENDATIONS

- Review the Enterprise Green Communities Pre-Development Design Toolkit, Project Management Guide, Green Charrette Toolkit and Green Development Plan (see Resources). These help you set the framework for a meaningful integrative design process for your project. For instance, the Pre-Development Design Toolkit includes a template and a description of creating a project Design Brief (essentially an owner's project requirements [OPR] document) and guidance on how to select the most qualified architect for the project. The Project Management Guide relays the iterative process of how the Enterprise Green Communities Criteria weave throughout a typical project's development timeline. The Green Charrette Toolkit includes sample agendas and facilitator guides.
- Use data from your previous projects as baselines to inform your goals for your current project. For example: Portfolio energy and water consumption per bedroom, health needs assessment data and financial data, including pro-forma assumptions broken down more finely regarding operating expense categories. Measure and share your progress.

Exhibit N

- Evaluate your project's compliance with Criteria 1.2a and 1.3a as part of the process you undertake for Criterion 1.1a.
- A charrette is an intensive workshop in which various stakeholders and experts are brought together to address a particular design issue, from a single building to an entire project. The term can also be applied to shorter, focused meetings. Charrette attendance might include participants from the following disciplines or interests:
 - Prospective or current residents, including potential community and/or neighborhood stakeholders.
 - Architecture or residential building design
 - Mechanical or energy engineering
 - Building science or performance testing
 - Green building or sustainable design
 - Civil engineering, landscape architecture, habitat restoration or land-use planning
 - General Contractor
 - Building management and maintenance
 - Asset management
 - Planning and building officials with jurisdiction over the project, or city green building reps – Funders and key donors
 - Resident services
 - Environmental science
 - Public health

Green design charrettes can be powerful opportunities to educate and align stakeholders with the goals and objectives of a project and to tap into collective wisdom of the group. In later stages of design development, these large group meetings can be important opportunities to check that the design is on course for the project goals from all perspectives. This is also the opportunity to ensure that lessons learned through maintenance of other projects are woven into design decisions of current projects. Smaller multi-disciplinary teams may also be brought together to analyze and develop integrated solutions to complex design challenges that require multiple perspectives to resolve perceived conflict, between first cost and best practice for example.

- Best practices in documenting the integrative design process required of project teams submitting for Certification also includes a description of which members of the design and development team are responsible for implementing the green features.
- Project performance and durability can be dramatically affected by decisions and processes established during the integrative design phase. Advanced Energy developed the following list of recommendations for project teams to consider during integrative design, based on an

Exhibit N

evaluation of Enterprise Green Communities projects (for full details, see the Enterprise Green Communities Project Management Guide):

- Consider adding specific energy consumption thresholds or goals for each project that will be evaluated after project completion.
- Document your process for approaching and complying with the Criteria for use in your future green projects. Include specific options for complying with Criteria, contact information for useful resources (organizations, websites, product distributors, etc.) and lessons learned.
- Adjust the scopes of all of the projects in your portfolio to match the Criteria to avoid confusion with changing expectations.
- Add building envelope and mechanical installation details to your plans and specifications for the most critical project components, paying particular attention to: air handler closet air sealing, floor system and band air sealing, party wall air sealing, proper insulation installation, ventilation system installation, and duct sealing with “bucket” mastic. Also provide the construction team with installation guides for the measures above.
- Consider creating incentives for your construction team based on the performance of various building components.
- Add self-verification requirements for your construction team for certain project items that demand proper installation (e.g., testing of water fixtures, testing of bath fans, air sealing of air handler closets). Self-verification for product-based measures (submitting cut-sheets for appropriate paints, carpets, etc.) is most likely unnecessary.

RESOURCES

- Enterprise Green Communities offers a variety of resources to support the integrative design process, particularly the Pre-Development Design Toolkit, Green Charrette Toolkit, Green Development Plan and Project Management Guide. www.enterprisecommunity.org/resources
- Enterprise Green Communities maintains a comprehensive registry of qualified green affordable housing technical assistance (TA) providers that are available for support on the design, construction, rehabilitation and operations of green affordable housing. To find a Green TA provider near you, search the list found at http://www.greencommunitiesonline.org/tools/resources/technical_assistance.asp
- Whole Building Design Guide: This website describes the core elements of “whole building design,” which includes the combination of an integrative design approach and an integrative team process. This site helps users identify design objectives and organize their processes to meet those objectives. http://www.wbdg.org/wbdg_approach.php

Exhibit N

- *The Integrative Design Guide to Green Building: Redefining the Practice of Sustainability.* 7group and Bill Reed (2009). This book provides guidance to building professionals on incorporating integrative design into every phase of a project.