

Serenbe Sustainable Development Project Charrette

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The essence of this charrette was to bring together a group of prospective developers with experts from various fields to provide an opportunity to define the character and agenda for Serenbe's development. Three main outcomes occurred:

- 1) Participants had the opportunity to interact and become invested in the future of the Serenbe project
- 2) The essential character of the development was more clearly defined
- 3) Key issues were identified that must be addressed as the planning for the development continues

The following defining characteristics of the development were identified in the charrette:

- ◆ Focus on the essence of community formation and the interaction of people to foster development of their potential
- ◆ Respect for and integration of the cultural history of the surrounding area, i.e., agriculture
- ◆ Preservation of permanent open space
- ◆ Age diversity of inhabitants, from children to seniors
- ◆ Economic diversity of inhabitants
- ◆ Economic sustainability of the development effort
- ◆ Environmental sustainability of all aspects of the development
- ◆ High tech, connected development to allow integration of Serenbe with the world at large (at minimal environmental impact)
- ◆ Music, arts, and crafts as a theme for the development

- ◆ The use of land trusts to achieve the desired character of the community
- ◆ The development as a living laboratory
- ◆ Integration of design across disciplinary, infrastructure, and philosophical dimensions

The following key issues were identified that must be addressed as planning continues:

- ◆ How "off the grid" should the development be? Options ranging from complete isolation to complete integration were discussed. This decision should be based on projections of requirements for grid support, estimates of availability of over-the-horizon technologies and present availability of commercial technology, and the overall philosophy of development based on the desires of the founders.
- ◆ To what extent should partnerships be sought with outside entities? This question was posed in relation to power issues, material availability issues, government and political issues, and the overall development plans of neighboring land owners. This decision should be based on the willingness of potential partners to buy in to the Serenbe vision, the congruence of their philosophy with that vision, and the potential returns to each partner in seeking to meet mutual goals.
- ◆ What should be the guidelines for balancing aesthetics with performance and sustainability? This question was brought up multiple times by multiple stakeholders. While a growing variety of technologies are available that can provide technological and sustainable performance without compromising architectural style, performance-based guidelines should be articulated to ensure that these technologies are used appropriately in Serenbe's facilities. This task will include identifying desired attributes of development that characterize the founders' vision, selecting indicators that can measure those attributes, and developing clear and measurable performance specifications and guidelines to assist other stakeholders in achieving the founders' vision. It was also noted that by focusing on performance specifications rather than technologies themselves, the standards would not become outdated as new technologies are developed.
- ◆ What measures will be taken to ensure that the whole project is integrated in terms of both design and implementation? A primary challenge of this development project will be to integrate the project not only across traditional disciplinary boundaries, but also in terms of the character of the design itself and the processes that will be necessary for its implementation. Special attention will be needed to ensure that design and construction professionals do not slip into "business as usual" mode when creating this project. While this goal poses a significant challenge, it also presents a key opportunity to explore new ways for project teams to work together to create developments, and the process should be carefully documented and evaluated to ensure that lessons are captured for dissemination to other projects.
- ◆ What will be the relationship of the development to its context? This question was raised in terms of physical relationships (e.g., water, solar energy), socio-cultural

relationships (e.g., schools, metro and local development plans, medical facilities, and commercial potential), and the relationships of the development to the history and original character of the site. Each of these issues must be addressed in terms of the founders' vision for the project, and careful attention should be given to articulating both the desired attributes of the relationships as well as the reasoning behind them. Defining the answer to this question in terms of the multiple dimensions of the development will be key to establishing a basic vision for the project, developing design and construction guidelines, establishing partnerships with other entities, obtaining investment capital to proceed, and marketing the development to prospective markets.

- ◆ What will characterize the relationships between elements *within* the development? A key distinguishing feature of the proposed development is its focus on relationships between and among the people and the land, articulated as "A community of people living among a community of trees." Developing a well-articulated vision of these relationships between humans, natural systems on site, and the built environment that connects the two will be important for the same reasons as the previous question - selling the project concept to investors, future occupants, and potential partners, and making sure that the development is true to the original vision of the founders. In addition to a basic vision, indicators should be defined that can be measured during the process, to ensure that the ideas behind Serenbe are implemented as envisioned.
- ◆ Is the list of defining qualities developed in the charrette complete? Does it accurately characterize the vision of the founders? The list of defining qualities identified in the charrette was a significant first step toward articulating the ultimate vision for the development and identifying its key characteristics. The founders need to reflect on these qualities to determine their congruence with the vision, and elaborate on them as necessary to obtain a defining set of principles for the whole development. When complete, this set of qualities will form the fundamental philosophy of the development and will be a starting point for developing measures of project success.
- ◆ To what extent should the development make use of features demonstrated in other development projects? How appropriate are these features for this project and its context? Many examples of cutting-edge development practices were presented as part of the case study review in the charrette. In addition, a variety of technologies (living machines, photovoltaics, fuel cells, etc.) were discussed as possibilities for this project. Project stakeholders should decide to what extent they desire to incorporate specific technologies or development practices in this project, and to what extent they would prefer to let the design evolve according to the performance-based vision for the project. For example, using photovoltaics to generate power on site may be equal in terms of sustainability to using the money to retrofit surrounding houses for energy efficiency, but these two choices are not necessarily equal in terms of the preferences and vision of the founders for the project.
- ◆ How will the tradeoffs between aggressive and evolutionary development be resolved? An important decision to be made by the founders is *how* they want the development to proceed. The question of "how large should Phase I be" was

repeatedly discussed, and a variety of perspectives were voiced. This decision should be based on the financial wherewithal of the founders and likely investors, the degree to which the founders want to actively participate in the project, and the overall philosophy of the project. Other considerations include how much development will be necessary to impart the "flavor" to prospective buyers, although alternatives to actual physical development are possible by using state-of-the-art rendering, computer visualization, and modeling techniques. Overall, the technology experts concluded that there was no minimum feasible size constraint in terms of technological systems, but there was a feeling that certain economies of scale could be achieved with more extensive initial development. On the other hand, opportunities exist to try new ways of implementing projects that are not dependent on economies of scale. Serenbe may want to explore these project management options.

- ◆ Who is the target market for this development? What are its characteristics? Extensive discussion focused on the role of the arts (and artists) as occupants of Serenbe. There was also discussion of other kinds of target occupants (e.g., second home owners, mid- to up-scale, etc.). One approach to developing a marketing strategy is to articulate the ultimate vision for who will be occupying Serenbe at the completion of the project, and then define alternative paths for reaching that vision. Considerations include who will be most likely to buy a property at Serenbe *before* critical mass is reached, e.g., people without children that must attend public schools, people not dependent on location for their jobs, etc.
- ◆ What will be the role of the founders as development progresses? The degree of personal involvement of the founders will affect how the project is implemented, including size of first phase, overall timeline, and other factors. Different scenarios will require differing contributions from the founding members. A key issue to be resolved is how the founders will establish and eventually turn over the governing of the community, including evolution and enforcement of development standards, management of ownership options such as land trusts, and direct participation in all aspects of the development.
- ◆ How sustainable do the founders want the project to be? Given the overall goal of developing Serenbe in a sustainable fashion, the founders will have to decide to what extent they want to push the boundaries of design and development to achieve sustainability goals. Sustainability was defined in the charrette as a state in which resources are not used up faster than they can be regenerated, and the basis for life on earth (biological systems) are not damaged, all while maintaining economic stability and profitability. Other measures of "greenness" exist, including the U.S. Green Building Council's LEED system, and Atlanta's Earthcraft housing standards. In developing performance standards to guide this development project stakeholders must consider the implications of setting sustainability goals, and carefully consider the lengths to which they will go to meet those goals.

Serenbe is an exciting opportunity for all of us who participated in the charrette. We wish this project well, and look forward to contributing to its design and implementation.