Promoting sustainability, heritage, and the creative economy through design

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Abstract—Through the use of design studios conceptual design assistance was provided to officials in a town in western Massachusetts to promote sustainable design, heritage tourism, and creative economy. This paper will highlight the design process used and its resulting successes.

Keywords—Sustainable Design, Creative Economy, Heritage Tourism.

I. INTRODUCTION

OFFICIALS in the Town of Montague, composed of five villages in western Massachusetts, in the United States, convened a working group of artists and public officials to advance the idea of redeveloping the site of an abandoned convenience store to promote economic revitalization in its key village, Turners Falls. Located adjacent to this site is a natural history interpretive center in a successfully renovated old mill building, now called the Great Falls Discovery Center administered by the Silvio O. Conte National Fish and Wildlife Refuge. The Discovery Center is centrally located in the downtown center of the village of Turners Falls. The idea of a new cultural center next door to highlight cultural arts through a theme of heritage landscapes in the downtown would complement the natural history center. To help visualize this possibility further the town sought assistance from the Department of Landscape Architecture and Regional Planning at the University of Massachusetts with planning, design, and a public involvement process.

To visualize redevelopment concepts for the site to date, four university studios have provided unique assistance to advance ideas for this new type of center. The first studio of graduate landscape architecture students gave vision to the site redevelopment by providing the town several conceptual design alternatives using a visual toolkit to illustrate the opportunities. Themes of sustainability were promoted which further related to and enhanced the connection to the natural history center. In this paper these ideas will be discussed further.

II. PROBLEM FORMULATION

A. Context

Turners Falls is located along the Connecticut River in western Massachusetts, just south of the border between Vermont and New Hampshire. In the region known as the Connecticut River Valley Turners Falls is one of five villages that comprise the Town of Montague. The town government is centered in Turners Falls.

Prior to colonization, several different tribes of native Americans, including the Pocumtuc, the Nipmuc, and the Abenaki, had gathered at the Great Falls as a sacred site traditionally for peace ceremonies. “Pocumtuc” or “Peskeompskut,” literally means the place or river divided by rocks. Fish, such as salmon and shad in the river had provided a plentiful source of food, which the native Americans sustainably harvested, never exhausting the supply. The Great Falls area was a sacred place of gathering, where tribes would set aside their differences and come together hospitably each year to harvest the great fish run.

The origins of this site are based with native American roots. Throughout the 17th century many New England tribes were lost to epidemic and war. Across the river in the surrounding hillside ancient native American burial grounds which have been identified by state agencies for protection against any potential development proposals, at the same time are kept secret to ensure their protection.
Turners Falls was named after 17th century English colonist Captain William Turner and the “falls” along the Connecticut River. On May 19, 1676, in the “Falls Fight” massacre at across the river, in the Town of Gill, Captain William Turner led an ambush on the gathering at Peskeompskut, slaughtering as many as 200 men, women & children.

The village of Turners Falls was founded in the late 1860s by Alvah Crocker as a planned industrial community. A canal that bypassed the falls was completed in 1867. The manufacturing facilities soon developed along this corridor, harnessing the water for power. Housing and commercial establishments for mill workers were then constructed within easy walking distance of the mills, with a continuance of small farms throughout the surrounding region.

The arts played an important role in the history of the village and the community, with the Shea Theater and Colle Opera House occupying prominent places on the main street in the downtown [1]. Turners Falls prospered through the 1940s, after which a loss of manufacturing jobs created a cycle of disinvestment, blight and decline. The downtown area is one the most severe pockets of poverty in western Massachusetts. According to the United States Census, median household income for the census block group incorporating the downtown was just $17,538 in 2000, a dismal 35% of that for the state of Massachusetts, according to the 2000 U.S. Census Bureau survey. Economic development efforts are critical to increasing the quality of life for the residents. A revitalization effort to restore downtown Turners Falls began in the early 1980s. The downtown was designated as a National Register Historic District in 1982, and the historic streetscape with brick sidewalks and planters was restored in 1984. Planning for a Heritage State Park started about the same time.

The Town, acting through the Montague Economic Development and Industrial Corporation (MEDIC) acquired privately-owned land for the Heritage Park by eminent domain in the early 1990s. A minor setback occurred in the early
1990s when the Heritage Park project was delayed and downsized in the wake of the Massachusetts fiscal crisis. The project, however, was not cut; rather, it was re-conceptualized as the Great Falls Discovery Center.

The only surviving building of the Montague Paper Company, a 19th century manufacturing facility at the inlet of the power canal, was identified as the future site of the Discovery Center. It opened in 2003 after being temporarily housed in the adjacent Cumberland Farms convenience store building. The Center is a natural history museum interpreting the history of the town dating back to the late 19th century, when the Heritage Park project was delayed and downsized in the wake of the Massachusetts fiscal crisis. The discovery center site was only one of several large public redevelopment projects completed in Turners Falls since 2000. Three of the most important structures in the downtown—the Crocker Bank Building, Cutlery Row House Apartments, and the Colle Opera House were fully restored between 2000 and 2003. Reconstruction of the Moltenbrey Building, another 3-story masonry building dating back to the late 19th century, was finished in June 2005.

Compelling evidence suggests that these projects have also stimulated private investment in Turners Falls. According to records provided by the Montague Building Inspector, there have been approximately $480,000 investments to improve privately-owned existing buildings within several blocks of the Discovery Center site between 2001 and 2003. More than $312,000, equaling 65 percent of that private investment, was in 2003. Most of the private investment in 2003 was in the development or improvement of artist studios and galleries in existing downtown buildings. All of these projects and investments served as powerful indicators that the Town was moving in a positive direction [1].

B. The Cumberland Farms Building
The Town saw the redevelopment of the old Cumberland Farms convenience store adjacent to the Discovery Center as central to its goal of enhancing the Discovery Center site and complementing other elements of the Turners Falls revitalization program. The former store occupies a premier site within the village, which was once the site of the Grand Trunk Hotel—a magnificent four story masonry building that was unfortunately demolished in the late 1960s. It is strategically located just off Route 2, on the edge of the Turners Falls historic district. The current façade of the old Cumberland Farms building detracted from the Discovery Center site and the downtown. In addition, use of the building for storage contributed nothing to the revitalization effort.

An architectural study of the Cumberland Farms building conducted by Juster, Pope, Frazier Architects in June 2002 found the building structurally sound, but, as no surprise, deemed its “strip architecture” inconsistent with the architectural context of Turners Falls. The architects recommended that the exterior be renovated to integrate the building into its surrounding in a suitable and respectful manner. The study advised against expansion of the structure due to the importance of certain load bearing walls and potential archaeological constraints on the site [2].

Town officials expressed concern about the possibility of inconsistent uses being proposed for the site by others, and therefore became proactive in developing a reuse plan. With urging from Senator Rosenberg, the Montague Economic Development and Industrial Commission convened a small working group, including town officials, state legislators, local artists and community leaders to discuss ideas for this redevelopment. This group affirmed that they wanted to redevelop the Cumberland Farms building and recruit a long-term tenant who would draw attention to the cultural arts and heritage in Turners Falls and the region.

III. PROBLEM SOLUTION
A. Northwestern Massachusetts Cultural Tourism
Arts-based cultural tourism has been identified as an economic development strategy for the communities in similar contexts. A graduate landscape architecture studio in the fall of 2004 gave vision to the redevelopment of the old Cumberland Farms convenience store by providing the Town with several conceptual design alternatives. These alternatives readily allowed local residents to understand the implications of proposed design alternatives. This way, residents could more actively engage in the process of revitalizing the town. The process will be highlighted as it offers an innovative model for encouraging local residents to explore their cultural roots while encouraging economic development.

B. The Design Process
The concept of promoting arts through the study of heritage landscapes evolved more clearly during 2004-2005. The Town, though, lacked the resources to facilitate a planning and design process, having only one professional staff person...
The studio first began with research into case studies of successful public/private partnerships to redevelop public buildings. Particularly the students looked at: the Massachusetts Museum of Contemporary Art (MASS MoCA); Vermont Arts Council Sculpture Garden, Montpelier, VT; Sanitation Park, Fort Wright, KY; and the National Museum of the American Indian, Washington, D.C. When reading these case studies, the students considered the stories behind the success. How did these examples fit into the local context? What was the relationship to surrounding landscapes and buildings? What design principles and spatial considerations appear to have inspired the design? What were the programmatic themes or concepts? How have funding strategies supported the development and operations in these examples? Finally, what have been the costs associated with these projects and how have they been funded? In addition to case studies, the students read Charles Birnbaum’s Preservation Brief 36: Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes in order to understand cultural landscape preservation as a process[4].

D. Mission

The studio sought to develop conceptual designs for a cultural center through a study of collected data, user needs, and opportunity. In doing so, the studio identified key issues important to the development of a cultural center relative to assets and liabilities as well as consider the roots of a community, both practically and innovatively, in the programming, planning and design process. Spaces that encouraged positive interactions and uses that served the needs of the center and neighboring community were outright goals.

The conceptual design and programmatic use needed to be consistent with the character of the site and town. The scheme had to enhance existing areas for historic, cultural, social, and economic gain. Safety and efficient circulation patterns needed to be overriding considerations. Besides producing conceptual design alternatives that took into account these considerations, the studio also had to develop a visual toolkit to express these different concepts. Thus, students in the studio sought to understand the process of developing visual scenarios for a cultural center. Ultimately, the studio had to explore solutions and strategies for a cultural center in consideration of stakeholder input and cost factors.

E. Concepts

Based on their understanding of the cultural roots and history of Turners Falls, students came up with several creative concepts: art exhibitions that changed yearly, which spoke to themes of sustainability and human stewardship of the land; a center for artwork and sculpture, which would bring artists to Turners Falls and make the Village a definitive location; a space for meeting, learning and discussion, in the native Peskeompskut spirit of hospitality and gathering peace; ethno-botanical gardens representing the area’s native American heritage; and finally, a color-coded signage system that linked local and regional places to the site. Almost all of these concepts incorporated the idea of the river in winding walkways or paths. Using scale models, design boards, and/or computer simulation, planning and landscape architecture students communicated to town residents at a public meeting in December 2004 the implications of proposed design alternatives. At this meeting, three conceptual designs really captured the audiences’ interest [5].

One student based her design on the concept of change— as the history and culture of Turners Falls is always evolving, so should the design. She used images of salmon to illustrate the changing, yet ongoing relationship of coexistence between humans and the natural environment. The designer divided the site into four areas: arrival, built environment, coexistence, and future.

Fig. 4. A conceptual plan for the site to illustrate the concept of change.
The overall scheme sought to demonstrate that humans and nature are really not at odds. Proposed panels were proposed around the renovated building to inform visitors about their historic and evolving relationship to nature.

Fig. 5. The proposed panels outside the renovated building can illustrate displays about fish and sustainable harvesting.

Fish such as salmon thrived under pristine conditions, prior to human contact; yet their numbers began to deplete with human discovery. When the Connecticut River was exploited during the second half of the nineteenth century for manufacturing, so was the ecosystem. By the early twentieth century, industrialization had led to its complete collapse and the number of fish greatly dwindled. The ecosystem, though, entered a period of recovery in the late 20th century.

Fig. 6. Detail of proposed fish mural panels for the site.

From this conceptual scheme, the graduate student proposed an artist-in-residence program. Artwork would change each year with the new artist, who would explore the theme of the human relationship to the natural environment.

Fig. 7. A simulation of what an artist in residence might conceive for the site with a temporary installation.

An artist-in-residence would maintain a series of outdoor installations that speak to sustainable practices. The designer additionally recommended that the connection to the canal be celebrated. Drawing visitors to the canal could be a major attraction.

Fig. 8. Illustrates a simulation where visitors are drawn to the canal by colorful banners and public art installations.

Evening use of the site could encourage more visitation and stimulate the economy further. Inspired by the river fires in Providence, Rhode Island, that have been so successful to drawing tourists to that city, the designer proposed that fire could be explored along the canal for evening programs.
This scheme promoted design sustainability, themes for heritage tourism, and a means of promoting the creative economy of the region.

The second conceptual design that particularly resonated with the local community divided the site into three areas based on stages of Turners Falls’ history, culminating with an ethno-botanical garden. A strong, curvilinear path, evoking the waters of the Connecticut River, links three nodes to one another. The designer suggests that the former Cumberland Farms building serve as the new visitors center linked to an outdoor display node showcasing the industrial history. The node that received the most attention from the local community was the small ethno-botanical garden that represented the area’s native American heritage. Here, the designer proposed a rock garden that shows how native Americans made use of native species in their day-to-day lives and also how they used different types of stone to make arrowheads and agricultural tools. This concept would especially encourage sustainable design and heritage tourism. A proposed café connected to the new visitors center would be a boost to the creative economy as well.
The third student addressed the lack of a clear signage in the village. She proposed a system of color-coded signs that would connect projects and displays at the Cumberland Falls building site with community-based activities in the village and surrounding area. The design sought to interactively establish a new visual language for Turners Falls. Materials through colors would link visitors to activities. Her concept also spoke to the theme of sustainability. This visual system would utilize inexpensive and recycled materials. Her concept divided the site into thematic areas, each given a designated color. The designer saw this as an interactive space for revolving murals and craft workshops facilitated by local artists and students of the Hallmark Institute. As the design concepts sought to forge strong connections between the site and the surrounding area, maps locating the galleries and studios of these artists would be available. This connection is further strengthened by color. Plexiglas signs that match in color to the ‘Community Arts’ Area will stand in front of these galleries and studios—visually linking visitors back to the Cumberland Farms site.

In the ‘Film Area,’ the designer made a point to show how the Cumberland Farms site could be used at night—affirming to the community that vitality would continually exude from this space.
While these three conceptual designs generated the most attention, all six designs collectively provided the public with a great range of alternatives. Particularly in regards to the various proposed funding strategies—obtaining state and federal grants; charging rental fees to use the grounds for parties, weddings, and celebrations; operating a café; and charging fees for festivals—the public could consider several financial options to make these design visions a reality. Visualizing the implications of proposed design alternatives proved to be an effective way of engaging local residents in the planning and design. At the public meeting, residents were able to voice their preferences, giving the designers immediate feedback. The three schemes illustrated here were favored. This information was important to obtain since a different group of students overtook the project during the spring semester. These students then had the advantage of knowing what the public liked. Subsequent studios focused on the heritage tourism direction for the village. One studio then proposed changes to the website for the town to make it more accessible.
Fig. 18. A proposed change to the Town’s website to make it easier to find as a tourist destination.

F. Outcomes to Date

The extensive amount of work conducted by this initial design studio on the redevelopment of the Cumberland Farms site and downtown revitalization laid a strong foundation for continued community-based initiatives. The town planner at the time was quite proactive and began to look for funding to make the design concepts a reality. Particularly she wanted to develop a signage system, based on the aforementioned design concept [5]. She secured $42,500 in funding from the John and Abigail Adams Arts Program, a grant made available through the Massachusetts Cultural Council, to support some of these endeavors through a project named “River Culture.” River Culture is a community and economic development project designed to promote the Village as a cultural center by highlighting the importance of the Connecticut River through all stages of Turners Falls’ history. The grant money allowed the River Culture project to maintain an interactive website, produce a historic downtown walking tour map and a downtown attractions guide, fund a part-time coordinator’s position, and support cultural activities. One of these activities is the Turners Falls Open Studio and Downtown Walking Tour, now in its third year, which hosts three annual events centered on the themes: Arts and Leaves, Arts and Icicles, and Arts and Bloom [6]. River Culture has proved to be so successful that the town of Montague was able to receive an additional $35,000 to fund a second year of programming and continue to support the position of the River Culture Director [7]. The Cumberland Farms building and site still remain integral to Montague’s downtown revitalization plans for Turners Falls. The redevelopment project was temporarily set-back with the loss of the planner without a replacement until November 2006 [8], [9]. The new town planner has high hopes for the site, but indicated the redevelopment project has yet to obtain the needed funding to move forward with more detailed design work and financial analysis [10]. In addition, future ownership of the building is still uncertain as it is currently in the state’s possession.

It is now hoped that the State Department of Conservation and Recreation (DCR) might take a leadership role in the renovation of the old Cumberland Farms building as part of their Heritage Landscape Program. The Village is presently focusing a lot of its efforts on River Culture, as a method of generating publicity about Turners Falls [11]. This tactic has already brought results. Because of all the successes in Turners Falls, the state chose the Village as the site for a workshop on the role of the creative economy in community downtown revitalization efforts called “How creative is your Downtown” [12].

Because of the state choice for this important workshop, the Village is hopeful that interest will continue on the redevelopment of the site especially as the downtown emerges as a thriving cultural center. The Village is following the methods suggested in the work of Tom Borrup to build a Continued activities program integrating seasonal arts, and plans for improving way-finding under discussion.

III. CONCLUSIONS

Due to the efforts of four design studios, the Village is well on its way to making an economic recovery by filling a niche in the thriving creative economy of northwestern Massachusetts. The work has engaged local artists in planning for economic development, encouraging work that reflects the rich industrial history of the area. The conceptual designs of the graduate students laid a strong foundation for revitalization by illustrating a range of opportunities for the former Cumberland Farms building and site as well as demonstrating how the site would be integrated into the Village. Proposed concepts excited and fostered relationships among low-income residents, artists, business owners, and public officials in Turners Falls. These constituencies are still communicating and cooperating because of the student work—River Culture being a working example. The studio, then, offers an exemplary model of utilizing a visual toolkit of conceptual design alternatives to give voice and engage participants directly in the planning and design process. Additional information about subsequent projects has been described in other publications and conference presentations [15,16]. Examples from other state of the art work will inform the future studies of this research [17, 18, 19]. New proposals of public art work that is sustainable and will engage both residents and visitors along public pathways are proposed for the next phase of work in downtown Turners Falls.

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REFERENCES


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Professor Bischoff has received several American Society of Landscape Architects (ASLA) Professional Research and Design Merit Awards. She is a Fulbright Senior Research Scholar and conducted research at the Technische Universitaet in Berlin, Germany. She has served at the President of the Council of Educators in Landscape Architecture (CELA) and of the Design Communication Association (DCA).