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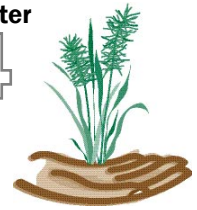
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Context Sensitive Solutions: Integrating Community Values with Conservation Objectives

A CASE STUDY IN CONTEXT-SENSITIVE DESIGN IN TRANSPORTATION PLANNING

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Abstract: This abstract examines the use of context-sensitive design on the Blue Ball Properties Project in Wilmington, Delaware. The project addressed existing traffic flow and safety concerns; projected traffic generated by 5,000 new or relocated AstraZeneca employees; recreational needs; historic preservation; storm-water management problems; and community land-use concerns.

Overview and Methodology

A collaborative effort utilized a context-sensitive design approach that satisfied the goals of AstraZeneca, the local community, and each federal and state agency.

Traditional traffic criteria were used to determine acceptable alternatives for the overall shape of the project in the 1990s. The Delaware Department of Transportation (DelDOT) developed transportation improvements for the area based on those criteria. This plan is known as the “Spaghetti Plan” for its numerous loop ramps and multi-level over-passes. Roundly opposed by the local residents, the plan also utilized much of the land now proposed for AstraZeneca and for recreational and environmental-enhancement purposes.

Therefore, rather than establishing the traditional minimum level of service as the measure of effectiveness, a “No Degradation” approach was undertaken, meaning that traffic operations of the proposed design should operate no worse in the design year than existing conditions. This nontraditional guideline led to a significantly reduced transportation footprint. In keeping with the community’s wishes, the smaller footprint allowed for re-allocation of right-of-way to be used for recreational and environmental purposes.

Fostering an intense public involvement effort is another hallmark of context-sensitive design. During the Master Planning process, 125 stakeholders were divided into a Transportation Committee and a Recreation and Historic Preservation Committee. The committees included private citizens and representatives from area businesses and civic organizations and local, state, and federal government agencies. Their task was to review information and analyze natural features, historic structures, travel patterns, public transit, and community recreational needs.

Results

In this manner, over 260 transportation and land-use alternatives were analyzed. Ideas from civic leaders, local legislators, and the public ranged from broad concepts to specific details. As the committees agreed on the preferred environmental, transportation, recreation, and historic-preservation concepts, these concepts were presented for public consideration through workshops, newsletters, and an interactive website (www.blueball.net) until the Final Master Plan was adopted. Ongoing public involvement efforts include frequent presentations to local civic groups, regular public workshops, monthly construction working-group meetings, project videos, and historic site tours.

One goal was to improve the environment in the study area, not simply avoid environmental features or mitigate for impacts. Previous studies fully documented natural, cultural, and social resources within the study area, which allowed the project team largely to avoid features such as wetlands and historic properties. After the Master Plan was approved, a formal Environmental Assessment was conducted.

Specific environmental enhancements include:

- Existing storm-water management systems are being significantly improved and designed to address long-term, systemic problems.
- Three historic standing structures have or will be improved, including the Weldin Ruins Archaeological Site, which is being developed into an interpretive site.
- Extensive stream stabilization and restoration of a local stream is being performed.
- Wetlands mitigation will comprise 1.92 acres to rebuild 1.23 acres impacted by the project.

The community was also concerned that two large open tracts of land (150 acres) in the study area would be developed, further worsening traffic problems. As part of the agreement between the AstraZeneca, the county, and the state, both tracts of land are being developed as county or state parks. Following the Recreation Committee's recommendations, the western tract will be maintained as "passive" recreation (uses that fit in with the existing natural and cultural characteristics of the land), while the eastern tract will be oriented toward "active" recreation (e.g., multipurpose playing fields, playgrounds, picnic areas etc.).

The park and adjacent network of trails will be accessible by all modes of transportation. Walkers, hikers, and cyclists will be linked to the City of Wilmington by extending the Northern Delaware Greenway from the Brandywine River. All major park facilities will be interconnected with paved park paths providing ADA accessibility and accommodation of occasional service and emergency vehicles. All park paths will link to the Greenway system and facilitate accessibility from abutting neighborhoods to all parts of the park.

Recommendations for Future Research

- Lower design speeds are being evaluated on park and local roads to encourage slower traffic and minimize environmental impacts. Future additional traffic-calming measures may also be evaluated.
- AstraZeneca is implementing an aggressive effort to reduce peak-hour trips to its site. This may determine the need for a transportation center at the campus.

Biographical Sketch: Bert Cossaboon, AICP, is a vice president with McCormick Taylor and an experienced land-use and transportation planner. He plays a key role as project manager or principal-in-charge for many planning and environmental projects in Delaware, New Jersey, and Pennsylvania. Mr. Cossaboon holds primary responsibility for defining project scopes and schedules, determining staff priorities and interfacing with all requisite regional, state, and federal agencies. Additionally, he is responsible for the overall management of the environmental staff in all of McCormick Taylor's Pennsylvania offices. He has been with McCormick Taylor since 1983. Most recently, Mr. Cossaboon was instrumental in establishing McCormick Taylor's Land Use Planning and Urban Design Group. His education includes a B.S., Environmental Studies, Richard Stockton College, 1976 and a Master of Regional Planning degree, University of Pennsylvania, 1983.