2011 ASLA Design Awards

Woodland Reserve Greenway
Merit Award
Wenk Associates, Inc.

Planning & Urban Design
PROJECT NAME: Woodland Reserve Greenway Master Plan
PROJECT LOCATION: Ankeny, Iowa
CATEGORY: Category 2 PLANNING

PROJECT SUMMARY
The Woodland Reserve Greenway Master Plan sets forth an overall vision for park and open space improvements and implementation strategies for a 75-acre greenbelt surrounding Four-Mile Creek in Ankeny, Iowa. The Plan represents a multi-agency collaboration for the City of Ankeny influenced by City staff from Parks & Recreation, Municipal Utilities, and the Planning & Building Departments. This group developed a vision for a “special use park” for the Woodland Reserve Greenway that is focused on successful floodplain management and water quality treatment in concert with creating new recreational opportunities, environmental preservation and educational facilities. The Woodland Reserve Greenway Master Plan will become a model for future development projects for the City by demonstrating the need for collaboration between agencies that capitalize on multi-benefit solutions in order to leverage capital costs for construction and management costs of parks, utilities, and natural resources.

PURPOSE OF PROJECT
Unlike other parks and open spaces in the region, the Woodland Reserve Greenway has been declared a “Special Use Park” by the City for the integration of natural landscape resources, unique park program, along with the management of the Four-mile creek and floodplain. The master plan provides the potential for: improved access to the Creek, creation of wildlife habitat, increased trail connections, and expanded outdoor education experiences creating one of the most dynamic park properties in the Ankeny Park’s System. The document provides the City with a plan framework and phasing options that can be used to secure funds for future park design, construction, and management of the resource.

The plan set out with the following objectives: Utilize natural elements, create a facility that showcases conservation practices and programming, provide nature-oriented activities, encourage interaction with the Creek, create an example of a healthy creek and well-managed floodplain, provide solutions that are “environmentally focused”, create play elements that are non-traditional -- natural “playscape”, and provide areas for small to mid-size group gatherings.

CONSTRUCTION BUDGET AMOUNT
$8.9 million

ROLE OF TEAM
The Landscape Architect led the consultant team, owners, and stakeholders through the planning effort and developed plan concepts and visionary approaches for this project. The effort was a collaborative between the team and three separate City Departments.

SPECIAL FACTORS
The project area is centered on a one-mile reach of Four-Mile Creek and encompasses approximately 75 acres. The Creek currently accommodates a large rural watershed comprised of mostly farmland that contributes to excessive erosion and increased sediment loads, which have had a detrimental impact on the stabilization of Four-Mile Creek. The portion of Four-Mile Creek that flows through the project area is a relatively stable, un-channelized, second-order prairie stream.

The project area is comprised of two very distinct landscape types; an open prairie on the north half of the site and a mature riparian forest on the southern half. The northern half of the site is characterized as prairie landscape with areas of wetland pockets. The southern mature riparian forest includes a large emergent wetland as well as several remnant oxbow wetlands associated with Four-Mile Creek. The understory growth
has become dominated by honeysuckle, an aggressive, invasive shrub species that shades out other species and makes the area nearly impenetrable to visitors.

Conceptual planning and design for these two landscape areas focused on the organization of program elements around areas that are complimentary to the specific site characters.

Southern Woodland: Provide “A Ribbon Connection”
- Organizes series of program spaces along a continuous trail system
- Create forest openings to provide spaces for park programming—“Activity Glades”
- Respects and utilizes the “resource” for design inspiration
- Elevates the woodland to a healthy, restored state
- Avoids compromising privacy while promoting use and education
- Designed as a scripted story of natural process and systems
- Avoids the introduction of foreign materials and objects

Northern Prairie: Provide “Demonstration Nodes”
- Organizes series of ecologically significant demonstration spaces along a continuous trail system
- Designed as a scripted story of natural process and systems
- Elevates the prairie to a healthy, restored state
- Focused on outdoor education and passive recreation

Critical to the success of protecting Four-Mile Creek and managing the resources are the stabilization and protection of the creek and creek bank. The plan calls for five distinct techniques for bank stabilization/toe protection that are to use bio-engineering methods that will blend in with the surrounding landscape.

There are many distinct sub-watersheds that drain to the project site. The plan examines these watersheds to evaluate outfalls and potential areas for water quality treatment, size of treatment required and best management practice opportunities.

Three natural playscapes are located along the south greenway trail – each inspired by natural elements: water, wood, and stone. Each is located adjacent to the creek and trail and use natural site elements to create play.

A series of four demonstration nodes are located in the prairie. Each demonstration node has a unique theme and function to support a healthy landscape system, diverse habitats, and provide educational experiences. These themes include: prairie plants, rainwater capture, bird watching, and water quality.

**PROJECT SIGNIFICANCE**
The Plan is also a model for future creek stabilization and stormwater management projects. It identifies bio-engineering techniques for stream stabilization that respond to the natural environment and surroundings, while also providing creek access. Stormwater and water quality techniques are presented that utilize the natural ecosystem, such as directing flow to the stream oxbows and wetlands.